



Taxation and Economic Growth Nexus: Emperical Evidence From Nigeria.

ABERE Benjamin Olusola PhD

*Department of Economics Edo State University Uzairue KM. 7, Auchi Abuja Road,
Iyamho – Uzairue Edo State, Nigeria.*

EGBUWALO Moses Orimolade Ph.D

Department of Economics, Elizade University, P.M.B 002, Ilara-Mokin, Ondo State Nigeria.

ABU Imran Enike

*Department of Economics Edo State University Uzairue KM. 7, Auchi Abuja Road,
Iyamho – Uzairue Edo State, Nigeria.*

Date of Submission: 12-10-2022

Date of Acceptance: 27-10-2022

Abstract

For the years 1990 to 2021, the study looks into the connection between taxation and economic growth in Nigeria. The explanatory variables for taxes include personal income tax, corporation income tax, value added tax, capital gain tax, and property tax. Gross domestic product was utilized as the indicator of economic growth. The goal of this study is to ascertain the long-term relationship between these taxing factors and Nigeria's economic growth. In order to prevent erroneous regression, the data set obtained from the Federal Inland Revenue Service, the Central Bank of Nigeria, and statistical bulletin was subjected to the Augmented Dickey Fuller Unit Root Test, which demonstrates that the variables are not stationary. Due to this, the autoregression distributed lag approach to co-integration had to be implemented. The outcome of the Wald test showed that the variables are co-integrated and that there is a long-term relationship between them. The model's long-term analysis shows a positive long-term relationship between GDP and personal income tax, capital gains tax, and property tax, but a negative long-term relationship between GDP and company income tax and value added tax. The study recommends a visible and updated basic amenities which will prompt the citizens to pay more tax and enhance accountability and transparency from the government regarding the management of revenue from tax to promote compliance among the tax payers

KEY WORDS: Personal Income Tax, Company Income Tax, Value Added Tax, Capital Gain

Tax, Gross Domestic Product, Value Added Tax.

I. INTRODUCTION:

There are significant duties that fall on the shoulders of any administration, but this is especially true of developing countries like Nigeria. These obligations include providing social services, building infrastructure, fostering the economic prosperity of the governed, ensuring the safety of people and their property, upholding the rule of law, expanding access to education and healthcare, managing the economy, creating job opportunities, and a host of other duties (Okoli, 2019).

These obligations require a significant financial commitment to be fulfilled. The amount of money the government is able to raise through many sources, one of which is taxation, determines its capacity to meet these demands (Nzotta, 2017). It is no longer acceptable or dependable to continue relying on oil as the primary source of income in order to achieve the much-needed economic growth and development in Nigeria. According to Okonjo-Eweala (2018), the contribution of tax to Nigeria's gross domestic product (GDP) was only 0.7%, despite the fact that the global benchmark should not be less than 20%. However, taxation's contribution to Nigeria's GDP increased marginally from 0.7 percent in 2013 to 8.1 percent in 2016, according to Okezie (2019).

Taxation, according to Appah (2020) and Salami, (2015), is a crucial component of a nation's investment and growth strategy. They added that a



tax is a mandatory levy placed by the government on a subject or his property.

In light of the significant financial obstacles Nigeria must overcome in order to achieve quick economic growth and development, the contribution of taxes to Nigeria's GDP appears to be insignificant. This research aims to investigate the relationship between taxation and economic growth in Nigeria in light of this disparity. The study attempts to accomplish this by attempting to answer the following questions: What are taxes' contributions to the expansion of the Nigerian economy? (b) How has taxation affected Nigeria's GDP expansion? (C) What relationship, if any, exists between taxation and economic expansion in Nigeria?

This paper's main goal is to empirically analyze how taxes affect Nigeria's economic development. The precise goals are to:

i.) Identify the effect of taxation on Nigeria's economic expansion during the study period.(ii) Establish the long-term relationship between economic expansion and taxation during the research period.(iii) Provide suggestions from experts that could increase taxation's contribution to economic growthexpansion in Nigeria.This study spans the years 1970 to 2021 in a time serial format.The other sections of the paper are organized as follows: section 2.0 offers a review of the literature and a theoretical framework; section 3.0 explains the technique used for the investigation; and section 4.0 discusses the study's multiple regression analysis. Conclusion and suggestions are included in Section 5.0.

II. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Economic Growth

Dwivedi (2019) defines economic growth as a long-term, sustained increase in net national product (NNP) or national output (GDP) per person. As a result, it indicates that the rate of growth of total output must outpace that of population growth.Thus, regardless of population expansion, economic growth requires a sizable and sustained increase in per capita income. The rise in output needs to be maintained for an extended period of time for economic growth to be considered real.It suffices to argue that economic expansion is not a byproduct of chance. The determinants of economic growth are a group of co-operating forces that collaborate to produce this phenomenon. They are the appropriate proportions of natural resources, capital formation, technological advancement, political and social elements, as well as human

resources and the quality of those resources. Technological advancement and favorable external influences typically result in economic expansion. It represents a decrease in income distribution discrepancies. Dwivedi (2017) continued, "It is the yardstick for enhancing the standard of leaving of the people in the concerned country."

