

# EFFECT OF REVENUE GENERATION THROUGH VALUE ADDED TAX AND OTHER TAXES ON ECONOMIC GROWTH IN NIGERIA

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## Abstract

*This study examined the effect of revenue generation through Value Added Tax (VAT) and other taxes on the economic growth of Nigeria. Data were gathered through secondary sources from the Central Bank of Nigeria (CBN), Nigerian Exchange Group (NGX) and National Bureau of Statistics (NBS) for the analysis. The study adopted ex-post factor research design to gather data that were already established. Regression and Correlation Analyses were used in the study. The findings revealed that there is significant relationship between Value Added Tax (VAT) and Economic Growth of Nigeria with ( $r^2 = 0.974$ ). Also, there is a significant relationship between Customs and Excise Duties (CED) and Economic Growth of Nigeria with ( $r^2 = 0.765$ ). There is also significant relationship between Companies Income Tax (CIT) and Economic Growth of Nigeria with ( $r^2 = 0.857$ ). Therefore, the study concluded that revenue generation through Value Added Tax (VAT) has significant impact on Economic Growth of Nigeria. The study recommended that the government must guarantee that the incomes earned by VAT and other taxes be used effectively to improve the standard of living of Nigerian citizens. This could be accomplished by closely monitoring the incomes received by the government. Also, it would go a long way towards alleviating the problems of VAT collection and administration because when the government fulfills its part, citizens will not fail to pay taxes. Nigerian government should reform the Customs and Excise Duties in order to stimulate investment and therefore achieve adequate economic growth.*

**Keywords:** Revenue Generation, Value Added Tax, Economic Growth, Nigeria.

## Background to the Study

Taxation is one of the oldest means by which the cost of providing essential services for the generality of persons living in a given geographical area is funded Adebajo (2020). Tax revenue, all over the world plays a vital role in the development of an economy; this facilitated many nations to introduce tax on goods and services. According to Nasiru et al (2016), government has the mandate to impose tax via its various regulations. An efficient and effective tax system is capable of ensuring the basic necessities and services in the country. Taxes are used to achieve economic development, equity in income and wealth distribution and maintain equilibrium in the economy.

Uche (2021) posited that, taxes can be either direct taxes levied on income, profits, wealth or indirect taxes levied on commodities, transactions, rights, et cetera. Indirect taxes are the various forms of taxes such as value added tax ,sales tax, excise taxes, custom duties and tariffs.

The transition from Sales Tax to VAT is outlined as a strategic move aimed at broadening the tax base and enhancing revenue collection efficiency. VAT was first introduced in Nigeria in 1994 to replace the Sales Tax (Egolum & Celestine, 2021). VAT's implementation was intended to encompass a wider range of goods and services, thereby increasing government revenue streams. This shift to VAT reflects a global trend towards consumption-based taxation due to its perceived economic efficiency and simplicity. Value Added Tax (VAT), as one of indirect taxes has been given great emphasis by the National Tax Policy in Nigeria (Kolapo,2019).

The statement highlights the importance of VAT in revenue generation for the Nigerian government, noting its role in financing essential services and infrastructure. VAT's effectiveness in revenue collection is underscored by its relative ease of administration and difficulty to evade, as evidenced by statements from the Federal Inland Revenue Service (FIRS) and findings from the International Monetary Fund (IMF). According to Madugba and Azubike (2016), the Federal Inland Revenue Service (FIRS) stated that VAT is easy to administer and of course very difficult to evade. Additionally, VAT is positioned as a key instrument for regulating economic and social policies, further emphasizing its significance in Nigeria's fiscal framework. Thus, the importance of Value Added Tax as a source of government revenue in both developed and developing nations has been subjected to serious examination in recent decades (Chigbu & Ali, 2014). Within the Nigerian context, VAT has been a reliable mean of revenue generation.

While VAT has emerged as a reliable source of revenue for the government, the statement acknowledges various challenges associated with its implementation. Complaints from the private sector regarding increased operating costs and concerns over tax administration inefficiencies are cited as notable issues. Furthermore, the volatility of oil prices in the international market, coupled with security challenges in regions like the Niger Delta, presents additional hurdles to revenue stability and economic growth.

Against this backdrop, the statement proposes an investigation into the impact of revenue generation through VAT and other taxes on Nigeria's economic development. The researcher aims to assess whether VAT has significantly contributed to the country's economic growth and to evaluate its potential as a sustainable alternative revenue source. By examining the effects of taxation on economic growth and development, the study seeks to inform policymaking and contribute to the ongoing discourse on fiscal policy in Nigeria.

In conclusion, the statement provides a comprehensive overview of the role of taxation, particularly VAT, in Nigeria's economic context. It highlights the importance of diversifying revenue sources away from oil dependence and underscores the significance of VAT in government revenue generation. However, it also acknowledges challenges and proposes further research to evaluate the impact of taxation on economic development, thereby contributing to evidence-based policymaking in Nigeria.

## **LITERATURE REVIEW**

## **Conceptual Review**

### **Tax Revenue and Value Added Tax in Nigeria**

Value Added Tax is on consumption, goods and services made by the consumers or persons, government agencies and business organizations but the taxes realized is based on value added by manufacturers, wholesalers and retailers until consumers finally consume the goods or services and pays the whole tax on it. VAT is a multi-stage tax on consumption of goods and services. The creators of value make the

advance payment (input tax) and are refunded by the consumers (output tax). The incidence of VAT like other consumption taxes such as import duties, export taxes, sales tax, are borne by consumers. They are difficult to evade and the incidence falls on the wealthier sector of the society effectively. VAT can also be defined as a tax on spending consumption levied at every stage of a transaction, but eventually borne by the final consumers of such goods and services. It is levied at the rate of 7.5 percent (Egolum & Celestine, 2021). Tax is a compulsory payment made by all concerned to the government of a country or state from which essential services are rendered, without necessarily offering an explanation on how the money generated was spent or equating the services with the money collected.

