

## Impact of Non-Oil Taxation on Economic Growth in Nigeria

<sup>1</sup>Yusuf Yakubu Samaila, <sup>2</sup>Aigbedion I. Marvelous, & <sup>3</sup>Ologunla S. Emmanuel

<sup>1,2&3</sup>Department of Economics,  
Bingham University Karu

Article DOI: 10.48028/iiprds/ijormsse.v10.i1.15

---

### Abstract

---

Nigeria, blessed with vast oil reserves, has for decades experienced a paradoxical reality: abundant natural resources coexist with persistent economic vulnerabilities. The dependence on this volatile commodity has exposed the economy to external shocks and hindered diversification. In this context, fostering alternative sources of revenue, particularly through non-oil taxation, emerging as a crucial imperative for sustainable economic growth. Driven by this critical need, this study assessed the impact of non-oil taxation on economic growth in Nigeria using quarterly data (2011Q1–2022Q4). The study made use of ex-post facto research and time series data. Autoregressive Distributed Lagged (ARDL) and Error Correction Model (ECM) techniques were used to examine the short-run and long-run impacts and relation between company income tax (CIT), Value Added Tax (VAT), education tax (EDT), stamp duty tax (SDT), capital gain tax (CGT), and real gross domestic product (RGDP) in Nigeria. The study reveals that company income tax (CIT) has a positive, significant impact while education tax (EDT) has a positive relationship but insignificant, and Value Added Tax (VAT), stamp duty Tax (SDT) have negative and insignificant impact on gross domestic product (RGDP) in Nigeria, which is proxy for economic growth in Nigeria in the short run. The long run result also showed that company income Tax (CIT) is positive, and insignificant and Value Added Tax (VAT), is positive, and significant while, education Tax (EDT), stamp duty Tax (SDT), and capital gain Tax (CGT) have a negative and insignificant impact on economic growth in Nigeria. Therefore, the study recommended that the government should broaden the tax base, improve tax administration and compliance, review tax rates and incentives, and focus on long-term investments, transparency, and public engagement, which will build public trust and understanding and are crucial for successful tax policy implementation.

**Keywords:** *Non-oil taxation, Economic growth, Company income tax, Value Added tax, Education tax, Stamp duty tax, Capital gain tax*

---

Corresponding Author: Yusuf Yakubu Samaila

## **Background to the Study**

Globally, the drive for economic growth and development of most advanced countries of the world is enhanced with revenues obtained from productive taxation framework and the arrangement of public services, for example, power, street lights, productive transportation framework, social insurance offices, schools, security of lives and properties and safeguard against internal revolt of outside hostility are the selective duty of the administration world over. Thus, to meet these obligations, governments need to saddle all wellsprings of revenue accessible to them internally and externally. Dependence on external wellsprings of revenue for formative purposes has been demonstrated to be ineffective for some nations throughout the years and those nations that accomplished fast social and infrastructural advancement around the globe were found to have utilised revenue from proficient tax framework.

Also, the International Monetary System (2021), saw that the emerging nations must have the option to raise the revenues required to fund the services requested by their residents and the foundation (physical and social) that will empower them to move out of destitution in other to attain economic growth and the Tax Justice Network (2020), expressed that taxation is required to assume a significant job in this revenue mobilisation. The structure of tax must be reinforced instead of tax organisation and equipped towards creating more revenue from existing tax sources by being increasingly proficient and successful as indicated by Oloidi and Oluwalana (2022), who portrayed productivity as the capacity to use accessible assets for ideal outcomes while adequacy is the capacity to have the option to practically deliver anticipated outcomes.

However, Nigeria, a country abundant in natural resources, has historically relied heavily on oil revenues to fuel its economy. This dependence has led to vulnerabilities with fluctuating oil prices and dwindling reserves. This has increase interest in diversifying the government's revenue streams towards non-oil sources, particularly taxation. Numerous studies have explored the relationship between non-oil taxation and economic growth globally. While findings vary across regions and methodologies, a general positive correlation emerges. The IMF, for instance, found a positive association between non-oil tax revenue and GDP growth in sub-Saharan Africa (IMF, 2019). Non-oil taxes provide resources for crucial investments in infrastructure, education, healthcare, and social safety as such, fostering long-term growth. Efficient tax systems can incentivize productive investments and discourage unproductive activities, leading to better allocation of resources. Nigeria's economy remains heavily reliant on oil, with oil revenues accounting for a significant portion of government income. This dependence exposes the economy to the volatility of oil prices.

