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By Abomaye-Nimenibo, Williams Aminadokiari Samuel, Michael Jack Eyo, Mni & Friday, Hope Chika

Obong University

Abstract- The contribution of taxation to any economy globally is so much in terms of quantification and cannot be therefore be ignored as unimportant. It is a source of revenue or income to the government be it the Central, State or Local government in achieving their macro-economic objectives in the areas of fiscal and monetary policies. For Nigerian government to effectively carry out its primary function and other subsidiary functions, she requires adequate funding. Government responsibilities has continued to increase over time especially in developing countries like Nigeria due to the increasing nature and size of her population, and infrastructural deterioration. This study was therefore poised to empirically examine the tax revenue and economic growth in Nigeria from 1980 to 2015 by employing Gross Domestic Product (GDP) as the dependent variable and Petroleum Profit Tax (PPT), Company Income Tax (CIT), and Customs and Excise Duties (CED) as the independent variables. The analysis of the study was carried out using the method of Multiple Regression Analysis. The Ordinary Least Square (OLS) method of econometrics was the main analytical technique that was employed using Econometric software (E-Views 9.0).

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An Emperical Analysis of Tax Revenue and Economic Growth in Nigeria from 1980 to 2015

Abomaye-Nimenibo, Williams Aminadokiari Samuel [α], Michael Jack Eyo, Mni [σ] & Friday, Hope Chika [ρ]

Abstract- The contribution of taxation to any economy globally is so much in terms of quantification and cannot be therefore be ignored as unimportant. It is a source of revenue or income to the government be it the Central, State or Local government in achieving their macro-economic objectives in the areas of fiscal and monetary policies. For Nigerian government to effectively carry out its primary function and other subsidiary functions, she requires adequate funding. Government responsibilities has continued to increase over time especially in developing countries like Nigeria due to the increasing nature and size of her population, and infrastructural deterioration. This study was therefore poised to empirically examine the tax revenue and economic growth in Nigeria from 1980 to 2015 by employing Gross Domestic Product (GDP) as the dependent variable and Petroleum Profit Tax (PPT), Company Income Tax (CIT), and Customs and Excise Duties (CED) as the independent variables. The analysis of the study was carried out using the method of Multiple Regression Analysis. The Ordinary Least Square (OLS) method of econometrics was the main analytical technique that was employed using Econometric software (E-Views 9.0).Our broad objectives were to examine the relationship that exists between Petroleum Profit Tax, Company Income Tax, Customs and Excise Duties; and Economic Growth in Nigeria. The Co-integration results revealed that there was a long-run relationship among the variables. The short run regression result also revealed that Petroleum Profit Tax and Company Income Tax has no significant relationship with economic growth in Nigeria. Custom and Excise Duties was found to have a significant relationship with Economic Growth in Nigeria during the period under study. The study therefore concluded that government should ensure that tax revenue is used judiciously to make expenditures on Education, Housing, Ttransportation, Aagriculture, Health, Power, Road construction, National defense, among others that will help the various sectors of the economy to grow and function well enough so that the growth and development of the country shall be enhanced. This calls for government's avoidance of mismanagement, corruption and embezzlement of taxation funds. Government should also make it mandatory for all companies in Nigeria to be registered as companies operating in the country without missing a single one so as to make tax collection simple, painless and without loss of revenue; and to penalize any company that have registered but evades tax payment. By this, government will not be starved of developmental funds.

Author α: Bsc., M.Sc., Ph.D (Econs) Director Of Post Graduate Studies, Obong University, Obong Ntak, Akwa Ibom State, Nigeria.
e-mail: wasanim2006@yahoo.com
Author σ: Senior Lecturer B.Sc (Political Science), M.Sc (Political Science/ International Relations and Diplomacy), MPA (Academic) in Public Administration, LL.B (Laws), B.L, LL.M (Laws) and Ph.D in International Relations. Department of Political Science/Public Administration Obong University, Obong Ntak, Akwalbom State.
Author ρ: M.Sc Economics in View.

I. Introduction

For Nigerian government to effectively carry out its primary function and other subsidiary functions, she requires adequate funding. Government responsibilities has continued to increase over time especially in developing countries like Nigeria due to the increasing size of the population, and infrastructural decay. But quite unfortunately the revenue of the government has not been growing above her expenditure to enable capital formation possible.

Taxation is seen as an essential part of a country's investment and growth pattern. Tax is a compulsory levy imposed on a subject or upon his property by the government to provide security, social amenities and create conditions for the economic well-being of the society (Appah, 2004; Appah and Oyandonghan, 2011). The funds provided by tax are used by the states to support certain state obligations such as education systems, health care systems, and pensions for the elderly, unemployment benefits, and public transportation.

Tax is a major player in every society of the world (Azubike, 2009). The tax system is an avenue for government to use in collecting additional revenue needed in discharging its pressing obligations. A tax system is one of the most effective means of mobilizing a nation's internal resources and it lends itself to creating an enabling environment to promote economic growth. Towing this line of argument, Nzotta (2007), also argued that taxes constitute key sources of revenue to the federation account shared by the federal, state and local governments. Hence, a tax policy represents key resource allocator between the public and private sectors in a country. Anyanfo (1996) and Anyanwu (1997), stated that taxes are imposed to regulate the production of certain goods and services, protection of infant industries, control business and curb inflation, reduce income inequalities etc. Similarly, Tosun and Abizadeh (2005), submitted that taxes are used as proxy for fiscal policy (negatively or positively). They outlined five possible mechanisms by which taxes can affect economic growth. First, taxes can inhibit investment rate

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through such taxes as corporate and personal income, 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 its 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 high tax burdens even though they have high social productivity. The economic growth is a gradual and steady change in the long-run which comes about by a general increase in the rate of savings and population (Jhingan, 2005). It has also been described as a positive change in the level of production of goods and services by a country over a certain period of time. However, economic growth is measured by the increase in the amount of goods and services produced in a country. An economy is said to be growing when it increases its productive capacity which later yield more in production of more goods and services (Jhingan, 2003). Economic growth is usually brought about by technological innovation and positive external forces. It is the yardstick for raising the standard of living of the people. It also implies reduction of inequalities of income distribution. Taxation therefore, plays a crucial role in promoting economic activity and growth. Through taxation, government ensures that resources are channeled towards important projects in the society, while giving succour to the weak. The role of taxation in promoting economic activity and growth is not felt primarily because of its poor administration (Festus and Samuel, 2007).

Ojo (2008), asserted that, taxation is a concept and science of imposing tax on citizens. According to him, tax is itself a compulsory levy which is required to be paid by every citizen. It is generally considered as a civic duty. The imposition of taxation is expected to yield income which should be utilized in the provision of amenities, both social and security as well as create conditions for the economic wellbeing of the society.

Okpe (1998) asserted that the existence of government is a necessity that cannot continue without financial means to pay for its expenses as there are certain services which the government must provide to its citizens because of their essential nature. Government does this to ensure that the supply of such goods and services are evenly distributed in any given society so that the rich and poor may benefit. Towards this end, One is prone to ask, howdid government get such huge amount of money to finance and provide such essential goods and services to her citizenry. Is It true that government uses her minted money to provide for the essential goods and services or there are other important economic means available that should be considered as sources of revenue to the government so that excessive money is not in circulation in any economic situation. Thus, Olashore (1999) noted that for an economic and social balance to be maintained in an economy, government has found ways of financing her activities and one of such finance apart from loans and grants is taxation.

Taxation plays a crucial role in promoting economic and social activities and growth. Through taxation, government ensures that resources are channeled towards important projects in the society while giving support to the weak. In support of Olashore, Orjih (2001), stated that taxation is useful in raising revenue, controlling the consumption of certain commodities, controlling monopoly, reducing income inequalities, improving the balance of payments as well as protecting infant industries.

Abomaye-Nimenibo(2017) is of the view that tax is a compulsory contributions made by animate and inanimate beings to government being a higher authority either directly or indirectly to fund its various activities and any refusal is meted with appropriate punishment. He went on to say that Tax is an involuntary payment made by a resident of a state in obeisance to levy imposed by a constituted authority of a sovereign state at a particular period of time; and that Taxation is the process put in place by government (which ever tier) to exercise authority on and over the imposition and collection of taxes based on enacted tax laws with which projects are financed. Taxation is therefore seen as the transfer of resources as income from the private sector to the public sector for its utilization to achieve some if not all the nation's economic and social goals such as provision of basic amenities, social services, educational facilities, public health, transportation, capital formation etc.

In essence, taxation is a core pillar of a country's regulatory framework for investment and growth. Hence, this study looks at econometric consequences of taxes for both GDP per capita levels and their transitional growth rates, with a large part of the empirical analysis devoted to assessing the effects of different forms of petroleum profit tax, company income tax and custom & excise duties on productivity and growth of the Nigerrian economy. Therefore, the aim of this research work is to evaluate empirically the impact of taxation on economic growth in Nigeria from 1980 to 2015.

a) Statement of the Problem

Nigeria and other African Countries aretoday facing series of challenges when it comes to optimizing 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.

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We see the taxation system in Nigeria as not being fully tapped and maximized and its role in promoting economic and social activities and growth is not felt because of it's poor administration. In this direction, Olashore (1999) submitted that the economy has remained in deep slumber or shamble as all macroeconomic indicators show that the economy is in urgent need of changes, balancing and indeed radical reform.

In addition, the attitude of Nigerians towards taxation is worrisome as many prefer not to pay tax. As a result of the unwillingness to pay tax as well as evading tax, the economy therefore continues to lose huge amount of revenue. If this lost revenue isployed back into the economy and well utilized, can change the fortune of the nation. In developing countries like Nigeria, this problem has been lingering for so long which requires urgent attention and solution. The cost of collecting tax in Nigeria is too high to the extent that if left unchecked the cost may soon outweigh the benefit or value derived from such operation and that will not be appropriate for the system as this unwholesome act is against the cannon of administrative efficiency. Administrative Efficiency being the process of levying and collecting taxes in an administratively efficient, transparent manner and must not cause economic distortion. Collection should be done in such way that the system brings in sufficient revenue to the government at less cost. Economy of administration is an important quality of a good Tax, whereby assessment and collection of taxes require personnel and equipment at minimal cost. This means that the cost of collecting a tax should not be more than the revenue to be derived from the tax itself but this is not so in Nigeria.

Identifying the impact of taxation on economic growth in Nigeria empirically is a research work carried out at the right time as there is an urgent need to examine more deeply and to look into the relationship between petroleum profit tax, company income tax, custom & excise duties and economic growth in Nigeria. This study will not only guarantee improved revenue base for the country but also position the country properly to take full advantage offered by the new millennium global tax reform system. Therefore, this research work examines the impact of tax revenue on economic growth in Nigeria by analyzing the tax gap in the system over the years and so revealing the critical challenges that needs to be bud. Hence, the need for further study of the current tax performance and its effect on the Nigerian economy.

b) Objectives of the Study

The broad objective of this study is to examine empirically the impact of tax revenue on economic growth in Nigeria from 1980 to 2015. The specific objectives of the study are to:

i. Xamine the relationship between petroleum profit tax and economic growth in Nigeria;
ii. Xamine the relationship between company income tax and economic growth in Nigeria; and
iii. Xamine the relationship between custom and excise duties and economic growth in Nigeria;

c) Research Hypotheses

The research work is guided by the following null and alternative hypotheses;

i. H_0: There is no significant relationship between petroleum profit tax and economic growth in Nigeria.
   H_1: There is a significant relationship between petroleum profit tax and economic growth in Nigeria.
ii. H_0: There is no significant relationship between company income tax and economic growth in Nigeria.
   H_1: There is a significant relationship between company income tax and economic growth in Nigeria.
iii. H_0: There is no significant relationship between custom & excise duties and economic growth in Nigeria.
   H_1: There is a significant relationship between custom & excise duties and economic growth in Nigeria.

II. Literature Review and Theoretical Framework

The study examines the ideas or views of various authors who took keen interest in the subject matter. Basically, the review was done on the following sub-headings of historical background, conceptual framework, theoretical framework, empirical literature and summary of the literature reviewed.