Olatunji (2009) cited in Theresa, et al (2024) explained that the walk towards VAT system in Nigeria started with acceptance of the recommendation of a study group on indirect taxation in November, 1991. The decision to accept the recommendations was made public in the 1992 budget speech of the Head of State General Ibrahim Badamosi Babangida (rtd). This resulted in setting up the Modified Value-Added Tax (MVAT) Committee on 1st June, 1992 as recommended by the study group. The recommendation of the Committee that VAT should be administered by an independent commission was rejected by the government. Tax administration was nonetheless given to Federal Inland Revenue Service, which was already charged with the responsibility of administering most other taxes in Nigeria. The introduction of VAT in Nigeria through Decree 102 of 1993 marks the phasing out of the Sales Tax Decree No.7 of 1986.

### **Company income tax in Nigeria**

Section 57 of the Companies Income Tax Act (CITA) 1990 requires that companies listed on the Nigerian Stock Exchange submit their monthly returns to the Federal Board of Inland Revenue within 7 days following the end of each calendar month. Additionally, under Section 8(1) of the same Act, taxes must be paid based on the profits of a company that arise from, are brought into, or are received in Nigeria, which includes any trade or business activities, regardless of the duration of those activities (Adegbite and Fakile, 2011). Solanke et al (2019) noted that company income tax is collected from both Nigerian and foreign companies. Tax revenue mobilization, including Company Income Tax (CIT), is crucial for financing development activities in Nigeria. However, this has been a challenging issue primarily due to various forms of resistance such as tax evasion, avoidance, and corrupt practices (Festus and Samuel, 2007 as cited in Ekanem et al, 2023). These activities undermine the economy and are frequently cited as reasons for the country's underdevelopment.

## **Custom and Excise duties in Nigeria**

Custom duties are the forms of indirect tax, which indeed applies to goods imported into a country like Nigeria. Sadique (2016) noted that custom duties have been in place since 1960 and are levied on imports, either as a percentage of import's value or as a specific fixed amount depending on the type of goods.

Custom duties serve multiple purposes, including generating revenue for the government and regulating the flow of goods across borders. They are significantly the source of revenue to many countries, including Nigeria where duties are emphasized due to the reliance on imported goods. On the other hand, it helps to protect domestic industries by making imported goods more expensive. Both custom and excise duties are traditional forms of taxation that continue to play a crucial role in the revenue system of countries, especially those reliant on imports. Ultimately, the revenue from these duties help to improve the welfare of the indigene through provisions of essential services such as roads, health facilities etc.

Anyanwun (1997) as cited by Sadique (2016) observed that export duty is a tax on the goods exported to other countries,. He argued that taxes are imposed to regulate the production and consumption of goods.

## **Concept of Government Revenue**

Goddes and Grosset (2023) defined revenue as cash received from the sale of products or services. They also defined it as earnings. Putting it more clearly, the Oxford Advanced Learners Dictionary (2010) defined revenue as the money that a government receives from taxes or that an organization, etc receives from its business, In order to sustain itself and perform its duties to the nation, the government must earn some money through some fiscal measures (Daniel, 1999 cited in Moris,2014).

## **Problems of Tax Revenue Generation in Nigeria**

Micah, e tal (2012) said the Nigerian tax system is beset by a myriads of challenges, which include: (i) non availability of tax statistics, (ii) inability to prioritize tax efforts, (iii) poor tax administration, (iv) multiplicity of taxes and (v) regulatory challenges. Corruption, of course is one of the major challenges facing our tax system. This expresses itself in evasion practices and even connivance and collusion by tax officers themselves. Specifically talking about the problems or Value Added Tax in Nigeria, Okoye (2019) highlighted (i) public resistance, (ii) small enterprises, (iii) tax refund, (iv) accounting culture, (v) administrative complexity, (vi) illiteracy level, and (vii) inflation. Ajekaiye (2000) cited in Efutade (2020) complained that even though, VAT able organizations deduct the VAT paid on inputs from VAT accruing on their outputs remitting the VAT office, they still regard their input VAT as cost. This goes on to overstate prices, where costs are considered in fixing them, making the consumers to suffer twice for the same tax.

## **Concept of Economic Growth**

According to Anyanwu and Oaikhenan (1995) cited in Iihan (2020) economic growth is the increase over time of an economy's capacity to produce those goods and services needed to improve the wellbeing of the citizen in their increasing number and diversity. It is also conceived as a sustained increase in the per capital income over a period of time (Claus *et al.*, 2012, cited in Osasusi, e tal (2017). It should be noted that economic growth is sometimes used interchangeably with economic development. But economics development is more encompassing in such that it includes growth plus improvement in wellbeing, eradication of poverty and illiteracy, disease and early death, changes in the composition of input and output, that generally include shift in the underlying structures of an economy away from agriculture or production of raw materials towards industrial sector and institutional transformation of an economy (Kindle-Berger and Herrick, 2001). Therefore, no matter the distinction, what is important is that there is no development without growth (King and Levine, 1993 cited in Aniekan,2018).

Microsoft Encarta Dictionary (2017) defined growth as the process of becoming larger and more mature through natural development. It went' further to define economic growth as increase in the total amount of production and wealth in an economy. Another definition as given bywww.bized.co.uk (2007) puts it as an increase in an economy's ability to produce goods and services. Contributing to the subject matter, Ogbonna and Ebimobowei (2012) as cited in Adefolake and Omodero (2022) defined economic growth as "a sustained increase in per capita national output or net national product over a long period of time. It implies that the rate of increase in total output must be greater than the rate of population growth. Economic growth is reflected in an increase in the productive capacity of a country over a given period of

time which is characterized by increased production of goods and services. Basically, economic growth is measured in increase in the Gross Domestic Product of a country over a given period of time. Economic growth can be made possible in two ways: (i) more resources are used in the economy and (ii) existing resources are used more efficiently. Economic growth can be hindered by barriers such as (a) availability and quality of land, labour, capital and entrepreneurship and (b) lack of access to export market due to trade policies of other countries in order to protect their own domestic producers (Teera, 2003 cited in Saibu et al,2013).

