Nigerian Studies in Economics
and Management Sciences 2021
ISSN: 2645-3061 www.nsiems.com 4(2):19-27

The Effect of Taxation on Economic Growth in Nigeria (1993-2019)

Ogunoye, Aderounmu Adebayo, Ph.D

Department of Economics, Faculty of the Social Sciences,
Adekunle Ajasin University, Ondo State.
E-mail: princeaogunoye@yahoo.com

Abstract

The study examines the effect of taxation on economic growth in Nigeria between 1993 and 2019. The study employed Dynamic Ordinary Least Square and Johansen co-integration to capture the objective. The result indicated that a long-run relationship existed among the variables. The coefficient indicated that Custom and Excise Duties were harmful to economic growth. Similarly, Value Added Tax was equally negatively related to Gross Domestic Product such that 1% increase in Value Added Tax collected led to 1.15% decrease in growth. The other form of taxes Company Income Tax amnd Petroleum Profit Tax contributed substantially to economic growth. The study discovered that two taxes (VAT, CED) did not contribute positively to the economic growth while the other independent variables (CIT, PPT) contributed positively to the economic growth. Based on these findings, the study recommends that, for a nation to grow, especially in Nigeria, the government's focus should be on some taxes that need to be improved significantly to aid economic growth. Primarily, on VAT and CED, policies should be geared towards them for positive effectiveness so as to improve the economic activities in Nigeria, which will in turn create a better avenue for actualizing economic growth.

Keywords: **:** Value Added Tax, Custom and Excise Duties and Economic growth

1. INTRODUCTION

Taxation has received considerable attention from schools and researchers recently, and everyone has given a different view on the subject. For the Nigerian government to adequately and effectively carry out its primary and other subsidiary functions, it requires adequate funding where income tax is one of the significant sources of revenue to all governments worldwide, including Nigeria. Therefore, taxation is seen as an essential part of a country's investment and growth pattern. Anyaduba (2000) viewed tax as a levy imposed compulsorily on individual, household, and corporate entity by the government or its agent to raise revenue. At the same time, Ogbonna and Appah (2012) asserted that taxation is used to raise the revenue to finance government expenditure and redistribute riches (wealth) in an economy. In the same vein, Johansson, powerful Arnold, Brys, and vartla (2008) portrayed that tax system is primarily aimed at financing public expenditure. They emphasize the importance of tax revenue as a tool for promoting and actualizing equality and readdressing social and economic concerns, increasing population size and infrastructural weakening.

The government levies tax to raise revenue that will help the administration of government policies and the role of each government is first to provide good governance. On the other hand, good governance means providing basic infrastructure to meet citizens' basic needs in

an atmosphere where peace and security are guaranteed. Meanwhile, revenue generated through taxes also enables the government to maintain law and order and other socioeconomic, political, and cultural activities. To obtain this, every government must establish a rational tax system where every taxpayer makes tax payments.

A tax system is considered as one of the most effective means of mobilizing a nation's internal revenue, which serves as a way of promoting economic growth whereby the state uses the funds generated from the tax to support certain obligations, such as education systems, health care systems, pensions for elderly ones, unemployment benefit and public transportation. Whereas economic growth on the other hand is seen as increased in productivity and economic well-being. Economic growth is gradual and steady changes in an economy which comes about by ageneral increase in the rate of savings and population (Jhingan, 2005). In addition, economic growth is the yardstick for raising the standard of living of the people and implies reducing inequalities of the income distribution. Through taxation, the government ensures that resources are channeled toward essential projects in the society which will aid economic growth.

Today, Nigeria and other African countries face a series of challenges in optimizing taxation for economic and social growth while aiming to achieve a high level of growth and development. The most common difficulty in optimizing taxation for social and economic growth is how to look forward for optimal balance between a regimes that is business and investment-oriented, while at the same time leveraging enough revenue for the public service delivery, which will, in turn, make the economy more attractive to investors. Unfortunately, the taxation system in Nigeria has not been fully tapped and maximized, and its role in promoting economic and social amenities is not well felt because of its poor administration; no wonder that Nigerian economy has remained in deep shamble, as well as the macroeconomic pointers, shows that the economy is in urgent need of changes balancing and indeed in need of good reform (Olashore, 1999). Moreover, the tax system in Nigeria has several loopholes and, as a result, is confronted with many challenges:

Meanwhile, Simeon and Roberts (2017) analyzed some top tax issues which happened in the price water house coopers in October 2010, and these are the multiplicity of taxes, lousy administration, non-availability of the database, complex nature of the Nigerian tax laws, changes of accounting data, minimum tax, tax touting and non-payment of tax reforms among others (Edori et al. 2017).

