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Impact of Tax-based Revenue on Economic Development in Nigeria, 1999 to 2023

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

This research measures the contributory impact of Tax-based revenue on economic development in Nigeria, 1999 to 2023, with a specific focus on the nuanced dynamics of oil-based tax (OBT), non-oil-based tax (NOBT), and aggregate tax revenue (ATR). Leveraging comprehensive data extracted from the Central Bank of Nigeria's Statistical Bulletin and Federal Inland Revenue Service (FIRS) database, the study employs the Autoregressive Distributed Lag Model (ARDL) with Gross Domestic Product Growth Per Capital (GDPPC) as the outcome variable. The empirical analysis supports a significant and positive impact of non-oil-based tax revenue on GDPG while the oil-based tax shares no significant impact on economic development. Also, aggregate tax revenue (ATR) was found to negatively but significantly impact on economic development. The study

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recommends the adjustment of the tax system to address the developmental constraint on investment and consumption posed by taxation while optimizing the benefits that accrue from an efficient and good tax system.

Keywords: Economic Development; oil-based tax revenue; non-oil -based tax revenue; per capita income; Nigeria; ARDL.

1. INTRODUCTION

Taxation is used to redistribute wealth and pay for government spending. One of the tools of fiscal policy that accelerates the rate of economic development in both established and developing nations worldwide is tax income. To put it another way, taxes are crucial tools of fiscal policy that provide a source of revenue to government.

Udeorah, Yusuf, and Amadi [1] highlighted the role of taxation in supporting economic growth and financing government operations. Taxes are mandatory levies on firms or properties to fund development. Economic growth involves changes in sectoral output and input distribution, aiming to enhance material welfare, reduce poverty, and illiteracy. Taxation is a key tool for governments to control the macroeconomy, raise revenue, and promote growth. Since the 20th century, governments have implemented tax reforms to achieve growth objectives, particularly in low- and middle-income countries with limited tax revenue (15-20% of GDP). Policymakers face challenges in financing public spending for growth, and raising taxes has economic implications, leading to cautious decision-making. Effective taxation strategies are crucial for achieving economic growth, reducing poverty, and meeting government obligations. Governments must balance revenue needs with potential economic impacts when making tax adjustments.

Economic growth refers to the increase in goods and services produced over time. Achieving economic growth is a key goal of governments, driving the importance of tax policies in both developed and developing countries. Tax policies are a crucial tool for maintaining economic growth, particularly during recessions, and are used to evaluate sustainable economic activities, ultimately aiming to improve citizens' quality of life through effective economic management.

Abdulwahab and David [2]examined the specific tax revenue that aid Nigeria’s economic growth from 1998 to 2021 and deduced that these listed taxes which are: value-added tax, corporation income tax, customs and excise duty, petroleum profit tax, and education tax have positive impacts on Nigeria's economic development.

Adelusi [3] stated that the Federal, State, and Local governments are responsible for enforcing the Taxes and Levies Act 1998, collecting taxes and levies as specified. This research aims to investigate the impact of tax revenue on Nigeria's economic development from 1999 to 2023, building on previous studies and providing reliable data to inform improvements in government revenue collection and economic growth strategies.

There's debate among scholars about tax's impact on economic growth, including in Nigeria. Despite this, Nigeria's tax revenue has grown rapidly, becoming the largest contributor to the federation account, which is shared among federal, state, and local governments, with each tier having distinct tax jurisdictions and fiscal powers.

Mobilizing tax revenue for development in Nigeria has been challenging due to resistance, evasion, avoidance, and corruption, which hinder economic progress and are blamed for the country's underdevelopment. This study aims to investigate the impact of tax revenue on Nigeria's economic development, exploring its contribution to key economic indicators and addressing the longstanding challenges.

This research work seeks to measure The Contributory Impact of Tax -Based Revenue and the Development of the Nigerian Economy, 1999-2023.

The study tends to use time series data from 1999 to 2023 (a total of 24 years) to investigate the relationship between tax revenue and economic development in Nigeria. The relationship between the proxies for tax revenue are Petroleum Profit Tax, Custom Excise Duties, and Value Added Tax and the Nigerian economy which will be gauged by Gross Domestic Product (GDP) growth rate is investigated for the relevant time. The Federal Inland Revenue Service

(FIRS) and the Central Bank of Nigeria (CBN) Bulletin were the sources of the data.

