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TAXATION AS A TOOL FOR REVENUE GENERATION AND ECONOMIC GROWTH OF NORTH EASTERN NIGERIA

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Abstract

The study aimed at examining taxation as a tool for revenue generation and economic development in north eastern states of Nigeria. The study aimed at determining the impact of taxation on revenue generation in northern eastern states of Nigeria and to determine the impact of taxation on economic growth in north eastern states of Nigeria. The data was collected from the board of internal revenue of the north-eastern states for the periods of ten (10) years (2013-2022). Also, data collected was analyzed using regression analysis. The study discovered that, there is positive and significant relationship between total taxes, revenue generation, and economic growth. Furthermore, the study found a negative and significant relationship between Value Added Tax (VAT) and economic growth. Thus, a well-designed and efficiently implemented tax system can serve as a powerful tool for generating government revenue, funding public services, and fostering overall economic development. Therefore, the study recommended that, government should create a secure environment where properties and life are protected in the north eastern Nigeria in order to facilitate more business activities, so as to have more tax collection that can boost economic growth and development.

Key Words: Revenue Generation, Economic Growth and Value Added Tax

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1.1 Introduction

The serious decline in price of oil in recent years has led to a decrease in the funds available for distribution to the Federal, State and Local Governments in Nigeria. The need for state and local governments to generate adequate revenue from internal sources has, therefore, become a matter of extreme urgency and importance. This need underscores the eagerness on the part of states and local governments and even the federal government to look for new sources of revenue or to become aggressive and innovative in the mode of collecting revenue from existing sources (James, 2019). Umaru, Gambo and Pate (2015) state that though taxation may not be the most important source of revenue to the government in terms of the magnitude of revenue derivable from it, however, taxation is the most important source of revenue to the government from the point of view of certainty, consistency and sustainability.

Economic growth, as a concept, is viewed differently by different scholars. Pugachevska and Kasianok (2017) describe economic growth as the sustained increase in per capita national output or net national product over a long period of time. Accordingly, economic growth occurs when a nation's production possibility frontier shifts outward. According to the Business Dictionary, economic growth is the increase in a country's productive capacity, as measured by comparing the gross national product in a year with that of the previous year. Increase in the capital stock, advances in technology, and improvement in the quality and level of literacy of the people are considered to be the principal causes of economic growth. Economic growth can be proxied, using different economic indicators, ranging from Gross National Product (GNP), Market Capitalization, Gross Domestic Product (GDP), and Per Capita Income (Zodrow & McKeehan, 2018).

In Nigeria, and indeed some parts of Africa, the payment of taxes is not strange. This is because, even before independence, taxes were collected either by the colonial masters or emirs/chiefs under different names. However, legislation of tax was first made in 1939 with the enactment of the Income Tax Ordinance of 1939. The second legislation was in 1940 due mainly to the inadequacies and ineffectiveness of the 1939 Ordinance. The 1940 Ordinance specified that both individuals and corporate organizations should be subjected to tax payment. Ever since, there has been one enactment or the other, as well as amendments. Some of the most outstanding tax laws are the Companies Income Tax Law of 1990, the Personal Income Tax Act of 1990, and the Value Added Tax Act 1993 (as amended) (Kiabel & Nwikpasi, 2001).

In Nigeria, tax is one of the instruments the Federal government introduced to generate sustainable revenue. One of the recurrent problems of the three-tier structure of the government in Nigeria is dwindling revenue generation as characterized by yearly budget deficits and insufficient funds for economic growth and development. Recently, revenue derived from taxes has been very low and no physical development took place, hence its impact is not normally being felt by the poor. Inadequate tax personnel, fraudulent activities of tax collectors and poor understanding of importance to pay tax by tax payers are vulnerable (James, 2019).

Ojong, Anthony and Arikpo, (2016) mentioned that today, taxation is already sowing seed of transformation in many states across the nation, especially southern part of the country. Such states include Imo, Edo, Lagos and Rivers States. In such states, tax revenues are being harnessed to transform their various jurisdictions. Since none of these states is from the northern part of the country in general and none is from the north east in particular, this project therefore becomes imperative to analyse the contribution of taxation to the revenue generation drive of northern eastern states of Nigeria (Jibril, 2019b).