However, inadequate training and retraining of tax personnel and fraudulent activities of the tax collectors pose significant challenges to revenues generation, as fraudulent tax collectors manipulate and divert public revenue to personal pocket and evasion of tax payment by the taxpayer has also been another challenge that has made the government lose a tremendous amount of revenue which would have aided economic growth. Hence, over-dependence on oil which Nigeria is seen as a major source of revenue has become a severe setback for government to strategize inwardly and outwardly on how to increase revenue generation from tax to improve the level of gross domestic product. Thus, the effect of taxation on economic growth in Nigeria prompts an urgent need to examine some issues and further investigation.

In the literature, different researchers have examined several views in which they arrived at different results. Manukaji (201 8), did a study on the effect of tax structure on economic growth in Nigeria. Using tax components (VAT, PIT, PPT, and CIT) have a positive effect on the economic growth of Nigeria. Babalola and Aminu (2011), also investigated their study, which is the impact of taxation on economic growth in Nigeria. Their work concludes that there is a positive impact on economic growth. Finally, we look at Ikem (2011), as he investigated the interaction between tax structure and economic growth in Nigeria. He uses two different models in which; the first model made us understand that there is a positive significance in promoting economic growth in Nigeria. In comparison, Okoi (2014) investigated the impact of taxation on Nigeria's economy. The study concluded that taxation has negative impact on the country's economic growth. Umoru and Anyiwe (2013) also studied the

empiricism behind the new national tax policy in Nigeria. The study was examined on direct and indirect tax structure and their effect on Nigeria's economy and concluded that indirect tax has a negative effect on the Nigerian economy. Based on these contradictory views, this study aim to examine the effect of taxation (PPT, CIT, VAT, and CED) on economic growth in Nigeria.

2. EMPIRICAL LITERATURE

Murithi (2013) examined the relationship between government revenue and economic growth in Kenya. His study showed that there is a direct relationship between income tax and economic growth. They further concluded that an increase in VAT leads to positive effects on the rate of economic growth.

Takuma and Iyke (2015) examined the causal influence of the tax revenue on economic growth in Ghana from 1986-2014 using the vector autoregressive (VAR) tests. The results show a unidirectional causal flow from the tax revenue on the economic growth in Ghana. The result from the study also revealed that taxation has a significant effect on Nigerian's economic growth. Although some studies do not find a positive linkage between economic growth and taxation, it was quick to point out some flaws, including their statistical methodology and the data used in the analysis.

In a study, Saima etal. (2014) utilized Johansen co-integration tests to estimate data and time-series data from 1973 to 2010 for empirical analysis. They found out that high taxes in Pakistan have adverse effects on consumption, negative effects on investment, and GDP. In the study carried out by Bonu and Pedro (2009) on Botswana also reports a negative relationship between income tax rates boosting Botswana's economic growth. Saibu (201 5) adopted the model developed by Scully (2013) for Cote D'Ivoire, the study found out that negative relationship existed between tax burden and rate of economic growth in Nigeria and South Africa.

The existence of a substantial and positive impact of CAT revenue on the economic growth(GDP) of Pakistan was the findings by Bilal (2015) in his investigations using the Ordinary Least Square (OLS) Regression Techniques. In their study, Ravindra et al. (2011) adopted the descriptive technique in estimating and analyzing the data and found out that value-added tax has been identified as the real goal maker by the Indian government in the coming years to foster growth and prosperity in the country. Manukaji (2018) studied the effect of tax structure on economic growth in Nigeria. The study used time-series data from 1994 to 2016 whose regression result revealed that all tax component studied (value-added tax revenue, personal income tax revenue, petroleum profit tax revenue, and company income tax revenue) has a significant effect on economic growth in Nigeria. Chigbu and Njoku (2015) investigated the impact of taxation on the Nigerian economy, covering 1994-2012. The statistical analysis results revealed that positive relationships exists between custom and excise duties, CIT, PIT, PPT and VAT, and GDP. However, according to them, the explanatory variables have not significantly contributed to the economy's growth. Umoru and Anyiwe (2013) investigated the empiricism behind Nigeria's New National Tax Policy by employing cointegration and error correction as empirical estimation methods with a practical disaggregation strategy. They found that direct taxation policy is significant and positively correlated with economic growth; indirect taxation roved insignificant with the negative effect on economic growth in Nigeria Babalola and Aminu (2011) also investigated the impact of taxation on economic growth in Nigeria over the period 1977-2009. The results indicated that production expenditure positively impacted economic growth during the coverage period, and a long-run relationship exists between them.

