DOES GOVERNMENT TAX AND INFRASTRUCTURE DEVELOPMENT INDUCE SUSTAINABLE ECONOMIC GROWTH IN NIGERIA?

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Abstract

This study investigates the impact of government tax and infrastructure on sustainable economic growth in Nigeria. The data employed in analyzing the result covers the period 1999 to 2023. The autoregressive distributive lag bound test is employed in estimating the models. The study's findings indicate a positive and significant on economic growth, indicating that an increase in government tax can trigger increased government revenue which can translate to sustainable economic growth in Nigeria. In the same vein, infrastructure in the short run and in the long run has a positive and significant influence on economic growth, meaning that effective investment in social and economic infrastructure can trigger economic growth. Again, the interaction of government tax and infrastructure increased the sustainability of economic growth. Other results confirmed that balance of payment, public debt, and exchange rate assert a negative effect on economic growth. Based on the empirical findings, the study recommends that since government tax and infrastructure enhanced economic growth, it then that the government should effectively provide a framework for a sustainable tax system that would ensure reliable sources of revenue to the government and support sustainable economic growth.

1. Introduction

The global health crisis, which had a persistent impact on the price of crude oil, forced most oil-producing countries, including Nigeria, to seek internal alternative sources of income to fund the activities of the real sector. Additionally, this highlights how eager governments at all levels are to explore new sources of funding or to adopt a more aggressive and creative approach to extracting money from already-existing sources, all the while paying little attention to the people who bear the brunt of the cost. The government must find ways to raise money, which means they implement measures like taxes. Government tax is a compulsory levy imposed by government agencies on

individual's income, company's profit, and goods and services, which can come in the form of direct and indirect tax. According to Oboh & Isa (2012), the necessity for tax payment has been a phenomenon of global relevance as it influences each nation's economy positively or negatively. Also, it is the avenue of raising capital to finance the deficit budget as well as generating revenue for the daily running of government activities. Government activities as opined by Akhor & Ekundayo (2016) involve generating funds and using the same to provide security, social amenities, and infrastructural facilities, for the inhabitants of the country. Based on this, it is paramount that the significance of taxation is in line with the benefit theory of taxation, which suggests that individuals should benefit from the taxes they pay, by ensuring that the government provides the needed amenities required by the citizens as they pay taxes.

Furthermore, it is imperative to know that government tax in the country encourages innovation and development of infrastructure which may create a long-run growth effect, that can enhance the performance of the economy. Regarding that, it is evident that there is a paradigm shift to tax revenue as an alternative source of revenue, although, the machinery and procedures for implementing a good tax system in Nigeria have been inadequate, as posited by Angahar & Alfred, (2012). This vacuum as established by Onoh (2013) has created room for tax evasion and avoidance of the self-employed individuals and organizations whose database is not captured in the relevant tax authority's data system and as a result poses great challenges and impediments to the performance of the economy. However, despite the challenges of having a good tax system, the government still puts effort into ensuring that more revenues are generated through tax. Furthermore, investment in infrastructure is crucial for achieving long-term sustainable economic growth. However, the epileptic and infrastructural deficits have resulted in high production costs, limited market access, and reduced competitiveness (Orji, Ogbuabor, Anthony-Orji & Monye, 2023).

Likewise, literature has shown that inadequate infrastructure development poses a significant challenge to Nigeria's sustainable economic growth. In that regard, insufficient transportation networks, unreliable power supply, and inadequate communication systems hinder economic activities, increase production costs, limit market access, and impede trade relations between countries (Onu & Ibekwe, 2020). However, providing adequate infrastructure is critical for attracting investments, promoting productivity, and enhancing competitiveness. Therefore, it is

essential to explore the impact of government tax and infrastructure development on economic growth in Nigeria, knowing fully well that effective government tax and proficient investment in infrastructure could trigger sustained economic growth. In addition, the key objectives of the study are to assess the relationship between government tax and economic growth, to analyze the impact of infrastructure development on sustainable economic growth in Nigeria, and to investigate the interaction between government tax and infrastructure in influencing sustainable economic growth in Nigeria. Furthermore, the empirical findings from the study can help in government policy-making regarding issues surrounding infrastructural deficits. In line with that, the findings from the study contribute to the literature by empirically revealing that government tax and infrastructure development triggers sustainable economic growth in Nigeria.

