



Government Revenue Generation and Expenditure: The Nigerian Experience

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Abstract

This study analysed the impact of Nigeria's revenue generation on government expenditure. Total government revenue and government domestic debt were used as independent variables, while government expenditure was used as the dependent variable. Annual time series data were sourced from the Central Bank of Nigeria annual statistical bulletin. The E-view statistical software was employed to analyze the data empirically. The unit root test shows that government expenditure and government domestic debt were stationary after second difference 1(2) respectively while total government revenue was stationary after first difference 1(1). The research uses descriptive statistics and the autoregressive distribution lag (ARDL) model to determine the relationship between government revenue, domestic debt and government expenditure. The results of the ARDL estimates indicate that in the long run total government revenue and government domestic debt are all positively signed and statistically significant. The study recommends, among others, that the government should explore other sources of revenue, especially in the non-oil sector, so as to transform the Nigerian economy and complement oil revenue.

Keywords Revenue Generation; Government Expenditure; Government Domestic Debt; Oil Dependency

Citation Aniemeke, T. O., & Mgbomene, C. (2025). Government Revenue Generation and Expenditure: The Nigerian Experience. *International Journal of Economics and Public Policy*, 9(1), 15-24
<https://doi.org/10.5281/zenodo.16356518>

Introduction

Revenue generation and government expenditure are critical components of economic management, as well as government debt. However, in this study, we will employ the use of government domestic debt, as it directly influences government expenditure decisions through resource availability, borrowing costs, and fiscal sustainability concerns. In Nigeria, fluctuations in oil prices, macroeconomic instability, and political factors have heavily influenced both revenue and spending. Revenue generation is the process by which the government generates national revenue. National revenue refers to the money received by a government from taxes and non-tax sources, enabling it, assuming full resource employment, to undertake non-inflationary public expenditure. Government revenue as well as government spending are components of the government budget and important tools of the government's fiscal policy.

Government spending or expenditure includes all government consumption, investment, and transfer payments. Public expenditure refers to the spending made by a country's government on collective or individual needs and wants of public goods and public services, such as pensions, healthcare, security, education subsidies, and infrastructure.

Government debt is the financial liabilities of the government sector. Changes in government debt over time reflect previous borrowing due to past government deficits. In public finance, internal debt is a component of the total government debt in a country. Internal government debt complements external government debt. The primary sources of funds for internal debts are commercial banks and other financial institutions within the country.

This study examines Nigeria's revenue generation and government expenditure from 1995 to 2023. Total government revenue and government domestic debt were used as dimensions of independent variables, while government expenditure was used as the dependent variable.

Literature Review

Revenue Generation in Nigeria

According to Ogunleye (2020), Nigeria's revenue system is mainly dependent on oil earnings, making it vulnerable to external shocks. Adegoke and Falana (2018) noted that efforts to diversify revenue sources have been slow and inadequate.

Government revenue includes all amounts of money (taxes and fees) received from sources outside the government entity. Large governments typically have an agency or department responsible for collecting government revenue from companies and individuals. Government revenue may also include reserve bank currency, which is printed, and this is recorded as an advance to the retail bank, along with a corresponding amount in circulation. The income is derived from the official cash rate for instruments such as 90-day bills (Oyendikachi et al., 2020). Tax and non-tax revenues are the major sources of government revenue in Nigeria. The primary function of taxation is to provide funds for public services. Because of the peculiar nature of the economy, the sources take the form of oil and non-oil revenue. Notwithstanding the distinction, oil and non-oil revenues still form an integral part of tax revenue.

Government revenue in Nigeria is primarily sourced from two main categories: oil revenue and non-oil revenue.

