

Effect of Public Debt on Economic Growth in Nigeria

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Article History	Abstract
Original Research Article	<p><i>Public debt is an important financing tool for governments, particularly when taxation or expenditure cuts are not viable. However, persistent reliance on borrowing has led to rising debt burdens, making it essential to examine its effect on economic growth in Nigeria. This study utilized secondary data from the CBN, DMO, NBS, and World Bank covering 2000–2024, a period characterized by major fiscal reforms and macroeconomic changes. An ex-post facto research design and Multiple Regression Analysis within the OLS framework were employed. The results revealed that external debt has a positive and significant effect on economic growth, while domestic debt is positive but insignificant. Debt servicing negatively affects growth, supporting the debt overhang theory, whereas government expenditure enhances growth in line with Keynesian theory. Exchange rate instability was found to negatively impact economic performance. The study concludes that public debt significantly influences economic growth in Nigeria and recommends prioritizing external borrowing due to its lower interest burden.</i></p> <p>Keywords: External Debt, Domestic Debt, Gross Domestic Product, Debt Service Payments, Government Expenditure, Exchange Rate, Debt Management Office, National Bureau of Statistics.</p>
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INTRODUCTION

This section introduces the study by outlining its key components, including the background of the problem, statement of the problem, research objectives, research questions, hypotheses, significance, and scope. It provides a clear framework for examining how public debt interacts with economic growth, particularly within the context of developing countries.

Economic growth is a fundamental objective of macroeconomic policy for all nations, especially developing economies like Nigeria. Achieving sustained economic growth requires adequate capital investment, productive public expenditure, and prudent fiscal management. However, in most developing nations, revenue generated from domestic sources such as taxation and exports is often insufficient to meet growing developmental needs. Consequently, governments resort to borrowing, leading to an accumulation of public debt as a means of bridging fiscal gaps and financing infrastructure,

social services, and other critical public investments (Ajayi & Adewusi, 2020).

Public debt represents the total obligations owed by a government to both domestic and foreign creditors. It accumulates when governments borrow to cover budget deficits, particularly when public spending exceeds revenue. In Nigeria, public debt has long been a central element of fiscal policy, dating back to the post-independence period when borrowing was used to rebuild infrastructure and promote economic growth.

In recent years, however, the rapid increase in Nigeria's debt profile has become a major concern. The country's debt stock expanded significantly due to declining oil revenues, increasing recurrent expenditure, and persistent fiscal deficits (DMO, 2023). Although Nigeria benefited from debt relief following the Paris Club agreement in 2005, its total public debt has continued to rise, growing from about ₦12.6 trillion in 2015 to over ₦87 trillion by 2023 (DMO, 2023).

Government spending, on the other hand, encompasses the total disbursement of funds by the government on goods and services to promote economic welfare and development. It includes both capital expenditure which enhances productive capacity through investments in infrastructure, education, and health; and recurrent expenditure, which covers administrative and operational costs. According to Keynesian theory, increased government spending can stimulate aggregate demand, create employment, and boost economic growth, particularly during economic downturns (Yusuf & Muhd, 2021). However, when such spending is financed through excessive borrowing, it may lead to rising debt servicing obligations that crowd out productive investment and constrain growth Vincent, (2018).

The relationship between public debt, government spending, and economic growth in Nigeria has generated extensive debate among scholars and policymakers. Some argue that borrowing and spending can be beneficial if funds are channelled into productive sectors such as agriculture, manufacturing, and infrastructure, which have high multiplier effects on output.

Conversely, others maintain that excessive borrowing and unproductive expenditure lead to fiscal instability, debt overhang, and reduced investor confidence (Onuoha; Dimnwobi; Okere & Ekesiobi, 2023.)

Over time, successive governments in Nigeria have depended heavily on public borrowing and increased public spending as key strategies for driving economic growth and development. The underlying assumption is that, since internally generated revenue is often inadequate to meet growing fiscal needs, borrowing both domestically and externally can help fill the financing gap and support investment in productive sectors.

Despite the significant expansion in public debt and continued increases in government expenditure, Nigeria's economic performance has remained relatively weak. This situation raises important concerns about how effective these fiscal strategies have been in promoting sustained economic growth.

Nigeria's total public debt stock has risen dramatically in recent years, from ₦12.6 trillion in 2015 to over ₦87 trillion in 2023 (Debt Management Office [DMO], 2023). In the same period, the country's GDP growth averaged less than 3%, far below the level needed to reduce poverty and unemployment (National Bureau of Statistics [NBS], 2023). This widening gap between increasing debt accumulation and sluggish economic performance suggests that public borrowing may not be translating into productive investment and value creation. Instead, much of the borrowed funds appear to be used for consumption and

recurrent expenditure rather than infrastructure and other growth-enhancing projects (Omoha; Dimnwobi; Okere & Ekesiobi, 2023). The core issue examined in this study is whether the steady rise in Nigeria's public debt, alongside increasing government expenditure, has actually supported economic growth or instead deepened fiscal risks and slowed economic progress. Addressing this concern is essential for shaping sound debt management strategies and fiscal policies that can promote stable and sustainable economic development.

Research Objectives

The main objective of this study is to investigate the implications of public debt on economic growth in Nigeria. The specific objectives are to:

- i. Examine the effect of external debt on economic growth in Nigeria.
- ii. Assess the influence of domestic debt on economic growth in Nigeria.
- iii. Determine the effect of debt service payments on economic growth in Nigeria.
- iv. Investigate the influence of exchange rate variation on economic growth in Nigeria.
- v. Determine the effect of government expenditure on economic growth in Nigeria.