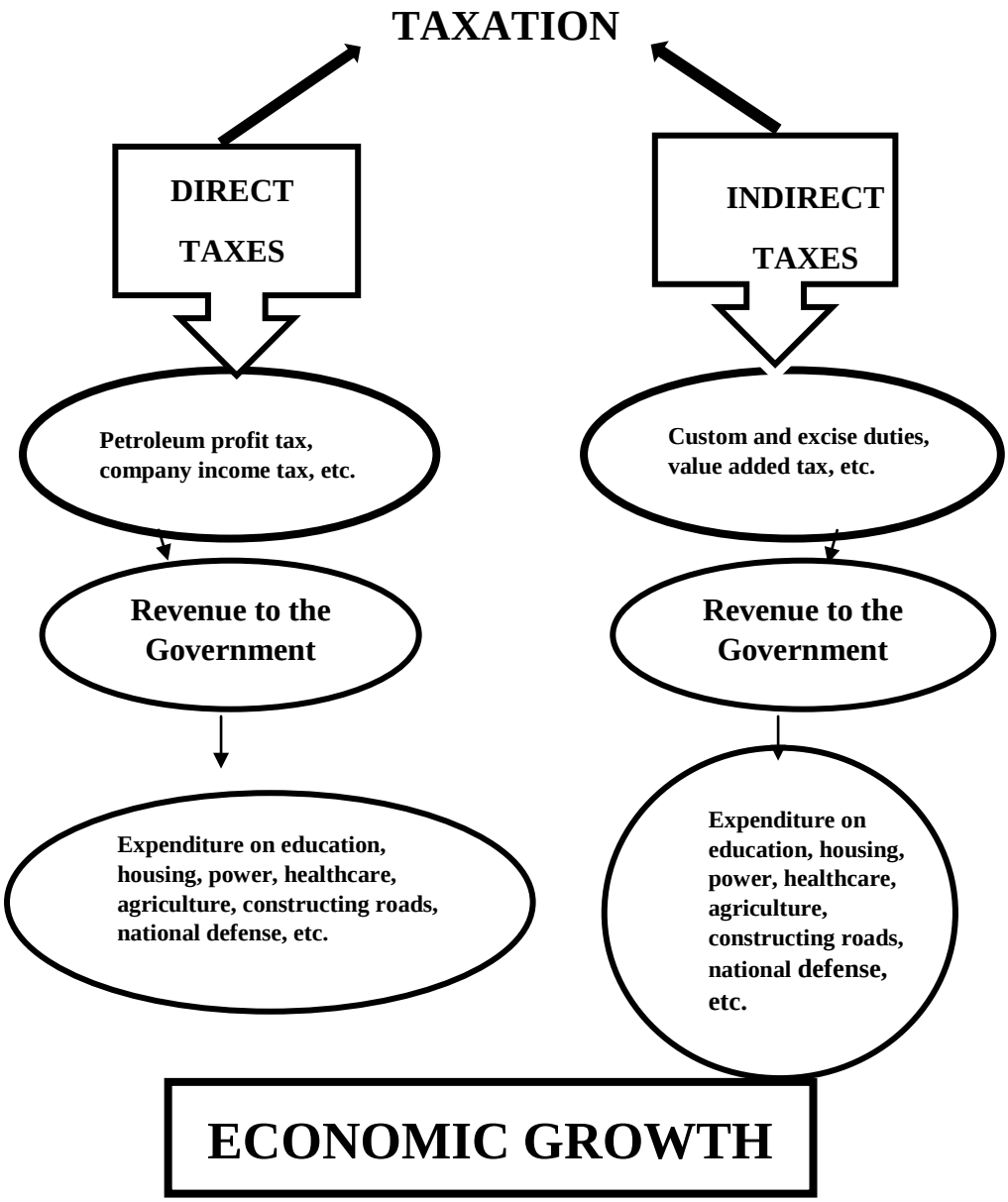
a) Historical Background of Taxation

Taxation is said to have come into existence "from time immemorial" without a specific mention of when exactly it evolved. However, the origin of tax levies can be traced to the ancient cities of Greek and Rome in modern literature; but from the Bible account, it has been as old as the world. In these so called cities of Greek and Rome, taxes were levied on consumption, saving, investment and properties (Abomaye-Nimenibo, 2017). From the account of St. Mark's gospel (chapter 12:14-16), a disciple of Jesus Christ precisely St. Peter was reported in the Holy Bible was confronted by the tax authorities and he met Jesus Christ who commanded him to get money with which Peter paid for himselve and the Lord Jesus Christ. St. Mathewgospel chapter 17:24-27 of the Holy Bible, stated that our Lord Jesus Christ Himself paid tax. Furthermore, in Matthew 19:21 we see tax money having its functions to perform in the society which enables government authorities to use in

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providing social services that will be enjoyed by all the citizens of a country. Such social services include the provision of health and education, maintenance of law and order, provision of basic amenities and infrastructures etc. Tax payment is therefore part of the price to be paid by sound members of an organized and orderly society.

i. *Conceptual Framework*



ii. *The Concept of Taxation*

Anyan wu (1993) stated that, tax is more or less compulsory, non-returnable contribution of money used occasionally for goods and services and flows from private individuals, institutions or groups to the government. It may be levied upon wealth or income of a person or body corporate or in form of surcharge on prices.

Okpe (1998), Taxation is regarded as a Compulsory charge imposed by the public authority (Federal, State and Local Government) for the general purposes of Government. It is also defined as the act of laying a tax or imposing taxes on the subjects of a state by government or on the members of a Corporation or Company by the proper Authority. It is levy regularly imposed and regarded as contribution to the general pool from which government expenditure are made.

Gyani (1990), went on to say that tax is a compulsory contribution imposed by the government on citizens in accordance with legislative provisions and paid by them through agents to defray the cost of administration.

Famoyin (1990), justified tax as a compulsory contribution imposed upon persons for the general purpose of the government. Once levied, every taxable person must pay tax. He also added that taxes are

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benefits, but for providing the government with funds necessary for the general administration of the country.

Taxation in summary is the transfer of income or resources from the private sector to the public sector in order to enable the public sector to carry out some, if not all of the Nation's economic and social goals. The goals may be in the form of provision of Government basic services regularly and particularly in the educational, public health, transportation sectors, amenities and capital formation. Taxes may be levied upon wealth or income or in the form of surcharge on prices.

iii. *Types of Taxes (Classification of Taxes)*

There are two types of taxes and they are direct and indirect taxes which differs only in terms of the taxpayers' awareness or in awareness of the incidence of a particular tax. The burden of the tax is distributed among the taxpayers who bears the tax payment knowingly or unknowingly. The tax buden is incidentally collected from the tax payers proportionally, progressively and/or regressively and they differ from one another on the bases of the relationship between tax base and tax rate. The tax base is the object that is being tax or that is to be taxed such as the income tax while tax rate refers to the percentage of the net value of the tax base or may be of a flat rate say 10%.

b) Direct Tax

This is a tax that is levied directly on a person or company and such a person or company is expected to pay the tax, as the taxpayer has been advised by notification, called assessment notice. Any tax authority personnel so empowered to collect tax and who did not comply with the above is a quack and an impostor. The taxpayer must be notified of the incidence of such tax (Abomaye-Nimenibo, 2017). Herefore, Direct tax is a tax levied directly on the income and property of individuals and Companies which includes the following:

i. *Petroleum Profit Tax (PPT)*

Petroleum Profit Tax was first introduced in 1957 by the Colonial Masters but it became effective and operational in 1958 when Nigeria commenced exportation of crude oil to the world market.

The Petroleum Profit Tax is levied on any resident company or person in charge of a non-resident company who are exploring for petroleum or producing it in Nigeria. This also includes any liquidator, receiver, or agent of liquidator or receiver of any company carrying on petroleum operations in Nigeria.

The Petroleum Profit Tax is a type of pre-paid tax which annual tax return forms are prepared and submitted to JP Morgan Chase Bank, within five months of the end of each assessment year of operation.

Usually, payment is done mainly in 2 segments of 12-13 phases. The first segment is the estimated annual return paid not later than February of each year. The tax due is then paid in 12 months instalments throughout the year. However, in the case of accumulated actual tax which exceeds the tax paid, a 13th month payment can be made as provided by law and if the opposite occurs, the company gets the refund.

Adereti (2011), explained that the taxable income of a petroleum company is subjected to 85%, but this percentage is lowered to 65.75% during the first 5 years of operation but where oil companies operate under production sharing contracts then they will be liable to tax at a rate of 50%.

In order to facilitate the collection of petroleum tax, the Petroleum Profit Tax law of 1959 was enacted as the principal Act which has undergone several reforms or amendments as follows:

Petroleum Profit Tax (Amendment) Act No 65, 1966.
Petroleum Profit Tax (Amendment) Act No 1, 1967
Oil Terminal Dues Act No 9, 1969.
Petroleum Profit Tax (Amendment) Act No 22, 1970
Petroleum Profit Tax (Amendment) Act No 2, 1975
Petroleum Profit Tax (Amendment) Act No 4, 1979
Petroleum Profit Tax (Amendment) Act No 25, 1979
Petroleum Profit Tax (Amendment) No 95, 1979.

In 1990, all these Acts were consolidated into the Petroleum Profits Tax Act Cap 354 Laws of Federation of Nigeria (LFN) 1990. This law has also undergone several amendments in the hands of succeeding Military governments in various decrees such as:

Petroleum Profit Tax (Amendment) Decree No 31, 1996.
Petroleum Profit Tax (Amendment) Decree No 18, 1998.
Petroleum Profit Tax (Amendment) Decree No 30, 1999.
Petroleum Profit Tax (Amendment) Decree No 104, 1999.

Finally, Petroleum Profit Tax Act, Cap P.13 LFN 2004 was enacted which is being superseded by the Petroleum Industry Bill that is being instituted to be signed into law.

ii. *Value Added Tax (VAT)*

Value Added Tax (VAT) was introduced in Nigeria in 1993 through VAT Decree 102 of 1993 which came into effect from 1st December, 1993; while real invoicing took effect from 1st January, 1994. This Decree abruptly repealed the states administered Sales Tax Decree No. 7 of 1986. By this decree, States ceases to collect Sales Tax which metamorphoses to VAT and its collection falls into the hands of the Federal Government through FIRS.

Value Added Tax (VAT) as a tax is imposed on any person or individual, corporate sole, and organizations that consumes or buys any taxable product or service in Nigeria. This tax is not paid by the user directly but it is rather collected by the seller when any taxable item or service is sold. The seller then nets off the VAT and submits it to FIRS through a designated

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bank. The bank immediately issues an e-ticket as evidence of payment and when this e-ticket is presented to the Integrated Tax Office (ITO) an e-receipt is issued accordingly.

iii. *Withholding Tax (WHT)*

The Withholding Tax does not stand distinctively of its own. It is rather, a mechanism to collect some other taxes.

Various persons or companies have subjected to this Withholding Tax deductions to balance their tax liabilities for different types of taxes. WHT deductions are regarded as advance payments (or payments on account) of the relevant tax liability that will arise from the tax returns of the period concerned. When a person benefits from any payment and the income is taxable, the Withholding Tax is withheld by the payer. It is then directly remitted to FIRS through a designated Bank. The amount may be refunded to the payer on successful presentation of evidence of tax payment based on the evidence of payment certificate.

iv. *Educational Tax (EDT)*

All the companies registered in Nigeria that are subject to Companies Income Tax (CIT) are also made liable to contribute to Educational Tax (EDT). The Educational Tax Decree No 7 of 1993 was promulgated to be used exclusively to upgrade the nation's educational infrastructures. This tax is considered not good enough but not repealed. Ogundele (1999) advance the following reasons why educational sectorial taxes are considered not good enough for any tax system:

a. It's unnecessarily over-burdens tax management.
b. It is capable of causing distortions in the economy.
c. It can frighten off foreign investors who reason that other sectors can come up with their own similar tax policy any time.
d. It makes a mockery of the budget system and,
e. It can result in "financial indiscipline."

These arguments may not necessarily hold water, if the proceeds of the tax are judiciously spent for the purpose for which the tax was raised that is, the development of the educational sector.

Educational Tax is also prepared and submitted with annual self-assessment of Companies Income Tax to designated Bank.

v. *Stamp Duties (STD)*

Items or persons subject to Stamp Duties tax are reckoned in written documents relating things between individuals or companies or group of soles. Stamp Duties may include instruments such as financial transaction, article of association between companies, statements, deals, bonds, etc. However, estate or property stamp duty payments in the states of the federation are paid to the State Board of Internal Revenue.

Companies or persons related with the stamp duties must submit all the instruments to the Stamp Duties Office for stamping. The duty is paid directly to FIRS through designated bank.

vi. *Capital Gains Tax (CGT)*

This type of tax is for all the companies registered in Nigeria which earn capital gains or gains realised on the disposal of any form of assets whether it is in Nigeria or not are liable to Capital Gains Tax.

Capital Gains Tax is calculated and submitted with Companies Income Tax to FIRS through Designated Bank.

Capital Gains Tax Act (CGTA) was first introduced in 1967 while Capital Transfer Tax Act (CITA) came into existence in 1979. Both Acts witnessed various amendments over the years. The first amendment was reducing the rate of Capital Gain Tax from 20% to 10% with effect from 1st January 1996 and this was to stimulate the activities in the capital market, encourage capital formation through investment and to ensure prompt and efficient management of the tax administration in the face of rising mergers, acquisition and take over desirables of companies. The Capital Transfer Tax was amended by abrogation through the 1996 budget, to make the tax workable as it was hitherto un-implementable throughout the federation.

vii. *National Information Technology Development Fund(NITDF) Levy*

The National Information Technology Development Fund was established under the National Information Technology Development Agency Act, 2007, Act No. 28 as a tax or in the form of a levy that is to be paid by all the companies in Nigeria, who are operating as:

i. GSM Services Providers and all Telecommunication companies.
ii. Cyber Companies and internet providers
iii. Pensions managers and pension related companies
iv. Banks and other Financial Institutions
v. Insurance Companies etc. that have an annual turnover of ₦100,000,000.00 and above. They are liable to pay 1% of the profit before tax as NITDF Levy.

Therefore, Companies chargeable are to pay this levy alongside with their Companies Income Tax. The companies have to compute 1% of their profit and pay it through the designated bank. The levy shall be tax deductible.

Dead Duty: This is a tax paid by persons seeking to inherit the capital assets and property of a dead person at the time of registration at Probate Registry to obtain Letters of Administration without Wills or the registration and enforcement of Letters of Wills of a deceased person.

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Company Income Tax: This is a tax under the Companies Income Tax Act, that a resident or non-resident company incorporated in Nigeria has to pay. The Companies Income Tax Act 1961 was replaced by Companies Income Tax Decree 28 of 1979. Several other amendments has since been enacted as either acts or decrees such as: Companies Income Tax Act (CITA) 1990 which itself was amended by Decree 3 of 1993, Decree 30 of 1996, Decree 31 of 1996, and Decree 32 of 1996 etc.

Companies Income Tax Act, 1990 is the enabling law that governs the collection of taxes on profits made by companies operating in Nigeria, excluding companies engaged in Petroleum exploration activities. This Tax is payable for each year of assessment of the profits of any company at a rate of 30% (Adereti, Sanni and Adesina, 2011).

Festus and Samuel, (2007) in their study of company Income Tax and the Nigerian economy, concluded that Company income tax is a major source of revenue in Nigeria but non-compliance with tax laws and regulations by tax payers is deep in the system because of weak control. There is therefore, the need for a general tax reform in the Nigerian company income tax system.

Capital Transfer tax: This is the tax levied on the value of all properties or wealth received by a person from another person who may be dead or alive.

Property tax: A tax imposed upon particular type(s) of property owned such as land and building, usually yearly. It may be referred to as ground rent.

Poll tax: This is a flat rate tax levied on every individual living in a particular country and it is usually levied on people whose income is low or whose income cannot be correctly assessed because of notangeable work engaged in by the payer.

Personal Income tax: This is the tax levied on the income of an individual after all allowances have been deducted from the gross emolument and is deducted at source.

c) *Indirect Tax*

These are taxes levied on persons or groups who are not intended to bear the burden or incidence but who will shift them to other people. They are normally levied on commodities or services which incidence does not fall directly on the the producer or first payer but on the final payers and consumers. They include;

i. *Customs and Excise Duties*

Customs duty is a major source of revenue for the Federal Government which is payable by importers of specified goods (Buyonge, 2008).