Ogbonna and Ebimobowei (2011) studied petroleum revenue in Nigeria's economy from 1 970 to 2009. The study showed a strong correlation between petroleum revenue and GDP. The regression results showed an R=0.839, R2 of 0.705, F-value of 90.630, and a corresponding significant value of 0.1 0 and a T-value of less than 0.05 significant

level. They concluded that oil-based revenue would make a material difference on GDP if investigated efficiently in the economy.

Ogbonna and Appah (2012) observed the period of tax reforms on economic growth in Nigeria using the data collected from the Statistical Bulletin of the CBN from 1994 to 2009. The result showed that tax reforms variables such as PPT, CIT, VAT, ET, PIT, and CED have significantly impacted on Nigeria's economic growth. Ihenya and Mieseogba (2014) viewed taxation as a financial instrument for economic growth from 1980 to 2013. The study employed Ordinary Least Square and the results revealed that Corporate Income Tax and VAT positively impacted on GDP.

Ofoegbu et al. (2016), studied empirical analysis of the effect of tax revenue on economic development in Nigeria using arrived time-series data for 2005-2014. They discovered that there was a significant lower relationship between tax revenue and economic development. Success etal. (2012), adopted the Ordinary Least Square (OLS) technique. As the result found out that the relationship between petroleum profit tax and GDP for the period covered is significantly positive in Nigeria. Osundina and Olanrewaju (2013) corroborated this position using the same technique. Ogbonna and Appah (2012) adopted descriptive statistics and econometric models such as Whit Test, Ramsey Reset Test, Breusch Godfrey Test, Jacque Berra Test, Augmented Dickey-Fuller Test, Johansen test, and Granger casualty test in estimation and fund out that tax reforms are positively and significantly related to economic growth and tax reforms granger cause economic growth. On the other hand, Edame and Okoi (2014) adopted the Ordinary Least Square estimating technique using time series analysis data. The result showed that there exists a negative relationship between taxation, investment and GDP. The analysis so far revealed that taxation has a significant effect on Nigeria's economic growth. Base on the controversies among the researchers, this study is set out to examine the effect of taxation on economic growth in Nigeria.

3. METHODOLOGY

Theoretical Framework

This study used the "expediency Theory" to explain the effect of taxation on economic growth. This study shows the effect of tax on economic growth, and the theory asserts that every tax proposal must pass the test of practicability and must be the only consideration weighted by the authorities which means states should charge the members of the society the tax that should be paid for enhancement of economic activity. It further explains that the government should levy tax on the citizens according to its activities. This reasoning justifies the imposition of tax for financing state activity which provides a basis for apportioning the tax burden between members of the society. Therefore, the tax system should not be designed to serve individual members of society but only be used to cure society's ills as a whole. In conclusion, the theory focuses on the fact that taxes are collected to achieve economic objectives, which enhances the growth and development of a society in all areas.

Model Specification

The model specification used in this study followed the work of Chibu and Njoku (2015). The explanatory variables (CED, CIT, and PPT) and the dependent variable (GDP). They are explained below:

GDP= f(CED, CIT, PPT), GDP= gross domestic product (proxied for economic growth), CED = custom and excise duties, PPT= petroleum profit tax,

$GDP = a + \beta 1PPTt + \beta 2CITt + \beta 3CEDt + e$.....1

With modification to the work of (Chibu and Njoku 2015). Thus the model is specified below: GDP=f(VAT,CED,CIT,PPT). This can be reinstated in an explicit form:

$GDP = a_0 + a_1VAT_t + a_2CED_t + a_3CIT_t + a_4PPT_t + U_t$.....2

Where: GDP = Gross Domestic Product (proxied for economic growth) is (dependent variable) while, VAT = Value Added Tax, CED = Custom and Excise Duties, CIT = Company Income Tax, and PPT = Petroleum Profit Tax are (independent varibles), a_0= intercept, a_1-a_3= coefficient or parameter estimates and U_t = error term.