2.1.2 Tax and Taxation

"A monetary charge imposed by the government on persons, entities, transactions, or properties to generate money" is the definition of a tax. Another definition of a tax is a financial burden imposed on people or property to fund public expenditures. A tax is any contribution levied by the government, whether it goes by the name of a duty, customs fee, excise tax, levy, or another term. A tax is defined as "not a voluntary payment or donation, but an enforced or an obligatory contribution exacted pursuant to legislative authority." As a result, a tax is a financial charge or levy that a state or a part of the state imposes on a person or a legal entity; this authority must be duly established (Piana, 2019; Anyaduba, 2018; Nzotta, 2017; Matthew, 2019; Salami 2018; Black ,2019).

From the aforementioned, taxation might be seen as the act of levying taxes on people, corporations, and other types of property in order to raise money for government programs that the tax-paying public will later benefit from.

According to Jhingan (2009), taxes are levied for a variety of reasons or goals, such as controlling the production of specific goods and services, safeguarding emerging industries, managing firms, controlling information, lowering income disparities, and others. Five different pathways or processes through which taxes may effect economic growth were presented by Rosen (2018) and Bhatia (2019). First, taxes such the corporate, individual, and capital gains taxes can lower investment rates. Second, taxes can stifle the expansion of the labor force by favoring leisure over labor-based leisure options. Thirdly, tax policy can have a negative impact on productivity growth by crippling spending on research and development. Fourth, taxes may cause resources to move to industries with lower productivity. Finally, high labor supply taxes can stifle the effective utilization of human Taxation encourages economic activity and expansion. The government makes sure that funds are gathered and directed toward significant societal projects through taxation, according to Jhingan (2009). The least fortunate people in society are helped in this way.



Taxes often serve three purposes: distribution, stabilization, and allocation. According to Nzotta (2017), determining the pattern of production, the goods that should be created, who should produce them, the relationship between the private and public sectors, and the point of social balance between the two sectors are all part of the tax allocation function. The distributional purpose of a tax also has to do with how the effective demand for economic commodities is distributed among society's citizens. According to Rosen (2018), the distributional role of tax focuses on the distribution of wealth and income to ensure compliance with what the community views as an equitable and fair state of affairs. With consideration for effects on trade and the balance of payments, the distributional function of taxes is to achieve high levels of employment, a respectable degree of price stability, and a suitable rate of economic growth.

Igbasan (2019) supported the idea that taxes deter, delay, or reduce consumption while promoting savings for private investments. This is only possible when the government provides citizens with access to the necessities of life, such as security, law and order, transportation, communication, educational opportunities, and healthcare facilities.

Nigeria has the lowest tax income as a proportion of GDP, according to the World Bank (2018), a comparison of tax revenue as a percentage of GDP of several African countries between 2015 and 2018. This presented an unsatisfactory image of Nigeria's tax system's contribution to economic growth. What could be the cause of this awful circumstance is a query that naturally arises.

The explanations are plausible. These factors, according to Agbi (2019) and Igbasan (2018), include tax evasion, tax avoidance, corruption, complex tax laws, inadequate oversight of tax compliance, irregular assessment and collection procedures, poor inter-agency interface and synergy, an unorganized private sector, the existence of an underground economy, insecurity, and others.

2.1.3 Tax Structure in Nigeria

Nigeria is not an exception to the rule that well-designed tax systems are beneficial to the process of economic growth and development of countries (Appah, 2020). A tax is typically a financial charge placed on income, assets, or transactions of an individual or entity and is typically collected by a specific authority at the federal, state, or local government level. Taxes can be levied on individuals, entities, assets, and

transactions, and they can be direct or indirect. The following criteria are used to assess taxes in Nigeria:

(i) Within Individuals

All Nigerian nationals and residents must pay personal income tax on their income, whether it is earned inside or outside of Nigeria. (a) The development levy is a flat fee assessed to each taxable adult in a state. On businesses (ii) (Corporate Entities) We have the following under that:

Except for those involved in the production of petroleum, all corporate entities registered in Nigeria or receiving income from Nigeria are subject to the following taxes: (a) Companies Income Tax and (b) Individual Income Tax.

Petroleum Profit Tax: This is typically levied on the earnings of all corporations with offices in Nigeria or who received income from oil and gas operations there.

(a) **Education Tax:** This tax is levied against all legally registered businesses in Nigeria.

(b) **Technology Levy:** This tax is imposed on specific corporate entities (telecommunication companies, internet service providers, pension managers, insurance companies, banks, and other financial institutions) in Nigeria with a certain range of turnover to support the national development of technology infrastructure and capacity.