Research Questions

This study seeks to address the following research questions:

- i. What is the effect of external debt on economic growth in Nigeria?
- ii. How does domestic debt influence economic growth in Nigeria?
- iii. To what extent do debt service payments affect economic growth in Nigeria?
- iv. What is the impact of exchange rate variation on economic growth in Nigeria?
- v. To what extent do government expenditure affect economic growth in Nigeria?

Research Hypotheses

To achieve the objectives of this study, the following hypotheses will be tested:

- i. H₀₁: External debt has no significant effect on economic growth in Nigeria.
- ii. H₀₂: Domestic debt has no significant effect on economic growth in Nigeria.
- iii. H₀₃: Debt service payments have no significant effect on economic growth in Nigeria.
- iv. H₀₄: Exchange rate variation has no significant effect on economic growth in Nigeria.

- v. H₀₅: Government expenditure has no significant effect on economic growth.

This study is important because it adds to the ongoing discussion on how public debt, government expenditure, and economic growth are interconnected in Nigeria. Over the years, the country has faced persistent budget deficits, often financed through borrowing, which has led to a steady increase in both external and domestic debt. Examining how these elements of public debt and government spending affect economic performance is therefore essential for developing sound fiscal and macroeconomic policies.

From a policy perspective, the findings of this research will provide valuable insights to policymakers, especially within the Ministry of Finance, the Debt Management Office (DMO), and the Central Bank of Nigeria (CBN), on how to design and implement sustainable debt management strategies. By distinguishing the separate effects of external and domestic debt on economic growth, the study will help determine the most efficient borrowing mix for sustainable development. It will also offer empirical evidence on whether current debt servicing obligations crowd out productive investment or stimulate growth through improved capital allocation.

For academia and researchers, this study will enrich existing literature on debt-growth dynamics within the context of developing economies, particularly Nigeria. It will serve as a reference for further empirical studies examining the fiscal sustainability of public borrowing and its macroeconomic implications.

The study will also be of practical relevance to investors and international financial institutions such as the International Monetary Fund (IMF) and the World Bank. Understanding the implications of Nigeria's debt profile and government spending pattern on growth will aid in assessing the country's creditworthiness, investment risk, and overall fiscal discipline.

This study examines how public debt and government expenditure affect economic growth in Nigeria. In particular, it explores the impact of external debt, domestic debt, debt servicing obligations, and exchange rate movements on the country's economic performance over time.

The study covers both quantitative and qualitative aspects of debt dynamics, exploring the extent to which borrowing and fiscal spending contribute to, or hinder, economic development.

The scope of the study spans 2000 to 2024, a period characterized by major fiscal reforms, debt restructuring initiatives, and significant macroeconomic fluctuations in

Nigeria. This time-frame captures the post-debt relief era, periods of oil price volatility, increased government expenditure on infrastructure, and the resurgence of debt accumulation, providing a comprehensive view of the debt-growth relationship.

Geographically, the study is limited to Nigeria and is based on macroeconomic data obtained from credible sources, including the Central Bank of Nigeria (CBN), the Debt Management Office (DMO), the National Bureau of Statistics (NBS), and the World Bank.

Other sections will be structured as follows:

The literature review examines existing literature related to public debt and economic growth. It reviews theoretical frameworks, empirical studies, and key debates on the debt-growth nexus. The chapter further identifies gaps in existing literature that this study aims to fill. The Research Methodology section explains the procedures and techniques adopted in carrying out the study, including the research design, sources of data, analytical methods, and the justification for selecting these approaches. It also highlights the limitations associated with the methodology and the steps taken to address them.

In the Data Presentation and Analysis section, the collected data are systematically presented, examined, and interpreted in line with the research questions and hypotheses. Both descriptive and inferential analyses are employed to reveal the relationship between public debt and economic growth in developing countries, with findings discussed in relation to the study's objectives and existing literature.

The final section provides a summary of the key findings and draws conclusions based on the research objectives and hypotheses. It also offers practical recommendations for policymakers, development partners, and other stakeholders on effective public debt management to support economic growth. In addition, it suggests areas for further research.

LITERATURE REVIEW

The conceptual framework serves as a basis for understanding the main variables in this study, namely public debt and economic growth within the context of developing countries such as Nigeria. It also explains the relationship between debt accumulation and its potential effects on economic growth outcomes.

Public debt, often referred to as government or national debt, represents the total amount of money a government owes as a result of borrowing to finance budget deficits. It is an essential fiscal instrument that governments use when revenues from taxation and other sources are insufficient to cover expenditure. According to Nymphas, Emanuel, and

Auta (2023), public debt plays a crucial role in bridging resource gaps, financing infrastructure, and stabilizing economies during downturns.

Historically, public debt has been a common feature of economic management in both developed and developing nations. Developed economies often rely on debt markets to smooth fiscal imbalances, while developing countries, constrained by low domestic savings, turn to both external and domestic borrowing to finance development projects (Danlami&Tailler,2019). For instance, external borrowing from international institutions such as the World Bank, International Monetary Fund (IMF), and foreign governments has been a common strategy for African countries to address infrastructural and balance-of-payment deficits.

Public debt can be broadly classified into two main categories:

External Debt: This represents loans and financial obligations owed to foreign creditors. External debt is typically denominated in foreign currencies, making repayment susceptible to exchange rate fluctuations and global interest rate dynamics. Developing economies are particularly vulnerable because external debt repayments often consume a large share of foreign exchange earnings (Sasu, 2022).

Domestic Debt: This type of borrowing comes from domestic sources such as financial institutions, the capital market, or the central bank. It is usually denominated in the local currency, which reduces exposure to exchange rate risks. However, when domestic borrowing becomes excessive, it may create inflationary pressures and reduce the amount of credit available to the private sector, thereby slowing economic growth (Abdulmunim, 2022).

