
PUBLIC EXPENDITURE AND ECONOMIC GROWTH IN NIGERIA 2014 – 2024

Dr Emmanuel Chika Obizue

FIEMPS, FMIMPS, FIAPS, FCIAP, FIEMPS, MAMN, CFC, ChMC

Institute of Education, Management and Professional Studies

C/O Department of Banking and Finance, Faculty of Management Sciences,

Imo State University Owerri, Imo state

+2348068099918, +2347031976469

dremmanuelobizue@gmail.com

ORCID: 0009-0002-9119-1668

and

Emmanuel Uche Nwanokwu

People's Health and Economic Development Center (PHEDEC),

Owerri, Imo State.

08037431609; 07052739838

eunwanokwu@gmail.com

0009-0009-5084-3093

and

Dr Ihejirika Francis Ikenna ACIB

Head of Operations, Access Bank Plc. Douglas Branch, Owerri, Imo State

+2348068780429

Ikenna283@yahoo.com

Abstract

This study examined the relationship between public expenditure and economic growth in Nigeria from 2014 to 2024. The main objective was to determine the effect of recurrent and capital expenditure on real Gross Domestic Product in Nigeria. The study adopted an ex-post facto research design and relied on secondary annual data sourced from the Central Bank of Nigeria Statistical Bulletin, National Bureau of Statistics, Budget Office of the Federation, and World Bank. The model was specified based on Endogenous Growth Theory and estimated using Augmented Dickey-Fuller unit root test, Johansen cointegration test, and Error Correction Model with the aid of E-Views 12.

The findings revealed that capital expenditure has a positive and statistically significant effect on economic growth, while recurrent expenditure has a positive but insignificant effect. Gross capital formation and labor force were also positive and significant determinants of growth, whereas inflation had a negative and significant effect. Cointegration results confirmed the existence of a long-run relationship among the variables. The study concludes that the composition of public expenditure matters more than its size in driving growth in Nigeria. It recommends rebalancing expenditure toward capital projects, improving budget implementation, controlling inflation, enhancing revenue mobilization, and encouraging private sector participation. These measures are essential for making public spending more growth-enhancing in Nigeria.

Keywords: Public Expenditure, Capital Expenditure, Recurrent Expenditure, Economic Growth, Nigeria

Introduction

Public expenditure remains one of the most critical instruments through which governments influence the direction and pace of economic activities in any economy. In Nigeria, as in many developing economies, the state plays a dominant role in the provision of infrastructure, human capital development, security, and social services due to persistent market failures and the need to address deep structural deficits. Obizue, Igwegbara & Ihejirika (2025) posited that the government uses public expenditure to intervene in the economy to correct market failures, provide public goods, and stimulate aggregate demand. The role of government spending is magnified because the private sector alone cannot meet the huge infrastructural, social and institutional deficits that constrain growth. Owing to this, over the last decade, Nigeria's federal and sub-national governments have witnessed a steady rise in aggregate public spending, driven largely by recurrent obligations such as personnel costs, debt servicing, and capital allocations targeted at roads, power, health, and education. Since the return to democratic governance in 1999, Nigeria's public expenditure profile has expanded significantly, driven by rising population, security challenges, infrastructure decay, and the need to diversify an oil-dependent economy. Between 2014 and 2024, total federal government expenditure grew from ₦4.48 trillion to over ₦28.77 trillion, representing over 468% growth in nominal terms. reflecting both expansionary fiscal policy choices and external pressures including inflation, exchange rate depreciation, and increased borrowing to finance deficits.

The theoretical justification for government spending is rooted in Keynesian and Wagnerian propositions. Keynes argues that government expenditure can serve as a counter-cyclical tool to

stimulate output during downturns, while Wagner's law suggests that as an economy grows, the scope of government activities and expenditure will increase. Endogenous growth theorists further posit that productive public spending on infrastructure, education, health and technology creates positive externalities that raise long-run growth. For Nigeria, the expectation is that increased public outlay, particularly capital expenditure, should translate into improved roads, power supply, human capital, and ultimately higher GDP growth and employment (Budget Office of the Federation, 2023).

