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Effect of Revenue on Economic Advancement in Nigeria Using Vector Error Correction Model and Robust Regression Model

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Abstract

This study examined the relationship between tax revenue and the economic growth of Nigeria from 1981 to 2022. The study used an ex-post facto research design sand three hypotheses were tested at 5% significance level, utilizing data from the CBN. The findings indicated that the tax on petroleum profits had a coefficient of -0.022970 and a t-value of -0.513293, suggesting it had a minimal impact on GDP at the 5% level. In contrast, corporation income tax revealed a significant positive correlation with GDP over the long term, with a coefficient of 0.370362 and a t-statistic of 5.975400. Additionally, the customs excise tax displayed a slight negative association with economic growth, evidenced by a t-value of -2.183335 and a coefficient of -0.180944. The study recommended that the government enhance customs regulations and combat corruption to improve revenue generation and stimulate GDP growth, viewed as the most effective approach.

Keywords: *Tax Revenue, ARDL, VECM, Petroleum, Custom, Excise, Company, Economic advancement*

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Background to the Study

Taxes are essential in any nation, affecting every economy regardless of national differences. Currently, tax laws in Nigeria are being reviewed to remove outdated provisions and simplify existing ones. The Taxes and Levies Act of 1998 delineates the distinct roles and responsibilities of Nigerian governments at the federal, state, and local levels concerning the collection of revenue. The Federal Government has historically generated most of the nation's revenue, with tax revenue making up a tiny fraction of that total (Otu & Adejumo, 2013). According to Afuberon and Okoye (2014) the recent declines in oil prices have further reduced the amount of revenue available for distribution to the federal, state, and municipal administrations.

Thus, Nation excessive dependence in oil sector as the primary source of revenue has seriously hampered the country's ability to experience sustainable economic growth. The Nigerian government and its citizens are deeply worried about the urgent need to diversify the nation's economy in light of the fluctuations in global oil prices. Nigeria, one of Africa's largest economies, encounters numerous challenges in its pursuit of sustained economic growth and development. Despite abundant natural resources and a growing population, the country grapples with poverty, unemployment, and inadequate infrastructure. Effective utilization of tax revenue has the potential to address these challenges by supporting government necessary funds to invest in critical sectors and stimulate economic advancement. This problem of not managing of funds in the Nation brought the idea of utilizing the VECM and Robust regression to understand the dynamic relationship between the tax revenue and economic advancement in Nigeria. Bonu and Pedro (2009) found no relationship between GDP growth and income from taxes in developing nations. The impact of the rate of income tax on Botswana's GDP growth was the main subject of the study. This highlights the need of analysing Nigeria's current tax status and its impact on the national economy. Therefore, the research considers how income tax affected Nation's GDP growth.

Literature Review

Revenue

The money the government receives from the various taxes it levies on its people and enterprises is known as revenue. It is a major source of revenue for social programs, infrastructure projects, and public goods and services.

Petroleum Profit Tax

A type of tax revenue known as petroleum profit tax is imposed on the profits of businesses engaged in the extraction and manufacturing of petroleum products, including natural gas and crude oil. Usually, the government collects this tax.

Company Income Tax

The government levies a tax on companies that operate in the nation called company income tax, or CIT. Businesses must pay CIT on their taxable profits and file tax returns. Penalties may follow noncompliance or non-payment.

Custom and Excise Duties

Customs duty, occasionally termed import duty or tariffs, is levied on items brought into a country from overseas. Several variables, including the kind of commodities, their value, and their country of source, along with any applicable trade arrangements or tariff plans between nations, may affect the degree of customs duty.

Economic Advancement

The process of expanding an economy's capacity to generate goods and services in order to enhance its people's welfare. It entails a regular increase in yield and is considered important once it outpaces population growth and enhances human welfare. Higher per capita output and increased productivity, especially in labor, are features of this growth (Balami, 2013).