2. LITERATURE REVIEW

The government generates public revenue through taxation, which involves imposing taxes on individuals, corporations, and groups [4,5].Taxation is a mandatory collection of earnings, income, or consumption by the government to fund its expenses [6]. Simply put, taxes transfer financial resources from the private sector to the public sector to support societal progress [7]. This occurs when a tax rate is applied to a tax base, generating revenue for public initiatives [8].

According to A well-designed tax structure can foster stable institutions, democratic accountability, and informed government spending in both emerging and developed nations [9]. Taxes fund public sector operations to meet a nation's social and economic obligations, with six key justifications: funding public goods, redistributing income and wealth, enhancing social and economic welfare, promoting economic prosperity, and regulating and harmonizing activities.

Tax law, tax policy, and tax administration form the foundation of the tax systems of both established and developing nations, including Nigeria [10].The intricate nature of the tax system necessitates careful monitoring and implementation of all its components.

Amechi [11] highlighted the significant reforms in Nigeria's National Tax Policy (NTP) introduced by the Finance Act 2023, impacting various tax components. The amended laws include the Capital Gains Tax Act, Companies Income Tax Act, Customs and Excise Tariff Act, Tertiary Education Trust Fund Act, Stamp Duties Act, Value Added Tax Act, Personal Income Tax Act, and Petroleum tax laws. The Finance Act 2023 updates the NTP to reflect current realities, clarifying ambiguities and creating a fairer tax framework. The revised tax law aims to establish a sustainable structure, promoting economic growth, reducing poverty, and stimulating economic activity.

2.1 Empirical Literature

Olaoye, Yunus, and Opefolu [12]examined the impact of tax income on economic development from 2003 to 2020 using data from FIRS, CBN, NBS, and ASB. Their analysis revealed a significant relationship between tax revenue (including education tax, petroleum profit tax, corporate income tax, and value-added tax) and economic development, as measured by the Human Development Index. They advised the government to utilize tax revenue to boost economic growth.

Ndu and Uguru [13] examined the impact of tax revenue on Nigeria's economic growth from 1999 to 2021. Their study found that corporation income tax hinders growth, while value-added tax, petroleum profit tax, and education tax boost growth. They recommend reducing corporation income tax rates and addressing revenue leakages to promote economic growth.

Agunbiad and Idebi [14] examined the relationship between tax revenue and economic growth in Nigeria from 1981 to 2019, focusing on petroleum profits tax, value-added tax, and companies' income tax. Using data from FIRS and NBS, they employed the Vector Error Correction Model (VECM) and found a long-run correlation between taxation and economic growth. The study revealed that shocks to direct taxes (CIT and PPT) have a low impact on GDP growth, while indirect taxes (VAT) have a significant impact. The researchers recommended a broad-based tax strategy, simplifying the tax system, and strengthening tax regulatory bodies to enhance compliance and increase tax revenue.

Uket, Wasiu, and Etim [15] investigated the impact of tax revenues on Nigeria's economic growth, examining income tax, petroleum profit tax, and Value Added Tax from 1994 to 2018. Using Ordinary Least Squares, they found a positive correlation between tax revenues and economic development, with a 99.2% coefficient of determination. However, they noted that petroleum profit tax had a minimal impact due to OPEC's production ceiling and global oil price fluctuations. Following this study, Awa and Ibeanu [16] examined the impact of tax income on Nigeria's economic development from 1997 to 2018. Using regression analysis, they found that value-added tax has a minimal impact, while petroleum profit tax and corporate income tax have a significant impact on economic development, as measured by the Human Development Index (HDI).

Udeorah, Yusuf, and Amadi [17] investigated the relationship between tax revenue and economic

development in Nigeria from 1999 to 2020 using the ARDL model. They found that export tax revenue positively impacted economic development, while import tax revenue had a negligible and negative effect. In a similar vein, Ho et al. [18] analyzed data from 29 developing countries with rapid economic growth between 2000 and 2020 to explore the impact of tax revenue on economic growth amidst increasing trade openness. Using panel data and statistical models, they found that tax revenue positively affects economic growth, but excessive trade openness can weaken this relationship. The study's findings have significant implications for developing countries seeking to balance tax revenue and trade openness.