However, challenges like inefficient tax administration, corruption, and informality pose obstacles to effective revenue collection. Studies within Nigeria have yielded mixed results. This study is motivated by the need to assess the potential of non-oil taxation as a driver of economic growth in Nigeria. By understanding the relationship between different non-oil tax types and economic performance, we can inform policy decisions

aimed at building a more resilient and sustainable economy. Therefore, the main objective of this paper is to analyze the impact of non-oil taxation on economic growth in Nigeria. While the specific objectives are to:

- i. Assess the impact of company income tax on economic growth in Nigeria
- ii. Investigate the impact of value-added tax on economic growth in Nigeria
- iii. Determine the impact of education tax on economic growth in Nigeria
- iv. Examine the impact of stamp duty tax on economic growth in Nigeria
- v. Investigate the impact of capital gain tax on economic growth in Nigeria

However, the hypotheses tested are as follows:

- $H_{01}$ : Company income tax has no significant impact on economic growth in Nigeria  
 $H_{02}$ : Value-added tax has no significant impact on economic growth in Nigeria  
 $H_{03}$ : Education tax has no significant impact on economic growth in Nigeria  
 $H_{04}$ : Stamp duty tax has no significant impact on economic growth in Nigeria  
 $H_{05}$ : Capital gain tax has no significant impact on economic growth in Nigeria;

Apart from the introduction, this study contains materials and methods, results and discussion with policy implications and conclusion.

## **Literature Review**

### **Conceptual Review**

#### **Economic Growth**

Eze (2023), economic growth is defined as a rise in national income or output per capita over a long period. It's an economic condition in which the rate of rise in national output must outpace the rate of population growth. Economic growth is the long-term expansion of the economy's productive potential. It entails a gain in Real gross domestic product (GDP), which translates to increased national output and wealth. The market worth of all products and services produced in a country during a given period is known as real GDP. Real GDP is a measure of a society's wealth since it shows how quickly profits can expand and the expected return on investment (Okerekeoti, 2022). Also, economic growth is an increase in the capacity of an economy to produce goods and services, compared from one period of time to another (Olugbemi et al., 2020). Economic growth can further be defined as the increase in the total value of goods and services produced in an economy within a period, usually a year and from the perspectives of the classical economist, economic growth is closely linked with the labour and capital factor of production which must be combined in order to increase the level of output (Omondi, 2019).

#### **Non-oil Taxation**

The revised National Tax Policy of Nigeria (2017) defined "tax" as "any compulsory payment to government imposed by law without direct benefit or return of value or a service whether it is called a tax or not" while the National Tax Policy of Nigeria (2012) defined tax as "a monetary charge imposed by government on persons, entities, transactions or properties to yield revenue" or "the enforced proportional contributions from persons and property, levied by the state under its sovereignty for the support of and

for public needs". Tax may equally be defined as a compulsory levy imposed by the government of a state for the effective management of government activities (Onakoya, 2017)., According to Otekunrin *et al.*, (2023), non-oil tax is revenue from direct and indirect sources payable by sectors of the economy excluding the oil sectors. The prominent components of Non-oil taxes in Nigeria include Company Income Tax (CIT), Value Added Tax (VAT), Customs and Excise Duty (CED), Capital Gains Tax (CGT), and Tertiary Education Tax (TET) (Otekunrin *et al.*, 2023).

### **Empirical Review**

Otekunrin *et al.*, (2023) examined the impact of oil and non-oil tax revenue on economic growth in Nigeria. The study adopted an ex-post facto research design where the Error Correction Model was employed to analyze the data collected after subjecting the series to the unit root test and co-integration test. The result of the study showed that petroleum profit tax (PPT) and excise duties (CED) had a positive significant relationship with economic growth, while company income tax (CIT) and value-added tax (VAT) had a negative significant relationship with economic growth. The study recommended that taxation is appropriately controlled to boost economic growth, lower inflation, and create jobs in the country. More attention to the channelling of PPT and CED revenue collections to infrastructural developments will bring about the economic growth of the country. Ihegboro *et al.*, (2022) examined the impact of non-oil revenue on the growth of the Nigerian economy. The time series data was from 1985 to 2018 and the Ordinary Least Squares (OLS) technique of regression analysis was used for analysis. The study found that Agricultural output (GDPA) and Industrial sector output (GDPI) had a bidirectional causal relationship with the non-oil sector of Nigeria's Economy respectively, commercial sector output (GDPC) and aggregate economic growth (GDPTOT) had no causal relationship with the non-oil sector of Nigerian economy while concluding that the continuing decline in international crude oil prices, the hostility of militants in Nigeria's oil-producing area, the Nigerian Government's profligate spending, the global health pandemic, among other factors, are undermining Nigeria's economic development. Therefore, the study recommended that the Federal government should encourage more exportation of agricultural output as this in turn will enhance external foreign exchange earnings and improve the competitiveness of Nigerian agricultural produce in the international markets.

Ike *et al.*, (2022) examined the impact of oil and non-oil revenues on economic growth in Nigeria. The study employed time series data using Autoregressive Distributed Lag and Ordinary Least Square to analyze the impact oil and nonoil revenue variables have on economic growth. The findings of this study revealed that Oil and Non-oil revenue had a significant and positive impact on economic growth during the period studied. Based on the findings of the study, it was recommended among others that the government should continue to widen oil exploration and expand non-oil revenue through technological innovation, technical-know-how and economic diversification to continue to sustain economic growth.

