# The Nexus Between Public Revenue and Government Expenditure in Nigeria

## IME Isaiah Udoh

Department of Accounting, faculty of Management Science Ignatius Ajuru university of Education, Port Harcourt

#### JONAH Ngbomowa Moses PhD

Department of Accountancy, Faculty of Management Sciences Rivers State University, Nigeria

CHINDA Godstime Nyema PhD Department of Accountancy, Faculty of Management Sciences Rivers State University, Nigeria

DOI: 10.56201/jafm.v9.no8.2023.pg113.129

#### ABSTRACT

This study examined the effect of government revenue on government expenditure in Nigeria. The study used a retrospective research design and data was obtained from a statistical bulletin from the OECD, CBN, IFRS and National Bureau of Statistics for the period 1981 to 2020. Descriptive statistics, correlation and multiple regression analysis were used to analyze the data based on SPSS 20.0 and the Advanced Excel Analytical Toolkit 2018 package. The result revealed a positive and statistically significant relationship between corporate income tax (CIT) and Government Capital Expenditure (GCE). The relationship between Value Added Tax (VAT) and Government Capital Expenditure (GCE) is also positive and statistically significant. Furthermore, CIT and VAT have been shown to have a positive and statistically significant relationship with government recurrent expenditure (GRE), respectively. Thus, the study reveals a significant relationship between government revenue and government expenditure in Nigeria. Among other things, we recommend that the government increase the number of goods on which Nigeria is subject to VAT to expand net VAT revenue as well as the collection of other indirect taxes to improve all public spending on Nigeria's economic growth - in line with Keynesian theory of expenditure and economic growth. Furthermore, in order to increase revenue for the CIT, according to Adolf Wagner's law of increasing public spending, the government must use tax money to create a favorable economic environment that stimulates high levels of industrial activity, thereby greatly affecting corporate performance and profits.

*Keywords:* Government Revenue, Government Capital Expenditure, Government Recurrent Expenditure, Value Added Tax (VAT), Company Income Tax (CIT).

# INTRODUCTION

The revenues generated by governments around the world can be divided into two main categories, namely: Petroleum revenues, including but not limited to royalties, Petroleum Profits Tax (PPT), gasoline, pipeline licenses and non-oil revenues, some of which are trade, loans, direct and indirect taxes, import duties, practicing fees, etc. Tax revenue is essentially the revenue that the government receives from all tax sources. Tax revenue is the portion of revenue collected by the government from various taxes. Taxes levied on direct and indirect taxes are considered tax revenue. Direct tax is a kind of tax that can be directly assessed on the income or profit of the taxpayer, while indirect tax is levied and paid before the goods reach the final consumer, but not directly levied like taxes, but as part of the tax; the sale price of the property or commodity. All countries in the world levy taxes to finance public spending.

Public expenditure is divided into current expenditure and capital expenditure. Public expenditure relate to expenditure on fixed assets so much as factories, roads, hospitals, buildings, schools and machinery, the benefits of which are fixed and last for various years and are levied by the Development Fund (DF). Recurrent government expenditure, on the other hand, refers to expenditures incurred by the government to manage the day-to-day operations of the government, which may include the cost of paying employees' wages and salaries, general administration, maintenance, and providing essential services. Services provided to the community and the economy as a whole are levied by the Ministry of Finance (Consolidated Revenue Fund) (Anyanwuocha, 2018).

Public spending is also considered the most important macro policy tool to encourage growth and equitably distribute income in developing economies such as Nigeria, to promote technological development, human capital and infrastructure development, and to provide an enabling environment for local investment, foreign entrepreneurs. Investment accelerates growth (Damilola *et al*, 2022).

One of the main characteristics of government spending in developed and developing countries of the world is that the increase in income is greater than the increase in overtime. Therefore, this poses a serious problem for the government and society as a whole. This situation is discussed in terms of population growth rates increasing with population change, which leads to increased pressure on public spending in the economy to develop agriculture, health, infrastructure, education, security, street cleaning, and sewage disposal. Globally, governments have a responsibility to provide basic infrastructure to their citizens, including but not limited to; redistribution of income, stabilizing the economy, provision of basic services in the sort of public goods, and so on which is also true for Nigeria.

With a high level of government corruption, Nigeria is notorious for the corrupt ways in which public funds are used – funds are mismanaged and squandered by corrupt officials instead of being used for productive activities in the country. Likewise, the very act of investing income in consumption rather than in the production of goods and services greatly affects the supply side of the economy, leading to shortages of goods and services that can have severe economic consequences such as poverty, and high inflation, high interest rates, high unemployment, high

exchange rates, low per capita income, debt accumulation, corruption, weak infrastructure, weak institutions, weak investment, etc. (Craig *et al*, 2020).

The above facts show that in Nigeria, as in any country in the world, government revenue and expenditure are two sides of the same coin in the financial management process required to achieve economic growth. However, debate continues to heat up in the Nigerian public finance literature on how government revenues can be sufficiently effective to achieve the government's macroeconomic objectives. This controversy therefore calls for the motivation to investigate the impact of tax revenues on government spending in Nigeria.

