



IMPACT OF DIS-AGGREGATED PUBLIC REVENUE ON ECONOMIC GROWTH IN NIGERIA

¹Muntari Dardau Iiyasu
mdiliyasu@fudutsinma.edu.ng
+23436562248

²Sani Jabir Jega
Sjjega@fudutsinma.edu.ng
+2348169544944

³Mohammed Abdullahi
Mabdullahi2025@fudutsinma.edu.ng
+2348065581681

^{1,2&3}Department of Economics and Development Studies,
Federal University Dutsin-Ma, Katsina State

ABSTRACT

The study examines the impact of disaggregated public revenue on Nigeria's economic growth, spanning the period from 1995 to 2024. Time series data were employed, using the ARDL bound test for cointegration. The results of the Bound test reveal the existence of cointegration among the variables. The study takes into cognizance the dependent variable proxy for economic growth, oil revenue (OR), non-tax revenue (NTR), Labor Force, and Tax revenue (TR) as independent and controlled variables. Findings of the study have shown a negative and statistically significant relevance of oil revenue on economic growth by -13.23% in the long run. The remaining revenue generation variables, LNTR, LLBRF, and LTR, exhibit positive long-run and statistical significance in influencing Nigeria's economic growth by 6.744, 44.512, and 20.358, respectively. Furthermore, the LOR in the current period (t) and the past period (t-1) indicates negative and positive statistical significance for Nigeria's economic growth. Moreover, LTR had shown a positive increase in GDP. However, the LTR in the current and past periods has shown a positive incremental percentage change in GDP. Accordingly, the ECM cointegration equation satisfies the prerequisite condition of its negative, less than 1, and statistical significance in ascertaining equilibrium convergence from the short-run truncation. Therefore, the study recommends speedy implementation of the Petroleum Industry Bill, which would lead to local content exploration, production, and ownership, and ultimately will result in increased accruals in Nigeria. In addition, appropriate measures should be put in place to safeguard Nigeria's oil facilities, and eventually, more revenue will accrue. Corruption and administrative bottlenecks should also be addressed, and diversification in non-oil revenue-generating sectors should be reinvigorated. This will lead to increased revenue in both the short and long term.

IMPACT OF DIS-AGGREGATED PUBLIC REVENUE ON ECONOMIC GROWTH IN NIGERIA

Keywords: Public Revenue, Economic Growth, ARDL, Nigeria

INTRODUCTION

Public revenue plays a fundamental role in shaping the trajectory of national development. It encompasses all income generated by the government through various sources such as taxes, oil and non-oil revenues, tariffs, fees, and grants. It serves as the primary means through which governments finance public services and goods. For developing economies like Nigeria to foster inclusive growth, reduce poverty, construct infrastructure, and raise the general standard of living for the population, public revenue must be strategically mobilized, distributed, and used.

Nigeria, Africa's most populous nation and one of the biggest economies on the continent, offers a special opportunity to examine how public revenue and national development interact. Since the 1970s oil boom, the nation has been largely dependent on oil revenue, which has contributed significantly to government revenue. Although oil price volatility, inadequate financial management, and an over-reliance on a single source of income have stimulated significant public spending, particularly in the areas of infrastructure and social services, they have frequently impeded sustainable development outcomes.

Diversifying the country's revenue base, enhancing tax administration, and bolstering fiscal transparency have all received more policy attention in recent years. However, there are still issues with efficiently converting public funds into observable developmental results like better employment, healthcare, education, and transportation, as well as general economic resilience. This poses important queries, such as how much Nigerian national development is impacted by public revenue. How well does the revenue system accomplish its objectives for development? Which institutional and structural elements strengthen or weaken the influence of public revenue on development?

The purpose of this study is to critically examine how Nigeria's national development is affected by disaggregated public revenue. It seeks to determine the relationship between government income and important development indicators, such as GDP growth, the development of human capital, the reduction of poverty, and the provision of infrastructure, by looking at trends in the creation of public revenue and patterns of public spending. Through both theoretical and empirical investigation, the study will provide insights into how Nigeria can optimize its revenue mobilization strategies and ensure that public funds are used effectively for sustainable development.

Finally, by providing policy recommendations that can guide budgetary planning, governance reforms, and economic diversification initiatives in Nigeria and other resource-dependent developing nations, this study adds to the larger conversation on fiscal policy and development economics. Public revenue is the backbone of government activity and a determinant of national development, as it provides funding for essential public goods and services. Oil exports and an expanding array of non-oil tax sources provide the federal government of Nigeria with the majority of its revenue. The results of national development have not kept pace with the significant inflows of revenue over the years. In order to provide empirical insights and policy recommendations, this

study investigates the effects of disaggregated public revenue on Nigerian development from 1995 to 2025.

