MODERATING EFFECT OF EXTERNAL DEBT ON THE IMPACT OF TAX REVENUE ON NIGERIA ECONOMIC GROWTH

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Abstract

Every economy of the world needs revenue in order to develop sustainably and thereby take position in the comity of nations. Studies have shown that the economic growth of nations all over the world depends largely on the revenue generated from a well - structured tax system. However, Nigeria's overdependence on oil for foreign exchange has adversely affected the sustainable growth of the nation. This has made the need to diversify the revenue base of the county to be very obvious. On this basis, this study evaluated the effect of tax revenue on Nigeria economic growth within 1997-2017. The study employed the ex-post facto research design. The sample size consisted federally collected taxes paid by the corporate tax payers and economic growth in Nigeria proxied by real gross domestic product (RGDP), while external debt was introduced as a moderating variable from 1997 to 2017. Data were sourced from government reports validated by their respective regulatory bodies. Descriptive and inferential statistics were adopted for data analysis. The findings revealed that tax revenue had a significant effect on the economic growth in Nigeria (F=2502.02, Adj. R^2 = 0.999, P-value = 0.0000). The Petroleum Profit Tax (LOG(PPT)) has significant positive effect on GDP in the long-run. [Coef.=0.269; R^2=0.996; P-value=0.000; t=7.635], Companies Income Tax (LOG(CIT)) has a significant positive effect on GDP in the long run [Coef.=0.296; R^2=0.996; P-value=0.000; t=31.933]; Value Added Tax (LOG(VAT)) has a significant positive effect on GDP in the long run [Coef.=0.296; R^2=0.999; P-value=0.000; t=44.668] and Customs and excise duties (LOG(CUS) has a significant positive effect on GDP [Coef.=0.296; R^2=0.995; P-value=0.000; t=8.604]. The study concluded that tax revenue influences economic growth and determines long-run economic growth. The study finds that Value Added Tax (VAT) and Customs and excise duties (CUS) are the determinants of short-run economic growth. The study recommended among others that government and all relevant tax relevant authorities should formulate appropriate policies in order to: encourage citizens to pay taxes as at when due, ensure appropriate utilization of the taxes collected, Improved capacity for the government agencies to formulate and implement sound tax policies effectively.

Keywords: Companies Income Tax (CIT), Economic Growth, External Debt, Gross Domestic Product (GDP), Petroleum Profit Tax (PPT) and Tax Revenue and Value Added Tax

Introduction

The economic growth of nations the world over mostly depends on the quantity of revenue generated from a well-structured tax system. The principal obligation of every responsible government is the provision of adequate public goods and services that improve the standard of living of citizens. The fulfilment of these responsibilities essentially depends on the quantum of revenue generated by the government through various means. Economic growth can be positive, zero, or negative (Eneje, 2018). Positive economic growth is recorded when the annual average level of the macro-indicators is higher than the average level of growth of the population (June, 2015; Abdouli & Hammami, 2017). Gross domestic product (GDP) is a monetary measure of the market value of all final goods and services produced in a period, be it quarterly or yearly (Eneje, 2018). The growth of Nigeria as a developing nation has been rated by the World Economic Global Competitive Index of 2015) as the 38th out of 144 countries with $286.5 billion US dollar using gross domestic product as an indicator. Gross Domestic Product (GDP) is an economic measure of a nation's total income and output for a given time period usually a year. GDP was used as a proxy for economic growth in this study. The GDP in Nigeria has been on the rise from 2010 to 2015 except in 2016. It rose from ₦54,612.3 billion in 2010 to ₦59,929.89 billion in 2012, ₦69,023.9 billion in 2015 but fell to ₦67,931.24 billion in 2016 (NBS Report, 2016) with a progressive increase in the tax revenue performance from ₦2,839.30 billion in 2010 to ₦5,007.70 billion in 2012, however in 2015, there was decline in tax revenue performance to ₦3,741.6 billion in 2015, which later rose to ₦3,307.4 billion in 2016 (FIRS Annual Report, 2016). Nigeria's over dependence on oil for foreign exchange and budgetary revenues has adversely affected the sustainable growth of the nation. This has, in turn, made the need to diversify the revenue base of the country very obvious.

Taxation is one of the viable sources of revenue generation required in order to provide essential services for people living in a particular geographical area. It has been a phenomenon of global significance as it affects every economy regardless of national differences (Oboh & Isa, 2012). As submitted by Okwara and Amori, (2017) taxation could have a positive or negative effect on both the individual and government depending on the tax structure. For instance, for individuals who pay tax, low income tax rate constitutes an incentive to work or save, while high income tax rate serves as a disincentive to work or save. On the other hand, for the government, high tax rates provide the most reliable, important and dominant source of revenue for promoting the economic growth of the nation.

Tax is proxy for fiscal policy and there are possible mechanisms by which it can affect economic growth. First, taxes can inhibit investment rate when levied in form of corporate and personal income taxes or capital gain taxes. Second, taxes can slow down growth in labour supply by disposing labour leisure choice in favour of leisure. Third, tax policy can affect productivity growth through discouraging effect on research and development expenditures. Fourth, taxes can lead to a flow of resources to other sectors that may have lower productivity. Finally, high taxes on labour supply can distort the efficient use of human capital even when they have high social productivity (Raed &

Ahmad, 2016). The primary aim of taxation is to generate revenue capable of financing government expenditure at all levels of government. This is done by imposing taxes on individuals, groups, businesses and corporate bodies by the constituted authorities (Eze, Celina & Atuma, 2018). Tax is proxy for fiscal policy and there are possible mechanisms by which it can affect economic growth. First, taxes can inhibit investment rate when levied in form of corporate and personal income taxes or capital gain taxes. Second, taxes can slow down growth in labour supply by disposing labour leisure choice in favour of leisure. Third, tax policy can affect productivity growth through discouraging effect on research and development expenditures. Fourth, taxes can lead to a flow of resources to other sectors that may have lower productivity. Finally, high taxes on labour supply can distort the efficient use of human capital even when they have high social productivity (Raed & Ahmad, 2016). The primary aim of taxation is to generate revenue capable of financing government expenditure at all levels of government. This is done by imposing taxes on individuals, groups, businesses and corporate bodies by the constituted authorities (Eze, Celina & Atuma, 2018). There are inconsistencies in tax laws making it difficult for the tax authorities to administer and even for the tax payer to follow. The initial plan of the federal government was to maintain a uniform tax system but the economic situation of each state has given room for divergent systems. The most significant point worthy of note in this regard is that taxation, which is supposed to be an instrument of economic growth is not currently yielding as much as it should in Nigeria. The impact of tax payment is not generally felt by payee, some do not understand some tax laws and this ignorance has birthed doubt and confusion which further spurs some to want to cheat or completely evade tax (Ogwuru & Agbaraevoh, 2017). Tax revenue has accounted for a small proportion of total revenue generated over the years when compared with the bulk of revenue generated by the Federal Government. However, the role of taxation in promoting economic activity and growth is not felt primarily because of its poor administration. This is a major challenge since it has been observed globally that there is a paradigm shift to tax revenue as a better alternative source of revenue generation and the need for Nigerian government to generate adequate revenue from taxation has become a matter of urgency and importance (Anyamaobi & Onyema, 2018)