### **Value Added Tax and Economic Growth in Nigeria**

The empirical exploration of Value Added Tax (VAT) and its impact on economic growth spans various countries and contexts. Studies such as those by Unegbu and Iretin (2011) cited in Nwaoha im (2020), emphasize VAT's positive effects on economic development, revenue generation, and provision of essential services. However, contrasting views exist. Denis (2010) as cited in Otemu (2020) found VAT ineffective as a revenue earner in Nigeria, while Salti and Chabaan (2010) as cited in Otemu (2020) highlighted its potential negative impact on poverty when rates increase. Despite debates, VAT remains a significant revenue source in many countries like Nigeria, where it contributes notably to GDP (Adereti e tal, 2011). Other studies, such as those by Smith, e tal (2011) as cited in Otemu (2020), illustrate VAT's satisfactory performance initially but stagnant growth later, attributed to factors like limited taxpayer base and weak monitoring systems. Overall,

while VAT is hailed for its revenue generation potential and positive impact on economic growth in some contexts, its effectiveness and distributional implications warrant further examination.

### **Theoretical Framework**

This study is anchored on the optimal taxation theory. The theory of optimal taxation states that a tax system that is chosen should maximize a social welfare function subject to a set of constraints (Mankiw & Weinzierl, 2009 as cited in Sylwia, 2019). Slernrod (2020) opines that the optimal tax theory involves the designing and implementing of a tax structure that enhances efficiency and reduces its representation in the market under certain economic constraints. This involves giving due attention to individuals' utility and minimizing the distortions caused by taxation towards optimizing the tax benefits. It therefore implies that the optimal taxation theory considers individual preferences and the efficiency in tax collections to give the best productivity of taxes collected. The goal of optimal taxation theory is to reduce if not total elimination of inefficiency as much as possible and to enhance government revenue. This is because taxation is perceived to distort the behavior of tax payers especially on consumption in a situation where there are options between two mutually exclusive investments having the same risk profile and returns but different tax rates. A rational investor will choose the investment that offers a tax advantage at the expense of the better benefits the foregone alternative may offer toward economic growth.

### **Review of Empirical Studies**

Ugochukwu and Azuibike (2016), cited in Okoro and Onatuyeh (2018) examined the effect of tax policy on Economic Growth in Nigeria. The study used annual time series data of 20 years from 1994-2013. OLS regression Analysis was adopted to estimate the relationship between the dependent and independent variables. The findings revealed that tax have a significant effect on the economic growth of Nigeria. It also revealed that the proportion of indirect to total tax have increased over the years. The study therefore recommended among others that the government tax policy should shift more to indirect tax due to the expansionary and non-distortionary nature.

Okoli and Matthew (2015 as cited in Awe, 2018) examined the extent to which VAT has contributed to Nigeria's total federally collected revenue and its position among the other tax components using data spanning the period 1994-2011. Adopting the Error Correction Model (ECM) for the analysis, the findings revealed that VAT was the second-long term source of the total federally collected revenue.

Njoku (2015) as cited in Onuoha and Akintoye (2018) examined the impact of indirect taxes on economic growth of Nigeria, utilizing time series data spanning a thirty-four-year period, from 1981 to 2014. The data collected from secondary sources, were analyzed and tested for stationary, using the Augmented Dickey-Fuller test. The Value Added Tax (VAT), Petroleum Profit Tax (PPT) and Custom and Excise Duties (CED), were stationary at second difference while the Real Gross Domestic Product (RGDP) was stationary at level. Consequently the study utilized the Error Correction Model to evaluate the impact of VAT, PPT and CED on the RGDP. The findings revealed that VAT and PPT exert a positive and significant relationship on the RGDP. It was also revealed that CED of two period lags has a positive relationship with RGDP and VAT of two-period lags showing a negative but significant relationship with RGDP.

Chigbu (2014) as cited in Omotoso (2020) examined the impact of value added tax on the economic growth of Nigeria. The author used relevant secondary data from for the period 1994-2012. The data collected were analysed with relevant econometric tests of Breusch-Godfrey Serial Correlation LM, White Heteroskedasticity, Ramsey RESET, JarqueBera, Johansen Co-integration, and Granger Causality. The findings revealed a long run equilibrium relationship between economic growth and VAT. It was also found that- VAT does 'granger cause gross domestic product of Nigeria. The paper concluded, on the basis of the findings that VAT is one of the most important components of Indirect taxes that affects economic growth in Nigeria.

Izedonmi and Okunbor (2014) as cited in Nwawuru and Nmesirionye (2018) empirically investigated the contribution of VAT to the development of the Nigerian economy. Time series data were used-on the Gross Domestic Product (GDP), VAT Revenue, Total Tax Revenue and Total (Federal Government) Revenue from 1994 to 2010.The data were analyzed using the econometric methodology of multiple regression technique. Their findings showed that VAT Revenue accounted for 92% significant variations in Nigeria's GDP.It revealed a positive but insignificant correlation between VAT Revenue and GDP.

Onwuchekwa and Aruwa (2014) cited in Ogbuma, (2017) investigated the impact of value added tax on economic growth of Nigeria. The study used ordinary least square technique to test the hypothesis of the research with data spanning the period 1994-2011. The result revealed that VAT contributes significantly to the total tax revenue of government and by extension, to economic growth of Nigeria. It further showed that VAT revenue had consistently increased but it is not that explosive.

Bakare (2013) cited in Olanrewaji (2019) investigated the impact of VAT on output growth in Nigeria. The study used the ordinary least square (OLS) regression technique. It was found that a positive and significant relationship exist between VAT and output growth in Nigeria. The results of the findings from this work also showed that the past values of VAT could be used to predict the future behaviour of output growth in Nigeria. The main conclusion of the study was that Value Added Tax has the potential to assist in 'the diversification of revenue sources, thereby providing enough funds for economic growth and development and reducing over dependence on oil for revenue. Olatunji (2009) as cited in Theresal (2024) conducted a study on the effectiveness of the administration of VAT in improving government revenue and boosting economic growth in Nigeria. It used simple percentage and chisquareto analyze the data. The, study showed a positive correlation between VAT and GDP.