The main objective of this study is to investigate the analytical impact of disaggregated public revenue on economic growth in Nigeria. Tax revenue, non-tax revenue, oil revenue, personal Remittances, population, and labor force are chosen as focus and controlled variables in investigating the relationship between disaggregated public revenue and economic growth, which is proxied by Gross Domestic Product (GDP). These variables are expected to influence national development (GDP) in one way or another (Meziane, 1999). The remaining sections of the paper will be organized as follows. Section one, discussed earlier, is the introduction. Section two establishes the theoretical settings and empirical reviews, thereby identifying the gaps in the study for the purposes under review. Accordingly, section three is the methodology, and section four entails a discussion of the research.

LITERATURE REVIEW

THEORETICAL REVIEW

According to empirical data, fiscal policy instruments like government spending and public revenue collection are still crucial for promoting economic expansion and national development, especially in developing nations. (Ereke, Okpata, Adeyemi, Ndukwe, & Offiah, 2024). Government primary sources of revenue in Nigeria emanates from gas and oil, to some extent the non- oil sectors basically; tax and non-tax revenue are in cognizance, additional sources includes miscellaneous receipt from Nigerians in diaspora as personal remittances, significantly these main components that makes up public revenue, including contribution as sources of public revenue especially through taxation and deficit financing, plays a vital role in managing the business cycle and promoting developmental objectives such as employment, infrastructure, and poverty reduction. To complement the precise relationship between public revenue and national development, the endogenous growth model of Solow will further clarify the relationship as exact or inexact.

ENDOGENOUS GROWTH THEORY

Endogenous Growth Theory, advanced by Romer (1986) and Lucas (1988), emphasizes the role of internal factors such as human capital investment (labour force, population), infrastructure development, and innovation all of which are financed largely through public revenue will effectively triggers growth in the short and long run periods, efficient utilization of revenue could immensely contributes directly to sustained long-term economic growth, particularly when channeled into sectors that improve productive capacity. in addition, Wagner's Law of increasing activity of a state will augment the aforementioned theories to established an important and comprehensive theoretical framework that will serve as a base theory in estimating the relationship between the variables.

IMPACT OF DIS-AGGREGATED PUBLIC REVENUE ON ECONOMIC GROWTH IN NIGERIA

WAGNER’S LAW OF INCREASING STATE ACTIVITY

Wagner’s Law posits that as an economy grows, public expenditure and by implication, public revenue will increase both in absolute and relative terms. This is due to rising societal demands for infrastructure, education, health, and public administration. For developing nations like Nigeria, revenue mobilization should scale with national development needs, thus justifying increased oil and non-oil revenue generation efforts.

EMPIRICAL STUDIES

Several empirical studies have examined the relationship between public revenue and economic growth, particularly in developing economies such as Nigeria. These studies offer mixed insights but essentially confirm the importance of government revenue in promoting economic growth.

Idebi et al (2024) examined the effects of disaggregated tax revenue on Nigeria's economic growth from 1995 to 2023. The data was sourced from the Central Bank of Nigeria and the Federal Inland Revenue Service databases. This study examined the effects of disaggregated tax revenue on Nigeria's economic growth from 1995 to 2023. The data was sourced from the Central Bank of Nigeria and the Federal Inland Revenue Service databases. Employing multiple regression analysis within an Auto Regressive Distributed Lag (ARDL) model, the study assessed the impact of Value Added Tax (VAT), Companies Income Tax (CIT), Petroleum Profit Tax (PPT), and Personal Income Tax (PIT) on economic growth. The Findings revealed that each tax revenue component positively influences economic growth.

David et al. (2024) investigate the influence of tax revenue on Nigeria's economic growth over a three-decade period spanning from 1991 to 2021. The tax data was collected from the Federal Internal Revenue Service (FIRS) and the Nigerian Bureau of Statistics (NBS), while economic data for Nigeria was sourced from the 2021 Statistical Bulletin of the Central Bank of Nigeria (CBN). The study utilized personal income tax (PIT), corporate income tax (CIT), and value-added tax (VAT) as proxies for tax revenue, with gross domestic product (GDP) serving as the dependent variable to represent the Nigerian economy. Several diagnostic tests were conducted, including a descriptive statistic to assess data normality and the Augmented Dickey-Fuller unit root test to evaluate data stability. The Autoregressive Distributed Lag (ARDL) technique was employed as the statistical tool for data analysis, utilizing E-View version 9 as the statistical package. The findings from the ARDL test revealed that personal income tax (PIT) and value-added tax (VAT) have a negative impact on GDP, while company income tax (CIT) shows a positive impact. As a result, the study concluded that tax revenue exhibits a positive and significant correlation with the growth of the Nigerian economy David et al., 2024).

