



EFFECT OF TAX REVENUE ON NATIONAL DEVELOPMENT IN NIGERIA

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Abstract

Growth and Development of any nation no doubt cannot be divorced from the efficacy of her fiscal policy strategy at raising needed funds. This study examines the effect of Tax Revenues on National Development in Nigeria between 2000 and 2022 using time series data. Specifically, it assess the effect of Company Income Tax (CIT), Value Added Tax (VAT) and Custom& Excise Duties (CED) on economic growth using secondary data sourced from Central Bank of Nigeria annual statistical publications as well as publications of Federal Inland Revenue and National Bureau of Statistics. The study used augmented Dickey Fuller test to ascertain the stationarity of the variables. Auto Regressive Distributed Lag Model was utilized to evaluate the effects of the CIT, VAT and CED on Gross Domestic Product (GPD). Findings of the study revealed that CIT and VAT have significant and positive effect on GDP, while CED negatively affects GDP. Consequently the study recommends among others that government should encourage tax payers by justifying the rationale for paying tax through judicious and "visible" utilization of the tax revenue.

Keyword: Economic growth, Taxation, Tax payer, Company Income Tax, Value Added Tax, Custom & Excise Duties

1. INTRODUCTION

One of the over-arching responsibilities of government of any nation amongst others is the enhancement of the welfare and well-being of the citizens through formulation and implementation of appropriate fiscal and monetary policies. In fulfilling this cardinal objective, there is a need for government to generate revenue both internally and externally. One of the fundamental clog in the wheel of government performance in the underdeveloped economies (Nigeria inclusive) has been paucity of revenue to prosecute capital projects that would have impacted significantly on the growth and development of the their economies. A significant source of revenue for government is Taxation

(Adereti, 2011). Other sources of income to Nigerian government apart for tax include oil revenue, Aids and grants, Proceeds from government asset sales, income from government parastatals, and borrowing. Tax is a compulsory levy imposed by government on her citizens in order to serve as source of revenue for the government in providing public goods and services for the well-being of the citizens. (Aboyade, 2010). The economic growth of every economy no doubt to a greater

extent hinges on the effectiveness of her tax structure, management and administration.(Adeusi, Uniamikogbo, Erah & Aggrah, 2020). Tax structure affects the compliance of the tax payers among other determinants. (Amah,2021). In 2021, Nigeria's tax to Gross Domestic product ratio stood at 10.86 per cent (NBS, 2021). This ratio however seemed relatively low relative to what is obtainable in developed and emerging economies. No doubt, Tax laws in Nigeria has witnessed significant review and reforms over time in order to ensure high and better level of tax compliance and tax yield. As observed by Wasao, 2014, some of the factors responsibling for tax non-compliance in Nigeria are lack of time on the part of tax payers to visit tax office (though taxes can now be paid online for proper education, lack of visible infrastructural developments prosecuted with tax payers' money, corrupt practices in tax administration as well as tax payers , especially self- employed adopting all kinds of methods to perpetrate tax evasion and avoidance by exploiting loopholes in the tax structure and administration. Ojong (2016) observed that the current tax system in Nigeria is targeted at guaranteeing both recurrent and capital



expenditures of government but not as a tool to enhance rapid industrial revolution and employment generation coupled with its income redistribution function. No doubt, the cumulative effect of the contemporary tax system and administration in Nigeria on tax volume will adversely affect the contributory impact of tax revenue to the National development if urgent and drastic efforts to enhance better tax generation are not taken. It is against this backdrop that this study focuses on investigating the effect of tax revenue on national development of Nigeria covering the period between year 2000 and 2022.

Specifically, the study will empirically investigate;

1. how company income tax revenue impacted on the gross domestic growth in Nigeria during the period under investigation?
2. the extent of the effect of value added tax revenue on economic growth in Nigeria and
3. how has revenue from custom & excise duties fared in contributing to Nigeria GDP during the period to be investigated?