Research Problem

The Nigerian economy is majorly dependent on oil, as it currently cannot finance social and economic growth in the absence of a large oil revenue base. In Nigeria, oil accounts for about 90-95% of the export revenue, over 90% of foreign exchange earnings and about 80% of government revenue. The oil industry is thus the hub of the Nigerian economy, and needs to be sustained if the country is to achieve real economic growth. Eneje (2018) opined that Nigeria has delivered a huge sum of revenue from oil with crude oil trading over $100 per barrel during the 2 quarter of 2014, and Nigeria reached a position of the largest economy in Africa, was comfortable but unable to manage the windfall. The over 60% drop in oil price to $40 per barrel was clearly unanticipated by the Nigerian government yet it effected over 80% fall in the income per barrel of oil produced in Nigeria, a gallop decline in revenue generation, the 2016 budget deficit of over N2trillion, depreciation of Naira, slowing GDP growth, reduced inflow of foreign direct investment (FDI), rising inflation, growing unemployment, rising debt profile,

discontinuation of Federal Government capital projects and reduction in allocation to the States of the Federation with resultant effect of many states' inability to pay employee salaries (Bickersteth, 2016). The success or failure of any tax system depends on the extent to which it is properly managed and the extent to which the tax law is properly interpreted and implemented. However, over the years, it has been observed that the Nigerian tax system has inherent problems in its structure (Asaolu, Olabisi, Akinbode, & Alebiosu, 2018). It also lacks the capacity to diversify the revenue portfolio for the country in a bid to safeguard against the volatility of crude oil prices and to promote fiscal sustainability and economic viability at lower tiers of government (Wahab & Diji, 2017). All of these deficiencies are still in place in spite of the fact that the tax system has undergone series of reforms in Nigeria. They further stated that the Nigerian tax system has undergone several reforms geared at enhancing tax administration with minimal compliance and enforcement costsThe success or failure of any tax system depends on the extent to which it is properly managed and the extent to which the tax law is properly interpreted and implemented. However, over the years, it has been observed that the Nigerian tax system has inherent problems in its structure (Asaolu, Olabisi, Akinbode, & Alebiosu, 2018). It also lacks the capacity to diversify the revenue portfolio for the country in a bid to safeguard against the volatility of crude oil prices and to promote fiscal sustainability and economic viability at lower tiers of government (Wahab & Diji, 2017). All of these deficiencies are still in place in spite of the fact that the tax system has undergone series of reforms in Nigeria. In the words of Unegbu and Irefin, (2011), the Nigerian tax system has undergone several reforms geared at enhancing tax administration with minimal compliance and enforcement costs

The empirical nexus between tax revenue and economic growth has been a contentious issue especially in developing countries. The empirical literatures depict different, disaggregated and inconclusive findings. For instance, the result of the studies of impact of taxation and economic growth indicated a positive relationship (Apata, 2015; Ayeni, Ibrahim & Adeyemi, 2017; Eyisi, Chioma & Bassey, 2015; Ibannichuka & Uguru, 2016; Ofoegbu, Akwu & Oliver, 2016; Okwara & Amori, 2017; Raed & Ahmad, 2016) while some other studies reported a negative relationship between the two variables (Akhor & Ekundayo, 2016; Chigbu & Njoku, 2015; Keho & Njogu, 2015; Ojong, Ogar & Oka, 2016).

It remains unclear why empirical evidence in developing countries like Nigeria often yield conflicting findings. These conflicting conclusions show that the effect of tax revenue on economic growth is not yet resolved. The inconclusive evidence has left the issue of growth effect of taxation open to further research. Following the aforementioned gap created by the mixed views in findings and conclusion reached by different researchers, this study aims at filling the gap by combining tax revenue proxied with variables like petroleum profit tax, companies' income tax, value added tax, and custom and excise duties, and then investigating its effect on economic growth in Nigeria. A good relationship between government revenue and economic growth of a nation is very important. However, the contribution of tax revenue in Nigeria has not met the expectations of Government. This is evident in table 1.1 which reflects the tax revenue to GDP ratio between years 2000-2016. Another major economic challenge

confronting Nigeria as a nation is the need to optimize taxation revenue for economic and social growth while aiming to reach development targets. The most glaring difficult challenge is how to find the optimal balance between a tax regime that is business and investment friendly while at the same time leveraging enough revenue for public service delivery which in turn makes the economy more attractive to investors. A number of studies have been done on tax revenue and economic growth in connection with other variables. Among these are Eyisi, Chioma and Bassey (2015), Raed and Ahmad (2016), Ibannichuka, Akanni, and Ikebujo (2016),Ogwuru and Agbaraevoh (2017), and Inga (2018).The review of literature shows that the problem of tax revenue and Nigeria economic growth has not been adequately addressed and there is a huge deficit of research work in that area. Inga, (2018) and Ogwuru, and Agbaraevoh, (2017) therefore suggested that further studies should be initiated on tax revenue and Nigeria economic growth

Table 1.1 Tax Revenue to GDP Ratio: 2000 – 2016

Year	GDP (N Billions)	Tax Revenue (N Billions)	Percentage (%)
2000	25,169.54	455.30	1.81
2001	26,658.62	586.60	2.20
2002	30,745.19	433.90	1.41
2003	33,004.80	703.10	2.13
2004	36,057.74	1,194.80	3.31
2005	38,378.80	1,741.80	4.54
2006	40,703.68	1,863.20	4.58
2007	43,385.88	1,846.90	4.26
2008	46,320.01	2,972.20	6.42
2009	50,042.36	2,197.60	4.39
2010	54,612.26	2,839.30	5.20
2011	57,511.04	4,628.50	8.05
2012	59,929.89	5,007.60	8.36
2013	63,218.72	4,805.90	7.60
2014	67,152.79	4,714.50	7.02
2015	69,023.93	3,741.60	5.42
2016	67,931.24	3,307.40	4.87

Source: National Bureau of Statistics (NBS, 2017)

Every economy of the world needs revenue in order to develop sustainably and thereby take its position in the comity of nations. Tax Revenue as a percentage of GDP has been consistently low in Nigeria, the highest was about 8% for the years 2011 and 2012. The

Tax Justice Network (2012) emphasized that tax revenue is the most important, most beneficial, and most sustainable source of finance for development for a country. A good relationship between government revenue and economic growth of a nation is very important. Another major economic challenge confronting Nigeria as a nation is the need to optimize taxation revenue for economic and social growth while aiming to reach development targets. The most glaring difficult challenge is how to find the optimal balance between a tax regime that is business and investment friendly while at the same time leveraging enough revenue for public service delivery which in turn makes the economy more attractive to investor