Okah-Avae and Mukoro [19] Consider how Nigeria, a nation with a poorly developed tax system, may modify its tax collection methods to address the demands of 21st-century digital trade. takes a doctrinal method to improve the effectiveness of the current tax systems and enable them to capitalize on the opportunities provided by digital transactions.

Nkanor and Chukwu (2022) investigated the impact of tax gaps on Nigeria's government budget implementation from 2003 to 2022. Using data from FIRS and CBN, they employed econometric analysis, including unit root tests, descriptive statistics, and OLS regression. The study found that corporation income tax and value-added tax gaps negatively affected budget implementation, while capital gains tax evasion had a minor positive effect. In contrast, petroleum profit tax and education tax gaps had a positive and significant impact. The study concluded that tax gaps significantly influence budget implementation and recommended closing loopholes in the tax code and expanding the tax base to increase revenue.

Mpofu [20] investigated the digital economy's impact on African taxation, where growing digital transactions have reduced tax bases. To address this, African countries have introduced various taxes, but debates persist among governments and policymakers. The study analyzed applying value-added tax (VAT) to the digital economy, weighing benefits (revenue mobilization, efficiency) against drawbacks (legislative ambiguity, capacity constraints) and potential consequences (increased costs, reduced accessibility).

Omodero [21]investigated the effectiveness of Value-Added Tax (VAT) revenue transfers to states and local governments in providing essential social services in Nigeria. Using secondary data from the Central Bank of Nigeria, the study analyzed the impact of VAT devolution on social development from 1995 to 2021. The results showed a positive correlation between VAT transfers to states and socioeconomic progress. However, the impact of VAT revenue on local governments was insignificant. The study recommended autonomous VAT revenue management and advocated for states and local governments to have access to all revenue receipts for societal benefits.

Oladipo et al. [22] investigated the impact of non-oil revenue on Nigeria's economic growth from 1990 to 2021. Using the Vector Error Correction Model (VECM), they found that Value-Added Tax (VAT) and Corporate Income Tax (CIT) positively correlate with economic growth, while Federal Independent Revenue (FIR) has a negative correlation. The study recommends strict enforcement of the Fiscal Responsibility Act to increase non-oil revenue contributions from Government-Owned Enterprises (GOEs) and boost economic growth.

Achanya and Mamman [23] emphasized the urgent need for Nigeria to mobilize tax revenue due to declining oil revenues, rising fiscal deficits, and national debt post-COVID-19. They warned that excessive borrowing can lead to inflation and debt servicing costs, while relying on crude oil exports is risky. Using secondary data and the Resource Curse Theory, the study recommended expanding the tax revenue base and reducing multiple taxation to ensure a sustainable fiscal system that provides public goods. This would reduce dependence on oil-based resources and promote economic growth.

Irmiva, et al [24] investigated the impact of tax planning on the value of Nigeria's listed commercial banks. Using Tobin's Q as a measure of business value, they found that the Effective Tax Rate (ETR) had a negative and significant impact on firm value. In contrast, Tax Saving (TSV) had a positive and significant effect, while Book Tax Difference (BTD) had a minimal positive impact. The study recommended that shareholders monitor managers' tax planning decisions to prevent deviations from the effective tax rate, and that firms implement sound governance practices to

reduce information asymmetry and increase firm value.

Okagbare & Okolie [25] examined the impact of tax aggression on Operating Cash Flows (OCF) of 12 Nigerian banks from 2012 to 2021. Using accounting ETR, cash ETR, and Income Tax Expense as proxies for tax aggression, they found a negative but insignificant correlation with OCF. The study concluded that tax aggression had no significant implicit impact on OCF and recommended that the sampled banks reconsider their asset base to optimize cash flows.

