

Value Added Tax, Governance and Economic Growth in a Democratic Era: A Study of Nigeria

Chinweoke Nwaeze, Ph.D.¹; Kalu Maurice Chukwu²; and Ufomadu Ogechukwu Abel³

¹Department of Banking and Finance, Abia State Polytechnic, Aba. ²Department of Business Administration and Management, Abia State Polytechnic, Aba. ³Department of Accountancy, Abia State Polytechnic, Aba.

Corresponding author: chnwaeze@yahoo.com

DOI: <https://doi.org/10.62154/5d864s59>

Abstract

Economic growth can be seen as an effect of both taxation and different strategies of governance applied to enhance national macroeconomic environment. Taxes and governance are determining factors in the evolution of socio-economic life, influencing also economic growth. This paper aimed to identify the relationship between value added tax, governance and economic growth of Nigeria using the Autoregressive Distributed Lag (ARDL). Based on the annual data from Nigeria, the Granger causality test was applied to identify the cause and effect mechanism of the variables. The results revealed that value-added tax enhances economic growth but this could be hampered by bad governance. In terms of Granger causality test, VAT and governance indices collectively influenced real gross domestic product (measure of economic growth) and the combination of real gross domestic product and governance indices influenced value-added tax. Recommendations were made that government should make sure that money raised through VAT is properly utilized for infrastructure improvements that are obvious for tax payers to see and appreciate, including strengthening the collection apparatus, closing loopholes, and making room for a more efficient VAT system.

Keywords: Governance, Economic Growth, Revenue Mobilization, Taxes, Value Added Tax.

Introduction

The goal of governance is to advance the well-being of all citizens, which is essential for a civil society. Many of the clauses of the Constitution of the Federal Republic of Nigeria, which state that the government needs money to carry out its duties, affirm this position. Unfortunately, a just and efficient tax administration can address the issue of the government's lack of funding for social programs (Orisadare & Fasoye, 2022). The current democratic experiment in Nigeria gives the government more responsibility for finding strategies to boost economic growth and income collection. Due to the fact that some services that the government must provide to its residents are necessary in nature, government cannot operate without financial resources to cover its expenses (Afolayan, Okonkwo & Okaro, 2021). The amount of revenue earned, and how best to allocate them for infrastructural provisions and human capital development needs, determine the political, economic, and social development of every nation. The Value Added Tax is one

form of taxation through which funds are raised by government to build these infrastructures.

Although the VAT was implemented in Nigeria in 1994, the government has yet to see a comfortable increase in tax revenue. According to the World Development Indicator (WDI), Nigeria's tax percentage of GDP increased slightly from the 2016 data (4.82%) to 5.82% in 2021. However, it was clear that Nigeria's tax revenue collection is extremely low for the amount of economic activity in the country, much lower than the minimal criterion of 15% recommended by the World Bank, when compared with the same index across other major African economies over the same time (World Bank, 2022). When compared to South Africa, Egypt, and Ghana, Figure 1 demonstrates that Nigeria dramatically falls below the 15% minimum. The government has also had annual deficits since 1981, even after the implementation of VAT in 1994, according to a breakdown of annual government spending by the CBN (CBN, 2021). This was in stark contrast to Nigerians' belief that the VAT was implemented in order to avoid relying on foreign aid and borrowing loans from international agencies for economic growth and development (Adereti, Sanni & Adesina, 2011).

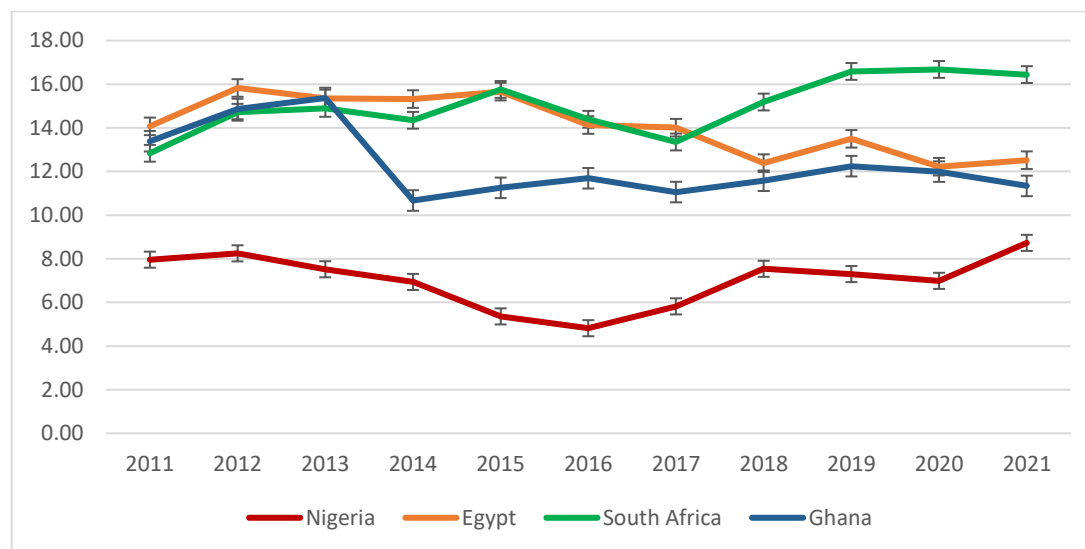


Figure 1: Total tax revenue – to-GDP ratio

Source: WDI and FIRS

In an endeavor to proffer answer to this problem, the Government is obligated to continue to study all means of VAT revenue generation, redistribution of resources and enhancing the welfare of citizens. The obvious issue is the likely challenge of the macroeconomic fundamentals, particularly the domestic output (measured by real GDP) given the government's excessive reliance on oil revenue and the appearance of insincerity in governance. In recent years, a significant macroeconomic challenge has been the real GDP's poor growth rate. Real GDP value climbed steadily but slowly from 24,215.78 billion in 1999 to 69,780.69 billion in 2015 before declining to 68,652.43 billion in 2016 as a result

of the economic downturn. Until the COVID-19 struck in 2020 and caused real GDP to dip to 70,800.54 billion and then rise afterwards to 73,382.77 billion in 2021, Nigeria's real GDP level continued to demonstrate an upward trend, rising from 69,205.69 billion to 72,094.09 billion (CBN, 2021). The current Nigerian economy and structure will typically be triggered by an increase in the VAT rate, which would also cause inflation. This will devalue domestic investments and production.

Therefore, the study focused on the relationship between Value Added Tax, Governance, and economic growth for the period 1999-2021. Collection of data on governance indicators such control of corruption, regulatory quality and political stability, posed a major challenge in this work. It is important to note here that in the reviewed empirical works, none of these variables were included. This is a major gap bridged in this work.

Statement of the Problem

In Nigeria, the intricacy of the tax code encourages public officials to abuse their administrative authority, which increases corruption (Johnson & Omodero, 2021). In the following words, Sandmo (2004) utilizes the idea of tax evasion. "Tax evasion is a legal violation: a taxpayer participates in criminal activity that entitles him to administrative or judicial action by the authorities when he fails to declare income from labor or capital that is principally taxable." What matters is not simply how much money is raised through taxes (revenue sufficiency), but also how the taxes were set, how they were collected, and how they were used. Tax-related concerns are resolved through political channels in democracies. In fact, history reveals that one of the main ways in which democratic institutions have spread over time is by achieving a sufficient level of consensus from the taxed. Thus, the legitimacy of the state is largely dependent on the "quasivoluntary consent" of the populace to taxation (Soro, 2020). Tax systems must eventually reflect the core beliefs of at least a small supporting coalition of the populace in order to maintain compliance. Good governance, governmental legitimacy, taxpayers' willingness to pay taxes, and the efficiency of tax administration are the cornerstones of a sound tax system. This is lacking in the Nigerian situation and thus, the problem of the study. Sebele-Mpofu (2020) in describing how tax reforms and governance are related stated that three significant dynamics are outcomes of the relationship between government, taxation, and investment climate. Better governance makes it possible to have a favorable tax structure that encourages investment and economic progress.

