Original Research Article

Tax Revenue and Capital Expenditure in Nigeria

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Abstract
This study aims to evaluate the effect of tax revenues on capital expenditures in Nigeria Economy. Data for the study was collected through secondary source from Federal Inland Revenue Service, Central Bank of Nigeria statistical bulletin and National Bureau of Statistics between periods of 1989 and 2018. A longitudinal research design was adopted, while secondary data were collected from audited financial statements of Federal Inland Revenue Service, CBN statistical bulletin and National Bureau of Statistics between 1989-2018. Data collected were analyzed usinga linear regression method to explain the relationship between variables of tax revenues (oil and non-oil) (independent variable), capital expenditure (dependent variable). The results revealed a statistically significant positive effect of non-oil revenue oncapital expenditure with a p-value of 0.0008 <0.05, R^2 =0.3345 and Adjusted R^2 of 0.3107. The regression results further revealed that the relationship between the oil tax revenues, total tax revenues and capital expenditure are not statistically significant with a p-value of 0.2997 and 0.0848 <0.05,R^2 =0.03835, 0.1023 and Adjusted R^2 of 0.0703 and 0.0703 respectively. The study concludes that revenue generated from tax has no impact on capital expenditure allocation. The study therefore, recommends that Government should utilize the revenue generated from oil and non-oil tax revenues to invest in other domestic sectors such as Agriculture and manufacturing sector in order to expand the revenue source of the economy and further increase the revenue base of the economy which will in turn increase fund allocated for capital expenditures.

Keyword: Tax Revenue, Growth, Oil Revenue, Non-Oil Revenue, Capital Expenditure

JEL Classification Codes: H200, H500

1. Introduction

A tax is a compulsory charge or some other type of levy imposed upon taxpayers (an individual or legal entity) by the government of a nation in order to fund various public expenditures. Taxes are levied in almost every country of the world, used to raise fund for government expenditures. The primary goal of any developing country like Nigeria is to increase the rate of economic growth and per capital income which leads to a higher standard of living thus taxation can be used as a stimulus to accelerate such growth of the Nigerian economy (Okoli, Njoku & Kaka, 2014).It is an instrument the government uses to measure, access and control the informal sector that dominates developing economies of the world (Wambai & Hanga, 2013). Tax is one of the major sources of government revenue. However, not every government effectively exploits this opportunity as a means of revenue generation (Okwara & Amori, 2017). In Nigeria, tax revenue has accounted for a small proportion of total government revenue over the years compared with the bulk of revenue needed for the development purposes that is derived from oil (Uremadu & Ndule, 2011). Tax Revenues is the receipt from the tax structures. Revenue accruing to an economy, such as Nigeria can be divided into two main categories, which are Oil revenue includes (Royalties, Petroleum profit tax (PPT), Gas tax, Pipeline licence) and Non-oil revenue include (Trade, Loans, Direct tax, import duties, Exercise duties and indirect taxes paid by other sectors of the economy.

Government expenditure no doubt is an essential instrument for a government to control the economy of a nation. In Nigeria, the federal government's expenditures are broadly divided into capital and recurrent expenditure. The recurrent expenditure consists of government expenditure on administration such as wages, salaries, interest on loans, maintenances. Whereas the capital expenditure is on projects like roads, airport, health, education, electricity generation, telecommunication, water etc. Capital expenditures are investments with multiplier effects on the economy in terms of public benefits. In most cases, government intervention has brought stability in income and employment in the economy (Collins & Mary, 2017). Therefore, based on this background, the objective of this study is to evaluate tax revenues and capital expenditures of the Nigeria economy (1989-2018).

Statement of the Problem

The inadequate social infrastructures in Nigeria call for attention as to how tax revenue generated is to be expanded and

accounted for especially where those in authority continue to spend these hand earned resources with reckless abandon. Nigerian economy in the last decade has transformed from the level of billion Naira to trillion Naira on the expenditure side of the budget and the effects of this expenditure are mostly unnoticeable to the public (Muritala, 2011). According to Azubike (2009) in Ojong, Ogar, Oka, (2016), it is an opportunity for the government to generate additional revenue to discharge its pressing obligations. Also, it is one of the effective means of mobilising a country's internal resources to promote economic growth. In Nigeria, the incidence of tax evasion and avoidance by taxpayers is high, leading to a low level of government revenue which further reduces the level of government expenditure, culminating into a reduction in the income savings and expenditure of households and firms, leading to a low level of economic activities and economic growth. Also, inadequate tax personnel, fraudulent activities of tax collectors and lack of understanding of the importance to pay tax by taxpayers are some of the problems of tax revenues which led to no or poor physical development on our capital expenditures in Nigeria economy (Worlu, 2012).

