THE RELATIONSHIP BETWEEN TAX FORMATION AND ECONOMIC GROWTH IN NIGERIA AND GHANA

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ABSTRACT

The study examined the relationship between tax formation and economic growth of Nigeria and Ghana using time series data for the period of 2015 to 2021. The study utilized statistical technique of Ordinary Least Squares (OLS) regression method of data analysis. The study used Gross Domestic Product as proxy for economic growth being the dependent variable while.Gross Tax Revenue Formation was the independent variable. The study revealed that increase in tax formation led to insignificant increase in economic growth in the Nigerian economy within the study period. This was evidenced as there was a positive, but insignificant relationship between tax formation and economic growth in Nigeria. Also, the study discovered that increase in tax formation led to significant increase in economic growth in Ghana as a positive and significant relationship sufficed between tax formation and economic growth in Ghana. It was concluded that Nigeria had a marginally higher gross tax revenue formation than Ghana, but Ghana had more stable economic growth than Nigeria. The government should put in place adequate measure to ensure that revenue generated or formed from taxes effectively utilized to develop and grow both economies

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1. INTRODUCTION

In both developed and developing economies, the government has to play an active role in achieving economic growth as one of its macroeconomic objectives (Edame & Okoi, 2022). In this sense, fiscal policy becomes an essential instrument of government in promoting economic growth through tax formation. It is widely recognized in extant studies that tax revenue is one of the most significant factors that contribute to any economy's growth aspiration (Myles, 2020). According to Garba (2020), it was observed that a country's tax formation system is a major determinant of other macroeconomic indexes which economic growth is not an exception. In Ghana, for instance, the economy is highly dependent on tax revenue as a source of government expenditure for developmental purposes towards booting economic growth (Takumah, 2020). For Nigeria, it tax formation system has provided the government an opportunity to collect additional revenue besides other sources, needed to discharge its pressing obligations (Garba, 2020).

According to Nyamadi (2019), the available tax receipts in Ghana are increasingly inadequate to meet the ever-increasing government expenditure to achieve economic growth. Similarly, Garba (2020) noted that only a substantial portion of revenue is realized from taxes in Nigeria to boost economic growth. These results placed both Nigeria and Ghana economies at a similar loss achieving the needed economic growth. Evidently, the International Monetary Fund (IMF) for the year 2021 for all current 191 members as well as Hong Kong and Taiwan, ranks Nigeria 23rd with USD 1,124,627 in tax formation and GDP growth rate of 3.6% and Ghana 79th with 131,498 million dollars and GDP growth rate of 5.4%. Therefore the study comprehensively examined the relationship between tax formation and economic growth in Nigeria and Ghana.

1.1. Statement of Problem

Tax formation supposed to enhance economic growth in Nigeria and Ghana. However, the cost of collecting tax in Nigeria both social and economic cost had been considered to be too high as compared to Ghana which had over the years resulted to slow growth rate in the Nigerian economy relatively to Ghana's average GDP growth rate. Evidently, Nigerian economy recorded average GDP growth rate of 3.6% in spite rise in its tax formation while Ghana which recorded high tax formation below Nigeria tax formation position, still recorded average GDP growth rate of 5.4% as compared to that of Nigeria (International Monetary Fund [IMF], 2021). This situation becomes a thing of concern in this current study to relate tax formation and economic growth in the contexts of both economies in order to make plausible recommendations where necessary. It is against this backdrop this current study was motivated.

1.2 Specific Objectives

The following specific objectives were utilized in this study for the purpose of achieving the main objective. These were to;

i. Examine the relationship between tax formation and economic growth in Nigeria.
ii. Determine the relationship between tax formation and economic growth in Ghana.

1.3 Research Questions

The following questions were used to guide the study of this nature. These include;

i. What is the relationship between tax formation and economic growth in Nigeria?
ii. What is the relationship between tax formation and economic growth in Ghana?

1.4 Hypotheses

The following hypotheses in null form were tested for the purpose of answering the research questions. These include;

i. H_{o1}: There is no significant relationship between tax formation and economic growth in Nigeria
ii. H_{o2}: There is no significant relationship between tax formation and economic growth in Ghana.