Sources of Data

The study used secondary time series data covering 27 years, from 1993 to 201 9. The data for the variables were sourced from different publications, such as the Central Bank of Nigeria statistical bulletin, World Development Indicator and National Bureau of Statistics.

4. RESULTS AND DISCUSSION OF FINDINGS

Table 4.1 DESCRIPTIVE STATISTIC

	LnGDP	lnCED	lnCIT	lnPPT	LnVAT
Mean	1 7.46836	5.288909	5.346735	6.594432	4.403251
Median	1 7.50428	5.38081 9	5.500850	7.202587	4.566429
Maximum	1 8.08364	8.968959	8.2091 23	8.071 31 2	6.335852
Minimum	1 6.80764	2.739872	2.256960	3.757892	1 .61 5420
Std. Dev.	0.478684	1 .266067	1 .785882	1 .432959	1 .499748
Skewness	-0.09691 3	0.31 0096	-0.08391 0	-0.940785	-0.370397
Kurtosis	1 .432484	4.3791 41	1 .792027	2.425472	1 .894392
Jarque Bera	2.80651 0	2.572502	1 .673283	4.3541 84	1 .992539
Probability	0.245796	0.276305	0.4331 63	0.1 1 3371	0.369254
Sum	471 .6458	1 42.8005	1 44.361 8	1 78.0497	1 1 8.8878
Sum Sq. Dev.	5.957597	41 .67609	82.92374	53.38768	58.48034
Observations	27	27	27	27	27

Source: Author's Computation, 2021

Table 4.1 above presents the results of the descriptive statistic. The Mean row could be interpreted as follows: In logarithm terms, the average value of GDP during the period reviewed was N17.5bn, that of CED was N5.3bn, CIT was N5.35bn, PPT was N6.6bn, and the average value of VAT collected was N4.4bn. The median, maximum, minimum values of each variable for the analysis period were also displayed, including their corresponding standard deviations. The Skewness statistic showed that only CED was positively skewed or skewed to the right while all other variables skewed to the left or negatively skewed. The Kurtosis statistic demonstrated that only CED with a value greater than 3 was leptokurtic or had a sharp-pointed peak. At the same time, all other variables with coefficients less than 3 indicated platykurtic distribution or distributions with flat or table peaks. The value of Kurtosis was expected to be 3 for a normal distribution, but since all the values were either greater than or less than three, then the data was not normally distributed; instead, they were somewhat skewed to the right or the left. Finally, Jarque-Bera's (JB) value for normal distribution was expected to be zero (JB = 0). However, the JB of the variable showed that all the statistics recorded were greater than zero. This confirmed that the data were not normally distributed.

Table 4.2 AUGMENTED DIKEY-FULLER UNIT ROOT TEST RESULTS

Variable	ADF test statistic	ADF @ 0.05	ADF @0.01 %	Order of integration	Remark
lnGDP	-5.533975	-2.991 878	-3.737853	I (2)	Stationary
lnCED	-5.223097	-2.991 878	-3.737853	I (2)	Stationary
lnCIT	-7.078592	-2.991 878	-3.737853	I (1)	Stationary
lnVAT	-5.91 201 4	-2.986225	-3.724070	I (1)	Stationary
lnPPT	-4.250846	-2.991 878	-.3.737853	I (1)	Stationary

Source: Author's Computation, 2021

The result of the ADF unit root test is presented in Table 4.2 above. The results showed that the data contained unit root problems as none of the variables integrated order I (0), meaning that they were not stationary at their level form. However, three of the variables, namely CIT, PPT, and VAT, were integrated of order I (0), implying that they were stationary at their first difference, while two variables (GDP and CED) were forced to be stationary at their second difference indicating that they were integrated of order I (2). Since these variables were not integrated of the same order, the study used Dynamic Ordinary Square to examine the effect of taxation on economic growth.