A lot of empirical studies (like Asaolu, Olabisi, Akinbode,& Alebiosu, (2018), Igbasan (2017), Ogbonna & Odoemelam (2013)) had focused only on the effect of tax revenue has a whole, tax evasion on Nigerian economic growth and development while there has been dearth on the impact of tax revenue in and its effect on capital expenditure, as a result of the neglect of the sector by the government.Therefore, this study was carried to evaluate the effect of tax revenues and capital expenditures of the Nigeria economy.

2. LITERATURE REVIEW
The Concept of tax revenues and capital expenditure
Independent   **Dependent**
Tax Revenue   **Capital Expenditure**
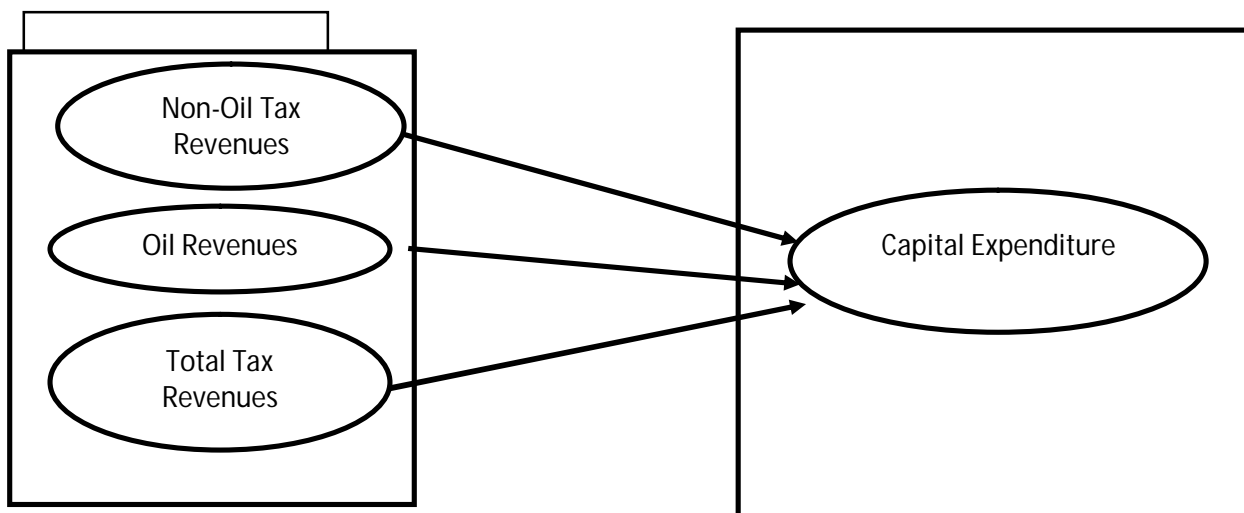
Source: Researchers' Conceptual Model, (2019).
Figure 2.1: Conceptual framework on tax revenues and capital expenditure

Analyses of research variables

Independent variable

Tax Revenues
Taxation is a dynamic theme which grows with the constant changes in the economic environment in which it operates. Tax is a compulsory payment made by individuals and organisations to the government following predetermined criteria for which no direct or specific benefit is received by the taxpayer (Bassey 2013). Tax revenue is a source of financing developmental activities in a developing country. To effectively carry out its primary function and other subsidiary functions, governments need adequate funding. Governments use tax proceeds to render their traditional functions such as the provision of public goods, maintenance of law and order, defense against external and internal aggression, regulation trade and business to ensure social and economic justice. Unfortunately, Government responsibilities continue to increase over time especially in developing countries; as a result of the growing population of citizens, and technological development (Ofoegbu, Akwu,& Oliver, 2016).

Tax revenue is defined as the revenues collected from taxes on income and profits, social security contributions; taxes levied on goods and services, payroll taxes, taxes on the ownership and transfer of property, and other taxes. Total tax revenue as a percentage of GDP indicates the share of a country's output that is collected by the government through taxes. It can be regarded as one measure of the degree to which the government controls the economy's resources. The tax burden is measured by taking the total tax revenues received as a percentage of GDP. This indicator relates to the government as a whole (all government levels) and is measured in million USD and percentage of GDP.