Objectives of the Study

The broad objective of this study is to critically examine the relationship between VAT , Governance, and economic growth of Nigeria for the period 1999-2021.

The specific objectives include to:

- i. examine the impact of Value Added Tax on economic growth of Nigeria.
- ii. evaluate the impact of control of corruption on economic growth of Nigeria
- iii. examine the impact of regulatory quality on economic growth of Nigeria

- iv. investigate the impact of political stability on economic growth of Nigeria.

Review of Related Literature

Conceptual Framework

The conceptual framework examines the many concepts of VAT and governance quality as an independent variables and economic growth as a dependent variable in great depth. This framework also explains the notion, which improves the comparability of the variables in this study. In other words, the conceptual framework is the researcher's understanding of how the variables in his study connect (Regoniel, 2015).

Concept of VAT Revenue Mobilization in Nigeria

Onwuchekwa & Suleman (2014) defined VAT as a consumption tax (on a good or service) imposed at each step of consumption and paid for by the end user of the good or service. It is a tax imposed on goods or sales at every point in the production process. Its distinguishing characteristic is that it allows businesses to deduct taxes spent on material inputs from the taxes they are required to collect on sales. Revenue is gathered throughout the production process as opposed to retail sales tax, which is only collected at the time of sale to the final consumer. All commercial activities, including imports, are subject to the value-added tax (VAT) unless specifically exempted by enabling laws.

In Nigeria, VAT was first applied at a flat rate of 5% and initially covered 24 kinds of service in addition to goods. Businesses and organizations that have registered with the Federal Inland Revenue Services (FIRS) for VAT service collect the tax on behalf of the government. When goods are sold and services are provided, these companies and organizations may claim a credit for this tax (also known as an input tax). These registered agents must also submit monthly VAT returns to the FIRS. The 5% VAT, which is sometimes referred to as the output tax less the input tax, is the same as the VAT that would be charged to the product's final consumer and collected by the government. However, a recent proposal suggests that starting in 2020, the VAT rate would rise from the long-standing 5% to a new rate of 7.5% (Johnson & Omodero, 2021).

Tax Revenue Mobilization, Governance and Economic Growth

Public governance quality is described by the World Bank (2006) as the method of choosing, assessing, and changing a country's leadership as well as the capacity of the government to effectively and efficiently manage the nation's resources in a fair and equitable manner in order to ensure economic growth and development. The importance of sound policy, the provision of public goods and services, citizen respect, and involvement in decision-making are all hallmarks of effective governance. The implied social contract, which states that citizens who support government and its functions by paying their fair share of taxes have a right to know what happens to those taxes, how they are spent, and what concrete benefits they receive, forms the foundation for the relationship between tax revenue mobilization, governance, and economic growth (Vlachos & Bitzenis, 2018). According to

Alabede & Affrin (2011), taxpayers would feel that the government is not living up to its own obligations under the social contract if they believed that the rate and scale at which taxes are transformed to political goods was minimal. As a result, voluntary compliance would decrease. Although a number of variables affect the relationship between tax revenue collection and economic growth, the significance of effective governance cannot be emphasized. According to Soro (2020), ineffective governance may restrict the amount of tax revenue mobilization, which will negatively impact tax compliance and cause an economic downturn. Further, elucidating on the relationship between governance and tax compliance, Torgler (2005) opined that tax compliance levels may increase when individuals are pleased with the quantity and quality of political goods paid for with their tax dollars. Everest-Phillips & Sandall (2009) conducted a thorough analysis of this link and proposed that governance quality affects the design of the tax system and that taxes, economic growth, and governance quality are all interdependently related. A fair and balanced tax system is bred by good governance, just as good governance and economic prosperity are made possible by effective taxation. Tax revenue mobilization, tax compliance, and output are all positively influenced by good governance and efficient tax systems.

According to Everest-Phillip & Sandall (2009), effective public governance requires a good tax system, and effective public governance and economic productivity require a good tax system. Through the payment of taxes, citizens support the government financially so that it can carry out its duties. Since the taxpayers are the ones who pay to the government, they should be interested in what is happening there. Governance difficulties may therefore influence taxpayer compliance behavior in a positive or bad way.

Corruption and Tax Revenue Mobilization

Previous studies have shown that corruption has negative effects on both the building of human capital and economic growth. It worsens poverty and disrupts both the public and private sectors. In developing nations, when government officials use taxpayer money for their own gain, corruption is a major problem. Due to tax administration corruption during revenue collection, some nations are unable to collect enough money through taxes. Corruption in tax administration is increasing as a result of a lack of the rule of law and democratic accountability (Abed & Gupta, 2002). In addition, political turbulence hinders economic development and progress in developing nations by lowering tax income generation. In this view, lower taxation levels and general governance quality are crucial factors in every country's growth process. Corruption in the public sector undermines tax compliance, which increases tax evasion (Ngenuka, 2021). A nation's capacity to pay for government expenditures suffers as a result. Similarly, corruption increases economic inequity since it lessens the distributive role of taxation. According to certain studies, corruption and poverty are related (Onyele & Nwokocha, 2016). The costs of corruption in Africa are generally very high. By promoting tax evasion and offering incentives to pay taxes, it decreases government revenues, leaving less money for spending on

infrastructure, healthcare, education and other welfare needs of the citizens, thereby slowing down the pace of economic growth. Thus, corruption becomes a threat to the government and a roadblock to the market's efficient operation.

Theoretical Review

Laffer curve

The government's ability to raise taxes is limited. In a certain political climate, there is typically a tax rate that is ideal. Every government must identify the ideal tax rate in order to efficiently and successfully pursue its taxing objectives. Prof. Arthur Laffer's invention of the Laffer curve provided an explanation. Afuberoh & Okoye (2014) claimed that the Laffer curve is a theoretical illustration of the relationship between tax income collected by the government and all potential tax rates. The curve in Figure 2 serves as the illustration for this hypothesis.



Figure 2: Laffer curve

Source: Afuberoh, D. & Okoye, E. (2014)

The amount of tax revenue collected at the extreme tax rates of 0% and 100% is depicted in the curve. According to the hypothesis, a tax rate of 100% generates no income in the same manner as a tax rate of 0% generates no money. This is because the incentive for a logical tax payer to earn any income is gone at a 100% rate, hence the amount of money raised will be 100% of nothing. Therefore, there must be at least one rate between them where the highest amount of tax income would be generated. Laffer gives credit to Keynes J. Marguments and Ibn-Khaldun for the idea. According to this idea, raising the VAT rate above a certain point could become counterproductive because of declining returns for boosting tax collection (Afuberoh & Okoye, 2014).

Wagner's Socio-Political Theory

Wagner's socio-political theory, as cited by Onakoya & Afintinni (2016), provides another theoretical foundation for this work. According to this view of taxation, choosing taxes should primarily be based on social and political goals. According to the principle, a tax system should be utilized to treat the problems that society as a whole, not just to benefit individuals. One of the problems with Nigerian society that led to VAT was the government's reliance on loans and other forms of outside assistance to finance growth. This study is hinged on this theory.

