

Impact of Corporate Income Tax and Value-Added Tax Revenue on Economic Growth in Nigeria: Evidence from an ARDL Bounds Testing Approach

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ABSTRACT

Nigeria relies heavily on tax revenues, particularly corporate income tax (CIT) and Value-Added Tax (VAT), to fund public expenditure and drive economic growth. However, persistent debates exist regarding the effectiveness of these taxes in stimulating national output, with some studies reporting positive impacts while others suggest negligible or negative effects. This study employed an Autoregressive Distributed Lag (ARDL) framework to examine the impact of corporate income tax revenue and value-added tax revenue on economic growth in Nigeria, controlling for real interest rate and labour force participation. The ARDL bounds testing approach was used to test for long-run cointegration and short-run dynamics among the variables. Where cointegration existed, an error correction model captured both long-run equilibrium and short-run adjustments. Pre-estimation tests included unit root and bounds tests, while post-estimation diagnostics assessed autocorrelation, heteroskedasticity, multicollinearity, and model stability using CUSUM and CUSUMSQ. The findings indicate considerable variability in Nigeria's macro-fiscal indicators over 1994–2023, with corporate income tax (mean = ₦784.94 billion; SD = ₦1,018.90 billion) and VAT revenue (mean = ₦711.63 billion; SD = ₦927.35 billion) showing high volatility and non-normality (JB = 91.09; 78.64). Unit root tests reveal mixed orders of integration [I(0) and I(1)], validating ARDL use. Bounds testing confirms cointegration ($F = 3.66 > 3.49$). Long-run results show corporate income tax positively affects growth ($\beta = 0.308$, $p < 0.01$), while VAT has a negative effect ($\beta = -0.00006$, $p < 0.05$). Short-run adjustment occurs at 43%. The error correction term (0.43) suggests a moderate adjustment speed toward equilibrium. In conclusion, improving corporate tax collection and administration can stimulate economic growth, while VAT policies require careful calibration to avoid unintended contractionary effects.

Keywords: Corporate Income Tax, Value-Added Tax, Economic Growth, ARDL Bounds Testing, Nigeria

INTRODUCTION

Understanding the effects of various tax revenue streams on economic growth is a key topic in fiscal policy research. Value-added tax (VAT) and corporate income tax (CIT) are two of the main sources of funding for governments, although their economic impacts differ (Hoi et al., 2024; Kolcava, 2023; Williams, 2021). The challenge is striking a balance between the requirement for enough money to pay for public goods and services and the negative effects on productivity, private investment, and consumption. While broad-based consumption taxes like VAT may have an impact on consumer spending and business expenses, CIT may deter business investment by lowering after-tax earnings, which can ultimately lead to reduced economic growth and job creation. The relationship between CIT revenue and economic performance is examined in a number of empirical research. According to a panel analysis of Sub-Saharan African nations, corporate income tax revenue had a negative short-term and long-term impact on economic growth. This suggests that slower growth may be linked to

higher CIT receipts, which may indicate a higher tax burden or inefficiencies in collection (ul Haq et al., 2025; Wahyuningrum & Aisyah, 2023).

Corporate taxes are among the most detrimental tax types for long-term growth when compared to consumption and property taxes, according to an OECD report on taxes and growth (Latulippe et al., 2023; Lin et al., 2024). This suggests that corporate taxes can hinder capital accumulation and productivity. According to more extensive empirical research, higher corporate tax rates or revenues generally correspond with slower economic growth in many industrialized economies. This is probably because there are fewer incentives for investment and business expansion (Jacob, 2022; Nishihara, 2023; Yoshida, 2023). There is disagreement in the empirical literature, nevertheless. There are conflicting findings in the literature, according to a large meta-regression that included 42 primary studies on corporate tax cuts. The results showed that changes in corporate tax rates were either associated with increases, decreases, or no statistically significant effects on economic growth. Even after accounting for publication bias, it was still possible that corporate tax changes had no effect at all on growth (Geichert & Heimberge, 2022). This implies that the impact of CIT on growth can depend on elements including the effectiveness of tax administration, institutional quality, and the allocation of tax revenues.