Non-Oil Revenue
Non-oil revenue is the income or proceeds generated from the commodities that are sold in the international market, excluding crude oil (petroleum product). Non-oil exports, on the other hand, are those commodities (excluding crude oil) that are sold abroad to generate revenue. These non-oil exports include agricultural products or crops, manufactured goods, tourist services/receipts, solid minerals, telecommunication services and other exports. (Kromtit & Gukat, 2016).

Dependent Variable

Nigerian Capital Expenditure
Government expenditure could be current, recurrent,and capital expenditures.Capital government expenditure refers to spending on fixed assets such as roads, schools, hospitals, building, plant and machinery, the benefits of which are durable and lasting for several years while recurrent government expenditure refers to the expenses that government incurs for its maintenance, for the society and the economy as a whole (Uwaezuoke, Nweke & Ogar, 2018). Government expenditures have far a very high effect on the overall economic activities of any nation. Government expenditure on production depends on three factors; the ability to work, save and invest; the willingness to work, save and invest and the diversion of economic activities between different uses and localities (Musa & Asare, 2013). Government expenditure in the form of grants and subsidies to farmers, firms and industries is highly productive as it minimises the cost of production which

leads to a fall in prices. In contrast, expenditures on education and health havea direct welfare effect on society. Expenditure on education and health is seen as an investment in human capital improves skill formation and raises the ability to produce which has the effect of raising disposable income and in turn increases consumption and investment (Uwaezuoke, Nweke, & Ogar, 2018).

Theoretical Review
This study was anchored on the Keynesian theory as it centers more on the challenges facing the economic condition of Nigeria.

Keynesian theory
The Keynesian Multiplier is an economic theory that asserts that an increase in private consumption expenditure, investment expenditure, or net government spending (gross government spending – government tax revenue) raises the total Gross Domestic Product (GDP) by more than the amount of the increase. Therefore, if private consumption expenditure increases by ten units, the total GDP will increase by more than ten units.The Keynesian theory propounded by John Maynard Keynes during the 1930s (specifically in 1936)posited that there exists a multiplier effect of a change in expenditure on the national income. Hence, an increase in the government expenditure would lead to increased employment and investment which would improve aggregate output (Ahuja, 2013). Keynes advocated for increased government expenditures and lower taxes to stimulate demand and pull the global economy out of the depression. The law of increasing state spending was propounded by German economist Adolph Wagner (1835- 1917). He posited that the development of an industrial economy would be accompanied by an increased

share of public expenditure in gross national product. With the development of an economy, new functions and activities spring up and are undertaken by the government while the old operations of the economy are performed more thorough. Wagner's law implies that there is a functional relationship between economic growth and the growth of government sectors which tends to increase public expenditure (Anyanwu 1993 in Ajudua and Davis, 2015).

Wagner highlighted certain forms of government activities that lead to increasing public expenditure such as, keeping law and order, participation in the production of economic goods including the provision of certain social products, increase in demand for public goods, urbanization and pressure on social amenities, social security and provision of welfare etc. (Nnamocha 2001 in Ajudua and Davis, 2015).Wiseman and Peacock put forward a hypothesis about the growth of public expenditure in their study of public expenditure of the UK between 1891 and 1955. They posited that government expenditure increases in a jerk and step-like manner rather than in a steady, continuous rate (Ajudua and Davis, 2015).

Benefit Received theory
The **benefit principle** is a concept in the philosophy of taxation from public finance. It bases taxes to pay for public-goods expenditures on a politically-revealed willingness to pay for benefits received. The principle is sometimes likened to the function of prices in allocating private goods. In its use for assessing the efficiency of taxes and appraising fiscal policy, the benefit approach was initially developed by Knut Wicksell (1896) and Erik Lindahl (1919), two economists of the Stockholm School. The benefit principle

takes a market-oriented approach to taxation. The objective is to accurately determine the optimal amount of revenue that should be spent on public goods. The free-rider problem is the primary criticism given for limiting the scope of the benefit principle. When information about marginal benefits is available only from the individuals themselves, they tend to under report their valuation for a particular good; this gives rise to the preference revelation problem. Each individual can lower his tax cost by under reporting his benefits derived from the public good or service. One solution would be to implement a tax choice. If taxpayers had to pay taxes anyway but could choose where their taxes went (without the possibility of secret rebates or similar), then they would have no incentive to hide their exact preferences.

