



Effect of Tax Structures on Gross Domestic Products in Nigeria

Nwankwo, Geraldine Chinyere¹; Prof. Oliver Inyama Ikechukwu²; Prof. Uche Lucy Onyekwelu, PhD³

^{1, 2 & 3} *Department of Accountancy,*

Faculty of Management Science,

Enugu State University of Science and Technology (ESUT), Enugu, Nigeria.

¹ Cynthiaanwankwo604@gmail.com, 08137256699

² inyiamaik@yahoo.com, 08035507599

³ inspireangell6@gmail.com, 07042984055

Abstract

Research Purpose: In the context of Nigeria's economic challenges, understanding the impact of tax structures on GDP is crucial for formulating effective fiscal policies. This study evaluates the effects of petroleum profit tax, corporate income tax, capital gains tax, and value-added tax on Nigeria's gross domestic product (GDP) from 2011 to 2021.

Methodology: The study utilised data from the Federal Inland Service publications and the Central Bank of Nigeria statistical bulletin. Descriptive statistics and common regression analyses, including unit root tests and least square regression, were employed to determine the relationships between the variables.

Findings: The analysis revealed that value-added tax, petroleum profit tax, and corporate income tax positively and significantly impact economic growth. Conversely, capital gains tax negatively and insignificantly affects GDP. The independent variables collectively exhibit a strong and significant relationship with GDP.

Conclusion: The study concludes that value-added tax, petroleum profit tax, and corporate income tax are significant determinants of economic growth in Nigeria. These taxes are productive and reliable predictors of GDP in developing countries.

Recommendations: The study recommends that the government implement policies to enhance citizens' income, create employment, and ensure salary equity across government establishments. Additionally, a reformed tax system should be established to provide adequate revenue for public expenditures, reducing the need for fund-raising activities.

Key words: Tax structures, PPT, CIT, CGT, VAT.

1.0 Introduction

Most of the money needed to run our government comes from taxes. Taxes are the payments that individuals and business firms make to cover the costs of government services. The power to impose taxes is basic to the power to govern. For the tremendous economic growth of the country; the amount of money government collected in taxes in a



recent year from every person in Nigeria, these sums was made- up of taxes on property; taxes on goods and services; taxes on imports; taxes on income; taxes on estates, inheritances, and gifts; and social security taxes. Tax policy in Nigeria is aimed at achieving a number of specific objectives, including generating revenue and sustaining economic growth. Recently, the Nigerian government reported total tax revenue generated in developed countries. Although proponents of common sense, different conclusions about the relative effects of direct and indirect taxes on economic growth (Umuoru & Anyiwe, 2013). Economic growth is the basis for increased prosperity. Investing in new capital (both human and physical), the implementation of new production technology and the introducing new production are the basis of growth processes. The effect on the expected profitability of R & D can affect the taxable elections and ultimately, increase the growth rate. Most developing countries, such as Nigeria, have had a constant increase in taxes during the previous century. It is typical to increase by around 5 to 10% of GDP when this century returns to 20 to 30% current. Such a significant increase in taxes raises serious questions about the effectiveness of generation of taxes from individuals and firms, especially the private firms (Gareth, 2000).

Federal Customs and Excise tax is the type of tax, which the consumer pays on the purchase of certain goods and services. These taxes are imposing on only certain goods and services such as gasoline, cigarettes, and air travel. The Excise taxes are included in the prices of the goods or services. It is essentially federal taxes, only the federal government can collect taxes on imports.

Petroleum Profit Tax (PPT) such as Oil profits tax, established to collect taxes, through which the government can generate revenue, solve problems of the country, and increase public spending, is said to benefit the people through the provision of economic and social infrastructure. The birth of the oil boom encouraged a certain laxity in management of non-oil revenues such as corporate tax, personal income tax, value added tax, etc. therefore, there is an urgent need to improve the tax system to improve performance evaluation, implementation and facilitate adequate macroeconomic planning (Adereti, et al, 2011).

Income taxes are taxes on individuals and corporations, which produce about two-thirds of the federal government's total income. More than half the states also impose income taxes. In addition, some cities levy the earnings of locally employed workers.

Corporate income taxes: are levied on the corporation's yearly profits and paid directly to the federal government. This results in a kind of double taxation. The Federal Internal



Revenue Service of Nigeria administers corporate income. The enactment passed on Company Income Tax (Ogbonna and Appah, 2016). Companies operating in the oil sectors were not included in this case. The tax charges were based on profit of the company which accrued in, derived from, or received in Nigeria as regards to trade or business, rent, premium, dividends, interest, royalties and any other sources of annual profits (Chigbu and Njoku, 2015).

Gross Domestic Product (GDP): is the total value of everything produced within a country's borders. It is the size of the economy (Amadeo, 2021). It is the market value or total monetary value of all the finished goods and services produced within a country's borders in a specific time. Being the broad measurement of overall domestic productions, it functions as an integrated scorecard for economic health in this field.