(iii) On Transactions

This tax includes the following taxes.

a. **Value Added Tax:** In Nigeria, this tax is levied on the net sales of eligible non-exempt goods and services.

(b) **Capital Gains Tax:** This tax is levied on capital gains obtained from the sale or disposal of assets that are subject to charge.

(c) **Stamp Duty:** In Nigeria, documents signed by both individuals and corporations are subject to this tax.

(d) **Excise Duty:** This tax is levied on products that are produced within Nigeria's national borders. The Nigerian customs agency is in charge of collecting this levy.

(e) **Import Duty:** The Nigerian Customs Service is responsible for collecting this tax, which is imposed on merchandise imported from countries beyond than Nigeria's borders.

(f) **Export Duty:** This tax, which is levied on items exported from Nigeria to foreign nations, is typically collected by the Nigerian Customs Services and paid into the Federal Government Treasury.

On Assets (iv). These taxes include those levied on land or other landed property, such as the property tax.



2.1.4 The Role of Taxation in Employment and Wealth Creation.

In the Nigerian economy, taxation can play important and crucial roles in the creation of wealth and employment in a variety of ways, including the ones listed below, according to Nzotta (2017), Salami, (2018), and Igbesan (2017).

(i) The government might build vital infrastructure facilities across the nation with the money it receives from taxes. These facilities include good roads, bridges, irrigation dams for farming during the dry season, the availability of electricity, and others. Such infrastructure might boost trade and investment.

(ii) Taxation may encourage both domestic and international investment. Domestic and foreign investments could be encouraged through an efficient and fair tax system. Increased investment would create jobs and bring about a reasonable level of prosperity for each member of the society.

(iii) Taxation is another tool that Nigerians can use to redistribute income. Tax revenue collected from high income earners might be utilized to provide public facilities and infrastructure to low income earners. Taxation can also be used to build a long-term and short-term social safety net, providing assistance to the underprivileged and other groups who may need government action (National Tax Policy)

(iv) Tax revenue can be utilized to create efficient regulatory frameworks, bolster financial and economic foundations, and correct market inefficiencies and other economic distortions. Specific economic sectors from which taxes were collected can get the tax revenue they generated realized to support their continued development and progress (Salami, 2018).

2.1.5 Empirical Review

Scholars have conducted a number of empirical research to look into the connection between taxation and economic growth in various nations throughout the world. These studies provide various findings and justifications for how taxes affect economic growth.

An investigation on the connection between taxation and economic growth in Malawi was conducted by Chiumia and Simwaka in 2019. They found that taxes imposed on individual and corporate income slowed economic expansion. From 1990 to 2019, Organization for Economic Cooperation and Development (OECD) countries were the subject of a study by Tosin and Abizadeh (2019). Their research showed that the tax composition of GDP per capita is significantly

impacted by economic growth as measured by GDP per capita. The analysis also showed that both company and personal income taxes are the most detrimental to growth. According to the report, personal and property taxes saw positive growth while payroll, goods, and service portions decreased.

Aamir (2019) studied the economies of Pakistan and India and discovered that direct taxes has a considerable favorable influence on the total revenue of the Indian economy. The researchers discovered that raising indirect tax income was more beneficial for long-term economic growth in both the Indian and Pakistani economies.

Value Added Tax (VAT) had a detrimental impact on economic growth in Nigeria, according to Ajakaiye (2019), who looked into this link.

Aderiti, (2018) examined the relationship between VAT and economic growth in Nigeria and found no indication of a causal association between GDP and VAT revenue or a substantial positive relationship between VAT revenue and economic growth (GDP)

Worlu and Emeka (2019) looked at the relationship between tax revenue and economic growth in Nigeria using the three stage least squares estimation method. The study discovered that infrastructure development was a growth-enhancing factor for tax income. The study revealed a few of the ways that tax revenue affected Nigeria's economic expansion. The study also discovered that tax revenue just permits infrastructural development and FDI to respond favorably to rising output rather than having a dependent influence on growth through FDI and infrastructure development. Nwakanma and Nnamdi (2018) used the least squares approach and the lin-log mode of the human development index in the given model to study the relationship between taxation and national development in Nigeria. According to the study's conclusions, the petroleum profit tax (PPT), corporate income tax (CIT), and excise tax (ET) all showed positive relationships with the degree of national development, whereas the human development index and corporation tax showed negative relationships.

2.1.6 Theoretical Framework

There are numerous taxation theories from which one may select one to serve as the foundation for this investigation. These theories include, among others, the expediency theory, ability-to-pay theory, cost-of-service theory, benefit-received theory, and socio-political theory.