# STATEMENT OF THE PROBLEM

A common feature of government expenditure in developing economies such as Nigeria is that government revenue has increased year by year, resulting in a widening gap or imbalance between government revenue and government expenditure. It has been argued that this issue has had a negative impact on government macroeconomic policies in developing economies such as Nigeria. Although according to Keynesian theory, increasing government spending has an advantage in stimulating economic growth and development relative to reducing government revenue and increasing government spending, Wagner's law of increasing spending also assumes the same advantage of increasing government spending. The short-term impact of economic spending has been criticized as a pressure on government revenue-generating activities over the years (Kanu et al, 2021)

Population growth and the resulting demographic changes will put enormous pressure on public spending to provide more social goods, infrastructure and basic services to satisfy dense populations and realize the potential for economic growth. To achieve this goal, the government will need to raise additional revenue from tax and non-tax sources, which may not immediately meet the government's anticipated large spending needs. According to reports, the Nigerian economy has seen an astronomical increase in budget spending over the past decade, from billions to trillions of naira, although the results of this spending are not readily available. Perceived by the public (Craig). *et al*, 2020).

The drive to raise revenues leads governments to borrow and run permanent deficit budgets and try to get extra revenue from taxes and other sources to keep the economy going, especially in times like these. where oil revenues in Nigeria have fallen sharply. This raises the question: whether; the revenue available to the government is sufficient for public spending to generate the much-needed economic growth in Nigeria. This question is timely as Nigeria and almost every country in the world is now shifting the focus of research to tax revenue generating jobs.

Previous studies have investigated the impact of government revenue on expenditure in various ways, but the imbalance between government revenue and expenditure to achieve economic growth in Nigeria remains controversial, which formed the motivation for this study. In addition, limited to the existing literature consulted in this study, only a few studies use value-added tax (VAT) and income tax (CIT) as the dimensions of government revenue. Therefore, this study fills a dimension and gap in the literature, attempts to investigate the impact of government revenue on government spending in developing countries, drawing on evidence from Nigeria.

# **CONCEPTUAL FRAMEWORK:**

IIARD – International Institute of Academic Research and Development

Page 115



Source: Hussaini et al, (2023), Adefolake et al, (2022).

## **RESEARCH OBJECTIVE**

The overall objective of this study is to determine the impact of government revenue on government expenditure in Nigeria among other objectives, namely:

- 1) Investigate the impact of company income tax on capital expenditure in Nigeria.
- 2) Investigate the impact of VAT on capital expenditure in Nigeria.
- 3) Investigate the impact of corporate taxes on recurrent expenditures in Nigerian.
- 4) Investigate the impact of VAT on recurrent expenditure in Nigeria.

# **RESEARCH QUESTION**

The following questions were posed in the study as a means to achieve the research objectives;

- 1) How does company income tax affect Nigerian government capital expenditure?
- 2) What is the impact of VAT on Nigerian government capital expenditure?
- 3) What is the impact of corporate taxes on Nigerian government recurrent spending?
- 4) What is the impact of VAT on Nigerian government recurrent expenditure?

#### **RESEARCH HYPOTHESIS**

According to the above research objectives, this study formulates and tests the following null hypotheses as a preliminary answer to the above research questions;

**HO**<sub>1</sub>: There is no significant effect between corporate taxation and government investment spending in Nigeria.

HO<sub>2</sub>: There is no significant effect between Nigerian VAT and government capital expenditure.

**HO**<sub>3</sub>: There is no significant effect between corporate taxation and government recurrent expenditure in Nigeria.

H04: There is no significant effect between Nigerian VAT and recurrent public expenditure.

# THEORETICAL OVERVIEW

This work is based on the Keynesian theories of expenditure and economic growth and Wagner's laws of state activity, as they have significant implications for Nigeria's contemporary economic challenges.

## Keynesian Theory of Expenditure and Economic Growth:

The concept of a multiplier measures the effect of changes in each component of aggregate demand (total expenditure), such as: investment expenditure, private consumption expenditure, government expenditure, exports and imports, on national income. The Keynesian multiplier theory states that a change (increase or decrease) in household private consumption expenditure, business investment expenditure, government expenditure, or a combination thereof will result in a change (increase or decrease) in national income (GDP) greater than the initial value. The change in aggregate demand (total expenditure), that is, if aggregate expenditure increases by ten units, national income (GDP) will increase by more than ten units, and vice versa.

John Maynard Keynes in 1936 championed the Keynesian theory that changes in any component of government spending have a multiplier effect on national income. Therefore, an increase in government spending should lead to an increase in productive activity, thereby raising total output (GDP) or national income (Craig *et al*, 2020). Keynes called for more government spending and lower taxes to stimulate demand and pull the world economy out of recession. Empirical evidence is lacking for the Keynesian theory of spending, and the exact multiplier effects of changes in aggregate spending have yet to be determined.

# Adolf Wagner's Law Of Increasing Public Spending:

This theory was proposed by the German economist Adolf Wagner (1835-1917). He believed that the improvement of the industrial economy would be followed by an increase in the share of public expenditure in the gross national product. This is said to be due to overcrowding due to increased urbanization and external factors (such as market failures) that require government intervention and regulation. He noted that public spending will boost the economy; the government will create jobs and new activities, while old economic processes will be realized in a more holistic manner. It has been argued that Wagner's law is a function of economic growth and the growth of the government sector that tends to increase government spending (Craig *et al*, 2020).

