



Review Article

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Value Added Tax, Public Revenue and Government Expenditure in Nigeria

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Abstract: The Impact of Value-Added Tax (VAT) on Public Revenue and Government Spending in Nigeria spanning from the period 1994-2021 was examined in this study. The goal of the research work is to evaluate the influence of Value Added Tax on government revenue vis-à-vis government spending. Secondary data source was explored in presenting the facts of the situation. The data were obtained from relevant literature, Central Bank of Nigeria Statistical Bulletin, Federal Inland Revenue Service Report, World Bank Report, and National Bureau of Statistics 2021 publications. The outcome of the Ordinary Least Square Linear Regression analysis showed a regression co-efficient and p-value on value-added tax (VAT) (0.541; $p=0.008<0.05$), capital investment (0.941; $p=0.03<0.05$), Labour force (0.615; $p=0.005<0.05$), FDI (0.673; $p=0.001<0.05$) and GDP (0.55; $p=0.035<0.05$) respectively, indicating a positive and significant relationship among the explanatory variables with public revenue. VAT trend showed a positive coefficient, which means that VAT figures rise year in and year out. In light of the findings, the report suggests that the government should critically examine the VAT collection and administration process, do away with bureaucratic red tape, and increase transparency so that businesses may coordinate their strategies with those of tax officials. And that organizations, businesses, and ministerial offices of governments are urged to be dependable, disciplined, and wise with public monies obtained through VAT by providing the infrastructure required to enhance Nigeria's economic activities and raise GDP. The government should also keep a close watch on VAT-eligible individuals to encourage quick remittance of VAT income and presentation of VAT invoices for an accurate tax audit by the Federal Inland Revenue Services (FIRS) to guarantee adherence to tax laws as at when due. Additionally, as higher standards of life are correlated with greater income per capita, the government ought to make conscious efforts to diversify the economy.

Keywords: Gross domestic product, Government expenditure, Income per capital, Public revenue, Revenue generation.

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INTRODUCTION

In the face of this foregoing uncertain future of Nigerian oil resources, the need to strengthen other sources of revenue cannot be over-emphasized. One of such sources is taxation (Uket, Wasiu & Essien, 2020). Taxation environments as well as its systems of administration in Nigeria have been in the spotlight in recent times. This accounts for the extensive research that has been conducted on the subject matter. Revenue generation from taxation is one of the major sources of revenue of all governments (Federal, State, and Local) in Nigeria. When it is accurately administered, taxes collected come back to taxpayers in the form of social amenities (Oyekale, Buraimoh, Ajayi-Owoeye, & Oyedokun, 2019; Mu, Fentaw & Zang, 2022).

A tax system represents one of the most effective means of mobilizing a nation's internal resources and it lends itself to creating an environment conducive for the promotion of economic growth for the three-tiered tax structure between the federal and other sub-national governments, each of which has different tax jurisdictions. The need for taxation among others, therefore, is to provide a material source of revenue for government in discharging its ever-growing obligations and commitments to its citizenry (Okoror, Uwaleke,

Mainoma, & Oyedokun, 2019; Emejulu, Onyekwelu, & Aandoakaa, 2019).

Taxation is the primary source of revenue to every government. It is a compulsory levy on economic agents of an economy by the government without any "quid-pro-quo". Though tax has been defined differently by various authors, the primary aim of any tax system is to raise funds through the public sector/domain for use in promoting government programs. In some instances, however, a tax may exist primarily, or at least very importantly, for regulatory purposes (Oyedokun, & Efonayi, 2018; Adebayo, Miriam & Amos, 2019).

One of the relatively new and important developments in the tax system is the emergence of Value Added Tax (VAT). VAT has gained the attention of the government of most country of the world, Nigeria inclusive, since it was launched in France in 1954. Studies also show that VAT as a major revenue source in Nigeria judging by its contribution to the National treasury has been on upward shift since inception in 1994 till date except for 2015 when there was a drop of 4% compared to the figure recorded in 2014, despite the reduction in VAT revenue generated in 2015 compared to 2014, the percentage contribution of VAT to GDP still increased from 17% to 21% in 2015. Thus, VAT

generated in 2021 which stood at N2.072trillion was 35% more than the figure presented in 2020 and 12.5% more than the budgeted figure of N1.84trillion and remain the highest figure the country has recorded since 2015 to date (Oyedokun, & Efionayi, 2018).

The main objective of this study is premised on the fact that despite the frequently changing fiscal and macro-economic policies, it remains a known fact that Nigeria government has still not fully harness her economic potential for rapid economic development. Hence, the study is carried out to evaluate the contribution of Value Added Tax to public revenue generation in Nigeria and its impact on capital expenditure using a wider scope of 1994-2021 in order to avoid a sweeping conclusion (Okoror, Uwaleke, Mainoma, & Oyedokun, 2019).

Objectives of the Study

The aim of the study is to investigate the effects of Value Added Tax (VAT) on revenue generation in Nigeria. Thus, other specific objectives are to:

- evaluate the contribution of value added tax to public revenue generation in Nigeria;
- ascertain how value added tax generation affect public infrastructure expenditure in Nigeria;
- examine the extent to which value added tax contribute to public spending on human capital development in Nigeria;
- assess the effect of value added tax generation on public military expenditure in Nigeria.