Oyedokun, Adeleye, and Nwabuzor (2024) investigated the impact of Nigeria's federal government tax collection on healthcare infrastructure growth. Using an ex post facto design, they analyzed 2013-2021 tax data from CIT, PPT, EDT, and VAT sources. The study found a non-significant positive correlation between health infrastructure spending and VAT, CIT, and PPT, but not EDT. The results showed that only PPT, CIT, and VAT significantly affect healthcare infrastructure growth. The report recommended raising funds through petroleum earnings tax and firm income tax revenue and allocating them for ethical spending on health infrastructure to preserve and improve Nigeria's healthcare infrastructure.

The study by Sunday et al. [26] examines the impact of revenue distribution on Nigeria's economic development since the return to democratic governance in 1999. Despite various revenue allocation schemes, the country's economic development has been hindered by poor planning, corruption, over-reliance on petroleum resources, and lack of people-oriented policies. The research reveals that these factors have led to high unemployment, poverty, and social inequality rates. To address these issues, the study recommends decentralizing power, promoting competition and income generation at local levels, and prioritizing policies that focus on Nigerian welfare.

Felix, Innocent, and Anslem (2024) examined the relationship between Nigerian culture and long-term tax compliance. The study found that culture significantly influences individual taxpayers' compliance and that Hofstede's cultural dimensions impact tax compliance. Taxpayers' trust in government accountability and transparency is crucial to prevent tax evasion. The study recommends that the Nigerian government and stakeholders consider culture when developing tax policies, laws, and administration procedures to achieve optimal results. By acknowledging cultural factors, the government can improve tax compliance and revenue collection, ultimately fulfilling its fiduciary duties to its constituents.

3. METHODOLOGY

The Federal Inland Revenue of Nigeria represent the key source of the data set for the study while the data points on population and gross domestic product were drawn from the Central Bank of Nigeria Database and the World Development Indicators. The datasets are of a secondary nature because they are from already documented or existing sources. The key advantage of using the secondary datasets is that it is verifiable and is largely in public domain. Onwumere 2019 holds that secondary data though previously gathered are of current necessity. Secondary data are largely located in archives or depositories such as the FIRS database and WDI as used in this study. Additionally, the datasets are time series as they are naturally ordered and follow a regular frequency (Brooks, 2014). In this study, the datasets are quarterlised time series which provides us with a higher frequency than the annualized time frequency which makes room for a more robust estimation output.

The Auto Regressive Distributed Lag Model (ARDL) is used in this study and specified as follow:

$$GDPPC_t = \beta_0 + \sum_{n=1}^{k} \beta_1 \Delta\, GDPPC_{t-n} + \sum_{n=1}^{k} \beta_2 \Delta\, OTAX_{t-n} + \sum_{n=1}^{k} \beta_3 \Delta\, NOTAX_{t-n} + \sum_{n=1}^{k} \beta_4 \Delta\, AGGTAX_{t-n} + \rho_1 GDPPC_t + \rho_2 OTAX_t + \rho_3 NOTAX_t + \rho_4 AGGTAX_t + \varepsilon_t$$

Where:

$GDPPC$ = the dependent variables, (Economic Development). $NOTAX$ = the independent variable (Non-oil Tax), $OTAX$ = the independent variable (Oil Tax), $AGGTAX$ = the independent variable.

(Aggregate Tax), β_0 = the constant or the intercept, $\beta_1 - \beta_5$ are the coefficient of the short run parameters, $\rho_1 - \rho_4$ are the coefficient of the long run parameters, $t - n$ is indicative of the lagged time series, ε_t = the residual or error term, $\Delta =$ the difference operators , k, n shows the minimum and maximum lag

Table 1. Description of model variables

S/N	Name of variable	Notation	Role	Source
1	Gross Domestic Product Per Capita	GDPPC	Dependent Variable Quotient of GDP over Population	Central Bank of Nigeria Database and World Development Indicators (WDI)
2	Aggregate Tax Revenue	AGGTAX	Independent Variable	FIRS Database
3	Non-Oil Tax	NOTAX	Independent Variable	FIRS Database
4	Oil Tax	OTAX	Independent variable	FIRS Database

Source: Compiled by the author

3.1 Four Basic Steps followed were in the Estimation Process

The Pre-Estimation Test (PRE-TEST) include the following:

1. Basic descriptive statistics - measures of central tendencies, measure of dispersion, test for skewness and kurtosis.
2. Table, graphs and Charts
3. Unit Root Test

The key estimation method adopted is the Autoregressive Distributed Lag model because of its advantages over other estimation methods. These advantages include:

A. It solves diagnostic issues like autocorrelation.
B. it is reliable in the face of small sample sizes
C. It accepts variables with different orders of integration I (1), I (0) not I (2).
D. It can use different lag lengths for both the regressors and the dependent variables.

