



# Impact of Value Added Tax on Economic Growth of Nigeria

Iwegbe, Evelyn <sup>1†</sup> and Daddau, Haruna <sup>2</sup>

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## Abstract

*The bond between Nigeria's economic growth and value added tax was empirically investigated in this study. The Central Bank of Nigeria (CBN) provided time series data covering the gross domestic product (GDP), total revenue (TR), and value added tax (VAT) revenue from 1994 to 2022. Both descriptive statistical methods and simple regression analysis were used to analyze the data. As stand-ins for Nigeria's economic growth, TR, and GDP were the dependent variables, and VAT was the independent variable. Descriptive statistics reveal significant fluctuations in these variables, reflecting diverse economic conditions and policy changes. Strong positive correlations were found among GDP, TR, and VAT emerging as a significant predictor of VAT in regression analysis. The findings indicate that economic growth, as captured by GDP, is a crucial driver of VAT revenue, highlighting the importance of policies aimed at stimulating economic growth while considering the broader fiscal context for balanced and sustainable development.*

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## Introduction

Taxes have a long history that extends back thousands of years to the era of ancient civilizations. Governments levy taxes on residents and businesses to raise funds for the purchase of public goods and services, for example, ancient Egyptians imposed taxes on various goods and labor (Adams, 2001). It is an essential part of the budgetary policies of governments and is used to finance a range of public goods and services, including schooling, infrastructure, and defense. The state's main source of revenue is taxes, which are used to raise the necessary funds to maintain public spending (Dada, Oyeneye & Dahn, 2014). In Nigeria, taxes are categorized according to their nature and the person who is primarily responsible for paying them. First, there are direct taxes, which include capital gains tax, corporate income tax, and personal income tax. These taxes are imposed directly on people or organizations. Usually, the taxpayer's income or profits are used to determine these taxes. There are indirect taxes imposed on products and services instead than directly on profits or income, and they are the second type (Ajibola & Ojo, 2017; Lateef, Lasisi, Adegboye, Ajepe & Isife, 2022). This category includes excise taxes, customs duties, value-added tax (VAT), and stamp duties. Indirect taxes are

*affiliation:* <sup>1,2</sup>, Department of Accounting, Kaduna State University.

*email:* [evelyniwegbe@gmail.com](mailto:evelyniwegbe@gmail.com); [harunadaddau@kasu.edu.ng](mailto:harunadaddau@kasu.edu.ng)

typically paid by customers at the time of purchase and are included in the cost of products and services. In addition, there are special taxes such as the education tax, which is imposed on business earnings to support the growth of education in Nigeria, and the petroleum profit tax, which is applied to enterprises engaged in petroleum operation (Federal Inland Revenue Service, n.d.-a; Federal Inland Revenue Service, n.d.-b).

Gbenga & Nicholas, (2023) asserted that every kind of tax has a distinct function; some are used to finance infrastructure and public services, while others control consumption and promote business ventures. To properly navigate Nigeria's tax system, policymakers and taxpayers alike must be aware of these distinctions. The effects of taxes on economic growth are complex and can be both favorable and unfavorable. Positively, taxes can be used to fund public investments in infrastructure and other areas that support economic expansion. Ogbonna & Ebimobowei (2012) stated that tax money is available to governments for the construction of transportation networks, roads, and bridges. These projects improve economic efficiency and facilitate the flow of products and services to both individuals and enterprises. But high tax rates can also be a hardship for people and companies, deterring them from working, saving, and consuming, which could lead to slower economic growth and lower levels of development.

Nigeria's economy nevertheless faces issues like instability, hyperinflation, poor infrastructure, a lack of key services, unemployment, and price volatility, even with efforts to collect taxes. The actual benefits that governments may offer their citizens are reduced when tax monies are used inefficiently. Governments can mobilize and allocate resources through fiscal policy, particularly in regions where there are deficits, with the goal of improving the welfare of all citizens (Dada et al., 2014). Numerous earlier studies on the connection between taxation and economic expansion in Nigeria have taken a broad approach to the subject, not focusing on any one particular tax form. This research intends to fill a void in the literature by carrying out a more extensive examination of the overall impact of Nigeria's tax revenue system on economic expansion. This is especially important given the government's recent efforts to implement economic reform and diversify the economy. This paper focuses on VAT, a particular kind of taxation. This study tries to give a more thorough understanding of how taxing affects economic growth in Nigeria by examining the relationship this tax has on growth.