Currently, due to insufficient fund caused reduction in petroleum revenue upon which the country depends on for development and economic growth, there was a threat to governance because the entire petroleum revenue was used for recurrent items by the government as a result of this, it placed the country in a worst position (Khadijat and Trophic, 2014).

To analyse the Tax structure and Economic growth in Nigeria and evaluate the relationship among petroleum profit tax, corporate income tax, capital gain tax, value added tax and gross domestic products in Nigeria. The remaining sections of this study are in four categories of section 2. This is an examination of existing related documents, followed by section 3. In section 4, researchers discuss empirical surveys and finally summarise their research.

2.0 Review of Literatures

Nigeria's tax system has undergone significant changes in recent times. The administration of CIT (Company Income Tax) left to the Federal Tax Service in Nigeria. The tax administered by the Nigeria Customs Department is known as import tax. Petroleum Profit Tax (PPT), Company Income Tax (CIT), Education Tax (ET), Personal Income Tax (PIT) is currently regulated under destination-based system, which means that taxes are levied on goods and services consumed within the tax area (Hines, 2002). In Nigeria, the applicable sales tax rate is 7.5% On purchased goods and services, but the power, this implies that the imposition of Value Added Tax (VAT) is designed to stimulate export growth of all companies with the tax rate of 2% on taxable profits in accordance with the law on corporate income tax rate of 30%.

Taxation comprises two types: indirect taxes and direct taxes:



Direct taxes include Petroleum Profit Tax (PPT), Company Income Tax (CIT) and Capital Gains Tax (CGT).

Petroleum profit tax (PPT)

PPT is a tax on the income of companies engaged in upstream petroleum operations in lieu of CIT. The PPT rates vary as follows: 50% for petroleum operations under production sharing contracts (PSC) with the Nigerian National Petroleum Corporation (NNPC).

CIT is governed by Companies Income Tax Act (CITA), Cap C21, LFN 2004 (as amended)

Corporate income tax rate is a tax collected from companies. Its amount based on the net income companies obtain while exercising their business activity, normally during one business year. The benchmark we use refers to the highest rate for corporate income. Revenues from the corporate tax rate are an important source of income for the government of Nigeria. CIT is a tax imposed on the profit of a company from all sources. The rate of tax is 30% of the total profit of a company. Some profits, exempted from CIT provided. Corporate income taxes are not derived from trade or business activities, carried out by the company e.g. Cooperative society. Every company shall pay provisional tax, not later than three (3) months from the beginning of each year of assessment, which is an amount equal to the tax paid in the previous year of assessment. This is a payment on account of the year's income tax assessment

The due date for filing returns: For newly incorporated companies within eighteen (18) months from the date of incorporation or not later than six (6) months after the end of its accounting period; whichever is earlier For existing companies, within six (6) months from the end of the accounting year. A self- assessment filer may (by application) commence payment of instalment before the due date but such instalment cannot extend beyond two months after the due date; Companies in operation for more than four (4) years are liable to minimum tax except those specifically exempted by the tax law.

Minimum Tax under CITA arises where:

- A company makes a loss
- A company has no tax payable
- Tax payable is less than minimum tax
- Withholding Tax (WHT) is a method used to collect Income Tax in advance



- WHT is deducted at varying rates ranging from 5% to 10% depending on the transaction
- The due date for filing WHT returns is 21st day of every succeeding month
- Penalty for late filing of returns is N25, 000 for the first month it occurs and N5000.

Capital Gains Tax (CGT)

Governed by Capital Gains Tax Act, Cap C1 LFN 2004 (as amended):

Capital Gains Tax, charged at a flat rate of 10% of chargeable gains, all chargeable assets are subject to Capital Gains Tax, when disposed of at a gain, except those specifically exempted by the Act. Chargeable assets include all forms of property whether or not situated in Nigeria. The due date for filing return and payment of the tax is the same as in Companies Income Tax. Allowable expenditure for the purpose of CGT includes fees, commissions or remunerations paid for professional services and cost of transfer, Gains exempted from Capital Gain Tax (CGT) includes those arising from disposal of decorations awarded for valour and gallant conduct: life insurance policy, Nigerian government securities, stock etc. Gains shall not be chargeable, if it accrues to some organisations provided the gain is not derived from any disposal of any asset acquired in connection with any trade carried on by the organisation. An ecclesiastical, charitable or educational institution of a public character, Statutory registered friendly society, Cooperative society registered under Cooperative Societies Law of any State, Trade union registered under the Trade Unions Act.