1.5 Scope

The study focused on the relationship between tax formation and economic growth in Nigeria and Ghana. The study covered the time frame of 2015 to 2021. The choice of the short time frame with the based year of 2015 and 2021 is to ensure clarity and control of data analysis outcome for easy comparison of the relationship between tax formation and economic growth in both countries utilized in this study.

1.6 Constraints

The study runs into some constraints in the process of conducting this study. The value of any research findings depend critically on the accuracy of the data collected. The quality of the data collected from the statistical agencies such as; Central Bank of Nigeria (CBN) Statistical Bulletin and Bank of Ghana Statistical Bulletin could be compromised via a number of potential routes. However, efforts to ensure that data from these two sources were accurate added to the costs of the research but such costs are necessary if poor decisions and expensive mistakes were to be avoided. Finally, the study was constrained by dearth of previous studies in the research area of interest which comparatively discussed issues on tax formation and economic growth as most of the previous studies were carried out in Nigeria.

1.7 Significance of the Study

The study would be of immense assistance to government, policy makers and future researchers. Specifically, it would help to achieve the following:

i. To the Government: It would help the government of Nigeria and Ghana in making a better utilization all taxes generated based on the tax reform to boost tax formation towards achieving the desire level of economic growth. Furthermore, this study will help the government of Nigeria and Ghana to discover and improve upon potential policy that could drive formation of taxes on the basis of the reform to boost economic growth in the countries,
ii. To the Policy Makers: This study would help policy makers not only to generate better tax policies but also to make better forecasts of the effects of such policies particularly tax formation policy framework on the

overall economy of Nigeria and Ghana. This study will also assist policy makers to design better policies that would encourage efficient use of the tax formation to achieve desired level of economic growth,

iii. To Future Researchers: The study will deepen previous studies on impact of tax formation on economic growth in Nigeria and Ghana It is hoped that this study will also find wide acceptance among those who desire to carry out further research in this area of research interest.

2. REVIEW OF RELATED LITERATURE

The review of related literature focused on conceptual review, theoretical foundation, empirical review and gaps in literature.

2.1 Conceptual Review

Conceptually, Godwin (2021) viewed tax as a compulsory financial charge or some other type of levy imposed on a taxpayer (an individual or legal entity) by a governmental organization in order to fund government spending and various public expenditures. According to Hassan (2019), tax formation deals with the accumulation of taxes to generate revenue for the support of government, for the administration of the laws, and as the means for continuing in operating the various legitimate functions the state. The Institute of Chartered Accountants of Nigeria (2016) and the Chartered Institute of Tax revenue of Nigeria (2020) viewed tax as an enforced contribution of money, enacted pursuant to legislative authority.

Felix (2017) conceptualized tax formation as the compulsory transfer or payment (or occasionally of goods and services) from private individuals, institutions or groups to the government. From Obi (2018); tax formation are generally either of two types; Direct and Indirect. A direct tax is levied on income or profit while an indirect tax is levied on expenditures. Good examples of Direct Tax include Personal Income Tax, Capital Gain Tax, Profit Tax and

Wealth Tax. Examples of Indirect Tax include Excise Taxes, Export Taxes, Import Duties, Expenditure Tax, Sales Tax and Value Added Tax.

Economic growth is referred to the steady process by which the productive capacity of the economy is increased over time to bring about rising levels of national output and income (Sameh, 2017). World Bank (2014) conceptualized economic growth as increase in a country's potential Gross Domestic Product (GDP), though this differs depending on how national product has been measured. Oladejo (2016) conceptualized economic growth as a continual rise in the national income over a range of time of not less than five years.

In economic growth theory, economic growth is usually calculated in real terms, that is, inflation-adjusted terms, in order to obviate the distorting effect of inflation hence, the use of Real Gross Domestic Product (RGDP) in most growth literature. This implied that an increase in Real Gross Domestic Product (RGDP) is an evidence of economic growth. Taiwo (2011) conceptualized a country's economic growth as a long term rise in capacity to supply increasing diverse economic goods to its population, this growth capacity based on advancing technology and the institutional and ideological adjustment that is demanded (Ohiaeri, 2017).

