

Fiscal Policy, and Economic Growth in Nigeria (2000-2024)

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Abstract

This study examined the impact of fiscal policy and public debt on economic growth in Nigeria over the period 2000–2024. The persistent challenges of slow economic growth, rising public debt, recurrent fiscal deficits, and increasing debt servicing obligations have raised concerns regarding the effectiveness of fiscal policy in promoting sustainable economic development. An ex post facto research design was adopted, utilizing annual time-series data obtained from the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), Federal Inland Revenue Service (FIRS), Debt Management Office (DMO), and the World Development Indicators (World Bank). Gross Domestic Product (GDP) served as the proxy for economic growth, while government consumption expenditure, and tax revenue, were employed as explanatory variables. Data were analyzed using the Augmented Dickey-Fuller (ADF) unit root test, , CUSUM stability test, and multiple regression analysis. The empirical results revealed that all variables were integrated of order one, I(1) The regression results showed that government consumption expenditure exerted a positive but statistically non-significant effect on economic growth ($\beta = 0.233010$; $p = 0.2829$), while tax revenue had a positive and statistically significant effect ($\beta = 0.434179$; $p = 0.0004$). Based on these findings, the study recommends that government should improve the efficiency of public expenditure through greater transparency and capital-oriented spending, strengthen tax administration and broaden the tax base to enhance domestic revenue mobilization, maintain fiscal discipline by ensuring that deficit financing supports productive investments, adopt prudent debt management strategies that limit excessive borrowing and prioritize concessional financing, and ensure that borrowed funds are channeled into economically viable projects capable of generating returns sufficient to sustain debt servicing and promote long-term economic growth

Introduction

1.1 Background to the Study

Fiscal policy in Nigeria traces its roots to the post-colonial era when the newly independent state centralized revenue and expenditures between the federal, state and local governments a system that inherited outward-looking fiscal arrangements and left persistent vertical fiscal pressures (Ekong, Orebiyi&Iriabije, 2024). During the 1970s oil-boom years, rising crude-oil receipts allowed expansive public spending and large investment programmes, but also entrenched dependence on volatile oil revenues and under-development of the tax base (Onyeka-Iheme, Ekle, Iheme - Madukairo & Damian, 2025).As oil revenues collapsed in the early 1980s, Nigeria embarked on austerity and stabilization reforms under the Structural Adjustment Program (SAP), which ushered in liberalization and public-finance reforms. Yet for decades thereafter, fiscal policy in Nigeria oscillated between stimulus during booms and forced consolidation during busts, with weak budget credibility, pervasive off-budget oil funds and sub-optimal public financial management (Ekong, Orebiyi & Iriabije, 2024).

The establishment of the Debt Management Office in 2000 signaled a recognition of debt-management weaknesses, though meaningful integration of fiscal rules and counter-cyclical budgeting remained elusive. From the 2010s onward, Nigeria's fiscal policy began shifting toward domestic revenue mobilization, subsidy-rationalization and institutional reform. Studies highlight that government expenditure on infrastructure and education under this era had only a weak and statistically insignificant long-run effect on inclusive growth (Ekong, Orebiyi & Iriabije, 2024). Nigeria's public-debt, since 2000 has been shaped by cyclical oil revenues, periodic fiscal slippages, and changing financing mixes that influenced growth outcomes. In the early 2000s the country carried a legacy of high external arrears from the 1980s–1990s; debt relief and rescheduling eased external obligations, allowing a period of stronger growth and increased public investment (Nworie, 2024). However, weak domestic revenue mobilization and continued dependence on oil left fiscal balances vulnerable to commodity shocks. (DMO, 2024; CBN, 2024). The 2000–2013 period saw rising public spending financed increasingly by domestic borrowing as the government expanded infrastructure and social spending; domestic debt composition and short-term instruments grew substantially. Several authors link this shift to mixed growth effects: while some public investment supported expansion in services and construction, rising domestic debt crowding-out effects and higher interest burdens reduced the fiscal space for productive spending (Joshua, 2024; Nworie, 2024). Empirical studies for the 2000–2018 window show ambiguous results public debt supported growth when directed to productive capital, but had negative or neutral effects when debt servicing and recurrent spending dominated (Olumuyinwa, 2025).

By 2022–2024 the debt-growth relationship in Nigeria became more contested. The Debt Management Office's official stock reports show rising nominal public debt levels through 2023–2024 even as policymakers pursued reforms to strengthen revenue collection and prioritize capital expenditure (DMO, 2024). Recent empirical work covering 2000–2023 finds that the impact of public debt on GDP depends on composition, maturity and how borrowed funds are used: external concessional borrowing and long-term domestic finance that fund infrastructure can be growth-supporting, whereas short-term domestic borrowing and high debt-service ratios correlate with slower growth (Olumuyinwa, 2025; Nworie, 2024).

1.2 Statement of the Problem

Nigeria's fiscal landscape between 2000 and 2024 has been characterized by recurrent macroeconomic instability, weak revenue generation, and persistent dependence on volatile oil receipts. Despite successive fiscal reforms and public debt management strategies, the Nigerian economy continues to struggle with low growth, high inflation, widening fiscal

