



AFRICAN JOURNAL OF ORGANIZATIONAL PERSPECTIVES AND ECONOMY
FACULTY OF MANAGEMENT OF SCIENCES, IMO STATE UNIVERSITY
VOL. 10 NO. 2 JUNE 2026

TAXATION AND MACROECONOMIC PERFORMANCE IN NIGERIA

CORNELIOUS TAMUNO

Department of Economics & Development Studies, Faculty of Social Sciences
Federal University Otuoke, PMB 126, Yenagoa
Bayelsa State, Nigeria
tamunocc@fuotuoche.edu.ng

&

JOHN IKECHUKWU OKPARA (PhD)

Department of Economics & Development Studies, Faculty of Social Sciences
Federal University Otuoke, PMB 126, Yenagoa
Bayelsa State, Nigeria
okparaji@fuotuoche.edu.ng

Article history:

Received: 18 May 2026;

Received in revised form:
10 June 2026;

Accepted: 28 June 2026

Keywords:

Taxation, Inflation, Income-tax, Regression, Growth, ARDL.

Abstract

This study examines the effects of taxation on macroeconomic performance in Nigeria using the Autoregressive Distributed Lag (ARDL) modelling framework. Macroeconomic performance is measured by per capita gross domestic product and inflation, while taxation is disaggregated into value added tax, company income tax, customs and excise duties, and petroleum profit tax, with the exchange rate included as a control variable. The results confirm the existence of a stable long-run relationship between taxation and macroeconomic performance in Nigeria. In the short run, value added tax and customs and excise duties exert positive and statistically significant effects on economic growth, whereas company income tax has a negative effect. In the long run, value added tax remains growth-enhancing, while company income tax and exchange rate depreciation significantly constrain economic growth. Petroleum profit tax is positive but statistically insignificant in both the short and long run. With respect to inflation, the findings reveal that the effects of taxation vary across tax types and time horizons. In the short run, value added tax and customs and excise duties significantly reduce inflation, indicating their moderating influence on price pressures. Conversely, company income tax exerts a significant inflationary effect in the short run, reflecting cost-pass-through effects, while petroleum profit tax remains insignificant. In the long run, customs and excise duties significantly increase inflation, suggesting persistent cost-push effects,

whereas value added tax continues to exert a disinflationary influence. Company income tax and petroleum profit tax do not have significant long-run effects on inflation, indicating limited enduring influence on price dynamics. The study concludes that indirect taxation supports economic growth in Nigeria, while excessive corporate taxation and macroeconomic

Introduction

Taxation has assumed a central role in public finance as governments seek sustainable revenue sources to support economic activities, provide public goods, and maintain macroeconomic stability. In developing economies such as Nigeria, an efficient tax system is especially important not only for revenue mobilization but also for stimulating economic growth, reducing inequality, and strengthening overall macroeconomic performance. Tax revenues provide governments with the fiscal capacity to invest in infrastructure, human capital, and social services that support long-term development and economic resilience (Akwe, 2014; Oladipupo & Obazee, 2016). Nigeria's tax structure, comprising both direct taxes (personal income tax, corporate income tax, and property tax) and indirect taxes (value-added tax, customs duties, and excise taxes), plays a critical role in shaping macroeconomic performance (Chaudhry & Munir, 2010; Justman et al., 2011). Direct taxes support redistributive objectives and influence household and corporate behavior, while indirect taxes affect consumption patterns, production costs, and overall market activity. Together, these taxes impact key macroeconomic indicators such as economic growth, employment, inflation, and fiscal stability.

However, despite their importance, Nigeria's tax system faces structural challenges that limit its effectiveness in enhancing macroeconomic performance and economic well-being. A large informal sector, accounting for more than half of total economic activity, remains largely untaxed due to weak administrative capacity, low income levels, and widespread public distrust in government

instability hinder long-term development. Policy recommendations emphasize tax structure reform, investment-friendly corporate taxation, efficient revenue utilization, and exchange rate stability.

institutions (Iyoha, 2019). Additionally, the discovery of crude oil in the 1970s shifted Nigeria's fiscal focus toward oil revenues, neglecting non-oil taxation and exposing the economy to external shocks from volatile global oil prices (Umeora, 2013). As a result, tax revenue remains disproportionately low relative to the size of the economy, with a tax-to-GDP ratio of about 6%, well below the 15–20% benchmark recommended for developing economies (IMF, 2021). This weak revenue performance constrains the government's ability to fund public goods, invest in infrastructure, and implement policies critical for sustained economic growth, fiscal stability, and broader macroeconomic development.

Macroeconomic performance refers to the overall effectiveness and stability of an economy in achieving growth, stability, and improved living standards. It evaluates economy-wide outcomes shaped by government policies, market dynamics, and external conditions. Key indicators include economic growth (GDP), price stability (inflation control), and employment levels, which reflect the efficient use of resources. It also encompasses fiscal stability, including sustainable revenues and manageable deficits, external sector stability, and equitable income distribution. Strong macroeconomic performance, especially in developing countries like Nigeria, is crucial for mobilizing revenue, attracting investment, reducing poverty, and enhancing overall economic well-being through a functional tax system.

The inadequacy of tax revenue in Nigeria stems largely from structural and institutional weaknesses within the tax system, including administrative inefficiencies, weak enforcement, widespread tax evasion, and the dominance of a large informal sector that

remains largely outside the tax net (Iyoha, 2019; Oladipupo & Obazee, 2016). These factors have resulted in a narrow and poorly diversified tax base. The situation is further aggravated by Nigeria's long-standing dependence on oil revenues, which reduced incentives to strengthen non-oil taxation and exposed public finances to volatility arising from fluctuations in global oil prices, leading to fiscal instability and disruptions in public spending (Akwe, 2014).

Although successive governments have implemented reforms aimed at improving tax administration, broadening the tax base, and attracting foreign direct investment, the outcomes have been limited. Initiatives such as the Nigerian Investment Promotion Commission Act and the establishment of the Presidential Enabling Business Environment Council were intended to improve the investment climate and expand the tax base. However, corruption, weak institutional capacity, poor inter-agency coordination, and inadequate technological infrastructure have undermined their effectiveness, preventing taxation from playing its expected role in stimulating investment and improving macroeconomic outcomes (Akinyomi & Okpala, 2013). More recent reforms under the Finance Acts, particularly between 2020 and 2023, introduced adjustments to tax rates and administration, including differentiated corporate income tax rates, increased VAT, and progressive personal income taxation (FIRS, 2023; IMF, 2021). While these measures have contributed to some improvement in revenue collection, Nigeria's tax-to-GDP ratio remains low compared to peer African economies, constraining the government's ability to finance critical infrastructure and social services.

The available literature shows that taxation significantly impacts macroeconomic performance through various channels by affecting incentives, investment, and resource mobilization, with studies often finding mixed

results, depending on the tax type, country context, and themes of the studies: For instance, a study by Omojolaibi and Obieke (2021) on the dynamics of the tax system and macroeconomic performance in Nigeria found that the computed dynamics of the tax system have a positive and significant influence on macroeconomic performance. In the same view, Atolagbe and Abiodun (2021) investigated the impact of trade liberalization and six macroeconomic variables and their interplay on tax revenues in Nigeria and found that the macroeconomic variables found to be predictors of both domestic and external tax revenues were share of petroleum and mining in GDP, foreign direct investment, share of agriculture in GDP, per capita income, exchange rate, and inflation rate. Yet, Ojong, Ogar, and Arikpo (2016) examined the impact of taxation on the Nigerian economy and found a significant relationship between personal income tax and the growth of Nigeria, while no significant relationship was found between company income tax and the growth of the Nigerian economy. Equally, Agama and Onowu (2025) examined the influence of value added tax, petroleum profit tax, and company income on gross domestic product growth, employment generation, and inflation in Nigeria and found that; (i) a significant relationship existed between value added tax, petroleum profit tax, company income tax, and employment generation; (ii) value added tax and company income tax have a significant relationship with gross domestic product growth, and petroleum profit tax and growth domestic product growth had an insignificant relationship; and (iii) there is an insignificant relationship between value added tax, company income tax, petroleum profit tax, and inflation.