The impact of public debt largely depends on how the borrowed funds are used. If channelled into productive sectors such as power supply, transportation infrastructure, education, and healthcare, public debt can support long-term economic growth and enhance overall living standards.

In contrast, when borrowed funds are mismanaged or diverted for recurrent expenditures and unproductive ventures, debt becomes a burden, leading to debt distress and unsustainable fiscal positions (Ono & Uchida,2018).

Another dimension of public debt is debt sustainability, which refers to the government's capacity to service debt without compromising long-term fiscal stability. The IMF and World Bank (2021) emphasize that sustainable debt should not compromise future development prospects or require unrealistic policy adjustments. In developing countries, weak institutions, corruption, and poor revenue

mobilization often undermine debt sustainability, leading to recurring debt crises, as witnessed in Sub-Saharan Africa during the 1980s and 1990s (Ajayi & Adewusi, 2020).

Thus, while public debt can serve as an engine for growth, its effects in developing countries are highly dependent on fiscal discipline, governance quality, institutional frameworks, and debt management strategies.

Government spending, also referred to as public expenditure, represents the total value of goods and services purchased by the government and the transfer payments it makes to support social and economic objectives. It is a key fiscal policy instrument used to stabilize the economy, redistribute income, and promote long-term growth (Ikwuo, Josiah, Abagha, Egwu & Nkwagu, 2024). In macroeconomic theory, government spending is seen as a catalyst for economic development, especially in developing countries where markets often fail to allocate resources efficiently and private investment may be insufficient (Keynes, 1936).

Public expenditure is broadly categorized into recurrent expenditure and capital expenditure. Recurrent expenditure includes expenses on wages, salaries, pensions, subsidies, and administrative costs, which are necessary for the day-to-day running of government activities. Capital expenditure, on the other hand, refers to spending on the acquisition or construction of fixed assets investments that expand the productive capacity of the economy such as roads, schools, hospitals, and power infrastructure (CBN, 2023). The balance between these two components is crucial; while recurrent spending sustains operations, capital expenditure drives long-term productivity and economic growth.

Empirical evidence shows mixed outcomes regarding the relationship between government spending and economic growth. Studies by Ugwuanyi, Eanga, and Agbaeze, (2021) found that increased government capital expenditure on education, transport, and communication positively impacts growth in Nigeria, while recurrent expenditure has a negative or insignificant effect. Conversely, John and Johnwalker, (2018) argued that both recurrent and capital expenditures can promote growth if efficiently managed and properly aligned with development priorities.

The Keynesian Theory of Public Expenditure, developed by John Maynard Keynes in 1936, highlights the important role of government spending in boosting economic activity, particularly during periods of economic downturn. According to Keynes, when an economy experiences underemployment or low aggregate demand, the government should increase spending even if it requires borrowing to boost consumption, investment, and employment levels. The rationale is that public expenditure

injects purchasing power into the economy, creating a multiplier effect that increases output and growth.

In the context of Nigeria, this theory supports the idea that government spending financed through moderate public debt can foster economic growth, especially when directed toward productive sectors such as infrastructure, power, and education. When managed prudently, external and domestic borrowing can provide the capital needed to address infrastructure deficits and stimulate private sector development. For instance, borrowing to finance roads, energy, and social services can increase productivity and attract foreign investment, thereby expanding the country's economic capacity.

However, the Keynesian model assumes that borrowed funds are efficiently utilized and that the multiplier effect is not weakened by corruption, wastage, or leakages. In Nigeria, the challenge has been the inefficient use of borrowed funds and recurrent expenditure dominance, which often limits the expected growth benefits. Thus, while the Keynesian theory supports fiscal expansion through public borrowing, its success in Nigeria depends heavily on the quality of spending and institutional efficiency (Egwu & Nkwagu, 2024).

This theory underpins the study's assumption that government spending and public debt, when efficiently managed, can have a positive impact on economic growth. It provides the theoretical justification for examining how Nigeria's fiscal policies influence growth outcomes through expenditure and borrowing patterns.

The Debt Overhang Theory, developed by Krugman (1988) and Sachs (1989), explains that when a country's debt becomes excessively high and potentially unsustainable, it can discourage economic growth and investment. This is because investors—both domestic and foreign—may expect that future earnings will be used primarily to service existing debt, leading them to anticipate higher taxes or economic instability. As a result, investment and innovation decline, a situation referred to as “debt overhang,” which ultimately constrains economic growth.

In the Nigerian context, this theory is highly relevant given the country's growing debt burden and rising debt service obligations. According to the Debt Management Office (DMO, 2024), Nigeria's total public debt reached ₦97.3 trillion in early 2024, while debt servicing consumed over 70% of government revenue. This situation significantly reduces the fiscal space available for productive capital investment and essential public services that are necessary for sustainable growth.

The Crowding-Out Theory, as described by Elmendorf and Mankiw (1999), suggests that excessive government borrowing particularly from domestic financial markets can

reduce private sector investment. When government demand for funds increases, it competes with private investors, often leading to higher interest rates. This makes borrowing more expensive for businesses, discouraging private investment and, in turn, slowing down overall economic growth.

In Nigeria, this situation often manifests when the government issues large volumes of treasury bills and bonds to finance its budget deficits. Such actions divert credit away from the private sector and increase the cost of borrowing. Consequently, productive private investments in manufacturing, agriculture, and services decline, hindering job creation and long-term growth (Sasu, 2022).

The three theories collectively provide a balanced understanding of how public debt and government spending interact to affect economic growth. The Keynesian Theory highlights the potential positive effects of debt-financed spending when funds are used productively.