Empirical Review

The impact of excise and customs revenues on the nation's the economici growth between 1994 and 2019 was examined by George (2023). The study analysed secondary data on GDP, customs and excise charges, and inflation rates from the Central the banks of Nigeria's statistics bulletin using the Granger Causality test and the Autoregressive model Distributed Lag (ARDL) Bounds test. The ARDL Bounds test confirmed a long-term association between the variables. The findings demonstrated that customs and excise taxes had a positive and significant effect on economic growth over both the short and long term. However, inflation rates have a negative effect on long-term economic development but a considerable favorable influence on short-term economic growth. Furthermore, the study discovered a one-way causal link between excise.

Again, Ouma (2019) studied the effects of political climate, economic expansion, and tax reforms Using nonlinear regression approaches, multi-segment regressions, and descriptive statistics, the study examined total tax, direct tax, and indirect tax revenues during 1964 to 2016. The results showed that both economic development and the tax reforms themselves contributed to higher tax revenue. Additionally, economic growth had a major impact on all forms of taxation, but government efficiency notably benefited indirect taxes. It was proposed that government control over corruption may potentially increase tax collections more than economic growth, even though the effect on tax revenues was statistically small. While the current study is quantitative and focused on tax revenue indicators, this study is descriptive.

Ali, Ali, and Mohamed (2018) studied domestic revenue and foreign aid from 1980 to 2007 to analyze how tax revenue affected Kenya's GDP. The data was obtained from IMF and WB on aggregate tax income, grants, and authentic gross domestic product (GDP at factor prices adjusted for the consumer price index). The analysis technique employed was the OLS. Grants and foreign help, on the other hand, were determined to have a detrimental effect on Kenya's economic growth. The results of this study might not be directly applicable to the Nation economy because it was carried out in Kenya. Furthermore, Ojong (2016) used Ordinary Least Squares regression models to study how tax income affected the Nigerian economy. The results showed a strong correlation between non-oil revenue, the petroleum profit tax, and GDP. Despite having a generally good effect, no discernible correlation was found between

organizations income tax and GDP. The current study's approach is different from previous studies.

Materials and Methods

Ex-post facto design was utilized because the actions under investigation have already occurred. This method seeks to determine whether changes in the explanatory variable, taxes income impact the explained variable, GDP. Fundamentally, the study looks at how these tax variables affect GDP while considering other possible factors to demonstrate a cause-and-effect relationship. The report also listed the important factors connected to Nigeria's GDP. This study analyzes several variables: Nigeria's GDP; customs and excise duties; company income tax; and petroleum profit tax. The secondary data were obtained from the Debt Management Office, Central Bank of Nigeria (CBN), and World Bank website (www.worldbank.org). The data were analyzed to assess the impact of petroleum profit tax, company income tax, as well as customs and excise duties on Nigeria's GDP. The study uses data from 1981-2022

Model Specification

To analyze the influence of inflation, interest rate, and exchange rate on Nigeria's economic growth, this study builds on the models taken from Idris and Suleiman (2019) and Inyiama (2013). Following their methods, the model for this study has been formulated as follows:

$$LNGDP = f(LNPPT, LNCIT, LNCED). \quad (1)$$

It is also possible to express it more explicitly as follows using model (1):

$$LNGDP = f(\beta_0 + \beta_1 LNPPT + \beta_2 LNCIT + \beta_3 LNCED + \mu_t). \quad (2)$$

The regression model's intercept, β0, indicates the dependent variable's predictive value when all other explanatory variables are held constant. The partial elasticity of LNGDP with respect to LNPPT, LNCIT, and LNCED is represented by β1, β2, and β3, respectively.