In another study, George and Obi (2022) assessed the impact of non-oil tax revenue on the economic growth of Nigeria for the period from 2004 to 2013 where Regression analysis was carried out with the analysis of variance (ANOVA) to determine if the non-oil tax revenue has any significant effect on the nation's economy. Findings showed that company income tax, value-added tax and custom & excise duties have a significant impact on the economic growth of the nation. This implies that non-oil taxes are very important as revenue bases in Nigeria. The study suggested diversification of the revenue base of the nation more to the non-oil tax revenue to further strengthen its impact on the nation's economy. George et al. (2022) investigated whether there is any significant relationship between non-oil tax revenue and Nigerian economic performance. The ordinary least square was used to evaluate the strength of the relationship between the variables. The results of the analysis showed a positive and significant relationship between companies' income tax and gross domestic product; however, the relationship between personal income tax and gross domestic product is only positive but not significant. The study concluded therefore that non-oil tax revenue has the potential to improve Nigerian economic performance as the explanatory variables indicated a positive sign. Based on the findings and the conclusion drawn, the study recommended among others that the Nigerian government and its revenue agencies should redefine the existing policy on company income tax by having intensified policy direction aimed at encouraging diversification and entrepreneurial development, especially in the tourism, entertainment, information communication technology, medical services and solid mineral sectors.

In another study, Ndu and Uguru (2022). investigated the impact of non-oil tax revenue on economic growth in Nigeria from 2001 to 2021. The Ordinary Least Square regression was employed to test the hypotheses at a 0.05 level of significance. The result showed that VAT, CIT, and CED have both positive and statistically significant impacts on economic growth in Nigeria. This result implies that all the variables (VAT, CIT, and CED) adopted as proxies for non-oil tax revenue in this study have jointly contributed to promoting the growth of the Nigerian economy for the period under review. The study, therefore, recommended that the government should ensure that revenue generated from VAT, CIT, and CED should be utilized judiciously to develop other sectors of the non-oil revenue such as mining and agriculture to enable her to have a variety of viable sources of income. Also, Adefolake and Omodero (2022) assessed the effects of tax revenue on the economic growth of Nigeria utilizing time series data spanning from the year 2000 to 2021. The study employed Ex-post facto research design is used for this study. The data collected are analyzed and tested for unit root using the Augmented Dickey-Fuller method. The study variables which comprise GDP, PPT, CIT & VAT are found to be stationary at first difference. Thus, a Johansen co-integration test is also conducted and it reveals a long-run relationship. Consequently, the study utilizes the Vector Error Correction Model. The findings reveal that PPT and VAT have positive and significant effects on GDP. It also reveals that CIT has a negative and significant effect on GDP. Based on these findings, the inquiry suggests that training and workshops should be organized by government tax agencies for the Nigerian public and companies on the importance and benefits of tax revenue to the economy and encourage companies.

Osamor *et al.*, (2022) investigated the effects of oil and non-oil taxes revenue on economic growth in Nigeria where quarterly data was used from 2011-2019. Descriptive statistics, Unit Roots Test, and Toda Yamamoto (Granger Causality Test and Wald Test) were used to analyze the time series data. The results of the study showed that oil tax revenue does not influence economic growth while non-oil taxes affect economic growth. Therefore, the study recommended that the government initiate regular tax reforms that will encourage small and medium-scale enterprises (SMEs) and encourage full diversification of the economy into technological, agricultural, mechanical and productivity aspects to improve the standard of living of the citizens.

Furthermore, Ilori and Efuntade (2020) examined the effects of generating oil and non-oil revenues on Nigeria's economic growth from 1989 through 2018 and the study employed the model for analytical co-integration and error correction. Similar analytical processes were applied to the multivariate data on components of oil and non-oil revenue, exchange rates, and real gross domestic products. Results generated indicated that the oil revenue harms real gross domestic products in Nigeria, but this is the same with effects reported from non-oil revenue. Nonetheless, Nigeria's exchange rate gives a positive sign and statistical significance for real gross domestic products. Consequently, the study opined that the continuing decline in global crude oil prices, resistance from insurgents in Nigeria's oil-producing area, the Nigerian Government's profligate expenditure, and the global COVID-19 health pandemic, among other factors, are harming the economic growth of Nigeria. Adeusi *et al.*, (2020) examined the effect of non-oil revenue on economic growth in Nigeria. Descriptive statistics and Ordinary Least Square (OLS) regression techniques were used to analyse the data collected. The study findings revealed that indirect taxes (Custom & Excise Duties and Value Added Tax) have a more significant positive effect on Nigerian economic growth than direct taxes (Companies Income Tax and Personal Income Tax). Also, direct taxes have a significant but negative effect on Nigerian economic growth, especially in the long run. It is therefore recommended that simple and transparent tax laws be enacted to regulate the tax regimes in Nigeria to avoid any form of illicit strategic tax behaviour by management. Also, the problems of implementation of good tax reform policies should be eliminated. Tax authorities should provide strategies to strengthen the control of the significant variables identified in this study analysis.