Asogwa and Nkolika (2013) cited in Ziemba (2020) examined the impact of value added tax on investment growth in Nigeria. Time series data on investment, government expenditure real exchange rate, real interest rate and trade openness from the central bank of Nigeria statistical Bulletin (CBN) were analyzed, using multiple regression analysis. The results showed that Value Added Tax has significant effect on investment growth in Nigeria. The study recommends that there should be dedicated and honesty on the parts of all agents of VAT with respect to the collection, and government should try as much as possible to improve on the way of collecting value added tax.

Yadirichukwu and Ebiringa (2012) as cited in Chinedu (2022) examined empirically, the effect of various forms of tax on the economic growth of Nigeria. Secondary data was utilized within the periods of 1985-2011, and the econometric technique adopted were OLS regression and Granger causality technique. The result showed that among the determinant factor of economic growth in the country through tax, only custom and exercise duties are capable of influencing growth, and have significantly inverse relationship with the GDP. The study therefore recommended that the company income tax system should be generally restructured to bring about more revenue capable of contributing more significantly to the Nigerian economic growth as it is evidenced in the advanced countries of the world. The study also observed that custom service operations and revenue generations in the border is not practically reflected in the economy due to non accountability and transparency as well as leakages in the system.

Another study conducted by Owolabi and Okwu (2011) as cited in Odu (2020) empirically evaluated the contribution of VAT to the development of Lagos State economy. Development aspects considered included infrastructural development, environmental management, education sector development, youth and social development, agricultural sector development, health sector development and transportation sector development. The findings revealed that VAT revenue contributed positively to the development of the respective sectors. However, the positive contribution was statistically significant only in agricultural sector development.

Anyanwu (1997) cited in Akhor, & Ekundayo (2016) examined the effects of taxes on Nigeria's GDP/Economic growth in Nigeria. His findings revealed that companies' income tax as positive and significant effects on Nigeria GDP just as custom and excise duties do.

Agbo et al (2022) carried out a research on tax composition and economic growth in Nigeria spanning from 2010 to 2020. The independent variable was tax composition measured by petroleum profit tax and company income tax, while the dependent variable is on economic growth. The study concluded that while higher profit tax revenue promotes economic growth, higher profit tax revenue surprising stalled economic growth in Nigeria during the period under investigation. It is expected therefore that all forms of loopholes inform of tax evasion and avoidance should be properly work on by the country. It is also much important that government of Nigeria should as well consider other arrears where revenue can be generated into the country.

## **METHODOLOGY**

### **Research Design**

The study was carried out using a longitudinal research design, employing secondary quantitative data. The required data on VAT, economic growth proxied with GDP were extracted from Statistical Bulletins of the Nigerian Exchange Group (NGX), Central Bank of Nigeria (CBN) and website of Nigeria Bureau of Statistics (NBS).

### **Sources of Data**

The study made use of secondary data gathered from Nigerian Exchange Group (NGX), Central Bank of Nigeria (CBN) Statistical Bulletin 2020, and website of Nigeria Bureau of Statistics (NBS). Panel data regression analysis was used for the purpose of this study.



**Method of Data Analysis**

This study used Correlation Matrix and Regression analysis to analyse the data. Also, long term relationship between the variables were measured with multiple regression analysis. Ex-post factor research design method was employed to analyse data.

**Model Specification**

The following model was used to evaluate the effect of revenue generation through Value Added Tax and other taxes on economic growth of Nigeria using the Multiple Regression Analysis. In order to account for the objectives of this study, the model is hereby specified below: VAT, CED and CIT represent the independent variables while economic growth is the dependent variable.

$y = f(x) + y_1$

x = Revenue generated through Value Added Tax (Dependent Variable)

y= Economic Growth (Independent Variable)

y<sub>1</sub> = Gross Domestic Product

Where:

x<sub>1</sub> = Value Added Tax (VAT),

x<sub>2</sub> = Custom and Excise Duties (CED),

x<sub>3</sub> = Companies Income Tax (CIT)

GDP =RGVAT (VAT, CED, CIT)

**Model 1:**  $GDP = \alpha_1 + \beta_1(VAT)_t + \mu_1$  ..... equ i

**Model 2:**  $GDP = \alpha_2 + \beta_2(CED)_t + \mu_2$ ..... equ ii

**Model 3:**  $GDP = \alpha_3 + \beta_3(CIT)_t + \mu_3$  ..... equ iii

This functional relationship can be transformed econometrically to:

$GDP = \beta^0 + \beta_1 \log (VAT) + \beta_2 \log (CED) + \beta_3 \log (CIT) + \mu$

B<sup>0</sup> = Autonomous Variable

μ = Forecasting Error Term

**Descriptive Statistics**

**Table 1: Descriptive Statistics of the Dependent and Independent Variables**

	GDP	VAT	CED	CIT
Mean	47735.32	420145.8	238597.8	941228.0
Median	48267.50	345650.1	215743.5	347950.0
Maximum	69838.38	854675.0	422900.0	14257510
Minimum	24332.87	38000.00	0.000000	35300.00
Std. Dev.	17119.78	298321.2	108669.9	2230938.
Skewness	0.047603	0.205053	-0.000957	3.930564
Kurtosis	1.668841	1.435716	2.661974	17.00308
Jarque- Bera	1.821561	.2.279308	0.095221	214.9031
Probability	0.434951	0.436333	0.953505	0.000000
Observations	10	10	10	10

**Source:** Author’s Computation Using E-View 10.0 (2023)

Mean is the average value of the series which is gotten by dividing the total value of the series by the number of observations. From Table 1 the mean for Gross Domestic Product, (GDP), Value

Added Tax (VAT), Custom and Excise Duty (CED) and Companies Income Tax (CIT) are 47735.32, 420145.8, 238597.8 and 941228.0 respectively. Median is the middle value of the series when the values are arranged in an ascending order. Gross Domestic Product, (GDP), Value Added Tax (VAT), Custom and Excise Duty (CED) and Companies Income Tax (CIT) are 48267.50, 345650.1, 215743.5 and 13257510 respectively.