LITERATURE REVIEW

Concept of Taxation

Taxation is one of the forces at work in every economic environment which has direct influence on the behavior of economic agents. Imposition of taxes affects the income of the various agents as it is a compulsory levy imposed by the government (Federal, State, or Local) and other legal entities; on their citizens who are under every obligation to pay the assessed amounts, since default or evasion attracts legal sanctions (Bâzgan, 2018).

Taxation is a compulsory but non-penal levy by the government through its agent on the profits, properties, income, or consumption of its subjects or citizens. It is also viewed as a compulsory and obligatory contribution made by individuals and organizations towards defraying the expenditure of government (Adewinle, Fowokan, & Oyedokun, 2023). A charge levied by the government on the income or wealth of a person or corporate organization for the common benefit of all (Juliana, 2018). The term does not include specific charges made against a particular person or properties for current or permanent benefits and privileges accruing only to those paying such charges. Similarly, taxation is defined as the transfer of real economic resources from private sector to the public sector to finance public sector

activities. It may be inferred from the foregoing that taxation is the transfer of financial resources from private economic agents like households and corporate bodies, to the public sector to finance the development of society.

Note that the benefit received by the taxpayers from the government are not usually related to or based upon the tax collected from such taxpayers. Government use taxes to influence and control economic behavior, where the type of tax used bears on the regulatory objective.

Value Added Administration in Nigeria

As the name implies, VAT refers to the tax on value added. What is the Value Added? The Value Added of a firm is the difference between a firm's sales and its purchases of inputs from other firms. In other words, it is the amount of value a firm contributes to a good or service by applying its own factors of production which are Land, Labor, Capital, and Entrepreneur. The concept of Value Added Tax is a consumption tax that is levied at a particular stage in the sale of a product or service. In other words, it is an indirect tax imposed on consumers at every stage of the consumption process from the raw stage to the finished stage. The idea of Value Added Tax system in Nigeria actually started with the acceptance of the recommendation of a study group on indirect taxation in November 1991. The decision to accept the recommendation was made in the 1992 budget speech by the then head of state, General Ibrahim Gbadamosi Babaginda. This resulted in setting up the modified Value Added Tax (MVAT) committee on 1st June 1992 as recommended by the study group (Obaretin & Uwaifo, 2020).

Prior to the implementation of the 2020 Finance Act in Nigeria and under the VAT Act of 1993 as amended, it was obligatory for a seller/supplier to levy and pull together the VAT at a uniform rate of 5% on all billed sums for merchandise and services that are not exempted from VAT. However, with the introduction and implementation of the 2020 Finance Act, all materials and business activities that are not excused from VAT now attract a charge of 7.5% VAT, which accounts for 50% increase in the VAT rate. Sections 10 and 11 of VATA further offers that the difference between contribution VAT and production VAT. While contribution VAT refers to the tax paid to suppliers on the purchase of taxable materials and financial undertakings, the productivity VAT is the tax received from customers on the value of taxable supplies and business activities sold or rendered (Ibadin & Oluwatuyi, 2021).

Since the 1999 fiscal year, the federal state (including the federal capital territory), and local governments have each received 15%, 50%, and 35% of the earnings of VAT inflows into the VAT pool account monthly. The distribution of the VAT earnings is done in

a way that also takes into account Nigeria's revenue derivation concept (Okoror, Uwaleke, Mainoma, & Oyedokun, 2019; Alhussain, 2020).

In line with the enabling statute (Value Added Tax Act, 1993 as modified), below are the list of Vatable and Non-Vatable goods and services in Nigeria as enshrined under the Finance Act 2019 as amended effective 3rd February 2020 by the Federal Ministry of Finance.

Exempted Goods

The following goods are free from value-added tax in Nigeria according to the VAT Modification Act 2020:

All Medical and Pharmaceutical Products, Basic food Items, Books and Educational materials, Baby Products, Commercial Vehicles and their Spare Parts, Agricultural Equipment and products and Veterinary medicine, Fertilizers, Farming Machinery and Farming Transportation Equipment, All exports of goods and services, Plant and machinery used in export processing zone, Plant, Machinery and Equipment purchased for utilization of gas in the downstream petroleum operations, Magazines and newspapers, Locally manufactured sanitary towels, pads, or tampons, Proceeds from the disposals of short-term state, local government, and corporate bonds (including supranational bonds), Bonds issued by the Federal Government, Petroleum Products, Renewable Energy, Gas supplied by gas producing companies to Electricity Generating companies (GENCO's), Electricity generated by GENCOs and supplied to National Grid or Nigeria Bulk Electricity Trading Company (NBET) and Electricity Distribution Companies (DISCO's).

Service Exempt

Below are services exempted from being charged value-added tax;

Medical Services, Services rendered by microfinance banks, people's banks, and mortgage Institutions, Plays and performances conducted by educational institutions as part of learning, All Export Services, and Tuition relating to Nursery, Primary, Secondary and Tertiary Education.