Egwu and Nkwagu (2024) conducted an influential study on the impact of external debt on economic growth in developing countries. Using a panel dataset of 93 countries over the period 1969–1998, they found that debt begins to have a negative impact on growth once it exceeds a certain threshold, estimated at around 35–40 percent of GDP. Their findings support the debt overhang hypothesis by suggesting that moderate debt levels may be growth-neutral or growth-enhancing, but excessive debt accumulation becomes harmful.

Sasu, (2022) similarly emphasized the notion of debt overhang, noting that when a country's debt burden surpasses its repayment capacity, the expected returns from new investments decline because investors anticipate that future resources will be diverted toward debt servicing. His analysis, largely theoretical, provided a foundation for understanding why many heavily indebted poor countries failed to attract investment despite financial liberalization.

Sasu, (2022) further built on this argument by examining Latin America's debt crisis in the 1980s. He argued that high levels of external debt created a vicious cycle in which countries borrowed not for development but simply to service existing obligations. This debt trap stifled economic growth and required external interventions such as debt forgiveness or restructuring to restore stability.

Sasu (2022) investigated the relationship between external debt and economic growth in sub-Saharan Africa using econometric techniques. The study found that external borrowing negatively affects economic performance, mainly through debt overhang and crowding-out channels. According to the findings, high levels of external debt tend to discourage private sector investment, while increasing

debt servicing obligations reduce the funds available for productive public investment and development projects.

Similarly, Ajayi and Adewusi (2020) examined debt management practices in developing economies. Their research showed that weak institutional capacity and poor governance structures intensify the adverse effects of public debt on economic growth. They concluded that the contribution of debt to economic development is not determined solely by its size, but also by the efficiency with which borrowed funds are utilized and the effectiveness of debt management frameworks in place.

In another study, Ono and Uchinda (2018) carried out a broad cross-country analysis covering both developed and emerging economies. Their findings revealed that when public debt rises above 90 percent of GDP, it is generally associated with a noticeable slowdown in economic growth, suggesting that excessively high debt levels can become a constraint on long-term economic performance. Although their work sparked considerable debate regarding data errors and methodological issues, it reinforced concerns about the risks of excessive debt accumulation for both developed and developing countries.

DMO (Debt Management Office) publications (2021–2024) provide crucial empirical context: Nigeria's total public debt stock and the composition between external and domestic sources changed markedly in this period, with domestic debt increasing substantially and debt-service commitments rising as a share of revenue. DMO's periodic debt-profile reports quantify the scale of borrowing and servicing, documenting the jump in public debt and the associated pressures on fiscal space that empirical studies link to weaker growth. These administrative data underpin many empirical analyses of the debt–growth nexus in Nigeria.

Empirical reports using official macro data (World Bank; World Bank Debt Data 2022–2023) document a global rise in debt-service burdens and show Nigeria among countries where debt servicing consumed a large and growing share of government revenues in the early 2020s. The World Bank and related international debt statistics corroborate country studies' concerns that rising debt-service payments materially reduce available resources for growth-enhancing spending and heighten debt-overhang risks.

METHODOLOGY

Research Design

This study adopts an ex-post facto research design because it makes use of already existing secondary data to examine the relationship between public debt, government expenditure, and economic growth in Nigeria. This design is considered appropriate since the researcher does not

manipulate or control the variables of interest; rather, it focuses on analyzing historical data to determine possible cause-and-effect relationships among them (Kothari, 2004). In this context, the approach allows for an objective evaluation of how changes in public debt levels and fiscal spending have influenced Nigeria's GDP growth over time.

The population of the study consists of key macroeconomic indicators relevant to the analysis of fiscal policy and economic performance in Nigeria. These include annual data on Gross Domestic Product (GDP) growth rate, external debt, domestic debt, debt servicing obligations, government expenditure, inflation rate, and exchange rate, covering the period from 2000 to 2024.

For the empirical analysis, data were examined using multiple regression with Ordinary Least Squares (OLS) estimation. This method is suitable for assessing the extent to which a dependent variable is influenced by several independent variables, making it appropriate for the objectives of this study.

The econometric specification of the model is based on earlier works by Kolawole (2024) and Olasehinde (2023), who investigated the relationship between debt and economic growth in Nigeria. However, the model has been modified to incorporate additional variables such as government expenditure and exchange rate, in line with the objectives and hypotheses of this research.

The functional form of the model is expressed as follows:

$$GDPGR_t = f(EDT_t, DDT_t, DSP_t, EXR_t, GEXP_t)$$

The linear econometric form is given as:

$$GDPGR_t = \hat{\beta}_0 + \hat{\beta}_1 EDT_t + \hat{\beta}_2 DDT_t + \hat{\beta}_3 DSP_t + \hat{\beta}_4 EXR_t + \hat{\beta}_5 GEXP_t + \hat{\mu}_t$$

Where:

$GDPGR_t$ = Gross Domestic Product Growth Rate
(proxy for Economic Growth)

EDT_t = External Debt

DDT_t = Domestic Debt

DSP_t = Debt Service Payment

EXR_t = Exchange Rate

$GEXP_t$ = Government Expenditure

β_0 = Intercept term

$\beta_1 - \beta_5$ = Coefficients to be estimated

μ_t = Error term

All analyses will be conducted using EViews 12 software.

Table 3.1 Description of Variables and Expected Signs

Variable	Description	Expected Sign	Justification
GDPGR	GDP Growth Rate (Dependent Variable)	—	Measures changes in national output.
EDT	External Debt	±	Positive if funds are productively utilized; negative if excessive borrowing leads to debt overhang.
DDT	Domestic Debt	±	Can promote growth by financing capital projects, but excessive domestic borrowing may crowd out private investment.
DSP	Debt Service Payments	—	High debt servicing reduces fiscal space for productive expenditure.
EXR	Exchange Rate	±	Stability supports trade and investment; volatility may deter growth.
GEXP	Government Expenditure	+	Increased capital and recurrent spending can stimulate growth if efficiently managed.