The maximum and minimum values for Gross Domestic Product, (GDP), Value Added Tax (VAT), Custom and Excise Duty (CED) and Companies Income Tax (CIT) are 69838.38 & 24332.87, 854675.0 & 38000.00, 422900.0 & 0.000000 and 14257510 & 35300.00 respectively. Standard Deviation is a measure of dispersion in the series. From Table 1 the standard deviation for Gross Domestic Product, (GDP) Value Added Tax (VAT), Custom and Excise Duty (CED) and Companies Income Tax (CIT) is 17119.78, 298321.2, 108669.9 and 2230938 respectively.

Skewness is a measure of asymmetry of the distribution of the series around its mean. The skewness of a normal distribution is zero. Positive skewness implies that the distribution has a long right tail and negative skewness implies that the distribution has a long left tail. From Table 1 the Gross Domestic Product, (GDP) Companies Income Tax (CIT), Value Added Tax (VAT) have positive skewness and as such they have long right tails while Custom and Excise Duty (CED) have negative skewness. Kurtosis measures the peakedness or flatness of the distribution of the series. If the kurtosis is above three, the distribution was leptokurtic relative to the normal and if the kurtosis is less than three, the distribution is flat or platykurtic. From Table 1 Gross Domestic Product, (GDP), Value Added Tax (VAT) and Custom and Excise Duty (CED) are below three therefore they were leptokurtic while Companies Income Tax (CIT) is flat or platykurtic. Jarque-Bera is a test statistic to test for normal distribution of the series. It measures the difference of the skewness and kurtosis of the series with those with normal distribution. From Table 1 the Jarque-Bera for Gross Domestic Product, (GDP), Value Added Tax (VAT), Custom and Excise Duty (CED) and Companies Income Tax (CIT) are 1.821561, 2.279308, 0.095221 and 214.9031.

### Variance Inflation Factor (VIF)

**Table 2: Tolerance Value and Variance Inflation Factor (VIF)**

	Coefficient	Centered
Variable	Variance	VIF
LN-VAT-	0.002793	8.775098
LN CED-	0.007159	8.642821
LN-CIT-	0.000688	6.641437

**Source:** Author's Computations Using E-View 10.0 (2023).

The tolerance value and the Variance Inflation Factor (VIF) are two advanced measures of investigating the existence of multicollinearity between the explanatory variables of the study. In Table 2 the Variance Inflation Factors are consistently smaller than ten indicating absolute absence of multicollinearity (Johansen, 1999). This shows the appropriateness of fitting the model of the study within the three independent variables. In addition, the tolerance values are consistently smaller than 1.00 thus providing further evidence of the absence of multicollinearity among the explanatory variables (Tobachmel & Fidell, 1996).

## Correlation Analysis

This section presents the correlation matrix of the variables of the study to demonstrate the associated relationship existing between them. Busuyi and Adewuyi (2018) argued that a correlation analysis is used to institute the landscape of the strength and direction of the linear relationship existing between the dependent and independent variables of the study. According to him, the magnitude of a correlation coefficient is measured using the numerical value of -1 to +1. Scholars in Econometrics interpret and regard the correlation coefficient value of 0.0 to 0.2 as a very low correlation, 0.2 to 0.4 as a low correlation, 0.4 to 0.6 as an average correlation, 0.6 to 0.8 as a high correlation and above 0.8 to 1 as a perfect correlation. In this study, the Pearson Correlation Technique was used to estimate the magnitude of the correlation coefficients of the study and the Correlation Matrix results generated for the variables of the study through the use of the Statistical Package for the Social Sciences are presented on Table 3.

**Table 3: Correlation Showing Relationships among GDP and CIT, VAT and CED**

	GDP	CIT	VAT	CED
GDP	1.000000			
CIT	0.473824	1.000000		
VAT	0.977198	0.498786	1.000000	
CED	0.683826	0.497106	0.674632	1.000000

**Source:** Author's Computations Using E-View 10.0 (2023).

Correlation analysis was used in establishing the relationship between the independent variables (CIT, VAT and CED) and the dependent variable, Gross Domestic Product (GDP). The Correlation Matrix in table three revealed that strong positive relationship exists between CIT, VAT and CED and Gross Domestic Product (GDP) as indicated by the Correlation Coefficient. The implication of this finding is that Companies Income Tax (CIT), Value Added Tax (VAT) and Custom and Excise Duty (CED) have a positive effect on Gross Domestic Product (GDP) in Nigeria.

### Test of Hypothesis One (H<sub>01</sub>)

**Main Research Objective:** To investigate the effect of revenue generation through Value Added Tax (VAT) on the Gross Domestic Product (GDP) in Nigeria.

**Research Hypothesis 1:** There is no significant relationship between Value Added Tax (VAT) and Gross Domestic Product (GDP) in Nigeria.

**Research Modell:**  $GDP = \alpha_1 + \beta_1(VAT)_t + \epsilon_1 \dots \dots \dots \text{equ 1}$

**Table 4: Regression Results for Hypothesis One**

Dependent Variable: LN_GDP				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_VAT_	0.481280	0.013558	26.19116	0.0000
C	5.893924	0.182481	32.29880	0.0000
R-squared	0.974431	Mean dependent var		11.45752
Adjusted R-squared	0.973010	S.D. dependent var		0.313518
F-statistic	685.9769	Durbin- Watson stat		0.671448

Pro b (F -statistic)	0.000000			
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Source: Author's Computations Using E-View 10.0, (2023).

$$GDP = \beta_0 + \beta_1(VAT)_t + \epsilon_1 \dots\dots\dots \text{equ 1}$$

$$GDP = 5.893924 + 0.481280VAT + \epsilon_1$$

From the results obtained on Table 4, it is observed that the constant parameter ( $\beta_0$ ) has a positive relationship with Gross Domestic Product (GDP) while  $\beta_1$  (VAT) have a positive coefficient values showing a positive relationship with the dependent variable Gross Domestic Product (GDP). This means that an increase in Value Added Tax (VAT) will cause an increase in Gross Domestic Product (GDP) in Nigeria.