Table 4.3 JOHANSEN CO-INTEGRATION TRACE TEST RESULTS

Hypotheized No of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical value	Probability
None*	0.9401 90	1 22.2380	69.81 889	0.0000
At most 1 *	0.63731 5	51 .82329	47.8561 3	0.0202
At most 2	0.480604	26.46780	29.79707	0.1 1 53
At most 3	0.327373	1 0.09056	1 5.49471	0.2738
At most 4	0.007033	0.1 76449	3.841 466	0.6744

Source: Author's Computation, 2021 .

Table 4.4 JOHANSEN CO-INTEGRATION MAX-EIGENVALUE TEST RESULTS

Hypothesized No of CE (s)	Eigenvalue	Max-Eigen Statistic	0.5 Critical Value	Probability
None *	0.9401 90	70.41 467	33.87687	0.0000
At most 1	0.63731 5	25.35549	27.58434	0.0939
At most 2	0.480604	1 6.37724	21 .1 31 62	0.2036
At most 3	0.327373	9.91 41 1 5	1 4.26460	0.21 76
At most 4	0.007033	0.1 76449	3.841 466	0.6744

Source: Author's Computation, 2021

Tables 4.3 and 4.4 above displayed the result of the Johansen co-integration test conducted to establish whether a long-run relationship existed among the study variables even though they were not integrated of the same order. Table 4.3 contained the Trace Test results, which indicated two co-integrating equations, while the Max-Eigenvalue result in Table 4.4 indicated one co-integrating equation. Overall, the two tests indicated that a long-run relationship existed among the variables; therefore, we could proceed to conduct further analysis on the data of the variables.

Table 4.5 DYNAMIC OLS ESULT

0	Coefficient	Std.Error	t-Statistic	Probability
LnCED	-0.21 6809	0.079761	-2.71 8241	0.0298
lnCIT	0.33341 1	0.062925	5.298562	0.001 1
lnPPT	0.077854	0.032374	2.404806	0.0471
lnVAT	-0.01 1 448	0.1 1 6632	-0.0981 52	0.9246
C	1 6.57733	0.242823	68.26923	0.0000
R-squared	0.996204			
Adj. R-squared	0.987527			

Source: Author's Computation, 2021

The result of the model specified for this study is presented in Table 4.5. A priori, all the variables were expected to be positively related to GDP, meaning that they were theoretically expected to contribute significantly to economic growth. This result indicated that CED was significant and negatively related to GDP as the coefficient of ln CED was -0.21 6809, implying that a 1 % increase in CED led to a 21 .7% reduction in GDP. VAT was insignificant and negatively related to GDP such that a 1 % increase in VAT collected led to a 1 .1 5% decrease in GDP. These two taxes probably did not contribute positively to the country's economic growth, this might be because most of the tax collected did not go directly to the Government purse. Even the one reported was not judiciously spent to develop the economy. The other two variables were significant and positively related to GDP. For instance, CIT contributed substantially to GDP as 1 % increase in CIT brought about a 33.3% increase in GDP, and a 1 % increase in PPT led to a 7.8% increase in GDP during the time of analysis.

Discussion of the Findings

The findings revealed that all the variables were not of the same order of integration. Variables like Gross Domestic Product and Custom and Excise Duties were stationary integrated of order (2) while, Petroleum Profit Tax, Company Income Tax and Value Added Tax were integrated of order (1) and this prompted the study to make use of Dynamic Ordinary Least Square Model.

On the other hand, the Johansen co-integration was used even though the variables were not integrated of the same order, and the result indicated that long-run relationship existed among the variables. Furthermore, the result from the DOLSM indicated that CED was significant and negatively related to GDP as the coefficient of CED was -0.216809, implying that 1 % increase in CED led to 21.7% reduction in GDP.

VAT was insignificant and negatively related to GDP such that 1% increase in VAT collected led to 1.15% decrease in GDP, this corroborate the work of Umoru and Anyiwe (2013). These two taxes probably did not contribute positively to the country's economic growth, this might be because most of the tax collected did not go directly to the Government purse. Even the one reported was not judiciously spent to develop the economy. The other two variables were significant and positively related to GDP. For instance, CIT contributed substantially to GDP as 1 % increase in CIT brought about 33.3% increase in GDP, and 1 % increase in PPT led to 7.8% increase in GDP during the time of analysis, this result is in line with the work of Manukaji (2018).