Taxable Goods

According to the VAT Act 2020 as amended, the following items;

All goods manufactured and assembled in Nigeria, Goods imported into Nigeria, Second-hand goods, Household furniture and equipment, Jewel and jewelry, Textile, Cloth,

Carpet & Rug, Bear, wine, liquor, soft drinks, treated water, Vehicles and their spare parts excluding commercial vehicles and their spare parts, Perfumes and cosmetics (including toiletries), Soap and detergents, Mining and minerals, Office furniture and equipment, Electrical materials of description and Incorporeal Properties (formerly exempted before the Finance Act 2019).

Taxable Services

Below are vatable services under the VAT Act 2020 as amended services rendered by Financial Institutions to consumers, accounting services,

Provision of reports, advice, information, or similar technical service in the following areas:

- Management, financial, and taxation.
- Recruitment, staff, and training.
- Marketing research.

From the above-listed goods and services, it becomes obvious that Value Added Tax covers almost every aspect of our economic and human lives. It is a tax that most consumers pay without knowing, yet it helps the government generate substantial revenue for economic growth. The advocacy for the VAT Act 2020 as amended to replace the sales tax of 1986 was a result of its broad nature and wider coverage with few exemptions and only exports are zero-rated (Olatunji & Oluwatoyin, 2019).

Value-Added Tax Law Amendments Made Recently as Pertained to the Finance Act of 2019

The First Schedule of the VAT Act as well as Sections 2, 4, 8, 10, 14, 15, and 45 are all amended by the Finance Act of 2019. In line with the Nigerian Finance Act 2019, the Value Added Tax law has undergone the following significant revisions (Abate, 2019, Mehmood & Ahmad, 2022):

- (i) Services will be deemed to have been provided in Nigeria and therefore subject to VAT where the recipient is in Nigeria, regardless of whether the services were rendered within or outside Nigeria.
- (ii) Sharing formula among the three tiers of government are from the VAT pool are; FGN 15%, States 50%, and LGAs and area councils of the FCT 35% (with a net of 4 percent as the cost of collection by the FIRS).
- (iii) The Act further clarifies that the services rendered to the fixed base or permanent establishments of non-resident persons do not qualify as exported services and are therefore subject to VAT.
- (iv) An increase in the VAT rate from 5% to 7.5%.
- (v) Exemption of companies with an annual turnover of less than Twenty-Five Million Naira (N25,000,000) threshold from the requirement of filing VAT returns.

- (vi) Intangible products are now included in the definitions of supply and goods and services.
- (vii) The VAT statute introduces the reverse charge provision. This regulation mandates that receivers of goods and services provided in Nigeria self-report the value-added tax (VAT) on products acquired from non-residents and remit the tax due on the transaction in the currency of the transaction on or before the due date.
- (viii) Removal of the requirement for foreign entities carrying on business in Nigeria to register for VAT in Nigeria and include VAT charges in their invoices.
- (ix) The management of linked parties and the removal of the VAT charge on the sale or transfer of business assets.
- (x) Incorporation assets, such as stakes in oil concessions, are now included in the definition of taxable goods. This may be taken to suggest that stocks are now subject to VAT.
- (xi) The VAT remittance must be done on a cash basis, meaning that the difference between the VAT output and VAT input must be paid on or before the 21st of the following month.
- (xii) For VAT exemption, a detailed explanation of what comprises basic food products under the VAT Act has been established.
- (xiii) The definition of goods and services has been expanded to cover intangible items that a person has an ownership interest in, or derives benefit from, and which can be transferred to another person other than land.
- (xiv) Registration as a VAT agent within the first six months from the date of commencement of trade has now been removed, hence companies to immediately register for VAT upon commencement of business.
- (xv) The penalty for failure to register has been increased from N10,000 to N50,000 for the first month of default, while subsequent months of default will now attract N25,000 as against previously N5,000.
- (xvi) A company that permanently ceases to carry on all its business or trades in Nigeria shall notify the service of such cessation within 3 months for the purpose of deregulation.

THEORETICAL FRAMEWORK

Theory of Laffer Curve

Several theories were reviewed in the course of the work, however, because of the significance of increase in VAT rate to public revenue and in turn GDP hence the need to focus more on the Laffer Curve theory. The theory postulated the theoretical relationship that exist between government revenue and an increase in VAT rate. The theory was demonstrated with a curve based on the observation that government revenue would continue to increase as VAT rate increase within a particular threshold of 0% - 100% and that where the rate

is more than 100% threshold, no money or increase in government revenue would be guaranteed as taxpayers would engage tax evasion.

As popularized by supply-side economist Arthur Laffer, a curve is depicted as a graph that begins with a tax rate of 0% and no revenue, increases to a maximum rate of revenue at a middle tax rate, and then drops down to zero revenue at a 100% tax rate (Lin & Jia, 2019).

Other theories reviewed among others are; the Theory of Demand, Benefit Received Theory of Taxation, Convenience Theory, Expediency Theory, Cost of Service Theory and Resource Based Theory.