Neka-Oloo et al. (2024) employ a mixed-method approach to investigate the relationship between tax revenue, government expenditure, and economic development in Nigeria from 2014 to 2023. Secondary data was sourced from the Federal Inland Revenue Service of Nigeria's tax promax, UNDP publications, and the Central Bank of Nigeria (CBN) website. The stationarity of the time series data was verified using augmented unit root tests, while the presence of autoregressive conditional heteroscedasticity (ARCH) was assessed through ARCH tests. Linear regression

analysis quantified the relationships among tax revenue, government expenditure, and the Human Development Index (HDI) Ado et al., (2023). The findings reveal that a one-unit increase in tax revenue correlates with a significant decrease in HDI (-4.1106 units, $p = 0.0370$), suggesting that higher taxes may impede human development. Conversely, a one-unit increase in government expenditure is significantly associated with a 2.8106-unit increase in HDI ($p = 0.0003$), highlighting the positive impact of public spending on human development. The model explains approximately 90.996% of the variance in HDI, with a high adjusted R-squared of 0.88424. These results indicate that while increased taxation can negatively affect human development, effective and transparent government spending in critical sectors like education and healthcare can foster significant improvements.

Onukelobi et al. (2024) investigated the effect of tax revenue on economic growth in Nigeria, focusing on three key tax components: Value Added Tax (VAT), Company Income Tax (CIT), and Customs and Excise Duties (CED) over the period 2004–2024. The study used time series data from the National Bureau of Statistics, the Federal Inland Revenue Service, and other pertinent publications using an ex-post facto research design. The impact of these tax revenues on the growth of Nigeria's GDP was evaluated using the Ordinary Least Squares (OLS) regression technique and correlation analysis. The results showed that tax revenues had a mixed effect on economic growth. Although the negative coefficients for VAT and CIT indicated a possible negative impact on GDP growth, these effects were not statistically significant. On the other hand, CED showed a strong and positive correlation with GDP growth, suggesting that it could be a more efficient revenue source for promoting economic growth. The overall model explained 46.13% of the variance in GDP growth, with a significant F-statistic, affirming the collective impact of the tax variables on economic growth.

Ewa et al. (2020) determined the impact of taxation proceeds on the development of the Nigerian economy. The study explored the impact of three tax income streams – Income tax from companies' profits, income tax from petroleum companies' profits, and Value Added Tax on economic development represented by Gross Domestic Product (at current basic prices) growth for the period 1994 to 2018. The study applied the Ordinary Least Squares statistical tool with the help of SPSS 20.0. The study revealed a positive relationship, with a coefficient of determination of 99.2%, indicating that 99.2% of the variation in economic development is attributable to the tax income streams studied. Also although the study revealed the existence of significant effect of taxes from companies' profits and Value Added Tax on Gross Domestic Product Growth, there is little or no significant impact of taxes on profits of Petroleum companies on Gross Domestic Product growth in Nigeria due to restriction by Organization of Petroleum Exporting Countries production ceiling on Nigeria's production/sales and the global price shocks of crude oil over the decade. Also, the study revealed taxpayers' apathy toward tax payment and the existence of tax leaks as a result of the tax authorities' administrative inefficiencies and corruption.

Aliyu & Mustapha (2020) estimate the relationships and the dynamics and long-run effects of independent variables on the dependent variable. ARDL bound test revealed that the variables are cointegrated, while ARDL long-run estimation indicated that petroleum profit, value-added tax, and government domestic debt are significant and positively related to GDP. In addition, company income tax and customs and excise duties resulted in significant costs but hindered economic growth.

IMPACT OF DIS-AGGREGATED PUBLIC REVENUE ON ECONOMIC GROWTH IN NIGERIA

Ogunleye and Adeyemi (2020) provided recent empirical evidence showing that non-oil tax revenue has a significant positive effect on Nigeria's GDP, though institutional bottlenecks limit its full potential.

With an emphasis on companies' income tax, value-added tax, and petroleum profits tax, Agunbiade & Idebi (2020) investigated the connection between tax revenue and economic growth in Nigeria from 1981 to 2019. The Federal Inland Revenue Service (FIRS) and the National Bureau of Statistics (NBS) provided the data. To determine the type and degree of the relationship between taxes and economic growth, the study used the Vector Error Correction Model (VECM). There is at least one long-term cointegrating equation between the variables, according to the Johansen test of cointegration. Real GDP and the various tax components were found to be causally related by the Granger causality test. The findings that the shock's effects on direct tax (CIT and PPT) and indirect tax (VAT) on GDP growth endure over the given time frame are corroborated by the impulse response functions and variance decomposition analysis. According to variance decomposition analysis, the impact of direct tax shocks (CIT and PPT) on GDP growth is typically minimal, while the impact of indirect tax shocks (VAT) on GDP growth is typically substantial, increasing over time.

