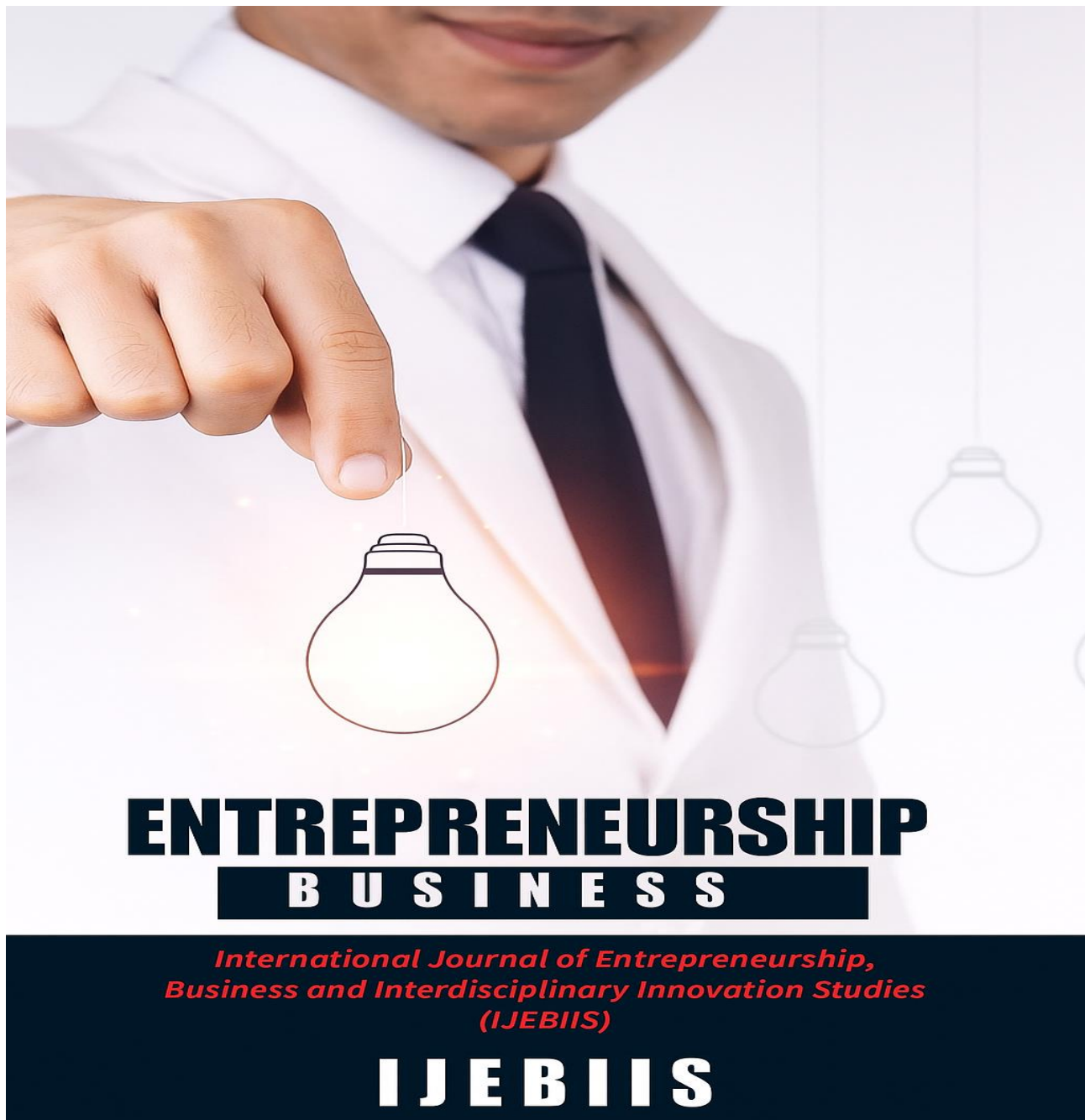




**TAXATION AS A DRIVER OF ECONOMIC GROWTH IN NIGERIA: A
COMPREHENSIVE ANALYSIS**

e-ISSN: 2616-1370
Print_ISSN: 1115-5868
Volume 1, Number 1 (2025)



TAXATION AS A DRIVER OF ECONOMIC GROWTH IN NIGERIA: A COMPREHENSIVE ANALYSIS

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Dates:

Received: 2025-05-15

Accepted: 2025-05-28

Published: 28-07-2025

Citation:

Okoro, Ijeoma Elizabeth & Prof. Salihu H. Muhammed-Gani. (2025). Taxation As a Driver of Economic Growth in Nigeria: A Comprehensive Analysis International Journal of Entrepreneurship, Business and Interdisciplinary Innovation Studies (IJEIIS), 1(1), 110-132.
<https://veritaspublishing.net/index.php/home/article/view/01>