The quest for economic growth and development compelled Nigeria to seek finance through external debt. The first major external loan of US$28 million by Nigeria was acquired from World Bank in 1958 to finance railway construction. Ever since then, there has been accumulation of loans aimed at various development projects without satisfactory results. The rising debt profile is closely related to the fact that the contribution of tax revenue has been minimal. The Central Bank of Nigeria's (CBN, 2017) figures show that Nigeria's External Debt amounted to US$11.4 billion as at December 2016 while Domestic Debt was N11.06 trillion. Debt servicing in 2017 was N1.66 trillion, while debt service as a percentage of revenue was 33.66%. This implies that more concerted efforts are needed to increase tax revenue in Nigeria (Budget, 2017). This has been realised in Nigeria, and over the years, several tax reforms have been implemented to improve the efficiency and effectiveness of the tax system in Nigeria. Nigeria recorded a government debt equivalent to 21.30 percent of the country's Gross Domestic Product in 2017. Government Debt to GDP in Nigeria averaged 32.42 percent from 1990 until 2017, reaching an all-time high of 75 percent in 1991 and a record low of 7.30 percent in 2008.

Research Objective

The main objective of the study was to examine the effect of taxation on the growth of the Nigerian economy. The specific objectives were set to:

i. examine the effect of petroleum profit tax on Nigeria economic growth;
ii. ascertain the effect of companies' income tax on Nigeria economic growth;
iii. evaluate the effect of value added tax on Nigeria economic growth;
iv. investigate the effect of Customs and excise duties on Nigeria economic growth;
v. examine the effect of total tax revenue on Nigeria economy growth and
vi. ascertain the moderating effect of external debt on the relationship between total tax revenue and economic growth in Nigeria.

Research Hypotheses

The following hypotheses were tested in this study:

H_o1: Petroleum Profit Tax has no significant effect on Nigeria economic growth.
H_o2: Companies' Income Tax has no significant effect on Nigeria economic growth.
H_o3: Value Added Tax has no significant effect on economic growth in Nigeria.
H_o4: Custom and excise duties have no significant effect on Nigeria economic growth.
H_o5: Tax revenue generated has no significant impact on Nigeria economic growth.
$H_0 6$: External debt has no significant moderating effect on the relationship between total tax revenue and economic growth in Nigeria.

Literature Review:

Several empirical studies have been carried out relating to the impact of petroleum profit tax on the economic growth of Nigeria. Yahaya and Bakare (2018), investigated the effect of petroleum profit tax and companies' income tax on economic growth in Nigeria and found that *petroleum profit tax* (*PPT*) *has positive significant impact on gross domestic product (GDP) in Nigeria; in congruence,* Gopar, Dalyop and Yussuf (2018) examined the impact of petroleum profits tax on economic growth in Nigeria. The work concluded that *Petroleum profits tax has a significant positive relationship with economic growth, but does not granger cause economic growth over the years under consideration. Furthermore,* Okon, Onyekwelu, and Iyidiobi (2016) examined *the effect of petroleum profit tax on economic growth of Nigeria the study found that PPT had positive and significant effect on Nigerian GDP in congruence,* Abdullahi, Madu, and Abdullahi (2015) also assessed the evidence of petroleum resources on Nigeria economy (2000-2009) the study revealed that petroleum has a direct and positive significant relationship with the Nigeria economy. This was re-investigated by Olatunji, and Adegbite (2016) who worked on the effect of petroleum profit tax interest rate and money supply on Nigeria economy from 1970 to 2010the analysis revealed that short run effect of petroleum profit tax was positive and that of interest rate was positive on economic growth. A companies' income tax in Nigeria is administered exclusively by the Federal Inland Revenue Services. Empirical studies on companies' income tax and Nigeria economic growth are inconclusive, intriguing and divergent. More recently, researchers shifted attention to investigating if companies' income tax can bring about economic growth. The study of Eneje, (2018) is an appraisal of companies' income tax on the growth of the Nigerian economy. The study found that *companies' income tax has a positive effect on the growth of the Nigerian economy.* In congruence, Naomi and Sule, (2015) examined companies' income tax in the light of alternative financing for sustainable development in Nigeria and found that there is a positive and significant relationship between companies' income tax and revenue generation in Nigeria.

Furthermore, Odusola, A., (2006) examined the effect of reduced companies' income tax incentives on foreign direct investment in listed Nigerian manufacturing companies. The findings showed strong positive linear relationships between reduced companies' income tax incentives and economic growth. Not far from this, Adegbite (2015) examined the effect of corporate income tax on government revenue in Nigeria. It was revealed that government derives revenue from corporate tax through which they discharge their responsibility by providing funding for infrastructure, education and public health; this invariably enhances economic growth in Nigeria. This implies that, corporate income tax is positively significant to economic growth.

The attention of researchers has shifted to investigating the place of value added tax in relation to Nigerian economic growth. A study from Igga, (2018) investigated the role of value added tax (vat) role in the economic growth of the republic of South Sudan, it was found out that the majority of South Sudan demand for the introduction of VAT furthermore, Ogwuru, and Agbaraevoh, (2017) examined impact of value added tax, companies' income tax and custom and excise duties on economic growth and development in Nigeria. *Results showed that there were positive and significant*

relationships between GDP and VAT. In coherence, Anyamaobi and Onyema (2018) investigated the impact of value-added tax on the growth of the Nigerian economy and the study found a significant relationship between value-added tax and the growth of the Nigerian economy. *Moreover,* Patrick, Zayol, Anwese, Terlumun, Kenneth, and Johnson (2017) examined the impact of value added tax on the Nigerian economic growth, the study found that value added tax (VAT) has a positive relationship with the Nigerian economic growth. in congruence, Nasiru, Haruna, and Abdullahi, (2016) evaluated the impact of value added tax on the economic growth of Nigeria from 1994-2014 The study found evidence of a significant positive impact of VAT on economic growth.

Custom and excise duties and Nigeria economic growth is a recurring theme in the literature which established diverse results. According to the study of Inga (2018) who examined the viability of customs tax (duty) in the economy of South Sudan the study found a positive effect of custom and excise duties on economic growth. In the same vein Ogwuru and Chinasa, (2017) examined the impact of custom and excise duties on economic growth and development in Nigeria the study found a positive relationship between of custom and excise duties on economic growth. In the same vein Adegbie (2011) who had a study on customs and excise duties contribution towards the development and growth of Nigerian economy.