Benefit –Received Theory

This idea is predicated on the notion that the relationship between the tax-payer and the state is essentially one of exchange or contract (i.e. Government). Members of society receive a range of products and services from the state, and they pay a proportionate share of the costs in exchange for these advantages. The state and the tax-player have a quid pro quo relationship (Jhingan, 2009; Bhatia, 2016). According to this view, citizens should be required to pay taxes in proportion to the advantages they gain from using the government's services. By building social goods like roads, bridges, schools, hospitals, and other facilities, which tax-payers pay for in the form of taxes, the government provides certain advantages to tax-payers for using these products. The idea, according to Jhingan (2009), implied a balanced budget.

This hypothesis does have some inherent limits, though. One of these restrictions is the difficulty to objectively assess the benefits that each person derives from the services provided by the government (Bhatia, 2016; Okwara and Amori, 2017), which renders this theory unsuitable.

(ii) Cost-of-service Theory:

The benefits-received theory of taxation and this theory of taxation are related. According to this view, the citizens who are the final recipients of the services must pay the costs paid by the government in giving them to the people. According to this view, tax is comparable to a price. Therefore, a person shouldn't be subject to any new taxes if they don't use any state services. The price of the many services that the government provides to taxpaying citizens should serve as the basis for taxation. This approach places more focus on the state's and citizens' semi-commercial relationship (Jhingan, 2009).

The cost-of-service theory does have certain inherent drawbacks, such as the difficulty in calculating the cost per head for each tax payer in relation to the numerous services offered by the state. According to Jhingan (2009) and Bhatia (2006), the majority of government services—including those for roads, parks, dams, bridges, defense, justice, and security—are provided for the benefit of all citizens, not just one person or group of people. In addition to this restriction, it is extremely challenging to identify the correct recipients of any service. The wellbeing of the governed is the goal of the government. If this theory is put into practice, it implies that the state not engage in welfare initiatives like those already mentioned. In addition to the constraints already

highlighted, the theory overlooked the fact that "a tax is not an optional payment but a required one." All taxable adults are required to pay taxes, even if they hardly ever utilize any public services. As a result, the quid pro quo premise is made false and invalid.

(iii) Ability-to pay Theory:

The primary concept of this theory is that since higher income earners would pay higher taxes than lower income earners, the burden of taxation should be distributed among society's members in accordance with the principles of justice and equity. This equity requirement will be met if the tax burden is distributed in accordance with each individual's comparative ability to pay (Bhatia, 2016). There are various indices available for estimating the relative ability-to-pay of the tax-payers, according to Jhingan (2009) and Bhatia (2016). These indices include those for income, possessions, wealth, consumption spending, and others. These indexes do have some limits, though, as they might be misused.

According to this study, Nigeria might adopt this idea if and only if the amount of kleptocracy and corruption at the various levels of government could be brought down to the absolute minimum.

(i) The Expediency Theory:

The expectancy theory of taxation is another name for the expediency theory. According to this theory, each tax proposal must actually not only pass the practicality test but also be the only factor taken into account by the authorities when selecting a tax proposal. Bhatia (2018) contends that when deciding which tax to impose and how much it would cost to collect, the government must keep in mind factors including equity, economic stabilization, growth, regional imbalances, and cost-effectiveness. However, this idea is flawed in that it cannot in any way assist the government in choosing between many workable tax regimes.

(v) Socio-Political Theory:

According to Bhatia (2018), while the society is made up of individuals, it is also more than the sum of its individual constituents. The civilization is a living, breathing thing that needs to be protected and cared for. As a result, a tax system should be created to address the demands of the entire society as opposed to focusing solely on the needs of a few individuals. According to Bhatia (2018), taxes may also be beneficial in a variety of human endeavors. For instance, it might be



necessary to reduce cyclical swings, unemployment, the production of unwanted goods and services, monopolistic and unfriendly trade practices, hoarding, and so forth. There can also be a need to achieve more evenly distributed growth among the various regions of a nation. All of these merits elevate the socio-political theory of taxation above the other theories discussed in this research, making it more deserving and appealing (Chigbu, 2018; Bhatia, 2018). As a result, the socio-political theory of taxes serves as the foundation for this essay.

III. Methodology

Theoretical Framework

The socio-political theory of taxes serves as the foundation for this essay. German economist A. Wagner (1835–1917) favored utilizing taxes to reduce income disparities and argued that all those with low incomes should be exempt from paying taxes in order to accomplish this goal. According to Bhatia (2016), while the society is made up of individuals, it is also more than the sum of its individual constituents. The civilization is a living, breathing thing that needs to be protected and cared for. As a result, a tax system should be created to address the demands of the entire society as opposed to focusing solely on the needs of a few individuals.

Taxation may also be advantageous in a variety of human endeavors. For instance, it might be necessary to reduce cyclical swings, unemployment, the production of unwanted goods and services, monopolistic and unfriendly trade practices, hoarding, and so forth. There can also be a need to achieve more evenly distributed growth among the various regions of a nation.