Country specific analyses of corporate income tax (CIT) in Nigeria reveal mixed results that mirror broader debates in fiscal and legal scholarship. Some researchers identify a positive link between CIT revenue and economic growth, suggesting that enhanced tax receipts may underpin public service delivery and infrastructure expansion, which, in turn, support GDP growth – an argument consistent with the productivity foundations explored in legal and ethical frameworks (Crisanti et al., 2022; Imeokparia et al., 2025). Conversely, studies reporting insignificant or negative effects of CIT on growth highlight how outcomes depend on model specification and period of analysis, echoing critiques of rigid policy interpretations (Okosa, 2021; De-Jonge, 2016). This diversity in outcomes finds parallels in discussions of institutional design and normative application across Nigerian contexts, where legal doctrine and state functions are contested (Abid et al., 2025; Alhajri & Aloud, 2025; Christensen & Læg Reid, 2025). As with debates on compulsory dress codes or state eradication laws, the effectiveness of taxation instruments is shaped by broader governance structures (Okosa, 2022a; 2022b). Similarly, jurisprudential explorations into compensation mechanisms and liability (Okosa, 2022c; Okosa, 2023) underscore the need for nuanced, context sensitive frameworks in evaluating policy impacts. Such interdisciplinary insights strengthen understanding of why CIT's relationship with GDP varies significantly across empirical settings.

On the other hand, research on VAT revenue and economic growth generally finds more consistently positive results, though with important contextual caveats. Several empirical studies in Nigeria find that VAT revenue has a significant positive effect on GDP or human development measures, suggesting that efficient VAT collection contributes to broader economic performance (Ojo & Shittu, 2023; Puteri et al., 2025; Tricahyono & Wijaya, 2024). Another Nigerian ARDL study concluded that VAT has a significant positive impact on GDP growth, albeit accompanied by calls for improved tax administration and governance to maximize benefits (FADIPE, ADENIYI OLUBUNMI et al., 2025; Liko, 2024; Sayari et al., 2023). Meanwhile, research also underscores that VAT's positive influence on growth can be constrained by governance issues, indicating that corruption or weak enforcement may limit how much VAT revenue translates into productive public expenditure (Nwaeze, 2026).

International tax research on VAT supports the notion that how VAT revenue is raised matters for growth outcomes. A study of OECD countries showed that a revenue-neutral increase in VAT can promote long-run growth when VAT is broadened through increased compliance and reduced exemptions, as opposed to simply raising standard rates; this implies

that base broadening and administrative efficiency can enhance the growth-friendliness of VAT revenue (Acosta-Ormaechea & Morozumi, 2021).

Policy implications from the literature point toward broadening tax bases, improving compliance and administration, and ensuring that tax revenues are effectively channeled into productive expenditure. The need for the present study stems from notable gaps in the existing empirical literature on taxation and growth in Nigeria. First, while several studies have investigated tax revenues broadly, many have not disaggregated tax categories to isolate the distinct effects of Corporate Income Tax (CIT) and Value-Added Tax (VAT) on economic growth using robust cointegration techniques over a long recent period. For example, previous ARDL studies either cover shorter and older periods or combine taxes without a focused disaggregated long-run analysis of CIT and VAT.

Second, existing ARDL research often reports mixed and sometimes insignificant results for CIT and VAT impacts, highlighting inconsistent findings. For instance, Idebi et al. (2024) found positive but statistically insignificant effects of CIT and VAT on growth, while other studies show significant relationships only for selected tax categories or limited periods without isolating dynamics across different economic regimes or structural changes in Nigeria's economy. Similarly, several empirical analyses focus only on VAT's influence or report conflicting signs and significance levels (e.g., some VAT studies show negative effects while others find positive or insignificant influence). Because recent economic reforms, changing tax policies, and the evolution of Nigeria's non-oil economy may alter the long-run relationship between tax revenues and growth, an updated ARDL bounds testing approach is necessary to fill these methodological and temporal gaps, providing more precise evidence to inform fiscal policy.

Research Questions:

What is the impact of CIT and VAT on economic growth in Nigeria?

Objectives of the study:

To ascertain the impact of CIT and VAT on economic growth in Nigeria.