Oil Revenue

For decades, oil has been the cornerstone of Nigeria's public finances. The country earns substantial revenue from:

- i. Crude oil exports
- ii. Petroleum Profit Tax (PPT)
- iii. Royalties and rents from oil companies
- iv. Licensing fees

- v. Gas sales and associated flaring penalties

Oil revenue accounts for approximately 50–60% of government revenue and over 80% of export earnings, making the economy vulnerable to global oil price fluctuations. The recent deregulation of the downstream sector and reforms at the Nigerian National Petroleum Company Limited (NNPCL) aim to enhance transparency and efficiency in this critical sector.

Government Domestic Debt

Government debt is the financial liabilities of the government sector. Changes in government debt over time reflect primarily borrowing due to past government deficits. In public finance, internal debt is a component of the total government debt in a country. Internal government debt is complemented by external government debt. The main sources of funds for internal debts are commercial banks and other financial institutions.

Non-Oil Revenue

The diversification of the revenue base is crucial for Nigeria's economic resilience. Non-oil revenue sources include:

Taxation: Tax is the most important source of government income and compulsorily imposed by government, irrespective of the exact amount of services rendered to the taxpayer in return. Since it is compulsory in nature, a person who is qualified to pay tax and refuses to do so is liable to punishment. It is a payment made by the taxpayers and is used by the government for the benefit of all the citizens. The government uses revenue generated from tax for providing infrastructure; hospitals, schools, public utilities. Tax is classified as follows;

- i. Companies Income Tax (CIT)
- ii. Value Added Tax (VAT)
- iii. Personal Income Tax (PIT)
- iv. Customs and excise duties
- v. Stamp duties

Other sources of revenues are:

- i. Revenue from Government-Owned Enterprises (GOEs): Agencies like NIMASA, FAAN, and the Nigerian Ports Authority contribute through fees, licenses, and surpluses.
- ii. Independent Revenue by MDAs: Ministries, Departments, and Agencies collect administrative charges and service fees.
- iii. Privatization and Concessions: Occasional sale or leasing of government assets also adds to government revenue.
- iv. Grants and Aids: Nigeria receives budget support and development financing from international organizations like the World Bank and African Development Bank.

Recent fiscal reforms, including the Finance Act amendments and digital tax systems, are expanding the tax net and increasing compliance.

Government Expenditure in Nigeria

Okonkwo and Eze (2019) assert that recurrent expenditure dominates Nigeria's budget, with capital expenditure trailing significantly. High debt servicing costs have also constrained fiscal flexibility. Government expenditure is the expenses the government incurs in carrying out her programs and/or businesses. Government expenditure involves all the expenses which the public sector incurs for its maintenance for the benefit of the economy.

Generally, government expenditure in Nigeria can be categorized into two component parts namely capital expenditure and recurrent expenditure. Capital expenditure is incurred on the creation or acquisition of fixed assets

(new or second-hand). It is also expenses on capital projects like roads, airports, education, telecommunication, electricity generation etc., while recurrent expenditure is incurred on the purchase of goods and services, payment of wages & salaries and settlement of depreciation on fixed assets. All these funds are sourced from different fiscal sources. Commercial banks' credits are also a source for funding government expenditures (Mgbomene and Nnamocha, 2023). The recurrent expenditure refers to government expenses on administration, such as wages, salaries, interest on loans, and maintenance (Anyanwu, 2007). An increase in socio-economic activities and infrastructural development is a structural framework for economic growth in any country.