Also, Elsevier (2023) examined the macroeconomic effects of tax changes during fiscal consolidations and found that base broadening during fiscal consolidations leads to

smaller output and employment declines compared to rate hikes, even when distinguishing between tax types. Still, Chamisa and Sunde (2025) investigated the macroeconomic and social determinants of income and consumption tax revenues in Zimbabwe and found that private consumption, agricultural output, inflation, and real interest rates exert statistically significant effects on tax revenues.

Literature Review

Several scholars have defined taxation as a compulsory contribution imposed by a government on individuals, businesses, or other entities to finance public expenditures and provide public goods and services. Musgrave and Musgrave (1989) and Stiglitz (2015) emphasize that taxation is a fundamental tool of fiscal policy, used not only to mobilize resources for government operations but also to redistribute income and influence economic behavior. Adereti, Salawu, and Ayodele (2011) note that taxation is a legally enforced levy on income, property, goods, or activities of individuals and organizations, enabling governments to meet expenditure obligations and promote economic development. In a similar vein, Ogujiuba, Stotsky, and Gemmell (2015) argue that taxation serves as a mechanism through which governments generate revenue while also regulating consumption, savings, and investment patterns in the economy. Todaro and Smith (2015) further highlight that taxation functions beyond revenue generation, acting as a policy instrument to achieve macroeconomic objectives, including controlling inflation, encouraging investment, and reducing inequality. Overall, these perspectives converge on the view that taxation is both a fiscal and economic instrument essential for enabling governments to deliver public services, support economic growth, and maintain social welfare.

Macroeconomic performance refers to the overall effectiveness and stability of an

economy in achieving its broad objectives, including economic growth, price stability, employment generation, and external balance, over a given period. It reflects how well an economy utilizes its resources to improve living standards and sustain development (Mankiw, 2020; Blanchard, 2019). From a fiscal and monetary policy perspective, macroeconomic performance represents the outcomes of government interventions and market interactions in maintaining stable growth, controlling inflation, ensuring fiscal sustainability, and promoting social welfare (Samuelson & Nordhaus, 2010; Dornbusch, Fischer & Startz, 2018). It can also be assessed through measurable indicators such as GDP growth, inflation rate, unemployment levels, balance of payments, fiscal balance, and exchange rate stability, which collectively evaluate the health and efficiency of an economy (Baumol & Blinder, 2016; Colander, 2018).

In the context of developing countries, macroeconomic performance is closely linked to the economy's ability to generate revenue, attract investment, reduce poverty, and provide public goods and services that enhance the population's quality of life (Todaro & Smith, 2015; Ajakaiye & Ncube, 2010). Overall, it represents the capacity of an economy to achieve sustained growth, stability, and equitable development while effectively managing its resources and responding to internal and external challenges. Macroeconomic performance refers to the overall functioning of an economy, reflecting its ability to achieve key objectives such as growth, stability, and improved living standards. Unlike microeconomic analysis, which focuses on individual firms or consumers, macroeconomic performance examines economy-wide outcomes resulting from the interaction of aggregate demand, aggregate supply, and government policies. Key indicators include economic growth, typically measured by GDP,

which reflects the economy's capacity to expand production and create employment. Sustained growth is essential for poverty reduction and improved living standards, but it must be accompanied by stability and equitable income distribution. Price stability, assessed through inflation, is critical for preserving purchasing power, encouraging investment, and supporting economic planning. Employment levels indicate the effective use of labor resources, while persistent unemployment signals structural weaknesses affecting income and social wellbeing. In this context, macroeconomic performance is measured using gross domestic product (GDP) per capita and the inflation rate in Nigeria. These concepts are significant indicators of the overall health and stability of the economy, as they capture both the standard of living and the price stability faced by households and firms.

GDP per capita reflects the average level of economic output and income per person, and it is commonly used as a proxy for economic welfare and productivity. An increase in GDP per capita suggests improvements in living standards, higher income levels, and enhanced productive capacity of the economy. In Nigeria, GDP per capita is particularly important for assessing whether economic growth translates into broad-based development, poverty reduction, and improved welfare, given the country's large population and structural economic challenges.

The inflation rate, on the other hand, measures the general increase in prices of goods and services over time and indicates the degree of price stability in the economy. Moderate and stable inflation is often associated with healthy economic activity, while high and volatile inflation undermines purchasing power, distorts investment decisions, and exacerbates income inequality. In Nigeria, persistent inflation has significant implications for household welfare, savings,

investment, and macroeconomic stability, making it a critical indicator of macroeconomic performance.

Channels of Transmission of Taxation on Macroeconomic Performance

Taxation influences macroeconomic performance through multiple interconnected channels affecting households, firms, government activities, and overall economic stability. As a key fiscal policy instrument, it shapes aggregate demand, production decisions, income distribution, and external competitiveness, thereby influencing growth, employment, and price stability. Taxation affects consumption by altering disposable income and prices. Direct taxes reduce household income, while indirect taxes raise the prices of goods and services, influencing consumption patterns and aggregate demand. Investment is affected through changes in the cost of capital and expected returns, as high or uncertain taxes may discourage investment, whereas stable and incentive-based tax systems can promote capital formation and growth.

Savings behavior is also influenced by taxation, as taxes on income and returns may reduce savings and constrain long-term investment, while savings-friendly tax policies can enhance capital accumulation. Through revenue mobilization, taxation enables governments to finance productive public expenditure on infrastructure and social services, which can boost productivity and economic growth when efficiently managed. Taxation affects labour supply and employment by influencing wages, work incentives, and labour costs. Excessive labour taxation may discourage participation or increase informality, while balanced tax structures can support job creation. Indirect taxes directly influence inflation by increasing production costs and consumer prices, potentially generating cost-push inflation. Taxation further shapes income distribution, as progressive tax

systems can reduce inequality and strengthen aggregate demand, whereas regressive structures may worsen inequality. Finally, taxation influences external competitiveness through trade taxes, corporate taxation, and investment incentives, affecting trade flows, foreign investment, and fiscal sustainability, particularly in economies with large informal sectors.

Theoretical Literature

The Ability-to-Pay Theory of taxation, advanced by Pigou (1943), posits that individuals should pay taxes in proportion to their capacity to do so, typically measured by income or consumption. This approach is intended to promote equity and justice in tax administration. However, determining an individual's ability to pay is inherently complex, as human wants are unlimited while resources are constrained. In Nigeria, where poverty is widespread and the population exceeds 202 million (NPC, 2018), classifying taxpayers by ability is challenging, limiting the practical application of this theory. The theory may be feasible when taxes are deducted directly from salaries, removing individual discretion, but otherwise, its implementation is constrained by weak moral disposition and limited political will.

