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VALUE ADDED TAX AND GOVERNMENT BORROWING: NIGERIAN EXPERIENCE

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ABSTRACT

The study investigated the effect of value added tax on government borrowing in Nigeria for the period 2011 to 2020. Quarterly time series data sourced from the Federal Inland Revenue Service (FIRS) and Debt Management office (DMO) were utilized for the work. The study found that Value Added Tax (VAT) has a positive and insignificant effect on government borrowing in Nigeria over the period of the study. The study concludes that value added tax does not have a significant effect in reducing the level of government borrowing in Nigeria. The study recommended that the fight against corruptions in the parastatals and agencies of government saddled with the responsibility of collecting and remitting indirect taxes to the treasury single account should be holistic instead of being selective. This would deter public office holders in these institutions from diverting these funds for personal use and would eventually translate to increase in government revenue and further reduce the level of borrowing by the government in Nigeria.

Keywords: Government Borrowing, Value Added Tax, Nigeria

INTRODUCTION

Tax is a mandatory payment made by all parties to the government of a country in exchange for needed services, without necessarily providing an explanation of how the funds were spent or matching the services with the funds collected. Anyanwu (1997) cited in Onwuchekwa and Aruwa (2014) defined tax as "a mandatory levy by the government on persons, companies, products, and services to generate revenue for operations of government and to create social fairness through the redistribution of income effect of taxes. Value added tax (VAT) is an indirect tax that is levied at a specific point during the sale of a product or service. According to Olatunji (2009), Nigeria's journey to a VAT system began in November 1991 with the approval of a study group's report on indirect taxation.

To raise the government's revenue potential and so improve people's welfare, a tax system is in place. The goal of VAT, regardless of the perspective from which it is regarded, is to increase government revenue. In Nigeria, the introduction of VAT in 1993 and its subsequent implementation in 1994 was a major success. For example, according to records from the Federal Inland Collection Service (FIRS), overall VAT revenue climbed from N 8.20 billion in 1994 to N 163.30 billion in 2004 within 10 (ten) years of introduction. In 2014, revenue reached N 616.90 billion, while in 2018, it reached N 1.7 trillion. The nation's total VAT revenue fell by N 53 billion in 2019, from N 1.7 trillion in 2018 to N 1.17 trillion in 2019.

In 2021, the Nigerian Budget shows a total deficit of more than N5 trillion and the 2022 proposed budget has a shortfall in revenue in the sum of N6 trillion which spurred the President Buhari administration to borrow in other to close up the gap.

In line with this study, most literature examines Value added tax and on the growth of the Nigerian economy like the work of (Orisadare & Fasoye, 2022; Afolayan, Okonkwo and Okaro 2021; Obaretin & Uwaifo, 2020). Most of the reviewed literature did not report any study on Value Added tax and government borrowing in Nigeria. The study examined value added tax and government borrowing in Nigeria.

Conceptual Framework

Value Added Tax

The Value Added Tax (VAT) is considered as a successor for the Sales Tax, which was established by Decree No. 7 of 1986 with unfolding and concerns influenced the decision to replace sales tax with VAT (Ogunbesan, 2015 and Soyode & Kajola, 2016). Among these are the following: Nigeria's sales tax base was narrow when it was implemented under Decree No. 7 of 1986.

Government Borrowing

Most emerging countries borrowed during the 1970s to finance their budget deficits and accelerate their economic development. Nigeria has recently accrued a large level of debt, which has had a negative impact on the economy. According to Soludo (2003), countries borrow for both macroeconomic and temporary deficit financing. The government's budget deficit in revenue spending and capital expenditure, the two categories of government expenditure, had to be met, hence the government had to borrow from public sources.

These sources are domestic, i.e., within Nigeria's borders, and international, i.e., from international creditors. The government's spending has soared as a result of the enormous challenges that the country's security, health, social, and agricultural sectors have faced.

According to the Nigerian Ministry of Finance's 2019 report, the amount borrowed by the federal and state governments is so large that after servicing the debt, just a small percentage of the Nigerian economy's various economic activity remains (Garba 2015). 'More monies were borrowed during the covid-19 period,' according to the finance minister. She also stated that the Nigerian economy must borrow for the next 45 years in order to be sustainable and stable.