Indirect taxes are imposed on one person or group, like manufacturers, then shifted to different payers, usually the consumers unlike the direct taxes, indirect taxes are levied on goods and services, not individual payers, and collected by the retailer or manufacturer; includes Value Added Tax (VAT). Federal customs and Excise taxes include sales tax on expenditures on domestically produced goods while customs duties on imported consumer goods and export taxes also levied on importation, with commodity exporters outside Nigeria. This category also includes Value Added Tax (VAT). A production – based tax is an excise tax levied on domestically produced goods and a landing fee levied on imported intermediate inputs.

VAT is governed by Value Added Tax Act Cap VI, LFN 2004 (as amended): *VAT is a consumption tax paid when goods purchased and services rendered. It is a multi-stage tax; VAT is borne by the final consumer, all the goods and services produced within or imported into the country are taxable except those specifically exempted by the VAT Act. Value added tax (VAT) is charged at a rate of 7.5%; some of goods and services such as*



non-oil exports are zero-rated, all taxable persons are required to file VAT monthly returns not later than the 21st day following the month of transaction.

Under the Nigerian VAT regime, three groups of taxpayers are obligated to deduct VAT at source and remit directly to the tax authority. These are:

1. Nigerian companies that are carrying on VAT able transactions with non-resident companies within the country;
2. Government ministries, statutory bodies and other agencies of government; and
3. Companies operating in the oil and gas sector

Empirical Review:

Indirect taxation and economic growth:

More specially, they are of the opinion that VAT can only increase growth when the application and in developing economies is worrisome. According to him, the number of VAT studied is a fragile outcome. Aamir al (2011) conducted the relationship between indirect taxes and economic growth, separately by income in the least costly and misappropriated way. He identified broad-base VAT as an ideal tax. Research results have shown that increasing revenue from indirect taxes is more beneficial to economic growth, increasing indirect taxes compared to direct taxation incomplete models reduce the presence of the active informal sector.

Inyama and Okwo (2021), This ponder examines the degree to which customers' support has influenced, caused and related with the profit of store cash banks in Nigeria within the display Covid-19 period. An ex-post-facto plan was received driving to information sourced from yearly reports and accounts of Store Cash Banks in Nigeria. A basic relapse demonstration was connected in gauging the impact of Customers' support on Benefit some time recently Charge, Granger Causality Test decided whether Benefit some time recently Charge was caused by Customers' Support whereas Co relational Investigation affirmed the relationship between the central factors. Straightforward relapse result uncovers that an increment in Add up to Store will essentially increment Profit before Charge (87%) within the managing an account industry. Relationship examination, which is the grapple device, appears that Add up to Store encompasses a solid relationship with Benefit some time recently Charge of Store Cash Banks in Nigeria. In conclusion, Granger Causality Test uncovers that Add up to Store Granger Causes Profit before Charge in Store Cash Banks in Nigeria. The discoveries infer that Add up to Store may be a solid determinant of developments within the level of profit of Store Cash Banks in



Nigeria. It was watched that a more prominent rate of clients, indeed as the economy shrivels

Direct taxation and economic growth:

The result of economic growth, McCarten (2005) found that the direct tax to GDP ratio with cross sectional differences in mean economic growth after controlling for other determinants of economic growth.

Odum, et al (2018), conducted the effect of direct income tax on gross domestic products from 2007 to 2016; the key focus was on the Nigeria fiscal policy and collected data from the Central Bank of Nigeria statistical bulletin, National Bureau of Statistics and Budget office of the Federal Inland Service publications. Johansen Cointegration test, Pearson Coefficient Correlation, Ordinary Least Square method of regression, Granger Causality test Granger Causality test and Error Correction Model, used to analyse the data. In order to determine the stationarity of the components, the Augmented Dickey-Fuller unit root test, used. The observation from the study revealed that direct income tax has a positive significant effect on gross domestic product. The researchers recommended that a transparent system and strong fiscal responsibility should be provided by the government in a situation where tax reforms would encourage the increase in investment, which tends to fight corruption on account of the significant and profound effect of fiscal policies on economic growth.

Nnajieze, et al (2021), considered empirically the impact of corporate obligation on the money related execution of Healthcare fabricating companies in Nigeria. An arbitrary test of three (3) Well being care firms cited within the Nigeria Stock Trade as at May, 2019, were chosen and considered for the period of ten a long time (2009-2018). Their response variable utilised for the think about was Return on Asset (ROA) whereas illustrative factors were Short-Term Obligation (STD) and Long-Term Obligation (LTD). Annual time arrangement auxiliary information extricated from the yearly report and budgetary articulations of the chosen firms were utilised whereas the ex-post calculate investigate plan was received. Measurable investigation methods utilised were clear measurements and arbitrary impact board slightest squares different relapse components. Vital demonstrative and strength tests such as Levin, Lin & Chu t^* board unit root and relationship examination were performed. Discoveries uncovered that corporate obligations have a noteworthy negative impact on the budgetary execution of pharmaceutical firms in Nigeria. Especially, the observational proof given that in aggregated shape, the impact of STD and LTD on ROA were separately negative and immaterial. The suggestion of this result is that obligation of any sort isn't ideal to



pharmaceutical firms in Nigeria. Based on these discoveries, it was suggested among others that firms in Nigeria ought to endeavour to decrease their debt proportion because it draws back their benefit levels within the company.