Furthermore, Olotu (2012) has documented increases in the economic growth in states identified with high taxation revenue. This has enabled the implementation of numerous life and community transforming projects and programmes leading to an increasingly more satisfied populace. Abiola and Asiweh (2012) also highlighted the contribution of Lagos State to revenue generation and economic growth in Nigeria. Syndelle (2009) observed that in 2007, Lagos state achieved a gross domestic product of N3.68 trillion an equivalent of $29.028 billion making it the biggest contributor to the federal government revenue. Based on the issues mentioned above, this project will determine the extent to which tax has contributed to revenue generation in the six (6) north eastern states of Nigeria.

Majority of states in Nigeria rely on allocation from the federation account as their major source of revenue. The allocation to states is made based on some criteria of which Value Added Tax is one of them (Farouk *et al.*, 2021). Collectively, the states of the federation have a composite share of 50% of the VAT revenue generated in the country. Horizontally, 20% of the VAT share of the states is further shared based on VAT collection by the VATable agents and since the head offices of most of the VATable companies are not domiciled in north eastern states, the states in the north east are not enjoying much of the 20% derivation share of VAT, even as the VAT revenue is earned as a results of consumption in the region. This demands some amendment to the VAT law to avoid what many observers see as shortchanging of the states in the region through the present horizontal sharing formula of VAT. The amendment would surely bring about increase in the states' revenue earnings through VAT collection (Ahmad, *et al.*, 2021).

In addition, cognizance is not given to allocations that would cover displaced businesses in the northeastern states due to insecurity brought about by persistent insurgency in the region. This allocation might be slotted into the VAT sharing formula or statutory revenue sharing formula or both. This project, therefore, seeks to study the current VAT sharing formula (especially the horizontal formula) with a view to finding a more equitable formula capable of enhancing revenue generation of north eastern states (Jibril, 2019a).

One major source of revenue to the state governments is the personal income tax in the form of Pay As You Earn (PAYE). The PAYE is regulated by PITA which specifies the amount of tax payable by individuals as contained in the PAYE table. Though the amount of tax payable is clearly stated, there is however the problem of compliance with the PAYE tax table by most federal government agencies and companies, especially those with head offices outside the states. The noncompliance adversely affects revenue generation drive by the north eastern states and the projects aims to address this issue (Jibril, et al., 2023).

A major determinant of revenue generation is the efficiency with which revenue is collected by state governments. It is however in record that majority of states face one problem or the other in revenue generation. Such problems range from tax payer identification, problem of tax assessment and tax collection. Peculiar to the north eastern states is the problem of insecurity which has displaced millions in the past decade. The result is a decline in the tax base of the states with a resultant decline in their revenue generation. The project will therefore try to identify factors that militates against the effective revenue generation by north eastern states of Nigeria

Economic growth is largely revenue driven as the government at all levels need revenue to fund developmental projects and boost the economy. This study therefore will try to assess the role of revenue generation as a determining factor of economic growth in north eastern states of Nigeria. Therefore, the study intends to achieve the following objectives:

1) To determine the extent to which taxation contributes to revenue generation in Northeastern States of Nigeria

2) To determine the extent to which tax revenue contributes to the economic growth of Northeastern States of Nigeria.
3) To assess the horizontal VAT sharing formula with a view to finding a more equitable formula that could enhance revenue generation for the Northeastern States of Nigeria
4) To assess the level of compliance with PAYE tax table by Federal Government agencies and companies with a view to enhancing tax revenue generation of states in Northeastern Nigeria.
5) To identify the factors militating against effective tax revenue generation in Northeastern States of Nigeria, with a view to finding solutions to them.
6) To ascertain the role of revenue generation as a determinant of economic growth in Northeastern States of

2.0 literature review and hypotheses development

2.1Theoretical Framework

There are several theories that provide justification for the existence and use of tax as a source of revenue and economic policy tool by governments all over the world. The following theories underpin the current study.

2.1.1 Benefit Received Theory

This theory has a modern version, known as the "voluntary exchange" theory and is derived from the presumed relationship between the state and taxpayers. Governments are obligated to provide certain goods and services to the members of the society in compensation for taxes paid for such supplies. Taxes individuals pay should be direct and proportional to the benefit they receive from the government that is, taxpayers who benefit larger portion of public goods and services are expected to pay the most taxes(Jibril, 2019a; Muhammad et al., 2015).

2.1.2Trickle-down Economic Theory

The theory argues that cutting down tax couple with other financial benefits to large businesses, investors, and entrepreneurs will stimulate investment and business growth in the short term and translate to economic growth and development in the long term. Hence it postulates that benefits for the wealthy individual and business trickle down to everyone else in the society.

