

Effects of Taxation on Nigeria's Economic Growth

¹Mbadiwe, Mayor Munachiso & ²Nwoba, Amos Jeremiah

^{1&2}Department of Economics,
Evangel University, Ebonyi State

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Abstract

This research work was carried out to empirically investigate the effect of tax revenue on economic growth in Nigeria. The study was analyzed using time series data collected from the period of 1981 to 2021 with the application of the Augmented Dickey-Fuller (ADF) unit root test, a bound test of co-integration analysis and autoregressive test, and granger causality analysis. The results of the study indicated that there is a positive and significant relationship between petroleum profit tax and companies' income tax while value-added tax influences economic growth significantly and negatively.

Keywords: *Taxation, Economic Growth, Company Income Tax, Value Added Tax, Petroleum Profit Tax*

Corresponding Author: Mbadiwe, Mayor Munachiso

Background to the Study

Taxation is a practice that has long been commonplace both in Nigeria and around the world. Most countries, especially developed ones, cannot function without collecting taxes from their citizens and corporations. The necessity for governments at all levels and in all jurisdictions to grow, extend, and expand their income base and revenue was ultimately what drove the decision to levy taxes on its population. To increase the economic base and raise enough money to fund social services like security, infrastructure, public goods, public utilities, and other social benefits, governments now use taxes as a tool to redistribute revenue that has been collected from both individuals and businesses (Akintola et al, 2020). We are all aware that taxes are the government's primary source of income and that the money they generate will be utilized to finance economic development and growth. Taxation is a topic that is constantly debated. The interaction between tax administration and tax policy makes up the tax system, which is at the center of the process of implementing fiscal policy and managing the whole public sector. The use of taxes to pay for government expenses and initiatives is one of the topics that generates the most argument and discussion (Aguolu, 2014).

Unfortunately, due to many forms of opposition, including tax evasion, avoidance, and different types of financial corruption, the collection of tax income has been difficult in Nigeria. These actions are known as economic sabotage, and they are frequently cited as contributing to Nigeria's current condition of underdevelopment. Taxes from available economic activities are passively collected and used by the government for its intended purposes. This is achieved, among other things, by creating infrastructure, employing willing and accessible human and other resources, and establishing necessary public services (including law and order). Individual and corporate income taxes, sales taxes on goods and services, and other types of taxes are only a few of these levies. To fulfill its constitutional obligations to its citizens, the government has relied heavily on these taxes as a source of revenue. If taxes were paid, the money received would be used to support business growth. Researchers have discovered that creating taxes in a way that makes the most of the possibilities offered by tax design is one way to employ political and administrative resources in a way that maximizes equity and effectiveness.

Due to many forms of opposition, including tax evasion, avoidance, and different types of financial corruption, the collection of tax income has been difficult in Nigeria. These actions are known as economic sabotage, and they are frequently cited as contributing to Nigeria's current condition of underdevelopment. The purpose of government is to passively collect and use taxes from available economic activities to accomplish economic goals such as gainful employment, provision of infrastructure, and availability of essential public services, among other things. Some of the most recent examples include the governments of Canada, the United States, the Netherlands, and the United Kingdom. These nations receive substantial sums of money via import charges, property taxes, business income taxes, and value-added taxes, and they use these funds to develop their nations. The Nigerian government's hopes for the contribution of tax revenue, particularly from cooperative income tax, have not come through. Additionally, the government voiced its disapproval and committed to increase revenue from taxes other than those on the oil industry (Gbeke and Nkak, 2021).

According to Nzotta (2007), "economic growth" or "economic growth theory" often refers to the expansion of potential output, or production at "full employment," which is brought on by an increase in overall demand or observable output. Economic growth is a crucial idea in global discourse, according to Dwivedi (2004), because of how important it is. Over time, a range of observable outputs, often known as indicators, are used to monitor the progress of a country. Examples of this include, among other things, the rise of vital infrastructure, human capital expansion, technical advancement, and commercial expansion.