Eboh, Igbokwe, and Nwagboso (2019) investigated the impact of public investment on human development indicators and found that inefficiencies in project implementation weaken the expected benefits of increased public revenue.

Chete (2018) focused on the role of public finance in promoting accountability and transparency. He argued that poor fiscal governance has been a significant impediment to translating revenue into development gains in Nigeria.

Olaniyi (2017) analyzed the effects of fiscal policy instruments on economic development and concluded that while oil revenue has driven Nigeria's fiscal structure, the increasing role of non-oil revenue—such as VAT and corporate income tax—has the potential to stabilize long-term growth.

Okonjo-Iweala (2012) emphasized the need for fiscal discipline and policy consistency in managing Nigeria's oil wealth. She advocated for sovereign wealth funds and stabilization policies to manage cyclical revenue inflows.

Iyoha and Oriakhi (2008) explored the effect of public expenditure patterns on Nigeria's economic development. Their findings indicated that while total government spending had a positive influence, only productive expenditures (i.e., capital expenditures) significantly affected development outcomes.

Collectively, these studies underscore several themes: the importance of diversifying revenue sources, the critical role of governance and institutional quality, the negative implications of oil dependency, and the need for targeted and transparent public investment. This body of literature provides a strong empirical and theoretical foundation for the current study.

METHODOLOGY

This presents the methodological approach adopted for analyzing the impact of public revenue on national development in Nigeria, guided by Wagner's Law and the Endogenous Growth Theory. It outlines the research design, data sources, model specification, estimation techniques, and the justification for the selected methodology.

TYPES AND SOURCES OF DATA

The type of data used in this paper is secondary data. The data of the variables (oil revenue, tax revenue, non-tax revenue, labor force, and population) were all sourced from the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), World Bank Development Indicators (WDI), Federal Inland Revenue Service (FIRS) reports, and the Ministry of Finance publications. Database from 1990-2024

MODEL SPECIFICATION

To investigate the relationship between public revenue and national development, the study draws from the augmented Solow model within the Endogenous Growth Theory, alongside insights from Wagner's Law.

The general functional form of the model is

$$GDP = F(OR, TR, NTR, LBRF, POP)$$

Where:

GDP = National Development proxy (GDP annual growth rate)

OR = Oil Revenue, TR = Tax Revenue, NTR = Non Tax Revenue, LBRF = Labor force

And POP = population

The functional model will therefore be transformed into a mathematical and econometric logarithmic model, respectively, as:

$$GDP_t = \alpha_0 + \beta_1 LOR_t + \beta_2 LTR_t + \beta_3 LBRF_t + \beta_4 LPOP_t + \beta_5 LNTR_t$$

And the econometric model is specified as:

$$GDP_t = \alpha_0 + \beta_1 LOR_{t-1} + \beta_2 LTR_{t-1} + \beta_3 LBRF_{t-1} + \beta_4 LPOP_{t-1} + \beta_5 LNTR_{t-1} + \mu_{t-1}$$

The generalized ARDL model based on Paseran and Shin et al (2005)

IMPACT OF DIS-AGGREGATED PUBLIC REVENUE ON ECONOMIC GROWTH IN NIGERIA

$$Y_t = \theta_{oj} + \sum_{i=1}^p \delta Y_{t-1} + \sum_{i=1}^p \beta_{j-1} X_{t-i} + \varepsilon_{jt}$$

Where Y_t = is a vector and the variables in X_i are allowed to be purely I(0) and I(1) or cointegrated; α and β and are coefficients; δ is the constant; $j=1, \dots, k$; p, q are the optimal lag orders; ε_{jt} is the vector of the error terms- unobserved zero mean white noise vector process (serially uncorrelated or independent).

ARDL model with the inclusion of the additional variables is specified as follows:

$$\Delta LGDP_t = \delta_0 + \alpha_1 LGDP_{t-1} + \alpha_3 LNTR_{t-1} + \alpha_4 LBRF_{t-1} + \alpha_5 LPOP_{t-1} + \alpha_6 LTR_{t-1} + \sum \alpha \Delta LGDP_{t-1} + \sum \alpha \Delta LOR_{t-1} + \sum \alpha \Delta LNTR_{t-1} + \sum \alpha \Delta LLBRF_{t-1} + \sum \alpha \Delta LPOP_{t-1} + \sum \alpha \Delta LTR_{t-1} + \lambda ECT_{t-1} + \varepsilon_{t-1}$$

RESULT AND DISCUSSION

The result of the estimated variables will be presented accordingly as follows:

Unit Root Test for the variables. A Stationarity test to confirm the order of integration of the variable is presented in Table 1.

