

## **Impact of Taxation on Government Capital Expenditure in Nigeria**

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### **Abstract**

This paper investigated the impact of taxation on government capital expenditure in Nigeria. Secondary data were used and were obtained from Central Bank of Nigeria (CBN) Statistical Bulletin and Federal Inland Revenue Service Website for Period 1994 to 2016. Descriptive statistics was used to describe the variables under investigation, Augmented Dickey Fuller (ADF) Unit Root Test and Johansen Co-integration tests were used to establish the stationarity and long run association among the variables while Error Correction Model (ECM) was used to establish the exact impact of taxation on capital expenditure in Nigeria. The study showed that Company Income Tax (CIT), Petroleum Profit Tax (PPT), Personal Income Tax (PIT) and Education Tax (EDT) have significant financing power on government capital expenditure. Contrarily, Value Added Tax (VAT) and Capital Gains Tax (CGT) are not significant variables affecting government Capital expenditure in Nigeria. However, co-integration result indicated that there was a long-run relationship between tax revenue and government capital expenditure. It was concluded that taxation revenue has significant effect on government capital expenditure in Nigeria and the Nigerian government should improve its' efforts in ensuring that all taxes are collected to prevent revenue leakage, in order to ensure provision of adequate infrastructural facilities which translate to economic growth with a view to sustaining the welfare of it citizens.

### **Keywords**

Taxation, capital expenditure, revenue, economic growth

### **Introduction**

The performance from the public sector perspective of any economy is partly measured by the quantum and quality of infrastructure facilities available to its

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citizenry. The ability of the government of a country to make infrastructures available in turn depends on the revenue at the disposal of that government. A well-structured tax system is being considered as revenue boosting agent that any government could rely on in order to obtain meaningful economic growth and development on the long-run.

A tax is a fee charged or levied by a government on a semi-finished or finished product, income, or activity. Taxation is necessary to finance government expenditures and to ensure the redistribution of wealth, which translates to financing the development of the country (Bhartia, 2009; Musgrave & Musgrave, 2004; Ogbonna & Appah, 2012; Ola, 2001).

Government collects taxes in order to provide social amenities (Worlu & Nkoro, 2012) and tax is also the nexus between state and its citizens, and tax revenues are the lifeblood of the social contract. Taxation has profound beneficial effects in fostering better and more accountable government (Tax Justice Network (TJN), 2012). However, the micro effects of taxation lies on the distribution of income and efficiency of resource while its macro effect is on the level of capacity output, employment, prices, and growth (Musgrave and Musgrave, 2004).

The use of tax as an instrument of fiscal policy to achieve economic growth in most less developed countries might not be reliable because of dwindling revenue generation (Akaegbu, 2012; Worlu & Nkoro, 2012). Consequent upon this, changing or fine-tuning tax rates have been used to influence or achieve macroeconomic stability. The tax base in Nigeria has been on the increase in order to mobilise the resources needed to execute infrastructure projects. Insufficient growth and investment is mainly a consequence of a lack of resources, governments are chiefly concerned with increasing the resources available for investment through additional taxation. The availability and mobilisation of tax is the fundamental factor on which economic growth and development are sustained. This is due to the fact that tax is the most important, the most beneficial, and the most sustainable source of finance for development (TJN, 2012; Tony, 2014), and the long-term goal of poor countries must be to replace foreign aid dependency with tax self-reliance.

However, in Nigeria, revenue from tax has not been encouraging; thus, expectations of government are being cut short. In another exposition, Kiabel and Nvokah (2009) argue that the increasing cost of running government coupled with dwindling revenue has left all tiers of government in Nigeria with formulating strategies to improve taxation. In addition, Edame (2011) noted that there is now a greater demand for the optimisation of revenue from various tax sources in Nigeria. The attitude of Nigerians towards taxation is worrisome as many prefer not to pay tax if given the opportunity.

The economy continues to lose huge amount of revenue through the unwholesome practices of tax avoidance and tax evasion which adversely affected adequate provision of public goods in Nigeria. These phenomena have been lingering for so long that urgent attention and solution is long overdue.