2. Literature Review

Quite a number of studies have investigated the impact of tax on economic growth (Anichebe, 2013; Akhor & Ekundayo, 2016), while few other studies beamed searchlight on the effect of infrastructure on economic growth (de Almeida & Mendonca, 2019; Canning & Pedroni,2008), however, to the best of the researcher's knowledge none of these studies have been able to empirically link the government tax and infrastructure on economic growth. This study deviated a little from previous studies to investigate if government tax and infrastructure could induce economic growth in Nigeria. For instance, Anichebe (2013), and Akhor & Ekundayo (2016) investigated the impact of tax on economic, employing the error correction technique. The result affirmed that government tax negatively and significantly impacts economic growth.

In another study, Gurdal, Aydin & Inal (2021) investigated the relationship between tax revenue and government expenditure on economic growth in G7 countries, from 1980 to 2016, using the panel causality approach. The result of the study confirmed a long-run bidirectional relationship between tax revenue, government expenditure, and economic growth. Similarly, McNabb (2018) revealed that tax structures using panel data analysis for 100 countries, tax structures assert a positive impact on economic growth. In addition, Ojong, Anthony & Arikpo (2016) examined the impact of tax revenue on economic growth in Nigeria, using the ordinary least square technique. The result revealed a significant positive relationship between tax revenue and economic growth. Similarly, Alkasasbeha, Haron & Abueid (2018) studied the effect of government expenditure and taxes on economic growth in Jordan from 1970 to 2017. The empirical findings from the study

confirmed that government expenditure and taxes have a positive and significant effect on economic growth.

In line with that, Tatyana (2014) assessed the impact of infrastructure on economic growth and global competitiveness. The result of the study affirmed that hat national competitiveness is influenced basically by the level of institutional development which triggers economic growth and global competitiveness. Using the system GMM, Brueckner (2021) analyzed the impact of infrastructure on economic growth. The result showed that effective investment on investment can trigger unprecedented economic growth. Also, the study by Grimes (2021) studied the impact of infrastructure on regional economic growth, using the spatial equilibrium approach. The result confirmed that infrastructure contributes positively to instigating economic growth. In addition, by employing the vector error correction model, Shi, Guo & Sun (2017) investigated the relationship between infrastructure capital and China's regional economic growth from the period 1990 to 2013. The result of the study affirmed that investment in infrastructure positively enhances China's regional economic growth. In the same vein, the study by Nguyen (2019) on the impact of direct and indirect taxes on economic growth in Vietnam, showed that direct tax and indirect taxes assert a positive and significant influence on economic growth.

In another study, Stoilova (2017) studied the impact of tax structure on economic growth in 28 European member states for the period 1996 to 2013, using a pooled panel data analysis. The result of the study affirmed that indicators of tax structure have a positive and significant influence on economic growth. Also, employing the autoregressive distributive lag model for a time series data spanning from 1980 to 2018, Al-tarawneh, Khataybeh & Alkhawaldeh (2020) confirmed that there is a negative short and long-run relationship between taxes and economic growth in Jordan. Similarly, Osman & Yamak (2018) in their study on tax rate influence and Turkey's economic growth, confirmed that direct tax has a positive on economic growth in Turkey. The result revealed a bidirectional causal link between indirect tax and Turkey's economic growth. Also, Babatunde (2018) examined the impact of government spending on infrastructure and economic growth in Nigeria, using a time series data spanning from 1980 to 2016. The result of the study affirmed that government spending has a positive and significant effect on indicators of infrastructure as well as on economic growth.

Furthermore, using FOLS and SGMM methods, the 96 countries, from 1976 to 2014, deAlmeida & de Mendonca (2019), government tax and infrastructure such as the Internet and mobile positively and significantly impact economic growth. Also, the study by Khan, Khan, Jiang & Khan (2020) on the role of infrastructure on economic growth, revealed that investment in infrastructure has a positive and significant effect on economic growth. In the same vein, Owusu-Manu, Jehuri, Edwards, Boateng & Asumadu (2019) examined the impact of infrastructure development on economic growth in sub-Saharan Africa with a special focus on Ghana, using the autoregressive distributed lag technique. The result of the study showed that infrastructure development particularly electricity distribution has a positive and significant effect on economic growth in Ghana. In addition, most of the studies reviewed did not take into cognizance the issues relating to government tax, infrastructure, and economic growth in Nigeria, based on this, the present study extended the frontier of knowledge to fill the gap noticed in the empirical, by investigating the impact of government tax and infrastructure on economic growth in Nigeria.