Empirical Review

Oziengbe (2013) explores the relative impacts of the federal capital and recurrent expenditures on Nigeria's economy in the 1980-2011 periods. The variance decomposition results indicate that the proportion of forecast error variance of GDP explained by innovations in RECEXP dominates the proportion explained by changes in CAPEXP in all the periods.Nwofor & Gordon (2013) studied tax revenue and government expenditure. They explored how revenue generated from taxation affects Nigeria expenditure. Secondary data used for data collection hypotheses and hypotheses tested using Pearson moments collation coefficient. The study found out that the volume of expenditure incurred by the government can negatively affect total tax revenue, especially those when those expenditures are mainly a recurrent expenditure.

Ogbonna and Appah (2016) examine the effect of tax administration and revenue on the economic growth of Nigeria. The data collected from the questionnaire and secondary data were analyzed using relevant regression analysis. The results reveal that there is a significant relationship between Personal income tax revenue (PITR) and per capita income, Company income Tax Revenue and Gross Domestic product of Nigeria, VAT revenue and PCI of Nigeria, Petroleum Profit Tax revenue and GDP of Nigeria and tax administration and Gross domestic product of Nigeria. Hence, the study concludes that tax administration and revenue does affect the economic growth of Nigeria for the period under review.Ojong, Ogar, Oka (2016) examined the impact of tax revenue on the Nigerian economy. s. Data were sourced from the Central Bank Statistical Bulletin and extracted through a desk survey method. Ordinary least square of multiple regression models was used to establish the relationship between dependent and independent variables. The finding revealed that there is a significant relationship between petroleum profit tax and the growth of the Nigeria economy. It showed that there is a significant relationship between non-oil revenue and the growth of the Nigeria economy. The finding also revealed that there is no significantrelationship between company income tax and the growth of the Nigeria economy

Ofoegbu, Akwu and Oliver, (2016)examined the effect of tax revenue on the economic development of Nigerian, and to ascertain whether there is any difference in using HDI and GDP in establishing the relationship. The approach adopted in this study was that of using annual time series data for the period 2005 - 2014 to estimate a linear model of tax revenue and human

development index using ordinary least square (OLS) regression technique. Findings show a positively and significantly relationship between tax revenue and economic development. The result also reveals that measuring the effect of tax revenue on economic development using HDI gives lower relationship than measuring the relationship with GDP thus suggesting that using the gross domestic product (GDP) gives a painted picture of the relationship between tax revenue and economic development in Nigeria. Nweze and Edame (2016) examined oil revenue and economic growth in Nigeria between 1981 and 2014. Secondary data on the gross domestic product (GDP), used as a proxy for economic growth; oil revenue (OREV), and government expenditure (GEXP) which represented the explanatory variables were sourced mainly from CBN publications. The co-integration result indicated that there is a long run relationship among the variables with three co-integrating equation(s). The result of the error correction mechanism (ECM) test indicates that all the variables except lag of government expenditure exerted a significant impact on economic growth in Nigeria. However, all the variables exhibited their expected sign in the short run but showed a negative relationship with economic growth in the long run except for government expenditure, which has a positive relationship with economic growth both in the long run and short run.

Okwara and Amori (2017) examines the impact of tax revenue on the economic growth in Nigeria for the period of 1994-2015. Secondary data were used and sourced from journals, textbooks and Central Bank of Nigeria (CBN) statistical bulletin. To avoid spurious results, Ordinary Least Square (OLS) with the aids of Statistical Package for Social Sciences

(SPSS) was used to test the significant impact of value added tax and non-oil income on Gross Domestic Product (GDP). The results revealed that non-oil income has significant impact on the gross domestic product. In contrast, value added tax has a negative relationship and statistically insignificant for the period under review. Onakoya, Afintinni and Ogundajo, (2017) also investigated the impact of taxation on economic growth in Africa from 2004 to 2013. The appropriate fixed and random effect test was employed to determine the fitness of the model using the Hausman test. The study conducted the Hausman-Test to determine the proper estimator between Fixed and Random Effect. Findings indicated that tax revenue is positively related to GDP and promotes Economic Growth in Africa. It was significant at 5% level.

Inyiama, Chinedu and Nnenna (2017) examined the effect of the Federal Government of Nigeria's tax resources on infrastructural development of Nigeria. The study adopts ex-post-facto research design as secondary data were used for the analysis. Data were analyzed using multiple linear regression techniques. The result reveals that tax revenue resources (PPT, CIT and VAT) had a positive and insignificant effect on Infrastructural Development in Nigeria. Kyissima, Pacific and Ramadhan (2017) empirically examine the long-run and short-run relationship between government expenditure and Economic growth in Tanzania for 1996-2014 making the use of annual secondary time series data. In the long-run, government expenditure is found to be statistically significant and has a positive relationship with economic growth. The short -run estimates show there is no

significant relationship between government expenditures and economic growth.