Wagner highlights some government activities that may lead to increased government spending, such as: maintenance of public order, partaking in the creation of economic goods, regard the supply of certain social goods, increased pursuit for public goods, urbanization, and social services, national insurance, and social security pressure etc. Wagner also divides public spending into three categories: management and conservation; culture and welfare, where services are provided directly by the government in the event of market failure. Governments usually set up law firms to look after the welfare of the people, rather than allowing monopolies to emerge. This is said to

be why government spending has risen as a percentage of GDP. There have been many criticisms of Wagner's theory of increased state activity.

Firstly it has been argued that the theory does not reflect the actual aspirations of the public; rather, it is an organic theory of the state in which the state acts as an individual and makes decisions independently of members of society. Second, the theory is said to lack predictive properties. It has also been argued that increases in per capita income do not always lead to increases in government spending as a share of GDP. As the economy grows, the share of public spending can decline, especially when the private sector is strong and dynamic. This study also demonstrates the applicability of the theory as it lacks empirical evidence (Innocent, 2020).

# LITERATURE REVIEW

This section presents previous literature reports on the impact of government revenue on government expenditure in developing countries and related issues. This is necessary to guide on going investigations and help researchers conduct their studies correctly.

## TAX REVENUE

Tax revenue is the revenue that the government receives from all tax sources. Tax Revenue provides a cumulative report of various tax revenues. Taxes levied on direct and indirect taxes are considered tax revenue. A direct tax is a tax that can be assessed directly on the income or profit of the taxpayer, while an indirect tax is levied before the goods reach the final consumer and is paid by them, not as a direct tax but as part of the sale price of the commodity. Corporate Income Tax (CIT), Personal Income Tax (PIT), etc. They are examples of direct taxes while Value Added Tax (VAT), Export Tax, Import Tax, etc. are examples of Indirect Taxes.

Tax revenues are the source of funding for almost every government in the world to grow their businesses. To effectively perform its various functions, a government needs to generate sufficient funds from tax revenues to provide public goods, maintain law and order, defend against outside and inside hostility, and regulate trade and commerce to ascertain social and economic well-being. Unfortunately, government responsibilities have increased over time, especially in developing countries; due to increasing numbers of citizens, security concerns, technological developments, etc.

# **COMPANY INCOME TAX (CIT)**

Taxation of corporate profits in Nigeria is governed by the Company Income Tax Act 2004, LFN. For the purposes of section 105 of CITA LFN 2004, the term "company" is defined to mean any corporation (other than a sole proprietorship or partnership) created by any relevant law in Nigeria or elsewhere (Soyode *et al*, 2015). Corporate tax is a tax on corporate profits. Resident companies are subject to corporate tax on their global income, while non-resident companies are subject to corporate tax on their Nigeria-sourced income. The corporate tax rate is 30%, and the tax is calculated according to the previous year (that is, the profit is taxed at the end of the accounting period of the year preceding the tax year). Investment income paid by Nigerian residents to non-Nigerian residents is subject to withholding tax on receipt for final tax purposes.

# VALUE ADDED TAX (VAT)

Value added tax has been defined by Soyode *et al*, (2015) as consumption tax which is indirectly levied on VAT able goods and services. Company income tax (CIT) is a tax on company's profit.

IIARD – International Institute of Academic Research and Development

VAT is considered to be a consumption tax that replaces sales tax in Nigeria and is imposed at each phase of the consumption chain and is levied on the last user of the goods or services. The idea to introduce VAT in Nigeria is said to have come from the report of a study group formed by the government of Nigeria in 1991 to evaluate the whole taxation system. A value-added tax was suggested and a committee was formed to conduct a feasibility study on its implementation (Kaoje *et al*, 2020). Each of them is obliged to charge VAT at the flat rate of 5% on all amounts shown on invoices for all VAT-chargeable goods and services. According to the value-added tax law revised in 1993, when the value-added tax (output tax) collected by the government in the current month exceeds the value-added tax (input tax) paid to others in the current month, the difference must be converted to the government by the taxpayer on a monthly basis. If the situation is reversed, the taxpayer has the right to refund the overpaid value-added tax, all export products will be subject to a zero tax rate, and export products will not be subject to value-added tax. Anyone, whether resident in Nigeria, who sells goods or provides services in Nigeria under the revised VAT Act must register for VAT inside six months of starting a enterprise in Nigeria and register with the Federal Income Tax Board (Kaoje *et al*, 2020).

## PUBLIC EXPENDITURE

The main functions of public expenditure are as follows: (1) Increase existing effective demand. (2) It represents and reports on the planned economic drivers that can be used; for change, reversal of the business cycle and development (3) It provides a generally abundant product for all; (4) Capital goods spending generates positive externalities effect, stimulating the economy and society. (5) Public spending on subsidies and aid reduces production costs (6) Education and health expenses directly affect social welfare. (7) Education and health expenditures simplify the formation of human capital. (8) It increases disposable income, which increases consumption and investment. (9) Infrastructure spending reduces unemployment (Odinakachi, 2021).