Model Specifications

We employ the socio-political approach to taxation with certain adjustments based on the theoretical literature examined above. The functional specifications of the model used in this investigation are as follows:

$GDP = f(PIT, CIT, VAT, CGT, PT, \dots)$
3.1

Where GDP = Gross Domestic Product, PIT = Personal Income Tax, CIT = Company Income Tax, VAT = Value Added Tax, CGT = Capital Gain Tax, f = function

The taxation equation is represented in econometrics as follows:

$\Delta LGDP = \alpha_0 + \alpha_1 LPIT + \alpha_2 LCIT + \alpha_3 LVAT + \alpha_4 LCGT + \alpha_5 LPT + \dots$ 3.2
Estimating Technique and Data

Given that this paper examines the long run relationship between taxation and the growth of the Nigerian economy. Autoregressive Distributed Lag approach to Cointegration analysis is used in this study. Having tested the unit root, the Wald test for cointegration was carried out together with short and long run Error Correction Representation of the model. The data used in this study were obtained from the data base of the Central Bank of Nigeria (CBN). All series are annually and the sample extend from 1970-2021. Accordingly, the empirical measurement covers the sample period 1970-2021.

IV. RESULTS AND DISCUSSIONS

4.1 Analysis of Unit Root Results

The outcome of the unit root test, as shown in Tables 1 and 2 in the appendix section, is intended to determine the order in which the variables were integrated. The intercept and linear trend of the Augmented Dickey Fuller (ADF) regression are shown in table 1. All of the variables were not integrated in the same sequence, as shown by the ADF result. This was due to the integration of order 1, or personal income tax, corporate income tax, capital gains tax, and property tax. (1) While the integration of the Gross Domestic Product and Value Added Tax was of order 0, i.e. (0). An intercept and a linear trend are also included in the Phillip Perron (PP) regression from table 2. Additionally, the PP findings show that not all of the variables were integrated in the same sequence. This was due to the fact that GDP was integrated of order 1, whereas PIT, CIT, VAT, CGT, and PT were integrated of order 0, or I(0) (1). Johansen co integration's prerequisite was not satisfied, thus we moved on to the Autoregressive Distributed Lags approach to co integration.

4.2 ARDL (Autoregressive Distributed Lag) Analysis

4.2.1 Lag Length Selection Criteria

When all the variables in the model are not integrated in the same order as in tables 4.1 and 4.2 in the appendix, the ARDL approach to co integration is used. The model's lag length must be determined first. To do this, use the lag length in Table 4.3 that produces the lowest number. The results so indicate that the model used in this study can have up to three lags.

4.2.2 Wald Test Analysis or Cointegration Test for the Model

The rule is that the null hypothesis (no co-integration) cannot be rejected if the computed F statistics is less than the lower bound value. On the



other hand, if the computed F. Statistics are higher than the upper bound number, it may be said that taxation and Nigerian economic growth are related over the long term. Tables 4.4 and 4.5 show that there is evidence of long-term correlations between economic growth and taxation factors in Nigeria because the calculated F-statistics of 27.52 is larger than the upper bound critical value of 3.04 at a 5% error level.

4.2.3 ARDL Long and Short-Run Analysis of the Model

The estimated long term model of the related ARDL is given as follows, taken from appendix table 4.6:

$LRGDP = 4.26LRPITt-3, 1.59LRCITt-3, 6.23LRVAT t-3, 3.18LRCGT t-3, \text{ and } 5.71LRPT t-3$, respectively.

According to the model's long-term analysis, a 1 percent rise in Personal Income Tax Direct causes the GDP to expand by 426 percent, whereas a 1 percent increase in Company Income Tax causes the GDP to decline by 159 percent. Additionally, it shows that although a 1 percent increase in capital gains tax results in an increase of 318 percent in GDP, a 1 percent increase in value added tax results in a 623 percent loss in GDP. A 1% rise in property tax results in a 571 percent increase in 571% in GDP. The value of the ECM coefficient that is most significant in the table is revealed by the short run analysis of the model from table 4.7. The gross domestic product is around 35 percent out of equilibrium, according to the ECM coefficient of -0.351160. The model's negative ECM coefficient value (-0.351160) confirms that there is a short-term disequilibrium that the model's set of variables is attempting to remedy over the long term. Despite the very sluggish adjustment speed, the outcome supports the Wald test's finding that the study model has a long-term equilibrium relationship.

V. CONCLUSION AND RECOMMENDATIONS

This study uses time series data from 1990 to 2021 to examine the effect of taxes on economic growth in Nigeria. Our long-term analysis shows a negative correlation between corporate income tax and value added tax in Nigeria while a positive correlation exists between individual income tax, capital gains tax, and property tax as well as economic growth. The study from the wald test results also show a long-term association between the Gross Domestic Product as a measure of Economic Growth in Nigeria and the explanatory variables (personal income tax, corporate income

tax, value added tax, capital gain tax, and property tax). According to study, long-term relationships between taxation and expansion of the Nigerian economy. This outcome is consistent with Worlu & Emeka's 2019 research.