3. METHODOLOGY

The research design employed in this study is the longitudinal research design since the data was a time series data. The population of the study was limited to the Nigerian economy. The sample size used was Federal Inland Revenue Service, while the technique adoptedwas purposive-sampling technique because tax revenue is recorded and monitored by the Federal Inland Revenue Service. The relevant information used for the data analysis was collected from audited statements (secondary data) of Federal Inland Revenue Service, CBN statistical bulletin and National Bureau of Statistics between 1989-2018. Data collected were analysed from time series analysis.The mathematical equation below represents the relationship between tax revenue and capital expenditure of the Nigeria economy in a linear form.

$Y= f(x)$

$CE=a_0+\beta_1 NOTR + e$ -----------I (Model 1)
$CE=a_0+ \beta_2 OTR +e$ --------------ii (Model 2)
$CE=a_0+ \beta_3 TTR +e$ ------------iii (Model 3)
Where
CE=capital expenditure
β_1- β_3 = Co-efficient of independent variables
a_0= constant of the equation
NOTR=Oil tax revenue
OTR= Non-Oil tax revenue
TTR=total tax revenue
OTR, NOTR & TTR are all independent variables
e= error terms

Base on theory and existing literature, it is presumptively expected that β_1, β_2, and $\beta_3>0$. That is an increase in the explanatory variables of non-oil revenue, oil-revenue, and total tax revenue will increase capital expenditure in Nigeria.

4. ESTIMATION RESULTS AND DISCUSSION OF FINDINGS
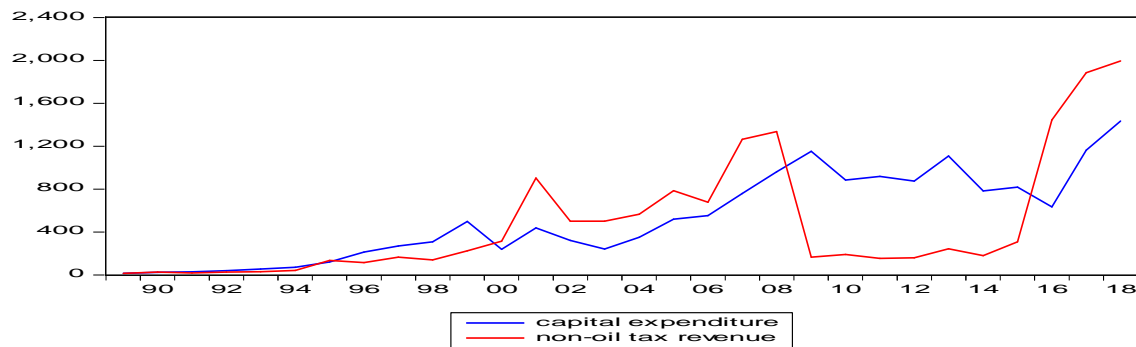
Univariate Analysis

Figure 1: Frequency distribution of non-oil tax revenues and capital expenditure

Figure1 above showed the relationship between non-oil tax revenues and capital expenditure. There was an increase in non-oil tax revenue from 1989-2008, while there was also a significant increase/decrease in capital expenditure between 1989 and 2018.

As non-oil tax revenue decrease in 2008 and later increases from 2015 to 2018, it was observed that capital expenditure reduces/increases from 2009 to 2016 and later increases from 2017 to 2018 respectively.
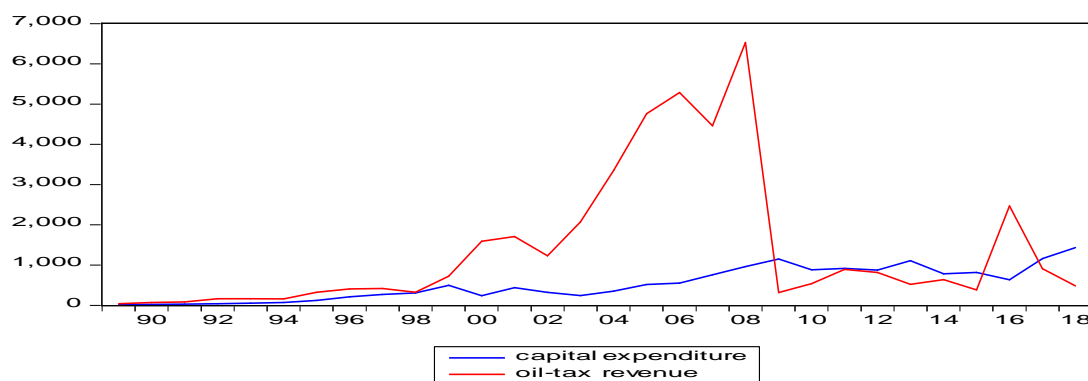
Figure 2 : Frequency distribution of oil tax revenues and capital expenditure