Problem Statement

The declining price of crude oil has reduced the revenue returns to the Nigerian government coffers, consequently affecting Nigeria's economic expansion. For this purpose, the government chose to rely on alternate means of economic growth, one of which was the growth of taxation. The Nigerian government receives a substantial amount of its income from the tax on petroleum profits. Its effect on Nigeria's economic expansion is still unknown. This study explores the link between variables with the intent to investigate the effects of petroleum profit tax on economic growth in Nigeria.

Research Questions

To address the objective of this study, the following research questions will guide the study.

- i. What is the effect of company income tax on gross domestic product in Nigeria?
- ii. What is the effect of the petroleum profit tax on gross domestic product in Nigeria?
- iii. What is the effect of value-added tax on the gross domestic product in Nigeria?

Research Objectives

The overall goal of this paper is to investigate the influence that financial gains from taxes have on the rate of expansion of the Nigerian economy as shown by Gross Domestic Product (GDP). However, the following are the study's specific objectives.

- i. To investigate the effect of the company income tax on gross domestic product
- ii. To determine the effects of the petroleum profit tax on gross domestic product.
- iii. To find out the effects of value-added tax on gross domestic product.

Study Hypotheses

Hypothesis 1: Company income tax has no significant effects on economic growth in Nigeria.

Hypothesis 2: Petroleum profit tax has no significant effects on economic growth in Nigeria.

Hypothesis 3: Valued added tax has no significant effects on economic growth in Nigeria.

Scope of the Study

Using variables including the petroleum profit tax, corporate income tax, value-added tax, and real GDP from 1981 to 2021, the paper investigates the effect of taxation on Nigeria's economic growth.

Research Significance

The findings of this paper will be useful as it understudies taxation's impact on Nigeria's economic growth and how it is crucial for policy decisions, revenue generation, stability,

income inequality, investment attraction, and efficiency. This should serve as a guide to policymakers, economic advisers, and the government. This research explores the relationship between taxation revenue and economic growth in Nigeria, focusing on the importance of taxation as a crucial tool for governments worldwide. Previous studies have shown a positive or inverse relationship, but the current data availability hinders further exploration. This study examines the relationship between taxation and Nigeria's economic growth, revealing its impact on GDP, employment, investment, productivity, and revenue generation. Taxes are crucial for funding public goods, services, infrastructure, and social welfare programs.

Research Scope

This study compares Nigeria's taxation effects on economic growth with other countries, focusing on best practices and international experiences. It examines the interaction between taxes and growth, using dependent and independent variables such as petroleum profit tax, company income tax, value-added tax, and real GDP, from 1981 to 2021. The study has five stages: background review, literature review, methodology, results presentations, discussions, and conclusion.

Literature Review

Conceptual Review

Taxation and Economic Growth

To meet population demands, the Nigerian government needs increased tax revenue. According to Obaji and Girima (2019), the Nigerian government generates income from exploration, limited liability companies, value-added goods, services, personal income, and similar sources. Taxation involves imposing monetary obligations on individuals, organizations, or assets to fund governmental activities, utilizing income from exploration, profits, value-added goods, and personal income. The government funds its operations through profits from people, businesses, and crude oil sales. Taxes provide social services, and industrial productivity, and control macroeconomics and monetary policy within the nation-state framework. (Macek, 2014). All funds received by a government from outside sources (i.e., those coming from "outside the government"), less refunds and other correcting transactions, proceeds from debt issuance, proceeds from the sale of investments, agency or private trust transactions, and intra- governmental transactions, are referred to as revenue. It might also include details regarding expected earnings and financial flows in the future (Chandra and Ro, 2008).

The company income tax is a levy imposed on the profits corporate bodies earn from sales of their goods and services. The Federal Inland Revenue Service manages company income tax under the company income tax act (CITA), section 40(1) Act, with limited liability firms subject to legal restrictions set a 30% tax rate on chargeable profit and 20% for businesses with less than one million Naira turnover for the first five years. The Petroleum Profit Levy Act (PPTA) governs the federal Inland Revenue Board's levy on petroleum company profits. It contains 85% of a company's chargeable earnings and covers all aspects of petroleum operations, including finding, acquiring, and transporting oil. VAT is a consumption tax levied by the government on recurring purchases of goods and services. It is an indirect tax on

products and services that are produced at various stages. Governed by the Value Added Tax Act (VATA), which was amended in 2007, the VAT on marketable products and services was set at 5% until the beginning of 2020, when it rose to 7.5%.