Adegbie (2011), in his study of the Customs and Excise Duties Contribution towards the development and growth of the Nigerian economy stated that there is a strong relationship between customs and excise duties and economic development of Nigeria; meaning that this is a source of income that Nigeria should rely on and develop. The study further shows that fraud and financial malpractices have negative impact on the contribution of customs and excise duties to Nigerian economic development. Customs and excise duty is an important component of the non-oil revenue and has remained an important source of revenue before and after the discovery of oil in Nigeria and have over the years, contributed significantly to national development. The Nigeria Custom Services is saddled with the responsibility of collecting custom duties, excise, fees, tariffs, and other levies so imposed by the Federal Government on imports, exports and statutory rates. However, the institution is much criticized for corruption and inefficiency, where its upper echelon is often driven with intrigue and in-fighting. All these need to change if the dream of economic development in Nigeria is to be achieved.

Therefore, Custom Dutiesis the totality of Import and Export duties collected by the Customs and Exercise Department.

Excise Taxes are charges imposed by government on specific commodities produced in a country at differing rates. These charges are being imposed on domestic products produced locally as distinct from imported goods and are mainly imposed for revenue generating purposes. Commodities such as tobacco, alcohol, petrol and manufactures are subject are subject to excise taxes in some countries while in others the components for taxation differ. Excise taxes are either selective or general according to the tax base. They are selective or general depending on whether the tax is restricted to a certain class of transaction, and specific or ad valorem depending on whether the tax rate is a specific amount of money.

a. Export Duties are taxes imposed on goods exported to other countries and are easy to collect as payment is done locally with local currency and is a source of income to the government. This tax may be in the form of discoursing exportation of certain goods.
b. Import Duties are taxes levied on imported goods for obvious reasons such as tariff to discourage importation and the duty is collected from the importer at the point the goods enter the country. it is a source of government revenue particularly in Less Developed Countries (LDCs).

Purchase or Sales Tax: Is a tax imposed on the sale of a commodity and varies according to the amount of a commodity sold. Simply, it that tax imposed on some selected commodities but applied only at one stage of the business cycle or activity. It is a consumption tax which is imposed at the retail level directly from market transactions. In some cases, it is collected either at the

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wholesale level or at the retail level. Sellers charge the sales tax on their sales and deposit the proceeds with the authorities. In some countries, food and medical purchases are included while in others they are exempted. These goods so taxed are basically durable goods. It could be narrow-based or broad-based.

Value-Added Tax (VAT): VAT is the acronym for valued added tax. This tax which is in other words called consumption tax and is being defined as the amount charged by the government for every goods or services purchased from time to time. This means it can only be paid when there is consumption of goods or services. VAT is an indirect tax, which is imposed on goods and services at each stage of production, starting from raw materials to final product. VAT is levied on the value additions at different stages of production. It forms part of the price paid for the good or service so consumed. It was introduced in Nigeria in 1993 by the General Ibrahim Babangida administration to replace sales tax which hitherto generated revenue for the state governments.

VAT was designed broadly to be a levy on imported goods, as well as on locally manufactured goods, hotel service, bank transaction etc. It was to be federally-collected and a uniform rate of 5 per cent was fixed on all affected items while VAT proceeds are shared among the three tiers of government at an agreed proportion.

VAT was first adopted by France in 1954 to replace the turnover tax (i.e. a tax imposed on the gross monetary value of a product at each stage of the product process. Since 1967, members of European Economic Council (EEC) have also adopted the VAT as a kind of tax that generates revenue. VAT is a type of multi-stage broad-based sales tax.

VAT is adopted in virtually all countries of the world including Nigeria. It is a tax imposed on the value of a product as an additional charge hence value-added.

It is also a tax levied on a measure of the contribution to the production of a good or service by a particular producer, and the income that is derived from that contribution. It is a tax on spending that is borne by the final consumer because it is included in the price of the relevant good or service.

d) Objectives of Taxation and Economic Policy

Taxes are not just imposed on citizens of the State by Governments not just for the sake of taxing. Taxation is a tool in the hands of government (federal, state or local) to achieve stated economic and social goals. It is a veritable tool to raise enough fundfor its numerous projects even though she is wealthier. The primary purpose of taxation is mainly to generate revenue for certain governmental expenditure, more so the provision of social amenity as well as providing for the welfare of her populace.

Taxation is used as an instrument to regulate the economy, by discouraging or encouraging the consumption of certain social goods and services. The following major objectives forms the tax policy:

a. The revenue function
b. Stabilization function
c. Regulation function
d. Income redistribution function and
e. Allocation function, just to mention out a few.

i. *Revenue Function*

This is the major reason for imposition of tax i.e.the ability of government to raise fundto use in carrying out her statutory functions (i.e. provision of services such as defense, education, health) etc.Without funds it will not be possible for government(s) to provide the needed services and infrastructural facilities for her citizenry; especially, goods that may not be provided by the private sector.

ii. *Stabilization Function*

Taxes are used by government to stabilize the economy. Stabilization is the use of tax policies to reduce inflation, and also to stimulate the economy for growth. The government uses tax rate by increasingit to reduce inflation. This is so because, increased tax will reduce disposable income, which will in turn reduce aggregate demand. Once, aggregate demand for goods and services falls, all things being equal prices will follow suite to fall. On the other hand, if the purpose of government is to stimulate economic growth then,she reduces tax rate thereby increasing the disposable income in the hands of the consumers who have the propensity to increase aggregate demand. Once aggregate demand increases, productivity activities will also increase, which will eventually bring about growth to the economy (Abomaye-Nimenibo, 2008, 2017a).

iii. *Regulation Function*

Taxes can be used to regulate the economy by regulating the consumption and production of certain goods in any nation. Where the government wishes to discourage consumption of certain goods, she could raise the taxes on such goods (e.g., cigarette). On the other hand if government want encourage the production of certain goods in the economy, she will lower taxes on these goods especially in terms of excise duties, hence reducing the cost of production and consequently, makes the selling price to fall. As prices fall demand will increase and the subsequent increase in the consumption of that particular good will increase, which will stimulate aggregate consumption and production of that good will call forth increase in aggregate supply. It could be reversed if the opposite is the desired goal of the economy.

iv. *Income Re-Distribution Function*

In order to correct inequality or imbalance in the economy, taxation is a tool commonly used by monetary

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authorities to cause incom redistribution. This income redistribution function by taxes creates equality and unbiased administration of taxation upon the rich or wealthy class.

v. *Allocation Function*

Taxation is a device used by Government to improved Gross Domestic Product (GDP) by means of encouraging some sectors of the economy that are not doing well through granting of tax reliefs and incentives to the citizenry (Abomaye – Nimenibo, 2017).

e) Characteristics of a Good Tax System

A good tax system in modern day governance is said to be very crucial. Taxation is one of the easiest and most convenient means of meeting the ever-increasing public expenditures is the derived revenue from tax. Revenue from taxation is an easy and commonest means of generating fund or revenue for the governments of the three tiers we have in Nigeria. It is a common experience that a number of persons detest payment of tax and government by such act loses revenue and she is bent on its implementation. It is a common phenomenon existing in the literature about the detestation of tax payments everywhere since a reasonable number or percentages of the people are not willing to pay taxes. For instance, the introduction of taxes had led to riots and loss of lives in so many places. A good number of persons numbering about 85 lost their lives when VAT was first introduced in Ghana. Also, the "Ijemo" massacre of 1914 was as a result of revolt against Egba United Government over her planned imposition of taxation. The Aba Women riot of 1929 is also an offshoot of tax detestation. All these are just to mention but a few. We need to sensitize the populace to see reasons and dividends of tax payments as revenue to the government to provide certain projects for the people as well as run the government expenditures.

It is therefore, imperative that every government should put in place an efficient, effective, equitable and just tax system, so as have a good taxation system. Adam smith (1776) has postulated the following characteristics, often called cannons of taxation which a good tax system should have.

The Foundation or Cannons of Taxation

The cannons of taxation simply mean the foundational structure upon which taxation is built upon. It also connotes the fundamental principles upon which taxation is hinged on. Therefore, a good tax system should meet the cannons of taxation.

Cannon of equity: This cannon state that taxes should be equitable to every person who should be taxed according to his/her ability. The rich and poor should not be taxed equally but that the rich should pay more while the poor to pay less meaning progressive tax be adopted. It also means that as the income of an individual increases, his taxation should also increase proportionately.

Equity in the terms of taxation means "fairness" in tax burden distribution to all persons concerned hence the adage which says that, equals should be treated equally and that unequal should be treated unequally. The statement saying that equals should be treated equally is referred to as horizontal equity, and on the other hand, the unequal should be treated unequally is referred to as vertical equity. These equity conceptions hold that individuals with the same tax-paying ability should bear the same tax burden, and those with different tax-paying abilities should also bear different tax burdens.

A good tax system should be based on *the cannon of certainty* whereby the time of tax payment, the manner in which tax is to be paid, the amount to be paid should of a surety be certain and clear to the tax payer and to every other person. The taxpayer should not be arbitrarily left to the whims and caprices of tax officials to use their sledge hammer on him/her. The tax which an individual pays has to be certain and not arbitrarily imposed. The time of payment, the manner of payment and the amount to be paid should be clear and plain to the taxpayer. This quality is meant to protect the taxpayers from harassment by the Tax officials.

The tax system should satisfy the *cannon of convenience* i.e. payment of tax should be convenient to the taxpayer. Social, political and economic standing of the tax payer must be taken into consideration when imposing tax on him/her. Secondly, the time of payment, and the mode of payment should not inconvenience the taxpayer in any way and that the tax should not be a heavy burden to the payer.

Administrative Efficiency: This is the process of levying and collecting taxes in an administratively efficient, transparent manner and must not cause economic distortion. Collection should be done in such way that the system brings in sufficient revenue to the government at less cost. Economy of administration is an important quality of a good Tax, whereby assessment and collection of taxes require personnel and equipment at minimal cost. This means that the cost of collecting a tax should not be more than the revenue to be derived from the tax itself.

Neutrality: Tax is said to be good and desirable if it is neutral in its effects meaning that the imposition of a tax for whatever purpose (revenue stabilization) must be unbiased and does not result in any change in either consumer or producer economic behaviour, in the private sector of the economy. Meaning also that, neutrality in taxation holds that a tax, when imposed, should neither offer the utility-maximization behaviour of consumers nor the profit-maximization behaviour of producers in the private sector of the economy. Tax must favour both sides of imposer and payer.

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Stabilization - Inducing: Taxation as a tool of fiscal policy play a major role for achieving economic stability by boosting, the economy during periods of unemployment and reducing economic activity during periods of inflation. A tax is good and desirable when it can play this role well. For example, during periods of unemployment, taxes that have minimum restrictive effects on aggregate spending (consumption and investment) would be the ideal ones to use while on the other hand during periods of inflation, taxes need to maximize anti-inflationary effect.

In total agreement with Adam Smith's cannon of taxation, Ayua, (1999), elaborated on these cannons to include:

a. *Incentives and Economic Efficiency:* Which demonstrates how tax system can have important effects on incentives and opportunity to work, to save, to invest in capital development, to use resources efficiently and to allocate them to uses which best serve the needs of the community.
b. *Distributional Effects:* In a good tax system there should be no discrimination at the same level of income within the same system. It must also be capable of being use for vertical re-distribution that is, redistribution from those who are better off to those who are worse off in such a way as not to discourage those who are well off.
c. *Simplicity, Cost of Administration and Compliance:* For a tax system to be embraced willingly by the public, it must be simple. But simplicity for tax system must be balanced with its objective. A tax system designed to deal with a complex or complicated situation will inevitably be complicated. Ease of understanding of tax details and simplicity of administration will help in reducing the cost of administration. Compliance cost must not be too high otherwise there will be high incidence of tax evasion and avoidance.
d. *Flexibility and Stability:* In a democratic setting where changes in government are part of in built mechanism for governance, tax system must be flexible enough for any political party in power to pursue the fulfilment of its campaign promises. However, flexibility objective must balance with the need to have a stable tax system. This balancing can only be achieved through virile, versatile, efficient and effective well-trained administrative machinery for assessing and collection as well as general administration of the tax system irrespective of the government in power.
e. *Economic Growth and Efficiency:* The Nigerian tax system should not be an impediment on the productive capacity of the economy, at any given time. In order to minimize the negative impact of taxes on economic efficiency, the tax system must be aligned to the National Socio-economic developmental goals, through ensuring that the marginal tax rates do not distort the marginal propensity to save and investment, and not pose competitive disadvantage to local firms.
f. *Transparency and Accountability:* Tax administration in Nigeria should be seen to be transparent and accountable to all the tax payers irrespective of class and gender. Tax payers should be aware of existing taxes or new taxes imposed on them, and the proper utilization of the tax revenue.

f) The Nigeria Tax Structure and Tax System

In the year 1904, a first form of tax was levied by Lord Lugard in Northern Nigeria known as community tax. A first tax law was introduced in Nigeria called the "Native Revenue Ordinance" in 1917. In 1918, the Native Revenue Ordinance was extended to the south and was only applicable in Benin and Abeokuta in the then Mid-Western State of Nigeria.

In 1928, the Native Revenue Ordinance was also introduced into the Eastern Region and in 1929, a flat rate of 2% total earned income and of corporate profit was levied. In 1939, an ordinance was passed into a bill known as company's income tax ordinance (CITO) which was to guide companies in the payment of tax. In 1940, another tax law, (Nigerian Income Tax Ordinance) was introduced though discriminatory in its application. This took care of corporate and non-corporate residency in Nigeria especially "natives" in Nigeria elsewhere than in the Lagos Township and the first commissioner of taxes was appointed. From thence on Nigeria started having tax laws.

Income tax was first introduced in Great Britain in 1911 by Patt with the intention that it would be a temporary levy. However, it was discounted in 1915, but resurfaced in 1942 and till date it is still in subsistence.

Direct taxation was first practiced in the Northern parts of Nigeria before the advent of the British while indirect taxation through custom duties and tolls attained a high level of development in Yoruba kingdom of the South-West while the South-East and South-South also practice it. The North practices direct tax because Islam charged it's devout to give a portion of their income for charitable or religious purposes, and so provided a religious basis for taxation which was followed to the letter.

Furthermore, the highly organised administration of the Emirs having firm control over their territorial villages, impose on them taxes. In the southern areas, because of the small size at the kingdom and difficulties of communication, toll was levied on trade between kingdom and between towns. Tributes of presents were often extracted by kings over the annexed territories, but the main source of wealth is the indirect taxation.

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In earnest, the tax system was highly developed in the North in the pre-1900 era called "The zakka", being a tax paid on crops while the livestock tax has its origin in the "korari"; while the "kurdankasa" was a tax similar to that of capital tax paid by farmers, and a plantation tax called the "shikka-shukka" was paid and extended to all crops which are not subject to zakka and Jangali or cattle tax was levied on livestock. Smiths, weavers, dyers, leather workers, freemen, gamblers, prostitutes, salt makers, canoe men, hunters, fishermen were all liable to a special tax.