The Benefit Theory of taxation, introduced by Lindahl (1960), suggests that taxes should correspond to the benefits individuals derive from government services: the greater the benefit, the higher the tax. While conceptually linking tax liability to received benefits, the theory faces practical limitations. Estimating individual benefits is difficult because public goods are non-rivalrous and non-excludable, and government expenditures are rarely attributable to specific taxpayers. Moreover, the provision of public goods requires substantial revenue that exceeds individual contributions. In Nigeria, institutional inefficiencies and governance challenges further hinder the applicability of

this theory. Attempting to base taxation on perceived benefits risks coordination failures, as taxpayers' needs are diverse and subjective, transferring decision-making power from government to citizens.

The Neo-Classical Model of Economic Growth, developed independently by Solow and Swan (1956), posits that economic growth is driven by the accumulation of capital, labor, and technological progress. According to the theory, countries can achieve higher growth by increasing the proportion of GDP invested in productive activities and technology, which enhances the productivity of capital. The model also introduces the concept of conditional convergence, suggesting that poorer countries can catch up to wealthier ones if they share similar savings rates, labor force growth, depreciation rates, and access to technology. Additionally, it emphasizes diminishing returns to capital, whereby growth slows as economies approach a steady-state equilibrium.

Empirical Literature

Okolo (2024) examined the relationship between tax revenue, government expenditure, and human development in Nigeria from 2014 to 2023 using secondary data from the Federal Inland Revenue Service, UNDP publications, and the Central Bank of Nigeria. Linear regression analysis revealed that increased taxation was associated with a decrease in the Human Development Index (HDI), while government expenditure positively impacted HDI. The study concluded that while taxation may impede human development if mismanaged, strategic public investment can significantly enhance economic wellbeing. It recommended efficient public spending and tax reforms to promote sustainable development.

Bokwana (2023) evaluated tax productivity and system performance from 1982 to 2022 using ECM-ARDL estimation to assess buoyancy and elasticity. The findings highlighted the responsiveness of the tax system to economic changes, with short- and

long-term elasticities outperforming buoyancy measures. The study concluded that a responsive tax system acts as an automatic stabilizer and recommended continuous monitoring of tax performance to maintain fiscal stability. Murebere and Margreth Faraja (2023) studied taxation and economic growth in Tanzania using a causal research design and ARDL modeling. They examined the effects of tax revenues, tax rates, and government expenditure. Results indicated that tax revenues positively influenced growth, while higher tax rates had a negative impact, and government expenditure was not statistically significant. The authors recommended the creation of a well-designed tax system to encourage investment, savings, and employment, thereby fostering sustainable economic growth. Kakaulina (2021) investigated the impact of COVID-19 on personal income tax revenue in Russia (2020–2023) using official government reports and economic forecasts. The study found significant reductions in tax revenue proportional to regional income levels, recommending that local authorities use these findings to plan budgets and mitigate pandemic-related fiscal shortfalls.

Ngwoke (2019) analyzed the impact of petroleum profit tax, corporate income tax, and customs and excise duties on Nigeria's real GDP for 2007–2017 using secondary data from the Central Bank of Nigeria and regression analysis. The study found that all three taxes significantly affected GDP, explaining approximately 96% of variations in economic output. The study concluded that taxation plays a vital role in economic growth and recommended diversifying the economy and strengthening anti-corruption measures to enhance revenue mobilization. Akay (2012) conducted a 26-year panel study in Germany to examine the effect of labor taxes, including income and payroll taxes, on individual well-being. Using exogenous variations in tax

regulations across time and demographic groups, the study found that labor taxes positively influenced subjective well-being after adjusting for post-tax income. This result was consistent across multiple specifications, suggesting that taxation can enhance welfare through public goods provision, insurance, redistribution, and tax morale. The study emphasized designing tax policies that balance revenue generation with welfare considerations.

Oishi, Schimmack, and Diener (2011) explored whether progressive taxation improves subjective well-being using data from the Gallup World Poll. Their objective was to assess the effect of tax progressivity on individuals' life satisfaction and daily experiences. The study employed cross-national survey data and controlled for wealth and income disparity. Findings revealed that progressive taxation positively influenced subjective well-being, with respondents in countries with more progressive tax systems reporting higher life satisfaction and more positive daily experiences. The study concluded that tax progressivity can enhance societal welfare, and it recommended that policymakers consider the broader social impacts of tax policies alongside revenue objectives. Johansson, Heady, Arnold, Brys, and Vartia (2008) investigated how different tax types affect economic growth using sectoral and firm-level data. The study revealed that corporate taxes were most detrimental to growth, followed by personal income taxes, while consumption and recurrent property taxes had lower negative effects. The authors concluded that shifting revenue from highly distortionary taxes toward less harmful taxes could improve efficiency and growth, recommending revenue-neutral reforms that balance equity and simplicity.

Empirical evidence consistently shows that taxation plays a significant role in shaping economic growth, human development, and

societal welfare. Studies by Oishi, Schimmack, and Diener (2011) and Akay (2012) demonstrate that progressive and labor taxes can enhance subjective well-being, reflecting the welfare gains associated with redistribution and public goods provision. In contrast, Johansson et al. (2008) find that corporate and personal income taxes are more harmful to economic growth than consumption or property taxes. Evidence from Nigeria, including Ngwoke (2019) and Okolo (2024), indicates that taxation significantly influences GDP and human development, though poor management or excessive tax burdens may undermine welfare outcomes. Similar patterns are observed in Tanzania and Iran, where Murebere and Margreth Faraja (2023) and Shahryar et al. (2024) report that while tax revenue supports growth, high tax rates or complexity can adversely affect welfare. Further, Bokwana (2023) and Kakaulina (2021) underscore the importance of responsive and flexible tax systems in ensuring fiscal stability and cushioning economies against shocks. A common gap is the lack of integrated, country-specific studies linking tax structure, rates to inflation and the growth rate of the GDP. Filling this gap would guide policymakers in designing tax systems that promote growth, equity, and welfare while minimizing inefficiencies.

Research Methodology

This study employs ex-post facto design to examine the relationship between taxation and macroeconomic performance in Nigeria using historical data. Secondary data from the Central Bank of Nigeria (CBN), Federal Inland Revenue Service (FIRS), Nigerian National Bureau of Statistics (NBS), and UNDP publications for 1981–2024 were analyzed. The dependent variable is macroeconomic performance, proxied by GDP growth and inflation rate (INF), while independent variables include value added tax, company income tax, custom and excise duties and petroleum profit tax. Time-series econometric techniques were

applied. Stationarity was tested using ADF and PP unit root tests. The Autoregressive Distributed Lag (ARDL) approach examined short- and long-run relationships, with the Error Correction Model (ECM) capturing adjustments toward equilibrium. Diagnostic tests addressed serial correlation, heteroskedasticity, and model stability.

This methodology accommodates variables of different integration orders, addresses potential endogeneity, and captures both short- and long-term trends. The study anticipates that a well-structured tax system enhances macroeconomic performance, while excessive or poorly managed taxation may hinder growth. Findings will inform evidence-based tax reforms, efficient public expenditure, and policy strategies to promote sustainable growth, fiscal stability, and improved living standards.