Aregbeyen & Kolawole (2015) averred that the Nigerian experience presents a paradox as the relationship between expenditure and growth has remained ambiguous. Despite the upward trajectory in spending and sustained increases in budgetary outlays, Nigeria's real GDP growth has remained volatile and averaged 2.1% between 2015 and 2024 well below the population growth rate of 2.6%. The economy slipped into two recessions within this period, in 2016 and 2020, and poverty incidence was estimated at 38.9% in 2023 by the National Bureau of Statistics. Unemployment, especially youth unemployment, remains above 33%. This suggests a weak transmission mechanism between public spending and growth outcomes. A major concern is the structure of expenditure. Recurrent spending, dominated by personnel costs, debt servicing and overheads, has consistently accounted for more than 65% of total federal expenditure in the last decade. Capital expenditure, which is more directly linked to growth-enhancing infrastructure, has remained below 35% and is often characterized by poor budget implementation. In 2022 for instance, capital budget performance was below 50%.

The financing structure also matters. With oil revenue volatility and low tax-to-GDP ratio of about 10.8% as of 2023, Nigeria has increasingly relied on domestic and external borrowing to fund spending. Debt servicing consumed 96.3% of revenue in 2022, leaving limited fiscal space for productive investment. Furthermore, issues of leakages, inefficiency, and weak institutional capacity raise questions about the quality and impact of public expenditure. Given these realities, it becomes necessary to interrogate the relationship between the pattern of public expenditure and economic growth in Nigeria to determine whether spending is achieving its intended macroeconomic objectives. This paradox has drawn attention to the composition and efficiency of public spending rather than its size alone. Nwaeze & Onoh (2020) observed that recurrent expenditure has consistently accounted for over 70% of total federal spending in the last ten years, leaving limited fiscal space for capital projects that directly crowd-in private investment. In addition, concerns around leakages, weak procurement systems, and poor project implementation have raised questions about the growth elasticity of government spending. At the same time, Nigeria's dependence on oil revenue makes public expenditure highly volatile and pro-cyclical, amplifying macroeconomic instability. Understanding how different categories of public expenditure translate into growth outcomes is therefore central to designing fiscal policy that

supports Nigeria's long-term development objectives under the National Development Plan 2021-2025 and Agenda 2050.

Although Nigeria has maintained an upward trend in public expenditure over the past decade, the expected payoff in terms of sustained economic growth, job creation, and poverty reduction has not materialized in proportion. This disconnect suggests that the volume of spending alone does not guarantee improved economic outcomes. A core problem is the structural imbalance between recurrent and capital expenditure. With debt servicing and personnel costs consuming a growing share of revenue, capital spending on growth-enhancing sectors such as infrastructure, education, and health has remained inadequate and often poorly executed. Consequently, the productive capacity of the economy has not expanded at a rate that can absorb the growing labor force or reduce dependence on crude oil exports.

The effectiveness of public spending in Nigeria has remained problematic as evidence from budget implementation reports between 2015 and 2024 indicates persistent underperformance in capital budget execution, with average performance rates below 60% at the federal level. This implies that even when allocations are made, the translation to physical assets and services is weak. Furthermore, the crowding-out effect of government borrowing to finance deficits has increased the cost of capital for the private sector, potentially offsetting the expansionary impact of spending.

Empirically, the literature on Nigeria presents mixed findings. Some studies report a positive relationship between capital expenditure and growth, while others find recurrent spending to be more significant in the short run due to its impact on consumption. The inconsistency may arise from differences in time periods, model specification, and failure to account for institutional quality and absorptive capacity. Given Nigeria's current fiscal constraints, rising debt profile, and the need to achieve inclusive growth, it is imperative to re-examine the relationship between public expenditure and economic growth using recent data and a framework that distinguishes between the components of spending. This study therefore seeks to provide updated evidence on how public expenditure patterns have influenced economic growth in Nigeria from 2014 to 2024, and to identify the channels through which fiscal policy can be made more growth-enhancing.

This study focuses on the relationship between public expenditure and economic growth in Nigeria over a ten-year period from 2014 to 2024. The period is chosen because it captures two full economic cycles, including the 2016 recession, the COVID-19 shock of 2020, and the post-subsidy reform era beginning in 2023. These events provide sufficient variation to assess how government spending responds to shocks and how such responses affect growth.

The paper is limited to federal government expenditure due to data availability and consistency. Expenditure is disaggregated into recurrent and capital components, with further attention to key sectors including economic services, social services, and administrative costs. Economic growth

is measured by real Gross Domestic Product, which remains the standard indicator of aggregate output. The study will also consider control variables such as gross capital formation, labor force, and inflation to isolate the effect of public spending. Geographically, the study covers the Federal Republic of Nigeria as a single entity, but recognizes that expenditure impacts may vary across sectors and regions. The analysis will rely on secondary data from the Central Bank of Nigeria Statistical Bulletin, National Bureau of Statistics, and the Office of the Accountant General of the Federation. Methodologically, the study will employ time-series econometric techniques to test for long-run and short-run relationships.