Similarly, special taxes were levied on a special product like date-palm, beehives as well as on certain luxury crops like onions, tobacco and sugar-cane. When the British came in 1830s and even much earlier in their expedition to the Riverine Communities in the present day Rivers State of Nigeria and other parts of the country at later dates, there was a formalised system of taxation even in the Southern Protectorate comparable to that in the North and the West. In the 12th Century and the period of 1500 when the Dutch visited Ogu, Okrika, Bonny, Opobo, Brass all of Rivers State (Riverine communities) and other areas of the South-South Nigeria, there are Political administrations in place which have both direct and indirect taxation until the Colonial Masters came and were faced with resistance when they tried to usurp political authority hence, the then wars and deportations of our Kings like King Ibanichuka of Okrika, King Jaja of Opobo just to mention but a few. Similarly, the Ijebu and Ondo kings relied on tributes, tolls and various levies form their revenues, while in Ibadan, Oyo and Ife, there was a system of annual levies, special contributions at special festivals, fees, presents and tribes unusual land rent, payment for personal services and contributions of food. The main revenue came from tolls, fines, death duties, presents and licenses, and customary taxes.

In the Igbo areas of the east, the tradition of direct taxation to a central authority was non-existence rather, the community pay taxes in kinds by rendering free services such as marking out a track road, clearing the bush, digging pit toilets and wells, and so on for the progress of the community.

The British colonial government only enacted the national revenue proclamation Law No.4 of 1904, under Lord Lugard who sort to simplify the complex array of northern taxes, by ensuring equity and social justice in the system of taxation thereby enhancing efficiency in the fiscal administration of the protectorate. The system of taxation was centred on the annual value of land to produce crops thereon, profit of traders and manufacturers, on the flocks and herds of pastures; and other listed sources of incomes.

In 1918, based on the H.R Paulines findings and consequent authorization by London, Lord Frederick Lugard introduced taxation in Yoruba areas of Egba land and Ibadan. In Benin the son of exiled king Overami, accepted the imposition of direct taxation in 1917. The imposition of direct taxation in the west involved computation of many tributes and exaction. Ilesha division voluntarily asked to be included in the tax payment system but in Abeokuta, direct taxation was resisted with much resistance in which lives were lost and a lot of property destroyed culminating in Maxwell commission of 1918. In Ibadan, Ife, Oyo, tax exemption was unbroken by Oba's and in Egba land by the Ogbonies. By 1920, the Native Revenue Ordinance has been extended to the entire west.

In the east, direct taxation was inconsistent. Direct taxation had been introduced in the south eastern region in 1926 but it was quickly withdrawn for lack of support. It was not until 1927 that Lord Frederick Lugard succeeded in extending the Native Revenue Ordinance to the area east of the Niger. However, the resistance was stiff and opposition was really prevalent. The Aba women riot of 1929 was sparked off as a result of rumours carried about that, women were about to be taxed, showing a strong indication of the strength of the people's feelings in the east against tax payment.

However, the east was the first to introduce a comprehensive regional finance law called, The Finance Law No.1 of 1956, wherefore people above 16 years of age are to pay tax. The Western Region followed sooth with the Income Tax Law No.26 of 1957 while the Northern Region retained the 1940 Direct Taxation Ordinance (DTO) as amended in 1948 and on its own accord, passed the Northern Nigeria Personal Income Tax Law in 1962. The Federal Territory of Lagos retained the income tax ordinance (as amended) of 1943 till 1957 when it reduced the structural modification in law and later promulgated the Personal Income Tax Law No.6 of 1961.

As the nation was about to have a republic, there is need to incorporate the tax laws into the constitution and therefore, there arose the need to have a commission to look into the existing tax laws and their inadequacies hence, the Sir Jeremy Raisman Fiscal Commission. The recommendations of the Sir Jeremy Raisman Fiscal Commission were accordingly, embodied in the Nigerian constitution order in council of 1960 which formed the basis of the income tax management Act 1961.

This Commission was set up in 1957 with the following main term of reference, to examine the jurisdiction and powers of the various tiers of government and to determine which arm of government should handle which tax law. It was decided that the Federal government should retained control over the taxation of individuals in the federal territories and companies throughout Nigeria, while the regional governments exercise control over income taxes of all persons within their regions whether Native or expatriates. It was furthermore determined that custom duties and sales tax were to be collected by the Federal

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Government, while the Regional Governments retained export tax on motor vehicles, fuel revenues, and exercise and custom duties on tobacco (Abomaye-Nimenibo, 2017b).

Adegbie (2011), stated that tax is a legal system approved by the government to have the charge, to have the direction, to manage and to provide policies; laws and regulations for the tax system to ensure all applicable taxes are collected and remitted to the appropriate authorities. The two major legal bodies connected to the administration of company income tax, Petroleum profit tax, Personal income tax, Value added Tax, Withholding tax, Education Tax and custom excise duty in Nigeria are Joint Tax Board (JTB) and Federal Inland Revenue Service (FIRS).

While the Joint Tax Board was established in 1961 to offer advice and coordinate various aspects of tax revenue and also to promote uniformity both in the application of the personal income tax Act 1993, and in the incidence of tax on individual throughout Nigeria; the Federal Board of Inland Revenue was established in 1990 with the power to administer company income tax. This body has the Federal Inland Revenue Service (FIRS) which was established in 1993 as its main operator having the responsibility of income tax assessment, collection, accounting and administration.

The Nigerian tax system according to Ogbonnaet el, (2009) has undergone series of reforms since 1904 to date as follows:

a. Introduction of income tax in Nigeria between 1904 and 1926
b. Grant of autonomy to the Nigerian Inland Revenue in 1945
c. The Raisman Fiscal Commission of 1957
d. Formation of the Inland Revenue Board in 1958
e. The promulgation of the Petroleum Profit Tax Ordinance No. 15 of 1959
f. The promulgation of Income Tax Management Act 1961
g. Establishment of the Lagos State Inland Revenue Department
h. The promulgation of the Companies Income Tax Act (CITA) 1979
i. Establishment of the Federal Board of Inland Revenue under CITA 1979
j. Establishment of the Federal Inland Revenue Service Between 1991 and 1992 and
k. Tax policy and administration reforms amendment 2001 and 2004.

Ola (2006),has stated that tax administration in Nigeria does not measure up to appropriate standards because tax is inequitable. Many of the supposed tax payers know nothing of the rules under which they are to pay tax or the range of deductible expenses and the allowance available to them; and that they cannot be at ease to disclose their taxable income. Ola (2006) went forward to say that the assurance of tax convenience in Nigeria is the ability of a taxpayer to go to the tax office, say what he is ready to pay, be assessed accordingly, and he pays and obtain a tax clearance certificate. From the above we can deduce that these has led to administrative inefficiency. This is as a result of the low literacy level in Nigeria and poor record keeping culture. Also, there are not enough tax officials to cover the field as most of them are not well trained, ill equipped, badly remunerated and corrupt (Ogbonna, 2011). He added that the failure of tax administration to recognize the importance of communication and dialogue between government and the citizen in matters relating to tax revenue is a key problem; and that there is a wide gap in tax administration in Nigeria when compared to countries like USA, United Kingdom, and Canada where tax system is computerized and every tax payer i.e organizations are well captured at source through integrated computer system. This to a large extend is being put in place by the Nigerian Federal Inland Revenue Service (FIRS) and until the system is well computerized, there is bound to be problem.

According to Olasatiyan and Samkey (2011), defined tax as a compulsory charge imposed by a public authority on the income of individuals and companies as stipulated by the government decrees, acts or cases, laws irrespective of the exact amount of services rendered to the payer in return. Taxes therefore, constitute the principal source of government revenue and the beauty of any government is for its citizenry to voluntarily execute their tax obligations without much coercion and harassment. The menace of tax leakages in the form of tax evasion and tax avoidance is the major problem facing the Nigerian tax system. Similarly, tax evasion being the willful and deliberate violation of the tax laws with the intent to escape tax obligation as opined byKiabel and Ogu (1999). The twin monster is tax avoidance,whereby taxpayers seek to reduce, or remove altogether their tax liability within the provision of the tax laws as also observed by Ola (2001).

Omoruyi (1983), also stated that tax evasion is one of the crimes of Nigerians, which they have so popularized that it makes armed robbery of minority interest. Government has made so much effort to curb these monsters yet, the problem of tax evasion and avoidance still persists (Alli, 2009).

Festus and Samuel (2007), Reynold and Wilbur (1990), have suggested ways in which tax being a principal source of government revenue should be closely monitoredso as to achieve maximum compliance as various tax leakages and mismanagement of tax revenue continue to exist.

g) The challenges of the Nigerian Tax System

Nigeria has undergone a lot of tax reforms of which we have a pecular one introduced as “Tax identification number (TIN)”that is unique tax payer’s

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identification number which became effective from February 2008; the E-payment system which enhances smooth payment procedure and reduced the incidence of tax touts, Enforcement Scheme having special purpose tax officers i.e. a special tax officers scheme that is in collaboration with other security agencies to ensure strict compliance in payment of taxes and the automated tax system that facilitates tracking of tax positions and issues by individual tax payer. The integrated tax offices and authority now have autonomy to assess, collect and record taxesin line with section 8Q of FIR Establishment Act 2007 which has led to an improved tax administration in Nigeria.

The Nigerian tax system has undergone some significant modifications in recent times as tax laws are consistently being reviewed with the aim of repealing obsolete laws and simplifying the ones that need to be. Nigerian tax law empowers taxation to be enforced by the 3 tiers of government being the federal, state and local governments, each having its sphere of authority clearly spelt out in the Taxes and Levies Decree 1998. Inspite of there modifications, there are still a good number of contentious issues that requires urgent attention such as the issue of appropriate tax authority to administer conflicting taxes.

However, Nigeria still faces some issue such as the multiple taxation by all the three tiers of governments which often times, poses some impediment in tax administration and bring about welfare cost. In addition, the issue of paucity of data base contributes to tax avoidance in the country.

The issue of corruption in Nigeria is still a perennial problem which reduces the confidence and trust of the tax payer in discharging his civil duty. Another issue is that of inadequate infrastructural development. In Nigeria, infrastructural facilities are in a deplorable state such as the epileptic and erratic electricity and water supply; making the populace to privately sources. Thus leading to tax avoidance and evasion.

Furthermore, Nigeria has the problem of codified tax language that is legally codified language that makes it difficult for an average Nigerian to be conversant with these tax laws. Tax evasion and avoidance is being practiced by individuals and corporate bodies.

h) Challenges of Tax Administration in Nigeria

Every System or nation opts for an efficient and effective system of tax Administration, free from all encumbrances, yet challenges militating against the creation and maintenance of such an efficient system cannot be ruled out. Tax administration challenges could be found in the Nigeria system of tax administration which cuts across the three tiers of government. These issues will be discussed hereunder.

These major challenges that face tax Administration in Nigeria includes and not limited to the followings:

a. Lack of proper orientation to the citizenry of Nigeria which greater population is Secondary School Certificate and below. Hence, low understanding of the role of taxation in Nigerian National development.
b. Insufficient political support for tax Administration as officials aresucceptive to incessant attacks.
c. Over dependence of the economy on oil revenue with some good level of neglect of taxation as a source of revenue.
d. Low level of business activity leading to low level of revenue.
e. Poor attitude to taxation, and lack of tax culture leading to tax avoidance and evasion amongst tax payers.
f. Low level of voluntary tax compliance
g. Multiple taxation leading to litigations and evasions.
h. Corruption on the part of officials during assessments lead to loss of tax revenues.
i. Diversion of tax revenues from government bank account into personal bank accounts by tax officials.
j. Lack of accountability of tax revenue on the part of Directors.
k. Lack of inter-governmental co-operation and co-ordination between three tiers and agencies of government.
l. Lack of human resources development and training of tax officials.
m. Employment of unqualified personnel in the administration of taxation.
n. Tax authorities are not equipped with modern technology and soft wareparkages.
o. Existence of manual system of tax administration in her operations.
p. Lack of proper record keeping.
q. Ta authorities are not funded adequately.

i) Role of Tax Revenue in Economic Growth and Development

It is often said that a country's tax system is one of the major determinants of its macroeconomic indexes. It has also been argued that the level of economic development has a very strong impact on a country's tax base and tax policy objectives which vary with the stages of development (Kiabel, 2009, Vincent, 2001).

Hence, Olopade and Olopade (2010) that growth is an increase in economic activities which represents the expansion of a country's GDP or output. Development until recently meant growth measured by GNP or a rise in per capital income. This definition of development is not tenable as it is not indistinguishable with growth. Kayode(1993) stated that development

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perhaps could be said to be growth coupled with justice. Development therefore, implies changes that would lead to improvement or progress; and it is believed that an economy that raises its per capita level of real income over time without transforming its social and economic structure is unlikely to be perceived as developing.

The main purpose of tax is To raise revenue to meet government expenditure and to redistribute wealth and manage the economy is the main purpose of government according to Ola (2001), Jhingan (2004),and Bhartia (2009); while Jarkir (2011), outlined tax as an important tool for economic growth of a country in the following methods:

Optimum Allocation of Available Resources: Taxation is the most important means and source of public revenue to finance government expenditures. The imposition of tax leads to diversion of resources from the taxed to the non-taxed sector. The revenue got is then allocated to various productive sectors of the economy of a nation with a view to increasing the overall growth of the country. Tax revenues may be used in developmental activities in the less developed areas of the country where real investors are not willing to invest.

In our contemporary society, public finance is not simply to raise sufficient financial resources for meeting administrative expense, for maintenance of law and order only but to also protect the country from foreign aggression. Now the main object is to ensure the social welfare of the economy. The increase in the collection of tax increases government revenue. It is safer for the government to avoid borrowings from any other source and concentrate on increasing tax revenue.

Encouraging Savings and Investment: Since developing countries operate mixed economy, care has to be taken to promote capital formation and investment both in the private and public sectors. Tax revenue policy is to be directed to raising the ratio of savings to national income.

Reduction of Inequalities in Income and Wealth: Through reducing inequalities in income and wealth redistribution, government usean effective and efficient tax system, to encourage people to save and invest in productive sectors of the economy.