Abstract

This study examined Taxation as a Driver of Economic Growth in Nigeria: A Comprehensive Analysis between 1990 and 2022. It adopted ex-post facto research design. The model adopted for the study was Autoregressive distributed lag model. The study utilized secondary sources of data from Central Bank of Nigeria (CBN) and Federal Inland Revenue Service. The variables in the model include gross domestic product (GDP) as the dependent variable, while petroleum profit tax revenue (PPTR), custom excise duty (CED), education tax (EDT) and value added tax (VAT) as the explanatory variables. The data were subjected to diagnostic test including unit root and co-integration test before estimating the model. Finding from the study revealed that petroleum profit tax (PPT) has negative and significant impact on economic growth (proxy gross domestic product) in Nigeria. Custom and excise duty (CED) has negative and insignificant impact on economic growth in Nigeria. Educational tax (EDT) has positive and significant impact on economic growth in Nigeria. Value added tax (VAT) has negative and significant impact on economic growth in Nigeria. The study recommends among others that efforts should be geared towards rebuilding and renovating the nation's refineries, this will help increase our domestic production and ultimately drive down the price of petrol while contributing to the nation's economic growth and guaranteeing energy security in the country.

Keywords Petroleum Profit Tax Revenue, Custom Excise Duty, Education Tax and Value Added Tax

Introduction

Taxation offers itself as one of the most effective means of mobilizing a nation's internal resources and it lends itself to creating an environment conducive to the promotion of economic growth. Nzotta (2007) argued that taxes constitute key sources of revenue to the federation account shared by the federal, state and local government. This is why Odusola (2006) stated that in Nigeria, the government's fiscal power is divided into three-tiered tax structure between the federal, state and local governments, each of which has different tax jurisdictions. The system is lopsided and dominated by oil revenue. He further argued that over the past two decades, oil revenue has accounted for at least 70% of the revenue, thus indicating that traditional tax revenue has never assumed a strong role in the country's management of fiscal policy. Instead of transforming the existing revenue base, fiscal management has merely transited from one primary product-based revenue to another, making the economy susceptible to fluctuations of the international market. However, one of the major functions of government, especially in developing countries such as Nigeria, is the provision of infrastructural services such as electricity, pipe-borne water, hospitals, schools, good roads, as well as ensure a rise in per capita income, poverty alleviation, to mention a few.

For these services to be adequately provided, government should have enough revenue to finance them. The task of financing these enormous responsibilities is one of the major problems facing the government. Based on the limited resources of government, there is need to carry the citizens along, hence the imposition of taxes on all taxable individuals and companies to augment government financial position. To this end, government has always enacted various tax laws and reformed existing ones to stand the test of time. They include: Income Tax Management Act (ITMA),

Companies Income Tax Act (CITA), and Joint Tax Board (JTB). All these are aiming at ensuring adherence to tax payment and discouraging tax evasion and avoidance.

Tax is a compulsory charge by a public authority on the income and properties of individuals and companies as stipulated by the Government decree, Acts or Laws irrespective of the exact amount of service rendered to the payer in return (Omotoso, 2001). Tax payment is not for the direct exchange of goods and/or services but a transfer of resources and income from the private sector to the public in order to achieve some of the nation's economic and social goals (Okpe, 2000). Such goals may be in for high level of employment, stable price, rapid growth of gross national product, favorable balance of payment position, promotion of a free market economy, satisfaction of collection demands, equitable income redistribution, promotion of infant industries, the encouragement of priority sector, encouragement of balance population development and promotion of labour and capital development (Onoh, 2013).

Tax is a major source of government revenue all over the world. Government use tax proceeds to render their traditional functions, such as the provision of public goods, maintenance of law and order, defense against external aggression, regulation of trade and business to ensure social and economy maintenance (Adereti, Adesina and Sanni, 2011).

In Nigeria, tax revenue has accounted for a small proportion of total government revenue over the years. This is because the bulk of revenue needed for development purposes is derived from oil. Crude oil export has continued to account for over 80% of the total federal government revenue, while the remaining 20% is contributed by non-oil sector in which taxation is a part. For instance, Oil sector share in total revenue was 54.4% in 1972 against 45.6% share from non-oil sector the

same year. By 1974 oil share of total revenue had reached 82.1% while only 17.9% accrued from non-oil sector. Following the glut in the world oil prices in the later part of the 1970s, the oil share in total revenue fell to 61.8% in 1978 while non-oil sector's share rose to 38.2%. And since 1984, the oil sector share in total revenue has continued to rise, though with occasional falls in between periods. By 2006, oil share of total revenue had reached 88.6% against non-oil share of 11.4%. As at 2009, oil sector share in total revenue stood at 78.8% while non-oil sector accounted for just 21.3% of the total revenue (Emelogu and Uche, 2010).

