

**RESEARCH ARTICLE****Federally Generated Revenue and Government Capital Expenditure in Nigeria****Ani, Thomas Maduabuchi¹, Ugwuanyi, Bonface Uche², and Ezugwu, Uche. B³**^{1,2,3}*Department of Accountancy, Enugu State University of Science and Technology, Nigeria****Corresponding Author: Ani, Thomas Maduabuchi | Department of Accountancy, Enugu State University of Science and Technology, Nigeria****ABSTRACT**

The study was designed to examine the relationship between Federally generated revenue and government capital expenditure in Nigeria. This study adopted ex-post facto research design. It uses annual time series data extracted from the statistics bulletin, public finance statistics, and the Federal Inland Revenue Service's Planning, Research, and Statistics Department. The data covered from 2010 -2020. For the data analysis, the study uses descriptive statistics as well as statistical correlations analysis where capital expenditure as the dependent variable, value added tax, federal allocation account and petroleum profit tax as independent variables. The result therefore, revealed that value added tax and capital spending in Nigeria over the period is positively weak and non-significant. Another one revealed that the relationship between federal account allocation and Nigeria's Capital Expenditure during the time is positively weak and non-significant as well Petroleum profit tax has no meaningful impact on Nigerian government capital expenditure. The study recommends that federal government should increase the strength of tax employee and monitor closely their activities of value added tax collectors to ensure that money budgeted are met. In order to strengthen Nigeria's infrastructure, the government should utilize at least reasonable portion of VAT collection. Secondly in order to accomplish economic advancement, the federal government should allocate more of its resources to capital expenditures in order to grow macroeconomic goals within its system of government. Finally, federal government should consider it necessarily to allocate high petroleum profit tax revenue to expand infrastructure in Nigeria.

Keywords: *Capital Expenditure; Petroleum Profit Tax; Revenue; Value Added Tax*

Introduction

The shape and volume of expenditure committed to economic and social development programmes have a significant impact on Nigeria's public spending (Okolo, Edeme & Emmanuel, 2018). Nigerian government spending is divided into two categories: capital and recurring. Roads, airports, health, education, telecommunications, and electricity generation are all examples of capital expenditures (Obinna, 2003). Capital expenditures (Cap Ex) are monies used to purchase, develop, and maintain tangible assets such as land, plants, buildings, technology, and equipment by a company, organization, or government. Infrastructure, according to Oteh (2010), refers to the physical assets and services that are necessary for an economy's growth and development. Infrastructure is also regarded as a facilitator of the growth and development process for this reason.

Infrastructure investment is essential for attaining rapid and sustainable economic growth. It can operate as a springboard for the growth of local industrial industries (Srinivasu & Srinivasa, 2013). Infrastructure spending, such as roads, communications, and power, reduces manufacturing costs and boosts private sector investment (Okoro, 2013 in Ayeni & Olasehinde, 2020).

The sum allocated to buy, upgrade, and

maintain physical assets such as the Ministry of Power, Works and Housing, Ministry of Transportation, Ministry of Defense, Agriculture, Interior, Water Resources, Health, and others are known as capital expenditure. Capital expenditures are for educational goods or assets that provide long-term advantages. Construction, remodeling, and major repairs to buildings, as well as the purchase of heavy equipment or vehicles are all included. Student financial aid and other transfers are not included in the direct spending.

The availability of efficient capital expenditure services is a prerequisite for private investment to take off in Nigeria. According to Okwo (2011), economic growth in Nigeria is condition of sustained and consistent increase in the

Citation: Ani, T. M., Ugwuanyi, B. U., and Ezugwu, U. B. (2022). Federally generated Revenue and Government Capital Expenditure in Nigeria. *European Journal of Finance and Management Sciences* 6(5), 24-35. DOI: <https://doi.org/10.5281/zenodo.7434736>

Accepted: November 23, 2022; **Published:** December 9, 2022

Copyright: © 2022 The Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Nigerian Real Gross National product (DNP) and per capita income over a period of time. Nigeria's administration has a habit of pandering to the media and failing to spend revenue wisely to improve the country's deteriorating situation. Apart from taxation (petroleum profit tax, corporate income tax, and value added tax), the government earns money from oil and non-tax sources such as grants, rentals, and so on.

Statement of the Problem

As a result of concerns such as graft and insufficient investment, Nigeria has an infrastructural deficit. Nigeria's lack of social infrastructure needs a reassessment of how tax revenues, federal account distribution, and other sources of money are gathered and accounted for.

Nigeria's slow economic growth could be attributed to the country's political instability, self-centeredness, inept tax collectors, poor tax law enforcement, and backwardness. The ongoing devaluation of the naira, combined with the reduction in oil prices, has resulted in major production and consumption imbalances.

Many empirical researches in Nigeria have mainly focused on the impact of federal government revenue on economic growth. It is one of the most efficient ways to utilize a country's domestic resources. In Nigeria, tax evasion and avoidance by taxpayers are frequent, resulting in poor government revenue.

It's regrettable that few capitals expenditure studies have been undertaken in developing countries like Nigeria. On this issue, the researcher is curious as to whether there is a link between federally generated revenue and capital expenditure in Nigeria.