Unit Root Test

$$y_{1t} = \rho y_{1t-1} + u_t \quad (3)$$

Where ρ is constant, y_{1t-1}, u_t is lag of explanatory variable and u_t is a white noise, Subtract y_{1t-1} From both side we have.

$$y_{1t} - y_{t-1} = \rho y_{1t-1} - y_{1t-1} + u_t$$

Note that $y_{1t} - y_{1t-1} = \Delta y_{1t}$

$$\Delta y_{1t} = (\rho - 1)\, y_{1t-1} + u_t \quad (4)$$

The potential serial correlation of the error process is not considered by Equation 4. We now use ARMA (p,q) in place of the AR (1) procedure, which guarantees serial correlation in the error term as

$$\Delta y_{1t} = \propto + \beta t + (\rho - 1)\, y_{1t-1} + \sum_{j=0}^{r} \beta_j\, \Delta y_{1t-j} + u_t \quad (5)$$

Where β_t is predict trend,$\propto$ is a constant, Δy_{1t-j} capture serial correlation, $\sum_{j=0}^{y}\beta_j$ is long run cumulative effect and $\beta_j$is lag weight, u_t is the error term.

Hypothesis of no unit root is of the formH_o: $\propto= 0, \beta = 0, \rho = 1$ against alternative H_o ; $\propto\neq 0, \beta \neq 0, \rho < 1$

We presume the existence of a unit root if the null hypothesis is accepted, necessitating the difference of the data prior to the regression analysis.

Test for Co-Integration

Economic data often display non-stationary characteristics, which can lead to unreliable estimates when using Ordinary Least Squares (OLS), as it assumes stationarity. Non-stationary data can cause inflated R-squared values, higher Durbin-Watson statistics, and increased t-ratios, resulting in misleading "spurious regression" results, as noted by Granger and Newbold (1974)

Vector Error Correction Model

According to Mustofa et al. (2017), a vector error correction model constitutes a special variant of the vector autoregression (VAR) framework suited for non-stationary data characterized by co-integration relationships. Conversely, the detection of co-integration among time series signifies a long-run equilibrium link between them; hence, the Vector Error Correction Model would be used to estimate short Run properties of the co-integrated Series. In the absence of co-integration, the VECM would not be needed, and we would proceed directly to the Granger causality test to explore the possible causal relationships among the variables involved. This approach extent the single equation error correction model to a multivariate model, let assume that we have three variables $x_{1,}\, x_{2,}\, x_3$ which can be endogenous. that is

$$Y_t = [X_1, X_2, X_3] \quad (6)$$

$$Y_t = A_1 Y_{t-1} + A_2 Y_{t-2} + - - - + A_p Y_{t-p} + \mu_t \quad (7)$$

VAR (p) can be reformulated in a vector error correction model as follows

$$\Delta Y_t = A_1 \Delta Y_{t-1} + A_2 \Delta Y_{t-2} + - - - + A_{p-1} \Delta Y_{t-p-1} + \sigma_1 Y_{t-1} + \mu_t \quad (8)$$

Where the long-term information is contained in the matrix σ, σ can be broken down into LB^t, where L is the speed at which the equilibrium coefficient is adjusted, and B^t is the long-term matrix of the coefficients.

Where $K = -(1 - A_1 - \ ... - A_p)$ (9)

$$H = LB^t = -(1 - A_1 - \ ... - A_p) \quad (10)$$

Model Specification for Robust Regression

where the Huber loss function ρ(ϵ) is defined as

$$\rho(\epsilon) = \begin{cases} \frac{1}{2}\epsilon^2, & if|\epsilon| \leq c \\ c\left(\epsilon - \frac{1}{2}c\right), & if|\epsilon| > 0 \end{cases} \quad (11)$$

where c is a tuning parameter (typically 1.345) that determines the threshold for outlier detection.

$$\omega_i = \begin{cases} 1, & if|\epsilon_i| \leq c \\ \frac{c}{|\epsilon_i|}, & if|\epsilon_i| > c \end{cases} \quad 12$$

This means that observations with small residuals are treated like OLS, while outliers receive reduced weights.