More importantly, the cost associated with collecting tax in Nigeria both social and economic cost is too high to the extent that if left unchecked the cost may soon outweigh the benefit or value to be derived from the operation of tax collection. This probably informed the decision of the Federal Government of Nigeria (FGN) in 1991 to set up a study group on the review of the Nigerian tax system and administration.

This paper therefore attempts to address the impact of taxation on government capital expenditure with the view of remedying the country's revenue potentials for enhanced wealth creation and development. The broad objective of this study is to investigate empirically the impact of taxation, looking at the various tax components including company income tax, personal income tax, petroleum profit tax, value added tax, capital gain tax and education tax on government capital expenditure in Nigeria.

## **Literature Review**

### **Conceptual Review**

Tax is defined as a financial charge or levy imposed upon an individual or legal entity by a State or a legal entity of a State; it is a pecuniary burden laid upon individuals or property to support government expenditure. It also defined tax as a monetary charge imposed by the Government on persons, entities, transactions or properties to yield revenue. It went further to state that tax is the enforced proportional contributions from persons and property, levied by the State by virtue of its sovereignty for the support of Government and the public needs (National Tax Policy, 2013).

According to Musgrave and Musgrave (2004), tax plays an important role in Nigeria society and it is a force for economic development in the country, from the pre-colonial to the post-colonial eras. It is by far the most significant sources of revenue for modern government; hence, the recent call for increase in taxation. The revenue generated from tax by the government can be used to carry out its expenditure programmes including; social and infrastructural services, general administration *et cetera* (Adegbile & Fakile, 2016). For government to effectively carry out these enormous tasks, the tax revenue is believed to be most significant source of revenue to the government (Rabul, 2000). This proves why government in its annual budget limits the level of expenditure to commensurate with the projected revenue which tax plays a significant role. In essence, what taxes meant to the government is exactly what capital and gains are to individuals and business organisations.

## **Theoretical Literature**

The theoretical framework for this study is hinged on the neoclassical theory of tax. This theory as espoused separately by Mutt, Arthur Laffer and others in the

early 1920s is based on the assumption that the state is obligated to remove obstacles to free market competition because the market can and must regulate itself without external intervention; in addition, it can achieve economic equilibrium. Hence, this theory differs from the Keynesian one and assigns a rather passive role to state regulation of economic processes.

According to this theory, taxation policy should be developed under the same assumptions, taxes must be as small as possible and corporations should be granted significant tax exemptions. Otherwise, a high tax burden would hinder economic activity and restraint the investment policies of corporations, which would lead to a downfall in the production funds renewal and in an economic recession. A restricted taxation policy would allow the market to provide independently for fast development and would lead to a significant expansion of the taxation basis.

Arthur Laffer contributed considerably to the neoclassical taxation theory. He established a quantitative relationship between progressive taxation and budget revenues, and developed the so-called "Laffer curve." According to Laffer, an increase in the tax burden leads to an increase in state revenues only up to a level, where they start to decrease. The higher the tax rate, the higher the motivation for tax evasion. When the tax rate reaches a certain limit, entrepreneurship incentives are suppressed, the motivations for production expansion are reduced, taxable income decreases, and as a result, a part of the taxpayers will transfer from the legal to the shadow sector of the economy. Laffer considered that 30% of income is the maximum taxation rate that can be deducted for state budget purposes. This theory has been used in the investigation of the impact of tax on the increased government expenditure (Edame & Okoi, 2014).

## **Empirical Review**

Ofoegbu, Akwu and Oliver (2016), examined the effect of tax revenue on economic development of Nigerian, and to ascertain whether there is any difference in using GDP in establishing the relationship. The study used 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. This suggest that using gross domestic product (GDP) gives a painted picture of the relationship between tax revenue and economic development in Nigeria.