Objectives of the Study

The broad objectives of the study are to examine the relationship between Federally generated revenue and government capital expenditure in Nigeria. Specifically, the study is set to;

- I. To determine the extent to which value added tax has any significant relationship with capital expenditure in Nigeria.
- II. Determine the relationship between federal account allocation and government capital expenditure in Nigeria.
- III. Determine the relationship between petroleum profit tax and government capital expenditure in Nigeria.

Research Questions

The following research questions will be considered in the study;

- I. To what extent does value added tax relate to the government capital expenditure in Nigeria?
- II. To what degree does federal account allocation relate to the government capital expenditure in Nigeria?
- III. To what extent does petroleum profit tax relate to the government capital expenditure in Nigeria?

Statement of Hypotheses

In order to address the issue raised above, the following hypotheses shall be proved;

- I. Value added tax has non-significant relationship on the government capital expenditure in Nigeria.
- II. Federal account allocation has non-significant relationship on the government capital expenditure in Nigeria.
- III. Petroleum profit tax has non-significant relationship on the government capital expenditure in Nigeria.

Conceptual Framework

Federally Generated Revenue (FGR)

Government revenues include all receipts, such as taxes, customs duties, earnings from state-owned enterprises, capital revenues, and foreign aid. Oil and tax income are considered as major public revenues by the United Nations (Okwo, 2011). Nigeria's state-owned oil company supplies crude oil to both domestic and international companies. Several times, the contents of government revenue have been modified. It now includes the following major components: (1) VAT, company tax, consumer tax, personal income tax, tariff, stamp tax on security transactions, and motor vehicle tax are all examples of tax revenues. (2) Special income and subsidies to industrial, commercial,

and grain purchasing and supply firms are included in the 2014-15 budget. (3) Interest income, revenue from the repayment of a capital building loan, and gifts and grants are among the other sources of income. Subsidies for state-owned firm losses are a source of negative revenue.

Allocation from Federation Account (AFA)

Nigeria's political system promotes federation. Fiscal federalism is a method of performing government duties at multiple levels of government. Nigeria's federation fulfills its macroeconomic goals through conducting resource allocation, income distribution/redistribution, and economic stability functions within the central government (Buhari, 2001; Likita, 1999).

A precise amount of something, usually money, is given to a specific person or used for a specific purpose in an allocation. This is the amount of revenue support that the federal government gives to each state. The distribution of the federation account is the basis for statutory allocation to states. The federal government receives 56 percent, the state government receives 24 percent, and municipal government receives 20 percent (Federation Account Allocation Committee, 2002)

According to various definitions, revenue allocation can be defined as the distribution of a country's revenue among the various levels of government in a way that ensures economic progress. According to Ikeji (2011), revenue allocation refers to the method(s) of allocating centrally generated revenue among tiers of government.

Petroleum Profit Tax (PPT)

The Petroleum Profit Tax Act (PPTA) was first enacted in 1959 to intercept the first oil shipment of the year (Nwadighoha, 2007). Governments rely on taxes as their primary and most reliable source of revenue. Taxation is used by the government to fund numerous aspects of economic growth. The petroleum profit tax is an indirect way of taxation imposed by the government on the activities of firms active in the upstream sector of the petroleum industry, according to Ibrahim, Bukar, Ali, and Mamuda (2018).

Oil and gas businesses in Nigeria, which account for 70% of government revenue and 95% of foreign exchange earnings, rely heavily on revenue from petroleum products and a low tax rate to stay profitable. When it comes to achieving expenditure commitments on various projects, Nigerian crude oil revenues are a big help.

The principal legislation governing petroleum operations in Nigeria is the Petroleum Profit Tax Act (PPTA) of 2007. Under the PPT, the tax rate was set at 67.5 percent for the first five years of operations by an oil company and 85 percent thereafter (Onyemaechi 2012). The petroleum industry has contributed immensely in both foreign exchange reserves and government revenues (Onyemaechi, 2012).

It has been observed that the government share of crude oil revenue as a result of various joint venture agreements is roughly 70 percent of revenues accruing from crude oil transactions. The industry can also contribute significantly to growth and development of the Nigerian economy through foreign direct investment.

Value Added Tax (VAT)

The establishment of the value-added tax (VAT) by the VAT Act No. 102 was a watershed moment in Nigerian tax reform. It was first implemented in January of 1994. Since its inception, 15 of the Act's 42 sections have been changed. VAT, which replaced sales tax, was initially applied on 17 types of commodities and 24 types of services. Basic foods, medical and pharmaceutical products, books, newspapers and magazines, rent, commercial vehicles and spare parts, and services provided by community and people's banks were all exempt from the VAT. The revenue earned through VAT was supposed to be split 20:80 between the federal and state governments. It is currently split 15:50:35 between the federal, state, and local governments. The state's share was to be split into three parts: 30% for the state of origin, 30% for consumption/destination, and 40% for state equity.

Although the name suggests that VAT is a value-added tax, it is actually a tax on domestic consumption that is expected to be paid at all stages of production and distribution (Ebrill, Keen, Bodin, & Summers, 2001). As a consumption tax (rather than a tax on production or distribution), the seller must charge VAT on all of its sales while also being able to claim credit for the VAT it has paid on its inputs. Previously, Nigeria charged a 5% value added tax; however, the current rate is 7.5 percent.