The research by Kasidi and Said (2013) shows that external debt and debt service both have a significant impact on GDP growth with the total external debt stock having a positive effect. In coherence, Abdelhadi (2013) explored the relationship between external debt and economic growth in Jordan during the period of 1990-2011. The study shows that there is a positive and significant relationship between external debt and economic growth. In line with this, Zafar (2015) found external debt has a significant and negative impact on economic growth. Azam (2013) found a positive impact of external debt on economic growth of Indonesia.Contrarily, Tehereni, Sekhampu, and Ndovi, (2013) analysed the impact of foreign debt on economic growth in Malawi using time series. Data for the period 1975–2003. Their results show a statistically insignificant and negative relationship between external debt and economic growth for the case of Malawi. This is in line with research of Abdelhadi (2013) who explored the relationship between external debt and economic growth in Jordan during the period of 1990-2011. The study found a positive effect of external debt on economic growth. Furthermore, Azam, Emirullah, Prabhakar, and Khan (2013) analyzed the impact of external debt on the economic growth of Indonesia. The main finding of their study shows that external debt has a negative impact on economic growth. Tran (2013) analyzed the impact of foreign debt on economic growth in Malawi using time series. Data for the period 1975–2003. Their results show a statistically insignificant and negative relationship between foreign debt and economic growth for the case of Malawi.

Theoretical Review

This study was hinged on the theoretical framework generated by the Socio-political Theory. The socio - political theory states that social and political objectives should be the main factors in selecting taxes, consequently, a tax system should not be designed to serve individual members of the society but should be used to cure the ills of the larger

society. However, contrary to this view, Knut Wicksell (1896) in his Benefits Received Theory stated that there exists an exchange relationship between the state and taxpayers. While the state provides certain goods and services to the members of the society; the tax-payers contribute to the cost of these supplies in proportion to the benefits received (Bhartia, 2009). In the same vein, Expediency Theory propounded by Anyafo (1996) advocates that tax revenue be used as a policy tool by government to remedy economic and social problems of the society. Ability to Pay Theory propounded by Pigou (1996) states that one should be taxed according to the ability to pay. It is simply an attempt to maximize an explicit value judgment about the distributive effects of taxes. Bhartia (2009) argued that a citizen is to pay taxes just because he can, and his relative share in the total tax burden is to be determined by his relative paying capacity. Wagner (1883) in his attempt to explain the pattern of government expenditure propounded "The Law of Increasing State Activity", which states that as an economy develops over time, activities and functions of government increase. Peacock and Wiseman (1961) question the applicability of the central idea in Wagner's (1883) law to all societies at all times. After a critical appraisal of all these theories, the Ability to Pay Theory and Wagner law were found to be most suitable for the purpose of addressing the concerns and preoccupations of this study. As a result, this study will be anchored on ability to pay theory and Wagner law.

Gaps in the study

Scholars have worked on studies combining tax revenue, external debt, and economic growth with some other variables such as the work of Kasidi and Said (2013) investigated the impact of external debt an economic of growth in Tanzania using time series of 1990-2010. In a similar study Korkmaz (2015) examined the relationship between external debt and economic growth in Turkey. Furthermore, study by Christensen and Schanz (2018) on the central banks and debt: Emerging risks to the effectiveness of monetary policy in Africa. Abdouli and Hammami, (2017). An econometric study of the impact of economic growth, human capital and environmental degradation on FDI inflows in the African Mediterranean countries. Salami, Apelogun, Omidiya, and Ojoye (2015). The review of literature shows that the problems of tax revenue, external debt and Nigeria economic growth has not been addressed and research works are limited in this respect coupled with the fact that many studies in Nigerian ever attempted to determine tax revenue, external debt and Nigeria economic growth, researchers. Therefore, Christensen and Schanz (2018) suggested that tax revenue, external debt and economic growth should be investigated by other researchers. Hence this study was designed to examine the moderating effect of external debt on the impact of tax revenue of the economic growth of Nigeria to bridge the missing link.

Methodology

This research work adopted *ex-post facto* design. *Ex-post facto* relies on secondary data obtained after the occurrence of the event which the researcher has no control over because they have already occurred and cannot be manipulated. The study evaluated the effect of Tax Revenue on Nigerian economic growth from 1997-2017 moderated by external debt. The population of the study was a total of 21 observations which was arrived at thus; a period of study covering 1997 to 2017. The choice of the period was

informed by the developments in the Nigerian economy traceable to the difficulty of the government in raising revenue needed to discharge its pressing obligations. Time series data was used in carrying out this study obtained mainly from secondary sources. Validated data were collected from secondary sources which include: Central Bank of Nigeria's Annual Reports and Statistical Bulletin, World Development Indicators, Federal Inland Revenue Service's Annual Report, National Bureau of Statisticsand other credible secondary sources. The total enumeration sampling technique was adopted. The sample size for this study covered the period of 1997 to 2017, which is 21 years and six variables representing 21 observations, which provided a good ground for observing the trend over a longitudinal period and it served as a good basis for generalisation. The research adopted descriptive and inferential statistic. The descriptive statistical approach of central tendencies and dispersion such as mean, median, standard deviation were used to organize, summarize and present the data in an informative way to capture the behaviour of the variables. For inferential analysis, the study employs the Autoregressive Distributed Lag (ARDL) approach to determine the extent to which each of independent variable affects the dependent variable. Autoregressive. Multiple regression was used to analyse the data for testing the hypotheses.

Model Specification:

$$Y = f(X)$$

Where Y= Economic Growth- Dependent Variable
Where X = Tax Revenue - Independent Variable
Therefore,

$$X= (x_1, x_2, x_3, x_4,)$$

Where:

Independent variables

x_1 = Petroleum Profit Tax (PPT)
x_2 = Companies' Income Tax (CIT)
x_3 = Value Added Tax (VAT)
x_4 = Custom and Excise Duties (CUS)

Dependent variable

Y = Economic growth (to be proxied by Gross Domestic Product - GDP)
Y = EG = GDP
Y = GDP

Moderating variable

Z=External Debt (EXD)

Functional Relationship

GDP = f(PPT)_____ Equation 1
GDP = f(CIT)_____ Equation 2
GDP = f(VAT)_____ Equation 3
GDP = f(CUS)_____ Equation 4
GDP = f(TREV) _____ Equation 5
GDP = f(TREV, EXD) _____ Equation 6

where:

GDP = Gross Domestic Product
PPT = Petroleum Profit Tax
CIT = Companies' Income Tax
CUS = Customs and excise duty
TREV = Total Tax Revenue (PPT, CIT, VAT, CUS)
EXD = External Debt

$GDP_t = \beta_0 + \beta_1 PPT_t + \mu_t$ ..... Model 1

$GDP_t = \beta_0 + \beta_2 CIT_t + \mu_t$ ..... Model 2

$GDP_t = \beta_0 + \beta_1 VAT_t + \mu_t$ ..... Model 3

$GDP_t = \beta_0 + \beta_1 CUS_t + \mu_t$ ..... Model 4

$GDP_t = \beta_0 + \beta_1 PPT_t + \beta_2 CIT_{t+} \beta_1 VAT_{t+} \beta_1 CUS_t$ ..... Model 5