Model Specification

In specifying the taxation and macroeconomic performance in Nigeria, we modified Oboh's (2021) model of the direct tax on foreign direct investment. Whereas the model for this study is expressed as thus:

$$\begin{aligned} \text{GDPPC}_t &= f(\text{CED}, \text{VAT}, \text{CIT}, \text{PPT},) \\ \text{GDPPC}_t &= \alpha_0 + \beta_1 \text{Ln CED}_t + \beta_2 \text{VAT}_t + \beta_3 \text{Ln CIT}_t + \beta_5 \text{EXR}_t + \beta_6 \text{PPT}_t + U_t \\ \text{INF}_t &= f(\text{CED}, \text{VAT}, \text{CIT}, \text{PPT},) \\ \text{INF}_t &= \alpha_0 + \beta_1 \text{Ln CED}_t + \beta_2 \text{VAT}_t + \beta_3 \text{Ln CIT}_t + \beta_5 \text{EXR}_t + \beta_6 \text{PPT}_t + U_t \end{aligned}$$

Where:

GDPPC_t = GDP Per Capita

INF = Inflation Rate

VAT = Value Added Tax

EXR = Exchange rate

CED = Custom and Excise Duties

CIT = Company income tax

PPT: Petroleum Profit Tax

The a priori expectation is that increase in custom and excise duties, company income tax, value added tax will reduce GDPPC in Nigeria $\beta_1, \beta_2, \beta_3 > 0$, and $\beta_4, \beta_5, \beta_6 < 0$. GDP per capita: GDP per capita is a measure of a

country's economic output per person. It is calculated by dividing the Gross Domestic Product (GDP) of a country by its total population. It reflects the average income or standard of living of individuals in the economy and is commonly used to compare living standards across countries or over time (Mankiw, 2020; Blanchard, 2019).

Inflation: Inflation is the rate at which the general price level of goods and services rises over time, reducing the purchasing power of money. Moderate inflation can indicate a growing economy, but high or volatile inflation undermines economic stability (Samuelson & Nordhaus, 2010).

Customs and Excise Duty: Customs duties are taxes imposed on imported and exported goods and services on a specific or ad valorem basis. Thus, $CED/GDDPC = 0$. **Company Income Tax:** Company income tax is the tax levied on the gross profit of companies operating in Nigeria within the study period. Thus, $CIT/GDDPC = 0$. **Value Added Tax (VAT):** A value-added tax (VAT) is collected on a product at every stage of its production during which value is added to it, from its initial production to the point of sale. Thus, $VAA/GDDPC = <0$. **Petroleum Profit Tax:** PPT is a tax on the income of companies engaged in upstream

petroleum operations in lieu of CIT. The PPT rates vary as follows: 50% for petroleum operations under production sharing contracts (PSC) with the Nigerian National Petroleum Corporation (NNPC). Thus, $PPT/GDDPC = <0$. The data for this study is mainly annual time series data obtained from the Central Bank of Nigeria's (CBN) statistical bulletin and a World Bank indicator. Therefore, this research study would make use of secondary data on foreign direct investment, value added tax, exchange rate, petroleum profit tax, customs and excise duties, company income tax, and trade openness.

Data Analysis

The research on revenue mobilization (taxation) and economic development in Nigeria was estimated in line with some estimation procedure. Firstly, the researcher subjected the series to a strict stationarity test with a unit root model augmented by Dickey Fuller (1986). Secondly, estimation test was performed for the equations to ensure that they were in line with the basic OLS assumptions. Finally, the estimation techniques for the study is correlation matrix and autoregressive distributed lag (ARDL) approach to modelling dynamic time series data.

Descriptive Statistics

	GDPPC	VAT	PPT	CED	CIT	INF
Mean	319911.7	19.36140	2504920.	71.91523	151.6367	170.3173
Median	343491.2	11.66630	1636830.	73.09500	53.37910	152.0800
Maximum	379251.6	58.99490	8137443.	123.0800	447.8520	307.0000
Minimum	208628.8	0.701800	362000.0	20.60000	27.79000	101.7000
Std. Dev.	49208.37	18.22850	2148398.	32.62493	152.7517	63.06433
Skewness	-0.779363	0.731008	1.206205	0.038131	0.900554	1.285579
Kurtosis	2.370717	2.166809	3.373749	1.597164	1.968423	3.340102
Jarque-Bera	10.36063	10.38288	21.85119	7.237142	15.79651	24.66392
Probability	0.005626	0.005564	0.000018	0.026821	0.000371	0.000004
Sum	28152229	1703.803	2.20E+08	6328.540	13344.03	14987.92
Sum Sq. Dev.	2.11E+11	28908.21	4.02E+14	92601.57	2029977.	346008.5
Observations	88	88	88	88	88	88

The descriptive statistics show that the mean and median values of per capita gross domestic product (PCGDP) are 319,911.7 and 343,491.2 respectively, indicating relative stability over time, with maximum and minimum values of 379,251.6 and 208,628.8. The distribution is negatively skewed (-0.779363), mesokurtic (2.370717), and non-normally distributed as indicated by the Jarque–Bera statistic (10.36063 , $p = 0.005626$). For value added tax (VAT), the mean value is 19.36139 and the median is 11.66627, suggesting moderate stability, with maximum and minimum values of 58.99490 and 0.701800. The VAT series is positively skewed (0.731008), mesokurtic (2.166810), and does not follow a normal distribution based on the Jarque–Bera statistic (10.38289 , $p = 0.005564$). Company income tax (CIT) has a mean of 151.6367 and a much lower median of 53.37912, indicating vulnerability to external pressure, with values ranging from 27.79000 to 447.8522. The series is positively skewed (0.900554), platykurtic (1.968424), and non-normally distributed as shown by the Jarque–Bera statistic (15.79651 , $p = 0.000371$).

Customs and excise duties (CED) record a mean of 71.91523 and a median of 73.09500, reflecting relative stability, with maximum and minimum values of 123.0800 and 20.60000. The distribution is slightly positively skewed (0.038131), platykurtic (1.597164), and non-normal based on the Jarque–Bera statistic (7.237142 , $p = 0.02000$). Inflation (INF) has a mean of 170.3173 and a median of 152.0800, with values ranging from 101.7000 to 307.0000, indicating susceptibility to external shocks; it is positively skewed (1.285579), leptokurtic (3.340102), and non-normally distributed

(Jarque–Bera = 24.66392 , $p = 0.000004$). Petroleum profit tax (PPT) shows a mean of 2,504,920 and a median of 1,636,830, with maximum and minimum values of 8,137,443 and 362,000.0; the series is skewed (1.206205), leptokurtic (3.373749), and also fails the normality test as indicated by the Jarque–Bera statistic (21.85119 , $p = 0.000018$).

The observed wide dispersion, skewness, and non-normality of key variables such as company income tax, petroleum profit tax, and inflation indicate a volatile and shock-prone tax and macroeconomic environment in Nigeria, implying that the effects of taxation on growth and inflation are neither linear nor uniform over time and justifying the use of dynamic models such as ARDL. While the close alignment of mean and median values for per capita GDP, value added tax, and customs and excise duties suggests relative stability and more predictable macroeconomic effects, the large disparities for company income tax, petroleum profit tax, and inflation point to vulnerability to policy shifts, oil price fluctuations, and macroeconomic instability, with stronger shock transmission effects. The persistent non-normality across all variables further reflects structural distortions arising from policy inconsistency, oil revenue dependence, weak tax administration, and inflationary pressures, indicating that taxation affects macroeconomic performance through both conventional economic channels and deeper institutional factors; consequently, effective tax policy should prioritize stability, revenue diversification, and efficient management while balancing revenue generation with growth, price stability, and resilience to shocks.