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework

2.1.1 Taxation Conceptualized

Different scholars has defined taxation in different ways. Anyanwu (2007) described tax “ as a payment compulsorily made by private individuals, group of individuals and institutions to the government”. The levy could be on profit, income, wealth or even charges on purchase of and services. According to Federal Inland Revenue Service (FIRS, 2012), taxation refers to the mandatory proportional contributions from individuals as well as on property possession levied by government the reason of its legal backing in order to finance government administration and provide for the welfare of the public. It is one of the significant internal sources of revenue from which government obtains income to finance her activities (Ojong, Anthony, and Arikpo, 2016). McLure (2015) opined that taxation is an obligatory monetary price or levies imposed on taxpayer (be individuals or legal entity) by government with the motive of raising revenue to fund public expenditure. Taxes are imposed on individuals as well as corporate income either directly or indirectly. Direct taxes

include the one levied on personal income and corporate income for tax payers, while mandatory payment levied on goods, services and profitable businesses is referred to as indirect taxes. Chijoke, Leonard, Bosco and Henry (2018) defined taxation to be a mandatory levy due for collection by government representatives from her qualified citizens. The unanimity among various scholars is that tax is a compulsory levy imposed by government every economy on taxable individuals, goods services as well as corporate organizations in order to raise revenue to finance government activities for national development among other purposes.

2.1.2 Nigeria Tax Structure

Tax structure in Nigeria has undergone major review and modifications over time. Currently, the country operates decentralized tax structure tailored towards administrative hierarchy in governance among the three tiers of government: Federal, state and local government. Each tier is constitutionally empowered to administer taxes within her jurisdiction to finance government functions thereby promoting economic growth and development (Nwachukwu, Nwoha and Inyama, 2022).

2.1.3 Company Income Tax (CIT)

FIRS (2022) defined company income tax as a tax imposed on profit of company (incorporated entities) from all sources. The tax is governed by companies Income Tax Act (CITA) 1979 with its root from the lincome Tax Management Act of 1961. CIT also include payment on profit of foreigners (non - residents) transacting businesses in Nigeria. Some profits are however exempted from CIT as long as such profits are not derived from transactions involving the company. Example of such is cooperative society. CIT is administered and collected by FIRS. In 2022, the CIT revenue was ₦2.83trn which was about 3.14% of the total projected tax of ₦83trn for the year (FIRS,2022). CIT no doubt is expected to form a good percentage of national income.

2.1.4 Value - Added Tax

Value –Added Tax also known as Goods and Services Tax (GST) is a tax levied on purchase or consumption at every stage of transaction with its incident on final consumer of such good and service (Edewusi and Ajayi, 2019). The tax is levied at each stage of production and distribution to the end consumer. It is a type of indirect tax. Currently, it is charged at the rate of



7.5 % payable by individuals, companies and government agencies with exception of certain goods and services. FIRS is the body saddled with the responsibility of VAT administration in Nigeria. In 2022, the revenue accruable from VAT was ₦2.49trn amounting to 31% of the total expected revenue from tax in the fiscal year. As observed by Edewusi and Ajayi (2019), VAT constitutes a significant proportion of GDP in some of the sub - Sahara African countries.

2.1.5 Custom and Excise Duties (CED)

Custom and Excise duties are taxes imposed on goods that are either imported or exported in cross - border transactions (Edewusi and Ajayi, 2019). It may be in form of ad valorem (which is a fixed percentage to be paid on the monetary value of imported goods) or specific duty. In specific duty, it is not the price of the goods that determines the amount to be paid but rather the weight, volume, e.t.c of the goods. In 2022, the amount of revenue realized from CED was ₦2.60trn representing about 3.13% of the expected revenue from tax for the year (FIRS, 2022). As like other form of taxes, CED is expected to as well significantly contribute to the GDP of Nigeria.