Results and Discussion

Table 1: Descriptive Statistic

	LNRGDP	LNPPT	LNCIT	LNCED
Mean	10.35785	12.30108	10.87493	11.19865
Median	10.20543	13.26966	11.26751	12.06746
Maximum	11.22194	15.25274	14.78976	14.33885
Minimum	9.530920	8.228711	5.998937	7.387709
Std. Dev.	0.600916	2.386306	2.798703	2.173603
Skewness	0.169926	-0.409919	-0.298859	-0.459112
Kurtosis	1.459822	1.618939	1.709738	1.841215
Jarque-Bera	4.353386	4.514065	3.538575	3.825355
Probability	0.113416	0.104661	0.170454	0.147684
Sum	435.0297	516.6452	456.7470	470.3433
Sum Sq. Dev.	14.80508	233.4727	321.1423	193.7066
Observations	42	42	42	42

Table 1 is a summary statistic results for company income tax, petroleum profit tax, customs and excise duty, and economic growth, during the period of the study, the natural logarithm of GDP indicates an average economic growth of 10.35785. The average natural logarithm of petroleum profit tax across the sample period is 12.30108. This suggests the typical level of petroleum profit tax revenue in Nigeria during the study period after taking the logarithm. The mean value of "LNCIT" is 10.87493. This suggests that, on average, company income tax revenue has a logarithmic value of approximately 10.87 during the study period. This average serves as a robust indicator of the typical level of company income tax revenue. The mean value of "LNCED" is 11.19865. This suggests that, on average, customs and excise duty revenue has a logarithmic value of approximately 11.20 during the study period. This average serves as a robust indicator of the typical level of customs and excise duty revenue.

Table 2: Unit Root Test

Variables	**t-Statistics**	**At level**	**1st difference**	**probability**	**Integration**
LNRGDP	-3.586833*	-	I(1)	0.0105	Order 1
LNPPT	-6.348828*	-	I(1)	0.0000	Order 1
LNCIT	-7.770996*	-	I(1)	0.0000	Order 1
LNCED	-6.268719*	-	I(1)	0.0000	Order 1

The unit-root test results using the Augmented Dickey-Fuller (ADF) test for the study variables are shown in Table 2. The ADF test is a customary test for establishing the existence

of a unit root in a time series, which would signal non-stationarity. The results show that all variables are integrated of order 1, which means they are stationary after first differencing.

Table 3: Lags Selection Criteria

Lag	LagL	LR	FPE	AIC	SC	HQ
0	-109.5619	NA	0.003975	5.823689	5.994311	5.884907
1	78.84088	328.4972*	5.78e-07*	-3.017481*	-2.164373*	-2.711393*
2	90.27652	17.59329	7.52e-07	-2.783411	-1.247816	-2.232453
3	100.2457	13.29228	1.10e-06	-2.474140	-0.256058	-1.678311

The lag selection criteria used for choosing the appropriate lag model for the econometric model are displayed in table 3. To choose the lag model length that most effectively fits the data, a variety of parameters are assessed and several lag lengths are tested. It was also shown that the lag 1 model is the most appropriate model for this specific investigation.

Table 4: Cointegration

Unrestricted Cointegration Rank Test(Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.510699	65.17113	47.85613	0.0005
At most 1 *	0.443325	36.58001	29.79707	0.0071
At most 2	0.269537	13.14904	15.49471	0.1094
At most 3	0.014543	0.585983	3.841465	0.4440
None *	0.510699	65.17113	47.85613	0.0005
Trace test indicates 2 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.510699	28.59112	27.58434	0.0371
At most 1 *	0.443325	23.43096	21.13162	0.0233
At most 2	0.269537	12.56306	14.26460	0.0913
At most 3	0.014543	0.585983	3.841465	0.4440
Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Table 4 summarizes the results from the Unrestricted Cointegration Rank Test, which consists of Maximum Eigenvalue and Trace tests. These methods ascertain the number of cointegrating equations in vector error correction models. The rejection of the null hypothesis in favor of the alternative hypothesis concerning the existence of two cointegrating equations at the 0.05 significance level is further established by the Maximum Eigenvalue test when both the "None" and "At most 1" cointegrating equation(s) are considered.