Research Hypothesis:

The following testable hypotheses will align this study with the above objectives.

- i. Ho: regional integration (composite, regional integration index of trade, financial infrastructure, production and movement of persons) has no significant impact on the economic growth of CEN-SAD countries.
- ii. Ho: Trade integration index and financial integration index do not have a significant impact on economic growth of CEN-SAD countries.
- iii. Ho: Integration in Infrastructure, production and movement of persons do not significantly impact economic growth in CEN-SAD countries.

METHODS

The ARDL model of this study is specified with additions of control variables. This is employed to evaluate the impact of corporate income tax revenue and value-added tax revenue on economic growth in Nigeria

The generalized form of the ARDL model in functional form is specified thus;

$$RGDP = f(CITR, VATR, RINR, LFPR) \quad (1)$$

Equation 1 is specified in the econometric form below:

$$\begin{aligned} LOGRGDP_t = & \alpha_0 + \sum_{j=1}^Z \phi_j LOGRGDP_{t-j} + \sum_{i=0}^X \theta_i LOGCITR_{t-i} + \sum_{k=0}^X \lambda_k VATR_{t-k} + \\ & \sum_{m=0}^X \delta_m RINR_{t-m} + \sum_{s=0}^X \rho_s LFPR_{t-s} + \mu_t \end{aligned} \quad (2)$$

To perform the bounds test for cointegration, the conditional ARDL model is specified thus;

$$\begin{aligned} \Delta \text{LOGRGDP}_t = & \alpha_0 + \beta_j \text{LOGRGDP}_{t-j} + \gamma_i \text{LOGCITR}_{t-i} + \delta_k \text{VATR}_{t-k} + \\ & \pi_m \text{RINR}_{t-m} + \sigma_s \text{LFPR}_{t-s} + \sum_{j=1}^Z \phi_j \Delta \text{LOGRGDP}_{t-j} + \sum_{i=0}^X \theta_i \Delta \text{LOGCITR}_{t-i} + \\ & \sum_{k=0}^X \lambda_k \Delta \text{VATR}_{t-k} + \sum_{m=0}^X \delta_m \Delta \text{RINR}_{t-m} + \sum_{s=0}^X \rho_s \Delta \text{LFPR}_{t-s} + \\ & \mu_t \end{aligned} \quad (3)$$

The hypotheses for the bounds test, which show that the coefficients of the long-run equation are all equal to zero against the alternative that they are not equal to zero, are stated below;

$$H_0: \beta_j = \gamma_i = \delta_k = \pi_m = \sigma_s = \partial_n = 0$$

$$H_1: \beta_j \neq \gamma_i \neq \delta_k \neq \pi_m \neq \sigma_s \neq \partial_n \neq 0$$

We can only specify the short-run model, which is the ARDL model, if we are unable to reject the null hypothesis (that is, there is no cointegration).

The ARDL model is specified thus;

$$\begin{aligned} \Delta \text{LOGRGDP}_t = & \alpha_0 + \sum_{j=1}^Z \phi_j \Delta \text{LOGRGDP}_{t-j} + \sum_{i=0}^X \theta_i \Delta \text{LOGCITR}_{t-i} + \\ & \sum_{k=0}^X \lambda_k \Delta \text{VATR}_{t-k} + \sum_{m=0}^X \delta_m \Delta \text{RINR}_{t-m} + \sum_{s=0}^X \rho_s \Delta \text{LFPR}_{t-s} + \\ & \mu_t \end{aligned} \quad (4)$$

We can specify both the short-run and long-run models, which is the error correction model (ECM), if we can reject the null hypothesis (that is, there is cointegration),

The error correction model (ECM) representation is specified as;

$$\begin{aligned} \Delta \text{LOGRGDP}_t = & \alpha_0 + \sum_{j=1}^Z \phi_j \Delta \text{LOGRGDP}_{t-j} + \sum_{i=0}^X \theta_i \Delta \text{LOGCITR}_{t-i} + \\ & \sum_{k=0}^X \lambda_k \Delta \text{VATR}_{t-k} + \sum_{m=0}^X \delta_m \Delta \text{RINR}_{t-m} + \sum_{s=0}^X \rho_s \Delta \text{LFPR}_{t-s} + \gamma \text{ECT}_{t-i} + \\ & \mu_t \end{aligned} \quad (5)$$

Where CITR = company income tax revenue, VATR = value added tax revenue, RINR = real interest rate, LFPR = labour force participation rate, and RGDP = real gross domestic product.