VAT has been a key part in tax systems around the world in recent years (James, 2015). Furthermore, according to Gillis (1989b), VAT implementation is linked to effective revenue results from comprehensive tax changes in less-developed countries. VAT (Value Added Tax) is a consumption tax that is levied and accepted by many industrialized and developing countries and it is relatively simple to administer and cheat. The ability of a government to create sufficient revenue in order to efficiently provide various infrastructure amenities to meet the requirements of the population and take its place among the nations in the global village is critical to any nation's economic development and growth according to World Bank chief economist, Dr Shashank Joshi.

Capital Expenditure

In Uwah (2020) asserted that capital expenditure is an aspect of capital budgeting that has to do with the analytical process of making decisions on investment by considering the viability of one investment to the other. As posited by Hilton, Maher and Selto (2012), capital asset refers to the resources, other than human, which a firm or nation procures and utilizes for productive or profit-earning purposes. Wikipedia the free encyclopedia, capital expenditure or (CAPEX) is an expenditure profile that is set to create future benefits. It is incurred when a business spends money either to buy fixed assets or to add to the value of an existing fixed asset with a useful life extending beyond the taxable year. Capital expenditures are amounts spent on acquiring fixed, and in some cases, intangible assets, repairing an existing asset so as to improve its useful life and upgrading an existing asset if it results in a superior fixture.

Government capital expenditures are classified as power, transportation, defense, water resource, education, research and technology, health aviation, agriculture and rural development, and others, and are viewed as a result of the need to repair, maintain, rebuild, purchase, and replace worn-out government facilities. A well-managed government capital investment will result in significant infrastructure development, attracting international investment and causing the economy to grow rapidly. Capital expenditure includes money spent on the following: acquiring fixed and intangible assets, upgrading an existing asset, repairing an existing asset and repayment of loan. The money spent by the government on the development of machinery, equipment, buildings, health facilities, education, and so on is known as capital expenditure. It also includes the costs of purchasing fixed assets such as land and investments that may yield earnings or dividends in the future. By building or enhancing industrial facilities, capital spending permits the economy to earn money for many years.

Theoretical Framework

Keynesian theory

One of the theories used in explaining the concept and impact of fiscal policy on the economy is the theory of John Maynard Keynes, whose classical theory has continued to generate debates amongst scholars and economists in particular. Keynesian theory states that government through its fiscal policy can influence macroeconomic productivity levels by increasing or decreasing tax levels (revenue levels) and public spending (public expenditure). It further argued that this influence created as a result of manipulating those variables in turn reduce inflation, increase employment and also maintain a good value for money. He in other words believed that fiscal policies intervention will lead to a countercyclical measure and when the market forces are left alone, they lead to stable level of economy where underemployment is seen at the equilibrium (Tyagi, 2013). As Abu & Abdullahi (2010) argued, within the Keynesian model, when government increases spending, it leads to a higher economic growth and vice versa. This is done by way of keeping equilibrium between effective demand and supply of goods and services, through the manipulation of revenue and expenditure by the government. However, this spending that is needed to spur this economic level of stability is the spending that is geared towards increasing the productive sector of the economy. Other spending that is not tailored towards these will not yield the desired result in terms of the macroeconomic objectives. This anchors on this Keynesian theory as it concurs with the theory of public finance. The underlying principle between government capital expenditure and federally generated revenue the needed revenue for the nation and then channel it to the economy in such a way that economic growth and development can be attained.

Empirical Review

According to Odogu and Dadowei (2021) investigated the effect of revenue from taxation on gross domestic product and human development index in Nigeria. Secondary data is used from the Central Bank of Nigeria, the World Bank, and Federal Inland Revenue Service for this study. The Ex-post facto research design was used for the study. The study used secondary data and was conducted via the relevant econometric tests. The study reveals that revenues from taxation have effects on gross domestic product and human development index. Based on the result, the study concluded that taxation is an essential component of fiscal policy that the Nigerian government can use to stimulate economic development. Based on the conclusion, the study made the following recommendations amongst others that, government need to improve on the personal income tax collection process to enable more individuals disclose their income for tax assessment. This is because most self-employed (skilled workers such as carpenters, bricklayers, welders, etc) Nigerians don't pay income tax voluntarily. There should be an improvement in the value added tax administration in Nigeria to reduce the lack of accountability of VAT by the agents. The tax officials and other agents of the relevant tax authorities need to reduce their fraudulent activities with tax payers to increase the amount of tax collected for the economic growth of Nigeria.