3.   Theoretical Justification for Model Specification and Variable Selection

This study is anchored on the public finance theory propounded by Richard Musgrave (1959). The theory examines the role of government tax and infrastructural development in enhancing economic growth. The theory further suggests that effective tax policies can help balance revenue generation with the ability to finance infrastructure development effectively. The theory also explains that the interaction between government tax and infrastructure can have a significant effect on economic growth. Given the theoretical explanation by Richard Musgrave (1959), the study adapts the model by Ogbonna & Ebimobowei (2012) that investigated the impact of petroleum revenue on the Nigerian economy. The adopted model is specified as:

$$Y_t = \beta_0 + \beta_1 X_i + \beta_2 \omega_j \tag{1}$$

Where Y_t is real gross domestic product, X_i represent petroleum revenue which is the independent variable, ω_j denotes the rate of inflation which is the control variable, β_0 is the intercept, while $\beta_{1, \ and} \ \beta_2$ is the parameter coefficient.

The above equation is extended to incorporate the variables of the current study. The variables of the current are specified as:

$$GDP = f(GOVTAX, INFR, PUD, EXR, BOP) \tag{2}$$

Where GDP is the real gross domestic product, GOVTAX indicates government tax revenue, INFR denotes infrastructure proxied with social infrastructure, PUD is public debt proxied with external debt, EXR signifies exchange rate, and BPD is balance of payment.

3.1 Estimation Technique

The estimation technique for this study is the autoregressive distributive lag model (ARDL). The rationale for selecting the technique is that the method allows for variables that are stationary at and at the first difference. Also, the method simultaneously reveals the long-run and short-run effect of the explanatory variables on the dependent variable. The ARDL method for the study is specified as:

$$\Delta GDP_t = \alpha_0 + \sum_{i=1}^{p} \alpha_1 \Delta GDP_{t-1} + \sum_{i=0}^{p} \alpha_2 \Delta GOVTAX_{t-1} + \sum_{i=0}^{p} \alpha_3 \Delta PUD_{t-1} + \sum_{i=0}^{p} \alpha_4 \Delta EXR_{t-1} + \sum_{i=0}^{p} \alpha_5 \Delta BOP_{t-1}$$
$$+ \beta_1 lnGDP_{t-1} + \beta_2 lnGOVTAX_{t-1} + \beta_3 lnPUD_{t-1} + \beta_4 lnEXR_{t-1} + \beta_5 lnBOP_{t-1} + ECT_{t-1}$$
$$+ \varepsilon_t \tag{3}$$

$$\Delta GDP_t = \alpha_0 + \sum_{i=1}^{p} \alpha_1 \Delta GDP_{t-1} + \sum_{i=0}^{p} \alpha_2 \Delta INFR_{t-1} + \sum_{i=0}^{p} \alpha_3 \Delta PUD_{t-1} + \sum_{i=0}^{p} \alpha_4 \Delta EXR_{t-1} + \sum_{i=0}^{p} \alpha_5 \Delta BOP_{t-1}$$
$$+ \beta_1 lnGDP_{t-1} + \beta_2 lnINFR_{t-1} + \beta_3 lnPUD_{t-1} + \beta_4 lnEXR_{t-1} + \beta_5 lnBOP_{t-1} + ECT_{t-1}$$
$$+ \varepsilon_t \tag{4}$$

$$\Delta GDP_t = \alpha_0 + \sum_{i=1}^{p} \alpha_1 \Delta GDP_{t-1} + \sum_{i=0}^{p} \alpha_2 \Delta GTAX * INFR_{t-1} + \sum_{i=0}^{p} \alpha_3 \Delta PUD_{t-1} + \sum_{i=0}^{p} \alpha_4 \Delta EXR_{t-1}$$
$$+ \sum_{i=0}^{p} \alpha_5 \Delta BOP_{t-1} + \beta_1 lnGDP_{t-1} + \beta_2 lnGTAX * INFR_{t-1} + \beta_3 lnPUD_{t-1} + \beta_4 lnEXR_{t-1}$$
$$+ \beta_5 lnBOP_{t-1} + ECT_{t-1}$$
$$+ \varepsilon_t \tag{5}$$

3.2 Sources and Measurement of Data

The data for the study are sourced from the Central Bank of Nigeria Annual and Statistical Bulletin and from World Development Indicator (2023). Also, the study employed secondary data spanning from 1999 to 2023. The justification for selecting the period is examined the impact of the government tax and infrastructure on economic growth during the democratic transition Nigeria.