Corporate income tax is a primary direct tax in Nigeria, tapping into firms' profits. Its inclusion captures how levies on corporate earnings influence aggregate outputs and has been employed by Edewusi and Ajayi (2019) in an empirical analysis. Value-added tax represents the main indirect tax instrument, levied at each production stage. It funds public expenditure without directly distorting corporate profit margins. Edewusi and Ajayi (2019) also applied the variable for analysis. The real interest rate proxies the cost of capital, shaping firms' investment and borrowing decisions.

$$Y_i = A(K_i).(H_i).H^e \quad (6)$$

Gross Domestic Product (: This is the dependent variable in our model and a proxy for economic growth. It measures the total value of final goods and services produced within the economy at any given period. Precisely, it is defined as a gradual upswing in national revenue or output (Etim et al., 2021). Economic growth is included in the model as it is the primary variable of interest, and it represents the aggregate demand in the economy. It is viewed from the angle of a four-sector economy, which is a function of household consumption, investment, government expenditure, and net export. In this study, gross domestic product is measured in billions of dollars (constant 2015 US\$).

Corporate income tax Revenue (CITR): Corporate income tax (CIT), also known as business income tax or corporate profit tax, is a tax imposed by governments on the profits earned by corporations or business entities. It is a major independent variable in this study as it captures the revenue obtained from direct taxation, similar to the study by Tweneboah (2019) in Ghana. It is one of the primary sources of revenue for governments and is levied on the taxable income generated by a corporation during a specified tax period, typically a fiscal year. It is expected that as corporate income tax revenue increases, there will be an increase in

economic growth through proper public investment. Hence, the coefficient of corporate income tax revenue is positive and greater than 1. For this study, corporate income tax revenue is measured annually in Naira.

Value-Added Tax Revenue (VATR): Value Added Tax (VAT) revenue refers to the income generated by governments through the collection of Value Added Tax. VAT is a consumption tax levied on the value added at each stage of the production and distribution process of goods and services. It is an independent variable in this study and is used to account for indirect taxation. Its inclusion in this model is justified as it is one of the most common forms of indirect taxation used by governments around the world. More so, it is the inclusion in the model that replicates that of Aliyu and Mustapha (2020). Based on economic expectations of the Laffer theory of taxation, it is expected that an increase in value-added tax revenue should increase economic growth if there is an optimal tax rate; otherwise, it would contract economic growth. In this study, value-added tax revenue is measured annually in Naira.

Real Interest Rate (RINR): This is an explanatory variable and is included in this model in line with economic theories that explain the strong impact of interest rates on economic growth through investment. Interest rate is the cost or price of borrowing money, typically expressed as a percentage of the amount borrowed. It is the cost that borrowers incur for using someone else's money. Interest rate is proxied by real interest rate as it accounts for inflation and is a better measure of interest rate over time. It is expected that the interest rate has a negative relationship with economic growth, as an increase in interest rate discourages investment, which reduces economic activity. Interest rate is measured annually in percentage, and its coefficient is negative and less than 1.

Labour Force Participation Rate (LFPR): The labor force participation rate is a measure that expresses the percentage of the working-age population (those available and willing to work) that is either employed or actively seeking employment. It is a key indicator used to assess the level of labor market engagement within a given population. It is introduced as an independent variable in this study in line with the neoclassical growth theory. It is expected that an increase in the labour participation rate should increase economic activities in an economy. Hence, its coefficient is positive and greater than 1.

The study adopted secondary time series data for all the variables covering the period from 1994 to 2023. The data was sourced from different areas based on the variable of consideration.

Table 1: Nature and Sources of Data.