Figure2 above was the relationship between oil tax revenues and capital expenditure, which shows that oil tax revenues and capital expenditure were increasing/decreasing in the opposite proportion. On the overall, oil tax revenues increased more than capital expenditure.
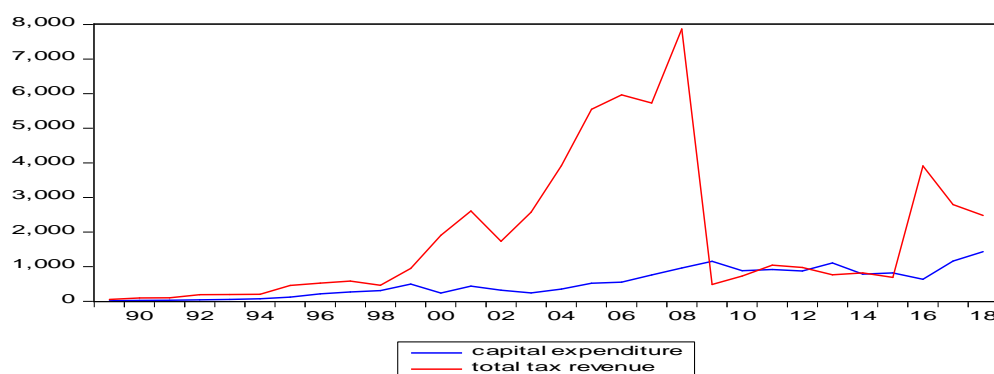
Figure3: Frequency distribution of total tax revenues and capital expenditure

As observed in Figure3 above, an increase in total tax revenue does not have any effect on capital expenditure. A sharp decrease/increase in TTR does not affect the CR

Table 1: Result of the DescriptiveAnalysis

	CAPITAL EXPENDITURE	NON-OIL TAX REVENUE	OIL TAX REVENUE	TOTAL TAX REVENUE
Mean	526.6850	483.7637	1395.063	1878.827
Median	468.3620	207.7627	588.8450	883.7340
Maximum	1434.800	1994.840	6530.600	7866.600
Minimum	15.03410	14.73990	39.13050	53.87040
Std. Dev.	407.7046	564.1310	1745.337	2088.440
Skewness	0.438754	1.437213	1.636233	1.368050
Kurtosis	2.091188	3.960092	4.553051	3.904796

Jarque-Bera	1.994948	11.48013	16.40126	10.38112
Probability	0.368810	0.003215	0.000274	0.005569
Sum	15800.55	14512.91	41851.88	56364.80
Sum Sq. Dev.	4820469.	9229071.	88339790	1.26E+08
Observations	30	30	30	30

The result of the descriptive analysis is reported in Table 1. The mean of the data are: Capital expenditure (526.6850), Non-oil tax revenue (483.7637), Oil tax revenue (1395.063), and Total tax revenue (1878.827) while the standard deviations of the data are Capital expenditure (407.7046), Non-oil revenue (564.1310), Oil revenue (1745.337), and Total tax revenue (2088.440). Jarque-Bera test does not accept the normality of CE but accepts the normality of other proxies (non-oil tax revenue, oil tax revenue and total tax revenues) at 5% and 10% respectively. The result was as depicted by skewness and kurtosis of the data.

MULTIVARIATE ANALYSIS

Table 2: Result of the Granger Causality Test
Pairwise granger causality tests
Date: 10/17/19   time: 12:20
Sample: 1989 2018
Lags: 2

Null hypothesis:	Obs	F-statistic	Prob.
Non-oil tax revenue does not granger cause capital expenditure	28	14.4292	9.e-05
Capital expenditure does not granger cause non-oil tax revenue		0.67493	0.5190
Oil tax revenue does not granger cause capital expenditure	28	4.06107	0.0309
Capital expenditure does not granger cause oil tax revenue		0.57327	0.5715
Total tax revenue does not granger cause capital expenditure	28	6.27348	0.0067
Capital expenditure does not granger cause total tax revenue		0.21321	0.8096
Oil tax revenue does not granger cause non-oil tax revenue	28	0.82257	0.4518
Non-oil tax revenue does not granger cause oil tax revenue		2.02978	0.1542
Total tax revenue does not granger cause non-oil tax revenue	28	0.82257	0.4518
Non-oil tax revenue does not granger cause total tax revenue		1.89649	0.1728
Total tax revenue does not granger cause oil tax revenue	28	2.02978	0.1542
Oil tax revenue does not granger cause total tax revenue		1.89649	0.1728