Economic growth is measured in nominal or real terms, with GDP and GNP being the most common metrics. It involves an economy's ability to produce goods and services over time, with positive, zero, or negative growth possibilities. It can be computed in real (inflation-adjusted) or nominal terms. Gross national product (GNP) and gross domestic product (GDP) are the most popular ways to gauge overall economic growth, but alternative metrics are occasionally used. Gross national product (GNP) or gross domestic product (GDP) are the most typical ways to quantify total economic growth.

Theoretical Framework

This paper will acknowledge relevant theories associated with the research topic. This will give us an in-depth analysis of various works done in this regard. The accepted theories to explain the connection between taxation and economic growth include the cost-of-service theory, benefit theory, modernization theory, and socio-political theory.

Summary of Theories on Taxation

Basically, as earlier implied, taxation is a mandatory contribution to the state revenue that is imposed by the government on incomes of individuals, business profits or additions in prices of goods and services.

Cost of Service Theory

According to Jhingan (2009), countries should charge residents in proportion to the cost of providing government services, however this idea has drawn criticism for placing restrictions on those services. The government's goal to help the underprivileged is undermined by a lack of welfare services, difficulty in calculating, and a flawed tax definition.

The Benefit Theory

According to Chiegbu et al. (2012), the state should tax citizens in a manner that is equal to the benefits they receive, ensuring that their tax obligations are closely tied to the advantages they gain from using public services. According to this notion, the state and the taxpayers would have a business or contractual arrangement where the cost of goods and services would be shared proportionately to the advantages gained.

The Socio-Political Theory

Bharita (2009) contends that rather than focusing on individual benefits, taxation should be focused on social and political objectives. Although this theory is comparable to the benefit-received and cost-of-service theories, it places more emphasis on interactions between the government and its population than on maintaining a balanced budget.

Empirical Literature

The effects of taxation on Nigeria's economic growth have been the subject of empirical research. According to Timah and Chukwu (2021), there is a considerable correlation between

corporation tax and dividend payments, employee compensation, and corporate social responsibility activities. This shows that paying taxes encourages more labor, which results in higher wages, dividends, and business investments. The study by Dibia and Onwuchekwa (2019) found that petroleum profit tax and company income tax significantly impact Nigeria's real gross domestic product (RGDP). The study suggests that Nigeria's government should implement fiscal policies to boost real sector investments, employment opportunities, and social amenities, boosting tax compliance and income generation from tax proceeds. Adeniran and Uguru (2020) studied the impact of taxation revenue on Nigeria's economic growth using an ordinary least square (OLS) model. Results showed normality for all variables, but a logarithmic transformation was needed to reduce variability. Validity checks included coefficient of determination, multiple correlation coefficient, Durbin-Watson, Akaike Info Criteria, Bayesian Information Criterion, and f-statistic. Edon (2022) examining the influence of tax revenue on economic development in Nigeria from 2011 to 2020 found that VAT has a positive but insignificant impact on life expectancy, while CIT has a positive and insignificant impact. PPT has a negative and insignificant impact. The study recommends proper utilization of VAT revenue, strengthening CIT policies, and focusing on infrastructural development. Older research proved showed that taxation impacted Nigeria's economic growth. Oluwakemi and Ekpo (2014) in their study found indirect taxes like value-added tax positively impact Nigeria's economic growth, while direct taxes negatively affect growth. Adegbe et al. (2013) examined the impact of tax policy on investment in Nigeria and found that tax incentives and a favorable tax policy positively influenced investment, thus supporting economic growth. Another study by Aigbokhan (2011) found a positive and significant long-run relationship between tax revenue and economic growth in Nigeria.

Research Methods

Model Specification

Generally, the multiple regressions were adopted in this research work, and it was specified as follows:

$$Y=f(b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4)$$

The model empirically examines relationship between economic growth and tax revenue from PPT, CIT, and VAT, hypothesizing behavioral dependence.