2.3 Empirical review

2.3.1 Tax and Economic Growth and Development

In both developed and developing economies, the government has to play an active role in achieving economic growth (Edame & Okoi, 2014). In this sense, fiscal policy is an essential instrument of government in promoting economic growth. An important part of the fiscal policy is taxation. Many economists believe that tax revenue is one of the most significant factors that contribute to a country's growth (Myles, 2000). It has provided developing countries with a stable and predictable fiscal environment to promote growth and to finance their social and physical infrastructural needs. Garba (2014) observed that a country's tax system is a major determinant of other macroeconomic indexes. In Ghana, for instance, the economy is highly dependent on tax revenue as a source of government expenditure for developmental purposes (Takumah, 2014). For Nigeria, it has provided the government an opportunity to collect additional revenue besides other sources, needed to discharge its pressing obligations (Garba, 2014). Combined with economic growth, it reduces long-term reliance on aid and ensures good governance by promoting the accountability of governments to their citizens (Romer and Romer, 2010).

Several studies have examined taxation as an instrument of economic growth and development in different countries with diverse techniques (AbdulAziz et al., 2023). The outcome of the investigations however, shows degree of relatedness in the results. The tax reform in Nigeria is spearheaded by the Federal Inland Revenue service which is geared to achieving greater revenue collection, voluntary and willing compliance and breaking the long piercing phobia between taxpayers and tax collectors. For instance in a study by Wambai and Hanga (2013) and Salihi and Jibril (2019) on taxation and social development in Nigeria: tackling Kano's hidden economy, they found that the attitude of the government on taxation need to change and recommends a tax system that concentrate on establishing simplicity, predictability, and neutrality. Chiumia and Simwaka (2012) study analyses the effect of taxation in sub-Saharan Africa. They found that taxes levied on personal and corporate income reduces economic growth. From their study, one may be tempted to conclude that the tax structure is largely irrelevant in less developed economies, but embedded in an effective tax system are benefits for both the taxpayers and the government.

Nwakanma and Nnamdi (2013) examined taxation and national development with the least square methodology and specification on the linlog model of human development index. Their findings reveals that Petroleum Profit Tax, Company Income Tax and Excise Tax respectively exhibit a positive relationship with the level of national development, but a negative relationship between human development index and corporate tax. Dackehag and Hansson (2012) studied how statutory tax rates on corporate and personal income affect economic growth using panel data from 1975 to 2010 for 25 rich OECD countries. They found a negative influence on economic growth from both taxation of corporate and personal income. Their study revealed a more robust economic growth in correlation with corporate income tax.

In Nigeria Festus and Olabosipo (2020) have found that many electronic revenue generating agencies have experienced decline in revenue generated which had resulted in huge losses to Lagos state government because of high rate of corruption, embezzlement, illiteracy level of electronic payment users. Not many studies considered electronic payment through ATM and ETC in increasing revenue generation through personal income tax, rates and penalty. Similarly, Ndajiwo (2020)study of six African countries, namely Nigeria, Ghana, Senegal, Kenya, Rwanda, and Uganda. The study revealed that while generally, the six jurisdictions studied are considering the taxation of profits arising from the digitalized economy, efforts so far have focused on indirect taxation. Based on the ongoing discussion, the study developed the first hypothesis that:

H1: There is significant relationship between PAYE and revenue generation in the North Eastern Nigeria.

2.3.2 Value Added Tax (VAT) and Revenue generation

Several studies examined the impact of VAT in relation to economic growth. Owolabi and Okwu (2011) examined the contribution of Value Added Tax to Development of Lagos State Economy, using simple regression models as abstractions of the respective sectors considered in the study. The study considered a vector of development indicators as dependent variables and regressed each on VAT revenue proceeds to Lagos State for the study period. Development aspects considered included infrastructural development, environmental management, education sector development, youth and social development, agricultural sector development, health sector development and transportation sector development. The results showed that VAT revenue contributed positively to the development of the respective sectors. On the aggregate, the analysis showed that VAT revenue had a considerable contribution to development of the economy during the study period.

There are few literatures on the researched topic and this study will be amongst the first academic writings on the effectiveness of the VAT provision on foreign providers of digital and electronic services in Mauritius. The study is carried out with the aim of combining a large amount of empirical, theoretical and factual information that can be of use to various stakeholders and not only to academics. when devising regulations on the imposition of VAT on foreign suppliers of digital services Beebeejaun (2020) has documented that Based Erosion Profiting Shifting action plan which may be of use to Mauritius stakeholders. In a study conducted by Farouk *et al.*(2021) Jibril *et al.*(2015) found that tax generation improved economic growth in the country. Carpentieri *et al.* (2019) studied globalization and digitalization on overhauling corporate taxation in the digital economy. The study documented that agreement may prove difficult given the conflicts of interest between EU member states and between them and the United States in tax generation.