Table 5: Estimation of Long Run Relationship using VECM

Variables	Coef.	STD Erorr.	t-statistics
LNPPT(-1)	0.720465	0.18086	3.98352
LNCIT(-1)	-1.152542	0.24200	-4.76248
LNCED(-1)	0.459382	0.30594	1.50157
CointEq1	0.313059	0.01440	2.30660
R-squared	0.307971		
F-Statistics	3.026171		

The outcomes of applying the Vector Error Correction Model (VECM) to estimate the long-run connection are shown in Table 5. The explanatory variables in the model account for about 30.80% of the variation in economic growth. With a 31% adjustment speed, the error correction equation (CointEq1) is substantial and satisfies the required criteria. This suggests that mistakes made in the short term can be fixed over time at a 31% yearly rate. Long-term causality also exists between the explanatory variables and explained variable.

Table 6: VECM Residual Normality Test

Component	Jarque-Bera	df	Prob..
1	3.734342	2	0.1546
2	1.476947	2	0.4778
3	0.047006	2	0.9768
4	0.735395	2	0.6923
Joint	5.993691	8	0.6479

In this VECM residual normality test, the null hypothesis states that the residuals are multivariate normal. The test examines each component's skewness, kurtosis, and Jarque-Bera statistics and then provides joint statistics for these measures. Skewness measures the asymmetry of the distribution. Each component's skewness and associated Chi-square statistic are provided in this test. Suppose the p-values (Prob.) are higher than the significance level, typically 0.05. In that case, the null hypothesis was accepted, suggesting that the skewness is not substantially different from zero.

Table 7: Test for Autocorrelation

Lag	Q-Stat	Prob.	Adj Q-Stat	Prob	Df
1	2.545746	-----	2.611022	-----	-----
2	10.99274	0.9983	11.50260	0.9975	28

*The test is only valid for lags that are more significant than the VAR lag order.
df is the degrees of freedom for (approximate) chi-square distribution after adjustment for VEC estimation (Bruggemann, et al. 2005)

The test evaluates residual autocorrelation at different time intervals. The Q-Statistic for lag 1 is 2.545746. However, significance cannot be determined immediately without a p-value. This could be the result of the test only working for lags that are more significant than the VAR lag

order, in which case you might need to confirm the VAR lag order in your model. With a p-value of 0.9983 and a Q-Statistic of 10.99274 for lag 2, there is no discernible residual autocorrelation at this latency because the p-value significantly surpasses the 0.05 cutoff. These findings imply that, up to lag 2, there is no discernible proof of residual relationship in the VEC model.

Table 8: VEC heteroskedasticity Test (Levels and Squares).

Joint test		
Chi-sq	Df	Prob.
111.5935	100	0.2013

Regarding the VEC heteroskedasticity tests involving the joint and individual components was to determine the model that exhibits heteroskedasticity. Joint test looks at the heteroskedasticity of the model as a whole. With 100 degrees of freedom, the joint examination's Chi-square statistic is 111.5935. 0.2013 is the corresponding p-value (Prob.).

VEC Serial correlation LM Tests

Table 9: VEC Serial Correlation LM Tests

Lag	**LRE*stat**	**Df**	**Prob.**	**Rao F-stat**	**Df**	**Prob.**
1	9.421121	16	0.8951	0.572487	(16, 83.1)	0.8959
2	9.842928	16	0.8747	0.599545	(16, 83.1)	0.8757
Null hypothesis: No serial correlation						
Lag	**LRE*stat**	**Df**	**Prob.**	**Rao F-stat**	**Df**	**Prob.**
1	9.421121	16	0.8951	0.572487	(16, 83.1)	0.8959
2	9.842928	16	0.8747	0.599545	(16, 83.1)	0.8757

Table 9 indicated that no problem of auto-correlation in the data, because the p-value of the lags are far above 0.05.