In Nigeria, evidence showed that the total government expenditure has continued to rise in recent times in geometric terms through the government's various activities and interactions with its Ministries, Departments and Agencies (MDAs) (Okulegu, 2013). Expenditures on defense, internal security, debt servicing, education, health, agriculture, construction, transport and communication are rising over time. For instance, government total recurrent expenditure has been on the increase over time. Meanwhile, Keynes in his hypothesis draws a link between public expenditure and economic growth, positing that causality runs from public expenditure to income, implying that public expenditure is an exogenous factor and a public instrument for increasing national income. According to Keynes, an increase in government expenditure leads to higher economic growth (Keynes, 1936). It has been argued that government fiscal policy (intervention) helps to mitigate failures that might arise from the inefficiencies of the market. Similarly, Dar and Amir (2002) pointed out that in the endogenous growth models, fiscal policy is very crucial in predicting future economic growth. It is a common belief that the government plays a significant role in the development of a country, and public expenditure is an important instrument for a government to control the economy. Economists have been well aware of its effects in promoting economic growth. The prevailing view is that public expenditure, whether recurrent or capital, particularly on social and economic infrastructure, can be growth-enhancing. An increase in government expenditure will yield a positive increase in the growth of the economy by increasing the national income, especially when it is injected into development programs (Omoke, 2009). For an instant, government expenditure on health and education is capable of raising the productivity of labour and increase the growth of national output (Oni, 2014).

In Nigeria, government expenditures are classified under the headings of administration, social and community services, economic services and transfers. Expenditure on administration includes general administration, defense, internal security and national assembly. Expenditures on social and community services include those on education, health and other social and community services. Expenditures on economic services include those on agriculture, construction, transport and communication and other economic services. Government transfers include public debt servicing, pensions and gratuities, contingencies/subventions, among others (CBN, 2016).

Theoretical Framework

Peacock and Wiseman's Theory of Expenditure

Peacock and Wiseman's study is probably one of the analyses of the time pattern of public expenditures. They founded their analyses upon a political theory of public determination which states that governments like to spend more money and citizens do not like to pay taxes, and that governments need to pay some attention to the wishes of their citizens. The duo saw taxation as setting a constraint on government expenditure. As the economy and thus incomes grew, tax revenue at a constant tax rate would rise, thereby enabling public expenditure to show a gradual upward trend even though within the economy there might be a divergence between what people regarded as a desirable level of public expenditure and the desirable level of taxation. During the periods of social upheaval, however, this gradual upward trend in public expenditure would be disturbed. These periods would coincide with war, famine or some large-scale social disaster, which would require a rapid increase in public expenditures, and the government would be forced to raise taxation levies. The rise in taxation levies, however, is regarded as acceptable to the people during the period of crisis. Peacock and Wiseman referred to this as the "displacement effect". Public expenditure is displaced upwards, and after the period of the crisis, it does not, however, return to its original level. A war is not paid for from taxation; no nation has such a large taxable capacity. Countries therefore borrow, and debt charges have to be paid after the event. Another effect that they thought might operate was the "imperfection effect", which arises from the people's keen awareness of social problems during the period of upheaval. The

government, therefore, expands its scope of services to improve these social conditions, and because people's perception of tolerable levels of taxation does not return to its former level, the government is able to finance these higher levels of expenditures originating in the expanded scope of government and debt.

Hypothesis: It states that there is no reliance between the choices on government expenditure and revenues. This theory is hinged on the fact that executive and legislative authorities are independent. The strategy suggestion is that spending deficiency is an aftereffect of higher government spending than revenue generation.

Methodology

Research Design

The study adopted both descriptive and analytical methods on time series. The study employed a quasi-experimental research design, which is suitable for the social sciences. The study employed a quasi-experimental design, which emphasises the systematic generation of the sample to investigate the relationships among variables. The estimation technique employed was the autoregressive Distributed Lag (ARDL) model, as the order of integration was mixed, specifically 1(1) and 1(2).

Data Sources

This study makes use of secondary data covering the period of 28 years (1995-2023) obtained from Central Bank of Nigeria Statistical Bulletins (CBN, 2023).

Description of Variables

Government Revenue (Independent Variable): Total federally collected revenue (oil and non-oil).

Domestic Debt (independent Variable): Total government domestic debt.

Expenditure (Dependent Variable): Total government expenditure (recurrent + capital).