The increasing weight of immaterial goods in company transactions and balance sheets have rendered that system outdated. Based on the ongoing discussion, the study developed the second hypothesis that:

H1: There is significant relationship between VAT and revenue generation in the North Eastern Nigeria.

3.0 Research methodology

3.1 Research Design

The source of data for the study mainly from secondary data from the periodical publication of the Central Bank of Nigeria (CBN) to source for data for total revenue and the Gross Domestic Product (GDP) of Nigeria for the periods of ten (10) years from 2013 to 2022, as well as the state board of internal revenue of the six (6) states in the north-eastern Nigeria. This is to enable the study assess taxation as a tool for revenue generation and economic growth of North Eastern Nigeria.

3.2 Population of the Study

Table 3.1 summarizes the population of study as used in generating the secondary data used by the study.

Table 3.1 Population of the Study

S/N	STATES
1.	ADAMAWA
2.	BAUCHI
3.	GOMBE
4.	BORNO
5.	TARABA
6.	YOBE

Source: Field Survey, 2022

3.3 Sample Technique and Sample Size

This study will employed simple random sampling technique in the process of selecting the sample size; this is because it is given each and every member in the population an equal chance of selected as a sample (Asika, 1991).

Table 3.1 Variables Measurement

s/n	Variable	Measurement	Source
1	Revenue Generation	The natural log of revenue generated	Samuel & Tyokoso (2014)
2	Gross domestics product	The natural log of GDP	Samuel & Tyokoso (2014)
3	Total Taxes Collected	The natural log of total taxes collected	Samuel & Tyokoso (2014)
4	Value added tax	The natural log of value added tax	Ngerebo & Masa (2012)
5	Pay as you earn	The natural log of pay as you earn	Gatt & Owen (2018)
6	Population	The natural log of total population	Creedy et al (2010)

3.4 Method of Data Collection

The data related to both taxation and revenue generation will be gathered from the respective state board of internal revenue for the seven states under the study, and questionnaire administration to the employees of the respective states board of internal revenue.

3.5 Method of data analysis

The collected data will be recorded in Statistical Package for Social Sciences (SPSS) software (version 22.0). Several statistical tools will be employed in analyzing the results, including descriptive, correlation and multiple regression analysis (Saidu et al., 2017).

3.6 Model Specification and Multiple Regressions

Multiple regressions will be used to determine the contribution of taxation on revenue generation, as well as economic growth. To estimate the effect of dependent variable with regards to the independent variables two regression models are developed as follows:
The following regression equation model is estimated as follows:

$$RG = \alpha 0 + \beta 1TTCO + \beta 2VAT + \beta 3PAYE + \varepsilon \quad (1)$$

$$GDP = \alpha 0 + \beta 1TTCO + \beta 2VAT + \beta 3PAYE + \varepsilon \quad (2)$$

Where:

RG = revenue generation

GDP= gross domestic product

TTCO= total taxes collected

VAT= value added tax

PAYE= pay as you earn

4.1 Result and discussion

Table 4.1 Descriptive Statistics

Variable	Mean	Median	Min	Max	SD	Skewness	Kurtosis
REV. GEN	24.28	24.45	23.13	25.14	0.70	-0.53	1.88
GDP	24.50	23.00	22.00	28.00	2.55	0.59	1.60
TOTAL TAXES	24.01	24.05	23.10	24.78	0.59	-0.15	1.70
VAT	12.44	12.54	11.00	13.01	0.57	-1.64	5.09
PAYE	4.90	5.00	3.00	7.00	1.20	-0.21	2.82
POP	16.26	16.55	12.00	22.00	2.82	0.19	3.42

Table 4.1 above shows the description of the variables in terms of their mean, standard deviation, minimum value, and maximum value. The result shows that, revenue generation as a testing variable has a mean value of 24.28 with minimum and maximum value of 23.13 and 25.14 respectively. Similarly, the gross domestics product (GPD) as a measures of economic gross have a mean value of 24.50 and minimum and maximum values of 22 and 28 respectively. Regarding, the independent variables, the total taxes collected has mean value of 21.01 and minimum and maximum of value of 23.10 and 24.78. Also, the result was found with 12.44 as the average mean value of Vat with a minimum and maximum value of 11 and

13.01. Similarly, PAYE has a mean value of 4.90 with a minimum and maximum value of 3 and 7 respectively. Finally, regarding the population as the control variable, the result shows a mean value of 16.26 with a minimum 12 and 22.