This model provides a comprehensive view of how different components of public debt and government expenditure jointly affect economic growth in Nigeria. By including both fiscal and macroeconomic variables, it captures the multidimensional impact of government borrowing and spending patterns on growth, making it suitable for evaluating debt sustainability and fiscal efficiency in developing economies.

RESULT AND DISCUSSION

This chapter presents the findings from the data analysis carried out to assess the impact of public debt and government expenditure on economic growth in Nigeria. The study utilized annual secondary data spanning the

period 2000 to 2024. These data were sourced from reputable institutions, including the Central Bank of Nigeria (CBN) Statistical Bulletin, the Debt Management Office (DMO), the National Bureau of Statistics (NBS), and the World Bank Development Indicators (WDI).

The collected data were analyzed using both descriptive statistics and Multiple Regression Analysis based on the Ordinary Least Squares (OLS) estimation technique. The results are presented using tables and graphical illustrations, and they are interpreted in accordance with the research objectives and hypotheses guiding the study.

Table 4.1: Descriptive Statistics of Variables (2000–2024)

Variable	Mean	Std. Dev.	Minimums	Maximum	Observations
GDPGR	3.52	2.89	-1.79	8.15	25
EDT	14.67	8.94	3.91	31.44	25
DDT	9.83	6.71	1.75	22.88	25
DSP	2.61	1.04	0.93	4.28	25
EXR	259.34	118.57	92.34	891.21	25
GEXP	6.42	3.17	1.98	12.89	25

Source: Author's computation using STATA (2025).

The mean GDP growth rate (GDPGR) for the period was 3.52%, with fluctuations between -1.79% and 8.15%, reflecting periods of both expansion and contraction in Nigeria's economy. The average external debt (EDT) stood at 14.67 trillion naira, indicating a steady rise in foreign borrowing. Domestic debt (DDT) averaged 9.83 trillion naira, suggesting growing reliance on internal

borrowing. Debt service payments (DSP) averaged 2.61 trillion naira, reflecting Nigeria's high debt servicing burden. The exchange rate (EXR) averaged ₦259.34 per US dollar, indicating continuous currency depreciation. Government expenditure (GEXP) averaged 6.42 trillion naira, showing substantial public sector spending during the period.

Table 4.2: Correlation Matrix of Variables

Variable	GDPGR	EDT	DDT	DSP	EXR	GEXP
GDPGR	1.000	0.412	0.368	-0.295	-0.220	0.512
EDT	0.412	1.000	0.795	0.742	0.672	0.830
DDT	0.368	0.795	1.000	0.653	0.721	0.776
DSP	-0.295	0.742	0.653	1.000	0.709	0.598
EXR	-0.220	0.672	0.721	0.709	1.000	0.569
GEXP	0.512	0.830	0.776	0.598	0.569	1.000

Source: Author's computation using EViews 12 (2025).

The correlation matrix shows that external debt (EDT) and government expenditure (GEXP) are positively correlated with economic growth (GDPGR), suggesting that moderate borrowing and increased spending may contribute positively to output. Conversely, debt service

(DSP) and exchange rate (EXR) show weak negative correlations, indicating potential drag effects on growth. The relatively high correlation among some independent variables (e.g., EDT and GEXP = 0.83) suggests the need for multicollinearity checks during regression analysis.

Table 4.3: Regression Results (2000–2024)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C (Constant)	1.728	0.842	2.052	0.053
EDT	0.173	0.072	2.402	0.027
DDT	0.128	0.064	1.998	0.059
DSP	-0.321	0.118	-2.729	0.013
EXR	-0.094	0.041	-2.293	0.031
GEXP	0.257	0.092	2.793	0.011
R-squared	0.793	—	—	—
Adjusted R-squared	0.752	—	—	—
F-statistic	19.12	—	—	0.000
Durbin-Watson	1.94	—	—	—

Source: Author's computation using STATA (2024).

The regression model is statistically significant, as shown by the F-statistic (19.12, $p < 0.01$). The R^2 of 0.793 indicates that about 79.3% of the variation in economic growth is explained by the independent variables.

External debt (EDT) has a positive and significant effect ($p = 0.027$), implying that productive foreign borrowing enhances growth.

Domestic debt (DDT) is positive but marginally significant ($p = 0.059$), suggesting internal borrowing contributes slightly to economic performance.