The results of the Granger causality test showed the statistics for the joint significance of each of the lagged endogenous variables in the models above. The probability (p-values) of the F-statistics for the joint significance between OTR and CE; TTR and CE are lesser than the significance level of 0.05, while NOTR and CE, OTR and NOTR, TTR and NOTR, OTR and OTR are greater than 0.05. Therefore, the null hypothesis was failed to be rejected. The results of most of the F-statistics are very high and by good point of this, most of the endogenous variables can be treated as exogenous variables.

Model 1
Table 3: Result of the Regression Analysis of Non-oil Revenue and Capital Expenditure

Dependent Variable: CAPITAL_EXPENDITURE
Method: Least Squares
Date: 10/17/19   Time: 11:52
Sample: 1989 2018
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	324.4736	82.00133	3.956931	0.0005
NON OIL TAX REVENUE	0.417996	0.111418	3.751596	0.0008

R-squared	0.334513	Mean dependent var	526.6850	
Adjusted R-squared	0.310746	S.D. dependent var	407.7046	
S.E. of regression	338.4818	Akaike info criterion	14.55116	
Sum squared resid	3207958.	Schwarz criterion	14.64457	
Log likelihood	-216.2674	Hannan-Quinn criter.	14.58104	
F-statistic	14.07447	Durbin-Watson stat	0.456862	
Prob(F-statistic)	0.000815			

The result of the regression analysis is shown in Table 3. The study employed capital expenditure as the dependent variable, while non-oil tax revenue was the independent variable. For the model, the F-value of 14.07447 and the probability value of 0.000815 is significant and indicates a linear relationship between the dependent and the independent variables. However, from model 1, the coefficient of multiple determination (R^2) reports that about 33.45% of changes in capital expenditure was accounted for by the explanatory variable of non- oil revenue while the adjusted R-squared of 31.07% further justifies this effect.

$$CE = 324.4736 + 0.417996 \, NOTR + e$$

Model 2

Table 4: Result of the Regression Analysis of Oil Revenue and Capital Expenditure
Dependent Variable: CAPITAL_EXPENDITURE
Method: Least Squares
Date: 10/17/19   Time: 11:56
Sample: 1989 2018
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	462.8689	95.73903	4.834693	0.0000
OIL_TAX_REVENUE	0.045744	0.043291	1.056672	0.2997

R-squared	0.038348	Mean dependent var		526.6850
Adjusted R-squared	0.004003	S.D. dependent var		407.7046
S.E. of regression	406.8878	Akaike info criterion		14.91929
Sum squared resid	4635614.	Schwarz criterion		15.01271
Log likelihood	-221.7894	Hannan-Quinn criter.		14.94918
F-statistic	1.116556	Durbin-Watson stat		0.276125
Prob(F-statistic)	0.299693			

For the second model, the estimated linear regression shows that the relationship between oil revenue and capital expenditure is not significant at the 5% level, with a t-value of 1.056672 and a probability value of 0.2997. For the model, the F-value, which was insignificant at the 10% level indicates that the models do suffer from specification bias. However, from hypothesis 2, the coefficient of determination (R^2) indicates that about 3.83% of the change in capital expenditure was accounted for by the explanatory variable of oil revenue. In comparison, the adjusted R-squared of 0.04% further justifies this effect.

$$CE = 462.8689 + 0.045744\ OTR + e$$

Model 3
Table 5: Result of the Regression Analysis of Total Tax Revenue and Capital Expenditure
Dependent Variable: CAPITAL_EXPENDITURE
Method: Least Squares
Date: 10/17/19   Time: 12:01
Sample: 1989 2018
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	409.3564	97.28544	4.207786	0.0002
TOTAL_TAX_REVENUE	0.062448	0.034955	1.786542	0.0848

R-squared	0.102326	Mean dependent var		526.6850
Adjusted R-squared	0.070266	S.D. dependent var		407.7046

S.E. of regression	393.1198	Akaike info criterion	14.85045
Sum squared resid	4327208.	Schwarz criterion	14.94386
Log likelihood	-220.7567	Hannan-Quinn criter.	14.88033
F-statistic	3.191733	Durbin-Watson stat	0.350288
Prob(F-statistic)	0.084845		