A critical examination of the results as reported above shows that about 97.4% of the total variation in the regressor and dependent variable Gross Domestic Product. (GDP) can be explained by the regressors or independent variable Value Added Tax (VAT). This is indicated by the Coefficient of Determination ( $R^2$ ) value of 0.974431. This implies that Value Added Tax (VAT) accounts for 97.4% of changes in Gross Domestic Product (GDP). An examination of the F-statistic value of 685.9769, testing for overall significance shows that the overall model is significant at 5% level of significance. This is because the observed value of 685.9769 is greater than the critical F-value of 0.05 = 4.31. Following the results above, since the p-value (0.0001) is less than significant value (5% or 0.05) the null hypothesis is hereby rejected. It was concluded that there was significant relationship between Value Added Tax (VAT) and Gross Domestic Product (GDP) in Nigeria.

**Test of Hypothesis Two (H02)**

**Research Objective 2:** To examine the contribution of Customs and Excise Duties (CED) on the Economic Growth of Nigeria.

**Research Hypothesis 2: H02:** There is no significant relationship between Custom and Excise Duties (CED) and Economic Growth in Nigeria.

**Research Model 2:**  $GDP = \alpha_2 + \beta_2(CED)_t + \epsilon_2 \dots\dots\dots \text{equ 2.}$

**Table 5: Regression Results for Hypothesis Two**

Dependent Variable: LN_GDP_				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_CED_	0.703291	0.094458	7.445566	0.0000
C	2.032629	1.157198	1.756509	0.0970
R-squared	0.765312	Mean dependent var		11.64162
Adjusted R-squared	0.751506	S.D. dependent var		0.408082
F-statistic	55.43646	Durbin- Watson stat		0.726814
Pro b (F -statistic)	0.000001			

Source: Author's Computations Using E-View 10.0 (2023).

$$GDP = \beta_0 + \beta_2(CED)_t + \epsilon_2 \dots \dots \dots \text{equ 2}$$

$$GDP = 2.032629 + 0.703291CED + \epsilon_2$$

From the results obtained on the Table 5, it is observed that the constant parameter ( $\beta_0$ ) has a positive relationship with Gross Domestic Product (GDP) while  $\beta_2$  (CED) has a positive coefficient value showing a positive relationship with the dependent variable Gross Domestic

Product (GDP). This means that an increase in Custom and Excise Duties (CED) will cause an increase in Gross Domestic Product (GDP). A critical examination of the results as reported above shows that about 76.5% of the total variation in the regressor or dependent variable Gross Domestic Product (GDP) can be explained by the repressors or independent variable Custom and Excise Duties (CED). This is indicated by the Coefficient of Determination ( $R^2$ ) value of 0.765312. This implies that Custom and Excise Duties (CEO) account for 76.5% of changes in Gross Domestic Product (GDP). An examination of the F-statistic value of 55.43646, testing for overall significance shows that the overall model is significant at 5% level of significance. This is because the observed value of 55.43646 is greater than the critical F-value of 0.05 = 4.31. Following the results above. Since the p-value (0.0001) is less than significance value (5% or 0.05), then the null hypothesis. It was concluded that there is significant relationship between Customs and Excise Duties (CED) and Economic Growth in Nigeria.

**Research Objective 3:** To access the effect of Companies Income Tax (CIT) on the Economic Growth in Nigeria.

Research Hypothesis 3:  $H_{03}$ : There is no significant relationship between Companies Income Tax (CIT) and economic growth in Nigeria.

$$\text{Research Model 3: } GDP = \alpha_3 + \beta_3(CIT)_t + \epsilon_3 \dots \dots \dots \text{equ 3}$$

**Table 6 Regression result for Hypothesis Three**

Dependent Variable: LN_GDP				
Method: Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_CIT_	0.263028	0.025279	10.40510	0.0000
C	7.340346	0.320719	22.88718	0.0000
R-squared	0.857444	Mean dependent var		11.65752
Adjusted R-squared	0.849524	S.D. dependent var		0.403518
F-statistic	108.2661	Durbin-Watson stat		1.664769
Prob (F -statistic)	0.000000			

**Source: Author's Computations Using E-View 10.0, (2023).**

$$GDP = \beta_0 + \beta_3(CIT)_t + \epsilon_3 \dots \dots \dots \text{equ 3}$$

$$GDP = 7.340346 + 0.263028CIT + \epsilon_3$$

From the results obtained on the Table 6, it was observed that the constant parameter ( $\beta_0$ ) has a positive relationship with Gross Domestic Product (GDP) while  $\beta_3$  (CIT) has a positive coefficient values showing a positive relationship with the dependent variable Gross Domestic Product (GDP). This means that an increase in Companies Income Tax (CIT) will cause an increase in Gross Domestic Product (GDP). A critical examination of the results as reported above shows that about 85.7% of the total variation in the regress on or dependent variable Gross Domestic Product

"(GDP) can be explained by the repressors or independent variable Companies Income Tax (CIT). This is indicated by the coefficient of determination ( $R^2$ ) value of 0.857444. This implies that Companies Income Tax (CIT) accounts for 85.7% of changes in

Gross Domestic Product (GDP). An examination of the F-statistic value of 108.2661, testing for overall significance shows that the overall model is significant at 5% level of significance. This is because the observed value of 108.2661 is greater than the critical F-value of 0.05 = 4.31. Following the results above, since the p-value (0.0001) is less than significant value (5% or 0.05) the null hypothesis was rejected. It was concluded that there is a significant relationship between Companies Income Tax (CIT) and Economic Growth in Nigeria.

## **Discussion of Findings**

The results of the hypotheses revealed that there is a significant relationship between Value Added Tax, Companies Income Tax and Customs and Excise Duties. They regression analysis test further revealed that Value Added Tax, Companies Income Tax, have a positive impact on Gross Domestic Product. This implies that an increase in Value Added Tax, company income tax, will lead to increase in gross Domestic Product. This corroborates the findings of (Ayuba, 2019). Companies' Income tax revenue generated over the years has contributed to the growth of Nigeria economy. The thirty percent corporate tax rate may be consistent with the Ibn Khaldun's Theory of Taxation. This theory posits that significant positive impact from a sustained optimum tax rate has a positive impact on the revenue generation and output of the economy or economic growth of a country. The results of this study supports the research findings of (Ayuba, 2019).