Theoretical Framework

The research was guided by the Pareto Optimality.

The idea is directly related to the study of economic efficiency and income redistribution, as well as how they affect the economy's overall well-being. In practice, it aims to give tools to help government policymakers achieve positive social and economic results for the economy. The theory also aims to assess the costs and advantages of economic changes, as well as to steer public policy toward improving society's overall well-being (Bird and Gendron, 1993).

It is believed that Pareto Optimality ensures that societal welfare is maximized by ensuring that no resources are redistributed to benefit one individual without benefiting at least another. As a result of the signing of the 2020 Finance Bill into law, the Nigerian economy is advancing towards Pareto Optimality.

Empirical Review

Orisadare and Fasoye (2022) used the consumer price index (CPI) as a threshold to assess the impact of VAT on economic growth in Nigeria between 1994 and 2020. The results of a Threshold Vector Autoregressive (TVAR) technique were used to show that a VAT beyond the 10% threshold value endangers the economy, whilst a VAT below the 7.59 percent threshold value does not affect the economy and really increases people's well-being. As a result, it is advised that the Nigerian economy keep the lower VAT threshold in order to mitigate the impact of rising CPI on citizens.

Afolayan, Okonkwo and Okaro (2021) investigated value added tax rate change: Effects on inflation rate and government borrowing in Nigeria. They pointed that the Nigerian government's tax revenue, particularly indirect tax revenue, has been shown to be insufficient to meet the country's expanding needs. As a result, the Federal Government has approved the Finance Act 2020, which makes modifications to the Value Added Tax Act among other things. Their study noted that the country’s citizens' general lack of patriotism tends to undermine even seemingly good government measures. They further suggested that the government should have the

political will to establish a culture of transparency and accountability; apply VAT on all luxury products and imported goods with local replacements; and work toward institutionalizing the tax system so that no one can influence tax policies for personal gain.

Bank-Ola (2021) necessitates the research into the influence of the value added tax on Nigerian economic growth from 1999 to 2019. Time series data were used to test the Auto-Regressive Distributed Lag (ARDL) model. The analysis demonstrates that VAT has a negative and significant influence on economic growth in the short run, but a positive but small effect on economic growth in the long run. Inflation has a strong positive effect on economic growth, whereas interest rates have a significant negative effect in the long run. According to the findings, there is a long-term beneficial association between value added tax and economic growth in Nigeria. As a result, the Nigerian government should implement policies aimed at ensuring a stable and sustainable value added tax rate and administration through accountability, transparency, and the closure of systemic leakages in order to boost the country's economy and increase government revenue, ultimately leading to infrastructural development and economic growth.

Obaretin and Uwaifo (2020) investigate the impact of the Value Added Tax on Nigerian economic development from 1994 to 2018. A longitudinal research design was used in this study. The data for the study was obtained from the Federal Inland Revenue Service and the United Nations Data Bank, and it was analyzed using the Auto-Regressive Distribution (ARDL) regression estimate technique. The findings reveal that VAT has a favorable and considerable impact on Nigeria's economic progress. According to the report, the government should ensure that VAT income is spent on projects that benefit the country's residents, and tax audits of registered VAT collectors should be conducted on a regular basis to verify that the tax collected is returned to the right authorities.

To determine the importance of VAT reform, Jayeoba, Kwabai, and Adegbie (2016) assess the impact of VAT on the Nigerian economy from its inception to the present. The study used an ex-post-factor, descriptive, and analytical research approach. From 1994 to 2015, data on VAT and GDP were collected and examined to discover the link between the two. VAT has been found to have a favorable association with GDP. According to the model's coefficient, a 1% increase in VAT will result in a 0.88 percent increase in GDP. This demonstrates that VAT and GDP have a perfect positive correlation. As a result, a VAT reform becomes unavoidable.

Finally, VAT requires a complete rate overhaul as well as a precise description of exempted items and services. We recommend that the current 5% be increased to a minimum of 10%, that Integrated Tax Offices be strengthened to improve efficiency and effectiveness, that the Federal Inland Revenue Service address tax evasion, that the government use VAT revenue wisely to encourage tax payers, and that the government clearly define exempted goods and services so that vatable goods that are currently not vatable are charged.