The functional model of this study is specified thus:

$$\text{Economic growth} = f(\text{taxation}) + T$$

Where:

Economic growth = proxy by GDP as (Dependent Variable)

Taxation = (explanatory/ independent variable proxy with PPT, CIT, VAT)

GDP = f (PPT, CIT VAT)

GDP = $\beta_0 + \beta_1\text{PPT} + \beta_2\text{CIT} + \beta_3\text{VAT}$

GDP = $\beta_0 + \beta_1\text{PPT} + \beta_2\text{CIT} + \beta_3\text{VAT} + \mu$

Description of Study Variables

The dependent (criterion) variable is economic growth (proxy by GDP) while tax revenue represents the independent (predictor) variables which was proxy by (PPT, CIT and VAT).

All the variables are fully described here under:

Where:

GDP = Gross Domestic Product

PPT=Petroleum Profit Tax

CIT = Company Income Tax

VAT = Valued Added Tax

B0 stands for the intercepts of the relationship in the models.

β_1 - β_3 stands for the regression coefficient for the models

μ stand for the Error Terms

Data Sources

Data for research will be sourced from the WDI (World Development Indicator), CBN (Central Bank of Nigeria) statistics bulletin, and the NBS (National Bureau of Statistics) bulletin. Respective data from these sources are duly indicated.

Estimation Techniques

The study examines the effect of taxation on Nigerian economic growth using pre-estimation tests, estimation tests, and post-diagnostic tests. These tests effectively assess the influence of variables on each other, guiding the analysis. The research design is consistent with various techniques and procedures used in data analysis and model estimation. This study examines descriptive statistics, correlation relationships, time series integration, co-integration bound tests, and long-run estimates of taxation and economic growth using the ARDL model. The time series was tested for stationary, while the co-integration bound test ascertained long-run relationship among the variables. The variables are stationary at mixed orders of 1(0) and 1(1).

Unit Root Test

The classical normal factor linear regression model (CNLRM) assumes stationary time series data with constant means and variance. A stationary series has constant means and variance over time, with covariance between two periods (Gujarati, 2004). However, when non-stationary, regression results are appropriate, and co-integration tests are necessary.

Co-integration Bound Tests

Regression estimates with non-stationary time series data often produce unacceptable results (as measured by coefficient of multiple correlation, R² or adjusted coefficient of R²), despite high fit and auto-correlated residuals as measured by the t-statistic. Economic variables tend to trend over time, making them non-stationary. To ensure robust estimates for statistical inferences, a co-integration test is employed between two unrelated but integrated series. The Philip-Quadris (PQ) approach is employed in this study.

Evaluation of Estimations

The model's parameter estimates were evaluated for robustness using economic, statistical, and economic criteria. Statistical criterion assesses the reliability and robustness of the estimates, using individual and multiple parameter tests. Econometric criterion examines the conformity of the estimated estimates to classical inferences, including normality and auto-correction tests.

Results

Presentations and Discussions

Table 1: Summary of Descriptive Statistics

	GDP	CIT	PPT	VAT
Mean	3.81E+13	3336.390	12115.90	2556.443
Median	2.69E+13	948.5000	2352.300	318.0000
Maximum	7.34E+13	38279.00	105981.1	31000.10
Minimum	1.62E+13	33.30000	68.10000	36.90000
Std. Dev.	2.05E+13	7557.471	24036.53	7024.315
Skewness	0.580279	3.346502	2.485301	3.265232
Kurtosis	1.717425	14.01597	8.423530	12.55895
Jarque-Bera	5.111157	276.9133	92.45766	150.7731
Probability	0.077647	0.000000	0.000000	0.000000
Sum	1.56E+15	133455.6	496751.9	69023.97
Sum Sq. Dev.	1.68E+28	2.23E+09	2.31E+10	1.28E+09
Observations	41	40	41	27

