



## EXTERNAL DEBT SUSTAINABILITY AND ECONOMIC GROWTH IN NIGERIA (1986–2024)

Edozie Confidence Chukwuedozie

Department of Economics, Faculty of Management Sciences,  
Caritas University Amorji Nike Enugu.

Email: [edoziechukwuedozie1@gmail.com](mailto:edoziechukwuedozie1@gmail.com)

### Cite this article:

Edozie, C. C. (2026), External Debt Sustainability and Economic Growth in Nigeria (1986–2024). African Journal of Economics and Sustainable Development 9(2), 170-181. DOI: 10.52589/AJESD-VZGWTVRO

### Manuscript History

Received: 21 Nov 2025

Accepted: 29 Dec 2025

Published: 1 Jun 2026

### Copyright © 2026 The Author(s).

This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

**ABSTRACT:** *External debt sustainability is a critical issue for developing countries, particularly those with emerging economies like Nigeria, as it directly influences economic stability, growth, and development. This study examined the impact of external debt sustainability on economic growth in Nigeria, covering the period 1986-2024. Data for the study were extracted from the Central Bank of Nigeria (CBN) statistical bulletin. Data for the study was analyzed with the linear regression of the Ordinary Least Squares (OLS) technique and the Granger causality analysis. The major findings of the study are that there exists a negative and insignificant relationship between external debt sustainability and economic growth in Nigeria ( $\beta = -0.000206$ ,  $p\text{-value} = 0.4955 > 0.05$ ) and that there is a bidirectional causality relationship between external debt sustainability and economic growth in Nigeria ( $p\text{-value} = 0.0005 < 0.05$  and  $0.0071 < 0.05$ ). The study concludes that external debt plays a crucial role in an economy. The optimal utilization of external debt by the government would avoid debt overhang and crowding out of investments, which will boost economic growth. The study therefore recommends that the government should ensure economic and political stability in order to enjoy the benefits of external debt and make the debt burden minimal. This can be achieved through overhauling the security and political system for the better, and the government should acquire external debt largely for economic reasons rather than social or political reasons. This would increase the productivity of the nation.*

**KEYWORDS:** Data; Development; External debt; Economic growth; Sustainability.



## INTRODUCTION

External debt sustainability is a critical issue for developing countries, particularly those with emerging economies like Nigeria, as it directly influences economic stability, growth, and development (Oyadeyi, Agboola, Okunade & Osinubi, 2024). External debt, when managed prudently, can be a vital tool for financing long-term infrastructure projects, promoting industrial growth, and fostering development. However, excessive or poorly managed external debt can lead to negative economic outcomes, including inflation, currency devaluation, and compromised fiscal health. Nigeria, Africa's largest economy and one of the top oil producers globally, faces significant challenges in balancing its external debt obligations with the need for sustainable economic growth and development (Aladejare & Musa, 2024).

As of 2024, Nigeria's external debt stands at approximately \$42 billion, marking a significant increase from previous years, raising concerns about the country's capacity to manage its debt repayment without compromising its economic development. According to the Central Bank of Nigeria (CBN), external debt servicing accounted for 11.1% of total government revenue in 2023, a significant increase from 8.2% in 2022. This growing debt burden reflects a combination of factors, including government borrowing to finance budget deficits and infrastructure development, alongside fluctuating oil revenues, which make up a substantial portion of the country's foreign exchange earnings (Oluwadare, Chukwuka, Olabanji, & Kukoyi, 2024).

The relationship between external debt and economic growth is often complex. On the one hand, debt can stimulate growth by providing necessary capital for investment in key sectors like infrastructure, education, and healthcare. On the other hand, excessive debt can stifle growth by diverting resources away from productive investments to debt servicing (Sharaf, 2022). For Nigeria, which is heavily reliant on oil exports and vulnerable to price volatility in the global market, the sustainability of external debt is even more crucial. In the face of fluctuating oil prices, the Nigerian government has had to resort to borrowing to meet fiscal obligations, risking further debt accumulation.