#### **GOVERNMENT EXPENDITURE**

Public expenditure is an important tool of fiscal strategy, reflecting the total amount of funds spent by the government to make available or meet joint needs or public goods, including but not limited to; social, economic, environmental expenditures, infrastructure, administrative services, security, public debt, etc. Funding for these services comes primarily from government revenue and/or government debt, grants and aid. Public spending will stimulate the economy by maximizing expected social benefits, economy, flexibility, punishment, and excess. Public spending is seen as an important tool for governments to control the economy. Public expenditure mainly consists of capital expenditure and current expenditure, both of which are used by the government as fiscal tools to control the economy, finance public goods and ensure long-term economic growth and development. Public expenditure mainly includes investment and operations. (Allard, 2022).

# **CAPITAL EXPENDITURES**

Capital expenditures is not a recurrent expenditures. These are investments in permanent projects. This includes the money the government spends on building roads, schools, power generation, communications, water conservancy, airports, schools, dams, bridges, hospitals, etc. This money pursues the public good and has a multiplier effect on the economy.

#### **RECURRENT EXPENDITURE**

Recurring charges are expenses that recur every year, they are not fixed. These costs include: funds to pay wages, maintenance of roads, bridges, ports and general administration. Current government expenditure denotes the expenditure that the government undertakes to maintain the whole society and economy.

# **EMPERICAL REVIEW**

Hosseini *et al*, (2023) assessed trends in the causal relationship betwixt government revenue and expenditure in Nigeria using yearly data from 1981 to 2020. The aim is to verify the existence of long-term and short-term relationships and the dynamics of the government in the economy. Engel co-integration is used to test for co-integration and estimate error corrections. Hypotheses were tested using the Engle-Granger co-integration method. The results of the model display that there is a two-way causal relationship between government revenue and expenditure in Nigeria. This suggests that government revenue and spending decisions are collectively made by national tax authorities. The results show that Nigeria has a feedback system of income and expenditure. In other words, income and expenditure levels influence each other in the Nigerian budgeting process. Therefore, higher tax levels are determined by higher spending levels, and vice versa. The Nigerian fiscal authority, which is stuck in a budget deficit, is advised to increase revenue and reduce expenditure at the same time to control the deficit.

Adefolke *et al*, (2022) studied the impact of tax revenues on economic growth in Nigeria using time series data from 2000 to 2021. The aim is to assess the impact of hydrocarbon tax, corporate income tax and value-added tax on economic growth. Growth in Nigeria. Secondary data come from CBN Statistical Bulletin and publish FIRS manual. The study adopted a retrospective research design. The research variables include GDP, PPT, CIT and VAT. The results show that PPT and VAT have a significant positive impact on GDP. It also shows that CIT has a significant negative impact on GDP. He recommend that tax authorities provide more tax education to the Nigerian public and businesses on the importance and benefits of taxation to the economy. He suggested that the tax authorities encourage enterprises to pay taxes to promote economic growth, and enterprises should benefit from it as part of fulfilling the government's social responsibility.

Demehin *et al*, (2021) examine the effect of government revenue on government expenditure in Nigeria. Data are from the Central Bank of Nigeria Statistical Bulletin 2018. The methods of analysis were augmented Dickey-Fuller test, paired co-integration test, self-distributed lag, and Granger pairwise causality. The results of the "sterling" co-integration test show that there is a long-term relationship between total government expenditure and total government revenue. The study finds that total government revenue has a positive and significant impact on total government expenditure in the short and long run. Lastly, it is found that there is a one-way causal relationship between total government revenue. Therefore, it is concluded that government revenue plays an essential part in determining government expenditure in Nigeria, and the increase in government expenditure precedes and determines government revenue. The study suggests that increased interest in other sectors such as agriculture and solid minerals is needed to increase the country's revenue base and shift more spending towards capital expenditure, thereby providing the necessary enabling environment for long-term economic growth.

Innocent (2022) examines the impact of indirect tax revenues on government spending in Nigeria. The aim is to find out the impact of indirect taxes on recurrent government expenditure and capital expenditure in Nigeria. A retrospective study design was employed to examine the association between indirect taxes (independent variable) and government expenditure and recurrent capital expenditure (dependent variable). This study uses time series data. Secondary data comes from Central Bank of Nigeria, Statistical Bulletin and Organization for Economic Co-operation and Development (OECD) data for the period 1995-2018. Data were analyzed using ordinary least squares (OLS) regression techniques. The analysis shows that indirect tax revenues have a positive and significant impact on public operating and investment spending. The results also show that indirect tax revenue contributes more to Nigerian government current expenditure than government agencies and agencies to reduce high staff and administrative costs and reduce borrowing to reduce high debt servicing with huge recurring charges. It is also proposed to develop an automated tax collection system across the Federation for uniform tax administration.