Oluseyi and Mujeeb (n/a) evaluated the effectiveness of Nigeria's VAT system in order to assess its impact on economic development. The necessity of an adequate tax administration system to help the Nigerian government diversify its revenue stream is emphasized in a meta-analytic result from research on VAT administration in Nigeria. The heart of this study, which used two constructs to investigate the subject matter, is determining the link between effective VAT administration and economic progress (FCR and GDP). The reason stems from what appears to be a lack of linkage in research on the impact of VAT on development and how this tax tool can assist the government in moving away from a single revenue stream (crude oil). The data was analyzed using simple linear regression, which revealed a positive association between VAT, FCR, and GDP.

In Nigeria, Ihenyen and Mieseigha (2014) looked at taxation as a tool for economic progress. The Ordinary Least Square (OLS) technique was used to estimate Corporate Income Tax (CIT), Value Added Tax (VAT), and Economic Growth (GDP) using annual time series data from the

Central Bank of Nigeria (CBN) Statistical Bulletin from 1980 to 2013. The empirical conclusion reveals that in the Nigerian setting, the hypothesized link between corporate income tax, value added tax, and economic growth does exist. As a result, the findings provide intriguing evidence that taxes is a tool for economic growth in Nigeria. This result highlights the necessity for extra government efforts to ensure that taxpayers do not avoid and evade taxes, allowing revenue to be shared correctly across the economy.

The impact of the value added tax on Nigeria's economic growth was researched by Onwuchekwa and Aruwa (2014). The hypotheses were tested using the Ordinary Least Square approach. The finding demonstrates that VAT contributes significantly to the government's total tax collection and, as a result, to Nigeria's economic growth. Though not very rapid, VAT revenue growth was consistent. We need to increase VAT revenue to increase tax revenue. This can be accomplished not only by raising the VAT rate to 5%, but also by plugging any VAT revenue leaks, educating managers of companies operating in Nigeria about the importance of remitting VAT revenue, and providing proper training to the Federal Inland Revenue staff in charge of VAT revenue collection.

METHODOLOGY

Research Design

Based on the nature characterizing this study, the use of an explanatory research design is most appropriate which is known as the expos-facto research design. This research design is more effective where the variables involved are not subject to manipulation (Apere 2004).

Population of the Study

The population of the study is the Nigerian Economy in terms of Government Borrowings. Population is the totality of all the elements or variables under study from which the researcher will draws his sample.

Sample and Sampling Procedure

A sample of the study is the same as the population. The study concentrates on the Nigerian Government Borrowing (Debt) and Value added tax (VAT). The government borrowing or public debt covers duration of forty (40) years starting from 1980 to 2020.

Data Collection Method

The data were drawn from the Federal Inland Revenue service, Central Bank Statistical bulletin and Debt Management Office.

Model Specification

These models below show the functional relationship between Value added Tax and Government Borrowing.

The model of Edoumiekumo and Opukiri (2013) is augmented to arrive at the specification below.

GOVD = f(VAT) - - - - - eqn. 1

The econometric specification of equation 1 is;

$GOVD_t = b_0 + b_1VAT_t + U_t$ - - eqn. 2

Where;

b_0 is the intercept

GOVD = Government Debt

VAT = Value Added Tax

b_1 –are the coefficient of the explanatory variables.

U is the error or stochastic term

Analysis and Discussion of Findings

Data Analysis

Table 1: Descriptive Statistics

	GOVD	VAT
Mean	18327870	234.3108
Median	17122037	207.1424
Maximum	38004616	454.6883
Minimum	6493319.	152.7777
Std. Dev.	9300590.	68.15227
Skewness	0.421627	1.449263
Kurtosis	1.988446	5.005949
Jarque-Bera	2.890531	20.70881
Probability	0.235684	0.000032
Sum	7.33E+08	9372.430
Sum Sq. Dev.	3.37E+15	181144.5
Observations	40	40

Table 1 shows that characteristics of the data set used for analysis in this study. The table shows that the mean, minimum and maximum government public debt outstanding (GOVD) for the period under review were 18,327,870; 6,493,319 and 38,004,616 billion naira respectively. The skewness statistic value of 0.421627 for GOVD indicates that the series is positively skewed. This also means that the series is bent towards the right. The Kurtosis statistic value of 1.988446 for GOVD shows that the distribution is platykurtic in nature. This also goes to indicate that the series has a flat tail. The Jargue-Bera statistic value of 2.890531 and its corresponding probability value of 0.235684 shows that the series (GOVD) is normally distributed. This assertion is made because the probability value of 0.235684 is greater than 0.05, thus, the hypothesis of the GOVD not being normally distributed is rejected.