Ojong, et al (2016), the impact of tax revenue on the Nigerian economy, examined. To assess the relationship between petroleum profit tax and the Nigeria economy, the impact of company income tax on the Nigerian economy and the effectiveness of non-oil revenue on the Nigerian economy were the objectives of the study. Data collected from the Central Bank Statistical Bulletin and desk survey method. Ordinary least squares of multiple regression models, used to ascertain the relationship between dependent and independent variables. The observation was a significant relationship between petroleum profit tax and the economic growth of Nigeria. It showed that there is a significant relationship between non-oil revenue and the economic growth of Nigeria. The investigation also revealed that there is no significant relationship between company income tax and the economic growth of Nigeria. Researchers recommended that social amenities be constructed or established in all parts of the country and that tax administrative machinery, restructured in the country in order to reduce minor problems of tax evasion and avoidance. Finally, the government should enhance employment opportunities and a good environment to improve entrepreneurship and innovation from tax proceeds. The major objectives of any government is to provide social amenities and employment, thereby constructing and building that would aid employment, but due to corruption and tribalism, you find out the majority of people that are being employed especially in government are the Northern, whether they are educated or not. Therefore, the government should look into the issue of marginalisation and allocations, allocated to states for the construction of roads, because of abandoning it.

In Manukaji (2018), the impact of tax structure on economic growth, examined over the time series from 1994 to 2016. Taxes divided into personal income tax, corporate tax; value added tax and petroleum profit tax. These tax components affected the gross domestic products, which also affected the economic growth. Ordinary least squares, co-integration, stationarity test and descriptive statistics, used to analyse in order to generate the data. Investigation disclosed that all the tax variables studied have a significant effect on economic growth and tax administrative loopholes, monitored for tax revenue to yell meaning economic development. Well, it has been an assumption for the majority of researchers, that controlling the administrative loopholes would increase revenue, which will assist the government; researchers are in support of the suggestion.

Onyekwelu and Ugwuanyi (2014) analysed the impacts of Individual Salary Assess Alteration Act 2011 on income era in Nigeria, with an uncovering the conceivable



challenges and prospects it postures to the Nigerian assess payers. The essential information for this ponder was sourced employing an organized survey whereas auxiliary information was sourced through significant reading material, scholarly diaries and the web. The information collected through the survey was analysed utilising chi-square measurable strategy. The researchers consider uncovers among other things that the increment within the assess rate influenced the charge payers income era, and the retroactive nature of our assess laws constitutes a major issue in this way: coming about in twofold tax collection amid the appraisal and collection of charges. taking after the discoveries, the analysts suggests that competent laws ought to be passed by the government on individual Pay charge collection and era, hardened punishments ought to be forced on the assess defaulters and dodgers, charge laws ought to be made less complex, enlistment of qualified faculty to empower them cover completely the scope of work and at long last the charge payers ought to be taught adequately on the significance of assess.

3.0 Methodology

The study adopted ex post facto research design. The data, collected from the Central Bank Statistical Bulletin and Federal Inland Revenue Service for the relevant years under consideration using the following variables Petroleum Profit Tax, corporate income tax, Capital Gain Tax, Value Added Tax and Gross Domestic Products Domestic Product (GDP at current basic price) from Nigeria with time series starting from 2010 to 2022. The model used in this study is the model of Manukaji (2018).

The Model Specification

The following model will be using to evaluate the study:

$$GDP = f(PPTR, CITR, CGTR, VATR) \text{-----} \quad (1)$$

$$GDP = \beta_0 + \beta_1 PPT_{t-1i} + \beta_2 CIT_{t-1i} + \beta_3 CGT_{t-1i} + \beta_4 VAT_{t-1i} + \epsilon_t \text{.....} \quad (2)$$

$$LGDP = \beta_0 + \beta_1 LPPT_{t-1i} + \beta_2 LCIT_{t-1i} + \beta_3 LCGT_{t-1i} + \beta_4 LVAT_{t-1i} + \epsilon_t \text{.....} \quad (3)$$

Where:

GDP = Gross Domestic Products

PPT = Petroleum Profit Tax

CIT = Corporate Income Tax

CGT = Capital Gain Tax

VAT = Value Added Tax

LGDP = Log of Gross Domestic Products



LPPT = Log of Petroleum Profit Tax

LCIT = Log of Corporate Income Tax

LCGT = Log of Capital Gain Tax

LVAT = Log of Value Added Tax

β_0 = Coefficient (constant) to be estimated (Autonomous or intercept)