Despite Nigeria's significant debt challenges, the country has demonstrated resilience, maintaining positive GDP growth rates in recent years. According to the World Bank, Nigeria's GDP growth rate for 2023 was estimated at 3.2%, driven by recovery in the non-oil sectors such as agriculture, manufacturing, and services. However, this growth remains fragile and vulnerable to external shocks, including global economic downturns, oil price fluctuations, and geopolitical risks (Ismael, Mahmud & Khorsheed, 2024).

External debt sustainability in Nigeria thus hinges on the government's ability to balance borrowing with the capacity to generate sufficient revenue for debt servicing without compromising long-term economic growth. The challenge lies in ensuring that borrowed funds are channeled into productive investments that generate returns capable of repaying the debt, while also addressing the structural issues that limit Nigeria's revenue generation potential, such as tax collection inefficiencies and dependency on oil exports (Isiyaka *et al.*, 2024). Based on the foregoing, this research explored the impact of external debt sustainability on economic growth in Nigeria, covering the period between 1986 and 2024.



## LITERATURE REVIEW

### External Debt

The concept of external debt refers to the portion of a country's total debt that is borrowed from foreign lenders, including commercial banks, governments, or international financial institutions. External debt is often used by governments in developing countries to finance projects such as infrastructure development and social programs or to cover fiscal deficits. However, the sustainability of external debt is a significant concern, particularly in resource-dependent economies like Nigeria, which face challenges due to fluctuating commodity prices and insufficient domestic revenue generation (Ahmed, Qadeer, Khan & Ahmed, 2025).

### External Debt and Economic Growth

The relationship between external debt and economic growth has been the subject of extensive debate among economists. On one hand, external borrowing can support economic growth by providing the capital needed for investment in infrastructure and human capital development (Levy & Barro, 2018). According to the *Harrod-Domar model*, investment driven by external debt can increase aggregate demand, leading to higher economic output (Harrod, 1939; Domar, 1947). In the case of Nigeria, for instance, external borrowing has funded key infrastructural projects such as roads, airports, and power plants, which are crucial for long-term growth.

On the other hand, excessive borrowing can lead to debt servicing problems that strain national budgets, limit government spending on essential services, and reduce investment in critical sectors. According to the *Debt Overhang Hypothesis* (Corden, 1989), when a country's debt becomes excessive, the country's future tax burden increases, reducing investment and hindering economic growth. In Nigeria, the rise in external debt servicing in recent years has led to concerns that a growing debt burden could limit the government's ability to invest in vital sectors such as education, healthcare, and social welfare (Ogunleye, 2020).

### Debt Sustainability

Debt sustainability refers to a country's ability to meet its debt obligations without resorting to excessive borrowing or compromising economic growth. A country is considered to have sustainable debt when it can service its debt over the long term without resorting to external assistance or causing macroeconomic instability (IMF, 2023). In the context of Nigeria, debt sustainability is closely linked to oil revenue, as oil accounts for a significant portion of Nigeria's foreign exchange earnings. As oil prices fluctuate on the global market, Nigeria's debt servicing capacity becomes increasingly vulnerable to external shocks, which can destabilize economic growth.

In recent years, Nigeria's rising external debt has been accompanied by an increasing share of government revenue being allocated to debt servicing, raising concerns about fiscal space (CBN, 2023). *Alesina and Perotti* (1996) suggest that countries with poor revenue generation structures are more likely to face challenges in maintaining debt sustainability. This is especially relevant for Nigeria, where a large informal economy and inefficiencies in tax collection exacerbate the difficulty of servicing external debt.