Empirical Review

Some researchers opined that most economy relies on income from taxation for its development, and that in addition to its use as a means of raising government revenue, it is also, often used as an instrument of regulating the economy; redistribute wealth and inducing preferred modes of behavior, particularly consumption patterns and investment choices. Their empirical study revealed that revenue generated through VAT has a significant influence on wealth creation in Nigeria and on total revenue generated in Nigeria. In their recommendation, they pointed out that Federal Inland Revenue Service should pay attention to the informal sector of the economy by creating VAT offices at the Local communities so as to generate more revenue and to fully achieve the objectives of wealth creation through Value Added Tax (Okeke, Mbonu & Amahalu, 2019).

Value Added Tax and Economic growth in Nigeria from 1994 to 2015 was examined. The econometrics methods of co-integration and ECM were employed as the main analytical techniques. The co-integration result revealed the existence of a long-run relationship among the variables. The Parsimonious Error Correction result revealed that Value Added Tax, exchange rate and interest rate have a significant relationship with economic growth in Nigeria during the period of study. While private domestic investment has no significant relationship with economic growth in Nigeria during the studied period. Also, the coefficient of the parsimonious ECM has the appropriate sign that is negative and statistically significant. Meaning that, the short-run dynamics adjust to long-run equilibrium relationship. The study therefore concluded that VAT revenue impacted on economic growth in Nigeria positively during the period of study (Tuomala, Weinzier, Adler, & Norheim, 2020).

The impact of VAT on the level of economic activities in Nigeria from its inception to 2014 was examined. The study uses secondary data which was analyzed using Johansen (1988) co-integration test. The quarterly data ranges from 1994 Q4 to 2014 Q4. The

study found evidence of a significant positive impact of VAT on economic growth. In the same vein, other government revenues, which include all oil receipts and other receipts into the federation account other than VAT were also found to be positively related to economic growth during the study period (L. J., Msugther, Henry & Upaa, 2020)

To evaluate the impact of VAT on government revenue generation and the influence of VAT on the financial standing of the Nigerian economy involving 1994 and 2014, the link amongst VAT, government total revenue, and GDP was examined was investigated. utilizing secondary data from the CBN statistics bulletin (2014), which was received from the Central Bank of Nigeria. The ordinary least squares (OLS) method was used in this investigation. Nevertheless, two distinct linear equations were approximated in an effort to determine the contributions of value-added tax on government total income and the expansion of the Nigerian economy. The Phillips-Perron unit root test was used to determine the strength of the relationship between the Value Added Tax and Government Total Revenue; the Correlation test was also used to determine the impact of the Value Added Tax on Economic Growth; and finally, the Descriptive Statistics test was used to determine the impact of the Value Added Tax on Economic Growth since the assessment takes the course of time into account. According to the analysis, Nigeria's Value Added Tax has a long-term, significant positive association with both the government's overall income and its Gross Domestic Product throughout the years under review (Ayanni, 2022)

METHODOLOGY

The study is intended to establish the relationship between Value Added Tax, Public Revenue, and Government Spending in Nigeria. An *ex-post facto* research design is adopted for this study while a time-series data was used to investigate this study. The data will be extracted from Federal Inland Revenue Service (FIRS), the National Bureau of Statistics and Central Bank of Nigeria Statistical Bulletin. The population of this study covers the entire Nigeria populace relating to Value Added Tax generated from production as well as the total revenue within the period of 1994 and 2021 as published by Federal Inland Revenue Service (FIRS), National Bureau of Statistics and Central Bank of Nigeria.

Model Specification

Following the theoretical model developed and the empirical works of previous studies, the adapted and modified model showing the relationship between value-added tax and revenue generation, while incorporating key control variables such as capital, labor, domestic credit to private sector, real gross domestic product, and foreign direct investment revealed the empirical model as specified:

$$REM_t = \alpha_0 + \alpha_1 VAT_t + \alpha_2 CAP_t + \alpha_3 LAB_t + \alpha_4 CPS_t + \alpha_5 GDP_t + \alpha_6 FDI_t + \mu_t \quad (3.1)$$

Where: REM is a row vector revenue mobilization variables measured by total public revenue, public infrastructure spending, government expenses on human capital development, and public military expenditure; CAP is capital investment measured by gross fixed capital formation; LAB is labour force; VAT is total value added tax; CPS is domestic credit to private sector; FDI is foreign direct investment; α_0, α_{1-6} are parameters; t is time; μ is stochastic term.

From the model developed for the study, a change in the level of revenue mobilization depends on the total sum of value added tax generated in the country. Hence, the independent variables and the moderating variables are positive determinants of dependent variables. Therefore, there supposed to be a positive relationship among the independent variables, moderating variables and the dependent variable. It means that income, domestic credit to private sector, labour, capital, and foreign direct investment will boost revenue mobilization.

The null and alternative hypotheses are as follows:

$$H_0 : \beta_1 = 0, \beta_2 = 0, \dots, \beta_n = 0 \text{ (no long-run relationship)}$$

Against the alternative hypothesis

$$H_0 : \beta_1 \neq 0, \beta_2 \neq 0, \dots, \beta_n \neq 0 \text{ (a long-run relationship exists)}$$

The computed F-statistic value will be evaluated with the critical values. The lower bound critical values assumed that the explanatory variables x_t are integrated of order zero, or $I(0)$, while the upper bound critical values assumed that x_t are integrated of order one, or $I(1)$. Therefore, if the computed F-statistic is smaller than the lower bound value, then the null hypothesis is not rejected and we conclude that there is no long-run relationship between the dependent variables and their determinants. Conversely, if the computed F-statistic is greater than the upper bound value, then variables share a long-run level relationship. On the other hand, if the computed F-statistic falls between the lower and upper bound values, then the results are inconclusive.