2.2 Theoretical Foundation

The theoretical foundation of this study is based on traditional tax handle theory, traditional tax handle theory, and benefit theory of tax and cost of service theory of tax.

i. Traditional tax handle theory: The traditional tax handle was postulated by Solow (1956) and Swan (1956). They posited that the level of fiscal need is nearly related to the level of economy development (Musgrave, 1989). According to this theory, to reach a certain level of growth of per capita income, there is need to create a given level of national income through taxes. Taxes arc obligatory contribution for which no certain benefit is received in return to the tax paper. Taxes are arranged to compulsorily make the household to transfer the purchasing power to the government for its use.

   The process also affects significantly the allocation of resources, recognize social costs which are not evident in the market prices and affect the allocation of income and wealth since they reduce the disposable income and wealth to those who bear them (Goode, 1984).Mansfield (19SS) is one of the leading proponents of the tax handle theory as being the most important theory that describes the approach of tax structure in the developed and developing countries. The theory suggests that as a country's per capita income and level of monetization increases, indirect taxes becomes more noticeable more than direct taxes. Therefore, while direct taxes contribute significantly to the fiscal revenues of developed countries, the indirect taxes contribute much more to the growth of the developing countries (Karumba, 2016).

ii. Benefit Theory of Tax: Benefit theory as propounded by Erik Robert in 1919. The theory assumes that citizens tend to pay more taxes when they feel they have sufficient benefits from the activities of the state. It is however argued that the services which are provided by the state may not quantified and measured after all some citizens who pay taxes do not have the opportunity of enjoying them. This theory is relevant as the theory is used to evaluate the benefits of tax just as the topic measures the relevance of taxation on growth of the economy.

iii. Cost of Service Theory of Tax: This theory believes that tax is similar to price. So if a person does not utilize the service of a state, he should not be charged any tax. Some criticisms have been leveled against this theory. According to Jhingan (2009), the cost of service theory imposes some restrictions on government services. The objective of government is to provide welfare to the poor. If the theory is applied, the state will not undertake welfare activities like medical care, education, social amenities, etc. Furthermore, it will be very difficult to compute the cost per head of the various services provided by the state; again, the theory has violated the correct definition and tenets of tax. Finally the basis of taxation as propounded by the theory is misleading. The limitations inherent in the cost of service theory led to the modernization of the theory.

2.3 Empirical Review

Review of Studies in Nigeria

In Nigeria, Cornelius, Ogar and Oka (2022) examined the impact of tax revenue on economic growth. Data were sourced from Central Bank Statistical Bulletin and extracted through desk survey method. Ordinary Least Square of Multiple Regression Analysis was used to establish the relationship between dependent and independent variables. The finding revealed that there was a positive, insignificant relationship between tax revenue and the growth ot the Nigeria economy. In the same way, Gylych, Samira and Abdurahman (2022) examined the impact of tax formation on the economic growth of Nigeria from 1986 to 2020. Results shows that tax formations is positively and significantly related to economic growth and that tax formations indeed causes economic growth. We conclude that favorable tax formations improves the revenue generating capacity of government to undertake socially desirable activities that translate to economic growth in real output and per capita basis. However, it is recommended that sustainable economic growth can be heightened through taxes in line with macro-economic objectives, corrupt-free and efficiency in tax policies of the government, alongside, accountability and transparency of government officials.

Nkhalamo and Sheefeni (2021) examined the connection between tax revenue and economic growth in Namibia. The study using quarterly data sourced from the ministry of finance, Namibian statistical agency and Bank of Namibia publication focused on tax and economic activities for the period 2001-2019. Results reported by the study reflects that no long run relationship exists between tax revenue and economic growth in Namibia, further results aimed at analyzing the short run effect of the independent variable revealed that an immediate negative effect of tax revenue exists on economic growth resulting from shocks in tax and more importantly the forecast error variance decomposition revealed that tax is responsible for moderate fluctuation in economic growth in Namibia.