Austin (2020) assessed the effect of taxation on economic growth in Nigeria from 1981 to 2019. To do this, secondary data of taxation measures (personal income tax, company income tax, and value-added tax) and economic growth measures (gross domestic product) was obtained from the Central Bank of Nigeria statistical bulletin, National Bureau of Statistics and World Bank Indicators. Data obtained were analyzed via descriptive (Mean, Standard Deviation, Minimum and Maximum Values, Skewness, Kurtosis, and Correlation) and inferential (Unit Root and Co-integration, Augmented Dickey-Fuller, Bound Test for Cointegration, Ganger Causality Wald, and Vector Auto Regression Tests) statistical tools. The Vector Auto Regression results indicated that while all taxation variables significantly affect economic growth; however, the relationship was

negative. The negativity attributable to taxation in the country could be that the tax collection mechanisms and administrative structure put in place are weak. Given the findings, it was recommended among others that there is a need for the government to ensure that all companies and individuals are captured in the tax net and fully comply with the payment of tax. There is a need to enforce penalties for companies and individuals that evade tax and strengthen the tax collection mechanisms in the country.

Finally, Anfofum et al., (2018), examined the relationship between oil consumption and economic growth in Nigeria using the Johansen and Juselius Co-integration technique based on the Cobb-Douglas production function to construct three models by introducing three major sectors of oil consumption in Nigeria (Transport, Power and Industrial sector oil consumption) and how Nigerian's upward review oil price variable impact on GDP. ADF (1979) and Johansen Maximum Likelihood method of cointegration (1988) are used to test the order of integration, long run and short run dynamics between variables respectively using annual data from 1970-2016. The study shows evidence of the long-run and dynamic relationship for all the variables except industrial oil consumption and oil price variables which have no short-run impact on GDP. Also, it was found that capital and labour are more important in affecting output growth compared to energy consumption Oil prices impact real GDP negatively in the long run but positively in the short run. To sustain high economic growth in the long run, the study recommended that the country needs to increase the efficiency of its workforce and expand its saving capacity to generate more capital and strengthen the effectiveness of energy-generating agencies by ensuring periodic replacement of worn-out equipment to drastically curtail transmission power losses

### **Theoretical Framework**

The theoretical framework of this study is the Laffer Curve theory on taxation and this theory was developed by supply-side economist Arthur (1974) to show the relationship between tax rates and the amount of tax revenue collected by governments. The Laffer Curve describes the relationship between tax rates and total tax revenue, with an optimal tax rate that maximises total government tax revenue. If taxes are too high along the Laffer Curve, then they will discourage the taxed activities, such as work and investment, enough to reduce total tax revenue. The Laffer Curve is a (supposed) relationship between economic activity and the rate of taxation which suggests there is an optimum tax rate which maximises total tax revenue. The Laffer Curve concept infers that a tax rate cut could lead to an increase in tax revenue, or a decrease in tax revenue, depending on whether you have already passed the 'optimal tax rate' (whatever percentage that may be). The Laffer curve is one of the main theoretical constructs of supply-side economics, and it is often used, to sum up the entire pro-growth worldview of supply-side economics.

The Laffer curve illustrates the basic idea stating that changes in tax rates have two effects on tax revenues which are the arithmetic effect and the economic effect (Laffer, 2004). This theory also shows the relationship between tax rates and tax revenue collected by governments. Busato and Chiarini (2009) have published a Laffer curve for income and

corporate taxation in the sector shadow economy in addition to finding a strong effect of the shadow economy on the level of taxation. Arthur Laffer gave the theoretical curve reflecting the dependence between tax rate and total tax revenue, called the Laffer curve. Based on the theoretical curve, Arthur Laffer proved that raising taxes had a negative impact on social production and a positive impact on real sector production. Therefore, the study established a functional relationship between non-oil taxation and economic growth in Nigeria.

## Methodology

### Sources of Data and Method of Analysis

The study employed the *ex-post facto* research design in obtaining, analyzing, and interpreting the data and adopted the secondary method of data collection and quarterly time series data from 2011Q1 to 2022Q4 sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin in December 2022 and Quarterly Report of the Federal Inland Revenue Service (FIRS). Since the study examines the impact of non-oil taxation on economic growth in Nigeria, the equations are designed to efficiently estimate coefficients by estimating each component using Autoregressive Distributed Lagged (ARDL) which is the best method for estimating variables integrated in order 1(1) and 1(0), according to Pesaran and Shin (1999), which was later expanded by Pesaran, Shin, and Smith (2001) and this estimate was used to analyzed the long- and short-terms of the impact of non-oil taxation on economic growth in Nigeria.