deficits, and unsustainable debt-servicing costs. The fiscal framework remains heavily consumption-driven, while the productive and non-oil sectors contribute marginally to the overall revenue base. In recent years, public debt accumulation has accelerated, with the total debt stock rising from ₦12.6 trillion in 2015 to over ₦97 trillion by the end of 2024, representing about 45% of GDP (DMO, 2024). More worrisome is that debt servicing now consumes over 80% of federal revenue, crowding out capital expenditure and constraining the fiscal space needed for economic diversification and infrastructure development. Although debt can stimulate growth when properly utilized for productive investments, the Nigerian case shows a growing mismatch between borrowed funds and tangible growth outcomes, raising concerns about fiscal sustainability and intergenerational equity. The repeated removal and reintroduction of subsidies, rising recurrent expenditure, revenue leakages, and poor fiscal coordination among the federal, state, and local governments further undermine the effectiveness of fiscal policy as a tool for stabilization and growth (Ekong, Orebiyi&Iriabije, 2024; Onyeka-Iheme et al., 2025). Recent reforms such as fuel subsidy removal and exchange-rate unification have improved fiscal transparency but have also triggered inflationary pressures and social costs that threaten inclusive growth. Thus, despite more than two decades of fiscal adjustments and debt management reforms, Nigeria's economy remains fragile, with growth performance inconsistent and non-inclusive. Despite its importance, many developing countries face persistent challenges in tax revenue generation. These include tax evasion, widespread informality, weak administrative capacity, corruption, and low levels of tax morale among citizens (Torgler, 2022). In Nigeria, dependence on oil revenue has historically limited the development of a robust non-oil tax system, resulting in revenue fluctuations and fiscal vulnerability (Adewale& Ibrahim, 2023). Addressing these challenges requires comprehensive reforms aimed at modernizing tax administration, enhancing digital tracking, and improving taxpayer education. The persistent question is whether fiscal policy and the pattern of public-debt accumulation between 2000 and 2024 have promoted or impeded sustainable economic growth. This study, therefore, seeks to critically assess the dynamic relationship among fiscal policy, public debt, and economic growth in Nigeria examining whether the country's fiscal strategies have effectively translated into real-sector productivity, macroeconomic stability, and long-term development.

1.3 Objective of the Study

The main objective of the study is to investigate the impact of fiscal policy and public debt on economic growth in Nigeria spanning from year 2000 to 2024, while the specific objectives are to:

- (i) Examine the impact of government consumption expenditure on economic growth in Nigeria.
- (ii) Assess the effect of tax revenue on economic growth in Nigeria.

1.4 The research questions in line with the specific objectives are state as follows:

- (i) To what extent does government consumption expenditure impact economic growth in Nigeria?
- (ii) How does tax revenue affect economic growth in Nigeria?

1.5 Research Hypotheses

The hypotheses of the study are stated as follows:

H_0 : Government consumption expenditure does not have a significant impact on economic growth in Nigeria .

H_{02} : Tax revenue does not have a significant effect on economic growth in Nigeria.

1.6 Scope of the Study

This study examines the impact of fiscal policy and public debt on economic growth in Nigeria using annual time-series data covering the period from 2000 to 2024. The geographical scope is limited to Nigeria, thereby providing evidence on the effectiveness of fiscal operations and debt management practices within the country's economic environment. The choice of 2000 as the base year is justified by its significance as the beginning of a new democratic era following the return to civilian rule in 1999, which ushered in major fiscal reforms, debt restructuring initiatives, and changes in public financial management. The study employs appropriate econometric techniques for time-series analysis to examine both the individual and combined effects of fiscal policy and public debt variables on economic growth. The analysis focuses on establishing the direction, magnitude, and significance of the relationships among the variables within the Nigerian economy during the period under review.

Review of Related Literature

2.1 Conceptual Review

2.1.1 Government Consumption Expenditure

Government consumption expenditure represents a core component of fiscal and macroeconomic exploration, capturing the total value of goods and services purchased by the government for the direct satisfaction of collective and individual needs within an economy. It primarily encompasses expenditures on compensation of public employees, purchases of goods and services necessary for government operations, and the provision of social transfers in kind such as public education and healthcare (World Bank, 2024). According to the Organization for Economic Co-operation and Development (OECD, 2024), government final consumption expenditure refers to the value of goods and services consumed by government institutions to deliver public services, excluding gross fixed capital formation, which is treated as investment. In line with the System of National Accounts (SNA 2008) and the International Monetary Fund's Government Finance Statistics Manual (IMF, 2024), government consumption expenditure is categorized into individual consumption and collective consumption. Individual consumption includes goods and services provided to identifiable households, such as public schooling and health services, while collective consumption covers services that benefit the community as a whole, such as defense, public administration, and environmental protection (IMF, 2024; OECD, 2024). The differentiation between government consumption and capital formation is crucial for accurate estimation of GDP and for understanding the structure of public sector contributions to economic growth.

Keynesian macroeconomic perspective believed that government consumption expenditure is a vital instrument of fiscal policy used to influence aggregate demand. Increased government spending during economic downturns can stimulate output and employment through the multiplier effect, whereas excessive or inefficient spending may create fiscal imbalances (Galí, 2023). On the other hand, the endogenous growth theory emphasizes the quality and composition of government expenditure. Productive spending tailored particularly on education, healthcare, and institutional efficiency, can foster human capital development and enhance long-term economic growth, whereas unproductive recurrent spending can crowd out private investment and impede growth (Afonso, Jalles, & Venâncio, 2023).

Moreover, differences in the classification and measurement of government consumption across countries pose comparability challenges. Some nations include social transfers in kind within government expenditure, while others allocate them to household consumption. The World Bank (2024) and OECD (2024) therefore emphasize the need for harmonized statistical methodologies to ensure cross-country consistency. In recent years, the efficiency and productivity of government consumption have received growing attention, with

researchers advocating for the reallocation of resources from non-productive recurrent spending to growth-enhancing sectors such as education, health, and environmental sustainability (Afonso et al., 2023; IMF, 2024).

Government consumption expenditure is not only a major determinant of short-term aggregate demand but also a long-term driver of economic growth, depending on its structure, efficiency, and alignment with developmental priorities. Sound fiscal management and adherence to internationally accepted accounting frameworks remain essential for ensuring that government consumption contributes effectively to economic stability and sustainable development.