The political, economic and social development of any country depends on the amount of revenue generated for the provision of infrastructure in that country. However, one means of generating the amount of revenue needed for providing the needed infrastructure is through a well-structured tax system. According to Azubike (2009), tax is a major player in every society of the world. Taxation is an opportunity for government to collect additional revenue needed in discharging its pressing obligations. From the foregoing therefore, it is imperative to investigate Taxation As a Driver of Economic Growth in Nigeria from 1990 to 2022.

2.1 Conceptual Review

2.1.1 Taxation

Taxation is the inherent power of the state, acting through the legislature, to impose and collect revenues to support the government and its recognized objects. Simply stated, taxation is the power of the State to collect revenues for public purpose (Margaret, Charles and Kaka, 2014). Several definitions of tax appear in the economic literature. These definitions do not really vary as the same

thought runs through all of them. Tax is defined as all amounts of money received by government from external sources for example those originating from “outside the government” net of refunds and other correcting transactions, proceeds from issuance of debt, the sale of investments, agency or private trust transactions, and intra-governmental transfers (Ahmed, 2010).

Petroleum Profit Tax: Petroleum Profit Tax Act 1959 as amended described petroleum profit tax as a liability where a company disposes off chargeable oil and gas. Disposal includes delivery of chargeable oil to refinery. The tax is on the profit of the company from petroleum operation under the provision of PPTA in Nigeria. The petroleum operation as defined in the act, essentially involves petroleum exploration, development, production and sales of crude oil. Section 8, of Petroleum Profit Tax Act (PPTA) states that every company engaged in petroleum operation is under an obligation to render return, together with properly annual audited account and computations, within a specified time after the end of accounting period.

Custom and Excise Duty: Fasoranti, (2013) described custom and excise duty or import duty as a levy on imports by custom authorities in Nigeria to raise revenue for the government and protect domestic industries from predator competitors abroad. Import duty is generally on the value of goods or on the weight, dimensions or some other criteria that are determined by the government. They are charged as a percentage of the value of import or a fixed amount of specific quantity (Fasoranti, 2013).

Education Tax: Education Tax is a tax imposed on the assessable profits of all companies registered in Nigeria (including companies subject to tax under Petroleum Profits Tax Act) for the enhancement of tertiary education in Nigeria. It is established by the Tertiary Education Trust Fund

(Establishment, Etc.) Act No 16, of 2011. This tax is assessed alongside the Petroleum Profit Tax (PPT) or income tax liability of a company. Education tax is assessed at 2% of the assessable profits of a company (though there are already plans to increase it to 4%).

Value-Added Tax: Value-Added Tax has been given different definitions by different authors and writers. According to Abata (2014) Value-Added Tax is described as a consumption tax whereby the consumers bear the tax burden. He explained that tax burden is passed from the manufacturer to wholesaler to retailer and finally to the consumer who ultimately bear the burden. It therefore means that VAT can only be avoided by not buying and consuming the vat able goods or services.

2.1.2 Economic Growth

Ayres and Warr (2006) defined economic growth as 'a rise in the total output (goods or services) produced by a country'. It represents an increase in the capacity of an economy to produce goods and services, compared from one period of time to another. Economic growth refers only to the quantity of goods and services produced. Economic growth can be measured in nominal terms including inflation, or in real terms, which are adjusted for inflation like by the percent rate of increase in the gross domestic product (GDP).

2.2 Theoretical Framework

This study was hinged on Laffer theory which ample on two interacting effects of taxation: an "arithmetic effect" and an "economic effect". The "arithmetic effect" assumes that tax revenue raised is the tax rate multiplied by the revenue available for tax base.

The model therefore is stated as R,

$$R = t \times B \text{ ----- (3.1)}$$

Where R, Revenue, t is the tax rate and B is the taxable base at a 0% tax, the model states that no tax revenue is raised. The "economic effect" assumes that the tax rate will affect the tax base itself. At the extreme of a 100% tax rate, the government collects zero revenue because taxpayers change their behavior in response to the tax rate: either they lose their incentive to work, or they find a way to avoid paying taxes. Thus, the "economic effect" of a 100% tax rate is to decrease the tax base to zero. If this is the case, then somewhere between 0% and 100% lies a tax rate that will maximize revenue. Graphical representations of the curve sometimes appear to put the rate at around 50%, if the tax base reacts to the tax rate linearly, but the revenue maximizing rate could theoretically be any percentage greater than 0% and less than 100%. Similarly, the curve is often presented as a parabolic shape, but there is no reason that this is necessarily the case. The effect of changes in tax can be a case of elasticities, where the revenue-maximizing elasticity of the tax base with respect to the tax is equal to 1. This is done by differentiating R with respect to t and grouping terms to reveal that the rate of change of R with respect to t is equal to the sum of elasticity of the tax base plus one all multiplied by the tax base. Thus, as elasticity surpasses one absolute value, revenues begin to fall. The problem is similar to that of the monopolist who must never increase prices beyond the point at which the elasticity of demand exceeds one in absolute value.