$\beta_{1\text{ to } \beta_4}$ = Coefficient of parameters of (PPTR, CITR, CGTR, VATR)

t= current period

t = i (i=1) = one year lag period

ε = Stochastic disturbance (error) team

The Effect of Tax Structures on Gross Domestic Product will be analysed, using the Descriptive statistics of the variables and simple regression, while pairwise granger causality test, regression analysis and correlation analysis will be used to ascertain the relationship between the variables of the study. The Null Hypotheses of PPT, CIT, CGT, and VAT have an insignificant effect on GDP in Nigeria. The coefficient is significant if the P-value is equal to or less than 0.05 (5%), this will serve as the decision rule for the test of hypothesis. The significance and nature for interpretation of the result for the test of hypotheses will be provided by E views 9.0, statistical software (Nwankwo, 2022).

4.0 Discussion of findings

Preliminary test was conducted before the regression analysis. The unit root test was conducted to help the researchers determine the level of data stationarity. It also helps to identify the most appropriate tool of analysis. Thus, its result guides the researchers to use the right tool, to avoid getting unreliable results. The Descriptive Statistics and Least square regression method, conducted on the data used in the line with the study hypotheses

4.1 Descriptive Statistics of the variables and Graphical Representations

The result of the presentation of the descriptive statistics are indicated in the table below,

Table 1 summary of the Descriptive Statistics

	GDP	PPT	CIT	CGT	VAT
Mean	41226271	2128.888	1725.448	18.13666	1058.662
Median	59929893	2114.268	1268.977	9.305000	910.5551
Maximum	69023930	3201.320	7173.491	99.40340	2072.850
Minimum	16962.51	1157.808	654.4482	2.649800	659.1536
Std. Dev.	32832212	709.8348	1836.369	27.61807	415.8616



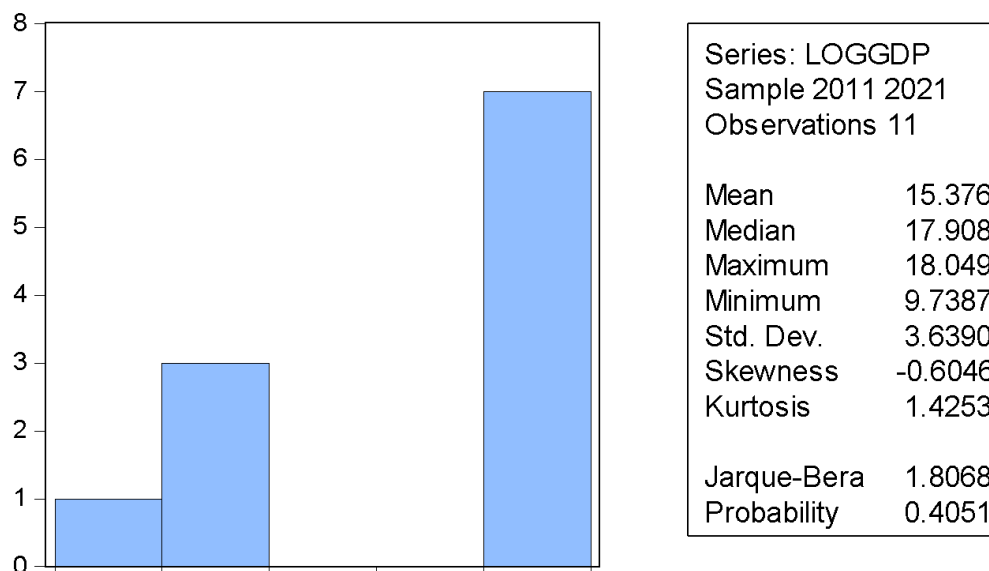
Skewness	-0.531590	0.065329	2.682233	2.604284	1.477177
Kurtosis	1.327870	1.736571	8.549974	8.282316	4.239585
Jarque-Bera	1.799587	0.739441	27.30737	25.22302	4.704691
Probability	0.406654	0.690928	0.000001	0.000003	0.095146
Sum	4.53E+08	23417.77	18979.93	199.5033	11645.28
Sum Sq. Dev.	1.08E+16	5038655.	33722515	7627.579	1729409.
Observations	11	11	11	11	11

Source: E-View 9.0

The result in table 1 provided some insight into the nature of the components of the tax revenue used in this study. The table shows that gross domestic product, petroleum profit tax, corporate income tax, capital gain tax, and value added tax mean values are 41226271, 2128.888, 1725.448, 18.13666, and 1058.662 respectively. Corporate income tax (CIT) and capital gain tax (CGT) recorded a standard deviation, which is higher than their respective mean and this shows that these variables recorded fast growth within the period under study; seen in the wide margins between their respective. While gross domestic product, petroleum profit tax and value added tax, (VAT) recorded a lower standard deviation, which implies that the three variables indicated a slow growth within the period under review. Jarque-Bera statistics, which measures whether the series is normally distributed, shows that all the variables were statistically insignificant at 5%. This means that no variables with outliers, even if there are, are not likely to distort the conclusion and reliable for drawing generalisation.