The Long-run model is given as:

$$REM_t = \alpha_0 + \alpha_1 VAT_t + \alpha_2 CAP_t + \alpha_3 LAB_t + \alpha_4 CPS_t + \alpha_5 GDP_t + \alpha_6 FDI_t + \mu_t \quad (3.1)$$

To distinguish the short-run impact from long-run impact, the error correction model framework is written as:

$$\Delta REM_t = \alpha + \sum_{i=1}^{N1} \delta_i \Delta REM_{t-k} + \sum_{j=0}^{N2} \eta_j \Delta VAT_{t-k} + \sum_{j=0}^{N3} \beta_j \Delta CAP_t + \sum_{j=0}^{N4} \theta_j LAB_{t-k} + \sum_{j=0}^{N5} \gamma_j \Delta CPS_{t-k} + \sum_{j=0}^{N6} \theta_j \Delta GDP_{t-k} + \sum_{j=0}^{N7} \gamma_j \Delta FDI_{t-k} + \alpha_1 VAT_t + \alpha_2 CAP_t + \alpha_3 LAB_t + \alpha_4 CPS_t + \alpha_5 GDP_t + \alpha_6 FDI_t + \mu_t \tag{3.2}$$

To determine the speed of adjustment in a co-integrating ARDL model, equation (3.2) can be re-specified to include an error correction term as follows:

$$\Delta REM_t = \rho I_{t-1} + \sum_{i=1}^{N1} \delta_i \Delta REM_{t-k} + \sum_{j=0}^{N2} \eta_j \Delta VAT_{t-k} + \sum_{j=0}^{N3} \beta_j \Delta CAP_t + \sum_{j=0}^{N4} \theta_j LAB_{t-k} + \sum_{j=0}^{N5} \gamma_j \Delta CPS_{t-k} + \sum_{j=0}^{N6} \theta_j \Delta GDP_{t-k} + \sum_{j=0}^{N7} \gamma_j \Delta FDI_{t-k} + \mu_t$$

Where:

REM = Row Vector Revenue Mobilization variables measured by total public revenue, public infrastructure spending, government expenses on human capital development, and public military expenditure; *CAP* = Capital Investment measured by gross fixed capital formation; *LAB* = Labour force; *VAT* = Total Value Added Tax; *CPS* = Domestic Credit to private sector; *FDI* = Foreign Direct Investment. $\delta, \eta, \beta, \theta$ and γ are the short-run coefficients and $\alpha_1 - \alpha_6$ are long-run parameters for the explanatory variables; ρ is the coefficient of the error correction term which must be negative t represents the periods under study; μ are the error term.

Diagnostic Tests

Data reliability and validity are two crucial determinants of credible research work. To control the incidence of unreliability of data, the data used in this analysis were obtained from the Central Bank of Nigeria (CBN), and the Federal Inland Revenue Service (FIRS). Both organizations are the primary institutions that generate the data required for the research while the threats to validity in the context of this research were by undertaking diagnostic tests such as; A cointegration test, Unit Root Test and Autoregressive Distributed Lag (ARDL).

RESULTS AND DISCUSSION OF FINDINGS

This chapter contains data presentation, analysis, and interpretation of results. In this chapter, descriptive and inferential statistics were used in this study to analyze the data. The inferential statistics utilized in this study is the time series regression analysis which comprised of correlation matrix, Variance Inflation Factor (VIF), Test of Hypotheses for the research questions, Auto-regression Distribution Lag (ADRL), Augmented Dickey-Fuller (ADF) and Philip-Perron (PP) test and Unit Root Test were all used to analysis with the use of secondary data that used E-view because it is a panel data which consist time series data and cross-section data.

Presentation of Data

Table 1: Data on the four hypotheses' GDP, Total Tax Revenues, and VAT

Year(s)	VAT (₦Million)	GDP (₦Million)	% Growth in VAT	Total Tax Revenue
1994	7,261	1,399,702	-	949,187.90
1995	20,761	2,907,358	186%	1,906,159.70
1996	31,000	4,032,300	49%	2,231,532.90
1997	34,000	4,189,250	10%	1,731,800.00
1998	36,000	3,989,450	6%	2,575,100.00
1999	47,100	4,679,212	31%	3,920,500.00
2000	57,500	6,713,575	22%	5,347,500.00
2001	91,800	6,895,198	60%	6,069,800.00
2002	108,600	7,795,758	18%	5,727,500.00
2003	136,400	9,913,518	26%	7,866,600.00
2004	159,500	11,411,067	17%	4,844,600.00
2005	178,100	14,610,882	12%	7,303,700.00
2006	221,600	18,564,595	24%	4,628,500.00
2007	289,600	20,657,318	31%	9,007,700.00
2008	401,700	24,296,329	39%	1,805,600.00
2009	481,400	24,794,239	20%	8,866,600.00
2010	564,890	54,612,264	17%	6,844,600.00
2011	659,154	62,980,397	17%	3,303,700.00
2012	710,555	71,713,935	8%	5,628,500.00
2013	802,684	80,092,563	13%	3,007,700.00
2014	802,965	89,043,615	0%	4,605,600.00
2015	767,330	93,426,656	-4%	7,466,600.00
2016	828,200	108,916,911	8%	4,944,600.00
2017	972,350	114,834,459	17%	7,503,700.00
2018	1,108,140	121,674,276	14%	4,728,500.00
2019	1,188,580	144,210,492	7%	5,207,700.00
2020	1,536,834	152,324,071	29%	4,605,600.00
2021	2,072,850	175,500,000	35%	5,866,600.00