2.3 Empirical Review

Ogbeifun, Ajetunmobi, Moronkeji & Adindu (2024) examined the contribution of revenue generated by the federal government on economic growth of Nigeria. An ex-post facto research designs was

adopted. Secondary data were sourced from Central Bank of Nigeria Statistical Bulletin. Econometric tools of co-integration and error correction model was employed to estimate the individual effect of aggregate revenue generated from Oil and Non-oil on Real Gross Domestic Products. Findings revealed that Oil revenue exerts a negative effect but significant on Real Gross Domestic Products and also non-oil revenue has a negative signed and statistically significant on Real Gross Domestic Products. The study concluded that revenue generated during the period of study has a negative but significant impact on economic growth of Nigeria. This was due to neglect of developmental projects that will generate employment opportunities, abandonment of non-oil sector, profligate spending of the government, amongst others. Hence, government needs to invest massively in agriculture, repositions the tourism sector to attract foreign investors and develop the solid mineral sub-sector, among measures aimed at economic diversification.

Osasu & Henry (2023) examined the impact of petroleum profit tax on Nigeria's economic growth. To accomplish this goal, the survey research methodology was used; relevant data were obtained from the Annual Statistical Bulletin of the Central Bank of Nigeria and the Annual record from the Office of the National Bureau of Statistics for the span of twenty-two years (1994 to 2015). In analyzing the collected data, the study used the ordinary least square statistical method. The report shows that petroleum income tax, foreign direct investment has a positive and significant impact on Nigeria's economic growth. Consequently, it is recommended that incentives available to investors in the petroleum industry are not good enough to reduce the effect of the social crisis on the risk premium of investors; revenue from petroleum profit tax should be properly utilized to enhance the level of infrastructural development among others.

Raifu & Raheem (2022) examined the effect of government revenues (oil and non-oil revenues) on economic growth, both in the short-run and the long-run using autoregressive distributed lag method. Our findings show that government revenues are indispensable to economic growth in Nigeria. In addition, the study found out that economic growth is more responsive to oil revenue than non-oil revenue. Based on the finding the study advocate for effective and efficient use of government revenues. Furthermore, since oil revenue fluctuates more than non-oil revenue, we further advocate for creation of an enabling business environment geared towards improving the contribution of the non-oil sector to the government revenue base.

3.1 Research Design

This study was based on ex-post facto research design. This is due to its suitability in forecasting time series variables. In this design, the use of past values to explain future outcomes is made possible; it combines theory and empirical exercise in estimating the impact of the explanatory variable on the explained variable.

3.4 Model Specification

This study adopt autoregressive distributed lag (ARDL) model from the work of Asaolu, Olabisi, Akinbode & Alebiosu (2018) on their study the relationship between tax revenue and economic growth in Nigeria. The model in their study is given as;

$$GDP = f(VAT, PPT, CIT, CED) \text{ ----- (3.3)}$$

Where;

GDP= Gross Domestic Product

VAT= Value added Tax

PPT=Petroleum Profit Tax

CIT= Company Income Tax

CED = Custom and Excise Duties

Equation 3.2 was modified to suit this study to have the following functional equation below;

$$GDP=f(PPT,CED,EDT,VAT) \text{ ----- (3.4)}$$

Where;

GDP= Gross Domestic Product

PPT=Petroleum Profit Tax

CED= Custom and Excise Duty

EDT= Education Tax

VAT= Value added Tax

The econometric model of the equation 3.2 is specifying as;

$$GDP= \beta_0+ \beta_1PPT_{t-1}+ \beta_2 CED_{t-2}+ \beta_3 EDT_{t-3}+ \beta_4 VAT_{t-4}+ \varepsilon_t \text{ ----- (3.5)}$$

Where;