Table 1: Unit root Test result

Variables	ADF TEST		PP TEST		order of integration
	T-Stat.	Pvalues	t-stat	P-values	
GDP	-4.795	0.008**	-2.857	0.007**	I(1)
LOR	-3.134	0.039**	4.449	0.001*	I(0)
LNTR	-3.439	0.020**	-4.221	0.013**	I(0)
LTR	-6.999	0.000*	-4.179	0.014**	I(0)
LLBRF	-7.303	0.000*	16.35	0.001*	I(0)

Note: *, **, and *** indicate significance at 1%, 5% and 10% respectively.

Table 2 Bounds F-test for cointegration

F-Bounds Test		Null Hypothesis: No level relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	6.667059	10%	2.08	3
k	5	5%	2.39	3.38

2.5%	2.7	3.73
1%	3.06	4.15

Source: Authors' Computation using E-views 13 (2025)

Table 1 is the unit root result showing the stationary levels of the variables under study, the results indicate that, the variables are mixed order of integration, The dependent variable economic growth (GDP) is a non-stationary variable, meaning it is stationary at first difference I(1), relatively, the focus variable and other controlled variables; LOR, LNTR, LTR, LLBRF exhibit constancy in their mean variances, in other-words, these variables are stationary at level form, therefore, going by hypothetical rule of thumb, the null hypotheses of no unit root in the series is rejected; that the null is not true. As such, the alternative hypotheses are accepted, that the series are non-stationary at first difference and levels form. This warrants an opaque reason for ARDL employment as recommended by Sims(2003); therefore, the ARDL bound test to cointegration is used to estimate the impact of public revenue on the economic growth of Nigeria.

To detect whether the variables are cointegrated, for instance, the F bound test in Table 2 is presented and indicates the presence of cointegration among the variables. This is because the F-statistic value 6.667 is greater than the upper (3.38) and lower (2.39) band limits. Therefore, the null hypotheses of no cointegration among the variables are rejected at 5% level of significance; as such, long-run and short-run estimates of the model will follow in panels A and B in Table 3, which is presented along with their respective diagnostic tests.

Table 3 ARDDL (1, 2, 2, 0, 0, 2) Long run and Short run coefficient Estimates Results

Panel A. Long-run Coefficient Estimates				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOR	-13.22588	5.446375	-2.428383	0.0292
LNTR	6.744223	2.659762	2.535649	0.0238
LLBRF	44.51159	13.10438	3.396694	0.0043
LTR	20.35767	6.003403	3.391022	0.0044
C	663.7662	120.9947	5.485912	0.0001
Panel B. Short-run Coefficient Estimates				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOR)	-1.830442	1.497702	-1.222167	0.2418
D(LOR(-1))	7.607289	1.810016	4.202886	0.0009
D(LNTR)	-1.966768	0.969979	-2.027641	0.0621
D(LNTR(-1))	-3.786992	1.492092	-2.538041	0.0237
D(LTR)	13.93180	2.592183	5.374541	0.0001
D(LTR(-1))	-5.199638	1.295838	-4.012567	0.0013
CointEq(-1)*	-1.137657	0.139330	-8.165206	0.0000

IMPACT OF DIS-AGGREGATED PUBLIC REVENUE ON ECONOMIC GROWTH IN NIGERIA

R-squared	0.857826	Mean dependent var	0.073544
Adjusted R-squared	0.815174	S.D. dependent var	3.019058
S.E. of Regression	1.297937	Akaike info. Criterion	3.57784

Source: Authors' Computations using Eviews 13 (2025)

Table 3 panel A is the ARDL long run bound test to cointegration estimates, the results shows that; a 1 percentage change in oil receipt is associated with (-13.23) percent decrease in economic growth of Nigeria, however, the LOR is found to be statistically significant towards achieving economic growth at 5% in the long run horizon, moreover, the log of non-Tax revenue (LNTR) variable have also exhibits statistical significance in influencing economic growth of Nigeria at 5% level of significance, the coefficient of log of non -Tax revenue (LNTR) indicates that; a 1 % change in non- tax revenue collected will leads to an increase in Nigeria's economy by 6.7% in the long run, Labour force variable in its logarithmic form indicate that; a 1 % change Nigeria's labour participation rate will eventually leads to an in increase of the economy by 44,5% , it's also found to be highly significant at 5% level of significance, in regard to the log of Tax revenue , the results indicates that a 1 % change in revenue accrues in to the economy of Nigeria, there will be an increase in the economy by 20.36 % at 5% level; of significance, it is also realize that the result is also statistically significant, all things being equal. Intuitively, The long run substantial decrease of economic growth by -13.23 from a unit percentage change in the LOR may likely attributed to a new paradigm policy shift in an attempts of the Nigerian authorities to avert over-dependence on oil as main source of revenue, thereby diversifying and evading reliance on mono source of revenue, which is cumulatively and continually keep lagging the economy backward and underdeveloped, the spill over effects of these repercussion has additional tremendous effects in employment generation, low production, low income, and adversely remain stagnated without growing and neither development in the long run, as such the Nigerian authorities have now focused on additional opportunities in revenue generation, this has attracts domestic and foreign direct investment, most especially in the area of ICT driven opportunities, such also include a large market share in whole Africa, Agriculture, solid minerals, Tourism and services are also inclusive, thereof, these may be the reason for the slump down of the LOR in relation to its future relevance to Nigeria's economic growth.