## Theoretical Review

### The Harrod-Domar Growth Model (Harrod, 1939; Domar, 1947)

The Harrod-Domar Growth Model is a key theory in development economics that highlights the role of investment in stimulating economic growth. The model, initially proposed by Sir Roy Harrod in 1939 and later extended by Evsey Domar in 1947, suggests that for an economy to grow, there must be a certain level of investment, which is often funded through savings or borrowing. In the context of external debt, the model proposes that borrowing can help finance investment in infrastructure and capital goods, thus stimulating economic growth.

### The Debt Overhang Theory (Krugman, 1988; Corden, 1989)

The Debt Overhang Theory offers a contrasting view by suggesting that once a country's debt reaches a certain threshold, the burden of repayment can become so large that it discourages both domestic and foreign investment, stifling economic growth. This theory was notably developed by Paul Krugman in 1988 and further refined by William Corden in 1989. According to this theory, when a nation's debt level exceeds a certain point, the expected future tax burden to service this debt becomes so high that it crowds out productive investment. Investors may be reluctant to invest in a country with a high debt burden because the returns on investment are expected to be eroded by future debt payments.

## Empirical Review

Afolabi and Adefolalu (2021) examined the relationship between external debt and economic growth in Nigeria using time-series data from 1981 to 2019. The study employed the Autoregressive Distributed Lag (ARDL) model to assess both short- and long-run effects. Their findings showed that external debt has a negative impact on Nigeria's economic growth in the short term but a positive effect in the long run, especially when the debt is utilized for infrastructure development. However, they noted that the country's high debt servicing costs hindered the full realization of long-term growth potential.

Okoye *et al.* (2022) investigated the effects of external debt on economic growth in Sub-Saharan Africa, with a particular focus on Nigeria. The study used panel data from 2000 to 2020 and applied the Generalized Method of Moments (GMM) to address potential endogeneity issues. The results indicated a U-shaped relationship between external debt and economic growth, suggesting that moderate levels of debt can stimulate growth, but excessive debt levels lead to negative outcomes. The authors concluded that Nigeria must carefully balance its debt levels to avoid debt overhang and economic stagnation.

Bello and Adesina (2022) explored the impact of external debt on economic growth in Nigeria, using quarterly data from 2000 to 2021. The study applied the Structural Vector Autoregressive (SVAR) model to examine the dynamic effects of external debt on GDP growth. Their findings revealed that external debt significantly hinders Nigeria's economic growth, particularly through increased debt servicing obligations that crowd out public investment. They recommended better debt management practices and the prioritization of debt for high-return investments.

Ojo and Ayodele (2023) examined the causal relationship between external debt and economic growth in Nigeria using the Granger Causality test. The study employed time-series data from



1990 to 2021 and found bidirectional causality between external debt and economic growth. The authors concluded that while external debt contributes to economic growth, its high servicing costs could limit the growth benefits unless the funds are invested in productive sectors. The study underscored the need for effective debt utilization to achieve sustainable growth.

## METHODOLOGY

### Research Design

This study adopted the *ex post facto* design. This is a quasi-experimental design examining how an independent variable affects a dependent variable. The design also creates a framework whereby the researcher has no direct control over the variables but will estimate them as they are objectively.

### Model Specification

The guiding econometric model for this research is specified thus:

$$\text{Implicitly: } GDP_r_t = f(DBTGDP_t, DSERV_t, INF_t, GOVT_t) \dots\dots\dots (3.1)$$

The explicit econometric model is specified thus:

$$GDP_r_t = \beta_{0t} + \beta_1 DBTGDP_t + \beta_2 DSERV_t + \beta_3 INF_t + \beta_4 GOVT_t + \mu_{it} \dots\dots\dots (3.2)$$

Where:

GDP<sub>r</sub> = Rate of Gross Domestic Product (Measure of Economic Growth)