The reliability and validity of the estimates were done with the following tests:

1. Test for Significance of the overall regression and tests for goodness of fit
2. Test for auto correlation conducted using Breusch-Godfrey Lagrange Multiplier test (BG LM).
3. Tests for heteroscedastic residuals were conducted following the Breusch, Pegan and Godfrey test (BPG).
4. Test for model stability conducted by adopting Ramsey RESET and CUSUM test.

4. RESULTS

Table 2, shows the measures of central tendency, dispersion and elements of test for normality.

Table 2. Summary of Descriptive Statistics for the Study

	Mean	Median	Max	Min	Coeff. Of Var	Std. Dev	Skewness	Kurtosis	Jarque-Bera	CV
GDPPC	0.0002	0.0002	0.001	9.04E-05	1.50	0.0003	2.93	9.88	163.29	1.5
AGGTAX	1298.97	1200.55	3186.22	563.87	0.37	482.44	2.04	7.88	80.88	0.37
NOTAX	722.37	653.68	1709.79	297.76	0.46	329.63	1.15	4.01	12.61	0.46
OTAX	576.60	538.66	1476.44	176.75	0.46	262.61	0.99	4.34	11.48	0.46

Source: Author's computation from Eviews 10

Table 3. Summary Results of Correlational Matrix

	GDPPC	AGGTAX	NOTAX	OTAX
GDPPC	1.00	0.33	-0.05	0.12
AGGTAX	0.33	1.00	0.86	0.76
NOTAX	-0.05	0.86	1.00	0.32
OTAX	0.12	0.76	0.32	1.00

Source: Author's computation from Eviews 10

Table 4. Summary result of stationarity test

	Test stat	Critical Values@		INF
		5%	10%	
AGGTAX	-7.96	-3.51	-3.19	I (1)
GDPPC	-5.20	-3.52	-3.19	I (1)
NOTAX	-11.63	-3.52	-3.19	I (1)
OTAX	-2.19	-1.95	-1.61	I (0)

Source: Author's computation from Eviews 10

Table 5. Summary of ARDL Estimates

	Coeff	Std. Error	t-stat	Coeff	Std. Error	t-stat
C	1.46	0.40	3.68	4.33*	0.93**	4.67***
ATR	-1.0	0.02	-51.19	-0.96*	0.04**	-22.16***
NOTAX	0.17	0.03	5.15	0.90*	0.07**	12.29***
OTAX	0.01	0.03	0.48	-0.11*	0.06**	-1.81***
Diagnostic Test						
R^2	0.02					
F-statistics	10.69					
LM	0.28					
HET	2.17					
CS/SS	STABLE					

Source: Author's computation from Eviews 10

*() * = coefficients of long run estimates; () ** = standard eorror of long run estimates; () *** = t – statistics of long run estimates*

Except for GDPPC, the summary of the descriptive statistics results above displayed higher strength (mean) figures against its weakness (standard deviation) figures for all the variables. Similarly, a low volatility (coefficient of variation below 50%) for all the series as against their sizes and strength (mean) excluding only GDPPC, indicated that variables for this study were normally distributed and this is in tandem with the null hypothesis of Jaque-Bera statistics, "the distribution is normal".

Relying on the above evidence, this study concludes that all data used in this study were normally distributed. This follows Arize, Kalu, Malindretos, and Ndu, [27], who posits that variables or data for a study becomes better linear combination when their coefficient of variation is not vastly dispersed but for the purpose of precision and concision, it is interesting to state that the focus of this study is more on causation than on any preliminary investigation.