2.2 Theoretical Review

2.2.1 Ability – to - Pay Theory

The proponent of the ability to pay theory was M.S Kendrick in 1993. The theory was premised on the equitable tax distribution according to assumed taxable ability of individual tax payer or group. The theory atimes referred to as “horizontal equity approach” ensures actualization of equitable income distribution and stabilization objective of taxation as those with more income are to pay more taxes. Thus, tax burden is apportioned according to relative ability to pay (Mattew, 2014). The main shortcoming of the theory is that it is not free from value - judgement as the criteria for determining “ability” remains ambiguous (Mattew, 2014).

2.2.2 Benefit Principle

The benefit school of thought led by J.S. Mill argued that distribution of tax burden should reflect the size of public goods being enjoyed by individual. A public good in this regard is defined as a good, which is equally available to all members of a community (sharing group), but whose cost of provision is a function both of the level of provision and the size of the sharing group. The implication deducible from the

argument above is that the government collects from the private sector how much it spend in it, and tax payers pay directly for services they enjoyed. A major underlying assumption of this school of thought is that taxpayers will voluntarily reveal their true preferences. It is further assumed that the public goods under consideration are normal goods, such that taxpayers’ preferences will be positively related to income levels (Abomaye, Micheal & Friday 2018).

If tastes are the same and marginal utility of income decreases as income rises, then low income earners are likely to value same unit of a public good lower than high income earners. The appropriate tax formula under this principle would then be largely determined by preference patterns. More specially, it would depend on income and price elasticity of demand for public goods. Thus, if income elasticity is high, and price elasticity is low, taxes should rise with income, calling for progressive taxation. However, proportional or regressive taxation will occur if income elasticity equals or falls short of price elasticity respectively. A critical look at the above theoretical postulates will show two prominent shortcomings. One, the benefit theory emphasizes internalizing of government expenditures with little attention to the redistribution effects of doing so. Two, the theory tends to suggest that taxes are more or less prices, whereas they are not. This is because taxes do not involve exchange which exists under prices (Ngwoke, 2019).

2.2.3 The Least Aggregate sacrifice Theory

The theory of taxation is usually based on the least aggregate sacrifice theory. According to this theory, a tax payer’s sacrifice that has to be made as a result of taxation is the difference between the net satisfaction the tax payer is to enjoy in the absence of any tax and the net satisfaction the taxpayer enjoys when there is tax. In the implementation of the above theory it is generally agreed that distributive justice or equity must be upheld in the distribution of burden in a tax regime. However, opinions differ as to what really constitute fairness in the sharing of the tax burden. In this regard we recognize two schools of thought. They are the benefit and ability to pay schools.

2.3 Empirical Review

Ebimobowei and Ogbonna (2012) investigated the impact of tax reforms on economic growth in Nigeria using descriptive and econometric analytical methods found that effective tax management through relevant tax management reform policies significantly impacted on economic growth. Okafor (2012), using Ordinary Least Square regression analysis found a significant relationship between Gross Domestic Product and tax revenue between period 1981 – 2007. Moreover, Ofoegbu, Akwu and Oliver (2016) carried out the empirical analysis on the effect of tax revenue on the effect of tax revenue on economic development in Nigeria using Annual Time Series data for the period 2005 – 2014 using OLS. The study found a positively significant relationship between tax revenue and economic development. Inyiama, and Ubesie (2016) carried out a study on the effect of value added, custom and excise duties on economic growth in Nigeria using multiple regression analysis. The study found positive relationship between these indirect tax components and Economic growth. Onoh (2021) investigated the impact of Tax policies on Economic growth in Nigeria, and the result of the study established inconclusive relationship between Tax policies and Economic Growth. Ajala and Afolabi (2021) investigated the effect of taxation on economic development in Nigeria using primary data using Taro Yamani technique. The study found that taxation contributed significantly to economic development of Nigeria.

3.0 Methodology

3.1 Research Design

This study used ex- facto research design since the study relied on secondary data already in

existence before the study was conducted (Ngwoke, 2019).

3.2 Sources of Data

Secondary data for the study was sourced from Central Bank of Nigeria Annual Statistical Bulletins and publications of Federal Inland Revenue and National Bureau of Statistics.