From the results inTable 5, the sign of the coefficient of total tax revenue was positive. This implies that an increase in total tax revenue increases capital expenditure. Meanwhile, considering the statistical significance of the coefficients which could be judged from the Standard Error, T-Statistic and the probability value of each coefficient, the result show that capital expenditure was statistically insignificant. The R-squared statistic shows that explanatory variables in the model (total tax revenue) account for about 10.23 percent of the variation in the dependent variable (capital expenditure). Thus, the explanatory power of the model was low and appears to suggest that the included variable was a weak predictor of capital expenditure. F-statistic being insignificant implies that the overall goodness of fit of the model was not satisfactory.

$$CE = 409.3564 + 0.062448\ TTR + e$$

Discussion of Findings
The result as depicted in**Hypothesis I**aboverevealed that non-oil revenue on capital expenditure show that there is a significant positive effect of tax revenues on capital expenditure of Nigeria. This is in line with Okwara and Amori (2017), Ogbonna and Appah (2016) their results showed a significant relationship between non-oil tax and gross domestic product. Arising from this, the study accepts the alternative hypothesis that non-oil tax revenues has a greater impact on capital expenditure of Nigeria.

Findings from **Hypothesis II** shows there is no significant relationship between oil tax revenues and capital expenditure of Nigeria, which is against the views of Ojong, Ogar and Oka (2016), they found a positive correlation between oil revenue and economic growth of Nigeria.

The result of the study (**Hypothesis III)** further shows there is no significant relationship betweentotal tax revenues on capital expenditure of Nigeria, which is in line with Nwofor and Gordon (2013). The outcome of the analysis of the data conducted to test the research hypothesis indicates that total tax revenuenegatively affects expenditure, especially when those expenditures are mainly a recurrent expenditure.

Summary of the findings
A quantitative, descriptive, longitudinal research design was conducted to investigate the relationship between tax revenues and capital expenditures of the Nigerian economy. Data for the study were obtained from the audited financial statement of FIRS and CBN statistical bulletin between the periods of 1989 and 2018. Descriptive statistic and ordinary least square (OLS) method were used to analyse the data and the significance of the relationship between variables using F-statistics and p-value of 0.05/0.10. Findings for each objective carried out shows that two of the coefficient estimates was statistically insignificant at the 5 percent level except for non-oil revenue that was

significant with capital expenditure. This assertion was based on the low F-statistic and probability (F-statistics) which were greater than 0.05 and thus was statistically insignificant. Given that the Prob. value of two of the models is greater than 0.05; the null hypothesis could not be rejected. In effect, the alternative hypotheses of model 2 and 3 that there was a statistically significant relationship between oil revenue, total tax revenues and capital expenditure in Nigeria were not accepted. From the result, only non-oil revenue was significant with capital expenditure. The regression result for the two out of the three models further revealed that the relationship between the tax revenues and capital expenditure in Nigeria is not in line with the apriori expectation. Only one of the results does conform to a priori result.

Conclusion and Recommendation

The study examines tax revenues and capital expenditures of the Nigerian economy. From the findings, it was concluded that revenue generated form tax has no impact on capital expenditure allocation. Though currently, the major revenue of the Nigeria government is from oil tax activities and revenue from petroleum profit tax. Having evaluated the contribution of non-oil tax revenue and oil tax revenues to government income and economic growth, it was agreed that government should spend more on capital expenditure, not forgetting their responsibility on recurrent expenditure as well in order to sustain the growth of the economy. It is therefore recommended that revenues generated from non-oil taxes shouldbe invested in other domestic sectors such as agriculture and manufacturing to expand the revenue source of the economy and further increase her revenue base.

Contribution to Knowledge, Suggestions for further studies and Limitation of the Study

This study contributes to understanding the relationships between tax revenues and capital expenditure of the Nigerian economy, measuring tax revenues with the proxy of oil tax revenue, non-oil tax revenues and total tax revenues. The outcome of this research would contribute to the field of study and help the government to evaluate the effect of tax revenues on capital expenditure and growth of the economy.Therefore, future researchers should consider more variables and proxies to measure tax revenues and capital expenditure of the Nigerian economy using other sources of revenue and expenditure variables.This study was conducted using time series data extracted from the financial statements of the FIRS and CBN statistical bulletin. The major limitation of the study was the difficulty in getting timely and relevant data due to the delays by FIRS in publishing their financial statements.

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