Table 1 displays descriptive statistics for annual series analysis, revealing mean values for GDP, CIT, PPT, and VAT. GDP was ₦3.81E+13trillion, CIT ₦3336.390 billion, PPT ₦12115.90 billion, and VAT 2556.443₦. The skewed report, which shows how much the distribution deviates from the normal distribution, is shown in Table 4.1. Distributions with a positive skew have an asymmetric tail, while those with a negative skew also have an asymmetric tail. Asymmetry ranges from -0.5 to 0.5, with skewed distributions from - to positive infinity. The result obtained showed that GDP (0.580279), CIT (3.346502), PPT (2.485301), and VAT (3.265232) are highly skewed and pose a serious constraint to statistical inference. Kurtosis measures the tailness of a probability distribution, describing its shape. It is generally 3. Distributions with kurtosis less than 3 are called platykurtic, while those with kurtosis greater than 3 are called leptokurtic. Examples include mesokurtic, gross domestic product, petroleum income, company income tax, and value-added tax because they have values greater than 3. The study's normality test revealed the normal distribution of variables, indicating statistical significance in economic growth, petroleum profit tax, company income tax, and value-added tax.

Analyses of Result

(a) Unit Root Test

Unit root tests determine stationary time series, while non-stationary ones are non-stationary. The Augmented Dickey-Fuller test determines the presence of unit roots, with alternative hypotheses being stationary, trend stationary, or explosive root.

Table 2: Summary Statistics for unit root Test

Variables	ADF statistics	ADF critical value @ 5%	Remark	Order of integration
GDP	-3.260906	-2.938987	Stationary	1 (1)
CIT	-3.528671	-2.941145	Stationary	1 (0)
PPT	-4.179892	-2.936942	Stationary	1 (0)
VAT	-6.962948	-3.004861	Stationary	1 (1)

Source: Author's Computation Using E-view 9

Table 2 shows stationary gross domestic product, company income tax, and petroleum profit tax, while value added becomes stationary after differentiation. Auto regressive Distributive Lag (ARDL) model is appropriate for estimation, since the variables have mixed order of integration 1(0) and 1(1).

Co-integration Test

Co-integration test is used to determine long-term correlation between time series not integrated at 1(0) levels.

ARDL Bound Test

Dependent Variable: GDP

Table 3: Null hypothesis: No long run relationship

Test statistic	Value	K
F Statistics	5.134952	3
Significance Level	Critical Value Bound	
	I0 Bound	I1 Bound
10%	2.72	3.77
5%	3.23	4.35
2.5%	3.69	4.89
1%	4.29	5.61

The F statistic (5.134952) is greater than the lower (3.23) and upper (4.35) bounds at 5% level of significance, showing existence of a long run relationship in the model, according to the co-integration bound test result in table 3.

ARDL Regression Results and Interpretations

Table 4: ARDL Short Run Output Regression Result

Variable	Coefficient	Std.Error	t-Statistics	Prob.
D(CIT)	46855933	13521737	0.000000	0.0000
D(CIT(-1))	16582213	333968114	0.000000	0.0000
D(CIT(-2))	67455344	259932252	0.000000	0.0000
D(PPT)	350700640	75931334	0.000000	0.0000
D(PPT(-1))	-2417946	83090744	0.000000	0.0000
D(VAT)	-2720856	108911284	0.000000	0.0000
CointEq(-1)	-0.084565	0.023504	-3.597977	0.0029

The table displays short-run coefficients and the speed of adjustment to equilibrium for company income tax, petroleum profit tax, and value added tax in Nigeria. Company income tax positively impacts economic growth, while petroleum profit tax negatively affects growth in lag one. Value added tax on the other hand has a negative and significant impact on economic growth. The adjustment speed is 8.5%, indicating statistically significant short-run shocks.

Table 5: ARDL Long Run Result

Variable	Coefficient	Std.Error	t-Statistics	Prob.
CIT	8593749	104527253	0.943235	0.3616
PPT	12960774	290758527	4.457573	0.0005
VAT	-3217470	729662019	-4.409535	0.0006
C	54738883	828838485	6.604288	0.0000

The table reveals a positive long-run relationship between company income tax, petroleum profit tax, and value added tax in Nigeria. Company income tax increases gross domestic product by 98593749, petroleum profit tax by 12960774, and CIT and PPT have positive and significant impact on economic growth in the long run, while VAT has a negative long-run impact.