3.3 Model Specification

The model for the study is functionally given as;
 $GDP = f(CIT, VAT, CED)$ (i)

Where;
 GDP = Gross Domestic Product proxying Economic Growth
 CIT = Company Income Tax
 VAT = Value Added Tax
 CED = Custom and excise Duty as proxy for Tax revenue
 Parametrically, equation (i) becomes;
 $GDP = \beta_0 + \beta_1CIT + \beta_2VAT + \beta_3CED + \mu$ (ii)

Where:
 β_0 = constant, β_1 , β_2 and β_3 are parameter estimate for CIT, VAT and CED respectively.
 μ = The error term.
 Transforming equation (ii) into logarithmic function for better result interpretation, it becomes;
 $\log GDP = \beta_0 + \beta_1\log CIT + \beta_2\log VAT + \beta_3\log CED + \mu$
 The A priori expectation is;
 $\beta_0 > 0, \beta_1 > 0, \beta_2 > 0$ and $\beta_3 > 0$.

Descriptive Analysis of the Variables

The descriptive statistics of the variables are as shown in table 1 below:

Table 1

	LGDP	LCITR	LVATR	LCEDR
Mean	12.72118	8.14661	10.04217	10.62108
Median	12.03662	8.63204	10.33001	10.80241
Maximum	16.74215	9.03512	10.97607	10.90854
Minimum	14.50441	7.03510	9.70714	10.00412
Std. Dev.	0.575508	1.4416	0.66453	0.41703
Skewness	-0.74632	-1.25170	0.52217	0.44023
Kurtosis	2.87341	1.60784	2.78751	2.09115
Jarque-Bera	2.89423	1.20014	2.66503	0.79221
Probability	0.54170	0.65327	0.66120	0.47218
Sum	157.6714	132.6542	153.4870	128.6301
Sum sq.Dev.	4.74201	6.35210	12.47211	1.96453
Observations	23	23	23	23

Source: Computation by authors with Eview 9.0 version

Descriptive statistics shows the attributes of the variables used in the study; The mean, median, maximum, minimum, standard deviation, skewness, kurtosis, Jarque - bera, probability sum square deviation and number of observations.. As revealed in the table, the LGDP has a maximum and minimum values of 16.74215 and 14.50441 respectively. The mean and median measures the central tendency. The dependent variable, log of gross domestic product has a mean of 12.72118 and standard deviation of 0.575508 implying high fluctuation of the GDP during the year under investigation. Moreover, all the variables had a positive mean values. The skewness of normal distribution typically ranges between 1 and 0 with positive

skewness indicating long - right tail while negative skewness depicts long- left tail. Logs of GDP and CTR were negatively skewed, while logs of VAT and CED were positively skewed.

Unit Root Test Summary

Table 2: Augmented Dicky Fuller Unit Root Test Result

The stationary properties of variables involved were tested. The null hypothesis being tested is that the variables are non-stationary at level against the alternative of stationary. A variable is stationary if the value of the ADF test statistic is more negative than the critical value at 5%.

Variables	ADF Coefficient	Critical value @ 5%	Probability	Order of Integration
LGDP	-4.55341	-3.43275	0.0056	I(1)
LCITR	-3.86644	-3.43710	0.0361	I(0)
LVATR	-3.73326	-2.90862	0.0210	I(1)
LCEDR	-5.05321	-5.55021	0.0035	I(0)

Source: Computation by authors with Eview 9.0 version

As shown in the table above, logs of company income tax revenue and custom and excise duties revenue were stationary at levels (I(0)) while logs of Gross domestic product and value added tax revenue were stationary at first difference (I(1))

Presence of auto- correlation which often occurs in time series data leads to spurious regression inferences, as the standard error may be too large or too small depending on whether the autocorrelation is positive or negative. If negative, the standard error will be too large and bias while it will be otherwise if positive and as well bias.

Test for Autocorrelation

Autocorrelation Test Result

Table 3: Breusch – Godfrey Serial Correlation LM Test Summary

F – Statistics	632.0167
Probability Values	0.2104

Source: Computation by authors with Eview 9.0

There is no autocorrelation when the probability value is greater than the 5%, and if otherwise, autocorrelation exists. As shown in the table above, the null hypothesis of no autocorrelation is accepted as the probability value is greater than 5%.