### Model Specification

The study adapted and modified the model used by Adeusi *et al.*, (2020) which used the descriptive statistics and Ordinary Least Square (OLS) regression techniques in analysing the effect of non-oil revenue on economic growth in Nigeria from 1994-2018. Presenting the implicit function and model as:

The model is specified as:

$$RGDPG = \alpha_0 + \beta_1 DTAX_t + \beta_2 IND TAX_t + \mu_t \quad (1)$$

Where DTAX = share of direct taxes in total GDP IND TAX = share of indirect taxes in total GDP.  $\alpha_1, \alpha_2$  are Coefficients of the independent variables It is a white noise stochastic error term. To establish the functional relationship between the impact of non-oil taxation on economic growth in Nigeria, the functional model is modified as:

$$RGDP = f(CIT_t, VAT_t, EDT_t, SDT_t, CGT_t) \quad (2)$$

Therefore, explicitly the model becomes:

$$RGDP = \beta_0 + \beta_1 CIT_t + \beta_2 VAT_t + \beta_3 EDT_t + \beta_4 SDT_t + \beta_5 CGT_t + \mu_t \quad (3)$$

Where; RGDP is real gross domestic product in Nigeria at time t, CIT is the company income Tax at time t, VAT is value added tax at time t, EDT is education Tax, in Nigeria at



time t, SDT is stamp duty Tax, CGT is the capital gain Tax while  $\alpha_0$  is Intercept,  $\alpha_1, \alpha_2, \alpha_3, \alpha_4$  and  $\alpha_5$  are Slope and  $\epsilon_t$  is the Error Terms. The Autoregressive Distributed Lagged (ARDL) model used in this study is specified as follows:

$$\begin{aligned}
 RGDP_t = & \alpha_0 + \alpha_1 RGDP_t + \alpha_2 CIT_t + \alpha_3 VAT_t + \alpha_4 EDT_t + \alpha_5 SDT_t + \alpha_6 CGT_t + \sum_{i=1}^p \alpha_7 \Delta RGDP_{t-1} \\
 & + \sum_{i=1}^p \alpha_8 \Delta CIT_{t-1} + \sum_{i=1}^p \alpha_9 \Delta VAT_{t-1} + \sum_{i=1}^p \alpha_{10} \Delta EDT_{t-1} + \sum_{i=1}^p \alpha_{11} \Delta SDT_{t-1} + \sum_{i=1}^p \alpha_{12} \Delta CGT_{t-1} + \mu_t
 \end{aligned}
 \tag{4}$$

Equation (4) was used to examine the short-run and long-run relationship and the impact of non-oil taxation on economic growth in Nigeria.

### Presentation and Discussion of Results

The data used in this study is made up of RGDP which is real gross domestic product in Nigeria at time t, CIT is the company income Tax at time t, VAT is value added tax at time t, EDT is education Tax, in Nigeria at time t, SDT is stamp duty Tax, CGT is the capital gain Tax in Nigeria, and these data are presented in Appendix I.

### Descriptive Analysis and Statistic Summary of the Variables

**Table 1:** Descriptive Analysis and Statistic Summary of the Variables

	RGDP	CIT	VAT	EDT	SDT	CGT
Mean	29740.23	325.9816	226.7786	51.61209	6.165090	5.105729
Median	27068.70	299.2273	174.7891	31.09030	2.262000	1.240950
Maximum	57780.58	778.2969	567.9539	218.7879	62.58300	72.59310
Minimum	14686.11	112.3609	113.8412	6.879900	0.480000	0.000000
Std. Dev.	10853.43	158.5899	114.7535	50.86685	11.41758	11.65472
Skewness	0.677923	0.863640	1.381174	1.707443	3.680527	4.389740
Kurtosis	2.622018	3.351413	3.835574	5.309742	16.50895	24.80774
Jarque-Bera	3.962375	6.213969	16.65750	33.99271	473.3536	1105.314
Probability	0.137905	0.044736	0.000241	0.000000	0.000000	0.000000
Sum	1427531.	15647.12	10885.37	2477.380	295.9243	245.0750
Sum Sq. Dev.	5.540000	1182085.	618913.6	121609.5	6126.978	6384.131
Observations	48	48	48	48	48	48

**Source:** Output from E-views 9.0 (2023)

Table 1 shows the summary statistics or the descriptive statistics of the variables used in the study. From the table, the highest value for the real gross domestic product in Nigeria during the period of study is 57780.58 billion, as shown in the maximum values in Table 2 while the peak values of, company income tax, non-company tax, education tax, stamp duty tax, capital gain tax in Nigeria are 778.2969 billion, 567.95 billion, 218.79, 62.58 billion and 72.59 billion, respectively. However, the lowest value for real gross domestic product during the period of study was 14686.11 billion. The lowest values for company income tax, value-added tax, education tax, stamp duty tax, and capital gain tax in Nigeria are 112.36 billion, 113.84 billion, 6.88 billion, 0.48 billion and 0.00, respectively, On average,

the real gross domestic product is 29740.23, while the company income tax, value added tax, education tax, stamp duty tax, capital gain tax in Nigeria are 324.98 billion, 226.78 billion, 51.61 billion, 6.17 billion, 5.11 billion respectively, as indicated by their mean values.

### Stationary Tests (Unit Root Tests)

This section shows the unit root of the variables using the Augmented Dickey-Fuller (ADF) Test to check the stationarity at a 5 percent level of significance.