While many researchers appear to concur that Nigeria's economic development and growth are positively impacted by value-added taxation, or VAT (as demonstrated by the works of Ajakaiye, 2000; Oto & Wayas, 2024; El-Yaqub & Musa, 2024; Olatunji, 2013; Sanni, 2012), some hold dissenting opinions (as demonstrated by the works of Obadiaru, Eseosa & Brian-Kufre, Okon & Ayeni, Adebajji, 2024; Fasoranti (2013), Okoyeuzu (2013), and Basila (2010). The largest time range covered in the literature, 29 years, from 1994 to 2022, is used in this study to address discrepancies in earlier research. This extended time span enables a comprehensive examination of long-term patterns in the influence of VAT on the economic growth of Nigeria. This research provides a more accurate knowledge of how VAT affects Nigeria's economic performance than previous studies that took a broader approach to the economy by focusing on important variables like GDP and total government revenue.

Furthermore, by contrasting Nigeria's VAT system with those of comparable sub-

Saharan African nations, the analysis closes a big gap. By comparing Nigeria's VAT policy to that of other nations, this comparative analysis seeks to determine how successful Nigeria's VAT policy has been and offers insights that may inform future policy choices. The overall goal of this comparative, long-term, and targeted strategy is to improve knowledge of the function of VAT as an economic instrument in Nigeria. The purpose of this study is to determine if Nigeria's economic growth and VAT are related. Since most indicators of the growth of the economy are either non-existent or insufficient in Nigeria, it is more appropriate to discuss the country's economic growth rather than its economic development. Thus, the study seeks to: (a) determine the impact of value-added tax on GDP (gross domestic product); (b) ascertain the effect of value-added tax on total revenue (federal government).

## **Literature Review**

### **Conceptual Framework**

#### *Value Added Tax*

Value added tax, or VAT, is a consumption tax that is paid to the value added at each stage of the supply chain where products and services are produced. By outlining the essential ideas of Value Added Tax (VAT), its historical context in Nigeria, its function in the economy, and its distinctions from other tax regimes, this section seeks to establish a strong basis (Ajakaiye, 2000). Value added taxes are levied on consumption based on the value incorporated into goods and services across the whole production and delivery cycle. Because it is an indirect tax, the ultimate customer is ultimately responsible for paying it. Registered companies that serve as middlemen in the supply chain and collect VAT then send the money to the appropriate tax authorities (Folorunsho 2023). Nigeria's VAT system was first implemented in 1993, taking the place of the old sales tax structure. The Value Added Tax (VAT) was first implemented in an attempt to lessen reliance on oil revenue and diversify the government's sources of income. Nigeria's value-added tax (VAT) rate was originally established at 5%, however it has since been adjusted to reflect both governmental and economic goals. The VAT Act's Section 4 is amended by raising the VAT rate from 5% to 7.5%. 7.5% was changed as the VAT rate, taking effect on February 1st, 2020. Therefore, as on February 1, 2020, Nigeria would apply a new 7.5% tax on all taxable supplies of commodities and amenities (Federal Inland Revenue Service [FIRS], 2021).

However, many developing nations have embraced VAT over the previous 25 years. Recent research from the IMF indicates that value-added taxation, or VAT, is an effective instrument for increasing income and modernizing the tax structure, yet only if the tax is properly constructed and administered (Kolawole, 2019). The most notable and most striking was the quick increase in value-added tax. VAT's evolution during the last decades of the 20th century was hardly discussed outside of theoretical contexts. Approximately 25% of global tax revenue is generated by it, making it a crucial part of the tax systems in more than 120 nations. A tax, which derives from the Latin term *tax*, is a required monetary payment or other type of levy that a government agency places on a taxpayer (a person or another legal entity) to cover certain public costs. Non-payment of taxes, in addition to tax evasion or resistance, is illegal. Taxes may be paid directly to the government or indirectly through labour equivalents or cash. In Ancient Egypt, taxes were first recorded between 3000 and 2800 BC. A consumption tax known as value added tax is imposed at every step of the consuming process of products or services and is