Variables		Proxy and Measurement	Sources (s)		
Economic Growth		Proxied by the real gross domestic product measured in billions of dollars	World Bank	Indicators	(WDI)
Private Investment		Measured in (₦Billion).	CBN		
Public Investment		Measured in (₦Billion).	CBN		
Direct taxation revenue		Proxied by corporate income tax revenue measured in billions of Naira	Federal Service	Inland Revenue	or https://www.firs.gov.ng/tax-resources-statistics/CBN
Indirect taxation revenue		Proxied by value-added taxation revenue and is measured in billions of Naira.	Federal Service	Inland Revenue	CBN
Real Interest Rate		Proxied by the real interest rate measured in percentage.	World Bank	indicators	(WDI).
Labour force participation rate		Proxied by the labour participation rate measured in total	World Bank	Indicators	(WDI)

Balance of trade	Measured in (₦Million).	World Bank indicators (WDI).
Political Stability and Absence of Violence/Terrorism	Measured as estimated of	World Governance Indicators (WGI)

Source: Researchers' Compilation 2024.

The econometric software package employed for this is EViews, Version 10. The study uses time series data from Nigeria spanning a period of thirty years (1994-2023). The variables of interest here include company income tax, value-added tax, real GDP, labour force participation rate, inflation rate, private investment, public investment, the balance of trade, Political Stability and Absence of Violence/Terrorism, and real interest rate.

RESULTS AND DISCUSSION

Descriptive Statistics of the Variables

The descriptive statistics for the main variables utilized in the analysis are shown in Table 2. Annual time series data from 1994 to 2023 are used in the study. The model incorporates the following variables: labor force participation rate (LFPR), real interest rate (RINR), value-added tax revenue (VATR), corporate income tax revenue (CITR), and real gross domestic product (RGDP).

Table 2: Descriptive Statistics of the Variables

Variables	Obs.	Mean	Minimum	Maximum	Standard Deviation	Jarque-Bera
CITR	30	784.9362	13.2	4896.47	1018.896	91.09154
LFPR	30	59.79964	58.437	60.422	0.536836	4.899907
RINR	30	3.538199	-31.4526	18.18	9.553944	40.92277
VATR	30	711.6278	8.2	4358.76	927.3487	78.64376
RGDP	30	3.45E+11	1.55E+11	5.51E+11	1.42E+11	3.095398

Source: Author's Computation, E-View 10.

The findings show that over the study period, corporate income tax revenue (CITR) averaged ₦784.94 billion, with a minimum of ₦13.2 billion and a maximum of ₦4896.47 billion. Given structural changes in Nigeria's fiscal policies and shifts in the corporate sector, the high standard deviation (₦1018.90 billion) indicates significant variations in corporate tax collections over time. Likewise, the average value of value-added tax revenue (VATR) is ₦711.63 billion, with a standard deviation of ₦927.35 billion. This suggests that over the research period, VAT revenue has shown significant volatility. These variations could be ascribed to macroeconomic instability, shifts in compliance rates, and policy modifications in consumption taxation.

With a mean of 59.80 percent and a standard deviation of 0.54, the labor force participation rate (LFPR) exhibits comparatively low variability, indicating that labor market involvement stayed mostly constant over the course of the study. On the other hand, the real interest rate (RINR), which ranges from -31.45 percent to 18.18 percent, shows notable changes in borrowing costs within the Nigerian economy. Nigeria's economic production was reflected in the average real gross domestic product (RGDP), which was 3.45×10^{11} . The Jarque-Bera statistics also show that a number of variables, especially CITR and VATR, depart from the normal distribution, which is in line with the volatility frequently seen in fiscal revenue data from developing nations.

Unit Root Test

Stationarity tests were performed to ascertain the variables' order of integration before model estimate. To make sure none of the variables are integrated at order two, which would render the use of the ARDL bounds testing approach illegal, the Phillips-Perron (PP) and Augmented Dickey-Fuller (ADF) unit root tests were used. Corporate income tax revenue (CITR), value-added tax revenue (VATR), labor force participation rate (LFPR), and real interest rate (RINR) are all stagnant at level, or integrated of order I(0), according to the data shown in Table 3. On the other hand, following initial differencing, the real gross domestic product (RGDP) becomes stationary, signifying order I integration (1).