**Table 2:** Unit Root Test Result

Variable	Augmented Dickey-Fuller (ADF) Test		
	ADF	Critical Value	Status
RGDP	-2.943083**	-1.948686	1(0)
CIT	-3.162169**	-2.931404	1(1)
VAT	-6.913904**	-2.926622	1(1)
EDT	-16.21875**	-2.929734	1(1)
SDT	-15.46543	-2.926622	1(1)
CGT	-5.649330	-2.925169	1(0)

*\* implies significant at 1% level, \*\*implies significant at 5% level and \*\*\* implies significant at 10%*

**Source:** Researcher's Computation Using EViews-9 (2023)

Table 2 shows the stationary tests of real gross domestic product (RGDP), company income tax (CIT), value-added tax (VAT), education tax (EDT), stamp duty tax (SDT), and capital gain Tax (CGT) in Nigeria. Thus, Table 3 of the ADF test results revealed that real gross domestic product (RGDP) and capital gain Tax CGT were stationary at level, which means that they are integrated of order zero 1(0) at a 5% level of significance. On the other hand, company income tax (CIT), value-added tax (VAT), education tax (EDT), and stamp duty tax (SDT) were not stationary at the level until they were differenced once, and they were said to be integrated of order 1(1). Given the mix result, as shown by ADF tests, as well as the order of integration of the variables, the long-run relationship among the variables will be tested using the ARDL model, which can capture the characteristics of a mixture of 1(0) and 1(1) of the variables as postulated by Pesaran et al. (2001).

### Co-integration of ARDL-Bounds Test

This section shows the ARDL co-integration bounds test of the variables used in this paper.

**Table 3:** ARDL-Bound Testing

Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	K
F-statistic	11.33745	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

**Source:** Researcher's Computation Using EViews-9 (2023)

Table 3 shows the ARDL bounds test for co-integration that was carried out for all four models based on the research objectives. The model result shows that the F-statistic derived from the ARDL bounds test is 11.34, and when compared with the critical values obtained from the Pesaran Table at a 5% level of significance, its value exceeded both 2.62 and 3.79 for 1(0) and 1(1), respectively. The company income tax, value-added tax, education tax, stamp duty tax, and capital gain tax as independent variables are co-integrated at a 5% level of significance.

### Estimation Results

This section presents the long-run and short-run results of the ARDL regression analysis, where the real gross domestic product (RGDP) in Nigeria is the dependent variable and the company income tax (CIT), value-added tax (VAT), education tax (EDT), stamp duty tax SDT, capital gain tax CGT in Nigeria, are the independent variables.

**Table 4:** ARDL Error Correction Regression Results

Co-integrating Estimates (ECM Estimates)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CIT)	12.212268	4.064407	3.004686	0.0095
D(CIT (-1))	4.087116	3.579696	1.141749	0.2727
D(VAT)	-4.234344	11.763140	-0.359967	0.7242
D(VAT(-1))	-5.942262	11.346758	-0.523697	0.6087
D(EDT)	7.831664	5.604364	1.397422	0.1840
D(EDT(-1))	-4.137820	6.905136	-0.599238	0.5586
D(SDT)	-16.420037	25.381306	-0.646934	0.5281
D(SDT(-1))	-52.221715	23.299757	-2.241299	0.0417
D(CGT)	30.616303	19.899329	1.538560	0.1462
D(CGT (-1))	-38.764473	15.707049	-2.467967	0.0271
CointEq(-1)	-0.239022	0.098006	2.438853	0.0287
R-squared				

**Source:** Researcher's Computation Using EViews-9 (2023)

From Table 4, the F-statistic is 308.93, with a p-value of 0.000, indicating that the overall model is highly statistically significant. The R-squared revealed that company income tax (CIT), value-added tax (VAT), education tax (EDT), stamp duty tax (SDT), and capital

gain tax (CGT) in Nigeria jointly accounted for about 99.84 percent of the variation in the economy in Nigeria during the period under review, while the remaining 0.16 percent was accounted for by other factors outside the model. The adjusted R-squared of 0.9992 accounts for the number of variables in the model and suggests that it's not overfitting the data, and the Durbin-Watson stat of 1.74 indicates no significant autocorrelation in the residuals, suggesting that the model's assumptions are reasonably met.

The long-run result showed that a 1-unit increase in CIT is associated with a 66.304-unit increase in RGDP in the long run. This positive relationship is statistically significant (p-value = 0.0022). while VAT, EDT, SDT, and CGT show a negative relationship and no significant long-run relationship with RGDP at a 5 percent significant level, as found from their p-values (0.9932, 0.1107, 0.6276, and 0.2068), respectively. Also, the short-run result showed a positive relationship, which is statistically significant (p-value = 0.0095). In other words, a 1-unit increase in CIT is associated with a 12.212-unit increase in RGDP in the long run, holding other variables constant while the ECT shows the 1-period lag error correction term. Its value of -0.24 indicates that it is negative and statistically significant, with a probability value of 0.05 at a 5 percent significant level. This means that the average speed of adjustment from the short run to the long run, should there be any disequilibrium, is 24%.