Ugochukwu *et al*, (2021) Evaluate Public Expenditure and Economic Growth in Nigeria: A Detailed Analysis. The aim is to probe the impact of different component part of government expenditure on economic growth in Nigeria between 1981 and 2020. Data analysis was performed using secondary data based on error correction models and Granger causality tests. The short-term patterns revealed by the components of public spending, such as current expenditures on agriculture, health, and education, have had little negative impact on growth. Current spending on debt servicing and road construction has had little positive impact on economic growth. It turns out that government investment spending on social services has a significant negative impact on economic growth. In contrast, government investment spending on economic services had a positive but insignificant effect on Nigeria's economic growth. All components of public spending have a significant impact on economic growth in the long run. The study concluded that the Nigerian economy is on the wrong track for sustainable growth and development. The study recommends that the government increase allocations to prioritize sectors. Finally, the research highlights the need for greater efficiency in public spending, transparency in the budget process, and strict regulation of government programs.

Odinakachi *et al*, (2021) examine the impact of federal government revenues on expenditure and economic growth in Nigeria between 1983 and 2018. The survey was designed using a retrospective study, utilizing Bounds tests, short/long term ARDL assessments to generate test results and make predictions. Study variables include real gross domestic product (RGDP), federal retained revenue (RR), non-oil revenue (NOR), capital expenditures (CE), and current expenditures (RE). The results show that Federal (RR); (NOR) and (RE) are statistically significant in explaining the relationship with short-term economic growth; while (CE) does not reach the 5% alpha level. (RR) was also found to be statistically significant in the long run. Therefore, governments are advised to act smartly in terms of fiscal policy synchronization. It was also suggested that Nigeria's expenditure structure, increase in revenue, and increase in revenue retained by the government needed to be monitored. It is believed that this will lead to an effective realignment of capital expenditures and help to increase the level of economic growth in Nigeria.

Ntekpere *et al*, (2020) examine the impact of tax revenues on public debt and capital expenditure in Nigeria between 1999 and 2018. Secondary data comes from the Central Bank of Nigeria (CBN)

IIARD – International Institute of Academic Research and Development

Statistical Bulletin. Using the E-views program, the ordinary least squares regression method is used to examine the impact of independent variables (value-added tax, income tax, oil profit tax, tariffs and output) on dependent variables (external debt, domestic debt). and capital expenditure). Data treatments for secondary time series data were descriptive statistics, unit root using augmented Dickey-Fuller test, cointegration test using bounds test and vector error correction model. The results show that tax revenues have statistically positive and negative effects on public debt and capital expenditure. Taxes have positive and negative effects on Nigeria's external debt (R = 0.789, f = 0.00010, p < 0.05), and taxes have positive and negative effects on Nigeria's capital expenditure. Nigeria (R=0.692, f=0.00164, p<0.05). He noted that tax revenues have an impact on Nigeria's public debt and capital expenditure. The government must seek other sources of revenue to further reduce the public debt burden.

Kaoje *et al*, (2020) examine the aggregate and disaggregated effects of tax revenues on economic growth in Nigeria over four decades (1979-2018). Use a purposeful sampling technique based on the ARDL model. The results show that VAT has a significant impact on GDP, with a coefficient of 0.4675 and a significance level of 5%. Personal income tax (PIT) also has a significant positive impact on economic growth, with a coefficient of 0.1975 and a probability value of 5% at the significance level. The overall results show a significant impact of tax revenues on overall economic growth. The study concluded that as oil revenues continue to decline, there is an urgent need for governments to prioritize their needs. Therefore, the study suggests that the government should try to diversify the economy, as the revenue generated from oil should be used to develop other sectors to increase revenue.

Craig *et al*, (2020) did a work on the effect of tax revenues on capital expenditures in Nigeria Economy. Secondary data were obtained from Federal Inland Revenue Service, Central Bank of Nigeria statistical bulletin, National Bureau of Statistics and Federal Inland Revenue between 1989 and 2018 financial years. The study used longitudinal research design and variables involved tax revenues (oil and non-oil) (independent variable), capital expenditure (dependent variable) were adopted. The results discovered a statistically evidential positive effect of non-oil revenue on capital expenditure with a p-value of 0.0008 < 0.05,  $R^2 = 0.33457$ . The regression outcome revealed the relationship betwixt the oil tax revenues, total tax revenues and capital expenditure are not statistically significant with a alpha-value of 0.2997 and 0.0848 < 0.05,  $R^2 = 0.03835$  and 0.1023 respectively. The study concluded that revenue gotten from tax has no impact on capital expenditure apportionment. It was recommended that Government should employ the revenue obtained from Oil and Non-Oil Tax Revenues to Put in other domestic sector such as agriculture and business enterprise Sector in Order to Enlarge the Income Source of the Economy as well as the Revenue Base of the nation which in turn Increase Fund allocated to Capital Expenditures.