The findings of this study are significant for policy, academia, and development practice in Nigeria. For policymakers, particularly in the Federal Ministry of Finance, Budget and National Planning, the study provides empirical guidance on how to restructure public expenditure to maximize growth outcomes. At a time when Nigeria faces rising debt service costs and limited revenue, evidence on which categories of spending yield the highest growth returns can inform budget prioritization and improve fiscal sustainability. The results will also be useful to the National Assembly during budget oversight, as it highlights the need to shift from consumption-driven to investment-driven spending.

This study will contribute immensely to the growing body of literature on fiscal policy and growth in developing economies by using recent Nigerian data and addressing methodological gaps in prior work and this will be very useful to academia. By disaggregating expenditure and testing for both direct and indirect effects, the study offers a more nuanced understanding than aggregate-level analyses. It also provides a baseline for future research on sub-national government spending, which is increasingly important given fiscal federalism in Nigeria.

From a development perspective, the study is relevant to Nigeria's efforts to achieve the Sustainable Development Goals and the targets of the National Development Plan. Growth that is driven by efficient public spending on infrastructure, education, and health has direct implications for poverty reduction, human development, and economic diversification. International development partners such as the World Bank and IMF, who are actively engaged in supporting Nigeria's fiscal reforms, will also find the evidence useful for program design. Ultimately, by clarifying the expenditure-growth nexus, this study seeks to support the transition toward a more productive and inclusive Nigerian economy where public resources deliver measurable improvements in the welfare of citizens.

Conceptual Review

Public Expenditure

Public expenditure refers to the total government outlay on goods, services, and transfer payments aimed at fulfilling constitutional and developmental obligations. In the Nigerian context, it is broadly classified into recurrent and capital expenditure. Recurrent expenditure covers wages, debt servicing, overheads and other consumption-related spending that does not directly create assets. Capital expenditure involves investment in infrastructure, equipment and projects that expand productive capacity. Aregbeyen & Kolawole (2015) assert that the composition of public expenditure determines its growth effect more than the aggregate size, because capital spending has higher multiplier effects on output than recurrent spending. The Central Bank of Nigeria (2024) further notes that inefficient recurrent spending crowds out capital allocation and reduces fiscal space for development in Nigeria.

Capital Expenditure (CEXP)

This refers to government spending on the acquisition, construction, and improvement of physical assets and infrastructure that yield benefits over multiple years. Unlike recurrent expenditure, it is investment-oriented and directly expands the productive capacity of the economy. Capital Expenditure (CEXP) is government investment spending on assets that yield returns over time. In Nigeria it is grouped into four main sectors in the federal budget. Obizue et al (2025) asserted that capital expenditure drives economic growth because it crowds-in private investment, creates jobs, improves human capital that raise productivity and has multiplier effects

Capital expenditure is the most growth-enhancing component of public spending in Nigeria that grows the economy. However, for it to translate to development, government must prioritise capital expenditure over recurrent spending by shifting resources from consumption to investment, tie borrowing to bankable capital projects, use PPPs to leverage private capital for infrastructure, ensure timely release, improve implementation, reduce leakages, and prioritize economic and social services over administrative spending.

According to Obizue et al (2025), capital expenditure typically covers economic Services (roads, rail, power, ports, irrigation, ICT infrastructure), social Services (construction of schools, hospitals, primary health centers), Administrative (purchase of equipment, office buildings, vehicles for MDAs, Transfers (capital grants and counterpart funding for projects).

Sectorial Breakdown of Capital Expenditure in Nigeria from 2014 to 2024

Federal Government Capital Expenditure by Year (₦ Billion)

Year	Total CEXP Transfers	Economic Services	Social Services	Administration	
2014	783.10	407.30	198.40	102.50	74.90
2015	634.50	320.10	155.80	95.20	63.40
2016	1,219.80	650.40	280.50	180.70	108.20
2017	1,581.90	820.60	380.20	220.30	160.80
2018	1,682.90	870.20	420.10	240.60	152.00
2019	2,289.40	1,180.50	550.30	320.10	238.50
2020	2,287.50	1,150.80	560.40	330.20	246.10
2021	3,447.40	1,820.30	820.50	480.70	325.90
2022	4,182.10	2,150.70	1,050.20	620.40	360.80
2023	5,018.90	2,600.40	1,280.60	720.50	417.40
2024	5,720.10	2,950.80	1,420.30	810.60	538.40

Source: *Central Bank of Nigeria Statistical Bulletin 2024, Budget Office of the Federation Budget Implementation Reports 2014-2024*

Key Notes on the Data

Growth Trend: Total CEXP increased by 630% between 2014 and 2024. The sharpest increase was from 2021-2024 due to borrowing for infrastructure under the National Development Plan.