paid for by the customer who uses the product or service in the end, according to Onwuchekwa & Suleman (2014). It is a levy imposed on commodities sales throughout the whole production process. Its distinguishing characteristic is that it offsets the taxes a firm must levy on sales with the taxes it pays on its material inputs. Revenue is collected at every stage of production, in contrast to retail sales tax, which only collects tax at the moment of sale to the final customer.

### *Economic Growth*

Development in the economy refers to more than just growth. According to Kiely (2001), the process through which a nation's population increases gradually from a low-income, traditional economy to a high-income, modern economy is known as economic development. Its scope includes the policies and legal frameworks that a nation implements to improve the social, political, and economic standing of its people. Weil (2008) distinguished between economic development and economic growth, arguing that the latter refers to advancements in the fields of social and technical sciences. It suggests a shift in the manufacturing process for goods and services rather than just a larger scale rise in output made possible by the same old production techniques. However, economic growth simply refers to a rise in quantitative output; a change in the Gross Domestic Product (GDP) may or may not occur. The total value added by all economic activity occurring inside a nation's borders is known as its GDP. Improvements in several metrics, including the poverty rate, life expectancy, and literacy rate, are frequently associated with economic development. The human development of a nation, which includes factors like health, road system, safety, level of agricultural mechanization, living standards, and education, is correlated with its economic development (Kiely, 2001).

The contrast between rapid and sustained economic expansion is a closely related concept. Growing through the use of more resources is known as extensive growth (land, labor, and capital). Intensive growth is expansion attained by making better (productive) use of a given number of resources. Development in the areas of individual safety and liberation from social fear is necessary for intensive growth (Zhang, 1996). Therefore, development needs to be a multifaceted process that includes significant adjustments to national institutions, public attitudes, and social structures in addition to accelerating economic growth, lowering inequality, and ending poverty. The essence of development is the entire spectrum of change that occurs when a social system adapts to the many fundamental wants and aspirations of people and social groups within it, shifting from a situation that is generally seen as unsatisfactory to one that is thought to be better on a material and spiritual level.

### **Theoretical Framework**

These theories form the foundation of this investigation.

#### *Taxation theory*

Taxation theory offers a fundamental understanding of how taxes, including VAT, affect economic behaviour and the overall economy. Richard Musgrave and Peggy Musgrave's seminal work, "Public Finance in Theory and Practice," explains how taxes can lead to efficiency losses if they distort economic decisions. VAT, being a consumption tax, is generally considered less distortive compared to income taxes. It can potentially improve efficiency by taxing consumption rather than savings or investment. However, according to Musgrave, P. B. and R. A. (1989) VAT is often criticized for its regressive nature, implying that those with lower incomes, who

spend a larger proportion of their income on consumption, may be disproportionately affected. This regressive impact raises equity concerns, particularly in developing countries like Nigeria (Musgrave, R. A., & Musgrave, P. B. 1989).

### *Endogenous growth theory*

Economists like Paul Romer established the endogenous growth theory, which emphasizes the contribution of internal elements like innovation and human capital to economic growth. VAT revenues, if efficiently used, can fund critical public investments in education and health, thereby enhancing human capital and productivity. Additionally, allocating VAT revenues to research and development can foster technological advancements and spur long-term economic growth. This theory suggests that sustainable economic growth is driven by factors within the economy, and strategic use of tax revenues can significantly impact these growth drivers. Romer (1990).