Alade (2020) examined the relationship between Nigerian government total revenue, and public expenditure and debts, due to excessive demand to provide necessary public goods by the government at the face of increasing public debts and scarcity of funds. Retrospective research design and time series data for a time frame of 1984 to 2019 were adopted and drawn from the Nigerian Central Bank's statistical bulletin . Descriptive and Vector error correction (VEC) model ganger-causality test were used to analysed the data, while variance decomposition and impulse response analyses were performed. Findings depicted stationarity of the dataset at first variation and the data co-integrate based on Johansen Co-integration test. Based on VEC model, the study

established granger causality betwixt the Nigeria government income, expenditure and public debt, thereby corroborating spend-tax hypothesis and fiscal synchronization with two directional relationship between government income and national debt. Inability to pay out funds readily to address recurrent expenditure items could upset instability in the shocks around revenue generation by the Nigeria federal government. Foreign debt written agreement was discovered to have tendency to obstruct investment in public goods and delay growth in public revenue. Government inability to carry out its social responsibilities to the citizenry due to scarcity of funds, and increasing debts could aggravate current cause of economic condition and criminality in Nigeria.

Kaka (2020) explored the association betwixt government tax income, non-tax income and government expenditure in Nigeria. Secondary data from Central Bank of Nigeria statistical bulletin,, World Data Atlas, World Bank and Federal Inland Revenue Service for 2010-2018 were used to analysed with the aid of descriptive statistics. The Study depicted that government income affect government expenditure. In addition, tax revenue have been found to increase though at a slower rate. The study recommended that Nigerian government should reduce current expenses on wages, acquisition of goods and services that can avoided so as to raise capital expenditure. Increase in capital expenditures on education, infrastructures and health care will boost the economic activity and which will in turn increase government tax revenue.

Daniel et al, (2020) examine the impact of different components of tax revenues and expenses on government spending in Nigeria between 1994 and 2016. The study used stability tests, cointegration, error-corrected estimates, and Granger causality. quality testing. The study also used an autoregressive distribution variance model. The study finds that oil profit tax, income tax, and value-added tax revenue sources contribute significantly to the long-term government expenditure structure, and that one-way causality is abundant, extending from oil profit tax and corporate Between income, personal and public expenditure, and VAT and public expenditure. It was also pointed out that the direction of public spending is largely independent of capital gains taxes, customs duties and excise taxes. This is said to be related to the accumulation of insufficient funds from tax revenue sources. Friedman's main tax assumptions are oil dividend taxes and corporate income taxes, which drive public sector spending patterns. Although the above shows that government spending is highly dependent on natural resources (crude oil) and state enterprises. Therefore, we recommend the following: the public sector must ensure a smooth budget process to ensure a smoother transfer and use of public expenditure revenue; taxation and tax rates must be reformed to ensure adequate transfer payments and an appropriate collection system must be reformed to ensure appropriate transfer payments and an appropriate collection system.

#### METHODOLOGY

This study adopted a retrospective research design to analyse the time series data obtained for all variables. National data sources for the period 1981-2020 (Central Bank of Nigeria Statistical Bulletin, IFRS, Ministry of Finance and National Statistics Department). Data were analysed using various descriptive correlation and regression techniques using SPSS 20.0 and Advanced Excel Analytical Tool Pack-2018. Empirical analysis is used to study the impact of tax revenues on government expenditure in Nigeria.

Page **123** 

## **Model specifications**

Regression models are used to test hypotheses. It is formulated by introducing research variables to test the above hypotheses and help answer research questions. GE = f(CIT, VAT),

## Panel Regression model

 $\begin{aligned} GCE &= f(CIT + VAT + \mu) \\ GRE &= f(CIT + VAT + \mu) \end{aligned}$ 

Therefore, the models for the study are;

 $\begin{array}{ll} & \text{GCE}_{it} = & \text{GO}_{0,} + & \text{GI}_{1,} \text{ CIT}_{it} + & \text{GI}_{2,} \text{ VAT}_{i_{t}} + & \epsilon_{it} & (1) \\ & \text{GRE}_{it} = & \beta_{0} + & \beta_{1} \text{CIT}_{it} + & \beta_{2} \text{VAT}_{i_{t}} + & \epsilon_{it} & (2) \\ \end{array}$ 

Where: TR = Tax revenue, GE = Government expenditure, GCE = Government capital expenditure, GRE = Government recurrent expenditure,  $\Omega_{0,\beta_0}$ = constant ,  $\Omega_{1,\beta_1}$  = co-efficient of regression;  $e_{it}$  = error term.

Concepts	Variables	Indicators	Measurements		
Tax revenue	Company income tax (CIT)	Company income tax revenue for the year (CIT)	Totalmoniesreceivedfromcompanyincometax(CIT)fortheobservedyears		
	Value added tax (VAT)	Value added tax revenue (VAT) for the year	Total monies received from Value added tax for the observed years.		
Government Expenditure	Government Capital expenditure (GCE)	Government spending that is not recurrent in nature for the observed periods.	Total spending on non-recurrent government activities for the observed years.		
	Government recurrent expenditure (GRE)	Government spending that is not capital in nature for the observed periods.	Total spending on non–capital government activities for the observed years.		