Basila (2020) investigated the relationship between tax revenue and GNP in Nigeria used a data based on tax revenue and GNP figure from 1994 to 2018 obtained from Central Bank of Nigeria statistical bulletin, GNP and tax revenue for that period of study were tested for correlation, the test revealed a strong Pearsons Product Moment Correlation (PPMC) at about 96 percent strength. Further, a test of significance confirmed that tax revenue is significantly different at 99 percent confidence level in relation to GNP. The study concluded that there is a strong positive correlation between tax revenue and GNP, again as regards to the test of significance;-test confirmed that tax revenue is significantly different in relation to GNP in Nigeria.

Adereti, Sanni and Adesina (2020) examined the effect of tax revenue on Gross National Product (GNP). The study used time series data on the Gross National Product (GNP), tax revenue, total tax revenue and total (federal government) revenue from 1994 to 2018, sourced from Central Bank of Nigeria to analyze, using both simple regression analysis and descriptive statistical method. Findings showed that the ratio of tax revenue to GNP averaged 1.3% compared to 45% in Indonesia, though tax revenue accounts for as much as 75% significant variations in GNP in Nigeria. However, they concluded that there is a positive and significant correlation that exists between tax revenue and GNP. Similarly, Omolapo, Aworemi and Ajala (2020) examined the effect of tax revenue on Nigerian economy. The study performed a data analysis with the use of stepwise regression analysis on time series data for the period of 2015-2019. Findings showed that tax revenue has statistical significant effect on revenue generation in Nigeria. The results from their analysis revealed that tax revenue is beneficial to the Nigerian economy. The study concluded that increase in tax revenue generation led to increase in economic growth and development in Nigeria.

Nasiru, Haruna and Abdullahi (2019) examined the impact of tax revenue on the level of economic growth in Nigeria. The study uses secondary' data which was analyzed using Johansen (1988) co-integration test. The quarterly data ranged from 1994 Q4 to 2018 Q4. The study found evidence of a significant positive impact of tax revenue on economic growth. In the same vein, other government revenues, which include all oil receipts and other receipts into the federation account other than tax revenue, were also found to be positively related to economic growth during the study period. The study, therefore, recommends that tax revenue should be sustained hence; all identified administrative loopholes should be covered for tax revenue to continue to contribute more significantly to economic growth of the country. Also, Ijeoma and Okoye (2019) analyzed empirically the impact of tax revenue on economic growth in Nigeria from 2005-2018. Data were collected from Central Bank of Nigeria (CBN) statistical bulletin.

A simple regression technique, with the aid of SPSS version 23.0, was employed to test the hypotheses formulated. The result shows that tax revenue positively contributes to the total revenue generated by government and by extension the economic growth of Nigeria.

William and James (2018) examined causalty between tax revenue and the Nigeria Economy. The study used error correction model (ECM) to analyse the causality between tax revenue and the Nigeria Economy proxied by GDP during the period 1994-2015. The data such as tax revenue and GDP were obtained from

Central Bank of Nigeria (CBN) statistical bulletin and Federal Inland Revenue Services (FIRS). The results of the findings revealed that tax revenue exert positive and significant influence on GDP while there was evidence of unidirectional casualty running from tax revenue to GDP. In the same way, Owolabi and okwu (2018) examined the contribution of tax revenue to development of Lagos State Economy, using simple regression models as abstraction of the respective sectors considered in the study. The study considered a vector of development indicator as dependent variables and regression each on tax revenue proceeds to Lagos State for the study period. Development aspect 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 tax revenue contributed positively to the development of the respective sectors. However, the positive contribution was statistically significant only in agricultural sector development.