2.1.2 Tax Revenue

Tax revenue constitutes one of the most fundamental aspects of public finance and is widely recognized as a vital instrument for national development. It refers to the compulsory financial contributions imposed by government on individuals, businesses, and economic activities for the purpose of financing public expenditure and promoting macroeconomic stability. Contemporary scholars note that tax revenue does not merely serve as a means of generating funds; it also functions as a strategic policy tool used to stimulate economic growth, redistribute income, and enhance governance outcomes (Musgrave & Musgrave, 2021). In essence, the concept captures the aggregate income that government mobilizes through both direct taxes such as personal income tax, corporate income tax, and capital gains tax and indirect taxes, including value-added tax, excise duties, and customs duties. Laffer (2022) emphasizes that tax revenue forms the backbone of national development, as it determines a country's ability to provide critical infrastructure, maintain public institutions, and encourage investment. The role of tax revenue is even more pronounced in developing economies where public financial needs are extensive, yet alternative revenue sources remain unstable. Literature shows that effective tax revenue mobilization enhances the fiscal space available to governments, enabling them to implement development initiatives without excessive dependence on external borrowing (OECD, 2023). In countries such as Nigeria, this becomes particularly significant given the frequent volatility in global oil prices, which often undermines the stability of revenue flows. As Adewale and Ibrahim (2023) argue, strengthening tax systems is essential for promoting fiscal resilience in economies that have historically relied on natural resources for revenue generation.

Several characteristics help to conceptualize tax revenue within the broader framework of public finance. First, tax revenue is compulsory, meaning that individuals and businesses are legally obligated to comply with tax payments; this distinguishes taxes from voluntary contributions or service fees (Bahl & Bird, 2021). Second, taxes exhibit a non-quid-pro-quo nature, as taxpayers do not receive immediate or direct benefits equivalent to the amount contributed, but rather enjoy collective public goods and services (Slemrod & Bakija, 2022). Third, tax revenue is a direct outcome of tax policy decisions, reflecting the structure, efficiency, and fairness of the tax system in place (Torgler, 2022). Finally, tax revenue demonstrates elasticity, as its performance responds to variations in national income, administrative efficiency, and policy reforms (OECD, 2023). In most economies, tax revenue is derived from multiple sources, including personal income tax, company income tax, petroleum profit tax, value-added tax, excise duties, and customs duties. In Africa, value-added tax has increasingly become a stable source of non-oil tax revenue due to deliberate reforms that focus on widening the tax base and improving compliance (UNECA, 2022). The diversification of tax sources is particularly important for resource-dependent economies seeking to broaden their revenue portfolios.

2.1.3 Real GDP Growth Rate

Real Gross Domestic Product (Real GDP) growth rate refers to the percentage change in the value of all goods and services produced within an economy over time, adjusted for inflation. Unlike nominal GDP, which measures output at current prices, real GDP isolates changes in production volume by removing the effects of price changes, making it a more accurate indicator of economic performance and long-term growth (World Bank, 2023). As a macroeconomic variable, the real GDP growth rate is widely used to evaluate the overall health of an economy, assess productivity trends, and guide monetary, fiscal, and development planning (IMF, 2022). Real GDP growth captures the rate at which an economy expands or contracts, reflecting the combined effects of consumption, investment, government spending, and net exports commonly referred to as the GDP expenditure components (Mankiw, 2021). An increase in real GDP growth typically signals rising production, job creation, improved income levels, and expanded economic activity, while a decline often indicates recessionary pressures, reduced investment, and weaker economic fundamentals (Blanchard & Johnson, 2022).

2.4 Theoretical Framework

Fiscal policy, public debt dynamics, and economic growth are subjects of significant scrutiny within the realm of macroeconomic theory. In order to establish a robust theoretical framework, this investigation is grounded in four well-recognized paradigms: Keynesian Theory, Neoclassical Growth Theory (Solow Model), Ricardian Equivalence Hypothesis, and Debt Overhang Theory. Collectively, these theoretical constructs elucidate the manner in which taxation, budget deficits, public borrowing, and government expenditure have historically influenced Nigeria's economic trajectory from 2000 to 2024.

(i) Keynesian Theory

The Keynesian theory, conceptualized by John Maynard Keynes (1936), serves as a pivotal foundation for comprehending fiscal policy. This theoretical framework asserts that government spending and taxation exert a direct impact on aggregate demand, which in turn affects economic output. Keynes contended that public expenditure, particularly during economic downturns, acts as a catalyst for productive engagement by infusing purchasing power into the economy (Keynes, 1936). Within the Nigerian context, the Keynesian viewpoint reinforces the assertion that expansionary fiscal policies, such as heightened capital expenditure, subsidies, and investments in infrastructure, can invigorate economic activity and alleviate unemployment rates. A plethora of empirical research conducted in Nigeria corroborates this perspective, indicating that fiscal expansion has historically facilitated output growth (Onyele & Nwokocha, 2016; Ojong et al., 2021). Furthermore, budget deficits, when strategically allocated towards productive capital expenditure, possess the potential to engender growth through a multiplier effect. Nevertheless, Keynesian theory also cautions that an overdependence on borrowing to finance deficits may precipitate inflationary pressures and challenges to debt sustainability—predicaments that have intermittently surfaced in Nigeria, particularly during the period from 2016 to 2023.

2.5 Empirical Review

The study in furtherance of the research work synthesizes past studies on fiscal policy, public debt, and economic growth, highlighting major findings, methodological trends, areas of consensus, and points of divergence. This will provide a robust foundation for identifying existing research gaps and situating the current study within the broader scholarly discourse. Joseph (2024) employs an ARDL framework to measure the impact of government capital and recurrent expenditure on Nigeria's real GDP for the period 2000–2023 using NBS and

CBN series. The study performs unit-root and co-integration tests and estimates long-run elasticity via the ARDL error-correction representation. Results indicate both capital and recurrent government spending exert positive and statistically significant effects on GDP, with capital spending showing a larger elasticity. The paper stresses that while consumption expenditure can stimulate demand, sustainable long-term growth depends on complementing recurrent spending with productive capital investments; accordingly, the author recommends reorienting the budget toward infrastructure and human capital while improving budget execution to reduce waste. Okunlola and colleagues (2024) analyze a 15-country ECOWAS panel (1999–2021) using panel co-integration techniques (POLS as baseline and FMOLS/DOLS to address endogeneity and serial correlation). Annual national accounts and sectoral spending data form the sample. The study finds a positive and significant long-run relationship between public spending and GDP across the region, with clear heterogeneity: countries directing a higher share of public consumption into education and health achieve stronger growth dividends. Policy recommendations emphasize reallocating consumption toward human-capital and infrastructure spending, strengthening fiscal transparency, and building capacity in PFM to ensure expenditure translates into sustainable growth.