### Hypotheses Testing

**Table 5:** Hypotheses Testing of ARDL Results

Hypotheses	Tc	Tt	Decision Rule	Remark
H <sub>0</sub> : $\beta_1 = 0$	3.73	2.05	> Tt Reject H <sub>0</sub>	<b>Rejected</b>
H <sub>1</sub> : $\beta_1 > 0$			< Tt Accept H <sub>0</sub>	
H <sub>0</sub> : $\beta_2 = 0$	0.008	2.05	> Tt Reject H <sub>0</sub>	<b>Accepted</b>
H <sub>1</sub> : $\beta_2 > 0$			< Tt Accept H <sub>0</sub>	
H <sub>0</sub> : $\beta_3 = 0$	-1.70	2.05	> Tt Reject H <sub>0</sub>	<b>Accepted</b>
H <sub>1</sub> : $\beta_3 > 0$			< Tt Accept H <sub>0</sub>	
H <sub>0</sub> : $\beta_4 = 0$	-0.49	2.05	> Tt Reject H <sub>0</sub>	<b>Accepted</b>
H <sub>1</sub> : $\beta_4 > 0$			< Tt Accept H <sub>0</sub>	
H <sub>0</sub> : $\beta_5 = 0$	-1.32	2.05	> Tt Reject H <sub>0</sub>	<b>Accepted</b>
H <sub>1</sub> : $\beta_5 > 0$			< Tt Accept H <sub>0</sub>	

*Tc is the calculated T-Statistics, Tt is the table T-Statistics (Theoretical T-Statistics) and the decision rule is based on 5% level significance. While the Degree of Freedom is set as (N - K) = 29 (Gujarati & Sangeetha, 2007).*

**Source:** Researcher's Computation Using EViews-12 (2023)

Table 5 showed the hypotheses tested on the impact of non-oil taxation on economic growth in Nigeria. Thus, H<sub>01</sub>: which stated that company income tax has no significant impact on the economic growth in Nigeria is **rejected** at a 5 percent level of significance given that the value of the calculated T-Statistics (Tc) of 3.73 is greater than the value of the table T-Statistics (Tt) of 2.05 and this implies that company income tax has a significant impact on the economic growth in Nigeria. On the other hand, H<sub>02</sub>: which stated that value added tax has no significant impact on the economic growth in Nigeria is **accepted** at a 5

percent level of significance given that the value of the calculated T-Statistics (Tc) of 0.008 is less than the value of the table T-Statistics (Tt) of 2.05 and this implies that value added tax has a significant impact on the economic growth in Nigeria. Similarly,  $H_{03}$ : which stated that education tax has no significant impact on the economic growth in Nigeria is **accepted** at a 5 percent level of significance given that the value of the calculated T-Statistics (Tc) of 1.70 is less than the value of the table T-Statistics (Tt) of 2.05 and this implies that education tax has a significant impact on the economic growth in Nigeria.

Also,  $H_{04}$ : which stated that stamp duty tax has no significant impact on the economic growth in Nigeria is **accepted** at a 5 percent level of significance given that the value of the calculated T-Statistics (Tc) of 0.496 is less than the value of the table T-Statistics (Tt) of 2.05 and this implies that stamp duty tax has a significant impact on the economic growth in Nigeria. Finally,  $H_{05}$ : which stated that capital gain tax has no significant impact on the economic growth in Nigeria is **accepted** at a 5 percent level of significance given that the value of the calculated T-Statistics (Tc) of 1.32 is less than the value of the table T-Statistics (Tt) of 2.05 and this implies that capital gain tax has a significant impact on the economic growth in Nigeria.

### Post-Diagnostic Checks

**Table 6:** Results of Post-Diagnostic Checks

Test		Outcomes	
		Coefficient	Probability
Breusch-Godfrey Serial Correlation LM Test	F-stat.	0.706926	0.5126
Heteroskedasticity: Breusch-Pagan-Godfrey	F-stat.	0.849164	0.6584
Normality Test	Jarque-Bera	1.46	0.48

**Source:** Researcher's Computation Using EViews-9 (2023)

Table 6 revealed that the variables are free from the problem of Serial Correlation since the F-statistics is 0.71 and the P-value of 0.51 is greater than the 5% significance level. This outcome suggests the absence of Serial Correlation in the model of the impact of non-oil taxation on economic growth in Nigeria. Similarly, the heteroscedasticity results show that variables are free from the problem of Heteroscedasticity since the F-statistics of 0.84 and P-value of 0.65 are greater than the 5% significance level. Also, the Jarque-Bera test of normality shows that the error term in our specified equation is normally distributed. Finally, this is evidenced by the respective insignificant Jarque-Bera statistics of 3.359 and the probability value of 0.186.

### Implication of Findings

The model which assessed the impact of non-oil taxation on economic growth in Nigeria revealed that taxes, particularly company income tax (CIT), play a dominant role in influencing real GDP (RGDP) growth in Nigeria as highlighted by High R-squared which is approximately 99.84% of RGDP variation can be explained by the included taxes and Significant CIT Long-Term Relationship as a 1-unit increase in CIT leads to a 66.304-unit increase in RGDP in the long run, highlighting its substantial impact. While CIT drives

growth, the negative coefficient and insignificant long-run relationship of other taxes (VAT, EDT, SDT, CGT) raise concerns about potential over-reliance on CIT. This could lead to economic instability which is overdependence on one tax stream which makes the economy vulnerable to fluctuations in that source and also inequalities as reliance on CIT might place more burden on businesses compared to individuals, potentially impacting income distribution. The positive and significant short-run relationship between all taxes and RGDP suggests immediate positive impacts. However, the long-run effects differ, prompting consideration of trade-offs. The negative and significant error correction term (-0.24) indicates a moderate speed of adjustment (24%) from short-run deviations to long-run equilibrium. This implies that the economy adjusts relatively quickly to disequilibria caused by tax changes. This finding agrees with the study of George and Obi (2022) who concluded that diversification of the revenue base of the nation more to the non-oil tax revenue to further strengthen its impact on the nation's economy.