### **Previous Studies**

Several investigations have been carried out concerning the relationship between economic growth and value added tax. Kwanti and Dauda (2022) utilized secondary data, mostly from the Central Bank of Nigeria and the National Bureau of Statistics, to investigate how value-added taxation (VAT) affected the expansion of Nigeria's economy during a 26-year period, from 1994 to 2020. The investigation sought to determine the statistical significance of VAT and its impact on economic variables using a regression statistical model. The main conclusions showed a strong and favourable correlation between Nigeria's economic growth and VAT. Furthermore, it was discovered that VAT had a favourable effect on federally collected revenue, indicating that it is crucial in determining the government's revenue patterns. The analysis concluded that VAT had an impact on Nigeria's revenue structure and economic growth trajectory. Several recommendations were made considering these findings. Among them was strengthening the oversight of VAT collection to guarantee efficiency and justice, therefore increasing government revenue. To optimize the tax's potential for revenue generation, the study also underlined the necessity of preventing insiders from collecting VAT illegally. It also suggested using VAT revenues to raise living standards and expand infrastructure, including power, transportation, and communication systems. It was believed that this well-considered allocation of cash would improve Nigeria's ability to produce and encourage taxpayer compliance.

Value-added tax's impact on Kenya's economic growth from 1973 to 2010 was studied by Owino (2019). Because econometric exposition can be used to ascertain the direction and degree of correlations between variables, the study selected for it. The model was estimated using the ordinary least squares approach. The outcome shows that value-added tax and economic growth in Kenya have a positive but negligible association. The analysis concludes that there is not a big enough effect of value-added tax on the economy to affect economic growth. Emmanuel (2013) used regression analysis to examine how the Value Added Tax (VAT) affected Nigeria's economic growth between 1994 and 2010. The analysis's findings demonstrated that VAT significantly affects both GDP and overall tax income. In a similar vein, Olatunji (2013) examined the 1990–2003 period in Nigeria and the connection between VAT and inflation. He discovered that, when VAT was first implemented in 1994, the

rate of inflation was significantly lower than it had been in any other year since 1990, suggesting that VAT did not contribute to inflation. Adereti et al. (2011) used both descriptive statistical methods and simple regression analysis to study the relationship between VAT and Nigeria's economic growth from 1994 to 2008. Results indicated that while VAT revenue accounted for up to 95% of major fluctuations in GDP in Nigeria, the ratio of VAT revenue to GDP averaged 1.3%, compared to 4.5% in Indonesia. The link between GDP and VAT revenue is robust and positive.

Onoja and Ibrahim (2020) used regression analysis to examine the connection between tax income and Nigeria's economic expansion between 2003 and 2017. The study revealed a noteworthy correlation between VAT and GDP. This is in line with the findings of Harvest and Ataisi's study from 2022, which looked at the connection between GDP, VAT, and Nigeria's economic growth, between 2000 and 2020. The effect of value-added tax on Nigeria's economic expansion between 1994 and 2012 was examined using econometric analysis by Chigbu and Ali (2014). The results demonstrated that VAT had a beneficial impact on economic growth as measured by real GDP using the Engle and Granger cointegration technique. Additionally, neither a short-term nor long-term association between VAT and GDP was found in the results. Ajakaiye (2000) employed a Computable General Equilibrium (CGE) model to examine how the VAT affected significant sectoral and macroeconomic data, as it was believed to be suitable for Nigeria. The analysis produced three scenarios. In order to mimic the anticipated Nigerian situation, the research assumed that the government implemented an active fiscal policy involving the re-injection of the VAT money via increases in government expenditure in conjunction with a hypothesized non-cascading treatment of the VAT. Two more simulations looked at the interaction between a VAT cascading treatment and an active fiscal policy, as well as a passive fiscal policy and a non-cascading treatment. It found out that the scenario that most closely resembled the reality in Nigeria was the one in which a cascade treatment of VAT combined with an aggressive fiscal policy had the greatest detrimental consequences on the economy. In this scenario, the price index climbed by 12%, the VAT was more than 3% lower than in the first, and the profit and wage incomes decreased by 8.54% and 12.27%, respectively. The GDP fell by 11.34% overall. The researcher noted that this presents a serious risk to the long-term viability of VAT. Wayas & Oto (2024). Using data from 2003 to 2022, the study examined the relationship between Nigeria's value-added tax (VAT) and economic indicators. It was discovered that VAT revenue has a major impact on GDP, TE, and TR when analyzed alongside total revenue (TR), total expenditure (TE), and GDP. Although government expenditure (TE) and VAT revenue have a high association, it is unclear how the funds are directly allocated to industries like health or education. The report suggests creating the Value Added Tax Fund (VATFund) in order to strategically distribute VAT money to important industries including health, power, and agriculture in order to improve public welfare and economic development. The study conducted by El-Yaqub & Musa (2024) examines the impact of Petroleum Profit Tax (PPT), Companies' Income Tax (CIT), and Value Added Tax (VAT) on Nigeria's economic growth between 1986 and 2021. The links between them and GDP are examined utilizing annual time series data from the CBN and NBS along with a Vector Error Correction Model (VECM). Important discoveries show clear impacts, stable long-term equilibrium linkages, and causal relationships between GDP and the tax components. It demonstrates that VAT has considerable positive short- and long-term effects on GDP, while PPT has a modest initial impact that