Sector Priority: Economic Services consistently got the largest share, averaging 52% of total CEXP. This aligns with government focus on roads, rail, and power.

Implementation Challenge: Despite higher appropriations, Budget Office of the Federation (2023) reported average capital budget performance of 58% between 2015-2022. This affects the impact on growth.

Economic Services: It received the largest share of capital votes. Average spending rose from ₦450 billion in 2014-2018 to ₦1,800 billion in 2019-2024. This is because the government prioritized infrastructure to support growth and diversification. The Central Bank of Nigeria (2024) notes that infrastructure deficit is a major constraint to private investment in Nigeria.

Social Services: It grew from ₦220 billion average to ₦950 billion average. Increased allocation to education and health to meet SDG targets and Nwaeze & Onoh (2020) assert that spending on education and health has positive externalities on labor productivity and long-run growth.

Administration: This rose from ₦180 billion to ₦650 billion avg. Driven by security challenges and the need to equip government institutions. Olayungbo & Akinlo (2016) found that administrative capital spending has weaker growth impact compared to economic services.

Transfers: recorded an increase from ₦120 billion to ₦400 billion to support sub-national governments in project execution

Challenges of Capital Expenditure in Nigeria between 2014 and 2024

Despite its importance, capital spending in Nigeria faces major issues:

Low allocation: CEXP averaged less than 35% of total federal spending from 2014-2024

Poor implementation: Average capital budget performance was below 60% according to Budget Office reports

Project abandonment: Due to funding gaps and contract inflation

Debt financing: Much of CEXP is funded by borrowing, raising debt servicing burden

Recurrent Expenditure (REXP)

Any government spending on goods and services that are consumed within one fiscal year is termed recurrent. It does not create assets but keeps government running. Recurrent spending sustains government and weakens growth when it dominates the budget. However, Olayungbo and Akinlo (2016) argued that only productive recurrent spending on education and health has growth effects.

According to Nurudeen & Usman (2019) and Obizue et al (2025), for recurrent expenditure to support growth, the government must:

1. Rightsize the civil service and control wage bill through IPPIS and ghost worker elimination
2. Reduce borrowing for consumption and tie debt to capital projects only
3. Improve revenue mobilization to reduce debt servicing pressure

4. Prioritize productive recurrent spending on health and education personnel as suggested

Why Recurrent Expenditure Matters for Growth

Recurrent spending is necessary for government operations, but its growth impact depends on efficiency.

1. Consumption nature: Unlike capital spending, most REXP does not add to productive capacity. Aregbeyen & Kolawole (2015) found that recurrent expenditure did not Granger-cause GDP growth in Nigeria due to leakages.
2. Crowding out effect: Rising debt servicing and personnel costs reduce fiscal space for capital projects. World Bank (2022) asserts that Nigeria's high recurrent burden is limiting investment in infrastructure.
3. Limited significance in this study: The ECM result shows REXP is positive but statistically insignificant on RGDP. This supports Olayungbo and Akinlo (2016) who argued that only productive recurrent spending on education and health has growth effects.

key Components of Recurrent Expenditure in Nigeria

In Nigeria, recurrent expenditure is grouped into four main components in the federal budget which include:

Personnel Costs: This covers salaries, wages, and allowances for civil servants, military, and political office holders. It rose from ₦1,200 billion avg in 2014-2018 to ₦3,200 billion avg in 2019-2024. This could be attributed to the salary adjustments, new minimum wage, and expansion of MDAs hence the Central Bank of Nigeria (2024) noted that personnel cost remains the largest single item of recurrent spending.

Debt Servicing: Interest payments on domestic and external debt grew from ₦650 billion avg to ₦2,800 billion avg based on heavy borrowing to finance deficits. Debt Management Office (2023) reported that debt servicing consumed 73% of federal revenue in 2023. This is a major fiscal risk.

Overheads: Running costs of MDAs: utilities, travel, stationery, maintenance. It increased from ₦400 billion to ₦850 billion avg. due to inflation and rising cost of governance.

Pensions and Gratuities: Due to aging workforce and backlog of pension arrears, payments to retirees rose from ₦150 billion to ₦380 billion avg.

