Abstract

The study examined the “Effect of Tax Revenue on Economic Growth of Nigeria Between 1990-2020”. The objective was to evaluate the effect of petroleum profit tax on the real gross domestic product of Nigeria; examine the impact of company income tax on the real gross domestic product of Nigeria; determine the impact of value added tax on the real gross domestic product of Nigeria. The study adopted ex-post facto research design. This study made use of secondary data obtained from the Central Bank of Nigeria Statistical Bulletins for the relevant years between 1990 and 2020. Data collected were analysed using Regression Statistical Tool using E-views Software Version 9. Findings revealed that Petroleum profit tax has significant effect on the gross domestic product of Nigeria; company income tax has significant effect on the gross domestic product of Nigeria; and valued added tax has significant effect on the gross domestic product of Nigeria. It was concluded that tax revenue from petroleum profits, company income tax and value added tax had significant positive relationships with Economic Growth of Nigeria. Based on the findings, it was recommended that: given the dwindling revenue from petroleum related sources, the government should embark on the strategic pursuit of broadening the economy to enhance economic growth and development; government agencies should effectively devise procedures for the collection of company income tax as it contributes to economic growth as reported in the findings; and government agencies should as well ensure timely payment of value added tax as it also contributed positively to economic growth as reported in the findings of the study.
1. Introduction

All around the world, governments, institutions and agencies require revenue to function. One of the ways through which government mobilize revenue is taxation. Tax is a lawful and inevitable 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 (Omoh, 2022). Taxation is the act of laying a tax, i.e., the process by which a local, state and central government, through its law-making body, raise revenue to defray the necessary expenses of the government. According to Festu and Samuel (2021), taxation can be defined as the compulsory transfer or payment (or occasionally of goods and services) from private individuals or groups to the government. The purpose and importance of taxation is to raise funds with which to promote the general welfare and protection of its citizens, and to enable it to finance its multifarious activities and to redistribute wealth and management of the economy (Ogbonna and Ebimobowei, 2017).

Tax revenue is a veritable source of government revenue. However, it is still debatable in the literature what should be the optimal tax revenue to be imposed to enhance development without unjustly inflicting welfare cost. Economic theories of taxation approach the question of how to minimize the loss of economic welfare through taxation and also discuss how a nation can perform redistribution of wealth in the most efficient manner. Taxation according to Tosun and Abizadeh (2021) is the collection of a share of individual and organization income and wealth by the government under the authority of the law. The Nigerian tax System has undergone significant changes in recent times. The Tax Laws are being reviewed with the aim of repelling obsolete provisions and simplifying the main ones. Under current Nigerian law, tax revenue is enforced by the 3 tiers of Government, which are Federal, State, and Local Government with each having its sphere clearly spelt out in the Taxes and Levies Act, 1998.

The whole essence of tax revenue is to generate revenue to advance the welfare of the people of a nation with focus on promoting economic growth and development of a country through the provision of basic amenities for improved public services via proper administrative system, and structures (Okafor, 2021). Taxation is one of the major sources for revenue generation in Nigeria of which petroleum carries the highest percentage of revenue generated in Nigeria. Petroleum taxation policy is both employed as a fiscal policy and as well as income generating tool is widely employed by both developing and developed countries. Since petroleum has been discovered in Nigeria it has been the bedrock of economy and is responsible for about 90% of revenue which is the highest revenue generated by government from taxation. As of 2000, oil and gas export accounted for more than 98% of export earnings and about 83% of federal government revenue, as well as generating more than 14% of its GDP as it provides 95% of foreign exchange earnings, and about 65% of budgetary revenues(Central Bank of Nigeria, 2015). The role of oil sector towards the process of national development can be seen in the aspect of; employment generation, foreign exchange earnings, income generation, industrialization, and improvement in other economic variables. While the major investors in the petroleum industry are the multinational oil companies, the government regulate the petroleum operations in Nigeria through the petroleum profit tax act (PPTA) of 2007 amended, with its main fiscal instrument as the petroleum profit tax (PPT), through which petroleum revenue accrue to the government. Ewa, Adesola and Etim (2020) noted that the petroleum profit tax is applicable to upstream operation in the oil industry, and its main focus relates to prospecting and exploration lease, royalties, rents, margins and profit sharing elements associated with oil mining. The fundamental objectives of petroleum taxation are to ensure a fair share of accruing from the extraction of the petroleum resource, while also providing sufficient incentives to encourage investment and optimal economic recovery of the hydrocarbon resources. Aliyu, and Mustapha (2020) opined that the objectives of petroleum taxation includes; achieving government’s objectives of exercising right and control over the public asset, as well as regulating the number of participants in the
industry and discouraging its rapid depletion in order to conserve some of it for future generation. Also some economist considers taxation an important tool for maintaining the stability of a country economy.