### **Conclusion and Recommendations**

In conclusion, the specific objectives were to assess the impact of company income tax on economic growth in Nigeria; investigate the impact of value-added tax on economic growth in Nigeria; determine the impact of education tax on economic growth in Nigeria; examine the impact of stamp duty tax on economic growth in Nigeria and investigate the impact of capital gain tax on economic growth in Nigeria. Therefore, the analysis suggests that while taxes significantly impact RGDP growth in Nigeria, a diversified tax structure focusing on long-term growth and sustainable development seems advisable. Therefore, the paper recommended the following:

1. The Federal Inland Revenue Service should design a mechanism for a period increase of the company income tax since its coefficient has a positive and significant impact on economic growth in Nigeria. Also, the government through the Federal Ministry of Finance should design a mechanism to manage the efficiency of the company income tax.
2. **Also, the government** through the Federal Ministry of Finance and Federal Inland Revenue Service **should** strengthen the value-added tax which can increase the tax collection and improve the effectiveness of value-added tax to increase it significantly.
3. **On the other hand, the government** through the Federal Ministry of Finance and Federal Inland Revenue Service should design a mechanism to reduce the negative impact of education tax, stamp duty tax and capital gain tax in Nigeria to increase the economic growth of Nigeria.

## References

- Adefolake, A. O. & Omodero, C. O. (2022). Tax revenue and economic growth in Nigeria, *Cogent Business & Management Journal*, 9(1), DOI: 10.1080/23311975.2022.2115282
- Adeusi, A. S., Uniamikogbo, E. E., Ose, D., & Aggreh, M. (2020). Non-oil revenue and economic growth in Nigeria, *Research Journal of Finance and Accounting*, 11(8), 95-106
- Austin, A. O. (2020). Effect of taxation on economic growth in Nigeria, *Journal of Contemporary Issues in Accounting*, 1(1), 101-115
- Anfofum, A. A., Michael, O. A., & Solomon, O. I. (2018). Oil consumption and economic growth in Nigeria: A multivariate cointegration analysis, *International and Public Affairs*, 2(1), 11-22 <http://www.sciencepublishinggroup>.
- George, W. C., Monday, O. & Chukwu, G. J. (2022). Evaluating the impact of non-oil tax revenue on Nigerian economic performance, *International Journal of Multidisciplinary Research and Growth Evaluation*, 3(1), 310-316. DOI: <https://doi.org/10.54660/anfo.2022.3.1.15>
- George, E., & Obi, J. O. (2022). Impact of non-oil tax revenue on the Nigerian economy, *International Journal of Research*, 9(2), 276-286
- Ihegboro, I. M., Onah, V. C., Nwonye, N. G., & Ijeoma, O. (2022). Impact of non-oil revenue on the growth of the Nigerian economy, *Journal of Economics and Finance*, 13(1), 18-27.
- Ike R. C., Adeleke, A. O., & Anuolam, O. M. (2022). Oil and non-oil revenues on economic growth in Nigeria. *Journal of Economics and Finance*, 13(4), 65-72
- Ilori, F. O. & Efuntade, A. O. (2020). Comprehensive analysis of the effect of oil and non-oil revenues on economic growth in Nigeria, *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 1(3), 161-186
- Ilori, F. O. & Akinwunmi, A. (2020). Comprehensive analysis of the effect of oil and non-oil revenues on economic development in Nigeria. *International Journal of Accounting Research*, 5 (3), 93-106
- Ndu, C. & Uguru, L. C (2022). Non-oil tax revenue and economic growth in Nigeria, *Journal of Taxation and Economic Development*, 21(2), 12-25
- Otekunrin, A. O., Fakile, S. A., Eluyela, D. F., Onabote, A. A., John, O. N., & Ifeanyichukwu, S. (2023). Impact of Oil and Non-oil Tax Revenue on Economic Growth in Nigeria, *International Journal of Energy Economics and Policy*, 13(2), 545-552 DOI: <https://doi.org/10.32479/ijeep.12781>

Obaje, F. O. & Ogirima, A. (2019). Effects of taxation on economic growth in Nigeria, *Journal of Leadership, Accounting Development and Investigation Research*, 3(1), 255-264.

Osamor, I., Abata, M., & Adebajo, A. (2022). Effects of oil and non-oil tax revenue on economic growth in Nigeria: Evidence of quarterly tax inflows, *International Journal of Accounting, Finance and Risk Management*, 7(3), 133-139. doi: 10.11648/j.ijafmr.20220703.14