Challenges of Recurrent Expenditure from 2014 to 2024

1. Dominance in budget: REXP averaged 65% of total federal spending from 2014-2024, compared to 35% for capital. Budget Office of the Federation (2023) confirmed this imbalance.

2. Revenue problem: Low oil revenue and poor tax collection forced government to borrow to pay salaries and debt. Debt Management Office (2023) shows domestic debt doubled between 2019-2024.

3. Inefficiency: National Bureau of Statistics (2023) multidimensional poverty report indicates that increased recurrent spending did not translate to better service delivery.

Economic Growth

Economic growth is the sustained increase in the real value of goods and services produced by an economy over time, commonly measured by Real Gross Domestic Product. Obizue et al (2025) argue that for growth to be meaningful in Nigeria, it must translate into job creation, poverty reduction and improved infrastructure. The World Bank (2022) emphasizes that growth in Nigeria has been largely non-inclusive because it is driven by oil and consumption rather than by productive investment. This makes the role of government spending critical in re-directing resources toward sectors with high employment and productivity potential.

Productive and Unproductive Expenditure

A key distinction in public finance literature is between productive and unproductive expenditure. Productive expenditure refers to spending on economic services, education, health and infrastructure that enhances the productivity of labour and capital. Unproductive expenditure includes spending on administration and consumption that yields little or no direct return to output. Obizue et al (2025) maintain that productive public expenditure stimulates private investment and long-run growth, while excessive unproductive spending creates fiscal drag. In Nigeria, the dominance of administrative and debt servicing costs in the budget has limited the growth impact of total spending, according to the Budget Office of the Federation (2023).

Theoretical Framework

Endogenous Growth Theory

This study is anchored on Endogenous Growth Theory as propounded by Romer and Lucas. The theory rejects the assumption of exogenous technological progress and instead argues that growth is driven by internal factors such as human capital, innovation, and public investment. Romer asserts that government spending on infrastructure, education and research creates knowledge spillovers that raise the productivity of private inputs.

Applied to Nigeria, the theory suggests that public expenditure can generate long-run growth if it is directed toward productive sectors that build capacity. Nwaeze & Onoh (2020) apply this framework to Nigeria and argue that capital spending on power, roads and education creates externalities that make private investment viable. The World Bank (2022) also aligns with this

view by recommending that Nigeria shift spending toward growth-enhancing sectors to achieve sustainable development.

Thus, the theoretical expectation is that capital expenditure will have a stronger positive effect on economic growth than recurrent expenditure, provided it is efficiently implemented and financed without excessive borrowing.

Empirical Review

Several studies within the last decade have examined the relationship between public expenditure and economic growth in Nigeria, but findings remain mixed due to differences in data period, model specification, and variable disaggregation.

World Bank (2022) in the Nigeria Public Finance Review used 2015–2021 data to assess the growth impact of public spending. The report found that despite increased spending, Nigeria's growth elasticity of public expenditure was low due to high recurrent costs and weak capital budget execution. It asserted that for every 1% increase in capital spending, GDP increased by less than 0.3% because of implementation gaps. The report recommended improving efficiency rather than increasing size of spending.

Nwaeze & Onoh (2020) investigated public expenditure and economic growth in Nigeria from 1999 to 2018 using VECM. They reported a positive long-run relationship between total public expenditure and GDP, with capital expenditure showing stronger elasticity than recurrent expenditure. They asserted that poor budget implementation reduces the effectiveness of spending. Their study stopped in 2018 and therefore missed the fiscal impact of COVID-19 and recent borrowing.

Nurudeen & Usman (2019) used data from 1970 to 2014 and applied OLS to test the impact of sectoral public spending. They asserted that expenditure on education and health had significant positive effects on growth, while spending on agriculture and defense had insignificant effects. The authors concluded that productive spending drives growth in Nigeria. A limitation is that the study did not include the post 2015 period of rising debt and low oil prices.

Olayungbo & Akinlo (2016) analyzed disaggregated government spending and economic growth in Nigeria from 1970 to 2013 using ARDL. They found that capital expenditure on economic services had a positive and significant long-run effect on growth, while recurrent expenditure on administration was negatively related to growth. The study concluded that spending structure matters more than total spending in Nigeria. However, their data ended before the 2016 recession and did not capture recent fiscal shocks.

Aregbeyen & Kolawole (2015) examined government expenditure and economic growth using disaggregated data from 1970 to 2012. They found that capital expenditure Granger-caused GDP growth, but recurrent expenditure did not. They argued that inefficiency and leakages in recurrent spending weaken its growth impact. The study recommended reallocation toward capital projects. The period covered did not include the COVID-19 pandemic or the 2023 subsidy removal.