Acceleration of Economic Growth and Price Stability: Tax policy may be used to handle critical economic situations like depression and inflation. In times of depression, taxation is minimized to increase consumption and reduce savings thereby increasing aggregate demand and vice versa Abomaye-Nimenibo (2008, 2017). Tax policy could be used to strengthen incentives to in savings and investments. Tax policy is further used in developing countries, to maintain price stability and growth of the economy.

Control Mechanism: Tax policy is also a tool widely used as a control mechanism in checkmating inflation, consumption of certain goods such as liquor and luxury goods as well as to protect the local industries from the uneven rivalry and competition. Therefore, tax revenue is the only effective weapon by which private consumption can be curbed and thus excess resources transferred to the state leading to sustainable economic development and eventual growth.

According to Appah (2010), economic growth is largely linked to labour and capital as factors of production and that, tax revenue is considered as an instrument of fiscal policy being an important variable which may determine changes in national income in developing countries like Nigeria. Increased tax revenue on imported goods and services have affected the level of such goods and services that industrialist within our country are encouraged to produce such goods and services locally. This curb high import duty on dairy products, textiles, materials, food, beverages, drinks etc. Nigeria's economic potential are encouraged through industrial investment locally and the multiplier effect on employment and national growth. Also, high tax rate imposed on imported components of oil industrial inputs has encouraged the use of local content in the oil industry geared towards increasing economic growth in Nigeria (Kiabel and Nwokah, 2009).

Bonu and Pedro (2009),were of the opinion that tax policy does affect economic growth. To themthere is enough evidence linking tax revenue and output to growth. Countries that are able to mobilize tax resources through broad based tax structures with efficient administration and enforcement will likely be in a position to enjoy faster growth rates than countries with lower overall tax collections assessed inefficiently. Therefore, the design of the tax system is likely to exert a modest, but cumulatively important influence on long-term growth rates.

Akinola (2001), explained how tax revenue plays a crucial role in promoting economic activity and growth. Through tax revenue, government ensures that resources are channeled towards important projects in the society, while giving succor to the weak. However, the role of tax revenue in promoting economic activity and growth is not felt primarily because of its poor administration.

Tax revenue is very important to the growth and development of any country as tax proceeds helps in rural and urban development as well as the provision of infrasturatural development in the form of road constructions, provision of power supply, and portable drinking water, the building of hospitals, schools and provision of other social amenities.

j) Tax Revenue in Nigeria

Tax and tax administration are fundamental components of any attempt to nation building, and this is particularly the case of any developing or transitional nation like Nigeria. Bariyima, Kiabel, and Nwoka(2009),

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has noted that taxes underwrite the capacity of states to carry out their goals; forms an integral areas for the conduct of state-society relations, and they shape the balance between accumulation and redistribution of wealth that gives states their social characteristics. Taxes build capacity, legitimacy and consent. Nigeria which was colonized by the British gained her independence by an act of the British Parliament on 1st October, 1960 and became a republic within the commonwealth in 1963 (Odusola, 2006). She therefore, qualified to impose tax and collect revenue thereby.

However, the tax system of Nigeria actually dates back to 1904 when the personal income tax Ordinance was introduced in the northern part of the country before the unification of the country by the colonial masters. It was later implemented through the Native Revenue Ordinance in the western and eastern regions in 1917 and 1928 respectively. Coupled with other amendment in the 1930s, it was later incorporated into Direct Tax Revenue Ordinance No.4 of 1940. Since then, different governments have continued on the improvement of the tax system in Nigeria (Abomaye-Nimenibo, 2017b).

Although the Nigerian tax system has undergone several reforms geared toward enhancing tax collection and administration with minimal enforcement cost, there is still non-voluntary compliance of the taxpayers due to the act of lethargy on the part of the system leading to an extensive practice of tax evasion and avoidance; which is a major impediment to economic growth, where tax evasion and avoidance are now prevalent (Ogbonna and Ebimobowei, 2011). One of the major tax reforms put in place by the government in addressing the problems of tax administration in Nigeria is the introduction of Taxpayers Identification Number (TIN) which became effective in February, 2008.

k) Theoretical Framework

According to Bhartia (2009), a tax revenue theory may be derived on the assumption that there need not be any relationship between tax paid and benefits received from state activities. We shall accordingly lookatsomeof such theories as discussed below.

i. *Socio-Political Theory*

This theory of tax revenue states that social and political objectives should be the major factors in selecting taxes. The theory advocated that a tax system should not be designed to serve individuals, but should be used to cure the ills of society as a whole.

ii. *Benefit Received Theory*

This theory is based on the assumption that there is basically an exchange relationship between tax-payers and the state because the state provides certain goods and services to the members of the society, therefore, members of the society should contribute to the cost of these supplies in proportion to the benefits received (Bhartia, 2009). Anyanfo (1996),supports this postulation by saying that taxes should be allocated on the basis of benefits received from government expenditure.

iii. *Faculty Theory*

According to Anyanfo (1996), this theory 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), shares this same view by argueingthat a citizen is to pay tax just because he can, and his relative share in the total tax burden is to be determined by his relative paying capacity.

iv. *Expediency Theory*

This theory asserts that every tax proposal must pass the test of practicality. It must be the only consideration weighted by the authorities in choosing a tax proposal. Economic and social objectives of the state and the effects of a tax system should be treated as irrelevant (Bhartia,2009). Anyafo (1996) and Bhartia (2009) explained that the expediency theory is based on a link between tax liability and state activities. It assumes that the state should charge the members of the society for the services provided by it. This reasoning justifies imposition of taxes for financing state activities by inferences, which provides a basis, for apportioning the tax burden between members of the society. This proposition has a reality embedded in it, since it is useless to have a tax which cannot be levied and collected efficiently.

Pressures from economic, social and political groups abounds in every economy. Every single group tries to protect and promote its own interests and by extension, authorities are often forced to reshape tax structure to accommodate these pressures. In totality, the administrative set up may not be efficient enough to collect taxes at a reasonable cost of collection. Tax revenue therefore, provides a powerful set of policy tools to the authorities and should be effectively used for remedying economic and social ills of the society such as income inequalities, regional disparities, unemployment, and cyclical fluctuations and so on.

Adolph Wagner advocated that social and political objectives should be the deciding factors in choosing taxes. Wagner did not believe in individualist approach to a problem. He stated that each economic problem be looked at in its social and political context and an appropriate solution found thereof. Accordingly, a tax system should not be designed to serve individual members of the society, but should be used to cure the ills of society as a whole. This theory relates to a normal development process and represents a benchmark against which,a country's specific empirical evidence may be compared.

This study therefore focuses on the expediency theory which enables us to assess the extent to which

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the Nigerian tax system conforms to this scenario where the link between tax liability and economic activities are linked. Where applicable, such a characterization will enhance accurate tax revenue projection and targeting of specific tax revenue sources given an ascertained profile of economic development. It will also assist in estimating a sustainable revenue profile thereby facilitating effective management of a country's fiscal policy, among others. This is because the expediency theory focuses on the fact that taxes are collected to achieve economic objectives which enhances the growth and development of a society in all its spheres. The socio-political, benefit and faculty theory are relevant also but they lay more emphasis on political relationship and ability to be objectives.

v. *Empirical Literature*

In an attempt to evaluate tax revenue and economic growth in Nigeria, we are prone to utilizing regression analysis for the period of 1980 – 2015. It will therefore be whortwhile to look at the empirical literature.

Chibu and Njoku (2015), investigated the impact of taxation on the Nigerian economy for the period 1994 -2012. The variables used in the model were subjected to Augmented Dickey Fuller Unit Root test, which revealed that the variables were stationary. The co-integration test also revealed that the variables are co-integrated and that long run relationship existed between the variables. The results of the statistical analysis revealed that positive relationship also existed between the explanatory variables (Custom and Excise Duties, Company Income Tax, and Petroleum Profit Tax) and the dependent Variables (Gross Domestic Product, and Unemployment). The study therefore, recommended total restructuring of the tax system in the country and the provision of basic amenities (good roads, steady power supply, internal security, etc) which will encourage individuals and corporate organizations to honor their tax obligations in Nigeria.

Babalola and Aminu (2011), also investigated the impact of taxation on economic growth in Nigeria over the period 1977- 2009. They examined the Unit roots of the series using the Augmented Dickey – Fuller technique after which the co-integration test was conducted using the Engle – Granger Approach. Error correction models were estimated to take care of short-run dynamics. The overall results indicated that productive expenditure did positively impacted on economic growth during the period of coverage and a long-run relationship exists between them as confirmed by the co-integration test.

Ogbonna and Ebimobowei (2011), conducted a study on the impact of petroleum revenue on the economy of Nigeria for the period 1970 to 2009. The study showed that a strong correlation existed between petroleum revenue and GDP. This was determined from the regression results that showed an R=0.839, R^2 of 0.705, F-value of 90.630 and a corresponding significant value of 0.000 and a t-value of less than 0.05 significant level. They concluded that oil based revenue if invested efficiently in the economy will to a large extent make material difference on GDP. From the findings of Ogbonna and Ebimobowei (2011), it can be deduced that PPT has a positive impact on Nigeria's economy but it'll be good to further investigate the roles other taxes play on the economy's GDP both individually and as a lump sum which is one of the objectives this study aims to achieve.

Brian (2007), analyzed the effects of tax revenue on economic growth in Uganda's experience for the period 1987 to 2005. From the study, tax revenue was found to have had an impact on the economic growth level of the country, with direct taxes having a positive effect while indirect taxes had a negative impact. However, he stated that due to time, financial and data constraints, not all essential issues could be analyzed. The issue arising from this work is the fact that indirect taxes are not easily evaded when it comes to payment because they are paid either at the time of consumption of the very good or service and at source and so one expects that they should have a positive impact on a country's' economic growth not negative as reported.

Engen and Skinner (1996),also carried out a study of taxation and economic growth of U.S. economy, using large sample of countries and evidences from micro level studies of labour supply, investment demand, and productivity growth. Their findings revealed modest effects on the order of 0.2 to 0.3 percentage and pointed differences in growth rates in response to a major reform. They stated that such small effects can have a large cumulative impact on living standards.

Tosun and Abizadeh (2005), in their study of economic growth of tax changes in OECD countries from 1980 to 1999 revealed that economic growth measured by GDP per capita has a significant effect on the tax mix of GDP per capita. It is shown that while the shares of personal and property taxes have responded positively on economic growth, shares of the payroll (payee tax), goods and services taxes have shown a relative decline.

Philips (1997), critically analyzed the Nigerian fiscal policy between 1960 and 1997 with a view to suggesting workable ways for the effective implementation of vision 2010. He observed that budget deficit has been an abiding feature in Nigeria for decades. He noted that except for the period 1971 to 1974, and 1979, there has been an overall deficit in the federal government budgets since 1960 to 1997. The chronic budget deficits and their financing largely from borrowings, have resulted in excessive money supply, worsened inflationary pressures, and complicated macroeconomic instability. The result showed negative

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impact on external balance, investment, employment and growth.

Ikem (2011), investigated the interaction between tax structure and economic growth in Nigeria during the period 1961-2011. He made his analysis using two different econometric models: the neoclassical growth framework and Granger causality test in examining the level of impact and direction of causality respectively. The growth model was decomposed during the analysis into long run static equation and short run dynamic error correction model. The results revealed that income and CIT is statistically significant in promoting economic growth in Nigeria.

The impact of tax revenue on economic growth has been examined severally by different researchers. The empirical studies of Anyanwu (1997), Engen and Skinner, (1996), Tosun and Abizadeh, (2005) and Arnold (2011), were used as the basis for different explanations of taxes on economic

The analysis so far have revealed that taxation has significant impact on Nigeria's economic growth. Although some studies do not find a positive linkage between economic growth and taxation, but was quick to point out some of the flaws to include their statistical methodology and the data used in the analysis. This research therefore adopted some econometric tools to check for the presence or absence of spuriousity in the regression results as such validates their relevance in policy making.

III. Method of Study

The method employed in this study, involves discussion of data collection analysis techniques. We adopted a quasi-experimental research which is purely analytical

a) Model Specification

The model was cast in line with the theoretical and empirical literature reviewed that captures the contribution of petroleum profit tax, company income tax, and customs and excise duties. Thus, both linear and log-linear specifications were set for the model as follows:

Linear Specification

$$GDP = f(PPT, CIT, CED) \quad (1)$$

From the above function, we derived the statistical model as follows:

$$GDP = \alpha + \beta_1 PPT_t + \beta_2 CIT_t + \beta_3 CED_t + \varepsilon \quad (2)$$

By transforming the linear function into their log form, we have;

$$GDP = \alpha + \beta_1 LPPT + \beta_2 LCIT + \beta_3 LCED + \varepsilon \quad (3)$$

Where;
GDP: Gross Domestic Product
PPT: Petroleum Profit Tax
CIT: Company Income Tax
CED: Customs and Excise Dutiesα is a constant
β_1, β_2, β_3, are the coefficient of the parameter estimate
ε is the error term or random variable

Apriori Expectation

According to (Gujarati, 2003) "a priori involves a deductive reasoning from a general economic principle to a necessary effect" based on hypothesis or theory rather than experiment. In this study, different economic and social factors, facts and principles were used in defining the theoretical expectation of the sign or the magnitude of the parameters of the specified model.

These apriori expectations are determined by the principles of economic theories guiding the economic and social relationships among the variables under consideration.

i. *Explanation of Variables in the Model*

The variables included in the model are classified as dependent and independent variables.

Dependent Variable

Gross Domestic Product (GDP): The total monetary value of all finished goods and services produced within a country's boarder in a specified fiscal year. GDP is expected to be positively influenced by export, exchange rate and trade or economic openness.

Independent Variables

Petroleum Profit Tax (PPT): The Petroleum Profit Tax (PPT) is for any resident company or person in charge of a non-resident company who are exploring for petroleum or producing it in Nigeria.

Company Income Tax (CIT): Being a tax paid by resident or non-resident company incorporated in Nigeria.

Customs and Excise Duties (CED): Theseare taxes payable by importers of specified goods as well as those imposed on goods produced locally.

b) Data Required

This study employed secondary data relating to the dependent and independent variables which was obtained from the Central Bank of Nigeria Statistical Bulletin.

Gross Domestic Product	1980-2015
Petroleum Profit Tax	1980-2015
Company Income Tax	980-2015
Custom and Excise Duties	1980-2015

c) Method of Data Analysis

The method of Data Analysis was econometric method of Ordinary Least Square (OLS), Co-Integration and Granger Causality test. It is important to note that time series data are prone to error due to fluctuations in business activities from which most of our data are derived. Hence, the following analysis were tested accordingly:

Test for the co-efficient of determination (R^2) was used to test and know the power-strength of the explanatory variables in the models to see the goodness of fit of the variables. In other words, it measures the

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percentage variation in the dependent variable that is explained by the independent variables.