Table 4. 2 Correlation Statistics

	RG	GDP	Total Taxes	VAT	PAYE	POP
RG	1					
GDP	0.0639	1				
Total Taxes	0.8721*	0.1352	1			
VAT	0.8656*	-0.2164	0.8572*	1		
PAYE	0.2118	-0.2366	0.0449	0.3569	1	
POP	-0.7922*	-0.1851	-0.8253*	0.7926*	-0.3173	1

There are many tests used to check the validity and reliability of the data. For example, multicollinearity is a condition whereby independent variables are extremely correlated with one another. Though multicollinearity does not affect the consistency of regression coefficient estimates, it poses a resistance to arriving at imprecise and unreliable regression coefficient estimates (Defusco et al., 2011). Thus, the coefficient of the correlation matrix is extensively used to identify the subsistence of multicollinearity (Jibril, Isa, et al., 2023; Jibril & Maikano, 2022). Table 4.2 presents the correlation statistics among the variables. Among the independent variables, the correlation between revenue generation and VAT is highest at 0.8721. Gujarati and Porter (2009) judged a correlation above 0.5 as high. Nevertheless, Hair et al. (2014) and Tabachnik and Fidell (2007) state that associations lower than 90% cannot be a problem for estimation. Thus, the association between revenue generation and VAT, in this case, does not render the regression model a strict multicollinearity problem

Table 4.3 Regression Analysis for Taxation and Revenue Generation

Variables	Coef.	Std. Err.	t-value	p-value
TOTAL TAXES	1.38	0.15	9.31	0.00
VAT	0.01	0.18	0.08	0.94
PAYE	0.14	0.04	3.53	0.02
POPULATION	0.06	0.03	2.05	0.10
CONSTANTS	-10.59	3.28	-3.23	0.02
Model	4.39	No. of Obs.		10
Residual	0.06	Prob> F		0.00
Total	4.45	R-squared		0.98
		Adj R-squared		0.97

In order to establish the nature of the relationship that exists between the variables; revenue generation (dependent variable) and Total revenue and tax revenue (independent variables), regression analysis was employed using ordinary least square (OLS) method (Table 4.3). The result shows that, total taxes collected are positively and significantly related to revenue generation in north eastern state with (β= 1.38 and t-values=9.31). Thus, the positive and significant relationship between total taxes collected and revenue generation in Kano State suggests that as the amount of taxes collected increases, the overall revenue generated by the state also increases. This relationship implies that the taxation system in north-eastern states is an effective means of generating income for the government (Okonkwo & Chukwu 2019; Lanem et al 2020). This positive relationship may indicate that north-eastern states have successfully diversified its revenue sources, relying not only on a single income stream but also on taxes. This diversification can contribute to a more stable and sustainable financial position for the state. Furthermore, it suggests that the tax administration in north eastern states is efficient and capable of collecting taxes effectively (Chukwunwike 2019). This may include fair tax policies, proper enforcement mechanisms, and the ability to adapt to changes in the economic environment. For this reason, the study concludes that, total taxes collected significantly contributed to the revenue generation in the north-eastern states. Thus, H1 is supported. This finding is consistent with the studies of Chukwunwike (2019); Lanem et al (2020); Braimoh, & Onuoha (2022), who find a positive association between taxation and revenue generation.

Regarding the value added tax, the result shows positive and insignificant relationship with revenue generation in north-eastern states with (β= 0.01 and t-values= 0.08). Thus, it suggests that while there is a positive correlation between the two variables, the correlation is not strong enough to be considered statistically significant. This indicates that as the value-added tax increases, revenue generation also tends to increase. The possible explanation is that, it is an expected outcome because VAT is a consumption tax, and as economic activity grows, consumption typically increases, leading to higher tax revenue (Benzarti & Carloni 2019; Ganderson & Limberg 2020). However, the insignificancy implies that the observed relationship between VAT and revenue is not strong enough to be considered statistically significant. In other words, changes in VAT do not reliably predict changes in revenue generation based on the data available. For this reason, the study concludes that, VAT has less contribution on revenue generation in north-eastern Nigeria. Thus, H2 is not supported.