Robust regression residual test for Normality

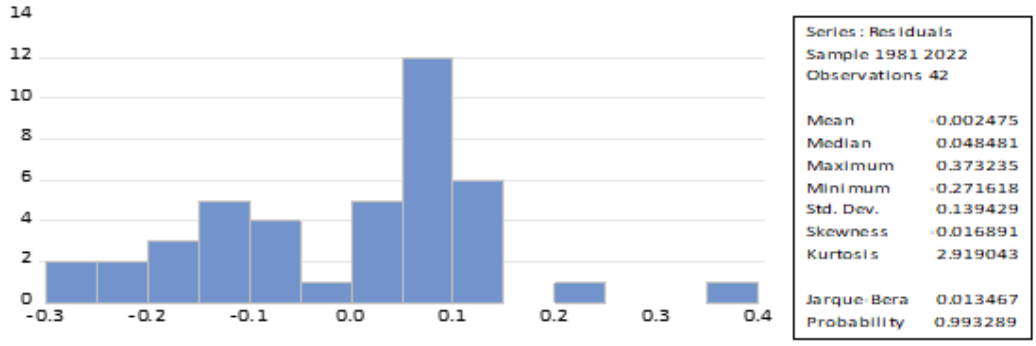

Figure 2: Normality test

The jarque-Bera statistic of 0.013467 and the p-value of 0.993289 demonstrate the evidence of a normal distribution in the data, respectively, showing the normality for robust regression in the figure.

Serial Correlation for robust regression

Table 10: Serial Correlation

Breusch-Godfrey Serial correlation LM Test			
Null hypothesis: No serial correlation at up to 1 lag			
F-statistic	1.25818	Prob. F(1,37)	0.7000
Obs*R-squared	1.72240	Prob. Chi-Square(1)	0.3000

The p-value related to the test is 0.7000 (Prob. F(1,37)), and the F-statistic yielded was 1.25818. The Obs*R-squared value was 1.72240 with a corresponding p-value of 0.3000 (Prob. Chi-Square1). Since both p-values exceed the significance level of 0.05, we cannot reject the null hypothesis. This implies that there is no observable indication of serial correlation in the residuals with the exception of at most one lag. Thus, the absence of autocorrelation at this lag indicates correct specification of the relationship between variables.

Heteroskedasticity for Robust Regression

Table 11.

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
Null hypothesis: Homoskedasticity			
F-statistic	2.063725	Prob. F(3,38)	0.0695
Obs*R-squared	3.180117	Prob. Chi-Square(3)	0.0924
Scaled explained SS	5.016105	Prob. Chi-Square(3)	0.1706

The Probability value associated with the F-statistic of 2.063725 is 0.0695 (Prob. F(3,38)). The ObsR-squared value of 3.180117 has a probability square (p-value) of 0.0924. Also, the P-value for the scaled explained sum of squares is 0.1706 (Prob. Chi-Square (3)), with its value being 5.016105. The null hypothesis of homoskedasticity thus cannot be rejected successfully since the F-statistic's p-value of 0.0695 is larger than the conventional 0.05 level of significance.

Short Run Stability Analysis Graph

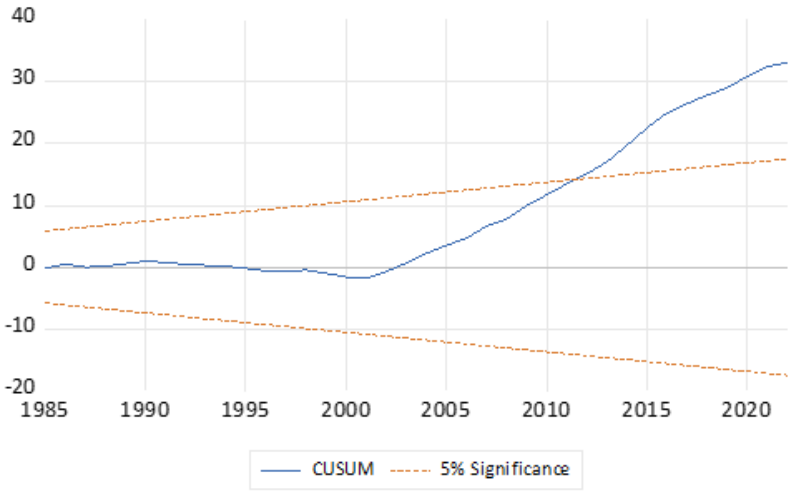

Figure 3: Stability Graph

The plot shows that the parameters are stable over time but unstable from 2012 to the present because the blue line between the red lines derailed from the middle of the red lines and advanced upwardly.