Table 1: Definition, Measurement, and Apriori Expectation of Variables

S/N	Variable	Definition	Measurement	Apriori
1	GDP	Gross Domestic Product	This is the monetary value of goods and services produced in the country	dep
2	GOVTAX	Government Tax Revenue	This is proxied with total federal government tax revenue	-
3	INFR	Infrastructure	Captured by social infrastructure proxied with electricity consumption (KWH per capita and number of telephone lines per 100 people	+
4	PUD	Public debt	This is proxied with external debt stock as % of GNI	-
5	EXR	Exchange Rate	Proxied with Official exchange rate	+
6	BOP	Balance of Payment	Captured by sum of current account plus capital account	+ (-)

Source: Authors' Compilation from WDI (2024)

4. Analysis and Discussion of Result

This section of the study deals with the analysis and discussion of empirical findings. The analysis commenced with a stationarity test, and thereafter, conducted the ARDL bound cointegration as well as post diagnostic test for the robustness of the study.

Table 2: Descriptive Statistics of the Variables

Variables	Units	Mean	Min.	Max.
GDP	*Annual Gross Domestic Product*	4.564	1.79	15.33
GOVTAX	*Federal Government Tax Revenue*	6880.558	949.2	11116.8
INFR	*Social Infrastructure*	2.130	1.231	1.998
PUD	*External debt stock as % of GNI*	18.193	4.95	52.94
EXR	*Official Exchange Rate*	213.111	92.34	638.7
BOP	*Sum of current and capital account*	−1950.95	7118.7	47.4

Source: Authors' Compilation (2024)

Table 2 revealed that the average mean of economic growth proxied annual gross domestic product in Nigeria stands at 4.56%, meaning that the rate of economic growth using the annual gross domestic product is 4.56% having a yearly maximum growth of 15.33 and a minimum of 1.79. Similarly, the average mean for government tax stands at ₦6,880.55 trillion. This indicates that government tax proxied with federally government revenue grow annually by ₦6,880.55 trillion, at maximum value of ₦11,116.8 billion and a minimum value of ₦949 million. In addition, the average mean for infrastructure proxied with social infrastructure stands at 2.13%, implying that the level of social infrastructural development grows at 2.13% at a maximum growth of 1.99 and a minimum rate of 1.23. Furthermore, the average mean for public debt proxied with external debt stock as a percentage of gross national income stands at ₦18.19 trillion. This means that Nigeria's external debt grows at an annual maximum value of $52.9 billion and an annual minimum value

of $52.9 billion, implying that the level of borrowing by the government has increased overtime. In the same vein, the average mean for the exchange rate stands at N213.1. This means that the exchange rate in Nigeria depreciates annually at a maximum rate of ₦ 638.7 to a \$1compared to the minimum value of ₦ 92.34 to \$1. The average mean for balance of payment proxied with sum of capital account and capital account stands at negative -1950.95. This means that the nation imports more commodities, capital and services than it exports.

Table 3: Correlation Analysis of the Regressors

Correlation	GDP	GOVTAX	INFR	EXR	BOP	PUD
GDP	1					
GOVTAX	-0.413	1				
INFR	0.089	-0.211	1			
EXR	-0.132	0.574	-0.685	1		
BOP	0.301	-0.213	0.141	-0.015	1	
PUD	0.178	-0.171	0.036	-0.247	0.243	1

Source: Authors' Compilation (2024)

Table 3, revealed the correlation matrix among the variables used. The correlation result presented confirmed that there is an absence of multicollinearity in the study, implying that all the independent variables in the model are not correlated, that is the model is good. However, the highest degree of strong negative correlation amongst the explanatory variables was -0.68 between exchange rate and infrastructure proxied with social infrastructure. In the same vein, the result also confirmed that government tax negatively impacts economic growth at 41.3%, likewise, exchange rate is negatively connected with economic growth at 13.2%, and both variables have a weak negative correlation on economic growth proxied with annual gross domestic product.