Heteroskedasticity Test

Another common source of spurious regression inference in time series data is the presence of heteroskedasticity, resulting to bias standard error and t- statistic value.

Table 4: Breusch – Pagan Godfrey heteroskedasticity Test Summary

F- Statistic	1.211430
Probability Value	0.2928

Source: Computation by authors with Eview 9.0

Heteroskedasticity exists when the probability value is lower than 5%, and otherwise, if the probability

value is greater than 5%. As revealed in the table above, absence of heteroskedasticity is confirmed as the p- value is greater than 5%.

Bound Test

Table 5: Bound Test Summary using Wald’s Test

Upper limit	4.06
Lower limit	3.02
F- Statistic =2.7253	

Source: Authors’ computation using E- view 9.0

Arising from the result about, the study concluded that there was no long run relationship among the estimated variables over the period under

investigation. This is because the lower limit is greater than the F-Statistic (i.e 3.02 > 2.73).

Table 6: Auto regressive Distributed Lag Result Summary

Dependent variables – LGDP				
Variables	Coefficient	Std.error	T- statistic	Probability
C	0.796331	0.402311	2.914211	0.0425
LCITR	0.021782	0.033751	0.563121	0.0311
LVATR	0.016328	0.235122	0.436300	0.0274
LCEDR	-0.026115	0.025078	-1.420315	0.2114

R- Squared = 0.815108
 Adjusted R- Squared = 0.770541
 F- Statistic = 24.58318
 Prob(F- Statistic) = 0.005000
 Durbin – Watson stat = 2.142744

Source: Authors’ computation using E- view 9.0

Fitting the values obtained in the ARDL as shown in the table above into the model, we have;
 $LGDP = 0.796331 + 0.0219 + 0.0163 - 0.0261 + Ut$

From the regression results, the adjusted R² which explains the goodness of fit is 0.770541, about 77%. Thus, it implies that about 77 per cent change in GDP was explained by the independent variables in the model. The F-statistic 24.58318 which is greater than 2.5 with probability value of 0.005000 also less than 0.05 implies that the model for the study has high goodness of fit and as well significant. Furthermore, the results revealed that Company income tax and value added tax have positive impacts on the dependent variable, real GDP, while custom and excise duties has negative impact on the GDP. Specifically, if revenue accruable from company income tax and value added tax increased by one unit, the real GDP will increase by 0.0219 and 0.0163 units respectively, *ceteris paribus*. On the other hand, a unit increase in revenue from custom and

excise duties will reduce the real GDP by 0.0261 units, *ceteris paribus*. The explanatory variables have probability values of 0.0311, 0.0274 and 0.2114 respectively indicating that company income tax revenue, value added tax revenue have significant effect on the real GDP at 5% significant level, while the effect of custom and excise duties revenue was insignificant. Durbin – Watson value of 2.142744 implies no autocorrelation and hence, no serial correlation.

CONCLUSION AND RECOMMENDATION

Conclusion

The study examined the effect of Tax Revenue on the National Development of Nigeria from 2000 to 2022 with specific focus on company income tax, value added tax and custom & excise duty revenue sources. Findings of the revealed that company income tax and value added tax positively and significantly affect the real gross domestic product of the economy while custom & excise duty revenue source has negative and insignificant effect on the real gross domestic product of the economy.



Recommendations

Base on the findings of this study, the following recommendations are made:

- i. There is a need for government to put in place appropriate tax policy measure that will minimize tax evasion and avoidance by the registered companies and as well equally ensure that illegally operating companies are made to register with appropriate government agency in order to maximize the contributory impact of company income tax to the national development of Nigeria.
- ii. Government should put in place appropriate mechanism in order to ensure that cases of by-passing excise & duty charges on imported goods are minimized.
- iii. Government should as a matter of urgency establish value added tax tribunal as recommended under value added decree of 1993.

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