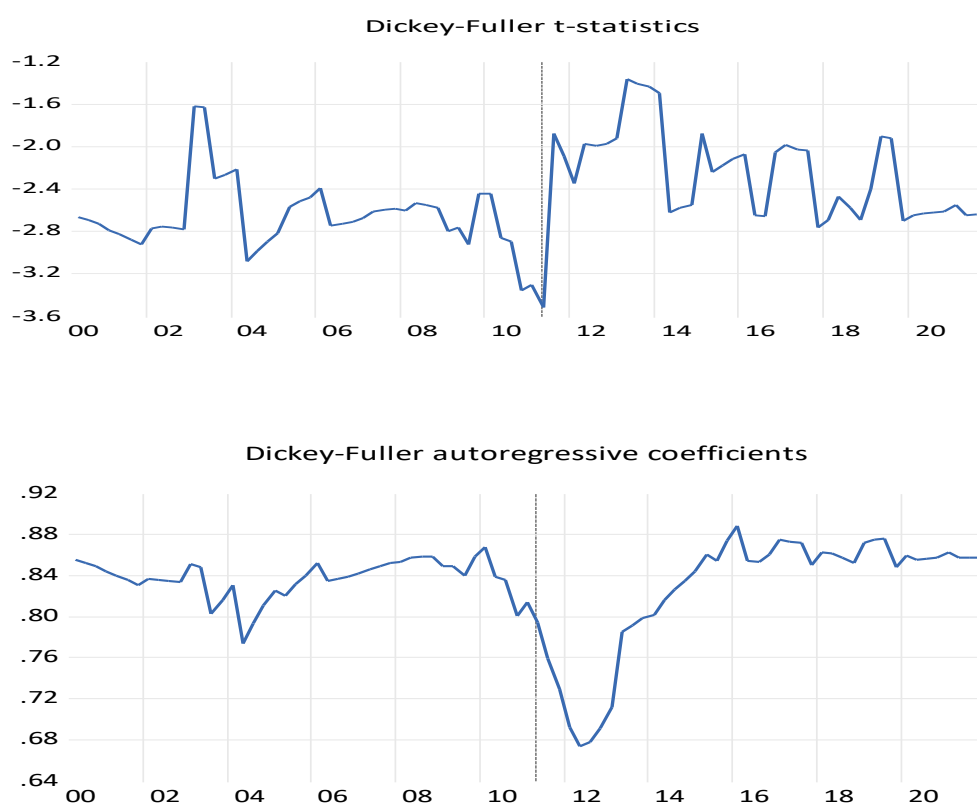
Stationarity Test Unit Root Result (PP)

S/N	Variable	Level	1 st Diff.	Order
1.	GDPPC	-3.513480 -4.859812	-4.905811 -3.467703	1(1)
2.	VAT	-4.153456 -3.463547	- -	1(0)
3.	CIT	-3.130148 -3.462912	-5.436549 -3.465548	1(1)
4.	PPT	-2.291419 -3.464865	-6.421297 -3.464865	1(1)
5.	CED	-2.465839 -3.462292	-9.277119 -3.462912	1(1)
6.	INF	-2.104104 -3.470032	-8.345345 -3.134532	I(0)

Sources: Authors compilation from EViews 13.05

The summary table for the stationarity test conducted by a unit root approach proposed by Philip and Perron (1988) is shown above. All the series or data used in the empirical study of the influence of taxation on per capita gross domestic product (PCGDP) in Nigeria were stationary at level 1, or mean reverting, except customs and excise duties and the exchange rate. Others became stationary after they were exposed to the first difference. Non-stationary time series data will be subjected to first differencing to make them stationary, according to Box and Jenkins (1987),

as cited in Hagan and Behr (1987). As a result, we can conclude that we have a mixed order of integration in the studies I (0) and I (1), and this justified the adoption of the autoregressive distributed lag (ARDL) approach to dynamic time series regression, which was proposed by Pesaran Shin and Smith in 2001. Below is a graphic image of Dickey Fuller's statistics for the dependent variable at level and after first differencing. Evidence showed that, after detrending the time series data, it became normal for estimation.



Cointegration Test:

Bounds Cointegration Test

Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K
F-statistic	4.495349	5

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.26	3.35
5%	2.62	3.79
2.5%	2.96	4.18
1%	3.41	4.68

The table depicts the bounds of cointegration output for the study of the effect of taxation on per capita gross domestic product (PCGDP) in Nigeria for the period under investigation. The test statistics show the presence of a long-run cointegrating relationship among the series since the F-statistic value of 4.495349 is greater than the upper bound critical value of 3.518 at 5%. The

evidence of long-run cointegrating relations implies that the null hypothesis, which states that there are no level relationships, has been rejected while the alternative hypothesis is accepted. Hence, there will be convergence in the long run, and that justified the estimation of both error correction and the long-run output of the aforesaid relationship.

Short Run Error Correction Result

Cointegrating Form

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(PCGDP(-1))	0.565100	0.080577	7.013132	0.0000
D(VAT)	1.355479	0.100305	13.51357	0.0000
D(CIT)	-0.451706	0.184994	-2.441736	0.0173
DLOG(PPT)	0.000369	0.000667	0.553622	0.5814
D(CED)	0.558436	0.099733	5.599302	0.0000
CointEq(-1)	-0.451706	0.184994	-2.441736	0.0173
R-squared	0.869669	Mean dependent var	12.68195	
Adjusted R-squared	0.849584	S.D. dependent var	0.145047	
S.E. of regression	0.002959	Akaike info criterion	-8.620855	
Sum squared resid	0.000578	Schwarz criterion	-8.099966	
Log likelihood	380.0759	Hannan-Quinn criter.	-8.411462	
F-statistic	11731.55	Durbin-Watson stat	1.471908	
Prob(F-statistic)	0.000000			

***Note:** p-values and any subsequent tests do not account for model selection

In the short run, the estimated ARDL model exhibits strong explanatory power. The R-squared value of 0.8697 and adjusted R-squared value of 0.8496 indicate that approximately 85 percent of the variations in economic development, proxied by per capita gross domestic product (PCGDP), are explained by changes in taxation variables in Nigeria. This suggests that taxation plays a significant role in explaining short-run movements in economic development. The F-statistic of 11,731.55, with a probability value of 0.0000, confirms that the explanatory variables are jointly significant, indicating a good overall model fit. The Durbin–Watson statistic of 1.4719 suggests that autocorrelation is not severe, although it indicates mild positive serial correlation, which is generally acceptable in macroeconomic time-series models. The error correction term (ECT) is correctly signed and statistically significant at the 5 percent level, with a coefficient of -0.4517 . This confirms the existence of a stable long-run relationship between taxation and economic development. The magnitude implies that approximately 45 percent of short-run disequilibrium in PCGDP is corrected each quarter, indicating a relatively fast speed of adjustment toward long-run equilibrium following short-run shocks. The coefficient of value added tax (VAT) is positive and statistically significant at the 5 percent level. This implies that VAT contributes positively to economic development in the short run. An increase in VAT revenue enhances government fiscal capacity, which can be channeled into productive expenditures such as infrastructure, education, and healthcare, thereby improving per capita income in Nigeria.

The coefficient of customs and excise duties (CED) is positive and statistically significant at the 5 percent level. Specifically, a percentage increase in CED leads to approximately a 1.3555 increase in PCGDP in Nigeria. This indicates that revenue generated from customs and excise duties contributes

meaningfully to economic development. The positive relationship suggests that such revenue, when efficiently utilized, can improve public infrastructure and productive capacity, thereby raising income levels and economic welfare. In addition, the short-run dynamics further show that a percentage increase in the CED fund results in about a 0.5584 (55 percent) increase in PCGDP, reinforcing the importance of customs-related revenue in driving short-term economic growth. This outcome is consistent with a priori expectations, as CED revenue supports the provision of essential physical infrastructure that enhances productivity and per capita income.