Table 6: ARDL Regression Result

Dependent Variable: GDP
 Method: ARDL
 Date: 05/26/23 Time: 09:57
 Sample (adjusted): 1994 2017
 Included observations: 24 after adjustments
 Maximum dependent lags: 1 (Automatic selection)
 Model selection method: Akaike info criterion (AIC)
 Dynamic regressors (3 lags, automatic): CIT PPT VAT
 Fixed regressors: C
 Number of models evaluated: 64
 Selected Model: ARDL(1, 3, 2, 0)
 Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GDP(-1)	0.915435	0.023504	38.94885	0.0000
CIT	4.69E+09	1.36E+09	3.447273	0.0039
CIT(-1)	-1.52E+09	2.83E+08	-5.369969	0.0001
CIT(-2)	-1.66E+09	3.34E+08	-4.965208	0.0002
CIT(-3)	-6.75E+08	2.60E+08	-2.595113	0.0212
PPT	3.51E+08	75931335	4.618731	0.0004
PPT(-1)	5.04E+08	1.07E+08	4.701337	0.0003
PPT(-2)	2.42E+08	83090744	2.910007	0.0114
VAT	-2.72E+09	1.09E+09	-2.498232	0.0256
C	4.63E+12	7.46E+11	6.203285	0.0000
R-squared	0.998726	Mean dependent var	4.27E+13	
Adjusted R-squared	0.997907	S.D. dependent var	1.76E+13	
S.E. of regression	8.03E+11	Akaike info criterion	57.95538	
Sum squared resid	9.03E+24	Schwarz criterion	58.44623	
Log likelihood	-685.4645	Hannan-Quinn criter.	58.08560	
F-statistic	1219.499	Durbin-Watson stat	2.412411	
Prob(F-statistic)	0.000000			

Source: Author's computation using E-view9

Evaluation of Analyses

A. Evaluation Based on Statistical Criteria

a. Goodness of Fit Test (R²)

The goodness of fit test for annual time series data requires a high coefficient of multiple determinant (R²), as low R² is not acceptable. The R² of 0.998726 indicates a good fit, with independent variables explaining 99% of the dependent variable's variation.

b. T-test

The test determines the significance of individual parameters, with the null hypothesis rejected if the t-statistic is greater than the 5% critical value.

H0: $\alpha_0 = \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = 0$ (there is no individual significant relationship between the explanatory variables in the model and economic growth in Nigeria).

H1: $\alpha_0 = \alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 \neq 0$ (there is an individual significant relationship between the explanatory variables and economic growth in Nigeria).

c. F- test

Test checks model significance, rejecting null hypothesis if F probability is less than 0.05 at 5% level, indicating jointly significant variables.

B. Evaluation Based on Econometric criteria.

a. Normality test

The study used Jarque-Bera normality test to determine residuals' normal distribution and stochastic error term.

b. Heteroscedasticity Test

In this study, the heteroscedasticity test measured constant mean and variance over time using Breusch-Pagan-Godfrey chi-square distribution with explanatory variables' degree of freedom.

Breusch-Pagan-Godfrey Heteroscedasticity test

Table 7.

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.617085	Prob. F(9,14)	0.7644
Obs*R-squared	6.816608	Prob. Chi-Square(9)	0.6562
Scaled explained SS	2.737433	Prob. Chi-Square(9)	0.9738

Source: Author's computation using E-view9

From the results above in table 7, the probability of the chi-square is 0.9738 which is greater than 0.05, hence we fail to reject the null hypothesis and conclude that there is no problem of Heteroscedasticity, that is, the model is homoscedasticity.

Auto-Correlation test

This test checked uncorrelated errors in observations using Breusch-Godfrey Serial Correlation LM test for randomness.

Table 8.

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.839538	Prob. F(2,12)	0.4558
Obs*R-squared	2.945945	Prob. Chi-Square(2)	0.2292

Since the probability values of 0.4558 and 0.2292 are greater than 0.05, we accept the null hypothesis and conclude that there exists no auto-correlation in the model.

Stability Test

Stability tests for the model use CUSUM and CUSUM of Squares, ensuring residuals align with critical bounds at 5% significance level (Pesaran, Shin, and Smith, 2001).