$GDP_t = \alpha_0 + \beta_1 TREV + \beta_2 EXD + \mu_t$ ..... Model 6

Conceptual Model

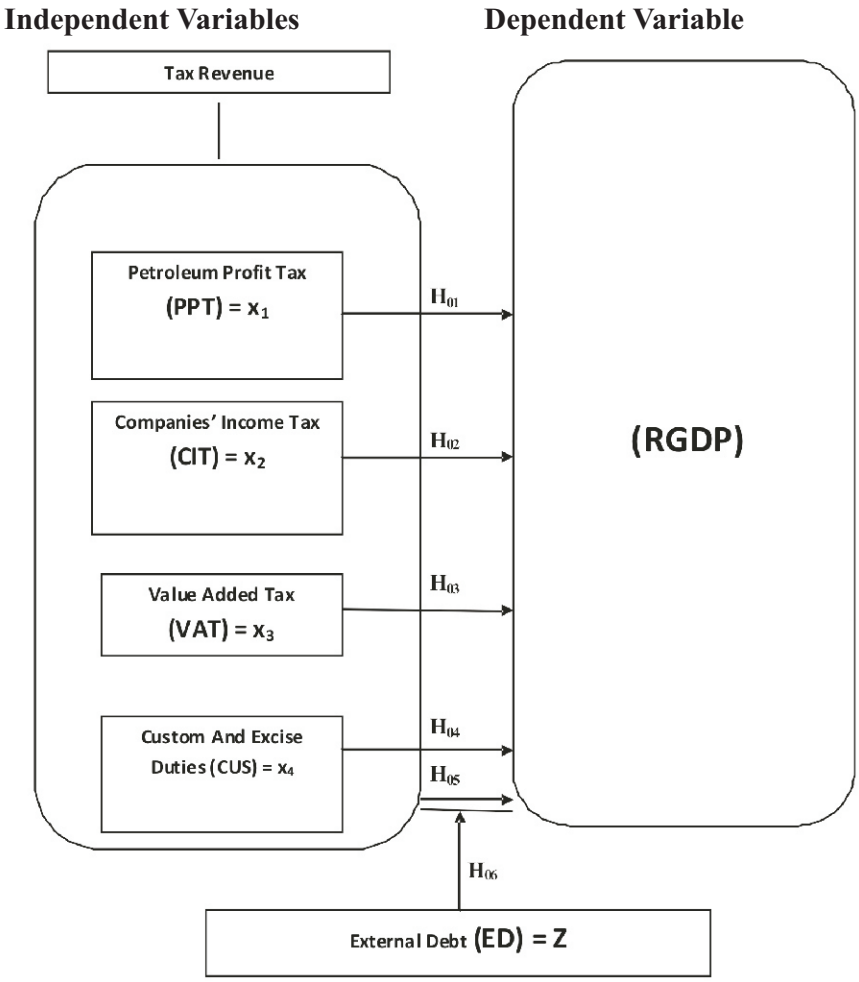

Figure 2.1: Researcher's Conceptual Model (2019)

Findings:

Descriptive Statistics

The descriptive statistics summarizes the basic statistical features of the variables under consideration. The variables under consideration are; gross domestic product (GDP), Petroleum Profit Tax (PPT), Value Added Tax (VAT), Companies' Income Tax (CIT), Customs Tax (CUS) and External Debt (EXD)

Table 1: Summary Statistics

	GDP (N'B)	PPT (N'B)	CIT (N'B)	VAT (N'B)	CUS (N'B)	EXD (N'B)
Observations	21	21	21	21	21	21
Mean	45208.18	1243.26	471.49	396.46	297.65	2147.19
Median	43385.88	1157.80	327.00	301.70	241.40	1631.52
Maximum	69023.93	3201.30	1207.30	967.70	628.00	5787.51
Minimum	23231.12	24.60	26.00	34.00	57.68	438.89
Std. Dev.	16676.14	979.58	426.23	319.20	178.83	1657.72

Source: Author's Computation 2019, underlying data from FIRS Annual Reports, CBN Statistical Bulletin and National Bureau of Statistics

NOTE: GDP represents Gross Domestic Product, PPT represents Petroleum Profit Tax, VAT represents Value Added Tax, CIT represents Companies' Income Tax, CUS represents Customs Tax and EXD represents External Debt

The results of the descriptive analysis for the variables considered are presented in Table 1. The result shows that there are 21 observations for each of the series. From the table, the average value of gross domestic product (GDP) is N45,208.18b while the mean value is N43,385.88b. this reflecting asymmetry in the distribution of GDP during the period of this study. The minimum and maximum values of the series are N23,231.12b and N69,023.93b respectively with a standard deviation of 16676.14. These indicate that the series varies during the period. The Petroleum Profit Tax (PPT) during the period takes its values between N24.60b and N3201.30b with an average value of N1243.26b and median value of N1157.80b. The mean and median values of the series that are approximately the same indicate that the series is symmetrical. Also, the minimum, maximum and standard deviation values indicate that there are wide gaps among the PPT values recorded during the period. Companies' Income Tax (CIT) figures recorded during the period of this study ranges from N26.00b and N1207.30b. These mean that the lowest CIT ever recorded during the period of this study was N26.00b while on the other extreme it was N1207.30b. The standard deviation value of 426.23 with the lowest and highest figure ever recorded indicates that the figures actually vary significantly during the period under study. However, the average and median values recorded are N471.49b and N327.00b respectively.

The Value Added Tax (VAT) has a minimum value of N34.00b and a maximum value of N967.70b with N396.46b and N301.70b as the average and median values respectively. From the results, the gap that exists between the average and median values is an indication that the series is asymmetrical. Furthermore, the standard deviation value of

319.20 with the minimum and maximum values depict that the figure of VAT for the period of this study diverge significantly. The ranges of the values that Customs Tax (CUS) has are N57.68b and N628.00b with an average value of N297.65b and median value of N241.40b. Looking at the figures critically, the mean and median are found not to be the same. This implies that the series are not symmetrical. Moreover, the estimated value of the standard deviation is 178.83 indicating that the series has some variability. With respect to External Debt (EXD), the result shows minimum and maximum values of N438.89b and N5,787.51b respectively with an average value of the N2,147.19b and median value of N1,631.52b. However, the standard deviation value of N1,657.72 reveals notable variations and diverse variability in the series.

Inferential; Statistics

Test of Hypothesis one ($H0_1$): Petroleum Profit Tax has no significant effect on Nigerian economic growth.