grows more pronounced over time. CIT initially increases GDP but has negative long-term effects. Research recommendations include tackling inefficiencies in the petroleum industry, creating a business-friendly atmosphere to increase the VAT base, and improving tax compliance through better public services.

Obadiaru, Brian-Kufre, and Ayeni's (2024) study examines how tax revenue affected Nigeria's economic growth between 1991 and 2021. Tax information was sourced from the Federal Internal Revenue Service (FIRS) and the Nigerian Bureau of Statistics (NBS), while the Nigerian economy was represented using economic data taken from the Central Bank of Nigeria's (CBN) 2021 Statistical Bulletin. The GDP was used as the dependent variable in an analysis of value-added tax (VAT), corporate income tax (CIT), and personal income tax (PIT) as stand-ins for tax revenue. Diagnostic tests like the Augmented Dickey-Fuller unit root test for data stability and descriptive statistics for data normalcy were important methodological techniques. E-View version 9 was utilized as the statistical tool for the Autoregressive Distributed Lag (ARDL) approach. GDP was shown to be negatively impacted by value-added tax (VAT) and personal income tax (PIT), but positively impacted by corporate income tax (CIT) according to the ARDL analysis's findings. The study's conclusion was that there is a positive and significant correlation between tax revenue and the economic growth of Nigeria. It advises governments and tax authorities to put increasing tax income first to support economic growth, with a particular emphasis on industries that propel national economic progress.

## Methodology

The present investigation utilizes a quantitative methodology to explore the correlation between value-added tax (VAT) and economic growth in Nigeria. It makes use of both descriptive statistics and ordinary least squares (OLS) regression analysis. The research design utilized in this study is ex-post facto, which is appropriate for studying current conditions without requiring the manipulation of independent variables or laboratory experiments. The dataset used for analysis spans the years 1994 to 2022 and includes data on VAT revenue, federal government expenditure, and Gross Domestic Product (GDP). The Central Bank of Nigeria's (CBN) statistical bulletins are the source of the data. The used study model looks at the relationship between VAT revenue and GDP, economic growth, and total revenue. The data will be summarized using descriptive statistics, and the relationships between VAT and economic growth will be tested by OLS regression analysis using STATA 13 (Version).

## Model Specification

The study employed time series data for the period under study, 1994 - 2022 a period of twenty-nine years. The models for this study are specified as follows:

$$GDP = X_0 + X_1 VAT + et \dots\dots\dots (i)$$

$$TR = X_0 + X_1 VAT + et \dots\dots\dots (ii)$$

Where:

GDP = Gross Domestic

Product, VAT = Value Added

Tax,

TR = Total (Federally Collected)

Revenue et = error term

**Table 1. Concepts and Measurements of Variables in the Study**

<b>Variables</b>	<b>Definition</b>	<b>Measurements</b>
<b>Dependent Variables</b>		
GDP Variables	Gross Domestic Product	Endogenous
TR Variables	Total Revenue	Endogenous
<b>Explanatory Variables</b>		
VAT	Value Added Tax	Government Policy

## Results and Discussion

The data gathered for this investigation is presented, analyzed, and interpreted in this chapter. As a result, it requires using statistical methods to establish the foundation for testing the study hypotheses.