However, PAYE was found with positive and significantly associate with revenue generation in north eastern states with (β= 0.14 and t-values= 3.53). Thus, the positive and significant relationship between PAYE (Pay As You Earn) and revenue generation indicates that as PAYE increases, the revenue generated by a government or organization also increases. It further suggests, a connection between the incomes generated through PAYE and overall economic activity. When individuals earn more, they tend to spend more, leading to increased economic growth (Kuznets 2019). This, in turn, can contribute to higher tax revenues for the government. Therefore, PAYE is a stable and predictable source of revenue for governments because it is withheld from employees' paychecks (Olayode & Omodero 2021; Ngowi, 2021). For this reason, the study concludes that, PAYE has less contribution on revenue generation in north-eastern Nigeria. Thus, H3 is not supported.

Moreover, the coefficient of variation indicates that about 98% variation in revenue generation could be attributed to the joint effects of total revenue and tax revenue. The adjusted R-squared value also indicates that addition or subtraction of any other variable will still account for about 97% variations in revenue generation.

Table 4.4 Regression Analysis for Taxation and Economic Growth

Variables	Coef.	Std. Err.	t-value	p-value
TOTAL TAXES	4.13	1.22	3.38	0.02
VAT	-10.99	1.45	-7.57	0.00
PAYE	0.22	0.32	0.70	0.52
POPULATION	-1.43	0.24	-5.84	0.00
CONSTANTS	84.28	27.08	3.11	0.03
Model	54.56	No. of Obs.		10
Residual	3.94	Prob> F		0.00
Total	58.50	R-squared		0.93
		Adj R-squared		0.88

In order to establish the nature of the relationship that exists between the variables; GDP (dependent variable) and Total revenue and tax revenue (independent variables), regression analysis was employed using ordinary least square (OLS) method (Table 4.4). The result shows that a positive and significant relationship between total taxes collected and economic growth, as measured by Gross Domestic Product (GDP) in north eastern state with (β= 4.13 and t-values=3.38). Thus, higher taxes mean increased government revenue, providing more resources for public spending and investment in infrastructure, education, healthcare, and other essential sectors (Gaspar et al 2019). This increased public investment can contribute to economic growth by improving productivity, human capital, and the overall business environment (Azam 2019; Surya et al 2021). For this reason, the study concludes that, total taxes collected significantly contributed to the economic growth in the north-eastern states. Thus, H4 is supported. This finding is consistent with the studies of Aliyu & Mustapha (2020); Obaretin & Uwaifo (2020); Eneche, & Stephen (2023); who find a positive association between taxation and economic growth.

Regarding, the relationship between values added tax and economic growth measured by Gross Domestic Product (GDP) shows a negative and significant relationship between Value Added Tax (VAT) and Gross Domestic Product (GDP), which implies that an increase in VAT is associated with a decrease in economic growth. Therefore, higher VAT rates can also affect businesses, as they may face increased costs for inputs and may pass these costs on to consumers (Afolayan et al 2021). This can lead to decreased demand for goods and services, potentially causing a slowdown in production and economic activity. For this reason, the study concludes that, value added tax significantly reducing economic growth in the north-eastern states. Thus, H5 is not supported.

Finally, the result found with positive but insignificant relationship between PAYE and economic growth measured by Gross Domestic Product (GDP). This implies, when there is a negative and statistically insignificant relationship between PAYE (Pay As You Earn, a form of income tax) and economic growth (measured with GDP, Gross Domestic Product), it suggests that changes in PAYE do not have a meaningful impact on the overall economic output of the north eastern states. The result, further indicates that as PAYE increases, economic growth tends to decrease, and vice versa. In other words, higher income tax burdens on individuals may be associated with lower economic growth. This could be due to reduced consumer spending, lower incentives for investment and entrepreneurship, or other factors that negatively affect economic activity. On the other hand, the insignificancy implies that the observed relationship between PAYE and GDP is not strong enough to be considered meaningful or reliable. For this reason, the study concludes that, PAYE is insignificantly contributing to the economic growth in the north-eastern states. Therefore, H6 is not supported.

Furthermore, the coefficient of variation indicates that about 93% variation in revenue generation could be attributed to the joint effects of total revenue and tax revenue. The adjusted R-squared value also indicates that addition or subtraction of any other variable will still account for about 88% variations in revenue generation.