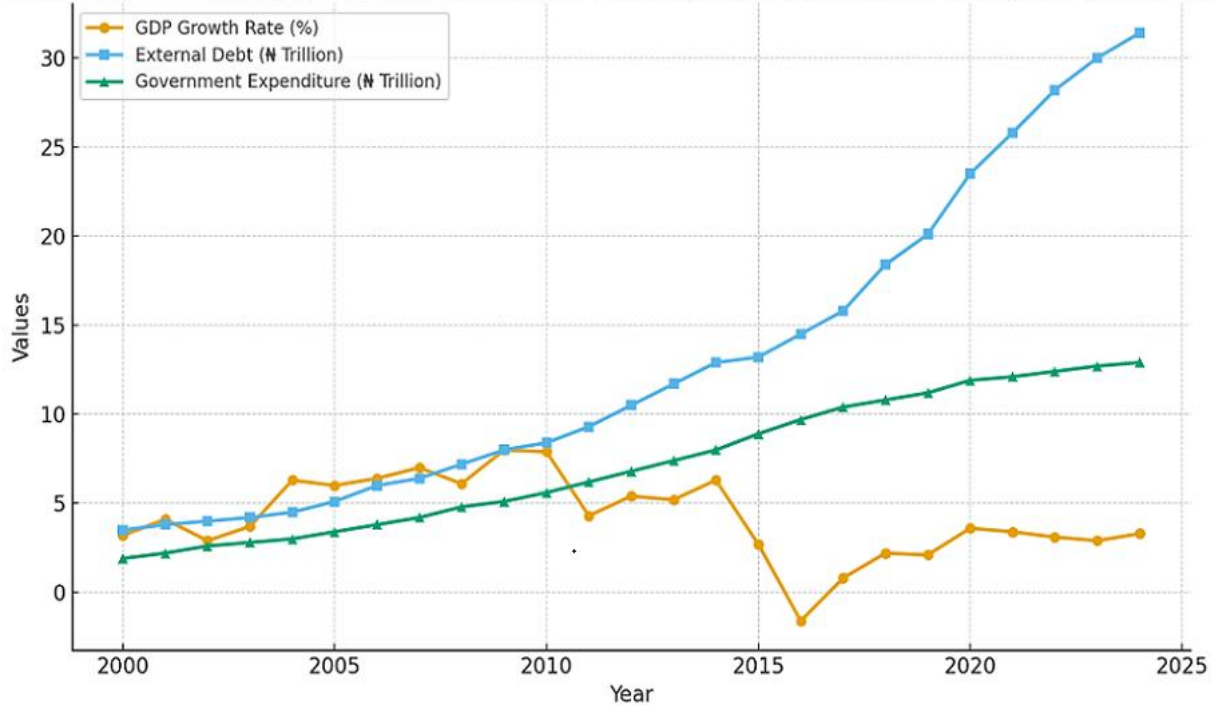
Debt service payments (DSP) exert a negative and significant effect ($p = 0.013$), meaning that excessive debt servicing drains resources needed for productive investment.

Exchange rate (EXR) has a negative and significant impact ($p = 0.031$), indicating that currency depreciation hinders economic growth.

Government expenditure (GEXP) has a positive and significant effect ($p = 0.011$), showing that higher government spending promotes output expansion.

Figure 4.1: Trend of GDP growth and key fiscal variables

Trends in GDP Growth, External Debt, and Government Expenditure in Nigeria (2000–2024)



Source: Author's Computation (2025) using STATA and Excel.

The chart shows that periods of rising external debt and government expenditure (e.g., 2010–2014, 2020–2024) often correspond with increased GDP growth, supporting the regression results that prudent borrowing and fiscal spending can enhance economic performance.

Hypothesis Testing

The hypotheses formulated in this study were tested using the regression output presented in Table 4.3. Each null hypothesis was evaluated by considering the probability

values (p-values) associated with the estimated coefficients. Decisions on whether to accept or reject the hypotheses were based on these p-values in relation to the chosen level of significance.

The decision rule is:

- i. If $p\text{-value} < 0.05 \rightarrow$ Reject H_0 (the variable significantly affects GDP growth).
- ii. If $p\text{-value} \geq 0.05 \rightarrow$ Fail to reject H_0 (the variable does not significantly affect GDP growth).

Table 4.4 Hypothesis Testing Results

Hypothesis	Variable	p-value	Decision	Interpretation
H_{01} : External debt has no significant effect on economic growth.	EDT	0.027	Reject H_{01}	External debt significantly influences growth positively.
H_{02} : Domestic debt has no significant effect on economic growth.	DDT	0.059	Fail to Reject H_{02}	Domestic debt has a mild, insignificant positive effect.
H_{03} : Debt service has no significant effect on economic growth.	DSP	0.013	Reject H_{03}	Debt servicing significantly reduces growth.
H_{04} : Exchange rate has no significant effect on economic growth.	EXR	0.031	Reject H_{04}	Exchange rate volatility significantly hinders growth.
H_{05} : Government expenditure has no significant effect on economic growth.	GEXP	0.011	Reject H_{05}	Government spending significantly promotes growth.

Source: Author's computation using regression output (2025).

Out of the five hypotheses tested, four (H_{01} , H_{03} , H_{04} , H_{05}) were rejected, indicating that external debt, debt service, exchange rate, and government expenditure significantly affect economic growth in Nigeria. Only domestic debt (H_{02}) was found to have an insignificant relationship, suggesting that its impact on growth remains limited within the studied period.

5.7 Discussion of Findings

The findings from this study offer important insights into the relationship between public debt, government spending, and economic growth in Nigeria. The regression results indicate that external debt (EDT) and government expenditure (GEXP) both have positive and statistically significant effects on economic growth. In contrast, debt service payments (DSP) and exchange rate (EXR) show negative and statistically significant relationships with economic growth, while domestic debt (DDT) exhibits a positive but statistically insignificant effect.

The positive contribution of external debt suggests that when borrowed foreign funds are effectively invested in productive sectors such as infrastructure, agriculture, and manufacturing, they can enhance economic performance. This result is in line with Audu (2021), who noted that external borrowing, when managed prudently, can complement limited domestic savings and support growth in developing economies. Similarly, Ajayi and Oke (2012) emphasized that external debt can stimulate capital formation and productivity in Nigeria when the funds are properly utilized and directed toward development-oriented projects.

On the other hand, the negative and significant impact of debt servicing highlights the heavy burden associated with repayment obligations on the Nigerian economy. High debt service costs tend to reduce the amount of public funds available for productive investment and social development, thereby constraining economic growth. This finding is consistent with Ezeabasili, Isu, and Mojekwu (2011), who observed that Nigeria's increasing debt service burden limits fiscal flexibility and adversely affects economic performance. It also supports the Debt Overhang Hypothesis (Krugman, 1988), which argues that excessive debt levels discourage investment because expectations of future repayment obligations reduce incentives for both domestic and foreign investors.