Keynes General Theory of Employment, Interest and Money

This study also makes use of the Keynes General Theory of Employment, Interest, and Money. In his major work, "the general theory of employment, interest, and money," first published in 1936, British economist John Maynard Keynes argued for the use of fiscal policy by the central government to control the level of aggregate demand in order to maintain economic growth and prevent inflation. In order to influence the economy's performance, this entails manipulating taxation and spending by the government. Government spending should be cut when inflation is present, or taxes should be raised to promote economic growth. These measures will lower overall demand, which will ease inflationary pressures and boost domestic output (Anichebe, 2015).

Empirical Review

Thoughts in this work were influenced by a variety of similar works. Using a large dataset spanning the years 1991-1992 to 2020-2021, Jafrul (2022) examined the impact of VAT on Bangladesh's GDP. The work combined a constrained V.A.R. called vector error correction model with Johansen's co-integration technique. VAT specifically had a favorable effect on Bangladesh's GDP, ensuring strong and ongoing economic growth.

Using the consumer price index (CPI) as a benchmark, Orisadare & Fasoye (2022) investigated 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 percent threshold value threatens the economy, while a VAT below the 7.59 percent threshold value benefits people's well-being rather than the economy.

Once more, Odu (2022) looked into the trajectory of VAT during the study period as well as the impact of VAT on the GDP and total income generated in Nigeria from 1994 to 2018. In the study, time-series data were used to run the VAT regression on total tax revenue and GDP. In the regression, the vector error correction and auto-regression models were applied. At the end of each year for the period, figures on VAT, total tax revenue, and GDP were included (1994-2018). Tests for stationarity and co-integration were undertaken in order to incorporate the variables' long-term characteristics. According to the analysis, VAT significantly affected total tax revenue with a two-year lag and over time, it has become more and more of an explanation for changes in total tax revenue. The study also demonstrated that VAT has a one-year lag and a considerable negative impact on GDP.

Adefolake & Omodero (2022) evaluated the impact of the hydrocarbon tax, corporation income tax, and VAT on Nigeria's economic growth using time series data covering the years 2000 through 2021. The variables were found to be stationary at first difference after the data were examined and evaluated for unit root using the Augmented Dickey Fuller method. A Johansen co-integration test is therefore carried out, and it identifies a long-term link. In order to assess the impact of PPT, CIT, and VAT on GDP, the study used the Vector Error Correction Model. The results showed that PPT and VAT significantly and favorably impacted GDP. It also showed that CIT significantly and negatively affected GDP. Additionally, from 2004 to 2018, Cole et al. (2021) looked into the connection between VAT and economic growth in Nigeria. Regression analysis was utilized to examine the data collected from secondary sources, including the National Bureau of Statistics (NBS) and the Central Bank of Nigeria statistics bulletin. The findings indicated a favorable and strong correlation between VAT and Nigeria's economic expansion.

Addressing the influence of both political (political stability), institutional (corruption) and bad governance on the mobilization of tax revenue in Nigeria from 2000 to 2020, Johnson & Omodero (2021) used Ordinary Least Squares (OLS) to revealed that corruption and political instability have a positive and significant impact on Nigeria's tax revenue mobilization. Bad governance, on the other hand, has a positive and insignificant influence on Nigeria's tax revenue mobilization.

Olarotimi & Alor (2021) looked at the dynamic effect of VAT on economic growth in Nigeria from 1994–2018 using data from 1994–2019. The data were analyzed using the dynamic ordinary least squares (DOLS) model. According to the DOLS findings, the model fits the data well because the R^2 is 94%. Additionally, VAT and economic growth exhibited a favorable association. The findings made it clear that a percentage increase in VAT resulted in an increase in economic growth of 9.3%.

The impact of VAT on economic development in Nigeria from 1994 to 2018 was determined by Uche & Ugonabo (2021). The hypotheses were tested using the Pearson coefficient of correlation and basic regression analysis. Results revealed a 5% significant level positive and statistically significant link between VAT and economic development as measured by gross domestic product and total government revenue.

In a different study, Kareem et al. (2020) looked at the relationship between economic growth and value added tax in Nigeria in order to understand how the two are related causally. The study employed secondary data taken from the Central Bank of Nigeria Statistical Bulletin. Bound test cointegration was performed to test for the long-term relationship between the variables, and Augmented Dickey-Fuller was utilized to evaluate the data properties for unit root. The findings showed that both in the long- and short-term, VAT had a favorable and considerable impact on Nigeria's economic growth. The causality test also revealed a direct link between VAT and economic growth in Nigeria over the course of the investigation.

Similar to this, Etim et al. (2020) investigated the problems and effects of imposing VAT on electronic transactions in Nigeria. For this study, a survey research design was used. FIRS

officers, tax researchers, tax practitioners, as well as operators and clients of e-transaction operations in Nigeria made up the study's population. A structured 5-point Likert scale questionnaire was given to a sample of 125 respondents drawn at random from each of the aforementioned population groupings. Frequencies, simple percentages, and ranks were utilized to analyze the responses in the 117 copies of the questionnaire that the respondents returned. The findings, among other things, emphasized the need to update and revise tax legislation as well as the inadequate application of current tax rules as the main obstacles to establishing VAT on e-transactions in Nigeria.

Similar research was conducted by Obaretin & Uwaifo (2020), who looked at the effect of VAT on economic growth in Nigeria from 1994 to 2018. The Federal Inland Revenue Service office and the United Nations Data Bank provided the data utilized in the study, and the data were then created and analyzed using the Auto-Regressive Distribution (ARDL) regression estimate approach. The outcome of the investigation revealed that VAT had a considerable and favorable impact on Nigeria's economic growth.

The effect of VAT on Uzbekistan's economic growth was once more studied by Ibrohimjonova (2019). Utilizing the multiple regression method, the data from 2008Q1 to 2018Q4 were examined. Beneficial shocks in VAT collections appear to have a positive impact on GDP growth when delayed effects and potential endogeneity of the variables were taken into account.

Additionally, Ayoub & Mukherjee (2019) looked into how VAT affected China's economic expansion. A time series covering the years 1985 to 2016 served as the study's source of data. The research findings have contributed to a growing body of literature on the characteristics of VAT in China, the identification of tax system change from 1993 to 2012, and the method of converting business taxes in the services sector to VAT. The test result showed a long-term and short-term positive link between the GDP and VAT.

Similarly, Adegbe et al. (2016) examined the effects of VAT on the Nigerian economy from its inception to the present in order to determine the necessity of its revision. Data on VAT and GDP were collected between 1994 and 2015, and their historical relationship was examined. It was shown that VAT and GDP were positively correlated. According to the model's coefficient, a 1% increase in VAT will result in an increase in GDP of 0.88%.

In Nigeria, the relationship between VAT and economic growth was examined by Chigbu & Ali (2014). The research demonstrated that VAT has a favorable impact on economic growth as measured by real GDP using the Engle and Granger cointegration technique on an annual data sample from 1994 to 2012. The findings also indicated that there was no association between VAT and GDP over the long or short terms.

Onwuchekwa & Suleman (2014) examined the relationships between VAT and economic growth in Nigeria from 1994 to 2011 using the Ordinary Least Squares (OLS) technique. The findings demonstrated that VAT had a sizable impact on the government's overall tax collection and, consequently, Nigeria's economic expansion.