Model Specification

The functional form of the model is:

$$EXP = f(TREV, DEBT) \dots\dots\dots i$$

The econometric form of the model is:

$$EXP_t = \beta_0 + \beta_1 TREV_t + \beta_2 DEBT_t + \varepsilon_t$$

Where;

EXP = Government Expenditure

TREV= Total Government Revenue

DEBT = Government Domestic Debt

$\beta_0, \beta_1, \beta_2$ = Parameters

ε = error term

The a priori Expectation

This defined the theoretical expectation about the sign of the included variables in the model. It is expected that all the independent variables would have a positive impact on government expenditure.

$$\beta_0, \beta_1, \beta_2 > 0$$

Presentation and Analysis of Results

Table 1: Descriptive Statistics

	EXP	TREV	DEBT
Mean	4699.473	7096.328	6009.901
Median	3452.991	5846.306	2774.168
Maximum	19808.44	22210.36	22210.36
Minimum	248.7681	459.9873	419.9756
Std. Dev.	4770.752	5834.521	6316.845
Skewness	1.540385	0.898516	1.077909
Kurtosis	5.036317	3.188019	3.073485
Jarque-Bera	16.47892	3.808791	5.428441
Probability	0.000264	0.148913	0.066257
Sum	136284.7	198697.2	168277.2
Observations	29	28	28

Table 2: Stationarity Test

<i>At Level</i>					<i>At Difference</i>					Order of Integration
Variables	ADF	MacKinnon Critical Value (5%)	Prob	Remark	Variables	ADF	MacKinnon Critical Value (5%)	Prob.	Remark	
EXP	9.081725	1.953381	1.0000	Not stationary	EXP	5.545444	1.954414	0.000	stationary	I(2)
TREV	2.398335	1.953858	0.9946	Not stationary	TREV	3.379485	1.954414	0.0016	Stationary	I(1)
DEBT	11.62611	1.953858	1.0000	Not stationary	DEBT	5.589000	1.955020	0.0000	Stationary	I(2)

Source: Author's computation from E-view

Table 2, shows the result of the stationarity test. The results of the unit root test indicate that none of the variable are stationary at level, but became stationary after differencing, specifically TREV (total revenue) became stationary after first differencing while EXP (expenditure) and DEBT (domestic debt) were stationary after second differencing therefore TREV (total revenue) is integrated of order one i.e. I(1), while EXP(expenditure) and DEBT (domestic debt) are integrated of order two i.e. I(2). Therefore, the variables are integrated of mixed order.

Table 3: ARDL Bound Test

ARDL Long Run Form and Bounds Test

Dependent Variable: D(EXP)

Selected Model: ARDL(1, 0, 1)

Case 1: No Constant and No Trend

Date: 05/10/25 Time: 09:57

Sample: 1995 2023

Included observations: 27

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Significance.	I(0)	I(1)
F-statistic	6.574170	10%	2.17	3.19
K	2	5%	2.72	3.83
		2.5%	3.22	4.5
		1%	3.88	5.3

Source: Authors' computation from E-views

The result presented in Table 3 shows that the calculated F-statistic of 6.574170 is higher than the upper bound critical value of 3.83 at 5% significance level. Based on this result, it is concluded that a long-run relationship exists among the variables of the EXP model. Therefore, we reject the null hypothesis of no long-run relationship and accept the alternative hypothesis of a long-run relationship among the variables.

Table 4: ARDL- ECM Short Run Results for EXP Model

ARDL Error Correction Regression
 Dependent Variable: D(EXP)
 Selected Model: ARDL (1, 0, 1)
 Case 1: No Constant and No Trend
 Date: 05/10/25 Time: 12:32
 Sample: 1995 2023
 Included observations: 27

ECM Regression Case 1: No Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DEBT)	0.557798	0.063308	8.810805	0.0000
CointEq(-1)*	-0.773597	0.167081	-4.630066	0.0001

Source: computed from E-views

Explanation of Estimated Short Run for EXP Model

The result of the short-run dynamic regression for the expenditure model is presented in Table 4. The regression results indicate that, in the short run, government domestic debt has a positive and significant relationship with government expenditure. This means that if government domestic debt increases by 1 per cent, government expenditure will increase by 55.7 per cent. The ECM yielded a negative value of -0.773597 as the ECM coefficient, indicating a 77% speed of adjustment. This means that approximately 77% of the discrepancy in the previous year is adjusted for the current year.