Table 12: Robust Regression Results

Variable	Coefficient	Std. Error	z-Statistic	Prob.
LNPPT	-0.022970	0.044751	-0.513293	0.6077
LNCIT	0.370362	0.061981	5.975400	0.0000
LNCED	-0.180944	0.082875	-2.183335	0.0290
C	8.641552	0.251827	34.31539	0.0000
R-squared	0.735158			

According to table 12, an R2 value of 0.735158 signifies a reasonably better fit of the model to the data; this implies that 73.5% of the change in economic advancement is being caused by the independent variables, while the remaining 26.5% is being caused by external variables that were not considered in the model.

Hypotheses Testing

$\mathbf{H}_{01}$: Petroleum Tax has no significant effect on Nigeria's Economic Advancement

From Table 12, petroleum profit taxation exhibits a t-value of -0.513293 and a coefficient of -0.022970, suggesting that it is insignificant at any 5% decision level. This shows a negative effect but not significant on GDP growth. The negative coefficient implies higher petroleum profit tax is associated with a lower rate of economic growth. Therefore, the study has sufficient data to accept the first null hypothesis.

H_{02}: Company Tax has no significant effect on Nigeria's Economic Advancement

The t-statistic of company income tax is found to be 5.975400. The coefficient is 0.370362. The results in Table 12 show that company income tax is statistically significant at the 5% level (p-value = 0.000). The implication is that company income tax has a strong positive relationship with the growth of GDP in Nigeria. Indeed, the positive coefficient indicates that an increase in corporation income tax corresponds to better economic growth. On this basis, there is sufficient evidence for the study to reject the preliminary null hypothesis.

H_{03}: Custom and Excise Duty does not have significant impact on Nigeria's Economic Advancement

Table 12 states that the t-value for customs and excise duties is -2.183355, the coefficient is -0.180944, and the p-value is 0.0290. Hence, this means that customs and excise duties have been negatively correlated with the growth of Nigeria's GDP. However, customs and excise duties significantly affect GDP, as the p-value signifies the 5% level of significance. The negative coefficient indicates an inverse relationship, meaning Nigeria's GDP tends to grow less with increased customs and excise duties. Thus, the study rejects the null hypothesis (H03), which indicates customs and excise duty has no significant effect on the growth of Nigeria's economy.

Conclusion and Recommendations

The study's conclusion which is in line with that of Asaolu et al. (2018), who also found an insignificant association with GDP was that the petroleum profit tax has a long-term, negative but statistically negligible impact on economic growth in Nigeria. It also discovered that corporation income tax has a long-term, substantial, and favourable effect on real GDP. Contrarily, it was found that, under George and Chioma (2023), customs and excise taxes had a negative but statistically negligible impact on economic growth. Finding variables utilizing the Robust Regression model that had a substantial short-term impact on GDP was the third goal of the research.

The analysis revealed that petroleum profit tax has a short-term negative and insignificant effect on GDP. In contrast, company income tax has a short-term positive and significant impact on economic growth. Furthermore, the results showed that customs and excise duties have a significant negative relationship with economic growth, differing from Akwe's (2014) findings. This study recommends the following:

i. Policymakers should consider modifying tax rates and structures to encourage investment and productivity in the petroleum sector while limiting negative consequences on other economic sectors.
ii. The government should harmonize CIT regulations with regional and global standards to improve Nigeria's competitiveness in the worldwide economy.
iii. The government should increase oversight and patrols in those areas and root out crooks who take advantage of their positions for personal gain. This will indirectly increase GDP and undoubtedly increase customs and excise duty income.

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