Table 1: Variables and Measurements

Source: Researchers Desk

Page **124** 

# **RESULTS AND DISCUSSION**

Table 2: Descriptive Statistics								
	Ν	Range	Minimum	Maximum	Sum	Mean	Std.	
							Deviation	
CIT	40	712.0000	3.0000	715.0000	8162.4460	204.061149	246.9041460	
VAT	40	1531.1709	.0000	1531.1709	8451.6440	211.291100	365.3284002	
GCE	40	2284.9	4.1	2289.0	20100.3	502.508	551.8024	
GRE	40	8184.0	4.8	8188.8	64366.9	1609.173	2120.2812	
Valid N	40							
(listwise)	<del>т</del> 0							

Table 2	Descrip	tive S	Statistics
---------	---------	--------	------------

# Source: SPSS OUTPUT 2023

Descriptive statistics for the campaign are shown in Table 2. The average corporate income tax (CIT), value added tax (VAT), public expenditure (GCE) and current expenditure are 204.1, 211.3, 502.3 and 1609.2 respectively. Thus, the table shows: In Nigeria, VAT contributes more to government revenue than the Internal Revenue Service (CIT). The implication here is that the Nigerian government spends more on current expenditures than on capital projects. The minimum and maximum values of government capital and current expenditure also refer to the fact that the government spends more on current expenditure, which may be the reason for the low level of infrastructure development and growth in the country.

		CIT	VAT	GCE	GRE
	Pearson Correlation	1	.763**	.857**	.888**
CIT	Sig. (2-tailed)		.000	.000	.000
	Ν	40	40	40	40
	Pearson Correlation	.763**	1	.885**	.954**
VAT	Sig. (2-tailed)	.000		.000	.000
	Ν	40	40	40	40
	Pearson Correlation	.857**	.885**	1	.930**
GCE	Sig. (2-tailed)	000	.000		000
	Ν	40	40	40	40
GRE	Pearson Correlation	.888**	.954**	.930**	1
	Sig. (2-tailed)	.000	.000	.000	
	Ν	40	40	40	40

# Table 3 Bivariate Correlation

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlations among the study variables are shown in Table 3. Income tax (CIT) and value-added tax (VAT) are significantly and positively correlated, suggesting that the CIT and VAT can make significant contributions to public spending and growth, depending on each. Nation economic or environmental conditions. There is a positive and highly significant relationship between CIT and government capital expenditure (GCE). There is also a positive and highly significant relationship between corporate income tax and government current expenditures (GRE). Value-added tax (VAT) is also highly positively and significantly correlated with government capital and current expenditures, respectively.

Mo	del	Unstandard	ized Coeff	StandCoeff	Т	Sig.	
		В	Std. Err	or Beta			
	(Constant)	127.395	43.362		2.938	.006	
1	CIT	.974	.210	.436	4.627	.000	
	VAT	.835	.142	.553	5.868	.000	
-							
1	R	R Sq	luare	Adjusted R Square	Std. Erro Estimate	or of	the
	.929 <sup>a</sup>	.863		.855	209.8885		
a.	Predictors: (Con	stant - VAT	, CIT). <b>b</b> .	Dependent Variable			

#### Table 4: Multivariate Analysis

(GCE)

Table 4 shows that the independent variables explain about 86% of the variation in government expenditure (GE), and the equation estimates show a positive intercept of 127,395. This means that when (CIT) and (VAT) are zero, government capital expenditure will increase to 127.395, and the slope of the estimated Model-1 shows a positive and continuous effect between CIT and GCE with a value of 0.974, p-value At 0.000, a unit change in (CIT) changes government capital expenditure by 0.974 units in the same direction. Income tax (CIT) is significantly correlated with general investment expenditure in Nigeria as the p-value is less than 0.05. Similarly, the regression of VAT on government capital expenditure (GCE) is positive with a value of 0.835, which means that a change in VAT units will cause a change in government capital expenditure of 0.835, and is significant with a p-value of 0.000, indicating that (VAT) is related to There is a statistically significant relationship between government capital expenditure (GCE). Therefore, Value Added Tax (VAT) has a lot to do with Nigerian government capital expenditures.

#### Model 2 regression analysis results

Model		Unstandardized Coeff		Stand Coeff	t	Sig.
		В	Std. Error	Beta		-
	(Constant)	126.867	75.872		1.672	.103
2	CIT	3.282	368	.382	8.910	.000
	VAT	3.846	.249	.663	15.451	.000

	R	R Square	Adjusted R Square	Std.	Error	of	the
		•	<b>5</b>	Estimate			
	.986 <sup>a</sup>	.972	.970	367.2510			
a.	Predictors: (Constant - VAT						

Table 5 shows that the independent variables explain about 97% of the variation in government current expenditure (GRE). The estimated equations also revealed positive crossings, totaling 126.867. Showing that when (CIT) and (VAT) are zero, the government reurrent expenditure is 1267.867, Model 2 also reveals a statistically significant positive correlation between corporate tax (CIT) and government recurrent expenditure (GRE), Its value is 3.282. A p-value of 0.000 means that a 1-unit change in corporate tax (CIT) will change government recurrent expenditure (GRE) by 3.282 units in the same direction. Since the probability value is less than 0.05, there is a significant correlation between Corporate Income Tax (CIT) and Nigeria's current expenditure, and therefore a significant effect between Income Tax Corporation and Nigeria's current government expenditure (GRE) shows a positive relationship with a significant value of 3.846 and a p-value of 0.000, indicating that a single unit change in VAT will result in Government Recurrent Expenditure. (GRE) by 3.846 units in the same direction. Therefore, Value Added Tax (VAT) has a lot to do with current expenditures in Nigeria.