Regarding the improvement of Nigeria's taxation arrangements and domestic resource mobilization, this conclusion is helpful for both policy and decision-making. Based on our research, the authors of this study urge that tax execution authorities establish positive working relationships with the tax-related professional associations in order to gain their support for efforts to curtail tax fraud and other types of fiscal misconduct. Further strengthening of the regulatory bodies in charge of tax collection is necessary in order to ensure taxpayer compliance. Government should be held more accountable and transparent for how it manages tax income in order to provide for the provision of public goods and services as this will enhance tax compliance among the tax payers.

REFERENCES

- [1]. Aamir, Qayyum, A., Hassain, s., Khan, K.I. and Butt, S. (2019) "Determinants of Tax Revenue: comparative Study of Direct Taxes and indirect Taxes of Pakistan and India". International Journal of Business and social science,2(18), 171-178.
- [2]. Adereti, S.A, Adesina, J.A and Sanni M.R(2011) "Value Added Tax and Economic Growth in Nigeria". European Journal of Humanities and Social sciences, Vol.10(1):456-467.
- [3]. Agbi, S.E.(2019) The Size and Development of the Nigerian Shadow Economy and the Rising Poverty level :A Comparison with other 37 African countries in 1999-2018 .
- [4]. Ajakaiye, D.O (2019) "Macroeconomic Effects of VAT in Nigeria: A comparison General Equilibrium Analysis" AERC, Research paper 92.
- [5]. Anyaduba, J.O. (2018) Partnership Taxation in Nigeria. ICAN Students Journal 9(2),15-17.
- [6]. Appah, E.(2020) "The Problem of Tax Planning and Administration in Nigeria :The Federal and State Government' Experience". International Journal of Labour and Organisational psychology, 4(1-2):1-14 .
- [7]. Bhatia, H.L (2018) Public Finance. New Delhi: VIKAS PUBLISHING HOUSE PVT LTD.
- [8]. Black, J. (2016) Oxford Dictionary of Economics. Oxford: Oxford press.



- [9]. Chiumia, A and Simwaka, K. (2019) "Tax policy Development, Donor inflows and Economic Growth in Malawi" *Journal of Economics and International Finance*, vol.4 (7):159-172.
- [10]. Dwiwedi, N.D. (2019) *Managerial Economics*. New Delih: Tata Mc- Graw Hill publishing Coy Ltd
- [11]. Igbasan, E. (2019) *TAX Revenue and Economic Growth of Nigeria (1918-2015)*. An Unpublished M.Sc. Thesis Department of Accounting, Babcock University, Ilishan Remo, Ogun State, Nigeria.
- [12]. Jhingan M.L (2009) *Money, Banking, International Trade and Public Finance*. New Delhi: virinda publication (p) ltd.
- [13]. MyleS , G.D. (2000) "Taxation and Economic Growth". *Fiscal studies*, 21(1),141-168.
- [14]. National Bureau of statistics; (2017) *Sector Statistics*.
- [15]. Nwakanman, P.C. and Nnamdi, K.C. (2013) "Taxation and National Development." *Research Journal of Finance and Accountant*, 4(19):176-180
- [16]. Nzotta, S.M. (2017)"Tax Evasion in Nigeria: A critique" *The Nigeria Accountant*, 40 (20): 40-43.
- [17]. Ojijo O. and Oluwatosin O. (2018) "Taxation and Economic Growth in a Resource –Rich Country: The case of Nigeria". Book citation index in web of science
- [18]. Okezie, A.I (2016)" Good Government and Basic Infrastructural Development : Its impact on growth and poverty reduction in Nigeria ". *International Journal of Advancement in Economic Science* 4(1):32-45.
- [19]. Okoli, M.N., Njoku, C.O, and Koka, G.N. (2014)" Taxation and Economic Growth in Nigeria: A granger causality approach". *International Journal of Research in Management Sciences and technology*, 2(3):64-80.
- [20]. Okonjo-Eweala, N. (2013)" Nigerian Government hires tax consultants to increase revenue generation". *Premium Times Newspaper*, November 27, 2013.
- [21]. Okwara, C.C and Amori, C.M. (2017)" Impact of Tax Revenue on Economic Growth in Nigeria". *International Journal of Advanced Scientific Research*, vol 2, No 2, dec, pages 94-102.
- [22]. Pianna, V. (2019) Tax revenue. Available from economics web institute. <http://www.economicwebinstitute.org/glossary/tax>. Accessed on 11th September, 2019.
- [23]. Pigou A.C. (1920). *The Economics of Welfare* London Macmillian.
- [24]. Romer P. (1986) Increasing returns and Long Run Growth. *The Journal of Political Economy*.
- [25]. Rosen, H.S. (2018) *Public Finance* . New York: Mc Graw-hill companies, inc.
- [26]. Salami, G.O., Apelogun, K.H, Omidia, O.M and Ojoye, O.F.(2018)" Taxation and Nigeria Economic Growth Process". *Research Journal of Finance and Accounting*, Vol.6, No 10, PP.93-101.
- [27]. World bank Group (2018) Tax revenue (% of GDP). Data, www.worldbank.org
- [28]. Worlu, C.N. and Emeka, N. (2019)" Tax revenue and economic growth in Nigeria: A Microeconomic Approach". *Academic Journal of Interdisciplinary Studies*, Vol.1(2): 211 223.