Ukwueze (2015) examined the determinants of the size of public expenditure in Nigeria for the period from 1961 to 2012. Using the Ordinary least squares (OLS) estimation technique, the study found that size of tax revenue and growth rate of national income (output) and private investment significantly influence the size of public expenditure both in the short run. The

similar study, Edame and Okoi (2014), examined the impact of taxation on investment and economic growth in Nigeria from 1980-2010. The ordinary least square method of multiple regression analysis was used to analyse the data sourced from the Central Bank of Nigeria statistical bulletin and NBS. The economic implication of the result is that a one percent (1%) increase in CIT will result in decrease in the level of investment and economic growth in Nigeria. Consequently, an increase in PIT will result in decrease in the level of investment. Finally, the result therefore showed that taxation is negatively related to the level of investment and the output of goods and services and is positively related to government expenditure in Nigeria. The study further established that taxation statistically is significant factor influencing investment, GDP and government expenditure in Nigeria.

Bukie and Adejumo (2013), examined the effect of tax revenue on economic growth of Nigeria for the period 1970 to 2011, regressing indicators of economic growth (domestic investment, labour force and foreign direct investment) on tax revenue. The result shows that the indicators all have a positive and significant relationship with economic growth in Nigeria.

Worlu and Emeka (2012), evaluated the impact of tax revenue on the economic growth of Nigeria between 1980 and 2007 using its effect on infrastructural development. They reported that tax revenue has direct and indirect relationships with the infrastructural development and the gross domestic product respectively (GDP). The authors argue that the channels through which tax revenue affects economic growth in Nigeria are infrastructural development, foreign direct investment, and GDP. They stressed that availability of infrastructure stirs up an investment that in turn brings about economic growth.

Success, Success and Ifurueze (2012), investigated the impact of petroleum profit tax on economic development of Nigeria between the period of 2000 to 2010. Their findings reveal that petroleum profit tax positively influences gross domestic product (GDP) of Nigeria, and the impact is statistically significant. They failed to report on the economic development that was the topic of consideration. However, the authors were worried that the enormous amount of money generated from Petroleum Profit Tax, and Oil Revenue do not translate into the economic development of Nigeria. They argue that the increase in the economic growth rate does not reflect in Nigeria's general economic development.

Adebile and Fakile (2011), studied the relationship between company income tax and Nigeria economic development using Chi-square and Multiple Linear Regression analysis in analysing the primary and secondary data respectively. The study concluded that there is a significant relationship between company income tax and Nigerian economic development and that tax avoidance and evasion are major hindrances to revenue generation. Okafor and Eiya (2011), evaluated the impact of tax revenue on the growth in government

expenditure in Nigeria. The data collected for these variables were subjected to the ordinary least square regression analysis. The results indicated that tax revenue has a significant positive relationship with government expenditure.

Owolabi and Okwu (2011), examined the contribution of only Value Added Tax (VAT) to development of Lagos State economy from 2001 to 2005. The study regressed each development indicator (infrastructural, environmental management, education sector, youth and social welfare, agricultural, healthcare, and transportation) on VAT revenue proceeds generated by Lagos State during the study period. Their finding was that revenue generated from VAT positively contributed to the development of the respective sectors of Lagos State economy during the period studied.

Adereti, Adeshina and Sanni (2011) extended the study by examining the impact of VAT revenue on economic growth of Nigeria during the period 1994 to 2008 using time series data on the GDP, VAT Revenue, Total Tax Revenue and the total revenue of the federal government. The result of the study was in line with that of Owolabi and Okwu (2011), showing an existence of a positive and significant correlation between VAT Revenue and Gross Domestic Product of Nigeria.

## **Methodology**

### ***Model Specification***

The study adopted the Government Expenditure Model from the work of Edame (2014). This model shows the relationship that exists between taxation and government expenditure and is stated as follows:

$$GCEX = f(CIT, PIT)$$

$$GCEX_t = \alpha_t + \beta_1 CIT_t + \beta_2 PIT_t + \mu_t$$

Where; GCEX = Government capital expenditure in Nigeria; CIT = Company Income Tax; PIT = Personal Income Tax;  $\mu_t$  = the random error.