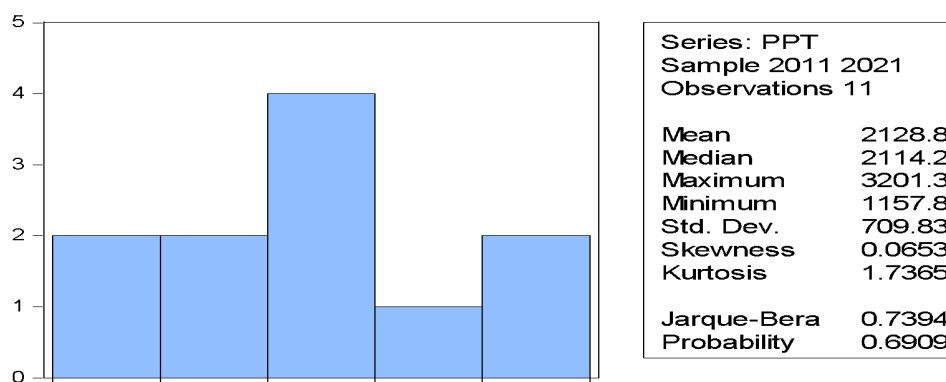
Table 2



Source: E-View 9.0

The GDP for mean value is 15.37663; median is 17.90869; the standard deviation is 3.639050, while the Jarque-Bera statistic is 1.806811 depicts a normal distribution of the time series data to be insignificant. Some fluctuations resulting from inconsistent, shown in the graph and figures.

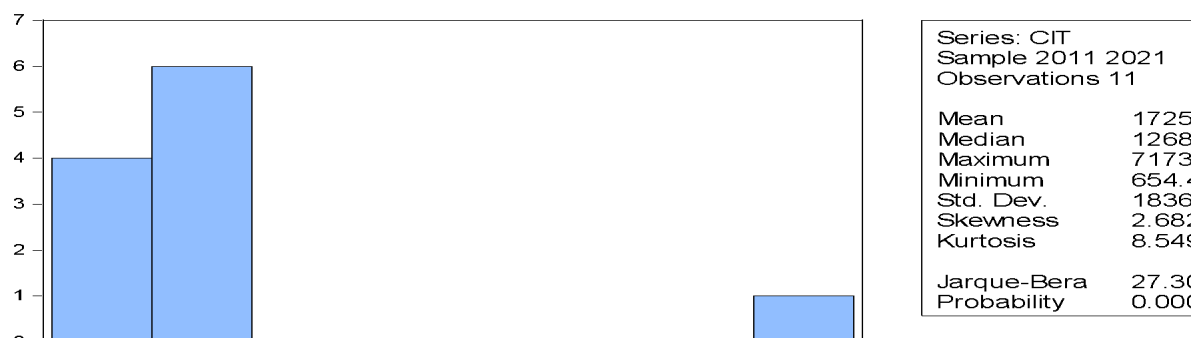
Table 3



Source: E-View 9.0

The PPT for mean value is 2128.888; median is 2114.268; the standard deviation is 709.8348, while the Jarque-Bera statistic is 0.739441 depicts a normal distribution of the time series data to be insignificant. Some fluctuations resulting from inconsistent, shown in the graph and figures.

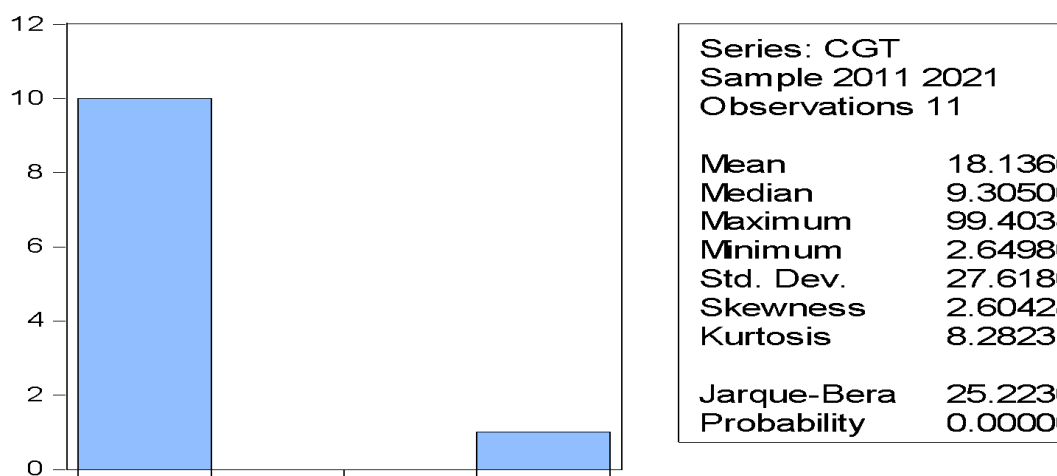
Table 4



Source: E-View 9.0

The CIT for mean value is 1725.448; median is 1268.977; the standard deviation is 1836.369, while the Jarque-Bera statistic is 27.30737 depicts a normal distribution of the time series data to be insignificant. Some fluctuations resulting from inconsistent, shown in the graph and figures.