Furthermore, Ayoka, Nzotta & Kanu (2021) examined the effect of federal government revenue and expenditure on the economic growth of Nigeria for the period 1983 to 2018. The investigation embraced an ex-post facto research design to produce test results via Bounds test, ARDL short/long run estimates and to make forecasts. The full-scale economic factors used in the study includes Real Gross domestic product (proxy for economic growth), federal government retained revenue, non-oil revenue, capital expenditure and recurrent expenditure. Findings of the research showed that federal government retained revenue; non-oil revenue and recurrent expenditure were statistically significant in explaining the relationship with economic growth in the short run; while capital expenditure was not at 5% Alpha level. Federal government retained revenue was also found to be statistically significant in the long run. On the basis of these findings, it was concluded that the influential growth variables are federal government retained revenue; non-oil revenue and recurrent expenditure. The researchers thus recommend that government should be tactful in her efforts at fiscal policy synchronization. There is need to monitor Nigeria's expenditure pattern, increase in revenue and a consequent increase in governments retained revenue. This will make for an effective adjustment in the utilization of capital expenditures and to assist with raising the level of economic growth in Nigeria.

More so, Ahannaya, Daniel-Adebayo, Iwala, Sanni, & Akenronye (2021) examined the extent of contribution of IGR and its impact on financing of infrastructural development as measured by capital expenditure on: roads infrastructures, environmental protection, health, housing and education incurred by States in Nigeria using Lagos as a case study. Data were sourced from the audited financial statements of Lagos State Government over a fifteen-year period of 2000 – 2014. Descriptive statistics and inferential statistics using linear regression method were carried out on the data. The result of the findings showed positive relationship between internally generated revenue (IGR) and total revenue (TR) ($-0.0000 < 0.05$) and also that IGR constitutes a significant proportion of Total Revenue of Lagos state. It was also noted from the study that IGR has significant positive relationship with Capital Expenditure measured along the vectors of: roads infrastructures CERI ($-0.0000 < 0.05$); environmental protection CEEP ($-0.0000 < 0.05$), health CEHT ($-0.0000 < 0.05$), housing CEHC ($-0.0005 < 0.05$) and education CEED ($-0.0000 < 0.05$) incurred by States in Nigeria. The study concludes that IGR has significant positive impact on the infrastructural development needed to create a platform for economic growth. The study recommends that State governments should put in place policies for sustainable growth in IGR and that IGR should be invested in financing capital expenditure required for infrastructure development needed for economic growth.

However, Aminu, Isah & Aliyu (2020) examines the impact of Bauchi State Government in development of infrastructure represented by the level of capital expenditure incurred through the utilization of the state's revenues. Secondary data was obtained from the government's Annual Financial Statements for the period 2006 to 2018. Ordinary Least Square regression was employed as the technique of analysis. The findings of the study revealed that share of allocation received from the federation account as well as debt both had a positive and significant influence in the provision of infrastructure while internally generated revenue, showed a negative and significant relationship. Other receipts comprising of contributions from Local Governments for the execution of joint projects as well as local and foreign grants and assistance received indicated a positive but insignificant relationship. The study recommends that policy makers should ensure a reasonable allocation of federation account revenues towards capital projects implementation. Efforts at the mobilization of internally generated revenue and

grants should be intensified with funds realized used along with funding drawn from the Local Governments as well as proceeds of debts raised towards the provision of the infrastructural needs of the state.

Notwithstanding, Joseph & Omodero (2020) examine the relationship between government revenues and the economic growth of Nigeria. The study employs exploratory and ex-post facto research designs while using secondary form of data spanning from 1981 to 2018 collected from the Federal Inland Revenue Services (FIRS), National Bureau of Statistics and CBN statistical bulletin. The relationship is tested by using Ordinary Least Squares (OLS) regression technique. The result reveals that federally received revenue and Value Added Tax (VAT) have a moderate positive relationship with the economic growth. The study provides evidence that there is a need for the government to formulate relevant revenue policies that will boost government income in order to have more favourable implication on the economy.

Moreover, Eneji, et al. (2020) examined the impact of government revenue and expenditure on employment and poverty reduction in Plateau State for the period of 1999 – 2019. The major findings shows that government expenditure on education has a positive significant effect on employment and a unit increase will increase employment and reduced poverty level. While that of agriculture and health have positive relationship on employment and insignificant a unit increase will reduce employment and increase poverty level. The major recommendations are that government should channel its revenue and expenditure to productive projects in all sectors of the economy. Priority should be given to education, health care, tourism, agriculture and industry. These will provide employment and reduce poverty level in Plateau State.

According to, John, Usman, Saidu & Anthony (2019) evaluate the impact of Federal Government's revenue on capital expenditure of public works in Nigeria (1999 – 2014). Annualized archival data for this study were sourced from the Central Bank of Nigeria (CBN) statistical bulletins and analyzed using descriptive and inferential statistical tools. The result showed that significant relationship exists between Federal Government revenue and capital expenditure on public works. The R^2 of 56.55% variations in revenue is explained by capital expenditure on public works. Significant relationship exists between Federal Government revenue and recurrent expenditure on public works. The R^2 of 88.54% variations in revenue is explained by recurrent expenditure on public works. The result also showed that there is no significant relationship between total expenditure on public works and the Nigerian Gross Domestic Product (GDP) as only the R^2 of 5.71% variations in total expenditure on public works is explained by the GDP. This shows that budget in Nigeria is less concerned with the provision of basic infrastructures for the long run growth of Nigeria. Most of the revenue derived by the government is spent on recurrent expenditure and total expenditure on public works over the years has not actually contributed to GDP. One of the major recommendations from the research findings was that policy makers should examine the existing laws, removing the bottlenecks and look for new ways of increasing capital allocations for public works with effective and efficient management.