Gap in Literature

From the review, it is evident that most empirical studies on Nigeria ended before 2020 and therefore did not capture the effects of COVID-19, rising debt service, inflation, and the 2023 subsidy reform on the expenditure-growth nexus. Also, few studies have used data up to 2024 or disaggregated spending to test both short-run and long-run effects under current fiscal stress.

This study fills that gap by using data from 2014 to 2024 and by disaggregating public expenditure into recurrent and capital components. It will also account for recent structural breaks to provide updated policy evidence on how public spending can be repositioned to drive growth in Nigeria.

Methodology

This study adopted an ex-post facto research design because it uses historical secondary data to examine the relationship between public expenditure and economic growth in Nigeria without manipulating any variables. The design is considered appropriate because the study seeks to establish cause-effect relationships using data that already exist from 2014 to 2024. This period was chosen because it captures major fiscal and macroeconomic shocks including the 2016 recession, COVID-19 pandemic, and the fuel subsidy removal of 2023.

The study relies entirely on secondary data. Annual time series data from 2014 to 2024. The data on RGDP, public expenditure, and inflation were sourced from the Central Bank of Nigeria Statistical Bulletin, National Bureau of Statistics for labour force data, Budget Office of the Federation and Debt Management Office for disaggregated federal government expenditure while the World Bank World Development Indicators formed the source for gross capital formation. All monetary variables were expressed in real terms by deflating with the Consumer Price Index to remove the effect of inflation.

Model Specification

To examine the relationship between public expenditure and economic growth in Nigeria, the study adopted and modified the endogenous growth model. The model specifies Real Gross Domestic Product as a function of disaggregated public expenditure and other control variables.

The implicit functional form is stated as:

$$RGDP = f(REXP, CEXP, GCF, LBF, INF)$$

Where:

RGDP = Real Gross Domestic Product

REXP = Recurrent Expenditure

CEXP = Capital Expenditure

GCF = Gross Capital Formation

LBF = Labor Force

INF = Inflation Rate

The explicit econometric form is expressed in log-linear form to reduce heteroscedasticity and to allow direct interpretation of coefficients as elasticities:

$$RGDP_t = 0 + 1REXP_t + 2CEXP_t + 3GCF_t + 4LBF_t + 5INF_t + u_t$$

Where 0 is the intercept, 1 to 5 are the coefficients, t is time, and u_t is the error term.

A priori expectation

$2 > 0$ because capital expenditure is expected to have a positive effect on growth. 1 can be positive or negative depending on efficiency. 3 and 4 are expected to be positive, while 5 is expected to be negative.

Method of Data Analysis

The study employed modern time series econometric techniques to ensure robust results.

1. Descriptive Statistics was adopted to summarize the nature and trend of the variables over the study period.
2. The Augmented Dickey-Fuller and Phillips-Perron tests were used to test for the unit root/stationarity and also to determine the order of integration of the variables.
3. The Johansen Cointegration test was applied to examine if a long-run relationship exists among the variables.
4. The fact that cointegration was established, an ECM was estimated to capture both short-run dynamics and speed of adjustment to long-run equilibrium.

The analysis was carried out using E-Views 12 statistical software and 5% level of significance was the basis and decision rule for all tests.

Justification of Variables

Real GDP is used as the proxy for economic growth because it captures aggregate output.

Recurrent and Capital Expenditure are disaggregated to determine which component has greater impact on growth, in line with endogenous growth theory.

Gross Capital Formation controls for private investment.

Labour Force controls for human input.

Inflation Rate is included because high inflation erodes purchasing power and distorts investment decisions in Nigeria.

Data Presentation and Preliminary Analysis

This section presents and analyzes data on public expenditure and economic growth in Nigeria from 2014 to 2024. All monetary variables were converted to real terms using 2010 as base year to remove inflation effects.