Gap in Empirical Literature

Having reviewed the empirical works on the subject matter, it was observed that none of the studies included the Worldwide Governance Indicators (WGI) to measure the views on the quality of governance. These indicators are relevant to this study because it is believed that VAT and other forms of tax collection would likely enhance economic growth under a government whose system of governance is of high quality. Hence, this study included governance indices of control of corruption, regulatory quality and political stability as measures of quality of governance. Also, the fact that the studies reviewed turned out with mixed findings is a strong motivation for this study; some authors found a positive effect of VAT on economic growth while some other reported negative impact of VAT on economic growth.

Materials and Methods

Secondary data from The Worldwide Governance Indicators and the Statistical Bulletin of the Central Bank of Nigeria (CBN) were used for the analysis of this study. Since Nigeria adopted a new form of government (a democratic regime) in 1999 and experienced a number of regime changes in 2007, 2011, and 2015, data on the variables were gathered from 1999 to 2021.

The Autoregressive Distributive Lag (ARDL), which was calculated using the E-Views Econometric Software, was used for data analysis. The variables' unit root test properties were determined prior to performing the ARDL analysis (Dang, 2013). Before running the test, the stationarity of the data was checked using the Augmented Dickey-Fuller (ADF) Unit Root Tests (Gujarati & Porter, 2009).

The limits test approach to co-integration was used to determine whether the variables have a long-term relationship after the ADF test revealed that they are stationary at various phases. The Breusch-Godfrey Serial Correlation Test, Jacque-Bera Normality Test, and Breusch-Pagan-Godfrey Heteroskedasticity Test were three of the residual tests used to evaluate how well the model fit the data.

Model Specification

The equation 3.1 is presented in an implicit version in order to assess the impact of VAT, Governance (proxied by CC, RQ, and PS), and economic growth (proxied by RGDP) in Nigeria; $RGDP = f(VAT, CC, RQ \text{ and } PS)$. (1)

Equation 2 expressed in an explicit form became:

$$RGDP_t = \beta_0 + \beta_1 VAT + \beta_2 CC + \beta_3 RQ + \beta_4 PS + \mu_t \quad (2)$$

β_0 stands for the intercepts of relationship in the model

$\beta_1 - \beta_4$ stands for the regression coefficients for the model

μ_t = error term

$t = i^{th}$ of the observation of the time series data (1999-2021)

RGDP = real gross domestic product

VAT = value added tax

CC = control of corruption

RQ = regulatory quality

PS = political stability

Description of Model Variables

The variables in the model were described as summarized in Table 1.

Table 1: Description of model variables

Variable	Description	Measurement	<i>A priori</i>
RGDP	Real gross domestic product (RGDP), also known as constant-price GDP or inflation-corrected GDP, is a metric that accounts for inflation and measures the value of all goods and services generated by an economy in a given year.	Annual percentage growth rate of RGDP	Nil
VAT	Any time value is added to a product throughout the production process or at the point of sale, this form of consumption tax is levied. The VAT Act of 1993 governs how VAT is collected in Nigeria.	Yearly percentage change in totally collected VAT revenue	Positive
CC	CC expresses opinions about how much government authority is used for personal gain, including both small-scale and large-scale corruption, as well as the "capture" of the state by elites and private interests.	WGI index	Positive
RQ	RQ shows opinions about how well the government is perceived to be able to create sensible laws and regulations that support and encourage the growth of the private sector.	WGI index	Positive
PS	Political instability and/or violence driven by politics, especially terrorism, are measured by PS.	WGI index	Positive

Source: Author's compilation

Note: Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance)

Analysis and Results

Presentation of Data

The data used for the empirical analysis are displayed in Table 2.

Table 2: Time series data

Regime	YEAR	RGDP (%)	VAT (%)	CC	RQ	PS
Olusegun Obasanjo	1999	0.58	31.76	-1.19	-0.95	-1.06
	2000	4.78	22.49	-1.16	-0.75	-0.59
	2001	5.59	31.77	-1.22	-0.54	-1.46
	2002	13.29	14.67	-1.43	-1.22	-1.63
	2003	6.84	20.12	-1.36	-1.25	-1.63
	2004	8.47	31.51	-1.34	-1.35	-1.75
	2005	6.05	-10.00	-1.16	-0.76	-1.67
	2006	5.71	20.91	-1.12	-0.91	-2.03
	2007	6.18	23.42	-1.05	-0.89	-2.01
Umaru Yaradua	2008	6.34	27.11	-0.89	-0.80	-1.86
	2009	7.44	13.63	-1.03	-0.75	-2.00
Goodluck Jonathan	2010	8.84	16.78	-1.05	-0.73	-2.21
	2011	4.66	13.34	-1.17	-0.68	-1.96
	2012	4.10	8.54	-1.17	-0.71	-2.04
	2013	5.12	10.74	-1.22	-0.66	-2.09
	2014	5.94	-0.17	-1.27	-0.82	-2.13
	2015	2.58	-1.99	-1.08	-0.85	-1.93
Muhammadu Buhari	2016	-1.64	3.98	-1.02	-0.92	-1.88
	2017	0.80	16.19	-1.08	-0.88	-2.00
	2018	1.89	11.24	-1.05	-0.80	-2.10
	2019	2.16	5.44	-1.10	-0.86	-1.92
	2020	-1.83	19.29	-1.10	-0.96	-1.86
	2021	3.52	27.86	-1.05	-0.80	-2.26

Source: Central Bank of Nigeria (CBN) statistical bulletin and Worldwide Governance Indicators

Trend Analysis of Data

Fig. 3 shows that the trend of RGDP and VAT growth rate was unstable over the sampled period. This could be attributed to the high level of corruption and the pattern of economic and financial management applied by the different presidents that have merged between 1999 and 2021. For instance, VAT reduced by 10% in 2005 probably due to corporate restructuring that took place the banking sector which led to the massive withdrawal of funds by depositors who felt that the banking sector was about to collapse, thus discouraging production activities and reducing collectible VAT. Also, it can be seen the RGDP also dropped from 8.47% in 2004 to 6.05% in 2005, indicating the policy of bank consolidation might have rattled the productivity of Nigeria at the initial stage.

From 2006 to 2008, VAT and RGDP trended upwards but further declined probably due to the global financial crisis the struck in 2008. In 2016, VAT rose and RGDP declined due to the economic recession and government's inability to manage the economic properly following the decline in crude oil price. This is worthy of note that this recession hit the Nigerian economy barely a year after President Goodluck Jonathan handed over power to President Muhammadu Buhari who partially removed fuel subsidy, took a lot of time to pass the appropriation bill, and introduced Treasury Single Account (TSA). In 2020, RGDP declined due to the COVID-19 pandemic but VAT rose due to its increase from 5% to 7.5%.