β_0 = Intercept

$\beta_1 - \beta_4$ = Coefficients

ε_t = Error Term

Equation 3.6 was stated in an ARDL form as:

$$GDP_t = \delta_0 + \pi_1 GDP_{t-1} + \pi_2 PPT_{t-1} + \pi_3 CED_{t-1} + \pi_4 EDT_{t-1} + \pi_5 VAT_{t-1} + \sum_{i=1}^a \sigma_i \Delta GDP_{t-i} + \sum_{i=0}^b \gamma_i \Delta PPT_{t-i} + \sum_{i=0}^c \lambda_i \Delta CED_{t-i} + \sum_{i=1}^d \sigma_i \Delta EDT_{t-i} + \sum_{i=0}^e \partial_i \Delta VAT_{t-i} + \varepsilon_t \quad (3.6)$$

Where;

δ_0 is the drift component; Δ is the first difference operator; π_i = Long-run multipliers (for $i = 1, 2, 3$); the terms with summation signs are used to model the short-run dynamic structure; $\sigma_i, \partial_i, \lambda_i, \gamma, \omega_i$ = Short-run multipliers; a, b, c = Lag lengths for the short-run dynamic structure; ε_t = Error Term; and t = Time.

Appropriate lag length was selected based on the Schwartz-Bayesian Criterion (SBC). The short run multipliers here help to confirm the evidence of long-run relationship among the variables; this implies that any disequilibrium in the economy system correct itself from the short run towards reaching long-run equilibrium.

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

To analyze the impact of taxation on economic Growth in Nigeria, model estimation was carried out using annual time series data covering the period 1990 to 2022. See Appendix A for the regression data.

4.2 Descriptive Statistics Result

Table 4.1: Summary of Descriptive Statistics

	GDP	PPT	CED	EDT	VAT
Mean	42559.12	94078.00	31542.31	1506.245	19620.60
Median	38378.80	3976.300	666.8500	49.94000	1026.330
Maximum	72393.67	683484.9	195468.6	16213.60	136411.2
Minimum	21462.73	1183.500	177.7000	0.000000	159.5000
Std. Dev.	19408.59	190197.5	56910.31	3988.023	34953.74
Skewness	0.321978	2.263328	1.924540	2.596547	2.090173
Kurtosis	1.491536	6.651397	5.426170	8.500225	6.488132
Jarque-Bera	3.474770	43.68845	26.73971	73.91007	38.28805
Probability	0.175980	0.000000	0.000002	0.000000	0.000000
Sum	1319333.	2916418.	977811.6	46693.61	608238.7
Sum Sq. Dev.	1.13E+10	1.09E+12	9.72E+10	4.77E+08	3.67E+10
Observations	31	31	31	31	31

Source: Computed by Author, 2023. Using E-views 10.0

The result in table 4.1 reveals that; the mean values of GDP, PPT, CED, EDT and VAT are 42559.12, 94078.00, 31542.31, 1506.245, and 19620.60 respectively while their respective standard deviations are 19408.59, 190197.5, 56910.31, 3988.023 and 34953.74. The result showed that EDT had the lowest or least mean and variability (standard deviation) while PPT had the highest or largest mean and variability (standard deviation).

The results of kurtosis which explain the peakedness and flatness of a normal curve has a value of more than 3 (that is, more than excess Kurtosis) for the following variable as; petroleum profit tax (PPT), custom and excise duty (CED), education tax (EDT) and value added tax revenue (VAT) implying that the variables have leptokurtic shape (that is, $K > 3$). This means that the series are concentrated with steep slopes. The variable on gross domestic product (GDP) in the model has kurtosis of less than 3, indicating a platykurtic shape (that is, $K < 3$). This implies that the distribution of the variable is widely spread away from the average. Lastly, the Jarque-Bera statistic values of GDP showed that the variable is normally distributed since the Jarque-Bera probability test result

of 0.175980 is greater than 0.05 percent level of significance while that of PPT, CED, EDT and VAT are not normally distributed since the Jarque-Bera probability test result of 0.000000, 0.000002, 0.000000 and 0.000000 are less than 0.05 percent level of significance.

4.3 Pre-estimation Test Results

4.3.1 Unit Root Test Result

Table 4.2 Augmented–Dickey Fuller (ADF) Test Result

Variables	ADF Statistics				Order of Integration
	ADF Calculated T-Value at Level	Critical T-Value at Level	ADF Calculated T-Value at First Difference	Critical T-Value at First Difference	
GDP	-2.866018	-2.963972	-6.648381**	-2.967767	I(1)
PPT	-2.413953	-2.967767	-6.756110**	-2.976263	I(1)
CED	-2.026228	-2.960411	-5.665745**	-2.957110	I (1)
EDT	-2.279214	-2.960411	-5.272806**	-2.963972	I (1)
VAT	-5.830967**	-2.963972	-9.363628**	-2.967767	I (0) (1)

Source: Computed by Author, 2023. Using E-views 10.0

Note: ** Indicates the rejection of the null hypothesis of existence of unit root at 5% significance level. Lags are selected based on Schwarz Information Criteria (SIC).