The model was modified to include PPT, CGT, VAT and EDT because this study seeks mainly to capture the effect of various taxes in Nigeria have on the government's capital expenditure. Therefore, the modified model is re-specified as:

$$GCEX = f(CIT, PIT, PPT, CGT, VAT, EDT)$$

The model is further divided into two due to availability of data. Model 1 spans between 1994- 2016 while model 2 spans between 2004-2016. Education tax is a late development in the Nigeria tax system; hence, the data on education tax can only be obtained from 2004.

$$GCEX = f(CIT, PPT, VAT) \dots \dots \dots (i)$$

$$GCEX = f(PIT, CGT, EDT) \dots \dots \dots (ii)$$

Econometrically, the model is represented as follows:

$$GCEX_t = \alpha_t + \beta_1 CIT_t + \beta_2 PPT_t + \beta_3 VAT_t + \mu_t \dots \dots \dots (iii)$$

$$GCEX_t = \alpha_t + \beta_1 PIT_t + \beta_2 CGT_t + \beta_3 EDT_t + \mu_t \dots \dots \dots (iv)$$

Where;

GCEX = Government Capital Expenditure; CIT = Company Income Tax; PPT = Petroleum Profit Tax

PIT= Personal Income Tax; CGT = Capital Gains Tax; VAT= Value Added Tax; EDT= Education Tax

and  $\mu_t$ = the random error. Two models were used with same dependent variable due to difference in time span of the study data.

### ***Data Description and Analysis Method***

This study adopted *ex-post* facto research design by making use of historical data to validate existing facts. The secondary data relating to the study variables were sourced from annual publications of the Chartered Institute of Taxation of Nigeria CITN, Central Bank of Nigeria (CBN) Statistical Bulletin and Federal Inland Revenue Service Website for the period between 1994 and 2016.

Descriptive statistics was used to describe the variables under investigation. Furthermore, the study employed Augmented Dickey Fuller (ADF) Unit Root Test to test for stationary and Johansen Co-integration test was conducted to check for the existence of long run association among the variables in the models. Estimate from Error Correction Model (ECM) was used to test for the long-run adjustment among the variables in the two models.

### ***Data Presentation, Analysis and Interpretation of Empirical Results***

#### ***Descriptive statistics***

The descriptive statistics of all the variables of the model are reported in table 4.1 in terms of the number of observation mean, standard deviation, minimum and maximum values of the explained variable (government capital expenditure) and each of the explanatory variables (company income tax, personal income tax, petroleum profit tax, capital gain tax, value added tax and education tax) used in this paper. The measure of dispersion of the model variables are measured by the values of standard deviation as shown in table 4.1.

**Table 4.1: Summary of Descriptive Statistics**

MODEL 1					
VARIABLE	OBS	MEAN	STD. DEV	MIN	MAX
GCEX	23	1779.4	1570.0	55.9	4271.3
CIT	23	418.7	500.9	12.3	139.4
PPT	23	1268.0	950.9	42.8	2573.1
VAT	23	315.5	293.6	7.3	803
MODEL 2					
GCEX	16	2497.1	1343.9	529.9	4271.3
PIT	16	2551.4	1699.6	433.9	5007.7
CGT	16	3.8	4.6	0.2	19.7
EDT	16	144.1	82.9	49.5	288.8

**Source:** Authors' Computation, 2018 (Note: Figures are in billions)

The results in table 4.1 show that government capital expenditure ranges from ₦55.9b to ₦4271.3b with a mean of ₦1779.9b showing the deviation of ₦1570.0b from its mean value. This indicates that Nigerian government spent an average of ₦1779.4b on capital expenditure from her total revenue. However, as indicated in table 4.1, the overall average of company income tax was ₦418.7b ranging from ₦12.3b to ₦139.4b with the deviation of ₦500.9b from the mean.

Petroleum profit tax ranges from a minimum of ₦42.8b to a maximum of ₦2573.1b, it has a mean of ₦1268.0b with a deviation of ₦950.9b from its mean value. As far as value added tax is concerned, it has a minimum value of ₦7.3b and a maximum of ₦803.0b with an average value of ₦315.5b.

On the other hand, the mean of government capital expenditure for the second model was ₦2497.1b with a standard deviation of ₦1343.9b over the period under study while it ranges from ₦529.9b to ₦4271.3b. Furthermore, personal income tax ranges from ₦433.9b to ₦5007.7b, showing a deviation of ₦1699.6b from its mean value of ₦2551.4b. Capital gain tax demonstrated a minimum value of ₦0.2b and a maximum value of ₦19.7b with a mean value of ₦3.8b showing ₦4.6b deviation from its mean value. Education tax also has similar statistics capital gains tax.