The descriptive statistics, Table 1 shows that the mean, minimum and maximum value added tax (VAT) for the period under review was 234.3104; 152.7777and 454.6883 billion naira respectively. The skewness statistic value of1.449263 for VAT indicates that the series is also positively skewed. This also means that the series is also tilt towards the right. The Kurtosis statistic value of 5.005949for VAT shows that the distribution is also platykurtic in nature as the kurtosis value is greater than 3. This also goes to indicate that VAT has a fat tail and its distribution is also peaky. The Jargue-Bera statistic value of 20.70881and its corresponding probability value of 0.000032 shows that the series (VAT) is not normally distributed. This assertion is also made because the probability value of 0.000032 is less than 0.05, thus, the hypothesis of the CD not being normally distributed is accepted.

To further show the properties of the series (data set), each of the series has been plotted against time to show their trends over the study period and is presented below.

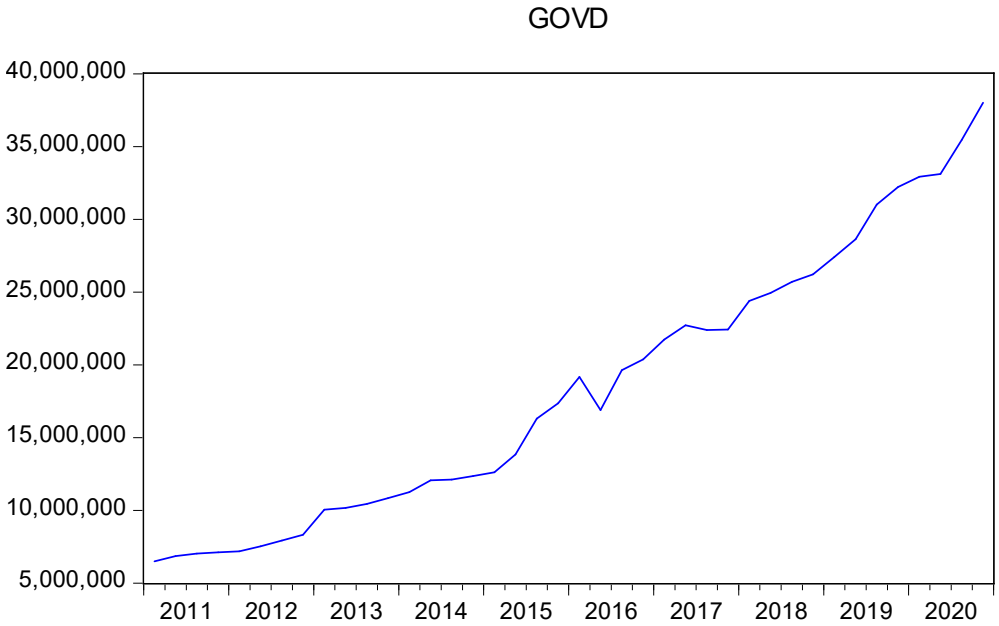

Figure 1: Trend analysis of government public debt outstanding between 2011 Qtr 1 and 2020 Qtr 4

Figure 1 also confirms the information in table 1 as the plot of GOVD shows a somewhat steady increasing pattern of movement, reaching a 38,004,616 billion naira highest point in the fourth quarter of the year 2020 and a lowest of about 6,493,319 billion naira in the first quarter of 2011. This also confirms that the variable GOVD maintained a steady rise over the period under review. What this implies is that the Nigerian government public debt outstanding (government borrowing) has been on a steady increase over the period of the study.