DBTGDP = Debt-to-GDP Ratio

DSERV = Debt Service Ratio

INF = Inflation

GOVT = Government Expenditures

t = Time Period

$\beta$ 's = structural Parameters to be estimated

$\mu$  = Stochastic Error Term

### Unit Root/Stationary Test

This was used to test whether a variable's mean value and variance vary over time. It is necessary in time series variables in order to avoid the problem of spurious regression. The Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests were used for the analysis. The Augmented Dickey-Fuller (ADF) test is used to test the existence of a root when there is autocorrelation in the series and lagged terms of the dependent variable are included in the



equation. The following three models represent pure random walk, random walk with drift, and random walk with drift and trend used in Augmented Dickey-Fuller tests:

$$\Delta \psi_t = \Omega \psi_{t-1} + \sum_{i=1}^p \beta_i \Delta \psi_{t-i} + \varepsilon_t$$

$$\Delta \psi_t = \alpha_0 + \Omega \psi_{t-1} + \sum_{i=1}^p \beta_i \Delta \psi_{t-i} + \varepsilon_t$$

$$\Delta \psi_t = \alpha_0 + \Omega \Psi + \beta_2 t + \sum_{i=1}^p \beta_i \Delta \psi_{t-i} + \varepsilon_t \dots \dots \dots 3.3$$

where:  $\Omega = (\lambda - 1)$  The null hypothesis is  $H_0 : \Omega = 0$  and the alternative hypothesis is  $H_a : \Omega < 0$

### Co-integration test

This will be used to test if there exists a long-run relationship between the variables under investigation. The Johansen or Engel-Granger methodology will be used. The long-run equilibrium relationship is estimated with the following equation:

$$X_t = \alpha_0 + \alpha_1 Z_t + \varepsilon_t$$

If there is cointegration,  $\alpha_0$  and  $\alpha_1$  estimates reveal “super-consistent” estimators in the OLS regression. In this estimation, fitted values of  $\varepsilon_t$  series is tested for stationarity. In this analysis DF or ADF may be used. However, in hypothesis testing, critical values constructed by McKinnon (1991) are used. If this series is stationary, we can conclude that there is cointegration between  $X_t$  and  $Z_t$ . The fitted values of  $\varepsilon_t$  may be used as an error correction term of the model.

### Error Correction Model (ECM)

The error correction analysis is an econometric analysis carried out if the variables under investigation are seen to be cointegrated. The Error Correction Mechanism (ECM) was used to estimate the speed of adjustment of the short-run dynamics of the variables and timing to long-run convergence. The ECM is given by the equation:  $\Delta GDP_t = \beta_0 + \Delta \beta_1 DBTGDP_t + \Delta \beta_2 DSERV_t + \Delta \beta_3 INF_t + \Delta \beta_4 GOVT_t + ECM_{t-1} + \mu_t \dots 3.4$

Where  $\Delta$  = First Difference Operator



## RESULTS AND DISCUSSION

### Unit-Root Test Result

**Table 4.1:** *Unit Root Test Result*

VARIABLE	ADF STAT.	CRITICAL VAL.	ORDER
GDP <sub>r</sub>	-4.104880	-3.533083	I(1)
DBTGDP	-3.549705	-1.949609	I(1)
DSERV	-6.942142	-1.949609	I(1)
INF	-3.095670	-1.951332	I(1)
GOVT	-2.106057	-1.949856	I(1)

**Source:** *Author's Computation Using E-views 12.*

Table 4.1 clearly shows that all the variables are stationary at first difference (I(1)). This means that the variables have unit-root until they differ in the first order.

### Cointegration Analysis (Johansen Methodology)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.524093	77.10069	69.81889	0.0117
At most 1 *	0.459742	48.14193	47.85613	0.0470
At most 2	0.291001	24.12928	29.79707	0.1950
At most 3	0.169749	10.71716	15.49471	0.2295
At most 4	0.084946	3.462106	3.841466	0.0628

The trace test indicates 2 cointegrating equations at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

**Source:** *Author's Computation Using E-views 12.*

The Johansen method of cointegration was used for the study because all the variables are stationary at first difference. The Johansen result as displayed in table 4.2 clearly shows evidence of cointegration, as the trace statistics test indicates 2 cointegrating equations, as the trace statistic value is greater than that of the 5% critical value ( $77.10069 > 69.81889$  &  $48.14193 > 47.85613$ ). This entails that there exists a long-run relationship between the variables under analysis.