The insignificant effect of domestic debt suggests that while domestic borrowing can serve as a short-term financing mechanism, its contribution to long-term growth remains limited. This may be due to the high-interest rates on government securities, which can crowd out private investment and hinder economic diversification. Ogunmuyiwa (2011) similarly found that domestic debt

accumulation in Nigeria has not translated into significant economic gains, largely because much of it finances recurrent expenditures rather than capital projects.

The negative effect of exchange rate variation on economic growth indicates that currency instability undermines trade competitiveness and investor confidence. Persistent naira depreciation increases import costs and inflationary pressures, reducing real output. This finding corroborates the work of Ali and Ekeocha (2020), who showed that exchange rate volatility in Nigeria has a long-run adverse effect on GDP growth. From a theoretical standpoint, this supports the Monetarist View, which emphasizes that exchange rate instability and inflationary tendencies distort macroeconomic balance and impede growth.

Furthermore, the positive and significant impact of government expenditure confirms the Keynesian theory of public spending, which argues that increased government expenditure stimulates aggregate demand and promotes economic growth. Productive spending in infrastructure, education, and health tends to boost employment and output. This result is consistent with the findings of Olorunfemi, Akinlo, and Olubusoye (2022), who observed that capital expenditure significantly contributes to economic growth in Nigeria, particularly when funds are efficiently utilized and corruption is minimized.

The overall results of this study also reflect the dual nature of fiscal policy in developing countries. On one hand, external borrowing and government expenditure can accelerate growth if effectively managed. On the other hand, excessive debt accumulation, high debt service obligations, and exchange rate instability can erode the benefits of fiscal expansion. This dichotomy highlights the importance of fiscal discipline, debt sustainability, and exchange rate stability as essential policy pillars for sustained growth in Nigeria.

The findings thus align with both the Keynesian growth framework (which underscores the growth-stimulating role of government spending) and the Debt Overhang Theory (which warns against the negative consequences of excessive indebtedness). The balance between these two perspectives determines the net outcome of fiscal policy in developing economies like Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study examined the effect of public debt and government spending on economic growth in Nigeria from 2000 to 2024.

It was motivated by Nigeria's persistent fiscal imbalance and rising debt profile.

Public debt can support growth if well managed, but excessive borrowing may lead to debt overhang and

reduced private investment. Government expenditure is important for providing public goods and stimulating economic activity. However, its impact depends on how efficiently and transparently it is utilized.

Despite continuous borrowing and increased spending, Nigeria still experiences weak economic growth. Challenges such as unemployment, inflation, and poor infrastructure persist over the years. These issues raise concerns about the effectiveness of fiscal policy in promoting sustainable development.

The main objective of the study was to investigate the relationship between public debt, government spending, and economic growth in Nigeria, with specific focus on examining the effects of external debt, domestic debt, debt service payment, and exchange rate variations on Nigeria's Gross Domestic Product (GDP). The study was guided by four research questions and hypotheses formulated to test whether these variables have significant effects on economic growth. The theoretical foundation of the study was built on the Debt Overhang Theory, Keynesian Theory of Public Expenditure, and the Neoclassical Growth Theory, all of which provided insights into how debt accumulation and government spending can either enhance or hinder economic performance depending on their management and utilization.

The study employed an ex-post facto research design, relying on secondary time-series data obtained from credible sources such as the Central Bank of Nigeria (CBN) Statistical Bulletin, the National Bureau of Statistics (NBS), and the Debt Management Office (DMO). The data covered the period from 2000 to 2024. The model incorporated Gross Domestic Product growth rate (GDPGR) as the dependent variable, while External Debt (EDT), Domestic Debt (DDT), Debt Service Payments (DSP), Government Expenditure (GEXP), and Exchange Rate (EXR) were included as the explanatory variables.

The data were analyzed using econometric tools to determine the statistical significance, strength, and direction of the relationships among the variables. Descriptive statistics revealed that the Nigerian economy experienced considerable fluctuations in GDP growth, debt accumulation, and exchange rate over the study period. The regression results showed that external debt (EDT) had a positive and significant impact on economic growth, implying that external borrowing, when efficiently managed, contributes to infrastructural and productive sector development. Domestic debt (DDT) also had a positive but insignificant relationship with GDP, suggesting that domestic borrowing in Nigeria has largely been used to finance recurrent expenditures rather than capital investments that could stimulate long-term growth.

Furthermore, the results revealed that debt service payments (DSP) have a negative and statistically significant effect on economic growth. This finding lends support to the Debt Overhang Theory, which argues that heavy debt repayment obligations reduce the availability of public resources for productive investment, thereby constraining economic expansion.

In contrast, government expenditure (GEXP) was found to exert a positive and significant influence on economic growth. This outcome is consistent with the Keynesian framework, which suggests that increased government spending can stimulate aggregate demand, boost economic activities, and ultimately enhance growth performance.

The study also showed that the exchange rate (EXR) has a negative and significant relationship with economic growth. This suggests that instability in the exchange rate, particularly the sustained depreciation of the naira, reduces investor confidence, increases production costs, and creates macroeconomic uncertainty, all of which negatively affect economic growth.

Overall, this study examined the effect of public debt and government expenditure on economic growth in Nigeria over the period 2000–2024. The empirical evidence provides a clearer understanding of how fiscal policy variables influence macroeconomic performance in the country. It can therefore be concluded that public debt (both external and domestic) and government expenditure play important roles in shaping Nigeria's economic growth, although their effects vary depending on how effectively they are managed and allocated.

The findings further indicate that external debt contributes positively to economic growth when it is efficiently utilized for productive purposes such as infrastructure development, energy projects, and human capital investment. However, when mismanaged or acquired under unfavorable conditions, it can become a fiscal burden and hinder growth. The positive effect observed in this study supports the view that external borrowing can serve as a viable development financing option when directed toward well-structured, growth-enhancing projects.