Table 4: Stationarity Test

Pre-Test	Variables	Level			First Difference			
		PP Static	1%	5%	PP Static	1%	5%	Level of Integration
PP Statistic Test	GDP	-2.950**	-3.737	-2.991	-8.025***	-3.752	-2.998	I(0)
	GOVTAX	-1.728	-3.737	-2.998	-5.727***	-3.752	-2.998	I(1)
	INFR	-0.953	-3.737	-2.991	-5.742***	-3.752	-2.998	I(1)
	BOP	0.207	-3.737	-2.991	-4.051***	-3.752	-2.998	I(1)
	EXR	4.475	-3.737	-2.991	-3.634**	-3.752	-2.998	I(1)
	PUD	-2.124	-3.737	-2.991	-3.651***	-3.752	-2.998	I(1)

Source: Author`s Computation (2024)
Note: *** significant at 1%, ** significant at 5%,

To explain the strength and stability of the data, we conducted the stationarity test, that is, the Phillips-Perron test. The Phillips-Perron stationarity test revealed that economic growth proxied with annual gross domestic product is stationary at level, meaning that all the other variables are not stationary. However, all the variables became stationary after the first difference at 1% and 5% levels of significance. This indicates that series in their first difference are mean reverting and converging towards their long-run equilibrium. Since the series converges towards their long run, requires that we conduct the ARDL bound co-integration test to examine the impact government tax and infrastructure on sustainable economic growth in Nigeria.

ARDL Bound Test Result

Table 5:   Bounds co-integration Result

Test Statistic	Value	K
F-statistic: Model 1	5.174	4
Model II	4.820	4
Model III	4.144	4
Critical Value Bounds		
Significance	I(0) Bound	I(1) Bound
10%	2.20	3.09
5%	2.56	3.49
2.5%	2.88	3.87
1%	3.29	4.37

Source: Author`s computation (2024)

The result of bound co-integration test reveals that long-run equilibrium relationship exist between government tax, infrastructure and sustainable economic growth in Nigeria, since the F-statistic for the three models is greater than I (0) and I (1) bound. In this case the study can proceed to estimate the short run and long run relationship by employing the autoregressive distributive lag.

Table 6 Autoregressive Distributive Lagged (ARDL) Estimation
Dependent Variable: Sustainable Economic Growth proxied with Annual GDP

	Variable	Model I	Model II	Model III
	D(GOVTAX)	0.070**	–	–
	D(INFR)	–	0.848**	–
	D(GTAXINFR)	–	–	0.340**
Short-run Estimation	D(PUD)	−0.407**	−0.021	−0.068
	D(EXR)	−0.051	−0.001	−0.013
	D(BOP)	−0.480**	−0.001	0.201**
	GDP (−1)**	−0.848***	−0.880***	−0.855***
	GOVTAX	0.082**	–	–
	INFR	–	0.963	–
	GTAXINFR	–	–	0.425**
Long-run Estimation	PUD	−0.056**	0.024	−0.080
	EXR	−0.002	−0.001	0.002
	BOP	−0.301**	−0.031	0.022
	C	5.492	5.349***	7.478

*Source: Author`s computation (2024) Note: *** significant at 1%, ** significant at 5%,*

From Model 1, the short and long-run result shows that government tax proxied with federal government revenue has a positive and significant impact sustainable economic growth. This means that increase in government revenue through taxes can significantly enhance and sustain economic growth if the taxes collected are judiciously deployed to improving the performance of the manufacturing sector. For instance, a percent change in government tax can enhance sustained economic growth by 7.0%. In addition, the empirical finding also agreed with the result by Osman & Yamak (2018) in Turkey. The result also agreed with the benefit principle of taxation, which says that individuals or business benefit from the taxes they pay. Moreso, revenue generated from government taxes can be used to fund government capital and recurrent expenditure. Other results revealed that public debt has a negative and significant influence on sustainable economic growth. This result suggests that increase in public debt in the short run and in the long run will reduce economic growth by 40.7% and 5.6% respectively. This result is in line with the result obtained by Heimberger (2023) and Malik & Agarwal (2023). In the same vein, exchange rate and balance of payment assert a negative impact on sustainable economic growth.