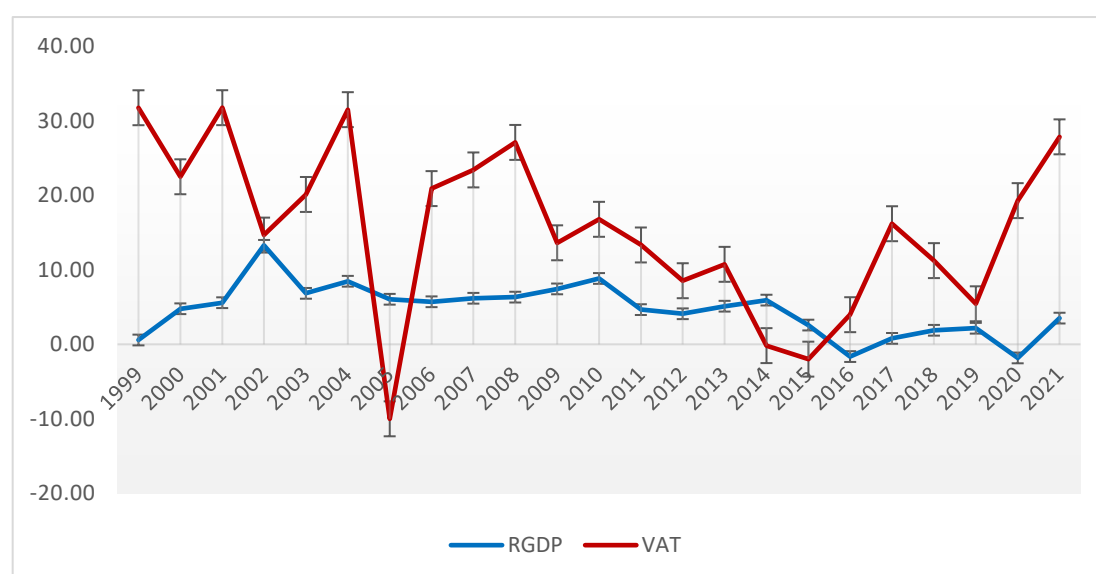


Fig. 3: % change in yearly RGDP and VAT

Source: Researchers' Computation, 2023

Fig. 4 indicates that all the governance indices (CC, RQ and PS) selected for this study trend negatively, implying poor governance in Nigeria from 1999 to 2021. The negative trend of CC shows that the government lacks the ability to control the high rate of corruption experienced in Nigeria which has been exhibited in the form of money laundering from the looting of tax proceeds for personal use by government officials. Ngenuka (2021) estimates that tax-related corruption costs Nigeria more than \$100 billion annually and claims that tax fraud and evasion by both people and businesses continue to be among the worst forms of corruption in the country. Nigeria must address tax fraud before it can effectively combat corruption. Numerous people and businesses avoid or manipulate taxes. They work together on this with experts like accountants and attorneys. Insignificant tax returns are the end result. The trend of RQ indicates that the regulatory quality of the Nigerian government has been poor. This implies that the government has not been able to create sensible laws and regulations that support and encourage the growth of the private sector. This discourages productivity and consumption, hence low VAT collection. PS trend implies that there so much political unrest in Nigeria.

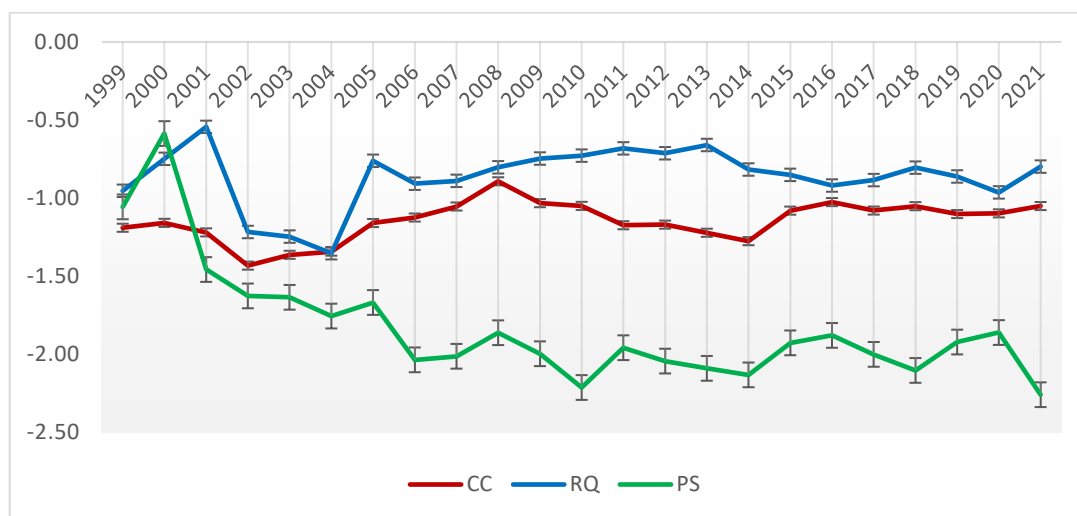


Fig. 4: Trend of governance indices

Source: Researchers' Computation, 2023

Descriptive Statistic

The descriptive statistic of the dataset was presented in Table 3.

Table 3: Descriptive analysis

	RGDP	VAT	CC	RQ	PS
Mean	4.670000	15.59261	-1.143913	-0.862609	-1.829130
Median	5.120000	16.19000	-1.120000	-0.820000	-1.930000
Maximum	13.29000	31.77000	-0.890000	-0.540000	-0.590000
Minimum	-1.830000	-10.00000	-1.430000	-1.350000	-2.260000
Std. Dev.	3.457924	11.25161	0.124160	0.191649	0.378561
Skewness	0.127867	-0.402127	-0.492976	-1.075277	1.876603
Kurtosis	3.366597	2.571295	3.118586	3.888682	6.503135
Jarque-Bera	0.191468	0.796004	0.945075	5.189027	25.26024
Probability	0.908706	0.671661	0.623418	0.074682	0.000003
Observations	23	23	23	23	23

Source: E-Views 10.0 result

For each of the variables, Table 3 includes the mean, maximum, lowest, and Jarque-Bera (J.B) values. The findings offered insightful information on the time series data collected between 1999 and 2021. First, a large degree of change in the variables was suggested by the considerable and astronomical gap between their highest and minimum values. This finding suggests that the variables' interactions with the economy have had a significant impact over time. The variable's mean suggests that typical variable performances are generally subpar. However, the Jarque-Bera test did not confirm normality in the single variable, which suggests that other factors may be required to confirm their normality.

Unit Root Test

The stationarity, if any, of the variables utilized in this analysis was assessed using the Augmented Dickey-Fuller (ADF) and Philip-Perron (PP). The idea that the variable is stationary is the null hypothesis. Tables 4a and 4b show the results of the unit root test.

Table 4a: Augmented Dickey-Fuller test

Variable	Level		First difference		Remark
	t-Statistic	Prob.	t-Statistic	Prob.	
RGDP	-4.363420	0.0117	-	-	Stationary
VAT	-3.883450	0.0308	-	-	Stationary
CC	-3.734222	0.0448	-	-	Stationary
RQ	-3.070376	0.1373	-5.288177	0.0024	Non-stationary
PS	-3.646225	0.0153	-	-	Stationary

Source: E-Views 10.0 result

Table 4b: Phillips-Perron test

Variable	Level		First difference		Remark
	t-Statistic	Prob.	t-Statistic	Prob.	
RGDP	-4.847405	0.0043	-	-	Stationary
VAT	-3.878075	0.0311	-	-	Stationary
CC	-2.292240	0.4205	-4.196263	0.0172	Non-stationary
RQ	-3.070376	0.1373	-5.938109	0.0005	Non-stationary
PS	-2.401334	0.1527	-6.347083	0.0000	Non-stationary

Source: E-Views 10.0 result

Table 4a shows that all the variables were determined to be stationary at the first difference except for the RQ variable, which failed the stationarity test at level. PP tests, however, show that all variables (CC, RQ, and PS), as shown in tables 4b, are integrated of order one (first difference), whereas RGDP and VAT were integrated at level 1. (o). indicating that the PP test proved the series to be integrated at both I(o) and I(1). This demonstrates that while the presence of a unit root was not rejected for RQ under the ADF test, it was rejected for CC, RQ, and PS under the PP tests. As a result, the results of the ADF support the PP test more and indicate a mixed level of integration at I(o) and I (1). We then used the ARDL bounds test to determine whether or not the variables in equation (2) have a long-run co-integrating connection given the unit-root features of the variables (Pesaran, Smith & Shin, 2001).