Kalagbor, & Ordu (2019) examine the effect of public revenue and public expenditure on the actualization of Nigerian macroeconomic objectives within a given period of time. Specifically, it examined the extent to which public revenue and expenditure has impacted on inflation rate (price stability), unemployment rate and economic growth in Nigeria within the period of 2015 –2017. Data were gathered from Nigerian Bureau of Statistics, Central bank of Nigeria statistical bulletin as well as trading economics.com. Content analysis and thematic analysis were employed for the analysis of the study. Findings indicate those macroeconomic objectives of price stability (low inflation target), low unemployment rate as well as stable and increasing economic growth within the period as set by the government were not actualized. Further, there were rising and high inflation rates, rising unemployment rate, slow but unstable economic growth witnessed as well as rising public expenditure and revenue in Nigeria. This situation is contrary to the Keynesian theory as adopted here, who advocates that the use of fiscal policy by government is the way it can achieve its macroeconomic objectives through effective manipulation of both revenue and expenditure. The implication of this is that obviously, the budget of Nigeria and its performance within the period has been ineffective, ill implemented and thus there is need for rethink and reevaluation in other to get a better performance of the budget. Further there is need to ensure that revenue leakages are reduced and prudent expenditure are maintained. This is particularly important given the fact that, there have been consistent budget deficit within the period as such fiscal policy of public expenditure and revenue, if not re- examined; macroeconomic objectives may not be achieved even in the long run.

Notwithstanding, Azubike & Onukwube (2019) establishing the effect of the government revenue on the economic growth of Nigeria. The study will help in assisting the government to making efforts in the redistribution of the Nigeria economic resources. Time series data were collected from Central Bank of Nigeria Statistical Bulletin of 2016.

The multiple linear regression models and the Durbin Waston autocorrelation test were used to analyze the data. The findings show that the adjusted R-square of 94.72% is significant to the overall hypothesis tested and that both the oil and non-oil revenues have positive effect on the economic growth of Nigeria as expressed by GDP. The study also recommends that efforts should be made by the Government to diversify the Nigerian economy so as to bring about economic stability.

Infact, Ogbeifun, Ajetunmobi, Moronkeji. and Adindu (2019) examine the contribution of revenue generated by the federal government on economic growth of Nigeria, while looking at the specific objectives: examine the influence of oil revenue on economic growth of Nigeria; examine the influence of non-oil revenue on economic growth in Nigeria. The study backed up with theory of economic growth. Ex-post facto research was adopted in the work to examine the contribution of revenue generated on economic growth in Nigeria for the period of 30 years. Secondary data were sourced from central bank of Nigeria statistical Bulletin (2017) for the purpose of this study. Econometric tools of co-integration and error correction model was employed to estimate the individual effect of aggregate revenue generated from Oil and Non-oil on Real Gross Domestic Products. Findings revealed that Oil revenue exerts a negative effect but significant on Real Gross Domestic Products and also non-oil has a negative signed and statistically significant on Real Gross Domestic Products. The study concluded that revenue generated during the period of study have a negative but significant on economic growth of Nigeria this was due to neglect of developmental projects that will generate employment opportunities, abandonment of non-profligate spending of the government, in agriculture, repositions the tourism sector to attract foreign investors and develop the solid mineral sub-sector, among measures aimed at economic diversification.

Methodology

Inyiama and Ezugwu (2016) posited that a research design is the blueprint of the study which defines the study type (descriptive, correlational, semi-experimental, experimental, review, meta-analytic) and sub-type (eg., descriptive-longitudinal case study) hypotheses, independent and dependent variable, experimental design, data collection methods and the statistical analysis plan; as a framework that has been created to seek answers to research questions.

A research design also provides a platform for assessing the extent to which the research problem and study objectives have been achieved (Onyekwelu, 2020). In carry out the study, ex-post facto research design was adopted. Correlation models were used to investigate the association between federally generated revenue and capital expenditure. The following was the model;

Model Specification

To examine the relationship between Federally generated revenue and capital expenditure in Nigeria, The following model was adopted because it corresponded to the study's variables;

$$CAPEX = f(\beta_0 + \beta_1FAA + \beta_2PPT + \beta_3VAT) + \epsilon$$

f = Function of

FAA = Federal Account Allocation

PPT = Petroleum Profit Tax

VAT = Value Added Tax

β = Beta

ϵ = error terms

Description of Variables

<i>Variables</i>	<i>Symbol</i>	<i>Definitions</i>
<i>Independent</i>		
<i>Federal Account Allocation</i>	FAA	A process and method of sharing a federation’s financial resources among the various tiers of government in the federation in such a peaceful way that guarantees development progress and enhances unity.
<i>Petroleum Profit Tax</i>	PPT	This is a tax that applies to operations in the upstream oil industry

Value Added Tax	VAT	This is a tax on domestic consumption that is expected to be paid at all stages of production and distribution
Dependent Capital Expenditure	CAPEX	The money spent by the government on the development of machinery, equipment, buildings, health facilities, education, and so on is known as capital expenditure.