Table 5: ARDL- ECM long run results for EXP Model

ARDL Long Run Form and Bounds Test

Dependent Variable: D(EXP01)

Selected Model: ARDL(1, 0, 1)

Case 1: No Constant and No Trend

Date: 05/10/25 Time: 12:41

Sample: 1995 2023

Included observations: 27

Conditional Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXP01(-1)*	-0.773597	0.242744	-3.186887	0.0041
TREV**	0.199645	0.062174	3.211084	0.0039
DEBT(-1)	0.282556	0.081290	3.475896	0.0020
D(DEBT)	0.557798	0.206100	2.706438	0.0126

* p-value incompatible with t-Bounds distribution.

** Variable interpreted as $Z = Z(-1) + D(Z)$.

Levels Equation Case 1: No Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
TREV	0.258074	0.036362	7.097305	0.0000
DEBT	0.365249	0.053039	6.886485	0.0000

$$EC = EXP - (0.2581 \cdot TREV + 0.3652 \cdot DEBT)$$

Source: Computed from E-views

Explanation of Estimated Long Run for EXP Model

The result of the long-run regression estimates for government expenditure is presented in Table 5. The regression estimates indicate that Government total revenue and Government domestic debt are all positively signed and statistically significant. This indicates that in the long run, improvement in government revenue will positively affect government expenditure, as well as a reduction in the long run on government debt will positively affect government expenditure.

Stability Test for EXP Model

The test is meant to test the appropriateness and stability of the estimated ARDL model. This is to check if the coefficient of the model are stable and can be used for prediction. The stability test was conducted using the cumulative sum (CUSUM) test. If the plot of the CUSUM for the model lies within the 5 percent critical bound it is suggestive that the model is stable. From our results, the model is stable and appropriate for prediction.