Lag Length Determination

Using the Log-Likelihood test, LR test statistic, FPE, AIC, SC, HQ, and SC, the ideal lag for the model utilized in this study was found. According to the results (Table 5), one lag was the ideal length for a lag based on the three criteria.

Table 5: Optimum lag length selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-119.2111	NA	0.055180	11.29192	11.53989	11.35033
1	-75.08117	64.18904*	0.010402*	9.552833*	11.04062*	9.903311*

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

Source: E-Views 10.0 result

Bounds Test

The limits test strategy to co-integration, as recommended by Pesaran et al. (2001), was used because the variables were a mixture of $I(0)$ and $I(1)$.

Table 6: Bounds test

Test Statistic	Value	Signif.	$I(0)$	$I(1)$
F-statistic	4.593801	10%	2.45	3.52
K	4	5%	2.86	4.01
		2.5%	3.25	4.49
		1%	3.74	5.06

Source: E-Views 10.0 result

The limits test's findings (Table 6) demonstrated that the F-statistic value is higher than the Pesaran test statistic's 95% upper bound value of 4.593801, indicating that the null hypothesis - that there was no long-run link among the variables was rejected. This ensured the execution of the error correction required for the long-run dynamics estimation.

Long-run Estimate

The long-run coefficients are presented in Table 7.

Table 7: Long-run estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VAT	0.470826	0.124769	3.773586	0.0070
CC	-8.171380	9.692849	-0.843032	0.4271
PS	-9.617073	3.043205	-3.160179	0.0159
RQ	4.804973	5.539487	0.867404	0.4145

Source: E-Views 10.0 result

The result (Table 7) of long-run estimation showed that VAT was statistically significant (conformed to *a priori* expectation). From the estimated coefficient of 0.470826, it implied that a unit increase in value-added tax would result in approximately 0.47 units increase in real gross domestic product in Nigeria. This is an indication that an increase in value-added tax would also contribute to economic growth in Nigeria in the long-run.

Among the governance indices, it was observed that political stability (PS) turned out negative and statistically significant (in contrast with *a priori* expectation). The estimated coefficient of -9.617073 indicates that a decrease in political stability would lead approximately 9.6 units decrease in economic growth, indicating that the Nigerian government has failed to ensure a politically stable environment that would enhance efficient VAT collection needed to foster economic growth in the long-run. On the other hand, control of corruption (CC) and regulatory quality (RQ) were not statistically significant, hence their influences on RGDP were seen to be marginal in the long-run. The negative and significant coefficient of PS could be seen from the ongoing security challenges and political upheavals ravaging the economic prosperity of the country.

Error Correction Model (ECM) and Short-run Dynamics

The outcome of the ECM is presented in Table 8. The fact that the ECM was adverse and highly significant supported co-integration between the variables under study. The feedback coefficient was -0.524064, indicating that the disequilibrium in the current year was corrected by around 52%. As a result, real gross domestic product (RGDP) adjusted by almost 52% within the first year to achieve full convergence to its equilibrium level when it was above or below this level.

Table 8: Error correction model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-13.72745	2.133835	-6.433233	0.0004
D(RGDP(-1))	-0.232223	0.100409	-2.312775	0.0540
D(VAT)	0.009141	0.024162	0.378317	0.7164
D(VAT(-1))	-0.082449	0.029778	-2.768828	0.0277
D(CC)	1.768653	3.121100	0.566676	0.5886
D(CC(-1))	-3.064687	0.668318	-4.585672	0.0003
D(PS)	-9.617073	1.111984	-8.648573	0.0001

D(PS(-1))	-5.627075	1.399848	-4.019775	0.0051
D(RQ)	1.001961	0.258545	3.875376	0.0013
ECM(-1)	-0.524064	0.087230	-6.007840	0.0005
R-squared	0.947225			
Adjusted R-squared	0.904046			
F-statistic	21.93700			
Prob(F-statistic)	0.000009			
Durbin-Watson stat	2.191289			
Diagnostics tests:				
Serial correlation	0.194033(0.8296)			
Heteroscedasticity	0.908621(0.5827)			
Jarque-Bera	0.483302(0.7853)			
Ramsey RESET test	0.384870(0.5578)			

Source: E-Views 10.0 result

The adjusted R-squared stood at 90%, only about 10% of the systematic variation of the independent variables were left unaccounted for by the model hence captured by stochastic disturbance term in the model. This indicates a good fit of the regression line and also the model has a high degree of forecasting power.

The result (Table 8) of short-run dynamics depicted that the coefficient of VAT was 0.009 with probability value of 0.7164. This result implied that a unit increase in VAT would result in marginal increase in RGDP to the tune of 0.009 units in the short-run. This result was an indication that an increase in VAT would result in a slight increase in real gross domestic product in the short-run. However, taking a period lag of VAT turned negative and statistically significant, indicating that a unit increase in VAT within a period of one year led to about 0.082 unit decrease in RGDP. This also implies that the effect of VAT on RGDP was time-varying and could be dependent on the situations surrounding governance. Also, it can be seen by the negative and significant coefficients of CC and PS that the extent to which the government could control corruption and ensure political stability was inhibiting the expected effect of VAT on economic growth. On the other hand, the positive and significant coefficient of RQ was indicative that better regulatory quality could enhance the VAT – growth relationship.

The diagnostic tests show that there is no evidence of diagnostic problem with the model as their respective p-values are greater than 0.05 to reject the null hypothesis of any model misspecification. Also, the CUSUM and CUSUMSQ in Figures 5 and 6 indicates that the residuals of the ARDL model falls within the lower and upper bounds value which further validates the absence of serious misspecification in the model.