Decision Rule

Reject the null hypothesis, If the P-value is less than the significance level ($\alpha = 0.05$)

Data Presentation

The data presented in the table below shows the federal account allocation, petroleum profit tax; value added tax and capital expenditure in Nigeria.

Table 1: Data for Federal Account Allocation, Petroleum Profit Tax; Value Added Tax and Capital Expenditure in Nigeria

YEARS	FAA (=N='B)	PPT (=N='B)	VAT (=N='B)	CAPEX (=N='B)
2010	2,416.51	2,536.43	747.93	1,600.00
2011	3,237.04	3,070.59	659.15	918.55
2012	3,451.76	3,201.31	710.54	744.42
2013	3,711.75	2,666.36	799.67	958.00
2014	3,404.45	2,453.94	802.95	587.61
2015	2,600.98	1,289.96	767.33	601.26
2016	2,081.41	1,157.80	828.19	173.09
2017	2,564.04	1,520.48	972.34	1,439.97
2018	3,483.89	2,467.58	1,108.04	1,655.00
2019	3,344.56	2,114.26	1,189.98	1,212.56
2020	2,969.95	1,516.99	1,531.17	1,016.38

Source: Adjusted data from Budget Office, Federal Inland Revenue Service and Office of the Accountant General of the Federation

Data Analysis

The raw data collected from the federal government generated revenue and capital expenditure were analyzed using descriptive statistics and correlation analysis. The results are presented in tables one and two below.

Table 2: Descriptive Statistics

	CAPEX	FAA	PPT	VAT
Mean	991.5309	3024.213	2181.427	919.7536
Median	958.0000	3237.040	2453.940	802.9500
Maximum	1655.000	3711.750	3201.310	1531.170
Minimum	173.0900	2081.410	1157.800	659.1500
Std. Dev.	459.7628	530.2183	712.2830	261.9079
Skewness	-0.076368	-0.448974	-0.115259	1.258376
Kurtosis	2.156408	1.862808	1.669072	3.617660
Jarque-Bera	0.336864	0.962278	0.836233	3.077959
Probability	0.844989	0.618079	0.658286	0.214600
Sum	10906.84	33266.34	23995.70	10117.29
Sum Sq. Dev.	2113818.	2811314.	5073471.	685957.3
Observations	11	11	11	11

Source: E-Views 8

Table one presents the descriptive statistics of the study. Results from the table indicate that the mean value of capital expenditure (CAPEX), federal account allocation (FAA), petroleum profit tax (PPT) and value added tax (VAT) are 991.5309, 3024.213, 2181.427, and 919.7536 respectively while standard deviations are 459.7628, 530.2183, 712.2830, and 261.9079. These results suggest that CAPEX, FAA, PPT, and VAT are highly volatile during the period. Also, the Jarque-Bera Statistics, a critical statistical tool for testing data distribution indicates that all the data set are abnormally distributed. This is evidenced from the significance value of the variables which are all non-significant at 5% level of significance.

Test of Hypothesis One:

Re – statement of hypotheses in both Null and Alternative:

Ho₁: Value added tax has non-significant relationship on the government capital expenditure in Nigeria.

Ha₁: Value added tax has significant relationship on the government capital expenditure in Nigeria.

Table 3: Pearson Correlation

	CAPEX	VAT	FAA	PPT
CAPEX Pearson correlation	1.000	0.312	0.179	0.251
Sig (2 tailed)		0.351	0.598	0.457
N	11	11	11	11
VAT Pearson correlation	0.312	1.000	0.071	-0.414
Sig (2 tailed)	0.351		0.835	0.206
N	11	11	11	11

Correlation is significant at 0.05 level (2 tailed).

Since the P-value is 0.351 > 0.05 at the 0.05 level of significance, we may conclude that there is no significant relationship between value added tax and capital spending. As a result, we accept the null hypothesis, which argues that the value added tax has no effect on government capital expenditure in Nigeria.

Test of Hypothesis Two

Ho₂: Federal account allocation has non-significant relationship on the government capital expenditure in Nigeria.

Ha₂: Federal account allocation has significant relationship on the government capital expenditure in Nigeria.

Table 4: Pearson Correlation

	CAPEX	VAT	FAA	PPT
FAA Pearson correlation	0.179	0.071	1.000	0.835
Sig (2 tailed)	0.598	0.835		0.017
N	11	11	11	11

The correlation table 4 also shows that at the 0.05 level of significance, the significant value of government capital expenditure is non-significant (0.835>0.05). As a result, we accept the null hypothesis, which argues that the Federal account allocation has no significant impact on government capital expenditure in Nigeria.

Test of Hypothesis Three

Ho₃: Petroleum profit tax has non-significant relationship on the government capital expenditure in Nigeria.

Ha₃: Petroleum profit tax has significant relationship on the government capital expenditure in Nigeria.

Table 5: Pearson correlation

	CAPEX	VAT	FAA	PPT
PPT Pearson correlation	0.251	-0.414	0.699	1.000
Sig (2 tailed)	0.457	0.206	0.017	
N	11	11	11	11

Table 5 further discloses that at the 0.05 level of significance, the significant value of government capital expenditure is non-significant (0.457>0.05). As a result, we accept the null hypothesis, which argues that the petroleum profit tax has no meaningful impact on Nigerian government capital expenditure.