APPENDIX

Table: 4.1 Unit Root Test Using Augmented Dickey Fuller ADF Test

	LEVEL			FIRST DIFFERENCE			
Variables	Intercept	Intercept & Trend	None	Intercept	Intercept & Trend	None	Decision
GDP	2.880603	0.599208	1.63506	-3.77480	-5.253577	-3.31401	
Critical Values							
1%	-2.473632	-3.064529	-1.506253	-2.477408	-3.108015	-1.507468	I(0)
5%	-1.817031	-2.402064	-0.837202	-1.818623	-2.422072	-0.837384	
10%	-1.501114	-2.075743	-0.501118	-1.502053	-2.087201	-0.501024	
PIT	-5.652	-6.136621	-5.6866	-7.104004	-7.023042	-7.208444	
Critical Values							
1%	-2.473632	-3.064529	-1.506253	-2.481351	-3.07537	-1.50874	I(1)
5%	-1.817031	-2.402064	-0.837202	-1.820303	-2.40708	-0.837575	
10%	-1.501114	-2.075743	-0.501118	-1.502833	-2.078621	-0.501024	
CIT	0.162508	-0.73735	0.378374	-5.038031	-5.146885	-4.604152	
Critical Values							
1%	-2.473632	-3.06453	-1.506253	-2.477408	-3.0708	-1.507468	I(1)
5%	-1.817031	-2.402064	-0.837202	-1.818623	-2.404412	-0.837384	
10%	-1.501114	-2.075743	-0.501118	-1.503024	-2.077148	-0.501024	
VAT		-0.260551	-0.548658	-4.000141	-4.05883	-4.050047	
Critical values							
1%	-2.473632	-3.06453	-1.506253	-2.477408	-3.0708	-1.507468	I(0)
5%	-1.817031	-2.40264	-0.837202	-1.818623	-2.404412	-0.837384	
10%	-1.501114	-2.075743	-0.501118	-1.502053	-2.077148	-0.501024	
CGT		-1.001407	-0.075747	-5.773474	-4.504227	-5.82528	
Critical Values							
1%	-2.473632	-3.06453	-1.506253	-2.477408	-3.07537	-1.507468	I(1)
5%	-1.817031	-2.402064	-0.837202	-1.818623	-2.40708	-0.837384	
10%	-1.501114	-2.075743	-0.501118	-1.502053	-2.078621	-0.501024	
PT	-2.77008	-2.760157	-1.2880	-4.301821	-4.332074	-4.368653	
Critical Values							
1%	-2.477408	-3.0708	-1.507468	-2.304482	-3.104003	-1.513046	I(1)
5%	-1.818623	-2.404412	-0.837384	-1.825831	-2.415508	-0.838208	
10%	-1.502053	-2.077148	-0.501024	-1.505746	-2.0835	-0.5006	

Source; E-View Statistical software version 9



Table 4.2 Unit Root Test Using Phillip-Perron (PP) Test.

Variables	LEVEL			FIRST DIFFERENCE			
	Intercept	Intercept & Trend	None	Intercept	Intercept & Trend	None	Decision
GDP	0.10064	-0.82377	0.82423	-3.739935	-3.80062	-3.28295	
Critical Values							I(1)
1%	-2.47363	-3.06453	-1.50625	-2.477398	-3.0708	-1.50747	
5%	-1.81703	-2.40207	-0.8372	-1.818623	-2.40441	-0.83738	
10%	-1.50112	-2.07574	-0.50112	-1.50205	-2.07715	-0.50102	
PIT	-5.652	-6.53761	-5.68659	-38.1403	-30.682	-31.5041	
Critical Values							I(0)
1%	-2.47363	-3.06453	-1.50625	-2.47740	-3.0708	-1.50747	
5%	-1.81703	-2.40207	-0.8372	-1.81862	-2.40441	-0.8374	
10%	-1.50112	-2.07574	-0.50112	-1.50205	-2.07715	-0.50102	
CIT	0.130016	-0.75747	0.231186	-5.0367	-5.147	-4.66926	
Critical Values							I(0)
1%	-2.47363	-3.06453	-1.50625	-2.47740	-3.0708	-1.50747	
5%	-1.81703	-2.40207	-0.8372	-1.81862	-2.40441	-0.83738	
10%	-1.50112	-2.07574	-0.50112	-1.50205	-2.07715	-0.50102	
VAT	-0.3056	-0.41814	-0.80408	-4.08674	-4.06202	-4.04807	
Critical Values							I(0)
1%	-2.47363	-3.06453	-1.50625	-2.47740	-3.0708	-1.50747	
5%	-1.81703	-2.40207	-0.8372	-1.81862	-2.40441	-0.83738	
10%	-1.50112	-2.07574	-0.50112	-1.491953	-2.07715	-0.50103	
CGT	-0.67504	-1.04154	-0.85775	-5.77469	-5.68286	-5.82528	
Critical Values							I(0)
1%	-2.47363	-3.06453	-1.50625	-2.47740	-3.0708	-1.50747	
5%	-1.81703	-2.40207	-0.8372	-1.81862	-2.40441	-0.8374	
10%	-1.50112	-2.07574	-0.50112	-1.50205	-2.07715	-0.50102	
PT	-2.13128	-2.70814	-1.12111	-14.3338	-21.1151	-14.6461	
Critical Values							I(0)