Because the autoregressive distributed lag (ARDL) framework permits estimate when variables have mixed orders of integration, as long as none are integrated at I(2), the combination of I(0) and I(1) variables satisfies the prerequisite for applying the ARDL model.

Table 3: Unit Root Results (Augmented Dickey-Fuller and Phillips-Perron Tests)

Variables	Test Statistic for ADF Test	5% Critical Value	Test Statistic for Phillips-Perron Test	5% Critical Value	Order of Integration
CITR	5.592219	-3.004861	4.404907	-2.967767	1(0)
LFPR	-4.652410	-3.632896	-3.631989	-2.971853	1(0)
RINR	-5.643089	-3.587527	-3.985468	-3.574244	1(0)
VATR	5.277427	-3.580623	7.778949	-3.574244	1(0)
RGDP	-3.137843	-2.971853	-3.107169	-2.971853	1(1)

Source: Author's computation (E-views 10)

NA denotes Not Applicable

The summary table 3 discloses that some of the variables are stationary in levels 1(0), like the company income tax, value-added tax, labour force participation rate, private investment, public investment, and real interest rate. Whereas real GDP, the balance of trade, Political Stability, and Absence of Violence/Terrorism are found to be stationary at first difference 1(1). Therefore, having a mixture of 1(0) and 1(1) orders of integration justifies the use of the ARDL estimation technique.

Correlation Analysis

Before regression estimation, the correlation matrix shown in Table 4 helps identify possible multicollinearity problems and offers some initial insight into the relationships between the variables. The findings indicate a positive correlation between RGDP and both value-added tax revenue (0.707843) and corporate income tax revenue (0.625883). This implies that higher levels of economic output are typically linked to increases in tax revenues. In the meanwhile, there is a moderately positive correlation between economic growth and the real interest rate (0.320767). The labor force participation rate and RGDP have a negative correlation (-0.704049), which may be due to structural dynamics in Nigeria's labor market, where gains in labor force participation do not always result in corresponding increases in economic output or productivity.

Crucially, there is no significant multicollinearity among the explanatory factors, as indicated by the fact that none of the correlation coefficients surpass the crucial cutoff point of 0.8. This attests to the variables' appropriateness for regression analysis.

Table 4: Correlation Matrix of the Variables

Panel A: Correlation Matrix

VARIABLES	RGDP	CITR	VATR	RINR	LFPR
RGDP	1.000000				
CITR	0.625883	1.000000			
VATR	0.707843	0.585778	1.000000		
RINR	0.320767	0.106611	0.074007	1.000000	
LFPR	-0.704049	-0.662480	-0.694432	-0.114854	1.000000

Test for Cointegration-Bounds Test

The ARDL limits testing method was used to ascertain whether there is a long-run equilibrium relationship between the variables. According to the limits test's null hypothesis, there is no long-term correlation between the variables. The computed F-statistic (3.663026) surpasses the upper critical bound at the 5 percent significance level (3.49), according to the data shown in Table 5. As a result, the null hypothesis that there is no cointegration is rejected.

Thus, the findings support the presence of a long-term equilibrium link between Nigeria's economic growth, real interest rates, labor force participation rate, corporate income tax revenue, and value-added tax revenue. This result supports the estimation of the short-run error correction model as well as the long-run ARDL model.

H_0 : No long-run relationship exists

Table 5: Bounds Test Result

Test Statistic	Value	K
F-Statistic	3.663026	4
Critical Value Bounds		
Significance	1(0) Bound	1(1) Bound
10%	2.2	3.09
5%	2.56	3.49
2.5%	2.88	3.87
1%	3.29	4.37

Source: Author's computation E-views 10

Decision Rule: We reject the null hypothesis since the test statistic (F-statistic = 3.6630) is greater than the upper bounds at a 5% level of significance [1(1) Bound = 3.49], and consequently conclude that a long-run relationship exists in the model. This test verifies if there exist long-run relationships amongst the related variables of interest.