Test of significance (T-test) of each of the parameter estimates was carried out. In other words, it is a statistical test that is used to verify whether each of the parameters at 5 percent confidence level is significant or not.

Test: Thistest was carried out to see the overall significance of the explanatory variables in the model.

Durbin Watson test for autocorrelation: The Durbin-Watson (DW) statistical test was used to carry out the test for autocorrelation. ''Autocorrelation or serial dependence of the error term is considered when the successive values of the error term are serially correlated or dependent. That is, the value, which U assumes in any one period, depends on the value, which it assumed in the previous period''.

d) The Co-Integration Technique

In this study we adopted the Co-Integration estimation technique in analyzing our data. Co-Integration is an econometric technique used for testing the correlation between non-stationary time series data. Usually, time series data are non-stationary due to fluctuations that do characterize such information.

Two variables are said to be Co-Integrated if they have a long run or equilibrium relationship between them (Gujarati, 2007).

Granger Causality: Granger Causality test shows the direction of effect between two times series. Such effect could be bilateral, bidirectional, unidirectional and independence causality.

IV. Data Presentation and Analysis

Our estimated results are presented and analyzed according to the specified econometric methods. We analyzed our data collected for this study by using the tools already discussed in sub-heading three. The researchers estimated the models and reported the results accordingly. Thus, this section begins with the data presentation and thereafter talks about analysis of the results. The data for the estimation are presented in table 4.1 below.

a) Data Presentation

The main objective of this study was to examine the impact of tax revenue on economic growth in Nigeria from 1980-2015. In order to achieve this objective, the study utilized data on gross domestic product (GDP) as the dependent variable while petroleum profit tax (PPT), company income tax (CIT) and customs and excise duties (CED) are the independent variables. The data used for the study is basically time series data from 1980-2015 which relates to both the dependent and explanatory variables. Thus, the data was sourced from the yearly reports of the Central Bank of Nigeria as presented in appendix I

Table 4.1: Descriptive Statistics of Variables

Variables	GDP	PPT	CIT	CED
Mean	428600.5	4326858.	551804.2	134157.2
Maximum	969969.1	32010000	8270667.	438300.0
Minimum	31546.08	3746.900	403.0000	1616.000
Std. Dev.	263763.2	9730301.	1594041.	153376.3
Observations	36	36	36	36

Note: RGDP, VAT, PPT, CED and CIT as earlier defined.
Source: Computed Result Using (E-Views 8)

From table 4.1, Gross Domestic Product (GDP) had a mean of 428600.5 million from the year 1980 to 2015. With a maximum and minimum of 969969.1 million and 31546.08 million respectively; the standard deviation from the mean for gross domestic product (GDP) between 1980 and 2015 was 263763.2 million. Moreover, Petroleum Profit Tax (PPT) from the year 1980 to 2015 had a mean of 4326858 million with a maximum and minimum of 32010000 million and 3746.900 million respectively and a standard deviation of 9730301 million. In addition, Company Income Tax (CIT) had a mean of 551804.2 million from the year 1980 to 2015. With a maximum and minimum of 8270667 million and 403.0000 million respectively; the standard deviation from the mean for Company income tax (CIT) between 1980 and 2015 was 1594041 million.

Custom and Excise duties (CED) had a mean of 134157.2 million from the year 1980 to 2015; and with a maximum and minimum of 438300.0 million and 1616.000 million respectively; the standard deviation from the mean for Custom and Excise duties (CED) between 1994 and 2015 was 153376.3 million.

b) Correlation Matrix

Table 4.2: Correlation Matrix for all Variables

Variables	GDP	PPT	CED	CIT
GDP	1.000000	0.789940	0.974300	0.659909
PPT	0.789940	1.000000	0.804091	0.662635
CED	0.974300	0.804091	1.000000	0.601649
CIT	0.659909	0.662635	0.601649	1.000000

Note: RGDP, PPT, CED and CIT as earlier defined
Source: Computed Result Using (E-Views 8)

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The correlation matrix presented in table 4.2 indicates a strong positive correlation of 79% between gross domestic product (GDP) and petroleum profit tax (PPT). A strong positive relationship of 97% exists between gross domestic product (GDP) and custom and excise duties (CED). Also, a strong positive relationship of 66% exists between gross domestic product (RGDP) and company income tax (CIT).

c) Unit Root Test (Test for Stationarity)

To avoid spurious regressions which may arise as a result of carrying out regressions on time series data, by subjecting the data to stationarity test, using the Augmented Dickey Fuller (ADF) tests.

Table 4.3: Unit Root Test (1980-2015)

Variables	ADF Test	Critical Values			Order of integration
		critical value 1%	critical value 5%	Critical value 10%	Order level
GDP	-.374925	-3.639407	-2.951125	-2.614300	1(1)
CED	-.794226	-3.639407	-2.951125	-2.614300	1(1)
PPT	-.834829	-3.646342	-2.954021	-2.615817	1(1)
CIT	-.651023	-3.646342	-2.954021	-2.615817	1(1)

Note: RGDP, PPT, CED and CIT as earlier defined.
Source: Computed Result Using (E-Views 8)

The stationarity test result presented in Table 4.3 shows that at various levels of significance (1%, 5% and 10%), the variables were stationary. Although the variables were not stationary at level 1, the variables were thus differentiated. Thus, all the variables became stationary at first difference (integrated of order one). Hence, the entire variables in this study are stationary. Therefore, there is need to determine the long run relationship with the aid of the Johansen Co-integration test. See table 4.5 for co-integration result.

d) Test for Co-integration

Co-integration is conducted based on the test proposed by Johansen. According to Iyoha and Ekanem (2002), co-integration deals with the methodology of modeling non-stationary time series variables as per table 4.5 below.

Table 4.4: Johansen Test for Co-integration

Eigen value	Trace Statistic	5% critical value	Prob. **	Hypothesis of CE(s)
0.986687	195.3335	47.85613	0.0000	None *
0.665660	48.48752	29.79707	0.0001	At most 1 *
0.271585	11.23724	15.49471	0.1973	At most 2
0.013531	0.463187	3.841466	0.4961	At most 3

Source: Computed Result Using (E-Views 8)

The Table 4.4 indicates that there are two co-integrating equations because three of the Trace Statistic(s) are larger than critical value at 5%. Therefore, there is a long-run relationship among GDP, PPT, CED and CIT.

e) Short Run Regression Result

Table 4:5: Short Run Result: PDI = f(MPR, MLR, PLR, EXR and GEX)

Variable	Coefficient	t-Statistic	Prob.
C	9.978123	31.22215	0.0000
LLOG(PPT)	0.072217	1.108482	0.2759
LOG(CIT)	0.052075	0.976035	0.3364
LOG(CED)	0.132786	1.744326	0.0907
R^2= 0.786181, F-Statistic= 39.21975 , DW= 1.124619, Prob.(F-stat=0.000000)			

Source: Authors' Computed Result from (E-view 8)

Table 4.5 indicates that the dynamic model is a good fit. The R^2 value of 0.786 indicates that the variation in GDP was explained by 79 percent of PPT, CIT and CED. This shows that the explanatory power of the model is very strong.

The result shows that the coefficient of the intercept parameter appears with a positive value; 9.978123. This simply means that if the independent variables are held constant, GDP will increase by 9.978123 percent.

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Furthermore, the coefficient of petroleum profit tax (PPT) appears with the right sign (i.e., positive). This conforms to the apriori expectation. This means that a percentage increase in petroleum profit tax (PPT) will increase economic growth by 0.072217 percent. Moreover, the absolute value of the t-statistic for the slope coefficient is not significant. This is because the t-calculated of 1.108482 < the t-table of 2.032. Thus, the study accepts the null hypothesis which states that "there is no significant relationship between petroleum profit tax and economic growth in Nigeria". The implication of this result is that PPT impact on economic growth but not significantly. Meaning that, PPT revenue alone without revenue from other sources cannot help Nigeria to achieve sustainable economic growth and development.

The coefficient of company income tax (CIT) appears with a positive sign (0.052075) implying a positive relationship between company income tax (CIT) and economic growth. This conforms to the apriori expectation. This means that a percentage increase in company income tax (CIT) will lead to 0.052075 increases in economic growth. However, the absolute value of the t-statistic for the slope coefficient is not significant. This is because the t-calculated of 0.976035 < the t-table of 2.032. Thus, the study accepts the null hypothesis which states that "there is no significant relationship between company income tax (CIT) and economic growth in Nigeria".

At the same time, the coefficient of custom and excise duties (CED) appeared with a positive sign (0.132786) which implies that a positive relationship between custom and excise duties (CED) and economic growth exist. This conforms to the apriori expectation meaning that a percentage increase in custom and excise duties (CED) will lead to 0.132786 increases in economic growth. In addition, the absolute value of the t-statistic for the slope coefficient is not significant. This is as a result of the t-calculated value of 1.744326 < the t-table value of 2.032. Thus, the study accepts the null hypothesis which states that "there is no significant relationship between custom and excise duties (CED) and economic growth in Nigeria".

The insignificant relationship between tax revenue (i.e., revenue generated from PPT, CIT and CED), indicates that income generated from taxes are not efficiently and effectively utilized to provide infrastructural facilities and social amenities that will help the various sectors of the economy to grow and function effectively. The reason could be adduced from the mismanagement, corruption and embezzlement syndrome in the country.

The entire regression model is significant given the f-value of 39.21975with the probability (F-stat=0.000000). The Durbin Watson value of 1.124619 portrays the presence of serial autocorrelation.

f) Pairwise Granger Causality Test

Table 4.6: Pairwise Granger Causality Test Result

Null Hypothesis:	Obs	F-Statistic	Prob.
LOG(PPT) does not Granger Cause LOG(GDP)	34	0.35346	0.7052
LOG(GDP) does not Granger Cause LOG(PPT)		3.30785	0.0508
LOG(CIT) does not Granger Cause LOG(GDP)	34	0.12910	0.8794
LOG(GDP) does not Granger Cause LOG(CIT)		2.14165	0.1357
LOG(CED) does not Granger Cause LOG(GDP)	34	2.97664	0.0667
LOG(GDP) does not Granger Cause LOG(CED)		0.16787	0.8463

Note: GDP, PPT, CED and CIT as earlier defined.
Source: Computed Result Using (E-Views 8)

The result of Table 4.6 shows that there is unidirectional causality between PPT & GDP as well as CED & GDP. But, there exist an independence causality between CIT & GDP. Therefore, Policy makers should put in place those policies that will favour increase in GDP.

V. Summary of Findings

The study examines tax revenue and economic growth in Nigeria from 1980 to 2015. The theoretical literature upon which this work hinged on included, socio-political theory, expediency theory, faculty theory and benefit received theory.

Therefore, to achieve our objectives, data were collected on gross domestic product (GDP) petroleum profit tax (PPT), company income tax (CIT) and Custom and Excise Duties (CED) from CBN Statistical bulletin. The study adopted the Ordinary Least Square (OLS), Co-integration and Granger Causality methods of econometrics to analyze the data and showcased the relationship that exists among the variables.

The regression result shows that:

a. There is no significant relationship between petroleum profit tax and economic growth in Nigeria;

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b. There is no significant relationship between company income tax and economic growth in Nigeria; and
c. There is no significant relationship between custom and excise duties and economic growth in Nigeria.

VI. Conclusion

Using the Ordinary Least Square (OLS), Co-integration and Granger Causality tests in analyzing the data collected on gross domestic product (GDP), petroleum profit tax (PPT), Company Income tax (CIT) and custom and excise duties (CED) through secondary source specifically, CBN Statistical Bulletin, our result shows that petroleum profit tax, company income tax and custom and excise duties has no significant relationship in explaining the economic growth in Nigeria. However, tax has the ability to impact on the economy positively if properly and systematically integrated. The positive signs of the petroleum profit tax, company income tax and custom and excise duties tax is an indicator that Nigeria at large is benefitting from tax revenue; since revenue from tax are used by government to finance its major economic projects. The resultsfurther revealed that there is no significant relationship between petroleum profit tax, company income tax and Nigeria economic growth. The implication is that tax revenue has not contributed much to the growth of Nigeria's economy as one considers the fact that most of the revenue generated from taxes are squandered by the government officials and tax administrators. One of the main purposes of tax revenue is to raise revenue that the government can use to provide adequate amenities and infrastructure as well as enhance growth and development but the case seems to be different in Nigeria as the physical evidences does not show that funds generated from tax revenue are used for this purpose.

VII. Recommendations

The following recommendations are put forward:

Government should ensure that taxation is properly managed in a manner that will accelerate economic growth, reduce inflation rate and generate employment in the country. The Nigeria government should restructure the tax system from what it is so as to meet the demands of the 21st century.

Government should ensure that tax revenue is judiciously used in the provision of basic Education, Housing Schemes, Transportation (mass transist), Agriculture development, Primary Health Care, adequate Power Supply, Construction of Roads and Bridges, good National Defense, among others that will help the various sectors of the economy to grow and function very well thereby enhancing the growth and development of the economy.

If economic growth and development has to be achieved in Nigeria, then the Federal Government as a matter of urgency, restructure the tax system in Nigeria. Revenue from tax should also be properly and judiciously be expended to provide basic amenities to the taxpaying citizens of Nigeria.

a. Government should use the revenue generated from tax especially that of petroleum profit tax to develop the domestic sector of the economy especially the Agro allied industry and the manufacturing sector qualitative development.
b. Government should sensitize the citizenry through awareness campaign and enlightenment on the need to pay tax and not to evade it.
c. Training on Total Quality Tax Management, technological development in tax policies and also acquire tax assessment packages, etc.
d. Government to encourage and also insist on taxes remittance to Government account via the e-payment system This will go a long way in cubbing the emenance of fraudsters as well as being a means of supporting the cashless economy.
e. Nigeria's tax regulatory body needed to implement policies that will reduce the loop holes in tax laws which tax payers capitalize on to evade tax.
f. Enact a act prohibiting tax avoidance and tax evasion a punishable offence with serious sanctions imposed.