**Table 4.2: Test for Multicollinearity**

Variance Inflation Factor (VIF) was used to test for multicollinearity among the independent variables. This is necessary because OLS regression technique assumes the absence of multicollinearity among the independent variables to expect a high level of accuracy from the estimator.

**Table 4.2: Test for Multicollinearity (Variance Inflation Factor)**

MODEL 1		
VARIABLE	VIF	I/VIF
CIT	5.76	0.17
PPT	4.94	0.20
VAT	9.18	0.09
MEAN VIF	6.63	
MODEL 2:		
PIT	1.10	0.91
CGT	1.06	0.94
EDT	1.13	0.89
MEAN VIF	1.10	

**Source:** Authors' Compilation, 2018

Table 4.2 showed the VIF and its inverse (also called tolerance) for all the independent variables. By rule of thumb, any variable whose VIF is greater than 10% highly collinear and vice-versa. From table 4.2, all the variables have VIF that are less than 10 which implied they are not collinear.

**Table 4.3: Result of unit root test using Augmented Dickey Fuller (ADF) Approach**

MODEL 1	LEVEL		FIRST DIFF.		ORD. OF INT
	T-stat.	p-value	T-stat.	p-value	d(I)
<b>Variable</b>					
GCEX	0.699	0.9898	-4.609	0.0015	I(1)
CIT	2.051	1.000	-3.791	0.0496	I(1)
PPT	-0.799	0.8195	-4.462	0.0219	I(1)
VAT	0.289	0.9768	-4.429	0.0227	I(1)
MODEL 2:					
GCEX	-0.663	0.8560	-4.757	0.0025	I(1)
PIT	-1.138	0.6998	-3.038	0.0396	I(1)
CGT	-2.620	0.5402	-3.969	0.0219	I(1)
EDT	-2.359	0.1537	-3.170	0.0433	I(1)

**Source:** Authors' Compilation, 2018

Note: I(1) = Stationary at First Difference

Table 4.3 showed that the variables are not stationary at a 5 percent level of significance which means that they have unit roots. The implication is that OLS regression could not be used on the non-stationary data as the result will be spurious. However, the order of integration was confirmed to be  $I(1)$  when the series became stationary after the first difference. This implies that no long-run relationship could be established between the independent variables and dependent variables. As a result, co-integration test was conducted to assess the possible long-run relationship in the models. The result is presented along with the probability value of the test in table 4.4.

**Table 4.4: Johansen co-integration test**

UNRESTRICTED CO-INTEGRATION TEST (TRACE)			
MODEL 1:			
HYPOTHESISED NO. OF CE(S)	EIGEN VALUE	T-test	p-value
NONE	0.953539	102.3524	0.0000
AT MOST 1	0.722840	37.88668	0.0047
AT MOST 2	0.404743	10.94029	0.2152
AT MOST 3	0.002202	0.046297	0.8296
MODEL 2:			
NONE	0.909347	61.62846	0.0015
AT MOST 1	0.751784	28.21847	0.0752
AT MOST 2	0.382722	8.711212	0.3928
AT MOST 3	0.130462	1.957103	0.1618

Source: Author's Compilation, 2018

Table 4.4 showed the result of unrestricted rank trace test of Johansen co-integration. The first hypothesis (Null) says that none of the variables is co-integrated. From the table, the  $p$ -value for the first hypothesis is 0.000, which is less than 0.05. The null hypothesis is therefore rejected meaning that the variables are co-integrated. Other hypotheses also confirmed the existence of co-integrating relationship among the variables.