Emmanuel (2018) examined the effects of tax revenue on economic growth and total tax revenue in Nigeria using data ranging from 1994 to 2017. The study utilized OLS method of regression analysis. The study found out that tax revenue has significant effect on GDP and also on total tax revenue. This indicates that increase in value added tax would lead to increase in tax revenue and economic growth (GDP). Similarly, Adereti, Sanni and Adesina (2018) studied tax revenue and economic growth in Nigeria Nigeria. Time series data on the Gross Domestic Product (GDP), VAT (Value Added Tax) Revenue, Total Revenue and Total (Federal Government) Revenue from 1994 to 2017 sourced from Central Bank of Nigeria (CBN) were analysed, using both simple regression analysis and descriptive statistical method. Findings showed that the ratio of VAT Revenue to GDP averaged 1.3% compared to 4.5% in Indonesia, though VAT Revenue accounts for as much as 95% significant variations in GDP in Nigeria. A positive and signification correlation existed between VAT revenue and GDP.

Finally, Ogbonna and Ebimobowei (2018) investigated the impact of tax revenue on the economic growth of Nigeria. To achieve the objective of this paper, relevant secondary data was collected from the Central Bank of Nigeria (CBN) and the Federal Inland Revenue Service (FIRS) from 1970 to 2010. The secondary data collected from the relevant government agencies in Nigeria were analysed with relevant estimation technique like Ordinary Least Squares (OLS). The result showed that there tax revenue had positive, but insignificant impact on economic growth in Nigeria within the study period.

2.4 Review of Studies in Ghana

In the case of Ghana, Alexander (2022) examined the impact of tax revenue on the economic growth of Ghana and Gross Domestic Product which measures the economic growth was used as proxy. The paper also examines tax reforms and the effect of automation on tax revenue performance, sources of revenue leakages and measures to improve the collection of taxes. The Least Square Multiple Regression was used to explore the relationship between GDP (the dependent variable) and Tax Revenue (Independent variable) for the period 1999 to 2020. Tax Revenue is made up of Direct Taxes, Indirect Taxes and taxes collected by the Customs Division. This has been on the increase but more is need to reduce the deficit of Ghana. The Regression result indicated a very positive and significant relationship and hence a positive impact of tax revenue on economic growth of Ghana.

Also, Wisdom (2021) examined the effect of tax revenue on economic growth in Ghana using quarterly data for the period 1986 to 2019 with VAR framework. The study found that there exist both short-run and long-run relationship between economic growth and tax revenue. The result indicated a unidirectional causality between tax revenue and economic growth and it flows from tax revenue to economic growth. The result suggested that tax revenue exerted a positive and statistically significant effect on economic growth both in the long-run and short-run implying that tax revenue enhances economic growth in Ghana. The study recommended that the tax base need to be widened and the tax rate reduced in other to generate more revenue. It was recommended that the government should improve tax collection measures in other to generate more revenue so as to increase economic growth in Ghana.

2.5 Review of Studies in Nigeria and Ghana

There is dearth of comparative study on tax formation and economic growth in Nigeria and Ghana. However, Francis, Emudainohwo and Gunardi (2018) examined the effect of tax revenue on economic growth of Nigeria and Ghana. The study used multiple regressions as tools of analysis. The study found based on the analysis that firstly, there's a significant positive effect of tax revenue on the gross domestic product of Nigeria. Secondly, there's a significant positive effect of tax revenue on the gross domestic product of Ghana. Thirdly, pairwise comparisons showed significant differences between standardise results of both countries.

2.6 Gap in Literature

There is no research without a gap, and the essence of any study is to add to existing body of knowledge. Looking at the available literatures reviewed in this area of research interest much attention had been given to issues on tax formation and economic growth as a whole in Nigeria with little attention given to tax formation and economic growth in comparative manner. It is the bid to fill this gap geographically that motivated this current study to examine the relation between tax formation and economic growth in Nigeria and Ghana.

3. METHODOLOGY

This section explained research design, sources of data collection and model specification.

3.1 Research Design

A quasi experimental research rooted on ex-post *facto* research design was adopted because it helps to examine the cause and effect relationship between the variables. This design approach was adopted because it combines theoretical consideration; that is the a priori criterion with empirical observations to ascertain the relationship the variables of interest in this study.

3.2 Sources of Data Collection

This study utilized a quantitative approach to empirically analyse the relationship between tax formation and economic growth in Nigeria and Ghana. The data for the study was sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin and Bank of Ghana, 2021. The data included; gross tax revenue formation (X) and Gross Domestic Product (Y) as measure of economic growth.