Table 2: ARDL Model for the Relationship between Gross Domestic Product and Petroleum Profit Tax

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG(GDP(-1))	0.871156	0.028778	30.27190	0.0000
LOG(PPT)	0.005524	0.009864	0.560024	0.5832
LOG(PPT(-1))	0.029076	0.010461	2.779347	0.0134
C	1.195526	0.259907	4.599826	0.0003
R-squared	0.996382	Mean dependent var		10.67851
Adjusted R-squared	0.995704	S.D. dependent var		0.377716
S.E. of regression	0.024757	Akaike info criterion		-4.382551
Sum squared resid	0.009807	Schwarz criterion		-4.183404
Log likelihood	47.82551	Hannan-Quinn criter.		-4.343675
F-statistic	1468.888	Durbin-Watson stat		1.898922
Prob(F-statistic)	0.000000			

Source: Author's Computation 2019, underlying data from FIRS Annual Reports, CBN Statistical Bulletin and National Bureau of Statistics.

NOTE: GDP represents Gross Domestic Product and PPT represents Petroleum Profit Tax

$$GDP_t = \beta_0 + \beta_1 PPT_t + \mu_t \quad \text{Model 1}$$

GDP=1.195526 +0.029076 PPT.

From table 2, the co-efficient of determination (R^2) indicates that about 99.6% of the variations in GDP is explained by Petroleum Profit Tax (PPT). Also, it shows that the data are so close to fitted regression line. The Durbin-Watson statistic value of 1.9 (approximately 2) indicates that the model is free from serial correlation. As shown in the result, in the long-run, the relationship between gross domestic product (GDP) and Petroleum Profit Tax (PPT) is positive as expected and statistically significant at 5% level of significance [Coef. = 0.269; The t-statistic is 2.773947 and P-value = 0.0134]. The significance of the coefficient indicates that the Petroleum Profit Tax (PPT) has

effect on the gross domestic product (GDP) in the long-run. Alternatively, it indicates that one percent increase in PPT increases GDP by 0.269 percent in the long run during the period of this study.

The null hypothesis was rejected and the alternate accepted.

Test of Hypothesis 2: Companies Income Tax has no significant effect on Nigerian economic growth.

Table 3 ARDL Model for the Relationship between Gross Domestic Product and Companies' Income Tax

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG(GDP(-1))	0.480671	0.111333	4.317424	0.0005
LOG(CIT)	0.067682	0.046868	1.444108	0.1680
LOG(CIT(-1))	0.085783	0.056624	1.514980	0.1493
C	4.720566	1.002227	4.710077	0.0002
R-squared	0.996862	Mean dependent var		10.67851
Adjusted R-squared	0.996274	S.D. dependent var		0.377716
S.E. of regression	0.023057	Akaike info criterion		-4.524812
Sum squared resid	0.008506	Schwarz criterion		-4.325666
Log likelihood	49.24812	Hannan-Quinn criter.		-4.485937
F-statistic	1694.265	Durbin-Watson stat		1.616997
Prob(F-statistic)	0.000000			

Source: Author's Computation 2019, underlying data from FIRS Annual Reports, CBN Statistical Bulletin and National Bureau of Statistics. NOTE: GDP represents Gross Domestic Product and CIT represents Companies' Income Tax

$GDP_t = \beta_0 + \beta_2 CIT_t + \mu_t$-……Model 2

GDP =4.720566 +0.085783CIT

Based on the result from the table 3, the R-squared value is 0.997. This indicates that about 99.7% of the variations in GDP is explained by Companies' Income Tax (PPT). The Durbin-Watson statistic value of 1.62 (approximately 2) indicates that the model is free from serial correlation. The F-statistics (1694.27; P - value = 0.000) is highly significant at 5% level of significance. This further indicates a good fit. From Table 3, the long run position shows a coefficient of 0.085783 which shows that 1% increase in CIT will lead to 8.5% increase in GDP. At 0.05 level of significance, t.statistic is 1.514980 while the p-value of the t-statistic is 0.1493 which is higher than 0.5 level of significance. Therefore did not reject the null hypothesis.

Test of Hypothesis 3: $H0_3$: Value Added Tax has no significant effect on economic growth in Nigeria.

From table 4, the coefficient of determination (R-squared) value is 0.999 suggesting that about 99.9% of the variances in GDP is explained by Value Added Tax (VAT). The F-statistics (6494.76; P - value = 0.000) is highly significant at 5% level of significance and

this further indicates that the model is fit. The Durbin-Watson statistic value of 1.96 (approximately 2) depicts that the model is free from serial correlation.

Table 4: ARDL Model for the Relationship between Gross Domestic Product and Value Added Tax

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG(GDP(-1))	0.410859	0.050418	8.149013	0.0000
LOG(VAT)	-0.055506	0.030582	-1.814977	0.0883
LOG(VAT(-1))	0.250348	0.038432	6.513959	0.0000
C	5.262502	0.446195	11.79417	0.0000
R-squared	0.999179	Mean dependent var		10.67851
Adjusted R-squared	0.999026	S.D. dependent var		0.377716
S.E. of regression	0.011790	Akaike info criterion		-5.866237
Sum squared resid	0.002224	Schwarz criterion		-5.667090
Log likelihood	62.66237	Hannan-Quinn criter.		-5.827361
F-statistic	6494.756	Durbin-Watson stat		1.959498
Prob(F-statistic)	0.000000			

Source: Author's Computation 2019, underlying data from FIRS Annual Reports, CBN Statistical Bulletin and National Bureau of Statistics. NOTE: GDP represents Gross Domestic Product and VAT represents Value Added Tax

$GDP_t = \beta_0 + \beta_1 VAT_t + \mu_t$ ..... .Model 3

GDP=5.262502 +0.250348VAT.

From table 4, the long run coefficient of VAT is 0.250348 positive, which shows that 1% increase in VAT will lead to 25% increase in GDP. At 0.05 level of significance, the t-statistic is 6.513959,while the p-value of the t-statistic is 0.0000 which is lower than 0.05.The study therefore rejected the null hypothesis. This shows that Value Added Tax has significant effect on the economic growth of Nigeria.

Test of Hypothesis 4: Custom and excise duties have no significant effect on Nigeria economic growth.

From the result in table 5, the co-efficient of determination (R2) indicates that about 99.5% of the variations in GDP is explained by Customs Tax (CUS). Besides, it shows that the data are closely fitted t the regression line. The Durbin-Watson statistic value of 1.91 (approximately 2) indicates that the model is free from serial correlation. The F-statistics (1170.59; P = 0.000) is highly significant at 1% level of significance. These confirm the usefulness of the model.