Similarly, Model II revealed that infrastructure in the short run and in the long run has a positive and significant effect on sustainable economic growth. This implies that investment in infrastructure particularly social and economic infrastructure will increase and sustain economic growth by 84.8% and 96.3% respectively. Other results confirmed that public debt, exchange rate and balance of payment asserts a negative impact on economic growth. The implication of the control variables (Public debt, exchange rate and balance of payment) is that increase in any of the mentioned variables will have an adverse effect economic growth which can sustain for longer period. Furthermore, the Model III result revealed that the interaction of government tax and infrastructure positively and significantly enhanced economic growth, indicating that following the benefit principle of taxation, when revenues generated from government tax is deployed to infrastructural development, the investment in physical, social and economic infrastructure triggers economic growth via the real sector. Furthermore, it is considerably important that government also imbibe culture of infrastructure maintenance. The cointegration equation result for the three models is negative and significant, suggesting that the speed of adjustment from the short run disequilibrium towards the long run equilibrium is 84.8%, 88.0% and 85.5%. This signify

that the speed of adjustment is high and short run disequilibrium can be corrected within one period.

Table 7   Post Diagnostic Result

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.326	Prob. F(9,14)	0.306
Obs*R-squared	11.047	Prob. Chi-Square(9)	0.272
Scaled explained SS	4.814	Prob. Chi-Square(9)	0.850
Breusch-Godfrey Serial Correlation LM Test			
F-statistic	0.855	Prob. F(2,12)	0.449
Obs*R-squared	2.993	Prob. Chi-Square(2)	0.223
Ramsey RESET Test			
	Value	df	Probability
t-statistic	0.257	13	0.800
F-statistic	0.066	(1, 13)	0.800

Source: Author`s computation (2024)

For the robustness check, the study tested for the presences of heteroskedasticity and serial autocorrelation. The result confirmed there is absence of heteroskedasticity and serial autocorrelation since the probability value and probability chi-square value is greater than 5% level significant. In addition, result of Ramsey Reset test revealed that the model is stable and well specified, since the probability value is greater than 5%.

5. Conclusion and Policy Recommendations

Less developed countries like Nigeria are concern with how to sustain long-term economic growth, as the studies have showed that sustained economic growth can reduce the level of poverty and in the country (Suryahadi, Hadiwidjaja & Sumarto,2012; Ebunoluwa & Yusuf, 2018). In this regard, sustainable economic growth can be achieved by ensuring that the necessary infrastructure required for effective performance of the manufacturing sector are put in place. Furthermore, any country that wants grow and develop must as a matter that wants to grow and develop, must as a matter of look inward in terms of revenue generation and the level of government spending in the economy. Since government revenue in the economy has a significant role to play, it implies that the government needs to focus on its effect on the economy. Importantly, the results from the study showed that in the short run and in the long run, infrastructure particularly social infrastructure assert a positive and significant on economic growth. Based on the empirical findings, the study recommends that since government tax and infrastructure enhanced economic growth, it then

suggests that the government should effectively provide a framework for a sustainable tax system that would ensure reliable sources of revenue to the government and support sustainable economic growth.

References

Akhor, S. O., & Ekundayo, O. U. (2016). The impact of indirect tax revenue on economic growth: The Nigeria experience. *Igbinedion University Journal of Accounting*, *2*(08), 62-87.

Alkasasbeha, O. M. A., Haron, N. F., & Abueid, A. I. S. (2018). The impact of government expenditures, taxes on economic growth in Jordan. *American based research journal*, *7*(12).

Al-tarawneh, A., Khataybeh, M., & Alkhawaldeh, S. (2020). Impact of taxation on economic growth in an emerging country. *International Journal of Business and Economics Research*, *9*(2), 73-77.

Angahar, P. A., & Alfred, S. I. (2012). Personal income tax administration in Nigeria: challenges and prospects for increased revenue generation from self-employed persons in the society. *Global Business and Economics Research Journal*, *1*(1), 1-11.

Angahar, P. A. and Alfred, S. I. (2012). Personal income tax administration in Nigeria: challenges and prospects for increased revenue generation from self employed persons in the society. Global Business and Economics Research Journal, 1(1): 1-11.

Anichebe, E. (2013): Tax Composition and Economics Growth in Nigeria. Paper presentation at Anambra State University Post Graduate School, Igbariam Campus.

Brueckner, M. (2021). Infrastructure and economic growth. *Journal of Risk and Financial Management*, *14*(11), 543.

Canning, D., & Pedroni, P. (2008). Infrastructure, long-run economic growth and causality tests for cointegrated panels. *The Manchester School*, *76*(5), 504-527.

De Almeida, J. L., & De Mendonça, H. F. (2019). The effect of infrastructure and taxation on economic growth: new empirical assessment. *Journal of Economic Studies*, *46*(5), 1065-1082.