Table 5

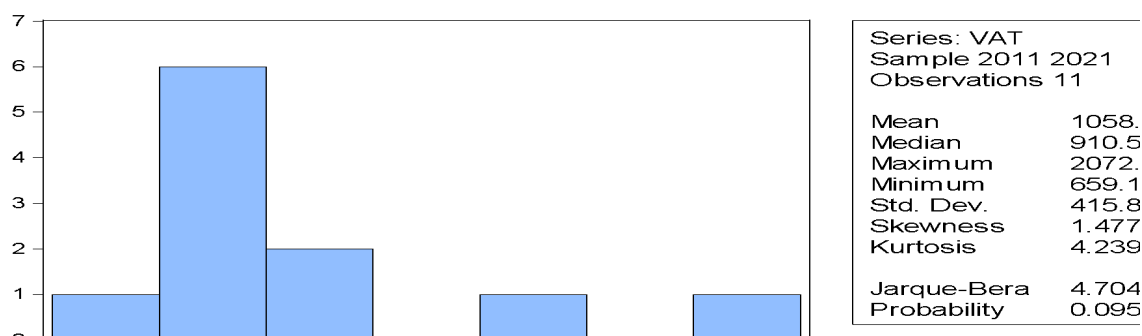


Source: E-View 9.0

The CGT for mean value is 18.13666; median is 9.305000; the standard deviation is 27.61807, while the Jarque-Bera statistic is 25.22302, depicts a normal distribution of the time series data to be insignificant. Some fluctuations resulting from inconsistent, shown in the graph and figures.



Table 6



Source: E-View 9.0

The VAT for mean value is 1058.662; median is 910.5551; the standard deviation is 415.8616, while the Jarque-Bera statistic is 4.704691 depicts a normal distribution of the time series data to be insignificant. Some fluctuations resulting from inconsistent, shown in the graph and figures.

The Skewness coefficient of the variables from the tables attached to the figures above revealed that Net Asset Value (NAV) is 3.252438; Equity Based funds (EBF) is 0.00000; Fixed income fund (FIF) is 8.13e-17; Mutual funds (MF) is 1.14e-16; Money market fund (MMF) is 5.86e-17; Bond fund (BF) is -0.132069; which are substantially; negatively greater than one (> 1). This situation confirms that all the time series are normal distribution.

The Kurtosis coefficients of Net Asset Value is 12.40312; MF is 1.731429, EBF is 1.789286, MMF is 1.796444, BF is 1,643326, FIF is 1.796444, 1.500000, MBF is 1.796444, which are greater than three (< 3), indicating that a credence to the fact that the frequency distribution of the variables are normal. The Probability of the variables: MF is 0.817782, EBF is 0.632502, MMF is 0.456289, BF is 0.727320, FIF is 0.456289, REF is 0.868815, and MBF is 0.456289; the probabilities are greater than the P-value (0.05) indicating insignificant.

4.2 Test of Hypotheses

Unit Root Test

The test of stationarity was done using augmented Dickey-fuller (ADF) Tests on the data. ADF tests done on levels of series

Null Hypothesis: Unit root (individual unit root process)

Series: GDP, PPT, CIT, CGT, VAT



Date: 09/02/22 Time: 13:51

Sample: 2011 2021

Exogenous variables: Individual effects, individual linear trends

User-specified maximum lags

Automatic lag length selection based on SIC: 0 to 2

Total number of observations: 48

Cross-sections included: 5

Method	Statistic	Prob.**
ADF - Fisher Chi-square	11.5456	0.3166
ADF - Choi Z-stat	0.84690	0.8015

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Intermediate ADF test results UNTITLED

Series	Prob.	Lag	Max Lag	Obs
GDP	0.8109	0	2	10
PPT	0.7726	0	2	10
CIT	0.0282	2	2	8
CGT	0.1760	0	2	10
VAT	0.9990	0	2	10

Table 7: Source: E-View 9.0

The ADF results in table 7 above shows that all the variables are petroleum profit tax, capital gain tax, and value added tax are all statistically positively insignificant, while the corporate income tax is significant.

**Regression Result**

Ordinary Least Square employed, to measure the effect of tax structure on economic growth in Nigeria. The result obtained, presented, in table 8 below.