It is based on the results of the correlational matrix as presented in Table 3, that this study explained the associational or bivariate relationship between the variables thus:

The summary of the correlational matrix presented in Table 3 explained the linear association between the variables used in this study. From the results, we observed that more than 80% of the linear association between the variables were positive (co-movement) with less than 20% negative relationship recorded between the variables. It is fortunate to disclose that, this study did not record any correlation coefficient above 90% to even call for any suspicion of multi-collinearity as assumed by Variance Inflation Factor. Buttressing further, the result of the diagnostic test against all forms of autocorrelations which were achieved through Breusch-Godfrey Serial Correlation Lagrange Multiplier (BG SC LM) test, showed neither presence of autocorrelation nor multi-collinearity.

The major analytical tool for this study was selected based on the results of the Augmented Dickey-Fuller unit root test following its interpretational simplicity as shown in Table 4.

The summarized results of the stationarity test above, it was observed and inferred that all our variables (AGGTAX, GDPPC, NOTAX, OTAX, and POP), were stationary at first difference except oil tax which was stationary at I (0) at the 5% and 10% level of significance. This is because, at first difference (I (1)), the ADF stats are in absolute terms, greater than their critical values at the chosen significant level, 5%. Even though the stationarity properties of our variables

permitted the use of Co-integration technique of analysis, this study used the Autoregressive Distributed Lag (ARDL) method of estimating regression for, its ability in yielding a robust output even when small sample are used, its autoregressive features for reducing autocorrelation and multi-collinearity as well as its simultaneous modelling of short run and long run elasticities [28,29].

Before employing ARDL as the major analytical technique for this study, we ensured the normality, associational and stationarity of the variables. The ARDL summary estimates are as summarized in Table 5 thus [30-35].

The interpretation of individual parameters for hypothesis testing was preceded by validity and reliability check of the ARDL estimates through the joint statistics. The summary of results above revealed a good fit (R^2 = 2%). Meaning the investigated taxed-based revenue proxies (OTAX, NOTAX, and POP), is responsible for about 2% variation in economic development (GDPPC) with about 98% unexplained variation (1- R^2) which is blamed on unmodeled factors. The F-Statistics (10.69) is within the acceptance region hence, the model is statistically significant, reliable for any meaningful analyses and hence, an indication for the presence of long run relationship between taxed-based revenue and economic development.

The result of the ARDL bound test, showed a long-run cointegrating relationship connecting taxed-based revenue and economic development in Nigeria. This is because the result of the bound test F-statistics (10.69) is @ 5% level of significance, greater than the upper bound of (3.67) [36-40].

For the diagnostic tests, there was absence of autocorrelation of any order as shown by the insignificant F-statistics (0.28) of the BG SC LM Test. Also, a record of homoscedastic residuals for this study, follows the insignificant F-Statistics (2.17) and P-values (0.0582) of the Heteroscedasticity test using Breusch, Pagan and Godfrey (BPG).

The cumulative sum of square (CUSUM) test was found to be stable within bounds at the 5% level of significance, hence, an indication of model stability.

This means, our model is void of specification bias and as well, follows a correct functional form.

The models for this study are consistent, best, linear, unbiased and good enough for the test of hypothesis [41-50].