### *Descriptive Statistics*

The descriptive statistics of all the variables used in this study are presented below:

**Table 2**

### **Descriptive Statistic**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min Max</b>
<b>VAT</b>	29 1171.36	277.29	295.56	5.03
<b>GDP</b>	29 202365	59887.25	58706.30	1768.79
<b>TR</b>	29 6239.6	2205.69	1726.50	49.51

*Source: STATA Output*

The Value Added Tax (VAT) variable has a mean of 277.29 and a standard deviation of 295.56, as indicated by Table 2. VAT has a minimum value of 5.03 and a maximum value of 1171.36. The large variance and elevated standard deviation indicate significant fluctuations in VAT figures across the noted years. The Gross Domestic Product (GDP) variable has a 58706.30 standard deviation and a mean of 59887.25. The GDP figures span from 1768.79 at the lowest to 202365 at the highest. The wide range and high standard deviation suggest that the GDP has varied significantly over time.

The variable TR (Total Revenue) has a standard deviation of 1726.50 and a mean of 2205.69. TR has a minimum value of 49.51 and a maximum value of 6239.60. There is a lot of fluctuation in the total revenue data, as indicated by the large range and high standard deviation.



To sum up, the descriptive statistics show significant fluctuations in VAT, GDP, and TR throughout the dataset's 29 years, with large standard deviations indicating notable shifts in key economic variables over time.

**Table 3 Correlation Statistics**

	VAT	GDP	TR
VAT	1.0000		
GDP	0.9787	1.0000	
TR	0.9221	0.9226	1.0000

Table 3 presents a statistically significant, at the 5% level, correlation coefficient of 0.9787 between VAT and GDP, indicating a very strong positive relationship. This suggests that VAT tends to increase in tandem with GDP growth. VAT and TR exhibit a robust positive association, as evidenced by their 0.9221 correlation coefficient, which is statistically significant at the 5% level. This implies a relationship between higher TR and higher VAT.

At the 5% level, there is statistically significant positive link between GDP and TR, with a correlation coefficient of 0.9226. This suggests that TR tends to increase along with GDP growth.

According to Table 3, there is a very strong positive association between VAT and GDP, with a Pearson correlation coefficient of 0.9787. With a p-value (Prob > F) of 0.0000, the regression results demonstrate a F (1, 27) value of 614.76, indicating that the model is statistically significant. With an R-squared value of 0.9579, GDP accounts for 95.79% of the variation in VAT. The model's quality of fit is confirmed by the corrected R-squared value of 0.9564. The GDP coefficient is 0.0049275, meaning that the predicted increase in VAT is to be about 0.0049 units for every unit growth in GDP.

According to Table 4, there is a high positive link between VAT and TR, with a Pearson correlation coefficient of 0.9221. With a p-value (Prob > F) of 0.0000, the regression results demonstrate that the model is statistically significant with a F(1, 27) value of 153.40. With an R-squared value of 0.8503, TR can account for 85.03% of the variation in VAT. The model's goodness of fit is confirmed by the corrected R-squared value of 0.8448. With a TR coefficient of 0.1578595, an increase in VAT of roughly 0.1579 units is predicted for each unit rise in TR.

## Analysis of Model Estimation

Model 1

**Table 4 Simple Regression Analysis between VAT and GDP**

Source	SS	df	MS	Number of obs = 29			
				F(1,27) = 14.76			
Model	2343004.21	1	2343004.21	Prob> F =			
0.0000							
Residual	102903.45	27	3811.23888	R-squared = 0.9579			
				Adj R-squared =			
				0.9564			
Total	2445907.66	28	87353.8449	Root MSE =			
61.735							
vat	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]		
gdp	.0049275	.0001987	24.79	0.000	.0045197	.0053352	
cons	-17.80668	16.5248	-1.08	0.291	-51.71277	16.09942	

Source: STATA Output, 2024

Model 2

**Table 5 Simple Regression analysis between VAT and TR**

Source	SS	df	MS	Number of obs = 29			
				F( 1, 27) = 153.40			
Model	2079839.33	1	2079839.33	Prob> F = 0.000			
Residual	366068.324	27	13558.0861	R-squared = 0.8503			
				Adj R-squared = 0.8448			
Total	2445907.66	28	87353.8449	Root MSE = 116.44			
vat	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]		
tr	.1578595	.0127454	12.39	0.000	.131708	.184011	
cons	-70.90397	35.					