Source: CBN Statistical Bulletin; Federal Inland Revenue Service, World Bank and National Bureau of Statistics Report 2021.

Table 2: Estimates of Regression using the Ordinary Least Square (OLS) method

Dependent Variables	REM
VAT (Value Added Tax)	0.551***(0.008)
CAP (Capital Investment)	0.941 (0.03)
LAB (Labour Force)	0.615 (0.005)
CPS (Credit to Private Sector)	0.657 (0.036)
GDP (Gross Domestic Product)	0.55 (0.035)
FDI (Foreign Direct Investment)	0.673 (0.001)
C (Regression Coefficient)	0.787***(0.000)
R ² (Reg. Coeff. Sq)	0.621790
Adjusted R ²	0.558755

Source: Researchers' E-View 9 result, 2023

$$REM_t = 0.787 + 0.541VAT_t + 0.941CAP_t + 0.615LAB_t + 0.657CPS_t + 0.55GDP_t + 0.673FDI_t + \varepsilon_t$$

The Ordinary Least Square (OLS) estimates, as well as significant statistics like R² and adjusted R², are included in the regression findings. The variance in Revenue Mobilization as a result of the six dependent variables was shown by the coefficient of determination (R squared) of 62 % (Value Added Tax, Capital Investment, Labour Force, Credit to Private Sector, Gross Domestic Product, Foreign Direct Investment) the remaining 38% of the variables were left out of the research. The findings revealed that there is a positive relationship between Value Added Tax, Public Revenue, and Government Expenditure in Nigeria. At a 5 % level, Value Added Tax invariably has a beneficial influence on revenue mobilization in Nigeria. Furthermore, the significant coefficient is 0.541, implying that a 1% increase in Value Added Tax will result in a 54% increase in Revenue Mobilization over time, but at a lower proportion. As a result, the more Value Added Tax, the more likely there is to be Revenue Mobilization; this was backed by a p-value of 0.008<0.05 level of significance.

Furthermore, the findings revealed a positive relationship between capital Investment and revenue Mobilization in Nigeria, with a regression coefficient of 0.941, indicating that Capital Investment is more closely linked to Revenue Mobilization. The significance of Capital Investment & Revenue Mobilization in Nigeria is also confirmed by the p-value of 0.03< 0.05. The conclusion is that a 1% increase in Capital Investment & Revenue Mobilization in Nigeria, leads to a 94% increase in Government Revenue in Nigeria. Similarly, data revealed a positive correlation between the field Labour Force and Revenue Mobilization in Nigeria, with a regression coefficient of 0.615, indicating that Labour Force is less related to Revenue Mobilization in Nigeria compared with Capital Investment. The significance of Labour Force is also confirmed by the p-value of 0.005< 0.05. The implication is that a 1% increase in the Labour Force leads to a 62 percent increase in Revenue Mobilization in Nigeria. Implementing a long-term Labour Force regime capable of increasing Revenue Mobilization in Nigeria.

Data revealed a positive correlation between Credit to Private Sector and Revenue Mobilization in Nigeria, with a regression coefficient of 0.657. The significance of the Labour Force is also confirmed by the p-value of 0.0036 < 0.05. The implication is that a 1% increase in Credit to Private Sector leads to a 65 percent increase in Revenue Mobilization in Nigeria. Implementing a good Credit to the Private Sector is capable of increasing Revenue Mobilization in Nigeria.

More so, data revealed a positive correlation between Gross Domestic Product and Revenue Mobilization in Nigeria, with a regression coefficient of 0.55. The significance of Gross Domestic Product is also confirmed by the p-value of 0.035 < 0.05. The implication is that a 1% increase in Gross Domestic Product leads to a 55 percent increase in Revenue Mobilization in Nigeria. Implementing import and export operation is capable of increasing our good and service through Revenue Mobilization in Nigeria.

In addition, data revealed a positive correlation between Foreign Direct Investment and Revenue Mobilization in Nigeria, with a regression coefficient of 0.673. The significance of Foreign Direct Investment is also confirmed by the p-value of 0.001 < 0.05. The implication is that a 1% increase in Foreign Direct Investment leads to a 67% increase in Revenue Mobilization in Nigeria. Implementing Foreign Direct Investment operation is capable of increasing services through Revenue Mobilization in Nigeria.