The ADF unit root test results as reported in table 4.2 shows that GDP, PPT, CED, and EDT were stationary at first difference since their calculated t-values (-2.866018, -2.413953, -2.026228, -2.026228, and -2.279214) at level is less than the critical values (-2.963972, -2.967767, -2.960411 and -2.960411) at level except VAT that was stationary at both level and first difference since the

calculated t-value(-5.830967) at level and (-9.363628) at first difference are greater than the critical value (-2.963972) at level and (-2.967767) at first difference. The study accept H_0 and conclude that variables (GDP, PPT, CED, and EDT) were not stationary at level but were stationary at first difference but reject H_0 and conclude that VAT was stationary at both level and first difference. This implies that the unit root test result shows that GDP, PPT, CED, and EDT are integrated of order one, i.e., $I(1)$ while VAT was integrated of order zero, i.e., $I(0)$. This outcome justifies the application of the Autoregressive distributed lag model as a suitable model for the study.

4.3.2 Co-integration Test Result

Table 4.3: ARDL Bound Test Result for Co-integration

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
Asymptotic: n=1000				
F-statistic	13.79365	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: Computed by Author, 2023. Using E-views 10.0

Note: The lag length was selected based on the Schwartz Information Criterion. K is the number of regressors.

The result of the ARDL bound test in table 4.3 shows that the estimated model of the ARDL-bound test is based on minimizing the Schwartz Information Criterion (SIC). The bound F -test for cointegration test yield evidence of a long-run relationship between the concerned variables.

The computed F statistic ($F_C = 13.79365$) is greater than the lower and upper bound at 5% critical value resulting in the rejection of the null hypothesis of no long-run relationship between the examined variables. This evidence implies that a long-run relationship exists between the variables and rules out the possibility of estimated relationship being spurious.

4.4 ARDL Regression Result

The ARDL Regression Result is presented in table 4.4 below;

Table 4.4 ARDL Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GDP(-1)	0.902471	0.025821	34.95045	0.0000
PPT	-0.026757	0.011888	-2.250873	0.0388
PPT(-1)	-0.104092	0.023421	-4.444450	0.0004
CED	-0.001215	0.026335	-0.046128	0.9638
CED(-1)	0.012296	0.028741	0.427814	0.6745
CED(-2)	0.054285	0.020820	2.607349	0.0191
EDT	2.560611	0.663390	3.859890	0.0014
EDT(-1)	2.635687	0.648266	4.065750	0.0009
EDT(-2)	-1.099498	0.370166	-2.970282	0.0090
VAT	-0.173094	0.057010	-3.036190	0.0079
VAT(-1)	0.292662	0.073814	3.964853	0.0011
C	7431.578	1479.610	5.022661	0.0001
R-squared	0.997854	Mean dependent var		43118.09
Adjusted R-squared	0.996379	S.D. dependent var		18958.81
S.E. of regression	1140.792	Akaike info criterion		17.21436
Sum squared resid	20822520	Schwarz criterion		17.78531
Log likelihood	-229.0011	Hannan-Quinn criter.		17.38890
F-statistic	676.4680	Durbin-Watson stat		1.621206
Prob(F-statistic)	0.000000			

Source: Computed by Author, 2023. Using E-views 10.0

The result indicated that the coefficient of education tax (EDT) agreed to the sign in the *A priori* expectation stated while petroleum profit tax (PPT), custom and excise duty (CED) and value added

tax (VAT) does not agreed to the *A prior* expectation stated. The reasons for petroleum profit tax (PPT), custom and excise duty (CED) and value added tax (VAT) not to agree to the *A prior* expectation has many reason but from the part of petroleum profit tax revenue might be as a result of high level of shocks associated with international crude oil prices.

From the estimated regression results in Table 4.4, the adjusted coefficient of determination (adjusted R^2) from the estimated regression model also showed that about 99.6 percent (0.996379) of the total changes in gross domestic product (GDP) is explained by components of taxation as; petroleum profit tax (PPT), custom and excise duty (CED), education tax and value added tax (VAT). This implies that the regression model has a relatively good fit. The Durbin Watson statistic corresponding to the estimated regression equation ($D-W = 1.62$) shows that the regression model is absence from Autocorrelation.

Similarly, finding from the ARDL regression result in table 4.4 result showed that the estimated coefficient of petroleum profit tax (PPT) is negatively related to economic growth (proxy GDP) and significant. The sign is inconsistent with the a-priori expectation, implying that a unit decrease in petroleum profit tax would result to about -1.10unit decrease in gross domestic product (GDP) in Nigeria.