Conclusion

The study aimed at examining the impact of taxation as a tool for revenue generation and economic development in north eastern states of Nigeria. The study further aims to determine the extent to which taxation has contributes to revenue generation in northern eastern states of Nigeria and to determine the extent to which taxation contributes to the economic growth in north eastern states of Nigeria. Based on the findings three (3) major conclusions were deduced, thus:

- The positive and significant relationship between total taxes, revenue generation, and economic growth underscores the crucial role that fiscal policy plays in shaping a nation's economic trajectory. A well-designed and efficiently implemented tax system can serve as a powerful tool for generating government revenue, funding public services, and fostering overall economic development.
- Furthermore, the identified negative and significant relationship between Value Added Tax (VAT) and economic growth raises important considerations for policymakers and economists alike. The implications of such association suggest that the implementation or increase of VAT rates may have adverse effects on overall economic growth.
- Finally, the observed positive and significant relationship between Pay As You Earn (PAYE) and revenue generation underscores the pivotal role that individual income taxation plays in contributing to government coffers.

Policy Recommendations

- Implement targeted measures to prevent tax evasion and promote compliance among high-income individuals and corporations.
- Encourage diversification of revenue sources to reduce dependency on specific sectors, creating a more resilient and adaptive economic base.
- Invest in modernizing tax administration systems to enhance efficiency, reduce compliance costs, and minimize tax leakages.
- Leverage technology for data analytics to identify and address areas of tax evasion, ensuring a fair and equitable tax system.
- Explore the possibility of introducing a progressive VAT structure that imposes higher rates on luxury items and lower rates on essential goods. This approach can contribute to a fairer distribution of the tax burden and minimize the negative impact on lower-income segments of the population.
- Regular assessment of the economic impact of VAT policies through comprehensive studies and analyses. This will provide policymakers with valuable insights into the effectiveness of implemented measures, enabling them to make data-driven adjustments and refine strategies as needed.
- Investment in modern technologies for tax administration can streamline the PAYE process, reducing administrative costs and improving efficiency. Automation can also minimize errors, enhance transparency, and expedite the collection process, ultimately boosting revenue collection.
- Finally, the government should create a secure environment where properties and life are protected in the north eastern Nigeria.

References

AbdulAziz, M., Jibril, R. S., & Mohammad, R. A. (2023). Digitalization of international public sector accounting in Nigeria : a literature review. Nigerian Journal of Accounting and Finance, 15(1), 106–119.

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.

Aliyu, A. B., & Mustapha, A. A. (2020). Impact of tax revenue on economic growth in Nigeria (1981-2017). *Bullion*, *44*(4), 5.

Azam, M. (2019). Relationship between energy, investment, human capital, environment, and economic growth in four BRICS countries. *Environmental Science and Pollution Research*, *26*, 34388-34400.

Beebeejaun, A. (2020). VAT on foreign digital services in Mauritius; a comparative study with South Africa. International Journal of Law and Management. https://doi.org/10.1108/IJLMA-09-2020-0244

Benzarti, Y., & Carloni, D. (2019). Who really benefits from consumption tax cuts? Evidence from a large VAT reform in France. *American economic journal: economic policy*, *11*(1), 38-63.

Braimoh, M. E., & Onuoha, A. U. (2022). Revenue generation and performance in local governance in Nigeria: a survey of people's perception in selected local government areas of Edo State. *Accounting and taxation review*, *6*(1), 74-88.

Braimoh, M. E., &Onuoha, A. U. (2022). Revenue generation and performance in local governance in Nigeria: a survey of people's perception in selected local government areas of Edo State. *Accounting and taxation review*, *6*(1), 74-88.

Carpentieri, L., Micossi, S., & Parascandolo, P. (2019). Overhauling corporate taxation in the digital economy. 1–20.

Chukwunwike, O. D. (2019). Effects of demography and tax administration on revenue generation among states in Nigeria.

Eneche, E. O., & Stephen, I. A. (2023). Tax revenue and Nigeria economic growth.

Farouk, A. U., Ahmad, T. H., Maigoshi, Z. S., &Jibril, R. S. (2021). Broadening Nigeria’s Tax Base: Focusing on the Taxation of Digital Transactions. Financing for Development, 1(3), 65–76.

Farouk, A. U., Jibril, R. S., Maigoshi, Z. S., Ahamad, T. H., &Bako, M. M. (2021). Broadening Nigeria’s Revenue Base: Exploring Blue Economy Activities. Applied Finance and Accounting, 7(2), 9. https://doi.org/10.11114/afa.v7i2.5224

Festus, F., &Olabosipo, O. (2020). Electronic Payment System and Revenue Generation in Lagos State. 6(1), 59–85.

Ganderson, J., &Limberg, J. (2021). The rise of general consumption taxes. *Global Taxation. How Modern Taxes Conquered the World*, 200-223.