Estimation and Interpretation

The empirical results show a positive and statistically significant correlation between Nigeria's economic growth and corporate income tax revenue (CITR). The computed coefficient indicates a long-term correlation between greater levels of real GDP and increases in business tax revenue. This finding suggests that improved economic performance typically occurs during times when corporate tax receipts are higher, rather than suggesting a clear causal relationship. One rationale is that higher tax income strengthens the government's

budgetary capacity, allowing for higher public spending on institutions, infrastructure, and public services – all of which are significant stimulators of economic activity.

Table 6: Model Estimation Result (Long-run)

Dependent Variable: LOGRGDP

Variables	Coef.	Std. Error	Prob.	Coef.	Std. Error	Prob.
ARDL ESTIMATOR			FMOLS ESTIMATOR			
LOGCITR	0.3078*	0.0112	0.0000	0.3142*	0.0089	0.0000
VATR	-0.00006**	0.00003	0.0229	-0.0001*	0.00001	0.0000
RINR	-0.0017	0.0020	0.4107	-0.0041*	0.001	0.0004
LFPR	-0.0103	0.0410	0.8039	-0.0511**	0.0208	0.0218
C	25.4085*	2.4427	0.0000	27.8231*	1.2602	0.0000

Source: Author's computation, E-views 10

Note: * denotes significance at 1%, ** denotes significance at 5%

Value-added tax revenue (VATR), on the other hand, has a statistically significant negative correlation with economic growth. A modest decrease in economic growth is linked to increases in VAT revenue, as indicated by the coefficient of -0.00006. This outcome might be a reflection of how consumption taxes reduce aggregate demand and household spending. Under the ARDL model, the real interest rate (RINR) shows a negative but statistically negligible association with economic growth. This implies that, according to the calculated model, changes in actual borrowing costs have no effect on Nigeria's economic development.

In the ARDL long-run estimation, the labor force participation rate (LFPR) likewise exhibits a negative and statistically negligible coefficient. This result would suggest that without commensurate gains in productivity and job possibilities, labor supply expansions by themselves are not enough to spur economic growth.

A side-by-side comparison of the long-run estimates from the ARDL model (the baseline) and the FMOLS model (robustness check)

In the long-run ARDL estimation, the coefficient on corporate income tax revenue is 0.3078 and highly significant at 1%, closely matched by the FMOLS estimate of 0.3142 (also 1% significant); both suggest a robust positive effect of corporate income tax revenue on GDP. For value-added tax revenue, ARDL yields a small but negative coefficient (0.0001) significant at 5%, while FMOLS estimates a slightly larger negative impact (0.0001) significant at 1%. Real interest rate is insignificant in ARDL (-0.0017, prob. value = 0.41) but becomes significant and negative in FMOLS (-0.0041, prob. value = 0.0004). Labour force participation likewise is insignificant under ARDL (-0.0103, prob. value = 0.80) yet turns significantly negative in FMOLS (-0.0511, p = 0.0218). Both estimators record highly significant constants, with FMOLS's intercept (27.8231) modestly above ARDL's (25.4085). Overall, FMOLS delivers slightly stronger magnitudes and additional significant relationships for RINR and LFPR compared to ARDL.

Table 7: Model Estimation Result (Short-run)

Dependent Variable: LOGRGDP

Variables	Coefficient	Std. Error	t-statistic	Prob.
D(LOGRGDP(-1))	0.2562**	0.1214	2.1099	0.0510
D(LOGCITR)	0.0984*	0.0180	5.4611	0.0001
D(LFPR)	0.0180	0.0212	0.8502	0.4077
D(LFPR(-1))	-0.0574**	0.0197	-2.9097	0.0102
CointEq(-1)*	-0.4343*	0.0809	-5.3709	0.0001