The coefficient of company income tax (CIT) is negative and statistically significant at the 5 percent level. This implies that an increase in company income tax leads to a 0.4517 decrease in PCGDP in the short run. The negative relationship suggests that higher corporate taxation may discourage private sector investment, reduce firm profitability, and weaken capital formation, thereby lowering economic development. This result contradicts a priori expectations that increased corporate taxation should enhance revenue and stimulate growth through higher public investment. However, in the Nigerian context, high corporate tax burdens may deter both domestic and foreign investment, as profit-seeking firms perceive the economy as a less attractive investment destination.

The coefficient of petroleum profit tax (PPT) is positive but statistically insignificant at the 5 percent level. This implies that, although PPT has a growth-enhancing tendency, its short-run effect on economic development is weak. The insignificance may reflect inefficiencies in revenue management, volatility in oil earnings, or limited pass-through of oil revenue into broad-based economic development. Nonetheless, the positive sign aligns with a priori expectations, given Nigeria's heavy reliance on the oil sector. Increased

petroleum tax revenue has the potential to finance capital expenditure and promote growth, provided it is effectively managed and diversified into productive sectors. The short-run results reveal that indirect taxes (VAT and CED) significantly promote economic development in Nigeria, while direct corporate

taxation (CIT) exerts a contractionary effect. The significant and negative error correction term confirms rapid adjustment to long-run equilibrium, underscoring the relevance of taxation as a fiscal policy instrument for economic development.

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VAT	0.011805	0.005189	2.274866	0.0257
CIT	-0.270306	0.084965	3.181385	0.0021
LOG(PPT)	0.022686	0.035889	0.632111	0.5292
CED	0.270306	0.084965	3.181385	0.0021
C	12.743566	0.727495	17.517061	0.0000

In the long run, the estimated ARDL results indicate that taxation and exchange rate dynamics exert significant and differentiated effects on economic growth in Nigeria, measured by per capita gross domestic product (PCGDP).

The coefficient of value added tax (VAT) is positive and statistically significant at the 5 percent level. This implies that a percentage increase in VAT revenue leads to approximately a 0.0118 (about 1 percent) increase in economic growth (PCGDP) in Nigeria in the long run. The positive and significant relationship suggests that VAT contributes meaningfully to sustained economic growth. This outcome is consistent with theoretical expectations, as increased VAT revenue enhances government fiscal capacity, enabling higher capital expenditure on infrastructure, education, healthcare, and other productive sectors. Over time, such investments improve productivity and income levels, thereby promoting economic growth.

The coefficient of company income tax (CIT) carries a negative sign and is statistically significant. Specifically, a percentage increase in CIT results in approximately a 0.2703 (27 percent) reduction in PCGDP in the long run.

This finding contradicts a priori expectations that higher corporate taxation should enhance growth through increased public revenue. However, in the Nigerian context, the negative relationship may reflect the distortionary effect of high corporate tax burdens on investment decisions. Increased company income tax reduces after-tax profits, discourages both domestic and foreign investment, and may lead to capital flight or the relocation of firms. The magnitude of the coefficient indicates that CIT is a major long-run determinant of economic growth in Nigeria.

The coefficient of petroleum profit tax (PPT) is positive but statistically insignificant in the long run. This implies that although PPT has a growth-enhancing tendency, its effect on PCGDP is not strong enough to exert a statistically meaningful influence on long-run economic growth. While this result aligns with theoretical expectations—given Nigeria's dependence on oil revenue—the insignificance may be attributed to factors such as volatility in oil prices, inefficiencies in revenue management, weak linkages between the oil sector and the rest of the economy, and limited translation of oil revenue into broad-based development.

Model Two: Taxation and Inflation Rate**Short Run ARDL result**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(CED)	-44.073244	18.230740	-2.417524	0.0178
DLOG(VAT)	-0.003279	0.001229	-2.668035	0.0092
DLOG(CIT)	0.005501	0.002065	2.664206	0.0093
DLOG(PPT)	-4.322337	3.064333	-1.410531	0.1621
CointEq(-1)	-0.150113	0.052170	-2.877365	0.0051
R-squared	0.930016	Mean dependent var	172.4251	
Adjusted R-squared	0.922518	S.D. dependent var	60.24503	
S.E. of regression	16.76960	Akaike info criterion	8.577300	
Sum squared resid	23622.43	Schwarz criterion	8.847864	
Log likelihood	-393.1331	Hannan-Quinn criter.	8.686588	
F-statistic	124.0303	Durbin-Watson stat	2.001283	
Prob(F-statistic)	0.000000			

The error correction coefficient is negative (-0.1501) and statistically significant at the 1 percent level ($p = 0.0051$), confirming the existence of a valid long-run relationship between taxation and inflation. The magnitude implies that approximately 15 percent of short-run disequilibrium in inflation is corrected each period, indicating a relatively slow but stable adjustment toward long-run equilibrium following short-run shocks. The estimated ARDL model demonstrates a strong explanatory power and satisfactory statistical performance. The R-squared value of 0.9300 indicates that approximately 93 percent of the variations in inflation rate in Nigeria are explained by the taxation variables included in the model. This suggests a high degree of model fit. The adjusted R-squared of 0.9225, which accounts for degrees of freedom, remains very high, confirming that the model is not overfitted and retains strong explanatory relevance. The F-statistic of 124.03 is statistically significant at the 1 percent level (Prob. F-statistic = 0.0000), implying that the explanatory variables are jointly significant in explaining changes in inflation.

The standard error of regression (16.77) is relatively low compared to the mean value of inflation (172.43), indicating that the model's predicted values closely track the observed inflation rate. Additionally, the sum of squared residuals (23622.43) is reasonably small, suggesting limited unexplained variation. The information criteria values—Akaike Information Criterion (8.58), Schwarz Criterion (8.85), and Hannan-Quinn Criterion (8.69)—are relatively low, supporting the suitability of the chosen ARDL specification among alternative model forms. The Durbin-Watson statistic of 2.0013 is approximately equal to 2, indicating the absence of first-order serial correlation in the residuals. This confirms that the model satisfies a key econometric assumption and that the estimated coefficients are reliable. In general, the diagnostic statistics show that the ARDL model is well-defined, statistically sound, and good for making policy decisions. The high explanatory power, joint significance of regressors, and absence of autocorrelation strengthen confidence in the short- and long-term results of the relationship between taxation and inflation in Nigeria.

The short-run ARDL estimation examines the immediate effects of changes in various tax components on the inflation rate in Nigeria. The estimated coefficients, associated t-statistics, and probability values offer clues about both the direction and statistical significance of these relationships. The coefficient of DLOG(CED) is negative (-44.073) and statistically significant at the 5 percent level ($p = 0.0178$). This suggests that, in the short run, an increase in customs and excise duties leads to a significant reduction in the inflation rate. The negative relationship implies that higher import-related taxes may dampen inflationary pressures, possibly by reducing excessive import demand or controlling consumption of certain goods. The coefficient of DLOG (VAT) is also negative (-0.0033) and statistically significant at the 1 percent level ($p = 0.0092$). This indicates that short-run increases in VAT revenue are associated with a decline in inflation. This outcome may reflect

the contractionary effect of VAT on aggregate demand, as higher consumption taxes reduce disposable income and spending, thereby moderating price pressures.

The coefficient of DLOG(CIT) is positive (0.0055) and statistically significant at the 1 percent level ($p = 0.0093$). This implies that, in the short run, increases in corporate taxes contribute to higher inflation. The positive relationship suggests cost-push inflationary effects, as firms may transfer higher tax burdens to consumers through increased prices.

The coefficient of DLOG(PPT) is negative (-4.322) but statistically insignificant ($p = 0.1621$). This indicates that changes in petroleum profit tax do not exert a meaningful short-run influence on inflation in Nigeria. The insignificance may be due to the indirect transmission of PPT to domestic prices or the dominance of other macroeconomic factors in driving inflation.