Test of Hypothesis

Hypothesis One

H₀₁: Value added tax has no significant effect on revenue generation in Nigeria. The computed t-value from the one sample t-test result was 13.714, but the table t-value was 1.812. This indicates that the computed t-value (13.714 > 1.812) is higher than the table t-value. Value Added Tax (VAT) is evident from this has effect on revenue. The study therefore, reject null hypothesis and uphold alternative hypothesis which states that Value Added Tax (VAT) has significant effect on revenue generated in Nigeria.

Hypothesis Two

H₀₂: There is no significant relationship between value Added Tax (VAT) and Public Infrastructure expenditure in Nigeria. The computed t-value from the one sample t-test table was 10.007, but the table t-value was 1.812. This indicates that the estimated t-value exceeds the table t-value ($10.007 > 1.812$). It displays that good accountability of Value Added Tax (VAT) has contributed to the development of public infrastructure in Nigeria. As a result, the study rejects the null hypothesis and supports the alternative hypothesis that Value Added Tax (VAT) leads to the development of public infrastructure through Gross Domestic Product in Nigeria.

Hypothesis Three

H₀₃: Value Added Tax (VAT) have no significant effect on public spending on human capital development in Nigeria. The computed t-value from the one sample t-test table above was 11.457, but the table t-value was 1.812. This indicates that the computed t-value ($11.457 > 1.812$) is higher than the table t-value. It demonstrates how Value Added Tax (VAT) has made it easier for businessmen to spend by removing their burdens and complexities. Thus, the analysis rejects the null hypothesis and supports the alternative hypothesis that Value Added Tax (VAT) have significant effect on public spending on human capital development in Nigeria.

Hypothesis Four

H₀₄: The generation of Value Added Tax (VAT) does not have any significant effect on public military expenditure in Nigeria. The computed t-value from the one sample t-test table was 13.461, but the table t-value was 1.812. This indicates that the computed t-value ($13.461 > 1.812$) is higher than the table t-value. It displays that good generation of Value Added Tax (VAT) has contributed to the development of public military in Nigeria. As a result, the study rejects the null hypothesis and supports the alternative hypothesis that Value Added Tax (VAT) leads to the development of public military expenditure through Gross Domestic Product in Nigeria.

DISCUSSION OF RESULTS

The finding implies that according to the first theory, VAT has little effect on overall revenue generation in Nigeria. We rejected this theory and adopted the alternative, which said that VAT had a considerable influence on public revenue, based on the findings of the empirical investigation. The result is consistent with several extant studies. Although this study did not take into account the long-run characteristics of the study's data, which covered a period of time, the results are compatible with those of experts who used the Ordinary Least Square estimation of multiple regression of Twenty - Seven (27) years (Ogar, Eyo & Arikpo, 2019) . The considerable impact of VAT

on total revenue seen in this study is consistent with research showing a strong positive impact of VAT on national income as determined by correlation analysis (Kovov, Malyshkin & Vicen, 2018).

The study, which tested the second hypothesis, found that there was no significant relationship between Nigerian public infrastructure spending and VAT, but that a two-year lag in VAT had a detrimental impact on GDP growth. This result is in line with negative but insignificant relationship between VAT and Public Infrastructure expenditure (Adewinle, Fowokan, & Oyedokun, 2023; Buettner & Tassi, 2023), This in this investigation was demonstrated by the VAT one-year lag. Because the same techniques were used in both investigations, our findings were consistent (Gillman, 2021).

Our results in relation to hypothesis three, which claims that value-added tax does not have significant effect on public spending on human capital development through GDP. It is also determined that the trend is not important. This provides the notion that there have been rises in VAT throughout time in capital development in Nigeria, demonstrating that the tax authorities were resolving VAT collection issues and removing systemic friction. Our finding aligns with other scholars, they reported that from 1994 to 2021, VAT increased steadily, indicating a favorable trend in VAT as demonstrated by this study (Nmesirionye, Jones & Onuche, 2019).

The four assumptions were investigated, and the results indicate that Value Added Tax (VAT) adds to both Nigeria's overall tax income and GDP growth. Furthermore, it emerges that the Value Added Tax (VAT) revenue objective affects the actual VAT during the research period¹¹.

CONCLUSION AND RECOMMENDATIONS

The study examined the effects of value-added tax on government revenue generation profile in Nigeria. The research demonstrated that value-added tax has a positive effect on government revenue generation profile in Nigeria thereby contributing to its economic growth and development as well as government spending in Nigeria.

The study further advised that if government increase its tax net on all vatable goods and services, the revenue base of the county will increase, and cause an upward surge on the growth of Nigeria economy.

The study recommended that the government should improve the living condition of citizens by the judicious utilization of value-added tax proceeds in an effective and efficient manner and that government should keep a watchful eye on those who are eligible to

pay VAT in order to encourage quick remittance of VAT income and submission of VAT invoice for accurate tax audit by the Federal Inland Income Services (FIRS) to guarantee adherence to tax laws as of the date of due.