Source: Author's computation, E-views 10

Note: * denotes significance at 1%, ** denotes significance at 5%

According to fiscal policy theory, tax revenue is essential for funding worthwhile public investments that promote sustained economic growth. According to endogenous growth theory, government expenditures funded by taxes can promote growth when they enhance economic infrastructure, human capital formation, and productivity. In this case, the benefit of tax-funded public investments to economic performance may be reflected in the positive correlation between corporate income tax revenue and economic growth. This perspective is consistent with empirical research that highlights how effective revenue mobilization enhances the government's ability to fund spending that is focused on development. But it's also important to exercise caution when interpreting the favorable correlation between corporation tax revenue and economic growth. Higher tax revenue may not be the main driver of economic progress in many developing economies, but rather a reflection of it. During times of economic expansion, government tax receipts inevitably climb in tandem with company earnings. Consequently, rather than a strictly one-way impact of taxes on growth, the observed link might reflect the interplay between economic expansion and tax revenue performance. The findings, on the other hand, indicate that there is a long-term, statistically significant negative correlation between value-added tax revenue (VATR) and economic growth. According to the estimated coefficient, over the study period, a minor decrease in economic growth is linked to increases in VAT revenue. In economies where household consumption accounts for a significant portion of aggregate demand, this finding might be a reflection of the possible contractionary consequences of consumption-based taxation. Increases in indirect taxes like VAT may lower disposable income and hence slow consumption-driven economic activity in Nigeria, where consumer spending accounts for a sizeable portion of GDP. The distortionary taxation hypothesis, which contends that specific tax forms have the power to affect resource allocation and economic behavior, can be used to interpret this finding. When the tax burden is passed on to consumers in the form of increased costs for goods and services, consumption taxes may lower purchasing power. Because people devote a significant amount of their income to basic consumption, these effects might be particularly noticeable in developing economies with relatively low income levels. As a result, short-term declines in aggregate demand may be linked to rises in VAT revenue, which may slow economic growth.

The adjustment process toward long-run equilibrium is further supported by the short-run dynamics that the error correction model captures. A steady long-term relationship between the variables in the model is confirmed by the negative and statistically significant error correction term. About 43% of deviations from the long-run equilibrium are adjusted in a single period, according to the projected adjustment speed. This implies that the economic system progressively returns to its long-term course, even though short-term shocks may momentarily upset the equilibrium link between tax revenue and economic growth. All things considered, the empirical results demonstrate how intricately taxes influence macroeconomic performance in developing nations. Depending on the economic structure and household income levels, reliance on indirect consumption taxes like VAT may have a mixed impact on the economy, even though effective corporate tax mobilization may be linked to better economic outcomes through increased fiscal capacity and public investment. These findings highlight how crucial it is to create fair tax laws that promote income creation while reducing negative effects on spending and the economy. This potentially explains the negative VAT result and underscores the need to contextualise VAT effects within Nigeria's broader institutional environment.

CONCLUSION

This study used the Autoregressive Distributed Lag (ARDL) bounds testing approach to examine the effects of value-added tax (VAT) and corporate income tax (CIT) revenues on economic growth in Nigeria. The empirical findings show that tax revenues and economic growth have a long-term equilibrium relationship, suggesting that fiscal policy tools have a big impact on Nigeria's macroeconomic performance. The results demonstrate that economic growth is positively and statistically significantly impacted by corporate income tax revenue. This finding implies that corporate tax revenue supports economic growth, most likely through increased government funding for profitable ventures, infrastructure development, and public spending. Therefore, it seems that a key element of sustainable economic development is efficient corporation tax administration. On the other hand, there is a negative long-term correlation between value-added tax revenue and economic growth. This result suggests that increases in VAT revenue could have a contractionary effect on economic activity, perhaps because families and firms are burdened by consumption taxes. An over-reliance on indirect taxes can lower purchasing power and stifle economic activity in developing economies where spending accounts for a significant portion of total demand. The statistically significant error correction term in the short-run results further shows that modifications toward long-run equilibrium happen at a moderate pace. This demonstrates how short-term shock-induced equilibrium deviations are progressively restored over time. All things considered, the study emphasizes how crucial it is to have effective and balanced tax laws that promote economic expansion while reducing unfavorable economic distortions. To increase revenue mobilization, policymakers should concentrate on bolstering corporate tax administration, enhancing tax compliance, and expanding the tax base. In order to prevent unforeseen detrimental effects on economic activity, significant thought should be given to the design and application of consumption taxes like VAT. Future studies should investigate how public expenditure management, tax administration effectiveness, and institutional quality affect the relationship between taxes and economic growth in Nigeria.

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