Meanwhile, the short run ARDL estimates eventually reveals that, a 1% Change in the log of oil revenue $D(LOR)$ and log of non-Tax revenue; $D(LNTR)$ in the current period is associated with decreases in the Nigeria's economy (GDP) by -1.83% and -1.967% ad jointly, however, these variables in the current period horizon exhibits statistical significance in influencing growth at 5% and 10% level of significance. The coefficient estimates of the log of Tax Revenue $D(LTR)$ in the current period (t) reveal a positive increase in the economy by 13.93%, and it also shows statistical significance in influencing growth in the current period by 13.93% in the short run. In the same vein, in th pat periods at lag (t-1), a percentage cange incese ioil revenue $\Delta(LOR)_{t-1}$ is associated with an increase in the Nigeria's economy by (7.61%), moreover, a 1% cange in the log of non-Tax revenue a tme time t1) pt period $(\Delta(LNTR)_{t-1}$ is also associated with at least -3.93% decrease of the economy of Nigeria in the short run periods, the log of Tax revenue $D(LTR(-1))$ in the previous period at time (t-1) indicates that; a 1 percent change in it, is associated with -5.19

percentage change in on growth in Nigeria, it also reveals statistical significance at even 1 Percent in influencing growth in the short run periods. Conclusively, public revenue variables (LNTR), (LLBRF) and (LTR) in the long run horizon exhibits positive and statistical significance in influencing economic growth of Nigeria, its only log of oil Revenue(LOR) that has negative relation to economic growth of Nigeria, all things being equal, subsequently, the short run public revenue variables comprising D(LOR(-!)) and the log of tax revenue D(LTR) have also maintain positive impact on economic growth of Nigeria, the log of non- Tax revenue (LTR(-1)) and the log of Tax revenue D(LTR(-1)) reveals negative and statistical significance to economic growth of Nigeria. All things being equal.

Cyclical shocks related to global market prices may be the cause of oil revenue's short-term statistical non-relevance to Nigeria's economic growth. These shocks also have an impact on government revenue that could be utilized to fund macroeconomic variables that promote development. The coefficient estimates of the ECM also show that, during the phase of the short-run trajectory of the variable, the short-run disequilibrium will be corrected annually by 13.76 percent towards long-run equilibrium achievement with the other variable. Additionally, the ECM estimates $cointEqn(-1)$ * fulfill its rule of thumb of a negative sign coefficient which is less than unity and statistically significant, emphasizing convergence of the model towards equilibrium from the short run disturbances. Furthermore, the model's robustness is indicated by the adjusted R², which shows that the independent variables account for 81% of the variation in the dependent variable GDP, with the random term error accounting for only 19%. The GDP mean and standard deviation are also satisfied. Post-diagnostic tests were performed in compliance with OLS statistical ethics, and the results are further displayed in Table 4.

Table 4. Diagnostic Test of the ARDL, Selected Model: ARDL (1, 2, 2, 0, 0, 2)

Test	Test Statistics	P-Values
Breusch-Godfrey Serial Correlation LM Test:	F-statistic (0.208)	0.815
Normality Test	JB-Statistics (0.959)	0.619
Heteroskedasticity	F-Statistics (0.725)	0.708
Ramsey Reset Test	F-Statistics (0.611)	0.551

Source: Authors' Computation Using Eviews 13(2025)

The diagnostic test of the ARDL bound test to cointegration of the estimates have shown that, the model is free from serial correlation, residuals are homokedastic and normally distributed with correct functional model form, therefore, by the decision rule, the null hypotheses of serial correlation among the variables, non-normal distribution of the residuals, heteroskedasticity and incorrect functional model form are here by rejected, thus the null is not true, and the alternative hypotheses is accepted that; the model certify the basic OLS assumption established. Therefore, it's robust and useful for policy purposes.

CONCLUSION AND RECOMMENDATIONS

The study employs the ARDL bound test for cointegration in estimating the analytical Impact of Public Revenue on the Economic Growth of Nigeria. The result of the ARDL (1,2,2,0,0, 2) exhibits long-run cointegration among the series in question. Bound test estimation techniques were used

IMPACT OF DIS-AGGREGATED PUBLIC REVENUE ON ECONOMIC GROWTH IN NIGERIA

to confirm the reliability of the relation. Therefore, Findings through the study estimation technique will pave the way for recommendations intuitively.