Ebunoluwa, O. O., & Yusuf, W. A. (2018). Effects of economic growth on poverty reduction in Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)*, *9*(5), 25-29.

Grimes, A. (2021). Infrastructure and regional economic growth. *Handbook of regional science*, 755-777.

Gurdal, T., Aydin, M., & Inal, V. (2021). The relationship between tax revenue, government expenditure, and economic growth in G7 countries: new evidence from time and frequency domain approaches. *Economic Change and Restructuring*, *54*, 305-337.

Heimberger, P. (2023). Do higher public debt levels reduce economic growth?. *Journal of Economic Surveys*, *37*(4), 1061-1089.

Khan, H., Khan, U., Jiang, L. J., & Khan, M. A. (2020). Impact of infrastructure on economic growth in South Asia: Evidence from pooled mean group estimation. *The Electricity Journal*, *33*(5), 106735.

Malik, M. Y., & Agarwal, M. K. (2023). Impact of public debt on economic growth: a case study of Jammu and Kashmir. *SN Business & Economics*, *3*(7), 1-20.

McNabb, K. (2018). Tax structures and economic growth: New evidence from the government revenue dataset. *Journal of International development*, *30*(2), 173-205.

Musgrave, R. A. (1959). *The theory of public finance; a study in public economy*. Indonesia :Kogakusha Co..

Nguyen, H. H. (2019). Impact of direct tax and indirect tax on economic growth in Vietnam. *The Journal of Asian Finance, Economics and Business (JAFEB)*, *6*(4), 129-137.

Oboh, C. S., & E. F. Isa (2012). An Empirical Investment of Multiple Tax Practices and Taxpayer's Compliance in Nigeria (Unpublished Research Work).

Ogbonna, G. N., & Ebimobowei, A. (2012). Impact of tax reforms and economic growth of Nigeria: A time series analysis. *Current Research Journal of Social Sciences*, *4*(1), 62-68.

Ogbuabor, J. E., Malaolu, V. A., & Uche, C. O. (2020). Government Taxation and Economic Growth Nexus in Nigeria: Evidence from Autoregressive Distributed Lag (ARDL) Model. Research Journal of Finance and Accounting, 11(4), 96-106.

Ojong, C. M., Anthony, O., & Arikpo, O. F. (2016). The impact of tax revenue on economic growth: Evidence from Nigeria. *IOSR Journal of economics and finance*, *7*(1), 32-38.

Onoh, J. K. (2013). Dimensions of Nigerian monetary and fiscal policies- Domestic and external. Aba: Astria Meridian Publishers

Onu, O., & Ibekwe, U. C. (2020). Infrastructure Development and Economic Growth in Nigeria: An ARDL Approach. Nigerian Journal of Technology (NIJOTECH), 39(1), 243-252.

Orji, A., Ogbuabor, J. E., Anthony-Orji, O. I., & Monye, E. G. (2023). Anaysis of Interest Rate Spread, Financial Development and Foreign Capital Inflow Nexus in Nigeria. *The Journal of Developing Areas*, *57*(3), 49-64.

Osman C. K., & Yamak R. (2018). Effect of Average tax Rates on Long-Run Economic Growth rate in Turkey, Acta Universitatis Danubius,14(5): 286 –298

Owusu-Manu, D. G., Jehuri, A. B., Edwards, D. J., Boateng, F., & Asumadu, G. (2019). The impact of infrastructure development on economic growth in sub-Saharan Africa with special focus on Ghana. *Journal of Financial Management of Property and Construction*, *24*(3), 253-273.

Shi, Y., Guo, S., & Sun, P. (2017). The role of infrastructure in China's regional economic growth. *Journal of Asian Economics*, *49*, 26-41.

Stoilova, D. (2017). Tax structure and economic growth: Evidence from the European Union. *Contaduría y administración*, *62*(3), 1041-1057.

Suryahadi, A., Hadiwidjaja, G., & Sumarto, S. (2012). Economic growth and poverty reduction in Indonesia before and after the Asian financial crisis. *Bulletin of Indonesian economic studies*, *48*(2), 209-227.

Tatyana, P. (2014). Assessing The Impact of Infrastructure on Economic Growth and Global Competitiveness. 2nd Global Conference on Business, Economics, Management And Tourism, 30-31 October 2014, Prague, Czech Republic.