Model Specification

In structuring the model for this study to accomplish objective one to two, the Ordinary Least Squares (OLS) method of simple regression analysis was used. On this basis, the functional from of the model was given as showed in Equation 3, 1 and Equation 3.2:

Y=f(X)---3.1

The models above in mathematical and stochastic forms are specified as follows:

Log=βo+ βlogX+ μ ---3.2

Where;

Y= Gross Domestic Product as measure of economic growth

X= gross tax revenue formation

μ = Error or Stochastic term (it captures other factors that determine economic growth apart from tax formation).

Date Presentation and Analysis

Table 1: Data on Gross Domestic Product (Y) as for Economic growth hand Gross Tax Revenue Formation (X)

Year	Y (%)	X ($Billion)	Y (%)	X ($Million)
		Nigeria	**Ghana**	
2015	2.65	70.01759621	2.12	27.68149333
2016	-1.62	78.12638666	3.37	29.60073214
2017	0.81	87.93512356	8.13	35.1874696
2018	1.92	123.6788999	6.20	39.71841199
2019	2.21	110.8400275	6.51	45.29161361
2020	-1.79	144.3822202	0.51	52.08446514
2021	3.65	164.9246423	5.36	61.38857012

Source: CBN Statistical Bulletin and Bank of Ghana, 2021

Table 1: Summary of Regression Result on the Relation between Tax Formation (X) and Economic Growth (Y)

Dependent Variable: logy

	Nigeria			
Variable	Coefficient	Std. Error	r t-Statistical	Prob.
C	0.348470	0.054381	6.6407937	0.0006 #
LogX	0.482112	0.079131	6.092580	0.064

Dependent Variable: logy

	Ghana			
Variable	Coefficient	Std. Error	r t-Statistical	Prob.
C	0.541775	1.486232	0.364529	0.7213
LogX	0.542168	0.102511	5.288876	0.0055 #

Source: Researcher's Computation using E-views Software version 10,2022

Note: # denotes significance at 5%

The constant of the regression equation on Table 1 is 0.348470. If other things being equal, it represents the value of Gross Domestic Product (Y) as proxy for economic growth when gross tax revenue formation (X) is equal to zero in Nigeria within the study period.

The regression coefficient of gross tax revenue formation (X) is 0.482112. It showed that 1% increase in tax formation in Nigeria brought about 48% increase in Gross Domestic Product (Y) as proxy for economic growth in the Nigerian economy. It is positive showing a direct, but insignificant relationship between tax formation and economic growth in Nigeria within the study period.

The regression coefficient of gross tax revenue formation (X) is 0.542168. It showed that 1% increase in tax formation in Ghana brought about 54% increase in Gross Domestic Product (Y) as proxy for economic growth for Ghana's economy. It is positive showing a direct and significant relationship between tax formation and economic growth in Ghana within the study period.

Table 2: Summary of the Probability Statistic for Hypothesis Testing

Countries	Variables	Parameters	P-values	Level of significance	Decision	Conclusion
Nigeria	X		0.0643	0.05	Reject H_1	Insignificant
Ghana	X		0.0055	0.05	Accepted H_o	Significant

Source: Author's Computation using E-Views 9.5 version 2022

Decision Rule: If p-value>0.5, accept the H_o and reject the H1 and concluded that the estimated parameter is not statistically significant. On the contrary, if the p-value <0.05, reject the Ho and accept the H1 and conclude that the estimated parameter is statistically significant. This is analysed below. The results based on the analysis on Table 2 showed that there was an insignificant relationship between tax formation and economic growth in Nigeria while there's a significant relationship between tax formation and economic growth in Ghana within the study period.

4. SUMMARY OF FINDINGS

The study utilized two specific objectives with the intention to; examine the relationship between tax formation and economic growth in Nigeria and determine the relationship between tax formation and economic growth in Ghana. Based on objective one, it was revealed that there's a positive, but insignificant relationship between tax formation and economic growth in Nigeria.