CONCLUSION

The ARDL bound test to cointegration techniques is used to estimate the long and short run relationship between Public Revenue and Economic Growth of Nigeria. Findings of the study reveal positive and statistically significant effects of the log of oil revenue $D(LOR(-1))$ in influencing the economic growth of Nigeria in the short run, at 5% level of significance. Accordingly, $D(LTR)$ has also shown positive and statistically significant results of Tax Revenue to the economic growth of Nigeria in the short run, at 5% level of significance. However, $D(LNTR(-1))$ has shown a negative and statistically significant impact on the economic growth of Nigeria in the short run. Moreover, in the long-run horizon, LOR exhibits a negative relation to Nigeria's economic growth but has statistical significance to the economy. Conversely, the LNTR, LLBRF, and LTR reveal a long-run positive association with the economic growth of Nigeria at 5% level of significance. Therefore, based on these results of the estimates, they will establish some recommendations to stimulate the economy for sustainable growth and development.

RECOMMENDATIONS

Based on the discussed findings, the study recommends a total overhaul to Nigeria's petroleum industry bill that will transfer total exploration, production, and ownership to the nationals, these will eventually makes it efficient, more reliable, and sustainable in generating more revenue from oil, this could trigger growth in near future aspirations to the bloc of rich and developed countries of the world. In addition, Nigerian authorities should checkmate corruption, nepotism, oil bunkering, vandalism, and theft through militancy, oil companies, and related petroleum agencies for consideration. The government should also diversify its sources of revenue, especially through trade policies such as the ease of doing business. These could attract more investment, especially in non-oil sectors such as service, Tourism, Agriculture, Solid minerals, and ICT. These could trigger growth in the near future.

STABILITY TEST: CUSUM/CUSUM OF SQUARES GRAPH.

The stability Test using Cusum and Cusum of squares test have shown stability trends, these explain by short and long run stability representation of the model, the Cusum graph illustrated that in the short run, the model is stable and its within the band of 95%, such also the cussum of the squares, it is also indicates that in the long run horizon, the model is also stable and within the band of 95%.