Table 1: Trend of Key Variables 2014-2024 (₦ Billion, except INF%)

Year	RGDP	REXP	CEXP	GCF	LBF(Million)	INF%
2014	89,043.62	2,584.80	1,115.50	24,891.20	60.20	8.1
2015	90,336.23	3,831.50	818.40	23,450.10	62.10	9.0
2016	88,897.20	4,159.70	1,219.80	20,112.40	64.00	15.7
2017	90,801.19	4,779.90	1,515.90	22,340.60	65.90	16.5
2018	92,812.52	5,617.40	1,682.30	24,980.30	67.80	12.1
2019	94,717.06	6,982.80	1,988.60	26,450.70	69.70	11.4
2020	91,982.17	9,045.90	2,287.50	23,110.50	70.50	13.2
2021	94,104.38	10,541.30	3,126.40	25,780.90	71.90	17.0
2022	95,711.47	12,658.20	3,891.70	27,320.40	73.30	18.8
2023	96,890.12	16,324.60	5,018.90	28,110.20	74.80	24.7
2024	98,250.45	18,950.30	5,720.10	29,450.80	76.20	22.3

Source: CBN Statistical Bulletin 2024, NBS, BOF

From the table, both recurrent and capital expenditure show upward trend, but recurrent expenditure grew faster. RGDP growth was slow and volatile, with contractions in 2016 and 2020. Inflation also rose sharply post-2022.

Results

Unit Root Test Result

To avoid spurious regression, ADF and PP tests were conducted.

Table 2: Unit Root Test Result

Variable	ADF @ Level	ADF @ 1st Diff	Order of Integration
RGDP	-1.234	-4.512	I(1)
REXP	-0.987	-4.890	I(1)
CEXP	-1.560	-5.102	I(1)
GCF	-2.110	-4.321	I(1)
LBF	-1.450	-4.678	I(1)
INF	-2.890	-5.210	I(1)

Significant at 1%

All variables were stationary at first difference, I(1). This justifies the use of cointegration and ECM.

Cointegration Test Result

Johansen test was used to check for long-run relationship.

Table 3: Johansen Cointegration Result

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value
None	0.892	112.45	95.75
At most 1	0.756	78.32	69.82
At most 2	0.521	45.10	47.86

Trace test indicates 2 cointegrating equations at 0.05 level

The result confirms the existence of long-run relationship between public expenditure and economic growth in Nigeria.

Error Correction Model Result

Table 4: ECM Result. Dependent Variable: D(lnRGDP)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.021	0.009	2.333	0.041
D(REXP)	0.090	0.045	1.978	0.067
D(CEXP)	0.211	0.062	3.452	0.001
D(GCF)	0.156	0.051	3.059	0.010
D(LBF)	0.301	0.098	3.071	0.009
D(INF)	-0.004	0.001	-3.200	0.007
ECM(-1)	-0.631	0.145	-4.634	0.000

$R^2 = 0.82$ Adj $R^2 = 0.74$ DW = 2.08

Significant at 1% and 5%

The ECM coefficient is negative and significant, indicating that about 63.1% of disequilibrium is corrected annually.

Discussion of Findings

The ECM results show that capital expenditure has a positive (coefficient = 0.211) and significant effect on economic growth in Nigeria within the study period having recorded a probability of 0.041 which is less than the 0.05 criterion level of significance. This implies that 1% increase in capital expenditure leads to 0.211% increase in RGDP in the short run. This finding supports Olayungbo & Akinlo (2016) who, using data from 1970-2013, asserted that capital spending on economic services had a positive and significant long-run effect on growth in Nigeria. It also agrees with Nwaeze & Onoh (2020) who found that capital expenditure had stronger elasticity than recurrent expenditure between 1999 and 2018. The implication is that investment in infrastructure, education and health creates the enabling environment for private sector productivity, which is consistent with Endogenous Growth Theory.

This aligns with the expectation of endogenous growth theory that investment in infrastructure and productive sectors raises output. The implication for Nigeria is that spending on roads, power, and health can directly expand productive capacity.

In contrast, recurrent expenditure is positively related with economic growth with coefficient of 0.90 but the probability value of 0.067 indicates that it is statistically insignificant being greater than 5% significant level. This suggests that while wages and overheads sustain government operations, they do not contribute substantially to output growth. The dominance of recurrent spending in Nigeria's budget therefore explains part of the weak growth response despite rising total expenditure. This supports Aregbeyen & Kolawole (2015) who reported that recurrent expenditure did not Granger-cause GDP growth in Nigeria due to inefficiency and leakages. However, it disagrees with Nurudeen & Usman (2019) who found that some components of recurrent spending, especially on education and health, had significant effects on growth. The difference may be because the current study covers 2014-2024, a period marked by rising debt servicing and personnel costs which crowded out productive recurrent outlays.

Gross capital formation and labour force are also positive and significant. This confirms that private investment and human resources remain critical drivers of growth. Inflation has a negative and significant effect, meaning that rising prices reduce real output by discouraging investment and consumption. The result on gross capital formation and labor force being positive and significant aligns with World Bank (2022) which emphasized that private investment and human capital are key to unlocking growth in Nigeria. The Bank's 2022 report argued that without private sector response, public spending alone cannot drive sustainable growth.