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(CED)	0.849887	0.052170	16.29066	0.0000
LOG(VAT)	-44.07324	18.23074	-2.417524	0.0178
LOG(CIT)	39.439866	30.229186	1.304695	0.1956
LOG(PPT)	-28.793933	20.448766	-1.408101	0.1628
C	325.77058	297.066558	1.096625	0.2759

The constant term is positive but statistically insignificant ($p = 0.2759$), indicating that inflation dynamics in Nigeria are largely explained by the included tax variables and adjustment mechanisms rather than by autonomous price movements. The long-run ARDL estimates capture the persistent effects of taxation variables on inflation in Nigeria after short-run fluctuations have been fully adjusted. The results reveal that the influence of taxation on inflation differs considerably across tax components in the long run. The coefficient of LOG(CED) is positive (0.8499) and statistically significant at the 1 percent level ($p = 0.0000$). This

indicates that, in the long run, increases in customs and excise duties lead to a significant rise in inflation. The positive relationship suggests that sustained increases in import and excise taxes raise production and distribution costs, which are eventually passed on to consumers in the form of higher prices. Unlike the short-run contractionary effect, the long-run outcome reflects structural cost-push inflation arising from persistent trade taxation.

The coefficient of LOG(VAT) is negative (-44.073) and statistically significant at the 5 percent level ($p = 0.0178$). This implies that VAT exerts a long-run disinflationary effect in Nigeria.

The result suggests that sustained VAT increases reduce aggregate demand and consumption over time, thereby lowering inflationary pressures. This finding supports the view that VAT functions as an effective demand-management instrument in the long run. The coefficient of LOG(CIT) is positive (39.4399) but statistically insignificant ($p = 0.1956$). This indicates that company income tax does not have a meaningful long-run impact on inflation in Nigeria. Although the positive sign suggests a possible cost-push channel, the lack of statistical significance implies that firms' long-term pricing decisions may be influenced more by market conditions, productivity, and macroeconomic stability than by corporate tax changes alone.

The coefficient of LOG(PPT) is negative (-28.794) but statistically insignificant ($p = 0.1628$). This suggests that petroleum profit tax does not significantly influence inflation in the long run. The insignificance may reflect the

insulation of domestic prices from petroleum profit taxation, especially where fuel prices are regulated or subsidized, limiting the pass-through of oil-sector taxes to general price levels. The combined short-run and long-run results suggest that taxation affects inflation in Nigeria through both demand-side and cost-push channels, with effects varying by tax type and time horizon. While VAT consistently reduces inflation in both the short and long run, CED exhibits a contractionary short-run effect but an inflationary long-run impact, reflecting adjustment and pass-through mechanisms. CIT influences inflation only in the short run, while PPT remains largely insignificant in both periods. The statistically significant error correction term confirms convergence to long-run equilibrium, indicating that deviations from long-run inflation dynamics caused by tax shocks are gradually corrected over time.

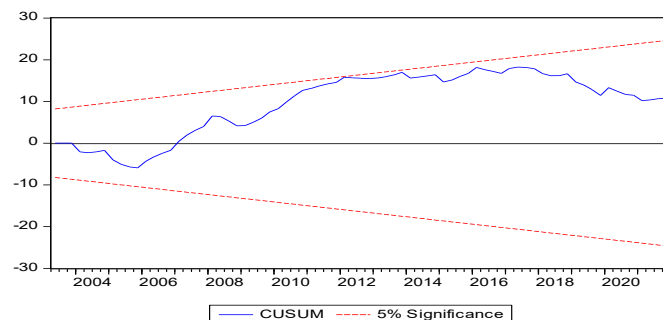
Diagnostic Checking

S/N	Test	F-test	P-value	Obs. R.	P-Value
	Serial correlation	0.243236	0.7847	0.554226	0.7580
	Heteroskedasticity	2.943814	0.9063	2.140255	0.7898
	Ramsey Reset Test	0.350102	0.7273	0.122571	0.7273
	Cusum	Stable		Stable	

Source: Authors Compilation

The table above presents the post-estimation diagnostic tests for the effect of taxation on PCGDP in Nigeria to verify the assumptions of ordinary least squares. Results indicate no serial correlation ($F = 0.243236$, $R^2 = 0.554226$, $p > 0.75$) and homoscedasticity is confirmed by the Breusch-Pagan-Godfrey test

($F = 2.943814$, $R^2 = 2.140255$, $p > 0.78$). The Ramsey RESET test shows no model misspecification ($F = 0.350102$, $R^2 = 0.122571$, $p = 0.7273$), while the CUSUM test confirms model stability within the 95% confidence interval, indicating that the model satisfies key econometric assumptions.



Summary Conclusion and Recommendation

Taxation of foreign and domestic investments has become a critical policy tool for revenue generation in Nigeria, enabling governments to fund infrastructure, employment, and essential public services (Kolawole, 2020). Despite its importance, many developing economies, including Nigeria, face challenges in designing efficient tax systems capable of broadening the revenue base (Van den Boogaard et al., 2018). While larger public sectors can support faster economic growth through broader tax bases, the absence of growth-enhancing programs can limit the developmental impact of taxation (Barker et al., 2008).

This study examines the effects of taxation on macroeconomic performance in Nigeria using time-series data from the Central Bank of Nigeria (CBN) Statistical Bulletin and applies the Autoregressive Distributed Lag (ARDL) approach, which accommodates variables with mixed integration orders and captures both short-run and long-run dynamics. Results indicate that the impact of taxation on economic growth varies by tax type and time horizon. In the short run, indirect taxes (Value Added Tax (VAT) and Customs and Excise Duties (CED)) positively and significantly enhance per capita GDP, while Company Income Tax (CIT) negatively affects growth, reflecting the dampening effect of corporate taxation on investment. Petroleum Profit Tax (PPT) has a positive but insignificant effect. In the long run, VAT continues to promote growth, CED shows a weaker effect, CIT remains contractionary, and PPT remains insignificant, highlighting the limited role of oil-based taxation in sustaining inclusive growth.

Regarding inflation, taxation exhibits heterogeneous effects. In the short run, CED and VAT reduce inflation, while CIT increases it; PPT has no significant impact. In the long run, CED contributes to higher inflation, indicating a

cost-push effect, whereas VAT maintains a disinflationary role. CIT and PPT remain insignificant over time, suggesting limited long-term influence on price stability. Overall, the study underscores that taxation affects Nigeria's macroeconomic performance through both growth and inflation channels, with effects varying by tax type, time horizon, and structural context, emphasizing the need for balanced and well-structured tax policies to promote sustainable growth and price stability.

This study concludes that taxation plays a critical and multifaceted role in shaping macroeconomic performance in Nigeria. The analysis confirms a stable long-run relationship between taxation and economic growth, demonstrating that tax policies influence both the level and stability of the economy over time. Among the different tax types, Value Added Tax (VAT) emerges as the most consistent growth-promoting instrument, positively affecting economic performance in both the short and long run. Customs and Excise Duties (CED) contribute to short-term growth but have a less robust long-term effect, while Company Income Tax (CIT) consistently dampens growth, reflecting the potential disincentives for investment and production. Petroleum Profit Tax (PPT) has limited impact on growth, indicating that its contribution to long-term economic expansion is minimal. The exchange rate further plays a significant role, with depreciation negatively affecting long-run growth.