**Table 4.5: Regression Result (Error Correction Model)**

MODEL 1		MODEL 2	
Variable	Coefficient(p-value)	Variable	Coefficient(p-value)
C	19.82448 (0.7911)	C	-8.22 (0.9696)
D(GCEX)(-1)	1.150844 (0.0019)*	D(GCEX)(-1)	2.171937 (0.0825)***
D(CIT)	-1.083047 (0.0348)**	D(PIT)	-2.157271 (0.0228)**
D(PPT)	1.032028 (0.0113)**	D(CGT)	-25.07111 (0.1504)
D(VAT)	0.073871 (0.9286)	D(EDT)	2.289984 (0.0502)***
ECT(-1)	-1.735750 (0.0002)*	ECT(-1)	-2.546171 (0.0278)**
ECM Statistics:			
R <sup>2</sup>	0.647309	R <sup>2</sup>	0.621602
Adjusted R <sup>2</sup>	0.529743	Adjusted R <sup>2</sup>	0.515103
F. stat.	5.506018	F. stat.	1.371779
Prob. (F stat)	0.004487	Prob. (F stat)	0.032851
D.W Stat	2.249621	D.W Stat	2.073108

Note \*, \*\* and \*\*\* denote statistically significant at 1%, 5% and 10% respectively

Also, p-values are reported in parentheses

Source: Author's Compilation, 2018

The result of the parsimonious Error Correction Model as presented in table 4.5 revealed lag of government capital expenditure, petroleum profit tax, value added tax and education tax to have a positive relationship with government capital expenditure. However, the company income tax, personal income tax

and capital gains tax showed a negative relationship with government capital expenditure.

In terms of the magnitude of significance, variables such as lags of government capital expenditure, company income tax, petroleum profit tax, personal income tax and education tax are significant as evidenced by their coefficients (1.150844, 2.171937, -1.083047, 1.032028, -2.157271 and 2.289984) with their *p*-values (0.0019, 0.0825, 0.0348, 0.0113, 0.0228 and 0.0502 respectively). This means that previous government capital expenditure has a significant effect on its present value. Company income tax was found to be negatively related to government capital expenditure meaning ₦1b increase in company income tax will lead to ₦1.08b decrease in government capital expenditure. This implies that CIT cannot be used successfully in financing government capital expenditure. Personal income tax also revealed a negative association with government expenditure such that ₦1b increase in PIT induces ₦2.16 reduction in government capital expenditure. By inference, therefore, PIT cannot finance government capital expenditure without other sources of revenue.

Petroleum profit tax depicted a significant positive association with government capital expenditure at 5% level of significance. However, it will leave a deficit of ₦0.03b since a ₦1b increase in PPT will result to ₦1.03 increase in government capital expenditure. This point to the fact that PPT cannot single-handedly finance government capital expenditure. In the same vein, education tax significantly impacted on government capital expenditure since a ₦1b increase in education tax will induce ₦2.28b increase in government expenditure thereby leaving a deficit of ₦1.29b.

However, value added tax and capital gain tax does not have a significant impact on government capital expenditure in Nigeria as shown in their probability values of 0.9286 and 0.1504 respectively.

The error correction term (ECT) is negative and statistically significant which implies that the validity of long run relationship between company income tax, petroleum profit tax, value added tax, personal income tax, capital gain tax, education tax and government capital expenditure in Nigeria. Also, the disequilibrium in the system is being corrected at the rate of 1.73% and 2.54% annually. In other words, the speed of adjustment to equilibrium is about 1.73% and 2.54%. R-squared of 0.64 and 0.62 indicates that about 64% and 62% of the variation in the value of government capital expenditure is explained in the model by the independent variables. Durbin Watson statistics of 2.25 and 2.07 testify to the absence of autocorrelation in the models. In terms of overall significance of the model, *p*-values of 0.004 and 0.033 that are less than 5% implies that the model is significant in explaining the impact of taxation on government capital expenditure in Nigeria.

## Discussion of Findings

The null hypotheses, which states that company income tax and personal income tax has no significant relationship with government capital expenditure were rejected. At 5% level of significance, this study found that company income tax and personal income tax have negative significant impacts on government capital expenditure in Nigeria.

Furthermore, petroleum profit tax and education tax have a significant relationship with government capital expenditure in Nigeria. At 5% level of significance, the null hypotheses were rejected. This may be because of the need to mobilise more resource outside taxation to execute infrastructural projects successfully.