Agum (2023) conducts an ex-post facto analysis of public expenditure and economic growth in Nigeria using annual data (1992–2021) sourced from FIRS, CBN and Federal Bureau of Statistics publications. Employing OLS and diagnostic tests typical of time-series macro work, the study reports that total public expenditure exhibits a positive relationship with GDP, but the sign and significance vary by subsector—education and infrastructure spending show the clearest growth association, while general recurrent consumption has weaker effects. Agum recommends tightening fiscal discipline, improving the quality of capital projects, and strengthening revenue mobilization to sustainably finance growth-enhancing public spending. Onifade’s empirical retrospect (2020) synthesizes Nigeria studies spanning several decades, using systematic review methods to compare OLS, ECM, ARDL and VECM findings. Drawing on multiple time-series works, the review finds mixed empirical outcomes: some studies show no short-run impact of government consumption on growth, while others detect long-run co-integrating relationships when capital and recurrent expenditure are properly disaggregated. The review highlights methodological drivers of mixed results (sample period, breaks, variable definitions) and recommends future research adopt structural-break-robust methods and pay careful attention to expenditure composition when assessing growth impacts. Haliru (2023) examines determinants of government expenditure in Nigeria (1986–2021) using descriptive statistics and ARDL inference techniques, analyzing how domestic revenue, debt servicing, and macro shocks shape the composition of public spending. While not a pure growth-impact paper, the study’s findings are instructive: growing debt service and sharp revenue fluctuations have shifted fiscal space away from capital spending toward recurrent consumption, indirectly weakening the potential growth impact of government expenditure. The author recommends reforms to revenue mobilization, debt management, and fiscal rules to protect growth-enhancing capital budgets.

Poku et al. (2022) provide an instructive Ghana case using ARDL (1970–2016) which finds positive short-run effects of government spending and shows the importance of infrastructure and human capital for long-run growth. The authors recommend improving expenditure efficiency and expanding revenue bases—lessons directly transferable to Nigeria given similar fiscal constraints in West Africa. Using such comparative empirical evidence strengthens Nigeria’s case for reallocating consumption toward growth-enhancing capital spending. Agarwalla and Sahu (2025) examine the influence of public expenditure and employment opportunities on economic growth using a panel of 23 developed and 38 developing countries over the period 2000–2021. They employ the Panel ARDL (PMG-ARDL) model, which allows for heterogeneous short-run dynamics and a common

long-run coefficient across countries, as well as addressing cross-sectional dependence and endogeneity. Their findings are striking: in the long-run, government expenditure (which includes consumption) is negatively associated with growth in developing countries, while the effect is insignificant in developed countries. Based on these results, they argue for fiscal restraint in rapidly growing developing economies, recommending that such countries reallocate public spending more efficiently, particularly toward job-creating investments, to avoid the trap of unproductive consumption. In their study, Abdelkawy and Al Shammre (2024) investigate how government consumption expenditure (final consumption) interacts with both oil and non-oil revenue to influence GDP growth in Saudi Arabia over the long period 1969–2022. Using an ARDL model, they assess both short-term shock responses and long-run equilibrium relationships. Their results suggest that government consumption played a stabilizing role during revenue volatility, particularly during economic downturns caused by oil price shocks: GC (government consumption) did not significantly drive growth in the short-run but had a more nuanced long-run effect depending on the nature of the crisis. The authors recommend counter-cyclical fiscal policy, arguing that Saudi Arabia should maintain government consumption to buffer against oil shocks, but also improve the efficiency of consumption spending to support sustainable long-term growth. Aşit (2024) explores the nexus between governance quality, government consumption, and economic growth in 36 Sub-Saharan African (SSA) countries across 2011–2022. The study applies a dynamic panel model using both GMM and Driscoll–Kraay regressions to account for endogeneity and cross-sectional dependence. The results show that better governance institutions (rule of law, corruption control, and regulatory quality) have a significant positive effect on growth, and that as institutional quality improves, government consumption also rises. Sit argues that strengthening institutions will not only boost growth directly but also improve public spending capacity; policy implication: SSA countries should prioritize institutional reforms (e.g., anti-corruption, rule of law) to maximize the positive growth effects of government consumption. In a cross-country panel study, Nguyen (2022) investigates how corruption control moderates the impact of government expenditure on economic growth. Using data from a broad sample of countries and employing panel regression techniques, the paper finds that where corruption is high, the positive effect of government consumption on growth is substantially weakened. This suggests that not only the size but the quality of governance matters: public consumption in corrupt environments may not translate into productive growth. The study recommends that governments focus on anti-corruption reforms and transparency-enhancing measures to ensure that consumption spending supports long-term development rather than rent-seeking. Ridha Noura and Mohamed Kouni (2018) conduct a dynamic panel threshold analysis for a set of MENA (Middle East and North Africa) and developing countries over 1988–2016 to test for the “optimal size” of government. Their model finds that government final consumption (among other public expenditures) exhibits a non-linear (inverted) relationship with economic growth: up to a threshold, increasing consumption supports growth, but beyond that threshold further consumption expenditure becomes detrimental. They advise policymakers to carefully calibrate government consumption levels, suggesting that exceeding the optimal consumption-to-GDP ratio can hamper growth, and that public spending should be aligned with structural and institutional capacity. Mohammed et al. (2024) explore the interplay between household consumption, government consumption, investment, and economic growth in Saudi Arabia using quarterly (or annual) data from 2000–2022. Applying a Vector Error Correction Model (VECM) and Granger causality tests, they find a long-run equilibrium among consumption, investment, and growth, with unidirectional causality running from government consumption to growth. Their results imply that public consumption is not just a passive stabilizer but actively contributes to long-term growth,