#### **DISCUSSION OF FINDINGS**

In the first two regression models, Nigeria's public sector income tax (CIT) is positively and statistically significantly correlated with government expenditure (measured as government capital and current expenditure), respectively. The third and fourth models also show a statistically significant positive relationship between value-added tax (VAT) and government expenditure (measured as government investment and operating expenditure, respectively) in Nigeria, which is consistent with evidence reported in previous literature unanimous. Craig *et al.* (2020), Eniekezimene *et al*, (2020), Demehin *et al*, (2021) and Hussaini *et al*, (2021) reported the relationship between Income Tax (CIT), VAT, Al-Hussaini et al. (2021) confirming that the Nigerian government There is a two-way causal relationship between income and spending. In contrast, Demihin *et al*, (2021) find one-way causality between total government spending and total government revenue.

# CONCLUSIONS AND RECOMMENDATIONS

The study examines the relationship between government revenue and government expenditure in Nigeria. The aim is to investigate the impact of tax revenues on public expenditure in Nigeria. The findings show that indirect taxes contribute more to government operating expenditures than government investment expenditures. Therefore, the government must adopt well-thought-out policies to reduce recurrent public expenditures, such as: Reduce personnel and administrative costs, including security costs for the country. Loans will also be reduced to curb the high debt service ratio, which is a huge current expenditure of the state. Likewise, corporate income tax (CIT) contributes more to government investment expenditure (GCE) than government current expenditure (GRE). Therefore, the conclusion of the study is that there are different degrees of

correlation between government revenue and government expenditure. Thus, this study enables an understanding of the impact of tax revenues on public expenditure in Nigeria. Based on the results of the above discussions, the following recommendations are drawn: The government should increase the value-added tax on Nigerian goods, expand the value-added tax revenue as well as the net tax amount of other indirect taxes, and increase all government expenditures to achieve economic growth in Nigeria - in line with Keynesian policies. Expenditure theory and economic growth. Furthermore, in order to increase revenue for the CIT. According to Adolf Wagner's law of increasing public spending, the government must use tax money to create a favourable economic environment that stimulates high levels of industrial activity, thereby greatly affecting corporate performance and profits. The study also recommends improving public spending efficiencies, including but not limited to; reducing administrative costs to reduce overhead and ensure transparency in the budget process

# REFERENCES

- Adefolake, A. O. & Omodero, C. O. (2022). Tax Revenue and Economic Growth In Nigeria. *Cogent Business & Management.* 3(2), 1-19.
- Alade, M. E. (2020). Relationship Between Nigerian Government Total Revenue Public Expenditure and Debts. *Fuoye Journal of Accounting and Management*, 5(1)2, 53-271.
- Anyanwuocha, R. A. (2010). Fundamentals of Economics. Africans fCITt publisher plc.
- Craig, A.O., Adetola, R., & Maminu, K.A. (2020). Tax revenue and capital expenditure in Nigeria. *Accounting and Taxation Review*, *4*(1), 132-147.
- Daniel, E E., Patricia, I. E. & Samuel, N. I. (2019) Tax revenues and duty elements on public expenditure in Nigeria *Saudi J Econ Fin, 3*(7), 264-282.
- Demehin *et al*, J. A.&Akungba A. (2021). Government revenue levels effect on public spending in Nigeria, *IOSR Journal of Economics and Finance*, *12* (3), 50-55.
- Hussaini, A., Usman, M., Falgore, J. Y., Sani, S. S., Abubakar, I. & Adamu, K. (2023). Investigation of causal relationships between government revenue and expenditure in Nigeria, using eagle co-integration approach. *Journal of Taxation and Economic Development*, 5(4), 222 – 228.
- Innocent, A S. (2021) Effect of Indirect Tax Revenue on Government Expenditure in Nigeria *Bingham International Journal of Accounting and Finance*, 357-364.
- Kaoje A. N. Abubakar Sabo, Yabo, A. S., & Bunza, A. M. (2020). Forestalling Value Added Tax and Personal Income Tax on Economic Growth in Nigeria. International Journal of Research and Innovation in Social Science, 4(1).
- Kaka., J. E. (2020).Relationship between government tax revenue, non-tax revenue and government expenditure in Nigeria. *Journal of Accounting Research, Organization and Economics3* (3), 215-228.
- Ntekpere, U. A. & Olayinka, I. M.(2020). Effect of tax revenue on public debt and capital expenditure in Nigeria. *Journal of Taxation and Economic Development 19*(2), 82–103.
- Nauki, T., Ugochukwu, S. D. &Oruta, L. I. (2021). Government expenditure and economic growth in Nigeria: a Disaggregated Analysis, *Path of Science*, 7(11).
- Odinakachi, A. C., Nzotta, S. M. & Ikechi, K. S. (2021). The Effect of Federal Government Revenue and Expenditure on economic growth in Nigeria. *International Journal of Innovation and Economic Development*, 7(3), 34-52.

Soyode, O. & Kajola, S. (2015). *Taxation: Principles and Practice in Nigeria*: LekSilicon Publishing company Ltd, Abeokuta.