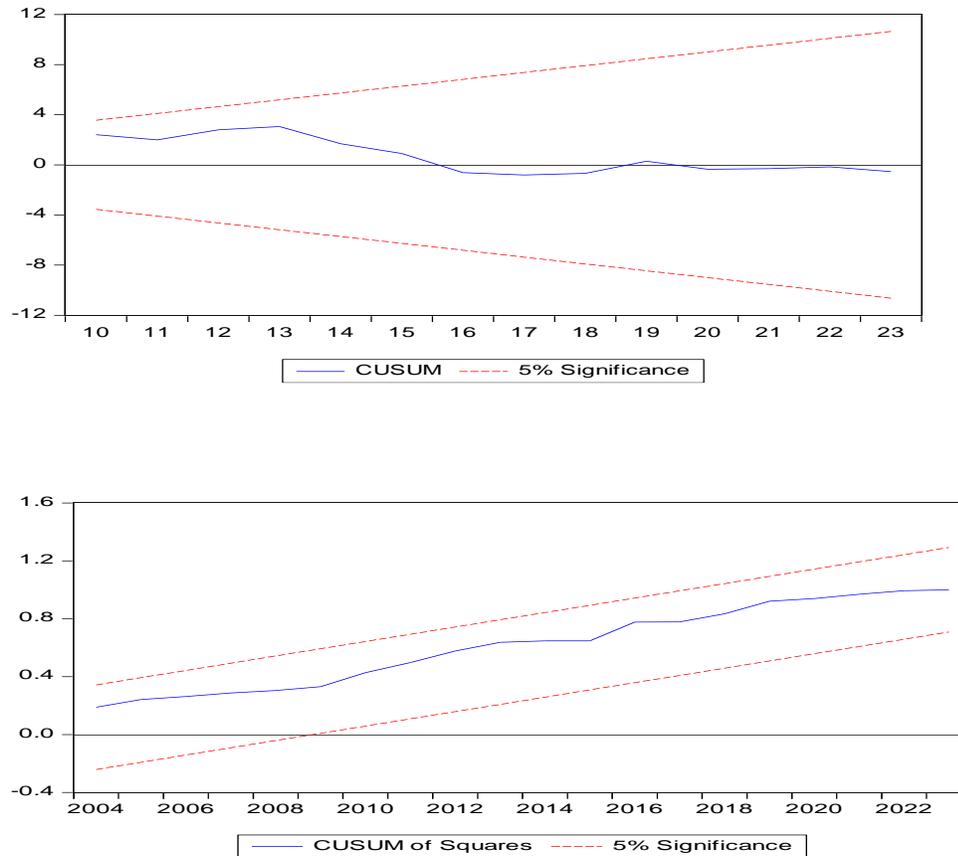


FIG 5.1 Cusum and Cusum of Squares

REFERENCES

- Adereti, S. A., Sanni, M. R., & Adesina, J. A. (2011). Value-added tax and economic growth of Nigeria. *European Journal of Humanities and Social Sciences*, 10(1), 456–471.
- Agunbiade, O., & Idebi, A. A. (2020). Tax revenue and economic growth nexus: Empirical evidence from the Nigerian economy. *European Journal of Economic and Financial Research*, 4(2).
- Ajayi, A. I., & Oke, M. O. (2012). Effect of external debt on economic growth and development of Nigeria. *International Journal of Business and Social Science*, 3(12), 297–304.
- Ajaz, T., & Ahmad, E. (2010). The effect of corruption and governance on tax revenues. *The Pakistan Development Review*, 49(4), 405–417.
- Aliyu, A. B., & Mustapha, A. A. (2020). Impact of tax revenue on economic growth in Nigeria (1981-2017). *Bullion*, 44(4), 5.

IMPACT OF DIS-AGGREGATED PUBLIC REVENUE ON ECONOMIC GROWTH IN NIGERIA

- Chete, L. N., & Adeoye, B. W. (2001). Fiscal policy and poverty alleviation: Some policy options for Nigeria. *NISER Monograph Series No. 5*.
- Egbulonu, K. G., & Amadi, S. N. (2016). Public revenue and infrastructure development in Nigeria: An ARDL cointegration approach. *Journal of Economics and Sustainable Development*, 7(22), 1–11.
- Ewa,–U. E., Adesola, W. A., & Essien, E. N. (2020). Impact of tax revenue on economic development in Nigeria. *International Business Research*, 13(6), 1–12.
- Idebi, A. A., Agunbiade, O., & Adesina-Uthman, G. A. (2024). EFFECTS OF DISAGGREGATED TAX REVENUES ON ECONOMIC GROWTH IN NIGERIA (1995-2023): ARDL BOUND TEST APPROACH. *European Journal of Economic and Financial Research*, 8(5).
- Lucas, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22(1), 3–42.
- Meziane, F., Onn, C., Labadin, J., & Harris, R. (1999). Towards a framework for developing educational software. <https://core.ac.uk/download/81270.pdf>
- Nwankwo, O., & Asuquo, A. I. (2021). Fiscal sustainability and public revenue in Nigeria. *Journal of Public Administration and Development*, 15(2), 89–101.
- Obadiaru, E., Okon, B. K., & Ayeni, A. (2024). The Impact of Tax Revenue on Economic Growth in Nigeria. *International Journal of Multidisciplinary Research and Growth Evaluation*, 5(1), 566–571.
- Okafor, R. G. (2012). Tax revenue generation and Nigerian economic development. *European Journal of Business and Management*, 4(19), 49–56.
- Okolo, M. N. (2024). Tax revenues, government expenditures, and economic development in Nigeria. *International Journal of Intellectual Discourse*, 7(2), 244–255.
- Olaniyi, O. (2017). Oil dependency and public revenue instability in Nigeria: Implications for fiscal sustainability. *Journal of African Development Studies*, 5(1), 22–35.

- Olaoye, C. O., & Ajilore, T. O. (2019). Oil revenue and sustainable economic development in Nigeria: A vector error correction model approach. *International Journal of Energy Economics and Policy*, 9(2), 341–347.
- Olatunji, A., & Abiola, M. A. (2012). The impact of tax revenue on Nigeria's economic growth. *International Journal of Economics and Finance*, 4(12), 201–209.
- Oni, A. A., & Olayemi, O. S. (2020). Internally generated revenue and local government development in Nigeria. *Journal of Economics and Policy Analysis*, 10(1), 25–39.
- Onukelobi, P. C. P., Okwuego, S. P., & Chidiebere, J. O. Effect of Tax Revenue on Economic Growth in Nigeria.
- Puviani, A. (1903). *Teoria dell'illusione finanziaria* [Theory of Fiscal Illusion]. Reprinted in Public Choice.
- Romer, P. M. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94(5), 1002–1037.
- Tanzi, V., & Zee, H. H. (2000). Tax policy for emerging markets: Developing countries. *IMF Working Paper No. 00/35*.
- Uchenna, E., & Odo, S. I. (2022). Fiscal decentralization and internally generated revenue in Nigeria. *Journal of Economics and Public Finance*, 8(3), 112–124.
- Wagner, A. (1893). *Grundlegung der politischen Ökonomie* [Foundations of Political Economy]. Leipzig: C.F. Winters.