especially when coupled with investment. They recommend that Saudi policymakers maintain a balanced fiscal mix supporting both private and public consumption and implement structural reforms to channel spending into productive areas to ensure sustainable non-oil growth. Durucan (2022) examines a panel of developed European countries to assess how the composition of public expenditure especially the ratio of government consumption relative to other spending—affects economic growth. Using a panel threshold regression model, the study identifies a “threshold” size of government consumption beyond which growth is hindered, confirming the non-linear relationship. Durucan argues that government consumption has diminishing returns, and when it constitutes too large a share of the budget, it may crowd out more productive investments. The policy lesson is that European governments should limit excessive consumption spending and prioritize capital and human capital investments once past the growth-enhancing threshold.

While not exclusively about government consumption, Sore et al. (2024) provide relevant insight by examining how fiscal deficits (which often reflect government consumption imbalances) affect growth in 42 Sub-Saharan African countries between 2011–2021. They employ a system GMM dynamic panel approach to control for endogeneity and dynamics. Their key finding is that in the short run, higher deficits are associated with modest growth gains, but in the long run, deficits (often driven by consumption) negatively affect growth. The authors suggest that fiscal disciplines essential and recommend that SSA governments focus on sustainable deficit financing, stronger macro fiscal frameworks, and better targeting of recurrent spending to support long-term growth.

2.7 Gap in Literature

Despite numerous empirical studies on fiscal policy, public debt, and economic growth in Nigeria, existing literature has not fully captured the nuanced dynamics of these variables over the 2000–2024 period, particularly in the context of Nigeria’s persistent macroeconomic instability and overreliance on oil revenue. Most studies focus either on government expenditure, tax revenue, or debt in isolation, without simultaneously examining their combined impact on sustainable growth, fiscal space, and capital allocation. Additionally, while the growth-enhancing potential of public debt has been acknowledged, few studies account for the stark mismatch between debt accumulation and tangible economic outcomes, including the crowding-out effect of debt servicing on capital expenditure. The literature also inadequately addresses the implications of recurrent fiscal reforms, subsidy adjustments, and rising recurrent expenditures on inclusive growth and macroeconomic stability. Furthermore, the interaction between weak revenue generation, non-oil sector underperformance, and the inefficiencies in debt management has received limited empirical attention. There is a notable absence of comprehensive, up-to-date studies that integrate the effects of government consumption, fiscal deficits, tax revenue, debt stock, and debt servicing within a coherent framework that reflects the Nigerian economy’s current fiscal realities. Hence, there is a critical need for research that assesses whether Nigeria’s fiscal policies and debt strategies over the past two decades have effectively promoted sustainable economic growth, real-sector productivity, and fiscal stability.

Chapter Three

Methodology

3.1 Research Design

The research design adopted in this study is based on *ex post facto* and analytical research design, as it fundamentally focused on assessing the impact of fiscal policy and public debt on economic growth in Nigeria spanning from year 2000 to 2024. It is an existing data, as a result the examination starts after the fact has taken place. An *ex post facto* research design,

commonly referred to as causal-comparative research, represents a non-experimental methodology wherein scholars explore potential causal relationships by scrutinizing an existing condition or outcome and tracing it back to its antecedent factors. This research design is employed in situations where the manipulation of variables is either impractical or deemed unethical. Scholars investigate naturally occurring variances among groups to derive inferences regarding possible causal factors (Johnson & Christensen, 2019).

3.2 Nature and Sources of Data

The data were retrieved from secondary sources. Secondary data being already processed and pooled, are easily found in National Bureau of Statistics (NBS) , Central Bank of Nigeria (CBN) Statistical Bulletin and World Development Indicator(WDI). Thus, the data gathering is based on documentation technique and the required information from online downloaded materials.

3.3 Specification and Modification of Model

The study adopted the works of Belau, Sunmonu & Odeyale (2025) that examined the impact of multiple tax system on GDP, using time-series data from 1992–2024 and multiple tax types (VAT, CIT). Their multiple regression results show that company income tax positively and significantly affects GDP, while VAT has a negative but significant effect. The study modified their model by substituting their independent variables (VAT, CIT) with government consumption expenditure, Tax revenue. Fiscal deficit, Public debt stock and Public debt service, and inflation rate as the control variable, while using the same (OLS) multiple regression model since the study is of time series nature where (BLUE) properties of OLS need to be accounted for during preliminary tests.

The equation is expressed as followed:

$$GDPGR = F(GCE, TR, FD, PDSK, PDS, INFL)$$

The functional form of the multiple regression model is expressed as:

$$GDPGR_t = \alpha_0 + \beta_{t1}GCE + \beta_{t2}TR + \mu \dots \dots \dots \text{Eq 1}$$

The model of the study are stated as follows:

$$\text{Model 1} = \alpha_0 + \beta_{t1}GCE + \mu$$

H_0 : Government consumption expenditure does not have a significant impact on economic growth in Nigeria .

$$\text{Model 2} = \alpha_0 + \beta_{t2}TR + \mu$$

H_{02} : Tax revenue does not have a significant effect on economic growth in Nigeria.

$$\text{Model 3} = \alpha_0 + \beta_{t3}FD + \mu$$

3.4 Description of Model Variables

3.4.1 Government consumption expenditure

Government Consumption Expenditure (GCE) refers to the total spending by government on goods and services that are used to satisfy current needs rather than to acquire long-term assets. It is therefore considered recurrent expenditure. Iheanacho (2021) examined government consumption expenditure as part of fiscal policy components affecting private sector output in Nigeria.