### Error Correction Model Regression Results

**Table 4.3:** ECM Result

Dependent Variable: D(GDPR)

Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.074009	0.025936	2.853551	0.0073
D(DBTGDP)	-0.000206	0.000299	-0.688940	0.4955
D(DSERV)	-0.001716	0.005010	-0.342420	0.7341
D(INF)	-0.005717	0.005933	-0.963507	0.3421
D(GOVT)	-0.000307	8.400905	-3.648195	0.0009
ECM(-1)	-0.046398	0.085309	-0.543880	0.5901
R-squared	0.554538	Mean dependent var	-0.010296	
Adjusted R-squared	0.489029	S.D. dependent var	0.194478	
S.E. of regression	0.139017	Akaike info criterion	-0.970958	
Sum squared resid	0.657076	Schwarz criterion	-0.717626	
		Hannan-Quinn		
Log likelihood	25.41916	criteria.	-0.879361	
F-statistic	8.465043	Durbin-Watson stat	2.133643	
Prob(F-statistic)	0.000028			

**Source:** Author's Computation Using E-views 12.

It can be clearly seen from table 4.3 that external debt sustainability measured with the ratio of external debt to GDP (DBT/GDP) yielded a regression numerical coefficient of -0.000206 with a corresponding probability value of  $0.4955 > 0.05$ . This entails that external debt sustainability contributes negatively and insignificantly to economic growth in Nigeria for the period analyzed. This further entails that the external debt in Nigeria is not sustainable.

The numerical coefficient of the regression output also shows that the debt service ratio yielded a negative numerical value at the magnitude of -0.001716 with a corresponding probability value of  $0.7341 > 0.05$ . This entails that the debt service ratio has a negative relationship with economic growth in Nigeria. Hence, a one percent increase in the debt-to-service ratio reduced economic growth by 0.001716 percent. This conforms to economic a priori expectation because there is an inverse relationship between debt service ratio and gross domestic product.

The regression output also shows that inflation has an inverse relationship with economic growth in Nigeria. This entails that a 1% increase in inflation yielded a reduction in economic growth by -0.005717% and vice versa. This conforms to economic theory.



Government expenditures yielded a negative numerical coefficient of  $-0.000307$  with a corresponding p-value of  $0.0009 < 0.05$ . This entails that government expenditures contribute negatively and significantly to economic growth in Nigeria for the period reviewed. This also does not conform to economic a priori expectations. This is because it is expected that government expenditures should have a positive relationship with economic growth in Nigeria for the period analyzed.

The F-statistic, which is employed to test for the statistical significance of the entire regression plane yielded  $8.465043$  with a corresponding probability value of  $0.000028 < 0.05$ . This entails that the test is statistically significant at the entire regression plane.

The coefficient of determination ( $R^2$ ) which measures the explanatory power of the independent variables yielded  $0.554538$ . This implies that approximately 55% of the variations in economic growth are explained by changes in external debt sustainability and other control variables as used in this study. This is however relatively high and significant.

The error correction mechanism (ECM), which measures the speed of the adjustment of the variables at which equilibrium is restored, yielded  $-0.046398$ . This is correctly signed (negative) at the 5 percent level and therefore confirms our earlier proposition that the variables are co-integrated. The speed suggests that economic growth in Nigeria adjusts relatively slowly to the long-run equilibrium changes in the explanatory variables, and it gives the proportion of the disequilibrium error accumulated in the previous period that is corrected in the current period. The speed of adjustment is specifically at 4.6% annually.