On the other hand, domestic debt exhibited a weak and statistically insignificant impact on economic growth, suggesting that much of Nigeria's domestic borrowing has been directed toward financing recurrent expenditures such as salaries and overheads rather than capital formation. This finding implies that while domestic debt can be a useful tool for internal resource mobilization, its benefits to the economy depend on whether the borrowed funds are allocated to productive investments that yield long-term growth dividends.

Furthermore, debt service payments had a negative and significant effect on economic growth, revealing that Nigeria's increasing debt servicing obligations have become a fiscal burden that limits investment in critical sectors like education, health, and infrastructure. This supports the Debt Overhang Hypothesis (Krugman, 1988), which posits that heavy debt servicing reduces a nation's capacity to invest in growth-promoting projects, as substantial portions of government revenue are redirected toward debt repayment.

In contrast, government expenditure was found to have a positive and significant relationship with economic growth, consistent with the Keynesian theory, which emphasizes the role of fiscal spending in stimulating aggregate demand and economic activity. This suggests that increased government spending, especially in areas such as capital projects, social welfare, and infrastructure, can drive sustained economic growth if efficiently managed. However, the exchange rate demonstrated a negative and significant relationship with growth, highlighting the adverse effects of persistent exchange rate depreciation, inflationary pressures, and import dependency on Nigeria's economic stability.

Taken together, these findings underscore that Nigeria's economic growth depends not merely on the volume of borrowing or the size of public expenditure, but on the quality of fiscal management, policy coordination, and accountability in the utilization of public funds. Sustainable economic growth requires a strategic balance between debt accumulation, debt servicing, and productive spending. The government must therefore adopt a comprehensive debt management framework that prioritizes transparency, efficiency, and fiscal discipline.

The study establishes that while public debt and government spending remain essential tools of fiscal policy, their ability to promote economic growth in Nigeria hinges on prudent debt management, reduction of unproductive expenditures, and commitment to channeling public resources into sectors with high growth potential. Sound fiscal governance, effective macroeconomic policy coordination, and improved revenue generation are key to achieving debt sustainability and inclusive economic development in Nigeria.

Based on the empirical findings and conclusions of this study, the following recommendations are proposed to enhance the effectiveness of public debt management and government spending in promoting sustainable economic growth in Nigeria:

- i. **Ensure Productive Utilization of Borrowed Funds**
The government should prioritize borrowing strictly for productive and growth-inducing investments, such

as infrastructure development, energy, education, and healthcare. Loans should be tied to projects capable of generating returns that exceed the cost of borrowing. This will help ensure that external and domestic debts contribute directly to the expansion of productive capacity and the creation of employment opportunities.

- ii. **Strengthen Debt Management Institutions and Transparency**
Agencies like the Debt Management Office (DMO) should be strengthened through better funding, technical capacity, and legislative autonomy to effectively monitor and evaluate debt accumulation. Regular debt sustainability analyses should be conducted to prevent excessive borrowing. The government should also enhance transparency by publishing comprehensive debt reports to ensure public accountability and investor confidence.
- iii. **Reduce the Cost and Burden of Debt Servicing**
The study revealed that high debt service payments negatively affect growth by crowding out essential spending. Therefore, Nigeria should pursue debt restructuring, refinancing, and renegotiation strategies to secure more favorable repayment terms. Domestic borrowing should be balanced with concessional external loans that offer lower interest rates and longer repayment periods.
- iv. **Reform the Structure of Government Expenditure**
The federal government must restructure public spending to reduce the share of recurrent expenditures and allocate more resources to capital projects that yield long-term benefits. Expenditure efficiency can be improved through better project monitoring, fiscal discipline, and the reduction of waste, corruption, and leakages in the public finance system.
- v. **Promote Exchange Rate Stability and Export Diversification**
Since exchange rate volatility was found to hurt growth, the Central Bank of Nigeria (CBN) should implement policies that promote naira stability through improved foreign exchange reserves management and reduction of import dependence. Encouraging export diversification, particularly in agriculture, solid minerals, and manufacturing, will increase foreign exchange inflows and reduce pressure on the naira.
- vi. **Enhance Domestic Revenue Mobilization**
To reduce overreliance on debt financing, the government should intensify efforts to broaden the tax base, reduce tax evasion, and strengthen institutions such as the Federal Inland Revenue Service (FIRS).

Improved tax collection efficiency and the formalization of the informal sector would provide a sustainable source of public revenue, thereby limiting the need for excessive borrowing.

vii. Adopt an Integrated Fiscal Policy Framework

Nigeria should adopt a comprehensive and coordinated fiscal policy framework that aligns borrowing, expenditure, and monetary policies with long-term development goals. Fiscal discipline must be enforced across all levels of government, and public sector budgeting should be guided by realistic revenue forecasts and performance-based allocations.

viii. Encourage Private Sector Participation and Public-Private Partnerships (PPPs)

To reduce fiscal pressure, the government should promote PPP arrangements in critical infrastructure sectors. This would allow for greater private sector involvement in funding and managing projects, reducing the reliance on debt and ensuring efficiency in service delivery.

ix. Institutionalize Fiscal Responsibility and Legislative Oversight

The Fiscal Responsibility Act (2007) should be strictly enforced to curb unproductive borrowing and ensure that all debts are contracted within the limits of sustainability. The National Assembly should enhance its oversight role in monitoring debt approvals, project implementation, and the fiscal activities of government ministries and agencies.

x. Promote Capacity Building and Public Financial Management Reforms

Continuous training of government officials on debt management, project evaluation, and fiscal planning is crucial. Adopting modern financial management systems and data-driven monitoring mechanisms would improve fiscal efficiency, policy consistency, and economic accountability.

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