3.4.2 Tax revenue.

Tax revenue refers to the compulsory payments collected by government from individuals and businesses through instruments such as personal income tax, corporate tax, value-added tax, customs duties, and excise duties. It represents the primary and most sustainable source of public financing, enabling government to fund public goods, social services, and

infrastructure without excessive borrowing. Recent studies such as Adebayo and Adeniran (2023) emphasize that efficient tax revenue mobilization enhances fiscal stability, while weak tax systems deepen deficits and debt dependence in developing countries. Similarly, Omodero (2022) and Asante et al. (2024) show that tax revenue significantly influences economic growth, public investment, and macroeconomic resilience.

3.5 Techniques of Data Analysis

To examine the impact of fiscal policy and public debt on economic growth in Nigeria spanning from year 2000 to 2024, Various preliminary examinations will be carried out, such as residual-based assessments like multi-co linearity and homoscedastic tests, along with parametric evaluations like unit root and parameter stability tests (cusum tests). The models (multiple regression) outlined in 3.3 (one to two), which hold significance, will be employed to assess the research hypotheses

Chapter Four

4.0 Data Presentation and Analysis

4.2 Test for Unit Root

Table 4.3 Unit Root Table

Variables	ADF -stat	5% level	Prob*	Difference	Decision	
Ln GDP	-3.096941	-2.998064	0.0409	1(1)	Reject nul	stationary
GCEXP	-3.064103	-2.998064	0.0438	1(1)	Reject nul	stationary
INFL	-6.483629	-3.622033	0.0001	1(1)	Reject null	stationary
TAXR	-4.074564	-2.998064	0.0048	1(1)	Reject null	stationary

Source; Researchers computation

Discussion of Unit Root Test Results

Table 4.3 presents the results of the Augmented Dickey-Fuller (ADF) unit root test conducted to determine the order of integration of the variables used in the study. The ADF test was employed to examine whether the time series variables are stationary before estimating the long-run and short-run relationships among fiscal policy, public debt, and economic growth in Nigeria. Stationarity is a fundamental requirement in time series econometrics because regression involving non-stationary variables may produce misleading or spurious results, leading to invalid statistical inference (Dickey & Fuller, 1979; Gujarati & Porter, 2009).

The results indicate that all the variables were tested after first differencing, implying that the variables were expected to be integrated of order one, I(1). Specifically, the logarithm of Gross Domestic Product (LnGDP) recorded an ADF statistic of -3.096941, which is more negative than the 5 percent critical value of -2.998064, with a probability value of 0.0409. This result indicates that the null hypothesis of a unit root is rejected, suggesting that LnGDP is stationary after first differencing. Finally, Tax Revenue (TAXR) recorded an ADF statistic of -4.074564 with a probability value of 0.0048, both indicating rejection of the null hypothesis and confirming stationarity after first differencing.

Government Consumption Expenditure (GCEXP) also became stationary after first differencing with an ADF statistic of -3.064103, which is greater in absolute terms than the critical value of -2.998064, while the probability value of 0.0438 confirms statistical significance. Likewise, Inflation Rate (INFL) exhibited a highly significant ADF statistic of -6.483629 with a probability value of 0.0001, indicating strong evidence against the existence of a unit root.

4.6 Parameter Stability Test

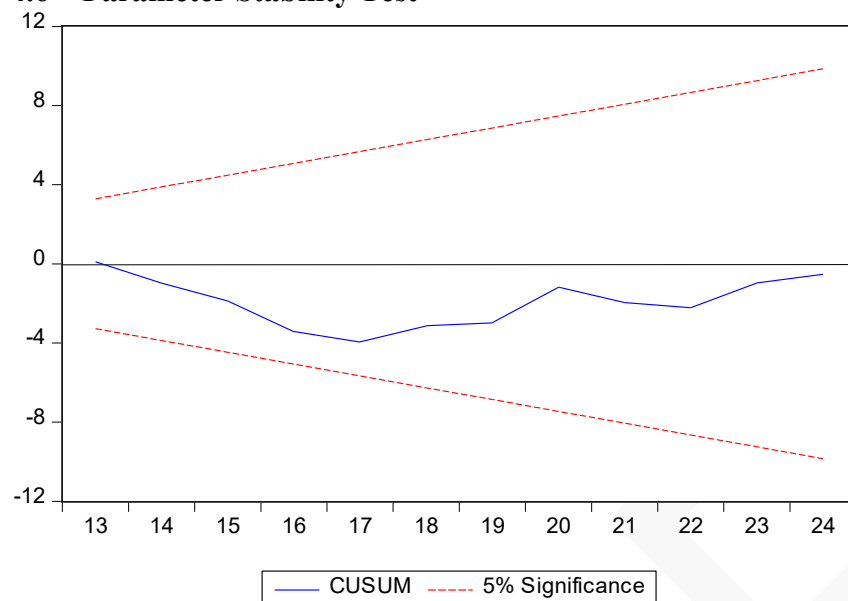


Figure 1 :

Discussion of the CUSUM Stability Test

The graph shows that the CUSUM statistic (blue line) remains entirely within the upper- and lower-5 percent significance boundaries (red dashed lines) throughout the study period. Although the CUSUM line exhibits some fluctuations, particularly between observations corresponding approximately to 2016 and 2022, it does not cross or touch either of the critical boundaries at any point. This indicates that the fluctuations are within the acceptable range and do not constitute evidence of structural instability.

The downward movement observed during the middle of the sample reflects temporary deviations in the recursive residuals, which may be associated with macroeconomic events such as changes in fiscal policy, oil price shocks, exchange rate adjustments, or periods of economic recession experienced by Nigeria. However, the subsequent upward movement of the CUSUM line demonstrates that the model gradually returned toward its long-run path, suggesting that these shocks did not permanently alter the estimated coefficients.