Tax revenue plays a crucial role in promoting economic activity growth and development. Through tax revenue government ensures that resources are channeled towards important projects in the society, while giving succor to the weak. The role of tax revenue in promoting economic activity and growth may not be felt if poorly administered. This calls for a need for proper examination of the relationship between revenue generated from taxes and the economy, to enable proper policy formulation and strategy towards its efficiency. Uzoka and Chiedu (2018) were of view that the Nigerian economy has remained in a deep slumber with macroeconomic indicators reflecting an economy in dire need of rejuvenation, revival and indeed radical reform.

A critical challenge before tax administration in the 21st century Nigeria is to advance the frontiers of professionalism, accountability and awareness of the general public on the imperatives and benefits of tax revenue in our personal and business lives which include: promoting economic activity; facilitating savings and investment; and generating strategic competitive advantage. If tax administration does not for any reason meet the above challenges, then there is a desperate need for reform in the area of the regime, and in the administration of taxes.

The various types of taxes payable in Nigeria include; Personal Income tax, Petroleum Profit Tax, Company Income Tax, and Customs and Excise Duties among others. Personal Income Tax is governed under Personal Income Tax Act(PITA) 2011. This Act regulates the taxation of individuals, sole traders, partnership, executors and trustees. Incomes charged under this Act are global incomes from employment, trading, business, vacation, trust etc. According to Afuberoh and Okoye, (2014) income tax is used all over the world by governments to stimulate adversely or positively specific types of business ventures with a view to meeting government desired objectives. As an emerging nation, Nigeria major economic goal is to enhance the rate of economic growth thereby improving per capita income and boasting living standard of citizens. Nigeria has for the past three decades carried out various reforms in personal income tax management to actualize this objective of GDP growth. The Company Income Tax is regulated by the Company Income Tax Act and managed by Federal Inland Revenue Service. The law deals with the assessment and collection of taxes from all companies operating as limited liability companies with the exception of those operating in the petroleum sub sector. Section 40(1) of Company Income Tax Act (CITA) specifies a tax rate of 30% of chargeable profit while Section 40(6) stipulates a tax rate of 20% for companies operating in either the manufacturing, agricultural, mining sectors or the company is completely into export trade and earns a total gross turnover of below one million naira for the first five (5) years of assessment. The Petroleum Profit Tax is regulated by the Petroleum Profit Tax Act (PPTA). It is under the administration of the Federal Inland Revenue Board and the tax is on profits of companies engaged in petroleum operations. The Act defined Petroleum Operations as “the winning or obtaining and transportation of petroleum or chargeable oil in Nigeria by or on behalf of a company for its own account by any drilling, mining, extracting or other like operations or processes, not including refining at a refinery, in the course of a business carried on by the company engaged in such operations, and all operations incidental thereto and any sale of or any disposal of chargeable oil or on behalf of the company”. The tax rate on chargeable profit in any accounting period is 85% of the company’s chargeable profit. Revenue from these sources are supposed to have significant effect on economic growth of Nigeria (Okwara and Amori, 2017). The prevalence of tax evasion in the Nigerian tax system, has curtailed the amount of revenue collected from tax income, this in no doubt has effect on the government expenditure and inflation in the economy. It was against this background that the researcher was poised to examine the effect of tax revenue on economic growth of Nigeria.
1.2 Statement of the Problem

Nigerian economy as a number one economy in Africa and emerging economy in the world has many problems militating tax revenue mobilization as a source of financing developmental activities. Federal Inland Revenue Services (FIRS) faces the challenges of widespread tax evasion, which is motivated by a complaint about corruption and poor quality of services. Omoigin (2011) stated, in Nigeria and other African countries, the level of tax evasion are quite high. No wonder, Okonjo-Iweala (2014) noted that a recent study conducted by the government revealed that about 75 percent of registered companies in the country are not registered with the stepping up its efforts to encourage voluntary compliance with a tax obligation.