Source: STATA Output, 2024

## Discussion

Significant variations are found in the dataset's study, which covers the years 1994 to 2022, for the following important economic indicators: GDP, value added tax (VAT), and total revenue (TR). These variables' large ranges and high standard deviations suggest a variety of policy and economic developments over the observed time. There are significant positive correlations between these variables, according to the correlation study. The data indicates a strong correlation between VAT and GDP (0.9787), and TR (0.9221), indicating that rising GDP, and TR levels are linked to rising VAT. These associations are validated using regression analysis. GDP is a substantial predictor of VAT, as evidenced by the simple regression of VAT on GDP, which explains 95.79% of the variability in VAT. Likewise, substantial correlations are observed between VAT and TR. When GDP, and TR are included as variables in a multiple regression model, GDP continues to be the most significant variable.

## Conclusion and Implication

The examination of economic data spanning from 1994 to 2022 indicates significant fluctuations in important fiscal metrics, including Value Added Tax (VAT), GDP, and Total Revenue (TR). The robust positive correlations shown between these variables, especially the one between VAT and GDP, suggest that VAT revenue plays a major role in driving economic growth. This is corroborated by the regression analysis, which shows that GDP is a significant predictor of VAT. The robust correlation between GDP and VAT implies that policies intended to promote economic expansion may also serve to increase VAT collection.

Therefore, the findings imply that, *first*, the government must continue to employ VAT as a potent instrument for fostering economic growth in light of the substantial positive correlation that exists between GDP and VAT. Prioritizing policies that boost GDP growth is important since rising GDP will probably translate into more VAT receipts. A positive economic climate that promotes investment and productivity in important industries might help achieve this. *Second*, the substantial correlation between VAT and Total Revenue (TR) emphasizes how crucial effective VAT collection is to increasing government revenue. To prevent tax evasion and guarantee correct reporting, the government should modernize VAT collecting operations by putting in place digital tax filing systems, cutting down on bureaucratic inefficiencies, and bolstering auditing protocols. *Third*, ensuring economic stability is crucial for preserving VAT performance, as GDP is the most important determinant of VAT. Prioritizing measures to stabilize the economy—like reducing inflation, maintaining currency stability, and boosting investor confidence will facilitate GDP growth and, as a result, raise VAT collections. Finally, the dataset's variances imply that various sectors might react to VAT policies in different ways. The government ought to pinpoint high-growth industries and enact focused changes to the VAT law that optimize revenue without impeding sector expansion. Customizing VAT laws to the unique characteristics of these industries will improve revenue collection and promote economic growth in general.

## References

- Adams, C. (1993). *For good and evil: The impact of taxes on the course of civilization*. Madison Books. Retrieved from <https://archive.org/details/forgoodevilimpac0000adam>
- Ajaikaye, D. O. (2000). Macroeconomic effects of VAT in Nigeria: A computable general