1%	-2.4774	-3.0708	-1.50747	-2.48135	-3.07537	-1.50874
5%	-1.81862	-2.40441	-0.83738	-1.8203	-2.40708	-0.83758
10%	-1.50205	-2.07715	-0.50102	-1.50283	-2.07862	-0.50103

Source; E-View Statistical software version 9

Table 4.3: Lag Length Selection Criteria for the Model

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-570.623	N/A	18002.15	20.03011	20.3277	20.13625
1	-286.658	211.5514	0.14335	11.13347	13.52217	12.00051
2	-274.03	53.6638	11.0024	11.04733	15.42615	12.5543
3*	21.002	67.2648	0.000002	10.0057	7.12462	8s.21256
4	-25.1007	50.01883	0.000103	15.05551	11.61456	10.16231

Source; E-View Statistical software version 9

*Indicates lag order selected by the criterion (each test at 5% level)

FPE indicates Final Prediction Error

AIC indicates Akaike Information Criterion

SC indicates Schwartz Information Criterion

HQ indicates Hannan-Quinn Information criterion

Table 4.4: Critical Lower and Upper Bounds Values

		5%		1%	
		Lower	Upper	Lower	Upper
	Restricted intercept no trend	1.98	3.04	2.41	3.61
	Unrestricted intercept no trend	2.06	3.24	2.54	3.86

Source: Pesaran et al (2001), Table CI (iii) case II

Table 4.5: Wald Bound Test of Presence of Cointegration in ARDL for the Model

Equation: ARDL (3,3,3,3,3,3,3).			
Test Statistic	Value	Probability	Decision
F- Statistic	27.5173	0.0012	Cointegration
Chi-square	13.2806	0.0000	Cointegration

Source; E-View Statistical software version 9

Table 4.6: Estimated Long Run Multiplier Coefficients for the Model

Dependent Variable: LR GDP						
Variable	LPIT	LCIT	LVAT	LCGT	LPT	
Coefficient	4.26	-1.59	-6.23	-3.18	5.71	

Source; E-View Statistical software version 9



Table 4.7: Error Correction Representation of ARDL for the Model
Dependent Variable DGD

Variable	Coefficient	Std.Error	t.statistics	Prob.
Constant	0.017701	0.040008	0.453406	0.4707
D(PIT(-1))	-0.000826	0.004807	-0.047213	0.7652
D(PIT(-2))	-0.003783	0.004485	-0.763507	0.2845
D(PIT(-3))	-0.005741	0.454500	-0.100360	0.1334
D(PIT(-4))	-0.000535	0.006824	0.106304	0.7274
D(CIT(-1))	0.001508	0.007701	0.322740	0.0610
D(CIT(-2))	0.001101	0.008001	0.230365	0.1000
D(CIT(-3))	0.006201	0.007823	0.706140	0.3155
D(VAT(-2))	-0.008520	0.064610	-0.148007	0.6880
D(VAT(-3))	-0.005642	0.073041	-0.070235	0.8260
D(VAT(-4))	0.047338	0.050407	0.840004	0.2460
D(VAT(-1))	-0.260335	0.064044	-1.010565	0.0400
D(CGT(-2))	0.082366	0.350002	-1.260275	0.0204
D(CGT(-3))	2.624685	0.376101	6.556602	0.0000
D(CGT(-4))	-0.002556	0.055685	-0.070830	0.8247
D(PT(-1))	0.508350	0.030040	3.237487	0.0005
D(PT(-2))	1.022060	0.301056	1.707253	0.0020
D(PT(-3))	-3.008630	0.343665	7.727830	0.0000
D(PT(-4))	-0.054310	0.083877	-0.747510	0.3030
ECMA(-1)	-0.351160	0.042841	-2.860487	0.0084***

Note: *** indicates significance at 5% level
Source; E-View Statistical software version 9