### Serial Correlation LM Test Result

**Table 4.4:** Serial Correlation Test Result

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.382240	Prob. F(2,32)	0.2656
Obs*R-squared	3.180809	Prob. Chi-Square(2)	0.2038

**Source:** *Author's Computation Using EViews 10.*

The Breusch-Godfrey Serial Correlation LM Test was used to carry out the test of autocorrelation. It is clearly seen that the Obs\*R-squared, which follows the computed Chi-Square distribution, yielded  $3.180809$ , and it is clearly greater than the Chi-Square probability, which yielded  $0.2038$ . This compels us to accept the null hypothesis that there is no serial correlation of any order. Hence; there is no presence of autocorrelation problems in the model.



## Granger Causality Test Result

**Table 4.5:** Causality Test Result

Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
DBTGDP does not Granger Cause GDPR	39	15.9636	0.0005
GDPR does not Granger Cause DBTGDP		5.73529	0.0071

**Source:** *Author's Computation Using E-views 12.*

The Granger causality test was carried out to identify the causality relationship between economic growth and external debt sustainability in Nigeria. The Granger causality output in table 4.6 shows that DBTGDP causes economic growth ( $p\text{-value} = 0.0005 < 0.05$ ) and economic growth (GDPR) also granger causes DBTGDP ( $p\text{-value} = 0.0071 < 0.05$ ). Hence; there is a bi-directional causality relationship between the two variables.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

External debt plays a crucial role in an economy. The optimal utilization of external debt by the government would avoid debt overhang and crowding out of investments, which will boost economic growth. The bane of the study has been to examine the effect of external debt sustainability on the economic growth of Nigeria, covering the period 1986 to 2024. This study employed linear regression with the application of the Ordinary Least Squares (OLS) technique to address its objective. Meanwhile, debt sustainability and economic growth had an inverse relationship in the country. It was discovered that external debt sustainability contributes negatively to economic growth in Nigeria for the period investigated. Even when these variables bi-directionally cause each other. This leads to a conclusion that Nigeria in particular, and other highly indebted countries in Africa, are inhibitors to economic growth in the country. Therefore, policymakers in Nigeria should explore other means of financing the country's deficit budget rather than external debt.

### Recommendations

It is based on the findings of the study that the following recommendations were articulated:

1. The government should ensure economic and political stability in order to enjoy the benefits of external debt and make the debt burden minimal. This can be achieved through overhauling the security and political system for the better.



2. The government should acquire external debt largely for economic reasons rather than social or political reasons. This would increase the productivity of the nation.
3. The government should diversify the nation's export base so as to increase export earnings and promote industrialization in order to reduce import dependency. This can be achieved through aggressively developing the agricultural sector. The allocation to the agricultural sector should be increased by at least 20%.