Based on hypothesis two which states that there is no significant relationship between Customs and Excise Duties (CED) and Economic Growth of Nigeria which was rejected and the study concludes there is significant relationship between Custom and Excise Duties (CED) and Economic Growth Nigeria, this study contradicted the findings of (Isibor e tal, 2018), who discovered a negative connection between customs and excise duties and GDP. In contrast, Customs and Excise Duties have a negative connection with GDP. This might be the consequence of poor revenue management by customs and tax authorities, as well as corruption and poor tax administration. However, it must be noted that the spurious regression results were avoided by adding trend functions as explanatory variables. The range of auto-correlation was not overlooked. Ordinary Least Square (OLS) was used on the regression calculations.

## **Summary**

The statement presents findings from a study on the impact of Value Added Tax (VAT) and other taxes on the economic growth of Nigeria. Through statistical analysis using E-views software, it was determined that VAT, Custom and Excise Duties (CED), and Companies Income Tax (CIT) all have positive relationships with Gross Domestic Product (GDP). Specifically, VAT, CED, and CIT were found to correlate positively with GDP, indicating that increases in these taxes lead to increases in GDP. The coefficient values for each tax indicate the strength of their impact on GDP, with VAT having the highest coefficient value. Additionally, all variables were found to be significant at a 5% level. Overall, the study concludes that there is a significant relationship between the taxes analysed and economic growth in Nigeria.

## **Conclusions**

The statement asserts that revenue from taxes like Value Added Tax (VAT) impacts Nigeria's GDP positively. Data analysis VAT, Companies Income Tax and Customs and Excise Duties (CED) significantly influence economic growth. Therefore, revenue generated from VAT and other taxes correlates with Nigeria's economic expansion.

## **Recommendations**

Based on the findings of this research work and consequent upon the issues examined in the study, the Nigerian government should take cognizance of the following recommendations:

There is a need to improve the legal or regulatory environment for businesses by evaluating and updating tax laws and enforcing tax laws on a regular basis; strengthening anticorruption agencies, boosting property rights and respect for the rule of law and due process, and guaranteeing good governance. People will have more trust in the government as a result, and the Value Added Tax will be used more efficiently. Also, the tax authorities in Nigeria should strengthen the tax administration system as tax revenue has been proven to be an important source of government's revenue for sustainable development.

The government must guarantee that the incomes earned by VAT and other taxes are used effectively to improve people's lives. This may be accomplished by closely monitoring the incomes received and the initiatives undertaken to ensure good governance. This will go a long way towards alleviating the problems of VAT collection and administration because when the government fulfills its part, citizens will not fail on tax payments, thus affecting the whole tax system positively.

Nigeria should reform the Value Added Tax and Custom and Excise Duties in order to stimulate investment and therefore achieve growth. Accountability and openness from government authorities on the management of incomes obtained from taxes should be implemented so that tax payers' morale will be improved by enjoying incentives for the payment of taxes.

## REFERENCES

- Adebayo, A (2020). Taxing emerging digital economy a vital buffer to an ailing economy. *Journal of Business Diversity*,21(3).
- Aderemi, S. A, Sanmi, M. R &Adesina, J. A (2011). Value added tax and economic growth in Nigeria. *European Journal of Humanities and Social Sciences*.10(1),456-471
- Agbo, I. S., Gina, O.O. & Biwei, T.A(2022). Tax composition and economic growth in Nigeria. *Journal of Global Accounting*, 8(1).<https://Journal.unizik.edu.ng.org>.
- Ajakaiye, D.O. (2000). Macroeconomic effects of value added tax (VAT) in Nigeria: A computable general equilibrium analysis. *African Economic Research Consortium*, Nairobi, 92(1),112-147.
- Anyanwu, J.C., & Oaikhenan, H. E. (1995). *Modern macroeconomics: Theory and applications in Nigeria*. Department of Economics & Statistics, University of Benin, Nigeria
- Anyanwu, O. (1997). Impact of tax revenue on economic growth in Nigeria. *Department of Accounting University of Benin, do-State Nigeria*.
- Asogwa, F.O., & Nkolika, O. M. (2013). Value added tax and investment growth in Nigeria: Time series analysis. *IOSR Journal Of Humanities and Social Science*, 18(1), 28-31.
- Ayuba, A., & Saad, Z. Z (2018). Does perceived corruption moderate the relationship between economic factors and tax companies? proposal framework for Nigerian small scale enterprises. *Mediterranean Journal of Social Sciences*,7(1),402-419
- Bakare, A. S. (2013). Value Added Tax and output growth in Nigeria. In Proceedings of 5<sup>th</sup> Annual London Business Research Conference Imperial College. London, UK (8-9).
- Bazed. (2007).Retreaved fom [www.bazed.co.uk](http://www.bazed.co.uk)
- Chigbu, E. E., & Ali, P. I. (2014). Econometric analysis of the impact of value added tax on economic growth in Nigerian *Development*, 6(18). 31 – 36