Finally, value added tax and capital gain tax have no significant impact on government capital expenditure in Nigeria at a 5% level of significance; as such, their respective hypotheses were rejected. This may be on the account of cutting short government expectation because of corruption, evasion and avoidance.

The findings of this study agreed with that of Ofoegbu, Akwu and Oliver (2016) and Bakei and Adejumo (2013) which found a positive association between tax revenue and capital expenditure. The result was also in agreement with that of Edame and Okoi (2014), which found a negative and significant relationship between Capital gain tax, personal income tax and government capital expenditure. This study was also in partial consonance with the result of Worlu and Emeka (2012) who reported an inverse significant association between infrastructural development and tax revenue.

Lastly, this paper differed from that of Adewara and Oloni (2012), which found a negative relationship between expenditure on taxation and education tax and a positive relationship between health and agricultural expenditure and taxation. This finding was also in line with the neoclassical theory of taxation, which suggests that taxes should be appropriate and sufficient to finance the expenditure need of the nation.

## Conclusion and Recommendations

Based on the findings, this paper concludes that the various forms of taxation affect government capital expenditure in Nigeria except for value added tax and capital gain tax. This means that change in government capital expenditure is caused by a change in the various forms of taxation. Furthermore, this study concludes that none of the forms of taxes could finance government capital expenditure successfully without the need for other sources of finances in Nigeria. Finally, long run association between government capital expenditure and the various forms of taxation was found by this study.

In line with the conclusions reached in this paper, it was recommended that the Nigerian government should evolve means of communicating effectively with Nigerian citizen on the importance of taxation in nation development.

This will go a long way to change the citizens' orientation about the reason for tax collection. Also, judicious use of the amount collected as tax should be tailored towards capital infrastructural facilities, health facilities, standard education and national development. Lastly, government should intensify efforts in the collection of other forms of taxation such as capital gain tax, withholding tax and education tax in other to enhance revenue collected for the provision of socio-amenities and achieve the desired objective of economic growth.

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## Naira Values of the Variables used in the Study

### Appendix1

YEAR	GCEX (b' ₦)	CIT (b' ₦)	PPT (b' ₦)	VAT (b' ₦)	PIT (b' ₦)	CGT (b' ₦)	EDT (b' ₦)
1994	55.92	12.3	42.8	7.3	-	-	-
1995	77.90	21.9	42.9	20.8	-	-	-
1996	83.99	22	76.7	31	-	-	-
1997	92.69	26	68.6	34	-	-	-
1998	143.77	33.3	68	36.9	-	-	-
1999	163.12	46.2	164.3	47.1	-	-	-
2000	355.68	51.1	525.1	58.5	-	-	-
2001	529.95	68.7	639.2	91.8	455.3	3.436598	125.6
2002	707.67	89.1	392.2	108.6	586.6	3.654998	94.13
2003	869.33	114.8	683.5	136.4	433.9	2.873398	142.7
2004	969.74	113	1183.5	159.5	703.1	2.091798	51.3
2005	1,303.85	140.3	1904.9	178.1	1194.8	2.310199	159.9
2006	1,478.30	244.9	2038.3	221.6	1741.8	4.528599	218.4
2007	2,072.23	275.5	1600.6	289.6	1866.2	4.746999	276.9
2008	2,961.13	361.9	1730.6	401.7	1846.9	6.965399	65.5
2009	2,710.22	568.1	1976.1	481.4	2972.2	0.1838	94.1
2010	3,170.80	654.3	2316.4	564.9	2197.6	3.4022	97.3
2011	3,431.00	700.5	2573.1	659.2	4628.5	0.3794	288.8
2012	3,629.70	816.5	2036.2	710.6	5007.7	4.161	279.4
2013	3,838.84	941.3	2183.9	802.7	4805.6	19.6559	189.8
2014	3,883.00	1097.5	2362.1	803	4714.6	1.866	97.9
2015	4,127.16	1592.3	2173.3	635.4	3741.8	0.1903	73.7
2016	4,271.32	1639.4	2381.8	777.5	3926.5	0.1903	49.5

Source: Central Bank of Nigeria Statistical Bulletin & FIRS website