References Références Referencias

1. Abomaye-Nimenibo, W.A.S (2008), Determinants of Aggregate Demand in Nigeria, 1970 – 2005. An Unpublished Ph.D Thesis of University of Port Harcourt.
2. Abomaye-Nimenibo, W.A.S (2015), Petroleum Economics, Port Harcourt, Nimehas Publishers.
3. Abomaye-Nimenibo, W.A.S (2017 a) The Empirical Determinants of Aggregate Demand and its Effect on the Nigerian Populace,; Global Journal of Management and Business Research, E. Marketing Volume 17, Issue 3, Version 1.0; December 23, 2017.
4. Abomaye Nimenibo, W.A.S. (2017 b), *The Concept & Practice of Taxation in Nigeria*, Port Harcourt, Nimehas Publishers.
5. Adam Smith (1776): *The Wealth of Nations; London*; Everyman's Library Ltd.
6. Adedeji, T. O, Oboh, C. S. (2010): An Empirical Analysis of Tax Leakages and Economic Growth in Nigeria. *European Journal of Economics, Finance and Administrative Sciences* ISSN 1450-2275 Issue 48 (2012) © Euro Journals, Inc. 2012
7. Adegbie, F. and Falike (2010): —Customs and Excise Duties Contribution TowardsThe Development and Growth of Nigerian Economy. *European Journal of Economics, Finance and*

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Administrative Sciences ISSN 1450-2275 Issue 29 (2011) © Euro Journals, Inc. 2011 http://www.eurojournals.com

8. Adereti, S.A, Sanni, M. R, & Adesina, J. A (2011): Value Added Tax and Economic Growth of Nigeria, *European Journal of Humanities and Social Sciences* Vol. 10, No.1 (Special Issue), 2011 © JournalsBank.com (2011). ISSN 2220-9425 457.
9. Akinola, A. (2001): -*Why corruption resides in Nigeria‖ Headlines Daily Times*pg 1-3
10. Alli, B.D., (2009): —*Managing the Tax Reform Process in Nigeria‖. Niger Account* 42(1): 45-51.
11. Anyanfo, A.M.O. (1996), "*Public Finance in a Developing Economy: The Nigerian Case",* Department of Banking and Finance, University of Nigeria, Enugu Campus. Enugu.
12. Anyanwu, J.C. (1993) *"Financial System*: Essex, Longman Group Ltd.
13. Anyanwu, J.C. (1993) "*Monetary Economics: Theory, Policy and Institutions*", Onitsha: Hybrid Publishers.
14. Anyanwu, J.C., (1997): *Nigerian Public Finance*. Joanne Educational Publishers, Onitsha.
15. Anyanwu, O. (1997). Efficient tax collection and tax administration in Nigeria. *A paper presented at a seminar organized by the University of Lagos consultancy Services Otta*, May, 1997.
16. Appah, E. (2004) "*Principles and Practice of Nigerian Taxation*", Port Harcourt: Ezevin Mint Printers and Publishers.
17. Appah, E. (2010), "The Problems of Tax Planning and Administration in Nigeria: The Federal and State Governments Experience", *International Journal of Labour and Organizational Psychology*, 4(1-2), 114.
18. Appah, E. and Oyandonghan J.K. (2011), "The Challenges of Tax Mobilization and Management in the Nigerian Economy", *Journal of Business Administration and Management,* 6(2), 128-136.
19. Arnold, J.M. (2011), "Tax Policy for Economic Recovery and Growth", *Economic Journal*, 121, 59-80. Babalola and Aminu (2011*)*: Fiscal Policy and Economic Growth Relationship in Nigeria.
20. Azubike, J.U.B. (2009). *Challenges of Tax Authorities, Tax Payers in the Management of Tax Reform Processes*.Joanne Educational Publishers, Onitsha.
21. Bariyima D, Kiabel N and Gladson Nwoka (2009): —Boosting Revenue Generation by State Governments in Nigeria: *The Tax Consultants Option Revisited European Journal of Social Sciences* – Volume 8, Number 4.
22. Bhartia, H.L., (2009): *Public Finance*. 14th Edn.,Vikas Publishing House PVT Ltd, New Delhi.
23. Bonu N. S. and Pedro Motau P (2009): —The impact of income tax rates (ITR) on the economic development of Botswana‖, *Journal of Accounting and Tax Revenue* Vol.1 (1), pp. 008022, April, 2009.
24. Brian Musaga (2007): —*Effects of Tax revenue on Economic Growth* (Uganda's Experience: 1987-2005).
25. Chibu and Njoku (2015): Annual Report 2015 – Corporate Activities of Standard Alliances Insurance Plc. *Economic Review,* vol. 40, pp 1521 – 40.
26. Engen E, Skinner J (1996): —Tax revenue and Economic Growth. *National Tax Journal* Vol. 49, No 4 (Dec 1996) pp 617:42.
27. Famoyin, Yale (1990) 'The search for growth', *In Policies for Long Run Growth, symposium series*.
28. Festus A, F., Samuel F.A (2007): —Company Income Tax and Nigeria Economic Development *European Journal of Social Sciences* – Volume 22, Number 2 (2011).
29. Graeme, L. (2003): *The negative impact of tax revenue on economic growth*. An economic paper published by the Institute of Directors, London, UK.
30. Gujarati, D.N. (2007). *Basic econometrics*.4th Edition. New Delhi: McGraw-Hill. Publishing Company Limited.
31. Gujarati, D.N. (2007). *Basic econometrics*.5th Edition. New York: McGraw-Hill. Publishing Company Limited.
32. Gyani, F. (1990) 'Increasing the capital income tax may lead to faster growth', *European Economic Journal,* 8 (22): 103 – 115
33. Ikem (2011): *Tax Structure and Economic growth in Nigeria*. Onitsha: Hybrid Publishers.
34. Iyoha and Ekanem (2002): *"Introduction to Econometrics".* March Publishers, Benin City, Nigeria.
35. Jakir K. (2011): —Role of Tax revenue in Economic Development‖, James O. Alabede, ZaimahZainolAriffin and KamilMdIdris, —Individual taxpayers' attitude and compliance behaviour in Nigeria: *The moderating role of financial condition and risk preference Journal of Accounting and Tax Revenue* Vol. 3(5), pp. 91-104, September 2011.
36. Jhingan, M.L. (1995): *The Economics of Development and Planning (28th Revised Edition*). New Delhi: Prabhat Offset Press
37. Jhingan, M.L. (2004), *Money, Banking, International Trade and Public Finance.* New Delhi: Vrinda Publications.
38. Jhinghan M.L. (2003), *Macro-Economic Theory, 11th Revised Edition*, Delhi: Vrinda Publications (P) Ltd.
39. Jhinghan M.L. (2005), *Economics of Development and Planning, 38th edition*, New Delhi: Vikas Publishing House PVT Ltd.
40. Johansen and Juselius (1994*): Journals of Econometrics*, 1994 - Elsevier
41. Kayode, M.O. (1993): *The National Question and Revenue Allocation*: An articulation of some of the problems and issues. The National Questions and Economic Development in Nigeria Ibadan: Nigerian Economic Society.

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42. Kiabel B. D. and Nwokah N. G. (2009): —Boosting Revenue Generation by State Governments in Nigeria: The Tax Consultants Option Revisited, *European Journal of Social Sciences* – Volume 8, Number 4.
43. Kiabel, B. D and Ogu, V. U. (1999): —Tax Administration in Nigeria: The Impact of Using Revenue Consultants. *A paper presented at the Workshop on Revenue Generation in the Oil Producing States of Nigeria Organised by Global Consults*, Port Harcourt.
44. Margalioth Y. (2003), "*Tax Competition, Foreign Direct Investment and Growth*: Using the Tax System to Promote Developing Countries", Virginia, 23, 161-204.
45. Myles G.D. (2000*), Taxation and Economic Growth. Fiscal Studies,* 21(1), 141-168.
46. Nzotta, S.M., (2007) *Tax evasion problems in Nigeria*: A critique. Niger. Account, 40(2): 40-43.
47. Odusola, A., (2006). Tax policy reforms in Nigeria. *Research paper No. 2006/03 United Nations University. World Institute for Development Economics Research*. OECD (1995), Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations, OECD, Paris.
48. Ogbonna G.N, Ebimobowei A (2011): —Impact of Petroleum Revenue and the Economy of Nigeria. *Current research Journal of Economic Theory* 4(2), Maxwell Scientific Organization.
49. Ogbonna, G. N, and Ebimobowei A. (2011): —*Impact of Tax reforms and Economic Growth in Nigeria*. Maxwell Scientific Organization.
50. Ogbonna, G. N. (2011): *Burning Issues and Challenges of the Nigerian Tax Systems with Analytical Emphasis on Petroleum Profits Tax*. Chozu Publishers, Delta State, Nigeria
51. Ojo, A.J. (2008) *Banking and Finance in Nigeria*: Bradford Shiva: Graham Burn
52. Okpe, I. (1998), *Personal income tax in Nigeria*, Enugu New Generation Books
53. Ola, C.S., (2001*): Income Tax Law and Practice in Nigeria*. Heinemann Educational Books Nigeria Plc, Ibadan.
54. Olaseyitan A. T and Sankay O. C (2011): —*European Journal of Economics, Finance and Administrative Sciences* ISSN 1450-2275 Issue 48 (2012) Euro Journals, Inc. 2012
55. Olashore, O. (1999): —*Strategies for Economic Revival*, The Guardian Newspaper, Friday, July 23.
56. Olopade C. and D.O. Olopade (2010): —*The Impact of Government Expenditure On Economic Growth and Development in Developing Countries*: Nigeria as a Case Study
57. Omoruyi, S.E. (1983): —Growth and Flexibility of Federal Government Tax Revenue: 1960- 1979‖. *Economic and Financial Review,* vol. 21, no.1: 11–19.
58. Orijh J. (2001) *Financial Management* Vol 2, Enugu: Splahmedia Organization
59. Oyejide (1975) '*Export and economic growth in Africa countries,"* Economic International 2:177-185.
60. Philips (1997): *Effect of Fiscal Instability on Economic Growth in Nigeria*. Maduabibi Publishers, Bayelsa State, Nigeria
61. Reuven A. Y. and Yoram Margalioth (2006): —*Tax Revenue in Developing Countries*: Some Recent Support and Challenges to the Conventional View.
62. Reynolds and Wilbur (1990): —U.S. Regional Characteristics, New Firms, and Economic Growth. *Working paper presented to the Cross-National Workshop on the Role of Small, Medium Enterprises in Regional Economic Growth*, at the University of Warwick, Coventry, United Kingdom, March 28.
63. The Holy Bible-*Mark 12:14 – 16 and Mathew 17: 24 – 27*
64. Tosun, M.S. &Abizadeh S. (2005), "*Economic Growth and Tax Components*: An Analysis of Tax Change in OECD" Applied Economics, 37, 2251-2263.
65. Umoru D. and Anyiwe M.A. (2013), "Tax Structures and Economic Growth in Nigeria: Disaggregated Empirical Evidence*". Research Journal of Finance and Accounting,* 4(2),65-79.

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Appendix I: Research data

Nigeria's Data on GDP, PPT CIT and CED

YEAR	GDP (₦ million)	PPT	CIT(₦ million)	CED
1980	31546.08	8564.3	579.2	1813.5
1981	205222.1	6325.8	403.0	2325.8
1982	199685.2	4846.4	550.0	2336.0
1983	185598.1	3746.9	561.5	1984.1
1984	183563	4761.4	787.2	1616.0
1985	201036.3	6711.0	1004.3	2183.5
1986	205971.4	4811.0	1102.5	1728.2
1987	204804.5	12504.0	1235.2	3540.8
1988	219875.6	6814.4	1550.8	5672.0
1989	236729.6	10598.1	1914.3	5815.5
1990	267550	26909.0	2997.3	8640.9
1991	265379.1	38615.9	3827.9	11456.9
1992	271365.5	51476.7	5417.2	16054.8
1993	274833.3	59207.6	9554.1	15486.4
1994	275450.6	42802.7	12274.8	18294.6
1995	281407.4	42857.9	21878.3	37364.0
1996	293745.4	76667.0	22000.0	55000.0
1997	302022.5	68574.1	26000.0	63000.0
1998	310890	680000	33300.0	57700.0
1999	312183.5	164300	46200.0	87900.0
2000	329178.7	525100	51100.0	10150.0
2001	356994.3	639200	68700.0	170600
2002	433203.5	392200	89100.0	181400
2003	477533	683500	11480.0	195500
2004	527576	1183500	13300.0	217200
2005	561931.4	1904900	14030.0	232800
2006	595821.6	2038300	24490.0	177700
2007	634251.1	1500600	27530.0	241400
2008	672202.6	2812300	450000	281300
2009	718977.3	1256500	630100	297500
2010	776332.2	1944700	712000	309200
2011	834161.9	30700000	806000	438300
2012	902794	32010000	963200	438300
2013	964184	21551567	8270667	395267
2014	969969.1	28087189	3346622	423956
2015	945,649.00	27216252	4193496	419174

Note: RGDP, PPT, CED and CIT as earlier defined.