This findings is similar to that of Ogbonna and Ebimobowei (2018) who investigated the impact of tax revenue on the economic growth of Nigeria, and the results showed that tax revenue had positive, but insignificant impact on economic growth in Nigeria within the study period. However, the findings is not in line with that of Nasiru, Haruna and Abdullahi (2019) swho examined the impact bof tax revenue on the level of economic growth in Higeria, and found that evidence of a significant positive impact of vtax revenue on economic growth.

Based on objective two, it was discovered that a positive and significant relaytionship sufficed between tax formation and economic growth in Ghana. The findings is in line with that of Alexander (2022) who examined the impact of tax revenue on the economic growth of Ghana, and the regression result indicated a very positive and significant relationship and hence a positive impact of tax revenue on economic growth of Ghana. Also, it is in line with that of Wisdom (2021) who examined the effect of tax revenue on economic growth in Ghana, and the result showed that tax revenue exerted a positive and statistically significant effect on economic growth both in the long-run and short-run implying that tax revenue enhances economic growth in Ghana.

5. CONCLUSION AND RECOMMENDATIONS

The study examined the relationship between tax formation and economic growth of Nigeria and Ghana for a period of 2015 to 2021. The study conclude that increase in tax formation led to insignificant increase in economic growth in the Nigeria economy within the study period. This was evidenced as there was a positive, but insignificant relationship between tax formation and economic growth in Nigeria. Also, the study concluded that increase in tax formation led to significant increase in economic growth in Ghana as it discovered a positive and significant relationship sufficed between tax formation and economic growth in Ghana. Thus, Nigeria had a marginally higher gross tax revenue formation than Ghana, but Ghana had more stable economic growth than Nigeria. The government should put in place adequate measure to ensure that revenue generated from taxes effectively utilized to develop and both economies.

The federal government should prudently manage the financial resources generated from taxes and also reduce drastically municipal waste of funds. Practical application of tax revenue to solving problems surrounding welfare of the citizens; will result in more generation of tax revenue. The government should pay attention to encouraging her citizens to build trust in it by tax accountability, ensuring that the promises made to the citizens are highly delivered. It should also ensure that the tax system is very transparent and proceeds from taxes used honestly for the betterment of the citizens. The positive impact of the tax on the economy can be sustained and enhanced if the government makes effort and its relevant agencies to exempt local infant industries from tax payment over agreed upon period. Also, the management, administration, and implementation of Taxes in Nigeria and Ghana should be done in such a way that it would not have an adverse effect on the economy by distorting the free forces of demand and supply. Beside that, the government must put stein punitive measures in place to sanction corrupt officials as well as establishments that refuse to remit collected Tax funds.

REFERENCES

Adcrai, P. Sanni, F. &Adesina G. (2020). Effect of tax revenue on Gross National Product (GNP *').International Journal of Finance.* 8(1), 93-104.

Adereti, D. Sanni, C. & Adesina P. (2018).Tax revenue and economic growth in Nigeria. *European Journal of Business and Management.* 5(2), 112-234.

Alexander, S. (2022). Impact of tax revenue on the economic growth of Ghana. *Journal of Economic and Business Studies,* 3(1), 15-27.

Basila, A. (2020). Relationship between tax revenue and GNP in Nigeria. *International Journal oj Comparative Studies in International Relations and Development,* 4(1), 161-74.

Cornelius, A. Ogar, F. & Oka C. (2022).Impact of tax revenue on economic growth. *The Journal of Economic Perspectives,* 8(4), 123-139.

Edame A. & Okoi, G. 2022). Determinants of tax formation. *International Journal of Business and Management,* 15(10), 17-59.

Felix, L. (2017).Tax formation and economic growth in Nigeria. *Journal of Humanities and Social Science,* 23(12), 52-64

Francis, E. Emudainohwo, K. & Gunardi S. (2018).Effect of tax revenue on economic growth of Nigeria and Ghana. *International Journal of Innovative Finance and Economics Research,* 4(3), 12-38

Garba, D. (2020). Tax revenue on economic growth in Nigeria. *International Journal of Portfolio Management,* 4(2), 23-78.