Also the estimated coefficient of custom and excise duty (CED) is negatively related to economic growth (proxy GDP) and insignificant. The sign is not consistent with the a-priori expectation, implying that a unit decrease in custom and excise duty (CED) would result to about - 0.001unitdecrease in gross domestic product (GDP) in Nigeria.

Moreso, the estimated coefficient of educational tax (EDT) is positively related to economic growth (proxy GDP) and significant. The sign is consistent with the a-priori expectation, implying that a unit increase in educational tax would result to about 2.56unit increase in gross domestic product (GDP) in Nigeria.

Finally, the estimated coefficient of value added tax (VAT) is negatively related to economic growth (proxy GDP) and insignificant. The sign is not consistent with the a-priori expectation, implying that a unit decrease in value added tax (VAT) would result to about -0.17 unit decrease in gross domestic product(proxy GDP) in Nigeria.

4.5 Post Estimation Test Results

4.5.1 Serial Correlation Test Result

Table 4.5: Breusch-Godfrey Serial Correlation LM Test Result

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.010067	Prob. F(2,14)	0.9900
Obs*R-squared	0.040211	Prob. Chi-Square(2)	0.9801

Source: Computed by Author, 2023. Using E-views 10.0

Table 4.5 showed that both statistics for the serial correlation accept the hypothesis of no serial correlation. Since the probability values of the F- statistics and chi-square (0.9900 and 0.9801) are individually greater than 0.05 (i.e., 5% level of significance). The result indicates absence of serial correlation problem in the estimated ARDL model.

4.5.2 Heteroscedasticity Test Result

Table 4.6: Heteroscedasticity Test Result

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.850396	Prob. F(11,16)	0.5991
Obs*R-squared	10.33045	Prob. Chi-Square(11)	0.5009
Scaled explained SS	5.549960	Prob. Chi-Square(11)	0.9016

Source: Computed by Author, 2023. Using E-views 10.0

Table 4.6 revealed that the null hypothesis of homoscedastic variance of the error term cannot be rejected since the probability values of the F-statistics and Obs*R-squared (0.5991 and 0.5009) are individually greater than 0.05 (i.e., 5% level of significance). The study therefore accepts the presence of Homoscedasticity.

4.5.3 Ramsey RESET Specification Test Result

Table 4.7: Ramsey RESET Specification Test Result

	Value	df	Probability
t-statistic	1.807254	15	0.0908
F-statistic	3.266168	(1, 15)	0.0908

F-test summary:	Sum of Sq.	df	Mean Squares
Test SSR	3723269.	1	3723269.
Restricted SSR	20822520	16	1301407.
Unrestricted SSR	17099251	15	1139950.

Source: Computed by Author, 2023. Using E-views 10.0

As shown in the table 4.7, the outcome from the Ramsey RESET test report the F-statistic and t-

statistic for testing the hypothesis that the coefficients on the powers of fitted values from the regression are jointly zero, that is, the model is correctly specified or linear. This implies that the null cannot be rejected since the p-values of the F-statistic (0.0908) was found to be greater than 0.05. It showed that the estimated linear ARDL model was correctly specified.

4.7 Discussion of Findings

The findings from this study reveal that petroleum profit tax (PPT) has a negative and significant impact on economic growth in Nigeria, which contrasts with the findings of some previous studies that reported a positive relationship between PPT and real GDP growth. The negative effect of petroleum profit tax on economic growth can be attributed to the mismanagement of the revenue generated from this tax. Despite the significant contribution of PPT to Nigeria's tax revenue, the funds derived from this tax have not been effectively allocated toward the infrastructure development necessary to foster economic growth. This misallocation aligns with the Laffer Curve theory, which argues that excessive tax rates can discourage economic activity. The "economic effect" described in the Laffer Curve suggests that an optimally set tax rate can maximize revenue, but when the tax rate is too high, it can reduce the tax base and economic output. In Nigeria's case, the volatility of oil revenue, combined with inefficient utilization of the generated tax revenue, contributes to the negative impact of petroleum profit tax on economic growth.

Similarly, this study found that customs and excise duties (CED) have a negative and insignificant impact on economic growth in Nigeria. This finding contradicts earlier studies that suggested a significant positive relationship between CED and economic growth. The insignificance of CED's impact could reflect inefficiencies in the collection and remittance processes, which prevent these taxes from contributing meaningfully to the economy. These inefficiencies in Nigeria's tax administration system—such as corruption, inadequate enforcement, and poor data management—undermine the country's ability to harness the potential of CED to stimulate economic growth.