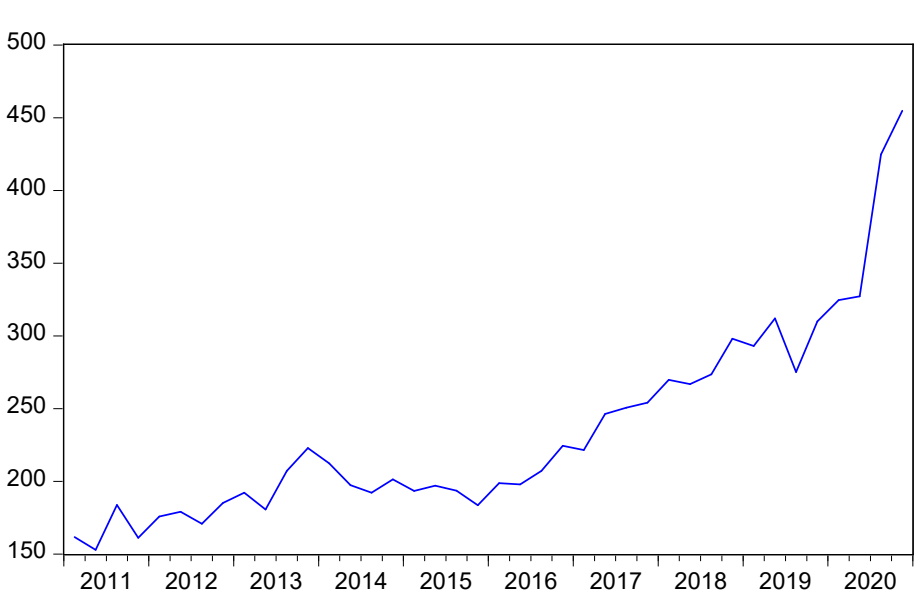

Figure 2: Trend analysis of Value Added Tax between 2011 Qtr 1 and 2020 Qtr 4

Figure 2 also supports the information in table as the plot of VAT also shows a somewhat steady increasing pattern of movement, reaching a 454.6883billion naira highest point in the fourth quarter of the year 2020 and a lowest of about 152.7777 billion naira in the first quarter of 2011. This also confirms that the variable VAT maintained a kindly of steady increase over the period under review. What this implies is that revenue accruing to the Nigerian government from Value

Added Tax has been on the increase between the first quarter of 2011 and the fourth quarter of 2020 on the average.

Table 2: Augmented Dickey-Fuller Unit root test results

Variable	Augmented Dickey-Fuller Result		Lag order	~I(d)	5% Critical Value
	Level	1st Difference			
GOVD	-1.253	-7.376*	4	I(1)	-3.529758
VAT	-0.007	-7.273*	4	I(1)	

Where * denotes significance at 5% and the rejection of the null hypothesis of the presence of unit root.

Source: Author's Computation

The ADF unit root test result in Table 2 shows that the variable became stationary after differencing once, that is of order one (I(1)).

Table 3: ARDL Error correction result
ARDL Error Correction Regression
Dependent Variable: D(GOVD)
Case 1: No Constant and No Trend
Sample: 2011Q1 2020Q4
Included observations: 36

ECM Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GOVD(-1))	-0.010572	0.180169	-0.058681	0.9542
D(GOVD(-2))	-0.377764	0.177518	-2.128035	0.0547
D(GOVD(-3))	-0.271226	0.160105	-1.694045	0.1160
D(VAT)	1.610419	1.124154	1.432561	0.1775
CointEq(-1)*	-0.032293	0.005918	-5.456546	0.0001
R-squared	0.853705	Mean dependent var		857934.4
Adjusted R-squared	0.698804	S.D. dependent var		983232.2
S.E. of regression	539610.9	Akaike info criterion		29.54033
Sum squared resid	4.95E+12	Schwarz criterion		30.37608
Log likelihood	-512.7260	Hannan-Quinn criter.		29.83203
Durbin-Watson stat	2.084005			

* p-value incompatible with t-Bounds distribution.
Source: Author's computation from Eview 12

The adjusted R^2 value of 0.698804 showed that the estimated model has a good fit. It also shows that the explanatory variables, value added tax were able to explain about 70 percent of the variations in government debts or borrowings in Nigeria, while the remaining 30 percent is being accounted for by the stochastic variable in the model. The Durbin-Watson statistic value of

2.084005 indicates that the estimated model is free from serial or autocorrelation. This is further validated by the serial correlation test result in table 4.6 below.