Godwin, F. (2021 *).Tax formation and economic growth in Nigeria.* Review of economic and business studies, 3(1), 105-127.

Gylych S. Samira, M. &Abdurahman B. (2022).Impact of tax formation on the economic growth of NigeriaJW/a *international journal of economics, finance and management,* 2(1), 34-67.

Hassan, J. (2019). Tax formation and economic growth in Nigeria. *International Journal of Portfolio Management,* 4(2), 23-78.

Ijeoma, H. &Okoye A. (2019).Impact of tax revenue on economic growth in Nigeria. *Journal of South African Business Research.* 3(2), 1-12.

Myles, S. (2020). lax formation and economic growth in Nigeria. *International journal of business and finance,* 45 (1), 115-135.

Nasiru, E. Haruna, G. & Abdullahi T. (2019).lmpact of tax revenue on the level of economic growth in Nigeria.

Nkhalamo, N.& Sheefeni C. (2021). The connection between tax revenue and economic growth in Namibia. *Global Business and Economic Research Journal,*

1(2), 8-12.

Nyamadi, P. (2019). Effects of tax formation on economic growth in-Nigeria. *Journal of Applied Business and Economics,* 9(1), 70-102 Obi, P. (2018).Tax formation and economic growth in Nigeria. *International journal of business and finance,* 45 (1), 115-135.

Ogbonna, S. & Ebimobowei, J. (2018). Impact of tax revenue on the economic growth of Nigeria. *European Journal of Business and Management,* 5(2) ,81-90.

Omolapo, D. Aworemi, J. & Ajala R. (2020).Effect of tax revenue on Nigerian economy. *Noble International Journal of Economics and Financial Research,* 3(6), 34-67 Takumah, A. (2020). Tax revenue and growth. *Journal of International Money and Finance,* 28(2), 271-292.

William, N. & James D. (2018).Causality between tax revenue and the Nigerian Economy. *International Journal of Academic Research in Business and Social Sciences.* 5 (12), 85- 126. Emmanuel (2018).Effects of tax revenue on economic growth and total tax revenue in Nigeria.

Appendix

Data on Tax formation (X) and Economic Growth (Y)

Year ($Million)	Y	X ($Billion)	Y	X
	Nigeria		**Ghana**	
2015	2.65	70.0176	2.12	27.68149
2016	-1.62	78.12639	3.37	29.60073
2017	0.81	87.93512	8.13	35.18747
2018	1.92	123.6789	6.2	39.71841
2019	2.21	110.84	6.51	45.29161
2020	-1.79	144.3822	0.51	52.08447
2021	3.65	164.9246	5.36	61.38857

Source: CBN Statistical Bulletin and Bank of Ghana, 2021

Dependent Variable: Y
Method: Least Squares
Date: 17/11/22: 7:54
Sample: 2015 2021
Included observation: 7

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.348470	0.054381	6.407937	0.0006
X	0.482112	0.079131	6.092580	0.0643
R-squared	0.971676	Mean dependent var	239429.6	
Adjusted R-squared	0.896124	S.D. dependent var	147281.4	
S.E. of regression	9169.544	Akaike info criterion	21.38812	
Sum squared resid	5.04E+08	Schwarz criterion	21.56898	
Log likelihood	-112.6346	Hannan-Quinn criter.	21.27411	
F-statistic	643.4716	Durbin-Watson stat	1.621121	
Prob (F-statistic)	0.000000			

Dependent Variable: Y
Method: Least Squares
Date: 17/11/22 Time 8:04
Sample: 2015 2021
Included observations: 7

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	0.541775	1.486232	0.364529	0.7213
X	0.542168	0.102511	5.288876	0.0055

R-squared	0.920569	Mean dependent var	41.81667
Adjusted R-squared	0.602801	S.D. dependent var	16.84725
S.E. of regression	10.61776	Akaike info criterion	7.437841
Sum squared resid	112.7369	Schwarz criterion	7.264307
Log likelihood	-17.31352	Hannan-Quinn criter.	6.743171
F-statistic	2.897036	Durbin-Watson stat	1.891473
Prob (F-statistic)	0.001231		