4.7 Multiple Regression Analysis

Table 4.7 Multiple Regression Table

Dependent Variable: LNGDP__BN_

Method: Least Squares

Date: 06/26/26 Time: 14:16

Sample (adjusted): 2001 2024

Included observations: 24 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNGDP__BN_(-1)	0.249771	0.249529	1.000971	0.3366
LNGOV__CONSUMPTION_EXP__BN_	0.233010	0.207263	1.124226	0.2829
LNGOV__CONSUMPTION_EXP__BN_(-1)	0.193283	0.179739	1.075357	0.3034
LNTAX_REVENUE__BN_	0.434179	0.088728	4.893341	0.0004
LNTAX_REVENUE__BN_(-1)	-0.117701	0.091641	-1.284366	0.2233

INFLATION_____	-0.001671	0.001059	-1.577897	0.1406
INFLATION_____(-1)	0.001590	0.000666	2.388786	0.0342
C	2.844402	0.870055	3.269223	0.0067
R-squared	0.799953	Mean dependent var	10.05997	
Adjusted R-squared	0.689910	S.D. dependent var	0.905232	
S.E. of regression	0.008580	Akaike info criterion	-6.371885	
Sum squared resid	0.000883	Schwarz criterion	-5.782858	
Log likelihood	88.46262	Hannan-Quinn criter.	-6.215616	
F-statistic	23272.76	Durbin-Watson stat	2.001184	
Prob(F-statistic)	0.000000			

Table 4.7 presents the results of the multiple regression analysis examining the effects of fiscal deficit, government consumption expenditure, public debt service, public debt stock, tax revenue, and inflation on economic growth in Nigeria over the period 2001–2024. The dependent variable is the natural logarithm of Gross Domestic Product (LNGDP), while the explanatory variables include both current and lagged values of selected fiscal policy and public debt indicators.

The lagged dependent variable, LNGDP (-1), has a positive coefficient of 0.249771, indicating that previous economic growth positively influences current economic growth. However, the coefficient is statistically insignificant, as evidenced by a t-statistic of 1.000971 and a probability value of 0.3366, which exceeds the 5 percent significance level. This suggests that past GDP does not exert a statistically significant influence on current GDP after controlling for the other explanatory variables.

Government Consumption Expenditure (LNGOV_CONSUMPTION_EXP) has a positive coefficient of 0.233010, suggesting that increases in government expenditure contribute positively to economic growth. Nevertheless, the coefficient is statistically insignificant at the 5 percent level ($p = 0.2829$). Similarly, the lagged value of government consumption expenditure has a positive coefficient of 0.193283 but remains statistically insignificant ($p = 0.3034$). These findings imply that although government spending tends to promote economic activity, its growth-enhancing effect is not sufficiently strong to achieve statistical significance during the sample period. This outcome may reflect inefficiencies in public expenditure allocation, implementation delays, or the predominance of recurrent rather than capital expenditure. Tax Revenue (LNTAX_REVENUE) has a positive coefficient of 0.434179 and is highly statistically significant ($p = 0.0004$). This suggests that improvements in tax revenue significantly promote economic growth by enhancing the government's capacity to finance infrastructure, education, healthcare, and other productive public services. However, the lagged value of tax revenue has a negative coefficient (-0.117701) and is statistically insignificant ($p = 0.2233$), implying that previous year's tax revenue does not significantly affect current economic growth. Inflation has a negative coefficient (-0.001671), indicating that rising inflation reduces economic growth. However, the coefficient is statistically insignificant ($p = 0.1406$), suggesting that the contemporaneous effect of inflation on GDP is weak during the study period. Interestingly, the lagged inflation rate records a positive coefficient of 0.001590, which is statistically significant ($p = 0.0342$). This may indicate that moderate inflation in the previous period is associated with subsequent economic expansion, possibly reflecting adaptive responses by firms and households or delayed effects of macroeconomic adjustment policies.

Regarding the overall performance of the model, the reported R-squared of 0.799953 indicates that approximately 80.0 percent of the variation in economic growth is explained by

the included explanatory variables. The F-statistic of 23,272.76, with a probability value of 0.000000, indicates that the explanatory variables are jointly significant in explaining economic growth. The Durbin-Watson statistic of 2.001184 is very close to the benchmark value of 2.0, indicating the absence of first-order serial correlation in the residuals.

4.8 Test of Hypotheses

4.8.1 Test of Hypothesis One

Statement of Hypothesis in Null

H_{01} : Government consumption expenditure does not have a significant impact on economic growth in Nigeria.

Government Consumption Expenditure (LNGOV_CONSUMPTION_EXP) has a positive coefficient of 0.233010, suggesting that increases in government expenditure contribute positively to economic growth. Nevertheless, the coefficient is statistically non-significant at the 5 percent level ($p = 0.2829$).

Decision Rule: Accept the null hypothesis if the probability value of t-statistic is not less than 5% level of significance, otherwise accept the alternate.

Decision Rule is applicable to all the Hypothesis.

Decision: Government consumption expenditure had a non-significant impact on economic growth in Nigeria since the probability value of t-statistic is not less than 5% level of significance, therefore the study accept the null hypothesis and state that government consumption expenditure does not have a significant impact on economic growth in Nigeria.

4.8.2 Test of Hypothesis Two

Statement of Hypothesis in Null

H_{02} : Tax revenue does not have a significant effect on economic growth in Nigeria.

Tax Revenue (LNTAX_REVENUE) has a positive coefficient of 0.434179 and is highly statistically significant ($p = 0.0004$). This suggests that improvements in tax revenue significantly promote economic growth by enhancing the government's capacity to finance infrastructure, education, healthcare, and other productive public services.

Decision: The study accepts the null hypothesis and state that Tax revenue had a significant effect on economic growth in Nigeria. The lagged value of tax revenue has a negative coefficient (-0.117701) and is statistically significant ($p = 0.0004$), implying that previous year's tax revenue significantly affect current economic growth.

4.9 Discussion of the Results

4.9.1 Hypothesis One: Government consumption expenditure does not have a significant impact on economic growth in Nigeria.