REFERENCES

- Abate Y.T., (2019). Value-added tax assignment under the federal constitution: designated or undesignated? *Harmaya Law Review*, 8, 41-56.
- Adebayo, H. O., N. Miriam & Amos M.O., (2019). Appraisal of budgeting and economic growth in Nigeria. *Macroeconomics and Monetary Economics*, 15(6), 265-274.
- Adewinle, O. M., Fowokan, T. E. & Oyedokun, G.E. (2023). Effect of External Borrowing on Government Expenditure on Agriculture in Nigeria, *AFAR Multidisciplinary Journal of Management Sciences (MJMS)*. 5(2), 98-122. A Publication of The Association of Forensic Accounting Researchers (AFAR). <https://zenodo.org/record/8211595>
- Alhussain M., (2020). The impact of value-added tax (VAT) implementation on Saudi Banks. *Journal of Accounting and Taxation*, 12(1), 12-27. DOI: 10.5897/JAT2019.0378.
- Bâzgan, R. M (2018). The impact of direct and indirect taxes on economic growth: An empirical analysis related to Romania. *Proceedings of the International Conference on Business Excellence* 12(1), 114-127.
- Buettner T. & Tassi A., (2023) . VAT fraud and reverse charge: Empirical evidence from VAT return data, *International Tax and Public Finance*, 30, 849-878. <https://doi.org/10.1007/s10797-023-09776-y>.
- Emejulu, E.C., Onyekwelu U.L & Aandoakaa K., (2019). Effect of government budget on economic growth in Nigeria. *European Journal of Accounting, Finance and Investment*, 5(7), 93-105.
- Gillman M. (2021). Income tax evasion; tax elasticity, welfare and revenue. *International Tax and Public Finance*, 28, 533-566.
- Ibadin P.O., & Oluwatuyi B.T. (2021). Tax revenue, economic growth and human development index in Nigeria. *Journal of Taxation and Economic Development*, 20 (2), 88-96.
- Juliana, M. I. (2018). Effect of tax structure on economic growth in Nigeria. *International Journal of Innovative Finance and Economics Research*, 6 (1), 1-11.
- Kovov I.O, Malyshkin O. & Vicen V., (2018). Value added tax; Effectiveness and legal regulation in Ukraine and the European. *Economic Annals-XXI* 171, 5(6), 4-14.
- Lin B., & Jia Z., (2019). Tax rate, government revenue, and economic performance: A perspective of Laffer curve. *China Economic Review*, 56.
- Mehmood K., Ahmad S & Mehmood T. (2022). Does Laffer curve exist in the tax structure of Pakistan? A threshold regression analysis. *Journal of Economic Impact*, 4(1).
- Mu, R., Fentaw, N.M. & Zang, L. (2022). The impacts of value added tax audit on tax revenue performance; Evidence from the Amhara region, Ethiopia, *Sustainability*, 14 (10), 6105; <https://doi.org/10.3390/su14106105>.
- Msugther L. J., Henry YUA., & Upaa J.U. (2020). Casual relationship between taxation and revenue generation in contemporary Nigeria: (1997 – 2018). *International Journal of Innovation Research and Advanced Studies (IJIRAS)*, 7(5), ISSN: 2394 - 4404.
- Obaretin, O. & Uwaifo, F. N. (2020). Value added tax and economic development in Nigeria. The international organization for the accounting and taxation research group of the university of Benin in Benin City, Nigeria's faculty of management sciences.
- Ogar A., Eyo I.E., & O.F., Arikpo. (2019). Public expenditure and economic growth in Nigeria; VAR Approach. *European Journal of Economic and Financial Research*, 3(3), 36 – 60, ISSN: 2501-9430, ISSN-L: 2501-9430.
- Olatunji, O.C. & Oluwatoyin, A.E. (2019). Effect of corporate taxation on the profitability of firms in Nigeria. *European Journal of Economics and Behavioral Studies*, 11(1), 191-201.
- Amahalu, N. (2018). Effect of Tax Revenue on Economic Development in Nigeria. *International Journal of Research in Business, Economics and Management*, 2(4).
- Okoror, J. A., Uwaleke, U., Mainoma, M. A., & Oyedokun, G. E. (2019). Value added tax and infrastructural development in Nigeria. *Journal of Taxation and Economic Development*, 18 (2), 134-157. A publication of Chartered Institute of Taxation of Nigeria.
- Oyekale, P. J., Buraimoh, W. D., Ajayi-Owoeye, A.O., & Oyedokun, G.E. (2019). Value Added Tax and Economic Growth in Nigeria. *Journal of Accounting*, 8(1), 3-23. A publication of Association of National Accountants of Nigeria
- Oyedokun, G. E. & Efionayi, O. P. (2018). Emmanuel, O. G., & Prosper, E. O. (2018). Auto Regressive Distributed Lag Analysis of the Impact of Public Expenditure and Economic Growth in Nigeria. *The Journal of Applied Business and Economics*, 20(9), 52-62.
- Oyedokun, G.E. & Adewinle, O.M., (2023). External Borrowing, Government Expenditure and Road Construction in Nigeria. *Journal of Economics, Finance and Management Studies*. 6(7), 3015-3027. DOI: 10.47191/jefms/v6-i7-03 <https://ijefm.co.in/v6i7/Doc/3.pdf>
- Tuomala, M., & Weinzierl, M. (2022). *Prioritarianism and optimal taxation*. Cambridge University Press.