Discussions of Findings

Discussion of Result One: Table 3's correlation analysis shows that the relationship between value added tax and capital expenditure is non-significant, with $r(df, 11) = 0.31 @ 0.35 > 0.05$. On this basis, it is possible to conclude that the relationship between value added tax and capital spending in Nigeria over the period is positively weak and non-significant. This study is not in line with Ahannaya, Daniel-Adebayo, Iwala, Sanni, & Akenronye (2021) who found that internally generated revenue has significant positive relationship with capital expenditure. Joseph & Omodero (2020) reveals that Value Added Tax (VAT) has a moderate positive relationship with the economic growth. Muriithi (2013) found that VAT leads to positive effects on the rate of economic growth contra with to the study.

Discussion of Result Two: The correlation coefficient and significant value of federal account allocation are 0.179 and 0.598, respectively, according to the correlation analysis in table four. On this basis, it may be concluded that the relationship between federal account allocation and Nigeria's Capital Expenditure during the time is positively weak and non-significant. This study is in line with Oti and Odey (2017) indicating that the federation allocations have not been enough to cater for capital expenditure in the state while Joseph & Omodero (2020) reveals that federally received revenue has a moderate positive relationship with the economic growth.

Discussion of Result Three: Table 5 further discloses that at the 0.05 level of significance, the significant value of government capital expenditure is positive but non-significant ($0.457 > 0.05$). This study disagree Mbah & Onuora (2018) revealed that there a significant positive relationship between Internal Generated Revenue and the cost of infrastructure in the South East States as at the date of the study.

Summary of Findings

From our empirical results, it was found that;

- I. Value added tax and capital spending in Nigeria over the period is positively weak and non-significant.
- II. The relationship between federal account allocation and Nigeria's Capital Expenditure during the time is positively weak and non-significant.
- III. Petroleum profit tax has no meaningful impact on Nigerian government capital expenditure.

Conclusion

The relationship between federally generated revenue and government capital expenditure in Nigeria was investigated in this study. The information was compiled using publicly available annual financial data from 2010 to 2020. We concluded that the relationship between value added tax, federal account allocation, petroleum profit tax, and capital expenditure is positively weak and negligible.

Implications

Low capital spending investment leads to a less productive economy, poorer living standards, and a lack of competitiveness. The economy will grow if more federally produced revenue is spent on capital expenditures. If more is given, more is expected; according to the saying more is expected.

Recommendation

In line with the findings of the study, the researcher recommends that;

- I. The federal government should increase the strength of tax employee and monitor closely their activities of value added tax collectors to ensure that money budgeted are met. In order to strengthen Nigeria's infrastructure, the government should utilize at least reasonable portion of VAT collection.
- II. In order to accomplish economic advancement, the federal government should allocate more of its resources to capital expenditures in order to grow macroeconomic goals within its system of government.
- III. Since the petroleum profit tax has no discernible effect on Nigerian government capital spending. The federal government should consider it necessarily to allocate high petroleum profit tax revenue to expand infrastructure in Nigeria.

Contribution to Knowledge

- I. This study, the relationship between Federally generated revenue and government capital expenditure in Nigeria contribute to the idea of petroleum profit tax which has not been used.
- II. None specifically examined the relationship between Federally generated revenue and government capital expenditure in Nigeria, 2020.
- III. Model specification used in this study is another contribution to the study.
- IV. Recommendations of this study are another contribution to knowledge