The empirical findings reveal that government consumption expenditure has a positive coefficient of 0.233010, indicating that increases in government expenditure are associated with improvements in economic growth. Specifically, the coefficient suggests that a one percent increase in government consumption expenditure is expected to increase gross domestic product by approximately 0.233 percent, holding other explanatory variables constant. However, the probability value of 0.2829 exceeds the conventional 5 percent significance level, indicating that the positive effect is statistically insignificant. Consequently, the null hypothesis is accepted, implying that government consumption expenditure does not exert a statistically significant influence on economic growth in Nigeria during the study period. The positive sign of the coefficient nevertheless suggests that government spending has the potential to stimulate economic activities through increased aggregate demand, employment generation, public infrastructure development, and improved

provision of public goods and services. However, the statistical insignificance implies that the magnitude of these benefits has not been sufficiently strong or consistent to produce measurable improvements in economic growth. This outcome may reflect the inefficiency of public expenditure management, corruption, delays in project implementation, excessive recurrent expenditure, weak budget execution, and the diversion of public resources from productive investments.

This finding partially supports Keynesian Fiscal Theory, which argues that increases in government expenditure stimulate aggregate demand and economic output, particularly during periods of economic slowdown (Keynes, 1936). However, while Keynesian theory predicts a significant positive relationship, the Nigerian evidence suggests that government expenditure has failed to generate the expected multiplier effects because of structural and institutional weaknesses in fiscal management.

The result is also consistent with Wagner's Law to the extent that government expenditure tends to rise alongside economic development. However, Wagner's theory does not necessarily guarantee that increased public expenditure will automatically translate into higher economic growth if spending is not efficiently allocated toward productive sectors.

Empirically, this finding agrees with studies by Nurudeen and Usman (2010) and Abu and Abdullahi (2010), who reported that certain categories of public expenditure in Nigeria failed to exert significant positive effects on economic growth due to poor expenditure quality and weak fiscal governance. Similarly, Afonso and Jalles (2014) argued that the productivity of public expenditure depends more on expenditure efficiency than on expenditure size.

The implication of this finding is that increasing government expenditure alone is insufficient to accelerate economic growth unless fiscal resources are efficiently allocated to productive sectors such as infrastructure, education, healthcare, agriculture, technology, and industrial development. Policymakers should therefore focus on improving the quality, efficiency, transparency, and accountability of public spending rather than merely expanding government expenditure.

4.9.2 Hypothesis Two: Tax revenue does not have a significant effect on economic growth in Nigeria.

The regression results indicate that tax revenue has a positive coefficient of 0.434179, with a probability value of 0.0004, which is statistically significant at the 5 percent level. This implies that increases in tax revenue significantly promote economic growth in Nigeria. Therefore, the study rejects the null hypothesis and concludes that tax revenue has a significant positive effect on economic growth during the study period.

The estimated coefficient suggests that a one percent increase in tax revenue leads to approximately 0.434 percent growth in GDP, *ceteris paribus*. This result indicates that improvements in domestic revenue mobilisation provide government with additional financial resources required to finance infrastructure, education, healthcare, transportation, security, and other productive public investments that stimulate economic activities.

This finding strongly supports the Theory of Optimal Taxation, which posits that an efficient tax system generates adequate government revenue while minimising distortions to economic activities (Ramsey, 1927). It also supports Endogenous Growth Theory, which argues that government investment financed through internally generated revenue contributes to sustained long-run economic growth by enhancing human capital, innovation, and productive infrastructure. The result is consistent with empirical studies conducted by Engen and Skinner (1996), who found that efficient tax systems enhance economic performance through improved fiscal capacity. Similarly, Ogbonna and Ebimobowei (2012) found that tax revenue significantly contributes to Nigeria's economic growth by strengthening government financing capacity. Likewise, Audu (2012) reported a positive relationship between tax

revenue and economic growth in Nigeria.

It is important to note that the lagged tax revenue variable is statistically insignificant ($p = 0.2233$). Therefore, previous year's tax revenue does not significantly influence current economic growth, suggesting that the growth effects of tax revenue occur primarily within the current period rather than through delayed transmission mechanisms.

The findings underscore the importance of strengthening tax administration, widening the tax base, reducing tax evasion, and improving compliance to generate sustainable revenue capable of financing long-term economic development without excessive reliance on public borrowing.

Summary of Findings, Conclusion and Recommendations

5.1 The findings of the study are summarized as follows:

- (i) the study accept the null hypothesis and state that government consumption expenditure does not have a significant impact on economic growth in Nigeria.
- (ii) The study accepts the null hypothesis and state that Tax revenue had a significant effect on economic growth in Nigeria.

5.2 Conclusion

This study examined the impact of fiscal policy and public debt on economic growth in Nigeria over the period 2000–2024. Specifically, the study assessed the roles of government consumption expenditure, tax revenue, fiscal deficit, public debt stock, public debt service, and inflation in explaining variations in gross domestic product (GDP). The analysis employed time series econometric techniques including unit root tests, and multiple regression analysis to determine both the relationships among the variables.

5.3 Recommendation of the Study

- (i) Since government consumption expenditure was found to be insignificant, fiscal authorities should improve the efficiency, transparency, and capital orientation of public spending to ensure that government expenditure translates into measurable economic growth.
- (ii) Given the significant positive effect of tax revenue on economic growth, government should strengthen tax administration, widen the tax base, and reduce evasion to sustain and enhance revenue-driven economic development.

5.4 Contribution to Knowledge

This study makes several important contributions to knowledge on the nexus between fiscal policy, public debt, and economic growth in Nigeria.

First, the study contributes to the existing literature by providing a comprehensive empirical assessment of the combined effects of government consumption expenditure, tax revenue, and inflation on economic growth within a unified econometric framework. Unlike many previous studies that focused on only one or two fiscal policy indicators, this study integrates major fiscal policy instruments and debt variables to provide a more holistic understanding of how fiscal operations influence economic performance in Nigeria.

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