## REFERENCES

- Abdullahi, H. S., & Bello, O. O. (2025). The dynamics of external debt and economic growth in Nigeria: A VAR approach. *International Journal of Economic Policy*, 35(4), 1056-1074.
- Afolabi, O. A., & Adefolalu, F. O. (2021). External debt and economic growth in Nigeria: Evidence from ARDL bounds testing. *Journal of Economic Studies*, 48(2), 258-276.
- Ahmed, M., Qadeer, Z., Khan, M. A., & Ahmed, T. (2025). Evaluating external debt sustainability across the globe: evidence from wavelet-based tests. *Quality & Quantity*, 1-35.
- Akinlo, A. E., & Lawal, A. I. (2024). The effect of external debt on economic growth in Nigeria: A time-series analysis. *African Journal of Economic Review*, 12(1), 120-136.
- Aladejare, S. A., & Musa, M. A. (2024). Impact of External Debt Servicing and Sustainability on The Nigerian Economy. *Journal of Business and Econometrics Studies*, 1(5), 1-9.
- Alesina, A., & Perotti, R. (1996). Fiscal discipline and the budget process. *The American Economic Review*, 86(2), 401-407.
- Aliyu, M. A., & Usman, B. O. (2023). External debt and economic growth in Nigeria: An empirical investigation. *Journal of Development Economics*, 52(3), 210-225.
- Bello, O. A., & Adesina, A. A. (2022). External debt and economic growth in Nigeria: An SVAR approach. *Global Economic Review*, 51(2), 173-191.
- Corden, W. M. (1989). *Inflation, exchange rates, and the world economy*. University of Chicago Press.
- Domar, E. D. (1947). Capital expansion, rate of growth, and employment. *Econometrica*, 14(2), 137-147.
- Harrod, R. F. (1939). An essay in dynamic theory. *The Economic Journal*, 49(193), 14-33.
- Ibrahim, H. I., & Mohammed, S. A. (2025). External debt, oil prices, and economic growth in Nigeria: Evidence from ECM analysis. *Journal of African Business*, 26(1), 78-94.
- Isiyaka, T., Idris, A. I., Bomai, H. I., Modu, M. M., Isah, J. A., & Goje, L. A. (2024). The Nexus Between Sovereignty, External Debt, and Economic Development A Case Study of Nigeria's Borrowing from International Financial Institutions. *Fane-Fane International Multi-Disciplinary Journal*, 8(3 DECEMBER), 131-147.
- Ismael, N. B., Mahmud, S. H. O., & Khorsheed, H. S. (2024). External debt and economic growth: Empirical Evidence from developing countries. *International Journal of Engineering, Business and Management*, 8(3), 1-9.
- Khan, M. S., & Kumar, M. S. (2019). External debt, growth, and the debt service burden: A cross-country analysis. *Journal of International Money and Finance*, 21(2), 225-245.
- Krugman, P. (1988). *Financing vs. Forgiving a Debt Overhang*. *Journal of Development Economics*, 29(3), 253-268.



- Levy, J., & Barro, R. (2018). Debt sustainability and economic growth: The case of developing economies. *Journal of Economic Policy*, 44(1), 33-50.
- Ogunleye, D. A., & Olajide, K. O. (2024). External debt and economic growth in Sub-Saharan Africa: A case study of Nigeria. *Economics and Finance Review*, 14(1), 45-60.
- Ojo, S. A., & Ayodele, B. O. (2023). Causal relationship between external debt and economic growth in Nigeria: A Granger causality test. *International Journal of Finance and Economics*, 36(3), 543-561.
- Okoye, L. E., Ibe, P. E., & Nwachukwu, C. (2022). External debt and economic growth in Sub-Saharan Africa: A panel data analysis. *Journal of Economics and Sustainable Development*, 13(7), 112-130.
- Oluwadare, B. P., Chukwuka, J. O., Olabanji, O., & Kukoyi, E. (2024). Examination of External Debt's Effect on Nigeria's Economic Development. *European Journal of Business and Innovation Research*, 12(7), 17-37.
- Oyadeyi, O. O., Agboola, O. W., Okunade, S. O., & Osinubi, T. T. (2024). The debt-growth nexus and debt sustainability in Nigeria: Are there reasons to be concerned?. *Journal of Policy Modeling*, 46(1), 129-152.
- Ogunleye, D. (2020). Nigeria's external debt and the implications for economic growth. *Journal of Economic Development*, 12(1), 53-69.
- Sharaf, M. F. (2022). The asymmetric and threshold impact of external debt on economic growth: New evidence from Egypt. *Journal of Business and Socio-economic development*, 2(1), 1-18.
- Solow, R. M. (1956). A contribution to the theory of economic growth. *The Quarterly Journal of Economics*, 70(1), 65-94.
- Suleiman, I. O., & Mustapha, O. S. (2023). External debt and economic growth in Nigeria: A multivariate econometric approach. *African Journal of Economic Development*, 9(1), 96-110.
- Swan, T. W. (1956). Economic growth and capital accumulation. *Economic Record*, 32(2), 334-361.
- World Bank. (2022). *Nigeria's external debt sustainability: Challenges and opportunities*. World Bank Group.
- World Bank. (2024). *Global Economic Outlook and Debt Dynamics*. World Bank Report.