5. CONCLUSION AND POLICY RECOMMENDATIONS

This study examined the effect of taxation on economic growth in Nigeria between 1993 and 2019. The result showed that a long-run relationship existed among the variables. The result further indicated that Custom and Excise Duties was significant and negatively related to Gross Domestic Product, Value Added Tax was insignificant and negatively related to Gross Domestic

Product, while, Company Income Tax and Petroleum Profit Tax were significant and positively related to Gross Domestic Product in Nigeria during the period under review. Therefore, the study concluded that revenue accrue from tax should properly be monitored and used in the country. Based on these findings, the study recommends that, for a nation to grow, especially in Nigeria, the government's focus should be on some taxes that need to be improved significantly to aid economic growth. Primarily on VAT and CED, policies should be geared towards them for positive effectiveness so as to improve the economic activities in Nigeria, which will in turn create a better avenue for actualizing economic growth.

References

Afuberon, I. R., & Okoye, G. A. (2014).The effect of tax compliance on economic growth and development in Nigeria. *West Africa.British Journal of Arts and Social Sciences. 11 (2).233-256*

Babalola & Aminu (1 977-2009) Impact of taxation on economic growth,

Bilal & Ravindra, (201 5) Impact of VAT Revenue on Economic Growth. *Journal of Economics and Sustainable Development. 13(6), 174-184*

Chigbu, E.E, Eze, L, & Ebimobowei, A. (2011). An empirical study in the casualty between economic growth and taxation in Nigeria. *Current Research Journal of Economic Theory. 4(2), 29-38.*

Cornelius, Orgar, & Oka, (2010) Impact of Tax Revenue on Nigeria Economy.

Edam & Okoi, (2014) Relationship or impact of taxation and investment on GDP. *Journal of Public Economics, 8(2), 27-44*

Gacanja, E. W. (2012). Tax Revenue and Economic Growth: An Empirical Case Study of Kenya. *Unpublished MBA Project, University of Nairobi*

Ihenya and Mieseogba, (2013) Taxation as a Financial Instrument for Economic Growth. *Journal of Information and Knowledge Management. 4(12), 49-53*

Ikem, (2011). Interaction between Tax Structure and Economic Growth.

Manukaji, I. J. (2018). Effect of Tax Structure on Economic Growth in Nigeria. International Journal of Innovative Finance and Economics Research, 6(11), 1-11

Chigbu and Njoku (1994-2012) Impact of taxation economic growth. Current Research journal of economic theory 4(2), 29-38

Murithi, K. M. & Moyi, D. E. (2003). Tax Reforms and Revenue Mobilization in Kenya. *AERC, Research Paper, 131*

Ofoegbu, G. N., Akwu, D. O., & Oliver, O. (2016). Empirical analysis of the effect of tax revenue on economic development of Nigeria. *International Journal of Asian Social Science, 6(1 0), 604-613*

Ogbonna, G. N. & Appah, E. (2012). Impact of tax reforms and economic growth of Nigeria: A Time Series Analysis. *Current Research Journal of Social Sciences 4(1), 62-68*

Osundina, C. K. & Olanrewaju, G. O. (2013). Welfare effects of taxation on the Nigerian economy. *International Journal Humanities and Social Science Invention. 8(2), 76-82*

Saibu, (2015) Relationship between Tax Rate on Economic Growth. *Euro economica issues, 34(1), 41-50*

Saima, S., Tariq, A., Muhammad, F. R., Sofia, A. & Amir, A. (2014). Taxation effects on Economic Activity in Pakistan. *Journal of finance and economics. 6(2): 215-21 9*

Success, M. J., Success, E. B. & Ifurueze, M. S. K. (2012). Impact of Petroleum Profit Tax on Economic development of Nigeria. *British Journal of Economics, Finance and Management Sciences. 2(5), 60-71*

Umaru and Anyiwe (2013) Tax Structures and Economic Growth in Nigeria: Disaggregated Empirical Evidence. *Journal of economic finance and Accounting. 4(2)*