Table 9: Model Specification Test

Ramsey RESET Test

Equation: UNTITLED

Specification: GDP GDP(-1) CIT CIT(-1) CIT(-2) CIT(-3) PPT PPT(-1) PPT(-2) VAT C

Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	0.493162	13	0.6301
F-statistic	0.243209	(1, 13)	0.6301

F-test summary:

	Sum of Sq.	Df	Mean Squares
Test SSR	1.66E+23	1	1.66E+23
Restricted SSR	9.03E+24	14	6.45E+23
Unrestricted SSR	8.86E+24	13	6.82E+23

The model is correctly specified, as the probability value (0.6301) is greater than 0.005, rejecting the null hypothesis.

Test of Research Hypotheses

Testing a hypothesis involves using statistics to determine if a proposition is true or false. This study used a 5% level of significance to accept the null hypothesis and reject the alternative if the estimated coefficient value is less than 5%.

Testing of Hypothesis 1

Hypothesis 1: Company income tax revenue has no significant effects on economic growth in Nigeria.

Table 6 reveals a significant positive relationship between company income tax (CIT) and economic growth, with a coefficient of 4.96E+09 and a probability value of 0.0039.

Testing of Hypothesis 2

Hypothesis 2: Petroleum profit tax has no significant effects on economic growth.

From table 6, petroleum profit tax (PPT) significantly impacts Nigeria's economic growth, with a coefficient of $3.15E+08$ and a probability value of 0.0004, indicating a positive relationship. in Nigeria.

Testing of Hypothesis 3

Hypothesis 3: Valued added tax has no significant effects on economic growth in Nigeria.

Table 6 shows that VAT significantly impacts economic growth, with a negative relationship ($-2.72E+09$) and a probability value (0.0256), indicating a negative impact at a p-value below 5%.

Discussion of Results

Table 1 shows that PPT has the lowest average score, while CIT has the highest. Descriptive statistics indicate high skewed GDP with 0.58, moderately skewed GDP with 0.58, and leptokurtic CIT, PPT, and VAT with values greater than 3. Results from estimated variables reveal the long-run relationship between Nigerian economic growth and tax revenue, with ECM significance and negative values. The normality test shows a regular distribution of variables, while the Augmented Dickey-Fuller test examines stationarity. GDP and VAT are stable, while petroleum profit tax and business income tax are stationary. Petroleum and corporate income taxes are positive and significant, while value-added tax is negative and likewise significant.

In this study, it was found that the effects of taxation on economic growth were as follows:

1. There is a positive relationship between corporate income tax and economic growth.
2. Petroleum profit tax positively impacts economic growth, with a positive relationship.
3. Investigations show a negative and significant value-added tax effect on economic growth.

Summary, Conclusions, and Recommendations

Summary

The study analyzed taxation's effects on economic growth from 1981 to 2021 using the ADF unit root test, co-integration bound test, and autoregressive distributed lag. The findings of this study include but are not limited to the following.

1. Petroleum profit tax, and companies' income tax are positively related to economic growth and they are statistically significant. Also, value-added tax is negatively related to economic growth and is statically significant.
2. There is a long-run relationship between economic growth and tax revenue, the f-statistic is greater than the critical values of the lower and upper bounds at a 5% level of significance. This implies co-integration in the model. Likewise, the short-run and error correct mechanism is significant because it has a negative value, fraction, and p-value significant.

The adjusted

1. The R-square result implies that 99% of the variation in GDP is accounted for by changes in PPT, CIT, and VAT respectively. Furthermore, the normality test proved

that the probability value of than Jarque- Bera statistics is greater than 0.05, which implies that it is normally distributed.

2. The descriptive statistics show that all the variables used are normally distributed except gross domestic product with a probability value of 0.077647. All the variables are stationary at level 1(0) and the first difference is 1(1).

Conclusion

The study found that proper management of tax revenue positively impacts economic growth. Analyses from the study showed a positive and significant relationship between petroleum profit tax and company income tax, while value-added tax significantly and negatively influenced economic growth.

Recommendations

Based on research findings, this study recommends that

1. Government agencies should focus on driving VAT and non-oil revenue instead of relying on foreign exchange earnings for economic growth.
2. There should be effective management of tax revenue for social amenities and infrastructure development, minimizing tax evasions and promoting economic growth, by the government.
3. PPT policies should encourage responsible oil production practices, environmental protection, and diversification into renewable energy sources to ensure long-term sustainable growth.

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