Regarding inflation, the effects of taxation are heterogeneous and time-dependent. In the short run, VAT and CED reduce inflation, while CIT increases it, and PPT shows no significant effect. In the long run, CED contributes to higher inflation, whereas VAT maintains a disinflationary effect, and CIT and PPT remain statistically insignificant. These findings suggest that taxation influences macroeconomic performance through both

demand- and cost-push channels, with varying magnitudes across tax types and time horizons. Overall, effective tax policy in Nigeria requires a careful balance: fostering economic growth, ensuring price stability, and maintaining resilience to shocks. Policymakers should prioritize well-structured, stable, and growth-friendly tax measures while enhancing revenue administration and compliance to maximize the positive impact of taxation on the economy.

Policy Recommendations

Based on the findings, the following policy recommendations are proposed:

- i. Given its consistent positive effect on economic growth and disinflationary impact, policymakers should prioritize the efficient collection and administration of VAT. Expanding the tax base, improving compliance, and minimizing leakages will ensure sustainable revenue mobilization without imposing excessive burdens on households and businesses.
- ii. While CED contributes to short-run growth, its long-term inflationary effect suggests the need for careful calibration. Trade and excise taxes should be structured to minimize cost-push inflation while still generating revenue. Simplifying procedures, reducing bottlenecks, and enhancing customs efficiency will help maintain a balance between growth and price stability.
- iii. CIT has a negative effect on economic growth and increases inflation in the short run. Policymakers should consider reducing excessive corporate tax rates, offering targeted incentives for productive investment, and streamlining the tax code to encourage business expansion while maintaining fiscal sustainability.
- iv. The limited and statistically insignificant impact of PPT on growth and inflation suggests that its current structure may not efficiently contribute to

macroeconomic performance. Reforms should focus on ensuring that PPT revenue is effectively mobilized and reinvested into productive sectors of the economy, particularly infrastructure and human capital development.

- v. Since exchange rate depreciation negatively affects long-term growth, coordinated fiscal and monetary policies should be implemented to reduce volatility, support investment, and maintain macroeconomic stability.
- vi. Improving tax collection systems, reducing evasion, and strengthening enforcement mechanisms are essential for maximizing the positive effects of taxation on growth and welfare. Adoption of digital platforms and taxpayer education can further improve compliance and efficiency.
- vii. Tax reforms should be accompanied by strategic public spending, targeted subsidies, and social investments to enhance human development and societal welfare.

References

- Adereti, S. A., Salawu, R. O., & Ayodele, J. O. (2011). The impact of taxation on economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 2(4), 13–20.
- Ajakaiye, O., & Ncube, M. (2010). Macroeconomic policy and performance in developing countries. *African Development Review*, 22(1), 1–14.
- Ajaz, T., & Ahmad, E. (2010). The effect of corruption and governance on tax revenues. *The Pakistan Development Review*, 49(4), 405–417.
- Akay, A. (2012). Happy taxpayers? Income taxation and well-being. *SOEPpaper No. 526*.
<https://ssrn.com/abstract=2197826>

- Akinyomi, O. J., & Okpala, K. E. (2013). The impact of taxation on economic growth in Nigeria. *International Journal of Research in Commerce, IT & Management*, 3(4), 85–90.
- Akwe, J. A. (2014). Impact of tax revenue on economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 5(7), 118–124.
- Baumol, W. J., & Blinder, A. S. (2016). *Macroeconomics: Principles and policy* (13th ed.). Cengage Learning.
- Blanchard, O. (2019). *Macroeconomics* (8th ed.). Pearson Education.
- Bokwana, E. (2023). *The analysis of revenue productivity of the tax system in South Africa applying the Buoyancy and Elasticity measures* (Doctoral dissertation, University of the Western Cape).
- Colander, D. C. (2018). *Macroeconomics* (10th ed.). McGraw-Hill.
- Dornbusch, R., Fischer, S., & Startz, R. (2018). *Macroeconomics* (13th ed.). McGraw-Hill.
- International Monetary Fund. (2021). *Nigeria: Selected issues paper*. Washington, D.C.: IMF.
- Iyoha, M. A. (2019). Challenges of taxation in Nigeria and the way forward. *Journal of African Economies*, 8(4), 314–330.
- Johansson, Å., Heady, C., Arnold, J., Brys, B., & Vartia, L. (2008). Tax and economic growth. *OECD Economics Department Working Paper No. 620*.
- Justman, D., Sabbatino, M., Montross, S., Pantaleone, S., Bean, A., Rose, K., & Thomas, R. B. (2022). A database and framework for carbon ore resources and associated supply chain data. *Data in Brief*, 40, 107761.
- Kakaulina, M. O. (2021). Projected shortfall in personal income tax revenues of regional governments in Russia due to the COVID-19 pandemic. *Journal of Tax Reform*, 7(1), 39-54.
- Lindahl, G., and O. Wallmén. 1960. Erik Lindahl. Bibliograf! 1919–1960 [Erik Lindahl. Bibliography 1919–1960]. *EkonomiskTidskrift* 62: 59–74.
- Mankiw, N. G. (2020). *Principles of economics* (9th ed.). Cengage Learning.
- Munir, M. T., Chowdhury, M. R., & Ahmed, Z. (2016). Emergence of new sub-genotypes of Newcastle disease virus in Pakistan. *J Avian Res*, 2(1), 1-7.
- Murebere, M. F. (2023). *The Impact of Taxation on Economic Growth in Tanzania* (Doctoral dissertation, The Open University of Tanzania).
- Musgrave, R. A., & Musgrave, P. B. (1989). *Public finance in theory and practice* (5th ed.). McGraw-Hill.
- Ngwoke, O. M. (2019). Effect of taxation on economic growth (2007–2017). *Effect of Taxation on Economic Growth*, 5(4), 68–82.
- NPC. 2017. “2017 Population and Housing Census”. In: N.P. Commission (Ed.), Nigerian Computer Society, (p. 15). Abuja, Nigeria. Retrieved March 17, 2018.
- Ogujiuba, K. K., Stotsky, J. G., & Gemmell, N. (2015). Taxation and economic development: Evidence from sub-Saharan Africa. *Public Finance Review*, 43(5), 621–646.
- Oishi, S., Schimmack, U., & Diener, E. (2011). Progressive taxation and the subjective well-being of nations. *Psychological Science*, 23(1), 86–92. <https://doi.org/10.1177/0956797611420882>

- Okolo, A. (2024). Federalism and Resource Control: The Nigerian Experience. *Journal of Public Policy and Administration Research*, Vol. 4, No 2, (2024). IISTE USA. <http://www.iiste.org/journals/index.php/PPAR/article/View/11092>. Pp. 99 – 109.
- Oladipupo, A. O., & Obazee, U. (2016). Tax knowledge, penalties and tax compliance in Nigeria. *International Journal of Business and Social Science*, 7(11), 109–117.
- Pigou, A. C. (1943). *The economics of welfare* (4th ed.). Macmillan.
- Samuelson, P. A., & Nordhaus, W. D. (2010). *Economics* (19th ed.). McGraw-Hill.
- Sen, A. (1999). *Development as freedom*. Oxford University Press.
- Solow, R. M. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics*, 70(1), 65–94.
- Stiglitz, J. E. (2015). *The theory of public finance in a developing economy*. World Bank Publications.
- Swan, T. W. (1956). Economic growth and capital accumulation. *Economic Record*, 32(2), 334 -361.
- Todaro, M. P., & Smith, S. C. (2015). *Economic development* (12th ed.). Pearson.
- Umeora, C. E. (2013). The effects of taxation on economic growth in Nigeria. *Asian Journal of Social Sciences & Humanities*, 2(3), 235–243.