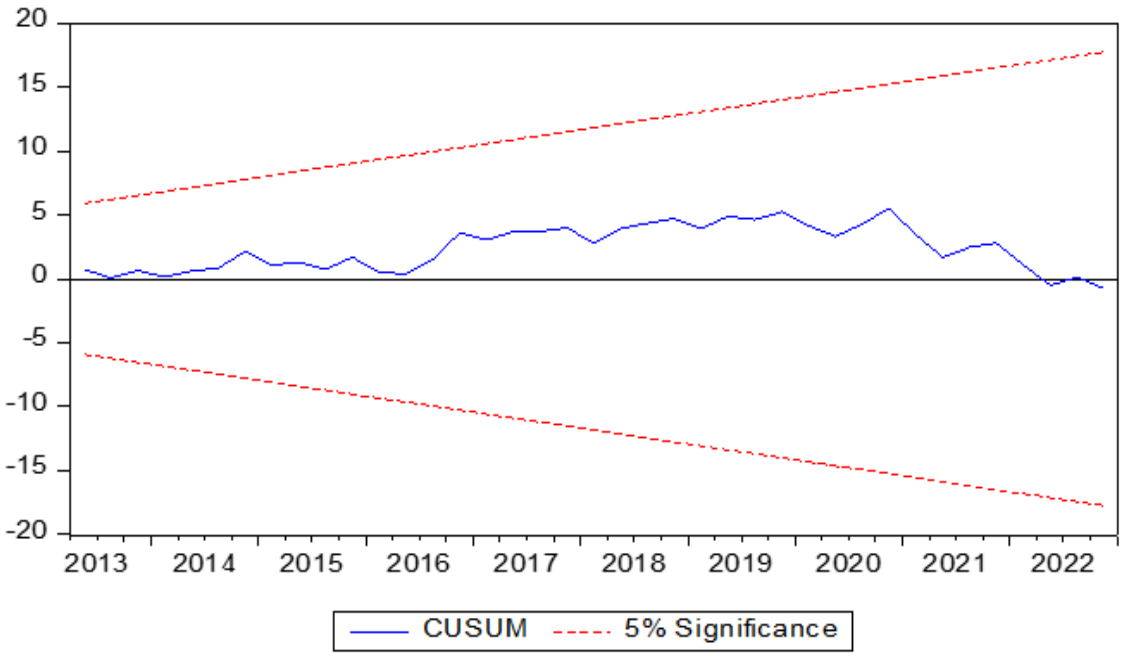

Fig. 1. Cumulative sum of square (CUSUM) test

In general, findings from this study showed that tax-based revenue proxies (OTAX, NOTAX, and ATR), drove economic development (GDPPC) significantly. This implies that tax-based revenue impacted significantly on economic development within the scope of this study. This result conforms to not only intuition but also the theoretical underpinning of this study. Specifically, oil-based tax, share a negative (β_1 = -0.11) and insignificant (t-statistics = -1.81) impact on economic development. This means that any unit change in oil-based tax, led to an insignificant (-1.81) decrease (11%) in economic development in the long run. Also, non-oil-based tax, share a positive (β_1 = 0.90) and significant (t-statistics = 12.29) impact on economic development, meaning that any unit change in non-oil-based tax, caused a significant (12.29) increase (90%) in economic development in the long run.

This result agrees with the work of Olaoye, Yunus and Opefolu (2023) who viewed that Nigeria's standard of living as quite low, its economic development quite poor and suggest that health care, education, and a high standard of living can be enhanced through tax income revenue (See also Oyedokun, Adeleye and Nwabuzor 2024 and Achanya and Mamman, 2024)

5. CONCLUSION

This study focuses on ways to increase tax income overall so that the fiscal system can provide public goods in an environmentally responsible way. The study warned against slavish reliance on oil-based resources by using secondary data and anchoring analysis on the Resource Curse Theory.

In tandem with the theoretical underpinnings of this study, and the discoveries from empirical literatures, this study coined a main objective which was to measure the contributory impact of Tax-based revenue on economic development in Nigeria, 1999 to 2023. To achieve this main objective, we further disaggregated and measured tax-based revenue into; oil-based tax, non-oil-based tax, and aggregate tax revenue on economic development which was measured by GDPPC. Specifically, this study sought to: (1) evaluate the effect of oil-based tax on economic development in Nigeria, (2) measure the contribution of non-oil-based tax to economic development in Nigeria, and (3) ascertain the impact of aggregate tax revenue on economic development in Nigeria. The findings are in line with intuition and the theoretical underpinnings for this study. Therefore, we concluded that tax-based revenue significantly impacted on economic development in the long run.

Based on the findings, it is recommended that government should reduce oil-based tax by way of reinstating oil subsidy as is the engine room for promoting productivity to achieve economic development thereby leading to improved standard of living for the citizens. The government should improve on harnessing non-oil-based tax to generate more revenue for production which in turn promotes employment and economic development. Government should efficiently improve policies that will boost aggregate tax revenue to provide available resources for investment, employment, economic development with heightened living standard potentials.

This study contributed to knowledge by way of the novelty of its empirical approach while contributing to the literature on the nexus between tax and economic development instead of the predominant tax and economic growth nexus.

Conclusively, it is a significant statement on the need to optimally use taxation for the imperatives of economic development in countries like Nigeria.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Authors hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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