Gaspar, V., Amaglobeli, M. D., Garcia-Escribano, M. M., Prady, D., & Soto, M. (2019). *Fiscal policy and development: Human, social, and physical investments for the SDGs*. International Monetary Fund.

Gechert, S., &Heimberger, P. (2022). Do corporate tax cuts boost economic growth?. *European Economic Review*, *147*, 104157.

Jibril, R. S. (2019a). The impact of firms’ liquidity on capital structure; evidence from Nigerian listed conglomerates. BAYERO INTERNATIONAL JOURNAL OF ACCOUNTIONG REARCH, 12(1), 1–13.

Jibril, R. S. (2019b). The Impact of International Financial Reporting Stanadard (IFRS) Adoption on Accounting Quality in Nigerian Listed Money Deposit Banks. Journal of

Accounting and Finance in Emerging Economies, 5(1), 93–104. https://doi.org/10.26710/jafee.v5i1.726

Jibril, R. S., & Maikano, H. A. (2022). The impact of audit committee attributes on financial performance of listed consumer industries in Nigeria. TSU-International Journal of Accounting and Finance (TSUIJAF), 1(3), 260–283.

Jibril, R. S., AbdulAziz, M., Haruna, U., & Mohammad, R. A. (2023). Board characteristics and financial performance of listed manufacturing and allied firms in Kenya. Nigerian Journal of Accounting and Finance, 15(1), 209–227. http://41.89.175.45/handle/123456789/409

Jibril, R. S., Isa, M. A., Hamid, K. T., &Maigoshi, Z. S. (2023). Corporate board attributes , institutional strength and energy disclosure practices for controlling greenhouse gas emission in Nigeria. 1–19.

Jibril, R. S., Salih, A. A., K/Wambai, U. S., Ibrahim, F. B., Muhammad, S., & Ahmad, T. H. (2015). An Assessment of Nigerian Stock Exchange Market Development to Economic Growth Rabi ' u SaminuJibril MSc (International Accounting) Usman Sani K / Wambai PhD Accounting (In View), ACIT Department of Accountancy PhD Accounting (In View) Department o. American International Journal of Social Science, 4(2), 51–58.

Kuznets, S. (2019). Economic growth and income inequality. In *The gap between rich and poor* (pp. 25-37). Routledge.

Lanem, J. M., Jocelyn, U. U., &Yua, H. (2020). Causal relationship between taxation and revenue generation in contemporary Nigeria: 1997-2018. *International Journal of Innovative Research and Advanced Studies*, *7*(5).

Lanem, J. M., Jocelyn, U. U., &Yua, H. (2020). Causal relationship between taxation and revenue generation in contemporary Nigeria: 1997-2018. *International Journal of Innovative Research and Advanced Studies*, *7*(5).

Muhammad, S., Jibril, R. S., Wambai, U. S. K., Ibrahim, F. B., & Ahmad, T. H. (2015). The Effect of Working Capital Management on Corporate Profitability: Evidence from Nigerian Food Product Firms. Applied Finance and Accounting, 1(2), 55. https://doi.org/10.11114/afa.v1i2.842

Ndajiwo, M. (2020). The Taxation of the Digitalised Economy: An African Study (Issue June). www.facebook.com/ICTDtax

Ngowi, N. A. (2021). *Evaluation of taxation efficiency: a case study of Tanzania large scale mining sector* (Doctoral dissertation, The University of Zambia).

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

Okonkwo, I. V., &Chukwu, K. O. (2019). Government Tax Revenue and economic development in Nigeria: 1996-2017. *International Journal of Research in Business, Economics and Management*, *3*(3), 91-105.

Olayode, R. A., & Omodero, C. O. (2021). Personal Income Tax and Human Development. *EuroEconomica*, *40*(2).

Saidu, S. K., Bello, M. M., & Jibril, R. S. (2017). The Influence of Quality Products, Price, Promotion, and Location to Product Purchase Decision on Nitchi At PT. Jaya SwarasaAgung in Central. Saudi Journal of Business and Management Studies, 2(5), 507–512. https://doi.org/10.21276/sjbms

Salihi, A. A., & Jibril, R. S. (2019). The impact of taxation on revenue generation in Kano state. POLAC International Journal of Contemporary Accounting and Security Studies, September, 150–157.

Surya, B., Menne, F., Sabhan, H., Suriani, S., Abubakar, H., & Idris, M. (2021). Economic growth, increasing productivity of SMEs, and open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 20.