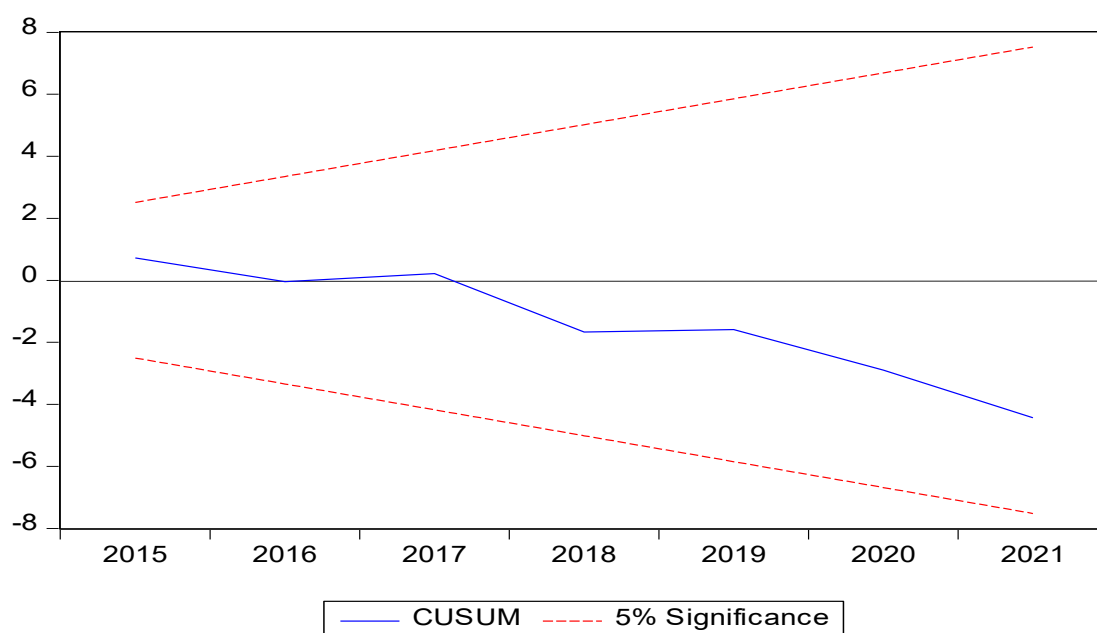


Figure 5: CUSUM test

Source: Researchers' Computation, 2023

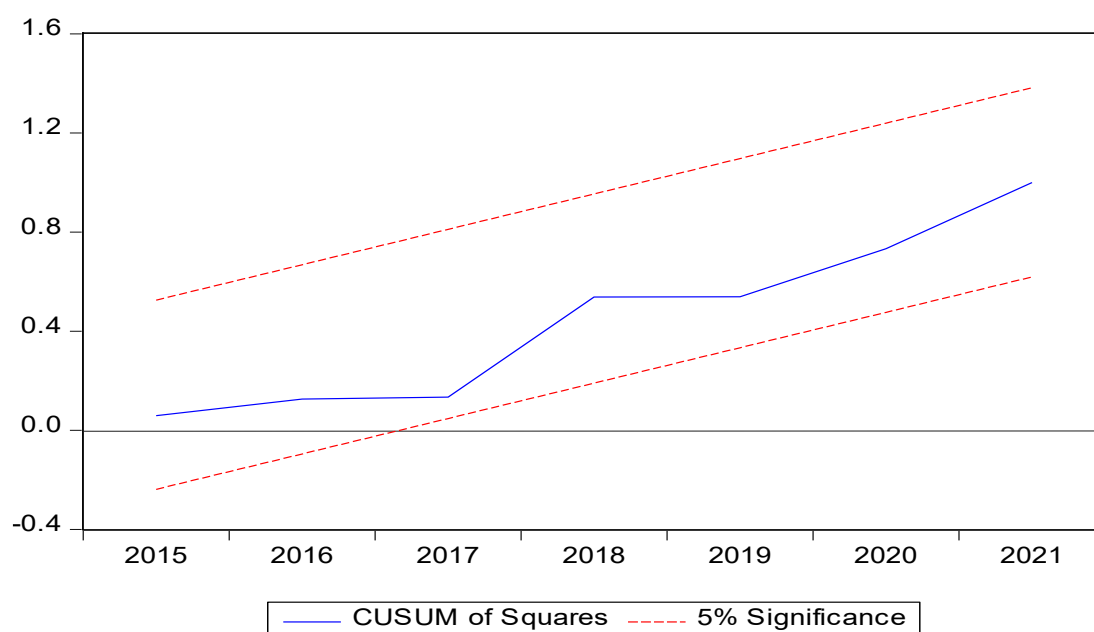


Figure 6: CUSUMSQ test

Source: Researchers' Computation, 2023

Multivariate Granger Causality

Applying the Granger causality test using the VAR Granger Causality/Block Exogeneity Wald tests provide an overview of the causality produced between the three variables analyzed in Nigeria as presented in Table 8. The existence of a causal relationship between

the variables of a model under analysis is verified only if the p-value is at a significance level of less than 0.05.

Table 8: Granger causality

Dependent variable: RGDP				Dependent variable: VAT			
Excluded	Chi-sq	df	Prob.	Excluded	Chi-sq	df	Prob.
VAT	6.550965	2	0.0378	RGDP	2.598734	2	0.2727
RQ	1.418450	2	0.4920	RQ	6.467857	2	0.0300
CC	0.051883	2	0.9744	CC	6.200557	2	0.0318
PS	7.628239	2	0.0221	PS	5.688356	2	0.0582
All	41.47742	8	0.0000	All	7.780468	8	0.0052
Dependent variable: RQ				Dependent variable: CC			
Excluded	Chi-sq	df	Prob.	Excluded	Chi-sq	df	Prob.
RGDP	3.769634	2	0.1519	RGDP	1.130557	2	0.5682
VAT	3.470931	2	0.1763	VAT	0.209176	2	0.9007
CC	0.235778	2	0.8888	RQ	2.048675	2	0.3590
PS	9.649594	2	0.0080	PS	2.526918	2	0.2827
All	16.35371	8	0.0376	All	10.26900	8	0.2467
Dependent variable: PS							
Excluded	Chi-sq	df	Prob.				
RGDP	1.027297	2	0.5983				
VAT	0.214701	2	0.8982				
RQ	0.711507	2	0.7006				
CC	1.923596	2	0.3822				
All	7.621581	8	0.4713				

Source: E-Views 10.0 result

In the first causal relationship, the p-value (0.0378) of the VAT variable is lesser than the level of 0.05 and is retained in the model at a significance level of 5%. This demonstrates that VAT causes RGDP. The situation is similar for the PS variable, as the p-value is 0.0221, which indicates that PS do cause RGDP. In the case of CC and RQ, the situation is different as their respective p-values were greater than 0.05, hence it was held that RQ and CC do not cause RGDP. However, the common (all) p-value (0.000) indicates that VAT, CC, PS and RQ collectively cause RGDP, implying that the interactions between VAT, CC, PS and RQ significantly explain the dynamics of economic growth in Nigeria.

In the second causal association, it was observed that VAT was largely caused by CC and RQ since their respective p-values of 0.0300 and 0.0318 were lesser than 0.05. On the other hand, the p-value of 0.0582 linked to PS indicates no causal relationship. But, the collective p-value (0.0052) for the relationship was lesser than 0.05, indicating that the interactions between RGDP, CC, RQ and PS significantly influence VAT.

In the third causal flow, PS variable causes the RQ variable at a value of 0.0080. Moreover, the common p-value (0.0080) shows that the combination of RGDP, VAT, CC and PS causes RQ, demonstrating that they together cause RQ. This shows that RGDP, VAT, CC and PS influences the changes in RQ in Nigeria, indicating that the changes in RGDP, VAT, CC and PS calls for government regulation or improved regulatory quality.

Conclusion and Recommendations

Conclusion

Economic growth in Nigeria has not been encouraging due to bad governance triggering a poor business environment. Using the Granger Causality/Block Eogeneity Wald Test was investigated the causality between VAT, governance and economic growth variables. The results revealed a causal relationship between the variables of the model under analysis as Real GDP, VAT and governance are interconnected. This result is engaging in the economic reality of Nigeria, because from the inception of the democratic era, the real GDP, tax (in this case VAT) and governance manifested themselves in the sense of mutual dependence. Collectively, VAT and governance indices caused real GDP and real GDP and governance indices caused VAT.

The conclusion based on the analysis of the ARDL estimation emphasizes the fluctuating aspects of the evolution of the Nigerian economy due to the dynamics of VAT and governance. Thus, the interdependence between VAT, governance and real GDP means the growth of the economy, influenced especially by VAT revenue mobilization and governance. At the same time, an increase in RGDP was due to VAT, so that, due to the revenue collection from VAT that will offer the possibility of making more investments in the economy but the negative effects of bad governance could undermine this process.