Discussions of Findings

The result in Table 4.4 shows that Value added tax (VAT) to have a positive effect on government debts/borrowing in Nigeria over the period of the study as the coefficient of D(VAT) has a positive value of 1.610419. This is at variance with apriori theoretical expectation as increase in any form of tax would increase the revenue base of the government, therefore should result to a reduction in the level of borrowing by the government. The positive value of 1.610419 for VAT indicates that a one percent increase in value added tax would result to about 161 percent increase in government borrowing, holding every other variables constant. The absolute student t-statistic value for value added tax (VAT) of 1.432561 and its corresponding probability value of 0.1775 showed that value added tax has an insignificant impact on government debts over the period of the study. The reason for this could be that revenues accruing to the government from VAT are either diverted by personnel in the agencies responsible for its collection to their private pockets, or a major part of the revenue collect from VAT are used to fund unproductive activities in the economy. This may also be the reason for the recent agitation by some state government in Nigeria to collect and manage VAT in their states to fund projects that would be beneficiary to the people at that level. This finding corroborates that of Okoli and Mathew (2015), Onaolapo, Aworemi and Ajala (2013) who were also of the view that VAT does not have any significant impact on the national economy of Nigeria. Olatunji (2009) did not ascertain the extent to which VAT boost revenue generation in Nigeria.

CONCLUSION AND RECOMMENDATIONS

The study investigated the effect of Value added tax on government borrowing in Nigeria for the period 2011 to 2020. Quarterly time series data sourced from the Federal Inland Revenue Service (FIRS) and Debt Management office (DMO) were utilized for the work. The study found that Value Added Tax (VAT) has a positive and insignificant effect on government borrowing in Nigeria over the period of the study. The study concludes that value added tax does not have a significant effect in reducing the level of government borrowing in Nigeria. The study recommended that the fight against corruptions in the parastatals and agencies of government saddled with the responsibility of collecting and remitting indirect taxes to the treasury single account should be holistic instead of being selective. This would deter public office holders in these institutions from diverting these funds for personal use and would eventually translate to increase in government revenue and further reduce the level of borrowing by the government in Nigeria.

REFERENCE

Afolayan, S.M., Okonkwo, I. V. & Okaro, C. S. (2021). Value added tax rate change: Effects on inflation rate and government borrowing in Nigeria. *Journal of Contemporary Issues in Accounting*, 2(1); 157-176.

Anyanwu, J. C. (1997). Nigeria Public Finance. Onitsha, Joance Education Publishers.

Bank-Ola, R. F. (2021). Value added tax administration and economic growth in Nigeria. *Global Journal of Education, Humanities And Management Sciences*, 3 (1); 14-23.

Ihenyen, C. J. & Mieseigha, E. G. (2014). Taxation as an instrument of economic growth The Nigerian perspective. In *Information and Knowledge Management,* 4(12); 49-53.

Jayeoba, O., Kwabai, J. D. & Adegbie, F. F. (2016). Assessment of Value Added Tax on the Growth and Development of Nigeria Economy: Imperative for Reform. *Accounting and Finance Research, 5* (4); 162-178. http://dx.doi.org/10.5430/afr.v5n4p163

Obaretin, O., & Uwaifo, F.N. (2020). Value added tax and economic development in Nigeria. *Accounting and Taxation Review, 4*(1):148-157.

Olatunji, C.O. (2009). A Review of Value Added Tax (VAT). *International Business Management, 3*(4) 61-68

Oluseyi, E. S. & Mujeeb, O. A. (n/a). Influence of Value Added Tax on Economic Development (The Nigeria Perspective). Retrieved from https://dj.univ-danubius.ro/index.php/JAM/article/view/122/244

Onwuchekwa, J. C & Aruwa, S.A.S. (2014). Value added tax and economic growth in Nigeria. *European Journal of Accounting Auditing and Finance Research*, 2(8); 62-69.

Orisadare, M. A. & Fasoye, K. (2022). The Effect of Value-Added Tax on Economic Growth of Nigeria. *African Journal of Economic Review, 10*(1); 158-169.

Soludo C. (2003). Debt, Poverty and Inequality", in Okonjo-Iweala, Soludo & Muhtar (Eds.). The Debt Trap in Nigeria. *Africa World Press NJ*, 23-74