References

- Abu, N., & Abdullahi, U. (2010). Government expenditure and economic growth in Nigeria: A disaggregated analysis. *Business and Economics Journal*, 4.
- Ahannaya, C. G.; Daniel-Adebayo, O.; Iwala, A. T.; Sanni, A. S. & Akenronye, C. (2021). Impact of internally generated revenue (IGR) on total revenue of Lagos state. *International Journal of Scientific & Engineering Research* 12(3), 913-922. <http://www.ijser.org>
- Aminu H., I. S. & Aliyu A. A. (2020). Impact of state government revenues on infrastructural development in Bauchi state Nigeria. *International Journal of Accounting and Taxation*, 8 (1), 34-43. <https://doi.org/10.15640/ijat.v8n1a5>
- Ayeni, R. K., & Olasehinde, I. O. (2020). Comparative analysis of capital expenditure on infrastructure and economic growth in Nigeria and South Africa. *Archives of Business Research*, 8(3), 53-64.
- Ayoka, C. O., Nzotta, S. M. & Kanu, S. I. (2021). Effect of federal government revenue and expenditure on economic growth in Nigeria – An Empirical Review. *International Journal of Innovation and Economic Development*, 7 (3), 34-52
- Buhari, A. L. (2001). *Straight to the point ICAN/Polytechnic public finance*. Ilorin, Nigeria: Unilorin Press.
- Ebrill, L., Keen, M., Bodin, J.-P., & Summers, V. (2001). *The Modern VAT*. Washington, D.C.: International Monetary Fund.
- Eneji M. A., Eneji A. I., Odey F. A, Haruna H. & Adikaba A. I. (2020). Impact of government revenue and expenditure on employment and poverty reduction in Plateau State. *Global Journal of Management and Business Research: B Economics and Commerce*, 20(4), 51-65
- Federal Government of Nigeria (1999). *The 1999 constitution of the Nigeria; Abuja, Federal Government press*.
- Federation Account Allocation Committee (2002). Allocation of Revenue (federation Account ETC) ACT. <https://nlipw.com/allocation-revenue-federation-account-etc-act/>
- Gillis, M. (1989b). Tax reform: Lessons from Postwar Experience in Developing Nations. In M. Gillis (Ed.), *Tax reform in developing countries* (493-521). Durham: Duke University Press.
- Hilton, R.W., Maher, M.W. & Selto, H. F. (2012). *Cost management strategies for business decisions* (4th ed.). New York: McGraw Hill.
- Ibrahim, M., Bukar, H., Ali, A., & Mamuda, U. A. (2018). An assessment of Nigerian petroleum tax regime strategy on foreign direct investment. *Journal of Economics and Finance*, 9(6),62–66. <https://doi.org/10.9790/5933-0906016266>
- Igbasan, E. (2017). Tax revenue and economic growth of Nigeria (1981- 2015). Being an Unpublished MSc. Dissertation.
- Ikeji, C.C. (2011). Politics of revenue allocation in Nigeria: A reconsideration of some contending issues. *Sacha Journal of Policy and Strategic Studies*, 1(1), 121-136.
- Inyama, O. I & Ezugwu, C. I (2016). *Research methodology (A Practical Approach)*. Enugu. JOMAP Press.
- James, K. (2015). *The Rise of the Value Added Tax*. New York: Cambridge University Press.
- Jegede, C. A. (2014). Econometric analysis of the effectiveness of public revenue in economic growth in developing countries: an examination of Nigerian economy. *International Journal of Economics and Finance*, 6(8), 187-195. www.ccsenet.org/ijef
- John E. I.; Usman M. D.; Saidu I. & Anthony I. A. (2019). Impact of federal government revenue on capital expenditure of selected public works in Nigeria (1999 - 2014). *Nigerian Journal of Technological Research*, 14(1), 05-28. <https://www.ajol.info/index.php/njtr/article/view/186945>
- Joseph, F. I. & Omodero, C. O. (2020). Nexus between government revenue and economic growth in Nigeria. *Journal of Economics and Business*, 34(3), 35–45, <https://doi.org/10.2478/eb-2020-0003>

- Kalagbor, K. G. & Ordu, P. A (2019). Effect of public revenue and public expenditure in the realization of macroeconomic objectives of government of Nigeria: Evidence of 2015-2017. *International Journal of Innovative Finance and Economics Research*, 7(3), 1-13
- Likita, O. (1999). *Elements of public finance*. Lagos, Nigeria: T. O. Abayomi Industrial Packaging Ltd.
- Nwadighoha, C.E. (2007). *Oil and gas accounting*, Enugu: Ephraimites Printing and Publishing LTD.
- Obinna, O. E. (1985) *Public Finance*, Nsukka, Ap and P Press Ltd.
- Odogu, L. I., Obalokumo, P. A, Odoko D.& Dadowei O. M. (2021). Effect of revenue from taxation on gross domestic product and human development index in Nigeria. *Asian Journal of Economics, Business and Accounting*, 21(6), 1-11
- Ogbeifun I. E., Ajetunmobi T. P., Moronkeji T. A. and Adindu G. C. (2019). Revenue generation and economic growth of Nigeria. *International Journal of Current Research*, 11(07), 5786-5792. <http://www.journalcra.com>
- Okolo, C.V., Edeme, R.K. & Emmanuel, C. (2018). Economic analysis of capital expenditure and infrastructural development in Nigeria. *Journal of Infrastructure Development*, 10(1), 52–62.
- Okwo, I.M. (2011). *Introduction to public sector finance and accounting*. Enugu, Computer Edge Publishers.
- Okwo, I.M. (2018). Unpublished lecture notes on Public Sector Finance and Accounting, Enugu.
- Onyekwelu, U. L (2020). *Firm foundation in accounting and finance research*. (Rev ed), Enugu, His Glory Publications.
- Onyemaechi J. O. (2012). Economic Implications of Petroleum Policies in Nigeria: An Overview.
- Oteh, A. (2010). Capital market as a long-term option for financing infrastructure development. *Central Bank of Nigeria Infrastructure Finance Conference*
- Srinivasu, B. & Srinivasa, R. P. (2013). Infrastructure development and economic growth; Prospects and perspective. *Journal of Business Management and Social Sciences Research (JBM & SSR)*, 2(1), 1-10
<http://www.stats.gov.cn/tjsj/ndsj/yb2004-c/html/8ie.htm>
- Tyagi, B. P. (2013). *Public finance*. Meerut: Jai Prakash Nath & Co. www.tradingeconomics.com
- Uwah, U. E. (2020). Capital expenditure decisions and long-term value of the firm: evidence from Nigerian manufacturing companies. *International Journal of Accounting and Finance (IJAF)* 8(1), 152-168
<https://www.researchgate.net/publication>