Table 5: ARDL Model for the Relationship between Customs Tax and Gross Domestic Product

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG(GDP(-1))	0.787685	0.059849	13.16130	0.0000
LOG(CUS)	0.027888	0.038169	0.730648	0.4756
LOG(CUS(-1))	0.081482	0.039743	2.050204	0.0571
C	1.711919	0.459749	3.723596	0.0018
R-squared	0.995465	Mean dependent var		10.67851
Adjusted R-squared	0.994614	S.D. dependent var		0.377716
S.E. of regression	0.027720	Akaike info criterion		-4.156472
Sum squared resid	0.012294	Schwarz criterion		-3.957326
Log likelihood	45.56472	Hannan-Quinn criter.		-4.117597
F-statistic	1170.587	Durbin-Watson stat		1. 911352
Prob(F-statistic)	0.000000			

Source: Author's Computation 2019, underlying data from FIRS Annual Reports, CBN Statistical Bulletin and National Bureau of Statistics. NOTE: GDP represents Gross Domestic Product and CUS represents Customs Tax

$GDP_t = \beta_0 + \beta_1 CUS_t + \mu_t$……Model 4
GDPt= 1.711919 +0.081482CUS

From table 5, the coefficient of the long run effect of customs and excise duties is positive with 0.081482. This shows that 1% increase in customs and excise duties will to 8.1% increase in Gross Domestic Product. At a degree of freedom 0.05, the t-statistic is 2.050204 while the p-value is .0571 which is higher than 0.05. Therefore, the null hypothesis was not rejected. This means that in the long run,Custom and excise duties have no significant effect on Nigeria economic growth.

Test of hypothesis 5: $H0_5$: Tax revenue generated has no significant impact on Nigeria economic growth.

Based on the result from table 6, the Adjusted R-squared value is 0.998919.This indicates that about 99.9% of the variation in GDP is jointly explained by Petroleum Profit Tax (PPT), Value Added Tax (VAT), Companies' Income Tax (CIT) and Customs Tax (CUS). The Durbin-Watson statistic value of 2.164 (approximately 2) indicates that the model is free from serial correlation. The F-statistics (2508.996; P - value = 0.000) is highly significant at 1% level of significance. This further indicates a good fit.

Table 6: ARDL Model for the Relationship between Gross Domestic Product and Tax Indicators

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG(GDP(-1))	0.391937	0.063663	6.156407	0.0000
LOG(PPT)	-0.001364	0.005770	-0.236416	0.8171
LOG(CIT)	0.032367	0.044532	0.726827	0.4813
LOG(VAT)	-0.056955	0.052002	-1.095231	0.2949
LOG(VAT(-1))	0.210543	0.049180	4.281084	0.0011
LOG(CUS)	-0.012736	0.020709	-0.614991	0.5500
LOG(CUS(-1))	0.034342	0.022666	1.515129	0.1556
C	5.398412	0.561219	9.619089	0.0000
R-squared	0.999317	Mean dependent var		10.67851
Adjusted R-squared	0.998919	S.D. dependent var		0.377716
S.E. of regression	0.012419	Akaike info criterion		-5.649966
Sum squared resid	0.001851	Schwarz criterion		-5.251673
Log likelihood	64.49966	Hannan-Quinn criter.		-5.572215
F-statistic	2508.996	Durbin-Watson stat		2.164364
Prob(F-statistic)	0.000000			

Source: Author's Computation 2019, underlying data from FIRS Annual Reports, CBN Statistical Bulletin and National Bureau of Statistics. NOTE: GDP represents Gross Domestic Product, PPT represents Petroleum Profit Tax, VAT represents Value Added Tax, CIT represents Companies' Income Tax, and CUS represents Customs and excise duties

$GDP_t = \beta_0 + \beta_1 PPT_t + \beta_2 CIT_t + \beta_1 VAT_t + \beta_1 CUS_t$ ……..Model5

$GDP_t = 5.398412 - 0.001264PPT + 0.032367CIT + 0.210543VAT + 0.034342CUS.$

From table 6, the long run effect shows that the coefficient of PIT is negative with -0.001364 which means that 1% increase in PIT will lead to 0.14% decrease in GDP,and also the p-value is 0.8171 which is insignificant at 0.05% level of significant. The coefficient of CIT is positive with 0.032367 which means that 1% increase in CIT will lead to 3.2% increase in GDP, and also it is insignificant with p-value of 0.4813. The coefficient of CUS is positive with 0.034342 which means that 1% increase in CUS will lead to 3.4% increase in GDP, and also the p-value of 0.1556 is insignificant at 0.05level of significant. The coefficient of VAT is positive with 0.210543. This means that 1% increase in VAT will lead to 21% increase in GDP. Also at 0.05 level of significance, VAT is significant at the p-value of 0.0011. Overall, at 0.05 level of significant, the F-statistics is 2508.996 with p-value of 0.00000 lower than 0.05.This means that the study rejected the null hypothesis which means that Tax revenue generated has no significant impact on Nigeria economic growth.

Test of Hypothesis 6: H_{06}: External debt has no significant moderating effect on the relationship between total tax revenue and economic growth in Nigeria.

Table 7: ARDL Model for the Relationship between Gross Domestic Product and Tax Indicators and External Debt

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG(GDP(-1))	0.376797	0.063028	5.978240	0.0001
LOG(PPT)	-0.007855	0.006352	-1.236622	0.2420
LOG(CIT)	0.026468	0.039854	0.664133	0.5203
LOG(VAT)	-0.053727	0.049403	-1.087534	0.3001
LOG(VAT(-1))	0.239149	0.039143	6.109650	0.0001
LOG(CUS)	0.000696	0.033701	0.020644	0.9839
LOG(EXD)	-0.010060	0.008179	-1.229984	0.2444
LOG(EXD(-1))	0.014296	0.006217	2.299595	0.0421
C	5.544886	0.558762	9.923525	0.0000

R-squared	0.999451	Mean dependent var	10.67851
Adjusted R-squared	0.999051	S.D. dependent var	0.377716
S.E. of regression	0.011633	Akaike info criterion	-5.767744
Sum squared resid	0.001489	Schwarz criterion	-5.319664
Log likelihood	66.67744	Hannan-Quinn criter.	-5.680274
F-statistic	2502.402	Durbin-Watson stat	2. 197370
Prob(F-statistic)	0.000000		

Source: Author's Computation 2019, underlying data from FIRS Annual Reports, CBN Statistical Bulletin and National Bureau of Statistics. NOTE: GDP represents Gross Domestic Product, PPT represents Petroleum Profit Tax, VAT represents Value Added Tax, CIT represents Companies' Income Tax, CUS represents Customs and excise and EXD represents External Debt

$GDP_t = \beta_0 + \beta_1 TREV + \beta_2 EXD + \mu_t$ ……..Model 6

GDP =5 544886-007855PPT +0 026468CIT +0 239149VAT +0 000696CUS +0 014296EXD

Based on the result from table 7, the Adjusted R-squared value is 0.999. This indicates that about 99.9% of the variation in GDP is jointly explained by Petroleum Profit Tax (PPT), Value Added Tax (VAT), Companies' Income Tax (CIT), Customs Tax (CUS) and External Debt (EXD). The Durbin-Watson statistic value of 2.197 (approximately 2) indicates that the model is free from serial correlation. The F-statistics (2502.402; P - value = 0.000) is highly significant at 5% level of significance. This further indicates a good fit.