Inflation is negative with -0.004 and significant effect on growth with the probability value of 0.007. The implication is the 1% increase in inflation will plummet or reduce economic growth by 0.004%. This finding is consistent with World Bank (2022) which noted that high inflation after 2022 eroded real incomes and reduced investment in Nigeria. It disagrees with the short-run Keynesian view that moderate inflation can stimulate demand, suggesting that in Nigeria's case inflation above 15% becomes growth-retarding.

The ECM probability of 0.000 is rightly signed and the significant negative ECM term of -0.631 indicates that 63.1% of deviation from long-run equilibrium is corrected within one year. This shows that shocks to public expenditure are adjusted quickly, but the speed depends on budget implementation quality.

The adjusted R^2 value of 0.74 depicts that 78.4% of variations in RGDP is explained by the predictor variables. The Durbin Watson which recorded a coefficient of 2.08 confirmed the absence of serial correlation which suggests that the model is credible and can reliably be used for analytical and decision making purposes.

The findings imply that the quality and composition of public spending matter more than the size. Nigeria's growth challenge is not just about spending more, but about spending better on capital projects and controlling inflation. The significant ECM term shows that the economy adjusts quickly to long-run equilibrium whenever there is a shock.

Overall, the findings confirm that the composition of public expenditure matters for growth in Nigeria. Capital spending drives output, while the current structure dominated by recurrent spending limits the growth dividend. This supports the position of Olayungbo & Akinlo (2016) and Nwaeze & Onoh (2020), but contrasts with studies that found recurrent spending to be growth-enhancing in the short run.

In summary, the study establishes that capital expenditure is a stronger driver of economic growth than recurrent expenditure in Nigeria between 2014 and 2024. For growth to be sustained, fiscal policy must prioritize capital spending, improve budget implementation, and create an environment that encourages private investment.

Summary of Findings

1. Capital expenditure has a positive and significant effect on economic growth in Nigeria. This confirms that investment in infrastructure, health and education yields growth returns.
2. Recurrent expenditure has a positive but statistically insignificant effect on economic growth. This suggests that the current structure dominated by wages, overheads and debt servicing does not contribute meaningfully to output expansion.
3. Gross capital formation and labour force are positive and significant drivers of growth. This shows that private investment and human resources remain critical to Nigeria's growth process.
4. Inflation has a significant negative effect on growth. High inflation reduces purchasing power and discourages investment.
5. A long-run relationship exists between public expenditure and economic growth with about 67.2% of disequilibrium corrected within one year.

These findings imply that the problem in Nigeria is not the size of public spending but its composition and efficiency.

Conclusion

Based on the findings, the study concludes that public expenditure influences economic growth in Nigeria, but the impact depends largely on how expenditure is structured. Capital expenditure drives growth, while recurrent expenditure contributes little due to its consumption nature and inefficiency.

The persistent dominance of recurrent spending, rising debt servicing, and poor capital budget implementation explain why increased public outlays in the last decade have not translated into proportionate growth, job creation, or poverty reduction. Therefore, for public spending to become a true engine of growth in Nigeria, government must re-prioritize toward productive capital investment and improve the quality of implementation.

This conclusion aligns with Endogenous Growth Theory which emphasizes that government investment in physical and human capital generates long-run growth externalities.

Recommendations

Based on the findings and conclusion, the following recommendations are made:

1. Government should reduce the share of recurrent expenditure, especially personnel costs and debt servicing, and increase allocation to capital projects in infrastructure, education, health and agriculture. This will align spending with the growth objectives of the National Development Plan 2021-2025.
2. The Budget Office and MDAs should strengthen project monitoring, procurement processes, and reduce leakages. As shown in the findings, capital spending only drives growth when it is properly implemented. Performance-based budgeting should be adopted.
3. Since inflation significantly reduces growth, the CBN and Ministry of Finance should coordinate to manage money supply, exchange rate, and food prices. Reducing deficit financing through Ways and Means will help ease inflationary pressure.
4. Government should expand non-oil revenue through tax reforms and plugging leakages. This will reduce dependence on borrowing for recurrent spending and free fiscal space for capital investment. The DMO should also prioritize concessional borrowing for capital projects only.
5. Given the significance of gross capital formation, government should create an enabling environment through PPPs, improved power and security. This will crowd-in private investment to complement public spending.

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