Recommendations

Based on the findings the study recommended that:

1. Since it was discovered that the VAT rate has a favorable and considerable impact on economic growth in Nigeria, the government should keep it at its current level. Additionally, the VAT laws should be amended to broaden its in order to increase income generation through coverage. The government should make sure that money raised through consumption tax (VAT) is properly used for infrastructure improvements that are obvious for tax payers to see and appreciate, strengthen the collection apparatus, close loopholes, and make room for a more efficient VAT system.
2. By way of regulation, government must come up with a plan that may include providing financial incentives to fiscal officers to lessen their motivation to engage in corruption. To enhance tax collections, tax administrators should concentrate on broadening the tax base rather than hiking tax rates. Because they have greater options to evade taxes, politicians and the rich profit from higher tax rates. High tax rates thereby increase the potential for corruption.

3. In order to detect and prevent crime in society, the government should also work to increase the effectiveness of its civil forces. States must immediately put into effect legislative changes that will provide their judicial systems and civil authorities more independence and effectiveness. An uncertain political climate, along with an ineffective legal and civil force system, cause investors to become passive and steer clear of long-term investments. The economy's expansion and overall tax income are consequently slowed. Taxpayers will be able to freely voice their reservations about the tax system, tax administrations will become more open and accountable to the public, and emerging nations' tax revenues will increase as democratic and political institutions start to operate successfully.
4. Receiving some benefits should come with verification of tax compliance. The Central Bank of Nigeria's intervention facilities, for instance, should not be accessible to organizations or businesses without proof of tax registration. This is why it is so commendable that the Finance Act of 2019 includes a provision requiring mandatory tax registration before opening a bank account. All levels of government must make sure that this program is adequately implemented and support further measures that restrict access to some public benefits for late payers and tax evaders.

Contribution to Knowledge

In summary, this study has made valuable contributions to knowledge in the following ways.

1. This study included governance indices such as control of corruption, regulatory quality and political stability as measure of governance quality. These variables are mostly absent in the studies reviewed.
2. The empirical findings of previous studies in this area showed a mixed bag of results. Thus, this study has added to the empirical literature available in the area of Value Added Tax, Governance and Economic growth.
3. The study has also formed the body of knowledge on which future research can be based on.

References

- Adefolake, A. O., & Omodero, C. O. (2022) Tax revenue and economic growth in Nigeria. *Cogent Business & Management*, 9(1), 2115282, DOI: 10.1080/23311975.2022.2115282
- Adegbe, F. F., Jayeoba, O., & Kwabai, J. D. (2016). Assessment of value added tax on the growth and development of Nigeria economy: Imperative for reform. *Accounting and Finance Research*, 5(4), 163 – 178. <https://doi.org/10.5430/afr.v5n4p163>
- Adereti, S. A., Sanni M. R. & Adesina J. A. (2011). Value added tax and economic growth of Nigeria. *European Journal of Humanities and Social Science*. 10(1), 456-471.
- 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.

- Afuberoh, D., & Okoye, E. (2014). The impact of taxation on revenue generation in Nigeria: A study of Federal Capital Territory and selected states. *International Journal of Public Administration and Management Research (IJPAMR)*, 2(2), 22-47.
- Alabede, J. O., & Affrin, Z. Z. (2011). Public governance quality and tax compliance behavior in Nigeria: The moderating role of financial condition and risk preference. *Issues in Social and Environmental Accounting (ISEA)*, 5(1/2), 3-24.
- Anichebe, A. S. (2015). Implication of tax policy on inflation in Nigeria (1981-2012). *Journal of Developing Country Studies*, 5(2), 103-113.
- Ayoub, Z., & Mukherjee, S. (2019). Value added tax and economic growth: An empirical study of China perspective. *Signifikan: Jurnal Ilmu Ekonomi*, 8(2), 235 – 242.
- Central Bank of Nigeria. (2021). *CBN annual statistical bulletin*, 32. Abuja, Nigeria.
- 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.
- Cole, A. A., Aroyewun, B. O., Soetan, A., & Akintola, A. F. (2021). Value added tax and economic growth in Nigeria, 2004-2018. *American Journal of Multidisciplinary Research & Development*, 3(12), 09-13.
- Etim, R. S., Jeremaiah, O. O., & Udonsek, A. (2020). The implementation of value added tax on e-transactions in Nigeria: Issues and implications. *American International Journal of Business Management*, 3(4), 01-09.
- Everest-Phillip, M., & Sandall, R., (2009). Linking business tax reform with governance: How to measure success. Working paper, Investment Climate Department, World Bank Group.
- Gujarati, D. N., & Porter, D.C. (2009). *Basic econometrics*. 5th Edition, McGraw Hill Inc., New York.
- Ibrohimjonova, P. H. (2019). Impact of value added tax on GDP growth: the case for Uzbekistan. *International Journal of Economics, Commerce and Management*, 7(12), 926 – 937.
- Jafrul, J. S. (2022). Impact of value-added tax on gross domestic product of Bangladesh. *Indian Journal of Finance and Banking*, 10(1), 41-44.
- Johnson, P. N. & Omodero, C.O. (2021). Governance quality and tax revenue mobilization in Nigeria. *Journal of Legal Studies*, 28(42), 1-41. DOI: 10.2478/jles-2021-0009
- Kareem, R. A., Arije, R. O., & Avovome, Y. H. (2020). Value-added tax and economic growth in Nigeria (1994 – 2017). *Izvestiya Journal of Varna University of Economics*, 64(2), 137 - 152.
- Ngenuka, N. (2021). 'Nigeria loses over N100b yearly to tax related corruption'. <https://guardian.ng/news/nigeria-loses-over-n100b-yearly-to-tax-related-corruption/>
- Obaretin, O., & Uwaifo, F. N. (2020). Value added tax and economic development in Nigeria. *Accounting and Taxation Review*, 4(1), 148-157.
- Odu, V. C. (2022). Value-added tax, revenue generation and economic growth in Nigeria. *Accounting and Taxation Review*, 6(1), 10-28.
- Olarotimi, Y. L., & Alor, U.S. (2021). Dynamic impact of value added tax on economic growth in Nigeria. *Journal of Research in Humanities and Social Science*, 9(5), 24-28.
- Onakoya, A., & Afintinni, O. I. (2016). Taxation and economic growth in Nigeria. [*Asian Journal of Economic Modelling*](#), 4(4), 199-210.
- Onwuchekwa, J. C., & Suleman, A.S.A. (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.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289 - 326.
- Regoniel, P. A., (2015). *Conceptual framework: A step-by-step guide on how to make one*. Simply Educate. Me.

- Sandmo, A. (2004). The theory of tax evasion: A retrospective view. Norwegian School of Economics and Business Administration, Discussion Paper 31/04. <https://core.ac.uk/download/pdf/30834949.pdf>
- Sebele-Mpofu, F. Y. (2020). Governance quality and tax morale and noncompliance in Zimbabwe's informal sector. *Cogent Business & Management*, 7(1), Article ID 1794662
- Soro, S. S. (2020). Institutional quality and tax revenue in Côte d'Ivoire: Evidence from ARDL approach. *International Journal of Economics and Financial Issues*, 10(6), 40-49.
- Torgler, B. (2005). Tax morale and direct democracy. *European Journal of Political economy*, 21(2), 525-531.
- Uche, E. P. & Ugonabo, C. U. (2021). The effect of value added tax on economic development in Nigeria (1994-2018). *IOSR Journal of Humanities and Social Science*, 26(5), 21-30.
- Vlachos, V., & Bitzenis, A. (2018). Corruption and tax compliance of Greek SMEs. In *Economy, finance and business in Southeastern and Central Europe*, Springer, Cham, 413-418.
- World Bank, (2022). *Global tax program*. <https://www.worldbank.org/en/programs/the-global-tax-program>