While the individual coefficients remain as analysed in hypothesis 5, the coefficient of external debt in the long term is positive with 0.014296 which means that 1% in external debt will have a 1.4% increase in GDP. At 0.05% level of significant, the p-value is significant at 0.0421 lower than 0.05. From the overall result, in the long run, at 0.05 level of significance, the F-statistic is 2502.402 while the p-value of is 0.00000 lower

than 0.05. The study therefore rejects the null hypothesis and accept the alternate, which means that External debt has significant moderating effect on the relationship between total tax revenue and economic growth in Nigeria.

Discussion:

The findings from the regression result revealed that positive relationship exists between Petroleum Profit Tax (PPT) and gross domestic product (GDP) both in the short-run [Coef. = 0.006; P-value = 0.583] and long-run [Coef. = 0.269; P-value = 0.000]. However, the study only finds significant among the variables in the long-run at 1% levels of significance. These mean that Petroleum Profit Tax (PPT) improves economic growth in the long run. The estimated positive but insignificant coefficients of Petroleum Profit Tax (PPT) in the short-run maybe as a result of the fact that the PPT recorded in the given short time is not enough to significantly affect the country's economy. This finding is in conformity with the *a priori* expectation and also consistent with the findings of Abdullahi, Madu, and Abdullahi (2015), Olatunji, and Adegbite (2016), Yahaya and Bakare (2018), Gopar, Dalyop and Yussuf (2018). The result further revealed that the estimated coefficients of current value Companies' Income Tax (CIT) is positive and statistically insignificant within the conventional alpha level of 10% - 1% in the short-run [Coef. = 0.068; P-value = 0.168]. Conversely, the estimated coefficient of the Companies' Income Tax (CIT) in the long-run is positive and statistically significant at 1% alpha level [Coef. = 0.296; P-value = 0.000]. Then again, it shows that economy of the country proxied by gross domestic product (GDP) grows with higher Companies' Income Tax (CIT) in the long-run. In congruence, Naomi and Sule, (2015), Olaleye, Riro, and Memba (2016) and Eneje, (2018) among others observed positive and significant effect of Companies' income tax on Nigerian economic growth in the long-run. However, the findings are not in tandem with Saidu, (2015) and Golpira, Abdolreza, & Rui-Li (2016) as they found negative relationships. It is evident that in the short-run; the coefficient of Value Added Tax (VAT) is positive and statistically significant at 5% level [Coef. = 0.068; P-value = 0.042].

Besides, the study finds positive and highly significant coefficient for the Value Added Tax (VAT) in the long-run at 5% level [Coef. = 0.296; P-value = 0.000]. The implication of these results is that Value Added Tax (VAT) significantly affects gross domestic product (GDP) both in the short-run the long-run. The positive and significant effects of Value Added Tax (VAT) in the in tandem with the empirical findings by Fredrick and Okeke (2015), Nasiru, Haruna, and Abdullahi, (2016) and Ogwuru, and Agbaraevoh, (2017), who found that Value Added Tax (VAT) exhibits positive and significant relationship with gross domestic product (GDP) but contrary to the findings by Kohaliand Noor, (2016), and Okwara and Amori (2017) who find negative relationships. The findings of this study as from the results confirmed that Customs Tax (CUS) has significant effect on economic growth in Nigeria. This is evident in the significant coefficients of the variable both in the short-run [Coef. = 0.068; P-value = 0.095] and long-run [Coef. = 0.296; P-value = 0.000]. This means that Customs Tax (CUS) have significant effect on economic growth. This seems to support the findings of Ogwuru and Chinasa, (2017) and Abomaye-Nimenibo, et al (2018) who also finds no positive and

significant evidence on the response of gross domestic product (GDP) to Customs Tax (CUS). However, the results failed to support the findings of Onakoya and Affitinni (2016) and Munyoro, Chiinze, and Dzapasi (2016). They both found that Customs Tax (CUS) has negative relationship with economic growth.in the case of the major tax type levels in a single model, the study finds positive and insignificant coefficient for Tax Revenue (TREV) in the short-run [Coef. = 0.007; P-value = 0.7162]. However, it is positive and significant in the long-run [Coef. = 0.328; P-value = 0.000]. This is in alignment to the Jones, Ihendinihu and Nwaiwu (2015), Uniamikogbo and Aigienohuwa (2017), and Asaolu, Olabisi, Akinbode and Alebiosu (2018) since the aforementioned tax type level are positive and statically significant.For the last model that reflected moderating effect of external debt on the relationship between tax revenue and economic growth, the study finds that in the short run; the current value of Tax Revenue (TREV) and External Debt (EXD) have positive but insignificant relationships with gross domestic product (GDP) [Coef. = 0.005; P-value = 0.802 and Coef. = 0.004; P-value = 0.559 respectively]. However, in the long - run the relationship between Tax Revenue (TREV) and economic growth is positive and statistically significant at 1% level of significance [Coef. = 0.320; P-value = 0.000] while External Debt (EXD) exhibits positive but insignificant relationship with gross domestic product (GDP) [Coef. = 0.017; P-value = 0.550].

Implications to Research and Practice

The results of this study have implications for regulatory authorities, Federal Inland Revenue Service, Tax Payers and Researchers. The results will enable the regulatory authorities like Central Bank of Nigeria, Federal Government of Nigeria to study the long term effect of the results and formulate policies that will make taxation a strong weapon to stabilize the economy in the period of borrowing to finance government budgets. It will also help the government to focus on tax justice. It will assist the Federal Inland Revenue Service to reorganize its internal resources towards generating taxes and advises the government on the need for tax justice. The Tax payers will learn the need to comply with tax laws when they realise the tax justice in their tax payment. The researchers will have access to the study for data collection and background to various research works in this area.

Conclusion

Using annual time series data, which covers a period of 21 years (1997 to 2017), this study establishes that tax revenue (measured by Petroleum Profit Tax (PPT), Companies' Income Tax (CIT), Value Added Tax (VAT), Customs Tax (CUS)) affects economic growth and it is a determinant of long-run economic growth. On the other hand, the study finds that Value Added Tax (VAT) and Customs Tax (CUS)) are the determinants of short-term economic growth in Nigeria. The study discovered that external debt could be used to moderate the effect of tax revenue on Nigeria economic growth which will propel the government of the nation to focus on production activities for long term development of the economy and service the external debt. This discovery shows that government depended on oil revenue which has been dwindling has not really supported the long-term growth of the economy. Therefore, this study discovered that diversifying to oil

revenue will promote growth in revenue and also influence the payment of external debt. The study also discovered that through diversification from oil revenue to non-oil revenue will promote Nigeria from a mono-product economy to a multiproduct economy for long term growth. That is to say, diversification to non-oil revenue will result into industrial development of the nation.

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