Dependent Variable: LOGGDP

Method: Least Squares

Date: 09/03/22 Time: 14:30

Sample: 2011 2021

Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<hr/>				
C	38.93136	25.12071	1.549771	0.1722
LOGCGT	-0.050308	0.755989	-0.066547	0.9491
LOGCIT	-0.483510	1.195931	-0.404296	0.7000
LOGPPT	-7.233715	1.993286	-3.629040	0.0110
LOGVAT	5.078643	2.010237	2.526390	0.0449

R-squared 0.804181 Mean dependent var 15.37663



Adjusted			
R-squared	0.673634	S.D. dependent var	3.639050
S.E. of regression	2.078932	Akaike info criterion	4.604541
Sum squared resid	25.93175	Schwarz criterion	4.785402
		Hannan-Quinn	
Log likelihood	-20.32497	criter.	4.490533
F-statistic	6.160118	Durbin-Watson stat	1.189851
Prob(F-statistic)	0.025624		

Table 8: Source: E-View 9.0

Decision Rule: The null hypothesis will be rejecting, if the t- statistics is greater than 2.0 and if the Probability value is less than 5% otherwise, accept the alternate hypothesis:

- A. The Capital Gain tax (CGT) is p-value 0.9491 non significant because it is greater than 0.05 and has a negative effect on gross domestic products (GDP), because the t-Statistics is -0.066547 negatively non significant.
- B. The Corporate Income tax (CIT) is 0.7000, positively significant because it is less than 0.05 and has a positive effect on gross domestic products (GDP), because the t-Statistics is -0.404296. The result is in support of the findings of Onwuzulumba and Okpata (2021).
- C. The Petroleum Profit tax (PPT) is 0.0110, positively significant because it is greater than 0.05 and has a positive effect on gross domestic products (GDP), because the t-Statistics is -3.629040. The result shows that the outcome has no inverse relationship with economic growth.
- D. The Value Added tax (VAT) is 0.0449, positively significant because it is less than 0.05 and has a positive effect on gross domestic products (GDP), because the t-Statistics is 2.526390. The result shows that the outcome has an inverse relationship with economic growth.

R-square coefficient is 0.804181, which shows that the explanatory powers of the variables is very high, this implies that 80.42% of the variations in economic growth are being accounted for or explained by the variations in Capital Gain tax (CGT), Petroleum Profit tax (PPT), and Corporate Income tax (CIT) within the period under review. Other



variables not included in the model account for 19.58% of the variation in gross domestic products.

The Adjusted R-square, R^2 value is 0.673634, which supports the claim, indicating 67.36% of the total variation in the dependent variable, which is the gross domestic products, explained by the independent variables (the regressors). The F-statistic is 6.160118, instrumentally in verifying the overall significance of an estimated model recorded a coefficient of the value obtained with a probability value, which is 0.025624 and it is statistically significant. The Durbin-Watson (DW) statistics recorded a coefficient value is 1.189851 and it implies that there is no autocorrelation since d^* is approximately equal to two. The variables in the model are not auto correlated and the model is reliable for prediction.

5.0 Summary

The observation is that not all the tax changes will have the same effect on the growth of the economy, especially the reforms of the economy, which are supposed to improve incentives, so that there will be a reduction in the existing subsidies. The finding of this study indicated that tax structures have a significant effect on gross domestic product within the period under reviewed. The study showed that value added tax (VAT), petroleum profit tax (PPT), and corporate income tax (CIT) have positive and significant effects on the economy, which indicated that the relationship between the independent variables has a very strong association with the dependent variable, which is the gross domestic product. The capital gain tax (CGT) has a negative and insignificant effect on the economy and the outcome was very weak, based on the following outcomes of the independent variables, which indicated that since two against one, the researcher decided to join the majority, which is significant. The existing studies on the impact of tax revenue on economic growth are plagued with inconsistencies in findings reflecting the lack of a consensus in the existing literature review. The implication of the findings is pointing mainly at policy makers, especially the Federal Board of Inland Revenue. This is downplayed as the study shows a positive and significant correlation with economic development, indicating that value added tax, petroleum profit tax and corporate income tax have proven to have a significant impact on Nigeria's Gross Domestic Products. The major contribution made by this study is that tax structures have a significant positive effect on gross domestic products thereby reaffirming the previous studies that reported a positive relationship between direct income tax and gross domestic products.

Recommendation:

The recommendation is in collaboration with some other researchers' point of view,



which the tax administration lapses, and in consideration of tax structure to contribute immensely to the development of the economy; since main components of direct studies had significant impacts on gross domestic product. Government should embark on policies and programs such as empowerment programs that will enhance the level of income of the citizens, create employment and ensure that all employees of government establishments that are on the same level and steps earn the same salaries irrespective of their positions and different establishments. The need for a reformed tax system is very imperative to implement. Managed tax system should ensure the provision of adequate revenue for government employees at federal, state and local levels in order to undertake socially desirable public expenditure without recourse to fund raising, launching and so on for development.

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