- Claus, I., Martinez-Vazquer, J. I., Vulovic, V. (2017). Government fiscal policies and redistribution in Asian countries. *Asian Development Bank Economic Working Paper*.
- Daniel, H. D. (1999). Study costs, student income and public policy in Europe. *European Journal of Education*, 34(1), 7-21.
- Denis, B. (2020). Investigating the relationship between VAT an GDP in the Nigerian economy. *Journal of Management and Corporate Government*,2(1),1-12
- Dwivedi, M. (2004). Online destination image of India: A consumer based perspective. *International Journal of Contemporary Hospitality Management*, 21(2),226-232
- Egolum, P. U, Celestine, U. U (2021). The effects of value added tax on the economic development in Nigeria.*Journal of Humanities and Social Sciences*,26(5),21-23
- Federal Government of Nigeria (1999) *Constitution of the Federal Republic of Nigeria*, Federal Government Press, Abuja.
- Federal Inland Revenue Service (1999) Move to boost more revenue generation through value added tax in Nigeria, *Federal Inland Revenue Service*, Abuja.
- Federal Inland Revenue Service (FIRS) (1993). *Value Added Tax Decree No 102 of 1993*, Abuja, Nigeria.
- Festus, F. & Samuel,F (2007).Company income tax and Nigeria economic development.*European Journal of Social Sciences*.22(2),72-83
- Keen, M., & Lockwood, B. (2007) IMF Working Papes: The Value Added Tax-its causes and consequences. *Fiscal Affair Department: IMF*.
- Goddess, W. & Grosset, U. (2023) *English Dictionary with Spelled-Out and phonetic (IPA) Pronunciation Guides*, Geddes and Grosset, Oxford.
- Isibor, A. A., Babajide, A. A (2018). The effect of public debt on economic growth in Nigeria: An empirical investigation. *International Business Management*, 12 (6),436-441
- Izedomi, F&., Okubi, J. A (2014). The role of Value added tax in economy development of Nigeria.*International Journal of Economic and Trade*, [www.sciencedomaon.org](http://www.sciencedomaon.org).
- King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *The Quarterly Journal of Economics*, 108(3), 717-737.
- Kolapo, M.D. (2019). Empirical evaluation of contribution of value added tax to development of Lagos State economy. *Middle Eastern Finance and Economy, Academic .edu*
- Leach, G. (2003). The Negative Impact of Taxation on Economic Growth. London: UK: reform, institute of Directors.<http://doi.org/10.1051/sh.scom>.
- Luthuanian, E.O., Bikas, E., & Raskauskas, J. (2011). Value added tax dimension: the case of Lithuania. *Ekonomika*, 90(1), 22-38.
- Madugba, J.U. & Azubike, J.U.B. (2016). Value added tax and economic development in Nigeria. *International Journal of Development and Economic Sustainability*.4(3) 1-10.
- Mankiw, N. G., Weinzierl, M., & Yagan, D. (2009). Optimal taxation in theory and practice. *Journal of Economic Perspectives*, 23(4), 147-74.
- Micah, L. C., Ebere, C., & Umobong, A. A. (2012). Tax system in Nigeria-challenges and the way forward. *Research Journal of Finance and Accounting*, 3(5), 9-15.
- Nasiru, M.G, Abdulai, M.A & Haruna, M.A(2016). Evaluating the impact of value added tax on the economy of Nigeria. *Journal of Accounting and Taxation*,8(6), 59-65.
- Njoku, D. (2015). Taxation and the Nigerian economic (1994-2012). *Management Studies on Economic System*,2(2),111-128

- Oby, O. P., Ekpali, O. M., Azubilce A. A., Opute, RD., & Ugochukwu, A. R. (2020). Evaluation of the impacts of using single and combined lowcost surfactants on enhanced oil recovery. *International Journal of Petroleum Science and Technology*, 14(1), 1-12.
- Ogbonna, G. N. & Appah, E. (2012). Impact of tax reforms and economic growth of Nigeria, *Current Research Journal of Social Sciences*, 4(11), 62 - 68.
- Ogbonna, G. N., & Ebimobowei, A. (2012). Impact of petroleum revenue and the economy of Nigeria. *Current Research Journal of Economic Theory*. 4(2), 11-17.
- Okoli, M.N.& Mathew, S. (2015). Correlation between value added tax (VAT) and national revenue in Nigeria.*Revenue Journal of Finance and Accountinf*,6(6)
- Okoye, F. (2019). The influence of tax amnesty programme on tax compliance in Nigeria.The moderating role of political trust. *Journal of Accounting and Taxation*,11(7),20-29
- Olaoye, C. O. (2009). Review of value added tax (VAT) administration in Nigeria. *Medwel Journal. com*.
- Olatunji. O.C. (2009). A review of value added tax (VAT) administration in Nigeria. *International Business management*, 3(4), 61-68.
- Onwuchekwa, & J. C., Aruwa, S. A. (2014). Value added tax and economic growth in Nigeria. *European Journal of Accounting Auditing and Finance Research*, 2(8), 62-69.
- Owolabi, S.A. & Okwu, A.T. (2011). Empirical evaluation of contribution of value added tax to Development of Lagos state economy. *Middle Eastern Finance and Economic Issues*.9 (1), 24-34
- Sadique, A. (2016). The impact of indirect tax oneconomic growth: The Nigerian experience Igbinedion University Journal of Accounting.2(62)
- Salti, N., & Chaaban, J. (2010). The role of sectarianism in the allocation of public expenditure in Postwar Lebanon. *International Journal of Business and Economy*, 6(5), 50 – 75.
- Slemrod, I. B. (2020). The impact of the tax reform act of 1986 on foreign direct investment to and from the United States. *NBER Working Paper*, (w3234).
- Smith, A., Islam, A.& Moniruzzaman, M. (2011). Consumption taxes in developing countries the case of the Bangladesh VAT. *International and comparative journal* 32(2),283-316
- Tabachmel, B. G., & Fidell, L. S. (1996). The effect of internal and external factors on the business success of agric-based exporting small and medium scale enterprises. *Journal of finance and economics*.6 (3),87-85
- Teera, J. M. (2003). Determinants of tax revenue share in Uganda. *University of Bath Economic and Sustainable Development*, 4(6), 190-201
- Uche, T. A. (2021). Effects of electronic banking on financial performance of deposit money. *International Journal of Accounting and Finance* 16(3), 71-84
- Ugochuchwu. M. A, & Ajubike, J. U. B, (2016). Value added tax and economic development in Nigeria. *International Journal of Development and Economic Sustainability*,4(3),1-40
- Unegbu, A.O. & Irefin, D. (2011) Impact of value added tax on economic development of emerging nations, *Journal of Economics and International Finance*, 5(2), 25 – 38.
- Yadirichukwu, I.& Ebunda (2012). Analysis of the formation and impact of economic growth in Nigeria.*Internattional Journal of Accounting and Financial Reports*,2 (2)