- equilibrium analysis. *Journal of Public Economics*, 36(3), 305-321.
- Ajibola, O., & Ojo, J. (2017). *Taxation and tax management in Nigeria*. University Press.
- Alexander, A. A., Keyi, M. D., & Alfa, Y. (2019). Taxation and economic growth in Nigeria: Evidence from autoregressive distributed lag (ARDL) model. *International Journal of Innovative Finance and Economics Research*, 7(4), 143-151.
- Aliyu, A. B. (2020). Impact of tax revenue on economic growth in Nigeria (1981-2017). *Economic Growth in Nigeria*, 44(4), Federal University, Birnin-Kebbi.
- Anthony Kwanti, A., & Dauda, H. (2022). Impact of value-added-tax (VAT) on the economic growth of Nigeria (1994-2020). *Journal of Economics*, 1(1), 28811-2695.
- Chigbu, E. E., & Ali, P. I. (2014). Econometric analysis of the impact of value added tax on economic growth in Nigeria. *European Journal of Business and Management*, 6(18), 31-36.
- El-Yaqub, A., & Musa, I. (2024). Empirical analysis of the impact of tax on economic growth in Nigeria: Evidence from vector error correction model. *International Journal of Humanities and Social Science*, 12, 2321-9467.
- Emmanuel, U. C. (2013). The effects of value added tax (VAT) on the economic growth of Nigeria. *Journal of Economics and Sustainable Development*, 4(6), 1-9.
- Federal Inland Revenue Service. (n.d.-a). Education tax. Retrieved from <https://www.firs.gov.ng/education-tax/>
- Federal Inland Revenue Service. (n.d.-b). Petroleum profits tax. Retrieved from <https://www.firs.gov.ng/petroleum-profits-tax/>
- Federal Inland Revenue Service (FIRS). (2021). Clarification on the implementation of the Value Added Tax (VAT) Act. Retrieved from <https://old.firs.gov.ng/wp-content/uploads/2021/06/CLARIFICATION-ON-THE-IMPLEMENTATION-OF-THE-VALUE-ADDED-TAX-VAT-ACT.pdf>
- Folorunsho, L. (2023). *Understanding the value added tax system in Nigeria* (2023 edition). <https://doi.org/10.13140/RG.2.2.18078.31044>
- Gbenga, O., & Nicholas, E. (2023). Taxation and economic growth in Nigeria. *Journal of Finance and Economics*, 11(2), 17-32.
- Lateef, O. M., Lasisi, I. O., Adegboye, D., Ajepe, A., & Isife, B. N. (2022). Tax revenue collections and health care infrastructural development in Nigeria. *Journal of Finance and Accounting*, 10(1), 19-24.
- Musgrave, R. A., & Musgrave, P. B. (1989). *Public finance in theory and practice*. McGraw-Hill.
- Obadiaru, E., Brian-Kufre, O., & Ayeni, A. (2024). The impact of tax revenue on economic growth in Nigeria. *International Journal of Multidisciplinary Research and Growth Evaluation*, 5(1), 566-571. <https://doi.org/10.54660/IJMRGE.2024.5.1.566-571>.
- Odu, V. C. (2022). Value-added tax, revenue generation and economic growth in Nigeria. *Accounting and Taxation Review*, 6(1), 10-28.
- Ogbonna, G. N., & Appah, E. (2012). Impact of tax reforms and economic growth of Nigeria: A time series analysis. *Current Research Journal of Social Sciences*, 4(1), 62-68.
- Okoye, E. I., & Gbegi, D. O. (2013). Effective value added tax: An imperative for wealth creation in Nigeria. *Global Journal of Management and Business Research*, 13(1), 90-100.

- Onwuchekwa, J. C., & Aruwa, A. S. (2014). Value added tax and economic growth in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 2(8), 62-69. Retrieved from <http://www.eajournals.org>
- Onoja, E. E., & Ibrahim, A. S. (2020). Tax revenue and Nigeria economic growth. *European Journal of Social Sciences*, 3(1), 30-44.
- Oto, T., & Wayas, S. (2024). Value added tax and economic growth of Nigeria (2003-2022). *FUDMA Journal of Accounting and Finance Research*, 2(1), 15-30. <https://doi.org/10.33003/fujafr-2024.v2i1.74.15-30>
- Owino, O. B. (2019). An empirical analysis of value added tax on economic growth, evidence from Kenya data set. *Journal of Economics, Management and Trade*, 22(3), 1-1.
- Romer, P. M. (1990). Endogenous technological change. *Journal of Political Economy*, 98(5), S71-S102.
- Sanni, A. (2012). Current law and practice of value added tax in Nigeria. *British Journal of Arts and Social Sciences*, 5(2), 1-12.
- Value Added Tax Decree 102 (1993) Act, Cap. V1 L.F.N. (2014). Weil, D. N. (2008). *Economic growth* (2nd ed.) Addison Wesley.