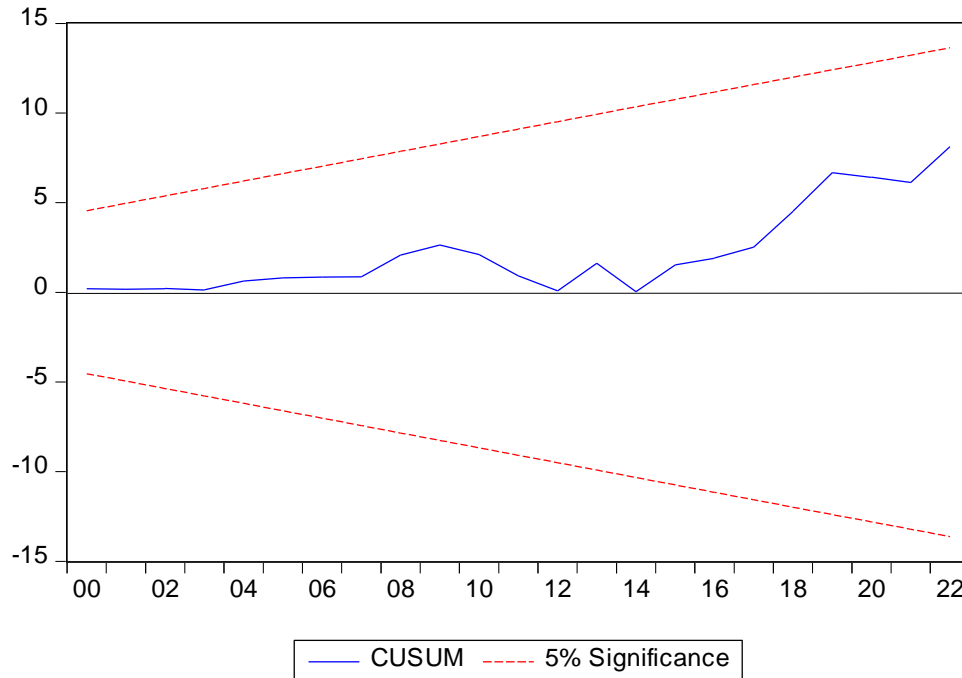


Figure 1: Cumulative sum for EXP Model

Conclusion

The study examined government revenue generation and expenditure in Nigeria from the period of 1995- 2023. The study investigated the long run and short run relationship between the variables by using Autoregressive distributed lag model (ARDL). The empirical results show that government expenditure is influenced by total government revenue and government domestic debt in both the long run and short run. The variables were found to be statistically significant in the long run, while in the short run it was only government domestic debt that is statistically significant.

Nigeria's revenue and expenditure landscape are at a critical juncture. While efforts to diversify and optimize nonoil revenue sources are commendable, sustainable growth requires prudent expenditure, especially in capital investments that drive productivity.

The literature affirms a dynamic and interlinked relationship between revenue generation and government expenditure in Nigeria. While reforms have enhanced non-oil revenue sources and improved expenditure management, challenges like corruption, over-reliance on oil, and poor fiscal discipline persist. A more diversified, transparent, and accountable system remains critical to achieving sustainable fiscal health.

Recommendations

This study made the following recommendations:

- i. Non-oil revenue should be sourced to transform the Nigerian economy and complement oil revenue. The country should seek revenue from her solid minerals and agriculture to shore up her foreign earnings and utilize such to achieve economic growth in the short run and long run.
- ii. Recurrent expenditures should be minimized to the barest minimum as this has eroded capital formation. The cost of administration at the federal and state level should be reduced or matched by internally generated revenue. By keeping a ceiling on recurrent expenditure, the economy can achieve greater savings for investment purpose that would bring about rising output and economic growth.

- iii. The capital expenditure of the country should cautiously be raised, as not all capital expenditure produces positive results. Government should show more interest in human capital, research and development as this could transfer its positive externality effect to the growth of Nigerian economy in the long run

References

- Adegoke, A. and Falana, S. (2018). *Revenue Generation and Fiscal Deficits in Nigeria. African Journal of Economic Policy.*
- Ayoka, C. O., Nzotta, S. M. and Kanu, S. I. (2020). *The Effect of Federal Government Revenue and Expenditure on Economic Growth in Nigeria – An Empirical Review. International journal of Innovation and Economic Development.*
- Central Bank of Nigeria (2015-2022). *Annual Reports*
- Elaigwu, B. E. and Ali, B. K. (2005 -2022). *Government Expenditure and Economic Growth in Nigeria. International Journal of Sustainable Development.*
- Mgbomene, C. & Nnamocha, P. N. (2023). Bank credit, money supply and performance of the Nigerian economy, 1980-2020, *African Journal of Social and Behavioural Sciences* 13(1), 22-34
- Muritala, T. and Taiwo, A. (2011). *Government expenditure and economic development: Empirical evidence from Nigeria. European Journal of Business and Management.*
- National Bureau of Statistics (2014-2023). *Annual Abstract of Statistics.*
- Omoke, P. C. (2009). *The Causal Relationship Among Financial Development, Trade Openness and Economic Growth in Nigeria (December 30, 2009). Available at SSRN: <https://ssrn.com/abstract=1529644> or <http://dx.doi.org/10.2139/ssrn.1529644>*
- Ogunleye, E. O. (2020). *Oil Dependence and Economic Vulnerability in Nigeria. Nigerian Economic Society Publications.*
- Okonkwo, U., and Eze, A. (2019). Public Expenditure and Growth in Nigeria. *Journal of Public Finance.*
- Olusegun, J. O. (2023). *Impact of government revenue and expenditure on economic growth in Nigeria.*