Source: CBN Statistical Bulletin (Various Issues)

Appendix ii: Regression Results

Linear Regression Result

Dependent Variable: GDP				
Method: Least Squares				
Date: 28/12/17 Time: 18:57				
Sample: 1980 2015				
Included observations: 36				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	206744.5	13209.01	15.65178	0.0000
PPT	-0.001265	0.001774	-0.713050	0.4810
CIT	0.021284	0.008059	2.641022	0.0127
CED	1.606952	0.105515	15.22960	0.0000
R-squared	0.958440	Mean dependent var		428600.5
Adjusted R-squared	0.954544	S.D. dependent var		263763.2

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S.E. of regression	56235.52	Akaike info criterion	24.81692
Sum squared resid	1.01E+11	Schwarz criterion	24.99287
Log likelihood	-442.7046	Hannan-Quinn criter.	24.87833
F-statistic	245.9907	Durbin-Watson stat	1.585160
Prob(F-statistic)	0.000000		

Appendix iii: Log-Linear Regression Result

Dependent Variable: LOG(GDP)				
Method: Least Squares				
Date: 28/12/17 Time: 18:58				
Sample: 1980 2015				
Included observations: 36				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	9.978123	0.319585	31.22215	0.0000
LOG(PPT)	0.072217	0.065149	1.108482	0.2759
LOG(CIT)	0.052075	0.053354	0.976035	0.3364
LOG(CED)	0.132786	0.076125	1.744326	0.0907
R-squared	0.786181	Mean dependent var		12.77103
Adjusted R-squared	0.766135	S.D. dependent var		0.683899
S.E. of regression	0.330730	Akaike info criterion		0.729413
Sum squared resid	3.500244	Schwarz criterion		0.905360
Log likelihood	-9.129434	Hannan-Quinn criter.		0.790823
F-statistic	39.21975	Durbin-Watson stat		1.124619
Prob(F-statistic)	0.000000			

Appendix iv: Unit Root test Gdp @ Level

Null Hypothesis: GDP has a unit root				
Exogenous: Constant				
Lag Length: 1 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			2.275536	0.9999
Test critical values:	1% level		-3.639407	
	5% level		-2.951125	
	10% level		-2.614300	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(GDP)				
Method: Least Squares				
Date: 28/12/17 Time: 19:01				
Sample (adjusted): 1982 2015				
Included observations: 34 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
GDP(-1)	0.038952	0.017118	2.275536	0.0299
D(GDP(-1))	0.139964	0.120433	1.162177	0.2540
C	1356.992	7832.136	0.173259	0.8636
R-squared	0.239460	Mean dependent var		21777.26
Adjusted R-squared	0.190393	S.D. dependent var		25107.00
S.E. of regression	22590.81	Akaike info criterion		22.97257
Sum squared resid	1.58E+10	Schwarz criterion		23.10725
Log likelihood	-387.5337	Hannan-Quinn criter.		23.01850
F-statistic	4.880260	Durbin-Watson stat		0.749851
Prob(F-statistic)	0.014368			

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Gdp @ 1st Diff

Null Hypothesis: D(GDP) has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-6.374925	0.0000
Test critical values:	1% level		-3.639407	
	5% level		-2.951125	
	10% level		-2.614300	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(GDP,2)				
Method: Least Squares				
Date: 28/12/17 Time: 19:01				
Sample (adjusted): 1982 2015				
Included observations: 34 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(GDP(-1))	-0.759988	0.119215	-6.374925	0.0000
C	15152.77	5272.267	2.874051	0.0071
R-squared	0.559469	Mean dependent var		-5823.415
Adjusted R-squared	0.545703	S.D. dependent var		35637.69
S.E. of regression	24020.36	Akaike info criterion		23.06821
Sum squared resid	1.85E+10	Schwarz criterion		23.15800
Log likelihood	-390.1596	Hannan-Quinn criter.		23.09883
F-statistic	40.63967	Durbin-Watson stat		0.684032
Prob(F-statistic)	0.000000			

PPT @ LEVEL

Null Hypothesis: PPT has a unit root				
Exogenous: Constant				
Lag Length: 1 (Fixed)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-0.708396	0.8313
Test critical values:	1% level		-3.639407	
	5% level		-2.951125	
	10% level		-2.614300	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(PPT)				
Method: Least Squares				
Date: 28/12/17 Time: 18:05				
Sample (adjusted): 1982 2015				
Included observations: 34 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
PPT(-1)	-0.084926	0.119886	-0.708396	0.4840
D(PPT(-1))	0.010164	0.202880	0.050097	0.9604
C	1112976.	1029457.	1.081129	0.2880
R-squared	0.019315	Mean dependent var		800291.9
Adjusted R-squared	-0.043955	S.D. dependent var		5411218.
S.E. of regression	5528864.	Akaike info criterion		33.97296
Sum squared resid	9.48E+14	Schwarz criterion		34.10764
Log likelihood	-574.5403	Hannan-Quinn criter.		34.01889
F-statistic	0.305279	Durbin-Watson stat		1.994942
Prob(F-statistic)	0.739108			

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PPT @ 1ST DIFF

Null Hypothesis: D(PPT) has a unit root				
Exogenous: Constant				
Lag Length: 1 (Fixed)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-5.834829	0.0000
Test critical values:	1% level		-3.646342	
	5% level		-2.954021	
	10% level		-2.615817	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(PPT,2)				
Method: Least Squares				
Date: 28/12/17 Time: 19:04				
Sample (adjusted): 1983 2015				
Included observations: 33 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(PPT(-1))	-1.449901	0.248491	-5.834829	0.0000
D(PPT(-1),2)	0.372353	0.173007	2.152245	0.0395
C	1133655.	936609.3	1.210382	0.2356
R-squared	0.592136	Mean dependent var		-26347.20
Adjusted R-squared	0.564946	S.D. dependent var		7991420.
S.E. of regression	5271034.	Akaike info criterion		33.87986
Sum squared resid	8.34E+14	Schwarz criterion		34.01591
Log likelihood	-556.0177	Hannan-Quinn criter.		33.92563
F-statistic	21.77701	Durbin-Watson stat		1.816351
Prob(F-statistic)	0.000001			

Cit @ Level

Null Hypothesis: CIT has a unit root				
Exogenous: Constant				
Lag Length: 1 (Fixed)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-1.108225	0.7012
Test critical values:	1% level		-3.639407	
	5% level		-2.951125	
	10% level		-2.614300	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(CIT)				
Method: Least Squares				
Date: 28/12/17 Time: 19:07				
Sample (adjusted): 1982 2015				
Included observations: 34 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
CIT(-1)	-0.208031	0.187716	-1.108225	0.2763
D(CIT(-1))	-0.391306	0.184682	-2.118809	0.0422
C	257719.2	243207.1	1.059670	0.2975
R-squared	0.283342	Mean dependent var		123326.3

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Adjusted R-squared	0.237106	S.D. dependent var	1538435.
S.E. of regression	1343728.	Akaike info criterion	31.14389
Sum squared resid	5.60E+13	Schwarz criterion	31.27857
Log likelihood	-526.4461	Hannan-Quinn criter.	31.18982
F-statistic	6.128160	Durbin-Watson stat	2.050800
Prob(F-statistic)	0.005719		

Cit @ 1st Diff

Null Hypothesis: D(CIT) has a unit root				
Exogenous: Constant				
Lag Length: 1 (Fixed)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-5.651023	0.0000
Test critical values:	1% level		-3.646342	
	5% level		-2.954021	
	10% level		-2.615817	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(CIT,2)				
Method: Least Squares				
Date: 28/12/17 Time: 19:06				
Sample (adjusted): 1983 2015				
Included observations: 33 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(CIT(-1))	-2.040279	0.361046	-5.651023	0.0000
D(CIT(-1),2)	0.365739	0.224693	1.627727	0.1140
C	287115.1	242224.9	1.185324	0.2452
R-squared	0.771897	Mean dependent var		25658.39
Adjusted R-squared	0.756690	S.D. dependent var		2705798.
S.E. of regression	1334675.	Akaike info criterion		31.13278
Sum squared resid	5.34E+13	Schwarz criterion		31.26883
Log likelihood	-510.6909	Hannan-Quinn criter.		31.17856
F-statistic	50.75966	Durbin-Watson stat		1.994395
Prob(F-statistic)	0.000000			

Ced@ Lavel

Null Hypothesis: CED has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			0.104207	0.9616
Test critical values:	1% level		-3.632900	
	5% level		-2.948404	
	10% level		-2.612874	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(CED)				
Method: Least Squares				
Date: 28/12/17 Time: 19:08				
Sample (adjusted): 1981 2015				

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Included observations: 35 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
CED(-1)	0.005080	0.048744	0.104207	0.9176
C	11284.50	9378.213	1.203267	0.2374
R-squared	0.000329	Mean dependent var		11924.59
Adjusted R-squared	-0.029964	S.D. dependent var		41311.12
S.E. of regression	41925.48	Akaike info criterion		24.18062
Sum squared resid	5.80E+10	Schwarz criterion		24.26950
Log likelihood	-421.1609	Hannan-Quinn criter.		24.21130
F-statistic	0.010859	Durbin-Watson stat		2.626425
Prob(F-statistic)	0.917636			

Ced @ 1st Diff

Null Hypothesis: D(CED) has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-7.794226	0.0000
Test critical values:	1% level		-3.639407	
	5% level		-2.951125	
	10% level		-2.614300	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(CED,2)				
Method: Least Squares				
Date: 28/12/17 Time: 19:08				
Sample (adjusted): 1982 2015				
Included observations: 34 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(CED(-1))	-1.311298	0.168240	-7.794226	0.0000
C	16125.31	7240.789	2.227010	0.0331
R-squared	0.654986	Mean dependent var		-155.7147
Adjusted R-squared	0.644205	S.D. dependent var		67773.04
S.E. of regression	40425.66	Akaike info criterion		24.10934
Sum squared resid	5.23E+10	Schwarz criterion		24.19913
Log likelihood	-407.8588	Hannan-Quinn criter.		24.13996
F-statistic	60.74996	Durbin-Watson stat		2.084552
Prob(F-statistic)	0.000000			

Appendix v: Johansen Cointegration Test

Date: 28/12/17 Time: 19:09				
Sample (adjusted): 1982 2015				
Included observations: 34 after adjustments				
Trend assumption: Linear deterministic trend				
Series: GDP PPT CIT CED				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		**Trace**	**0.05**	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.986687	195.3335	47.85613	0.0000
At most 1 *	0.665660	48.48752	29.79707	0.0001
At most 2	0.271585	11.23724	15.49471	0.1973
At most 3	0.013531	0.463187	3.841466	0.4961
Trace test indicates 2 cointegrating eqn(s) at the 0.05 level				

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* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.986687	146.8460	27.58434	0.0001
At most 1 *	0.665660	37.25028	21.13162	0.0001
At most 2	0.271585	10.77405	14.26460	0.1659
At most 3	0.013531	0.463187	3.841466	0.4961
Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegrating Coefficients (normalized by b'*S11*b=I):				
GDP	PPT	CIT	CED	
3.96E-08	2.23E-07	-1.29E-06	1.99E-08	
-5.48E-06	-1.50E-07	-2.41E-07	2.16E-05	
3.30E-05	5.60E-08	-7.44E-07	-5.45E-05	
-2.57E-07	1.74E-08	4.74E-07	3.57E-06	
Unrestricted Adjustment Coefficients (alpha):				
D(GDP)	7743.018	14448.98	2045.519	-462.2909
D(PPT)	-2547872.	1594268.	1311490.	377838.4
D(CIT)	1260423.	27223.57	57135.28	11453.02
D(CED)	-12217.00	10192.08	17490.49	-926.8858
1 Cointegrating Equation(s):		Log likelihood	-1801.399	
Normalized cointegrating coefficients (standard error in parentheses)				
GDP	PPT	CIT	CED	
1.000000	5.638969	-32.69159	0.501778	
	(0.14614)	(0.78849)	(7.09594)	
Adjustment coefficients (standard error in parentheses)				
D(GDP)	0.000306			
	(0.00014)			
D(PPT)	-0.100823			
	(0.03410)			
D(CIT)	0.049877			
	(0.00157)			
D(CED)	-0.000483			
	(0.00027)			
2 Cointegrating Equation(s):		Log likelihood	-1782.774	
Normalized cointegrating coefficients (standard error in parentheses)				
GDP	PPT	CIT	CED	
1.000000	0.000000	0.203861	-3.967176	
		(0.02772)	(0.27565)	
0.000000	1.000000	-5.833593	0.792513	
		(0.11101)	(1.10406)	
Adjustment coefficients (standard error in parentheses)				
D(GDP)	-0.078884	-0.000443		
	(0.01212)	(0.00059)		

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D(PPT)	-8.838502	-0.808031		
	(4.42465)	(0.21716)		
D(CIT)	-0.099327	0.277165		
	(0.21608)	(0.01061)		
D(CED)	-0.056343	-0.004257		
	(0.03653)	(0.00179)		
3 Cointegrating Equation(s):		Log likelihood	-1777.387	
Normalized cointegrating coefficients (standard error in parentheses)				
GDP	PPT	CIT	CED	
1.000000	0.000000	0.000000	-1.788021	
			(0.07283)	
0.000000	1.000000	0.000000	-61.56533	
			(5.73453)	
0.000000	0.000000	1.000000	-10.68944	
			(0.99239)	
Adjustment coefficients (standard error in parentheses)				
D(GDP)	-0.011349	-0.000328	-0.015020	
	(0.07286)	(0.00060)	(0.00329)	
D(PPT)	34.46193	-0.734557	1.936619	
	(25.7138)	(0.21111)	(1.16130)	
D(CIT)	1.787064	0.280366	-1.679607	
	(1.26904)	(0.01042)	(0.05731)	
D(CED)	0.521127	-0.003277	0.000342	
	(0.19373)	(0.00159)	(0.00875)	

	GDP	PPT	CIT	CED
Mean	428600.5	4326858.	551804.2	134157.2
Median	306456.3	120483.5	17954.15	56350.00
Maximum	969969.1	32010000	8270667.	438300.0
Minimum	31546.08	3746.900	403.0000	1616.000
Std. Dev.	263763.2	9730301.	1594041.	153376.3
Skewness	0.828738	2.144604	3.761748	0.820502
Kurtosis	2.418029	5.770360	17.24666	2.245207
Jarque-Bera	4.628877	39.10829	389.3553	4.893910
Probability	0.098822	0.000000	0.000000	0.086557
Sum	15429619	1.56E+08	19864953	4829660.
Sum Sq. Dev.	2.43E+12	3.31E+15	8.89E+13	8.23E+11
Observations	36	36	36	36

	GDP	PPT	CED	CIT
GDP	1.000000	0.789940	0.974300	0.659909
PPT	0.789940	1.000000	0.804091	0.662635
CED	0.974300	0.804091	1.000000	0.601649
CIT	0.659909	0.662635	0.601649	1.000000

Pairwise Granger Causality Tests			
Date: 28/12/17 Time: 19:22			
Sample: 1980 2015			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
LOG(PPT) does not Granger Cause LOG(GDP)	34	0.35346	0.7052
LOG(GDP) does not Granger Cause LOG(PPT)		3.30785	0.0508
LOG(CIT) does not Granger Cause LOG(GDP)	34	0.12910	0.8794
LOG(GDP) does not Granger Cause LOG(CIT)		2.14165	0.1357
LOG(CED) does not Granger Cause LOG(GDP)	34	2.97664	0.0667

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LOG(GDP) does not Granger Cause LOG(CED)		0.16787	0.8463
LOG(CIT) does not Granger Cause LOG(PPT)	34	3.06157	0.0622
LOG(PPT) does not Granger Cause LOG(CIT)		2.50109	0.0995
LOG(CED) does not Granger Cause LOG(PPT)	34	4.01473	0.0289
LOG(PPT) does not Granger Cause LOG(CED)		3.36565	0.0485
LOG(CED) does not Granger Cause LOG(CIT)	34	0.42530	0.6576
LOG(CIT) does not Granger Cause LOG(CED)		0.62553	0.5420

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