This inefficiency highlights the "economic effect" of taxation described in the Laffer Curve theory, where a poorly managed tax system fails to optimize revenue collection and subsequently stifles economic growth.

On the other hand, the study found that educational tax (EDT) had a positive and significant impact on economic growth in Nigeria. This positive relationship can be attributed to recent investments in Nigeria's educational sector, which have contributed to human capital development. Education, as a key driver of productivity and innovation, enhances the productivity of the workforce, thereby positively influencing economic output. The finding that EDT contributes positively to economic growth aligns with the theoretical framework of this study, where taxation is seen as a vital tool for mobilizing domestic resources to promote socio-economic development. By funding education through taxes, the government can invest in human capital, which is essential for the growth of a knowledge-based economy. This underscores the importance of utilizing tax revenues to build a strong foundation for long-term economic sustainability.

The study also revealed that value-added tax (VAT) has a positive and significant impact on economic growth in Nigeria. This relationship can be attributed to the proper allocation of VAT revenue, which has been used to fund essential public goods and infrastructure. The effective use of VAT revenue has improved the quality of public services and the business environment, thereby enhancing overall economic productivity. The finding that VAT significantly contributes to economic growth is consistent with the Laffer Curve theory, which emphasizes the importance of an efficient tax system that maximizes revenue without discouraging economic activity. When taxes like VAT are properly collected and allocated, they can have a substantial positive impact on economic growth.

These findings align with previous empirical studies. For instance, Ogbeifun, Ajetunmobi, Moronkeji, and Adindu (2024) found that oil revenue had a negative but significant impact on real GDP, citing neglect of developmental projects and inefficiencies in government spending. This is consistent with the negative impact of petroleum profit tax in this study. Similarly, the study by Osasu and Henry (2023) showed that petroleum profit tax had a positive and significant impact on

economic growth, but emphasized the need for better utilization of oil revenues to improve infrastructure. This reinforces the idea that the mismanagement of petroleum revenues in Nigeria contributes to the negative effect of petroleum profit tax on economic growth.

In addition, Raifu and Raheem (2022) argued that government revenues, both oil and non-oil, are crucial for economic growth, but oil revenues have a more significant impact than non-oil revenues. This study supports the notion that oil revenue, which constitutes a large part of Nigeria's tax revenue, has a complex relationship with economic growth. The study suggests the need for better utilization of government revenues and calls for an enabling business environment to improve the contribution of non-oil sectors to the economy. This aligns with the findings of this study, particularly in the case of educational tax and VAT, where efficient allocation of tax revenue can foster long-term growth.

In conclusion, the findings of this study largely align with the theoretical framework provided by the Laffer Curve, highlighting the complex relationship between tax rates, tax bases, and economic growth. While the negative impacts of petroleum profit tax and customs duties reflect significant challenges in Nigeria's tax administration system, the positive effects of educational tax and VAT underscore the potential for a well-managed tax system to drive sustainable economic growth. These findings suggest that to fully harness the economic benefits of taxation, Nigeria must improve tax collection efficiency, ensure proper allocation of revenue, and foster a business environment that promotes human capital development. Therefore, a comprehensive reform of Nigeria's fiscal policy and tax administration is crucial for optimizing tax revenue utilization and driving long-term economic growth.

5.1 Conclusion

This study examined the impact of Taxation on economic growth in Nigeria, with specific emphasis on petroleum profit tax (PPT), custom and excise duty (CED), education tax (EDT) and value added tax (VAT). However, the various components of taxation did not have the same level of influence

on economic growth in Nigeria during the same period. Education tax (EDT) exerted a relatively stronger influence on economic growth in the Nigerian economy when compared with value added tax and petroleum profit tax. It should therefore be noted that this outcome is instructive for both policy and planning as far as the enhancement of Nigeria's government revenue structures are concerned. Hence, policy measure with regards to improving government revenue can help increase the gross domestic product, thereby stimulating economic growth and development positively.

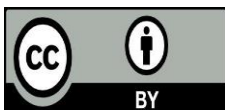
5.2 Recommendations

Based on the findings from the empirical investigations in this study, the following policy recommendations are designed.

- i. The study recommends that revenue from petroleum profit tax should be properly used for tangible and physical infrastructures; however, the incentives should be adjusted accordingly through improvement in fiscal policies and putting better infrastructure in place, especially those that will bring about the proper functioning of petroleum industry and administration of petroleum profit tax that will in turn enhance the growth of Nigeria economy.
- ii. Custom and excise duty should be properly distributed for growth and development to be harnessed, especially in providing basic social amenities as well as infrastructures in Nigeria.
- iii. The study recommend that education tax should be increased from the present 2% to 5% in order to contribute more significantly to growth and development of Nigeria Economy.

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