The prevalence of tax evasion in the Nigerian tax system, has curtailed the amount of revenue collected from tax income, this in no doubt has effect on the government expenditure and inflation in the economy. Moreover, the revenue generation capacity of the nation's present tax administrative system is hampered by challenges such as paucity of data, inefficient monitoring and enforcement system, and corrupt practices. These challenges appear to have impeded the economic growth in Nigeria and accentuated by the resultant effect of companies closing down, hence, reducing the tax revenue of the Government. Likewise, the problem associated with corruption and corrupt practices have eaten deep into this nation; therefore, the Nigerian tax justice is tainted with lack of transparency, unaccountability and inefficient administrative system, which on the other hand has a negative effect on the economic growth.

According to the World Bank doing business 2011 report, Nigeria ranked 137 out of 183 countries surveyed on the ease of doing business and 134 on the ease of paying taxes. The report, further noted that in the 2010 report, Nigerian ranked 134 and 131 on the ease of doing business and paying taxes respectively. The report documented that Nigeria has been sloping back consistently on the ease of paying taxes index is a function of three broad indicators – some tax payments, time require complying with tax obligations and total tax rate. It was against this background that the researcher was poised to examine the effect of tax revenue on economic growth of Nigeria.

1.3 Objectives of the Study

1. To evaluate the effect of petroleum profit tax on the real gross domestic product of Nigeria.
2. To examine the impact of company income tax on the real gross domestic product of Nigeria.
3. To determine the impact of value added tax on the real gross domestic product of Nigeria.

1.4 Hypotheses

\[ H_0: \ \text{Petroleum profit tax does not have significant effect on the real gross domestic product of Nigeria.} \]

\[ H_0: \ \text{Company income tax does not have significant effect to the real gross domestic product of Nigeria.} \]

\[ H_0: \ \text{Value added tax does not have significant effect to the real gross domestic product of Nigeria.} \]
2. Review of Related Literature

Conceptual Review

Taxation

Tax has been defined in many ways by different authors. For instance, Anyanwu (2007) defined tax as “compulsory transfer or payment of money (or occasionally of goods and services) from private individuals, institutions or and services) to the government. It may be levied upon wealth or income or in the form of surcharge on price. In a similar vein, Okpe (2008) asserted that tax is the transfer of resources and income from the private sector to the public sector in order to achieve some of the nation’s economic and social goals, maybe in the form of provision of additional government basic services particularly in education, public health, transportation, capital formation and in the provision of facilities. The above definition is significant in its effort to highlight the purpose of taxation.

Moreover, Anyanwaokoro (2004) defined tax as a compulsory payment imposed by the government on individuals and corporate bodies in the governed area for which no direct goods or services are given in exchange of the payment made. The definition given above implies that tax is a compulsory levy imposed by the government on individuals and business organizations. It is a payment in return for which no direct and specific “quid pro quo” is offered by the government and indirect benefit to different individual taxpayers cannot be determined. From the above definitions tax is a compulsory payment made by individuals and corporate bodies to the government for financing government expenditure or for general purpose of government aimed at improving the taxpayers welfare and in which both the taxpayer and the public at large benefit. The tax base is the object being taxed. Examples of tax based are income, profit and property. The tax rate is the proportion of the value of the tax based that is paid as tax. The tax yield is the actual amount accrued to the government in tax.

Petroleum Profit Tax

The Petroleum Profit Tax Act (PPTA) is the tax law responsible for the governing of the taxation of companies engaged in petroleum operations (Adedeji and Oboh, 2012). The Act defines petroleum operations as “the winning or obtaining and transportation of petroleum or chargeable oil in Nigeria by or on behalf of a company for its own account by any drilling, mining, extracting or other like operations or process, not including refining at a refinery, in the course of a business carried by the company engaged in such operations, and all operations incidental there to and sale of or any disposal of chargeable oil by or on behalf of the company”. The definition is applicable to the upstream sector of the petroleum industry; hence, only companies in the upstream sector are charged with petroleum profit tax (PPT). The importance of taxation on petroleum profits cannot be overemphasized as tax revenue derived from tax in petroleum profits contributes, largely, to the total tax revenue available to the Nigerian government.

Aboyade, (2010) stated that Petroleum Profit Tax is a major source of revenue for the Federal Government of Nigeria to meet its statutory obligations of ensuring the economic development of Nigeria. It assists the government to achieve the country’s macroeconomic objective in the areas of fiscal and monetary policies. However, it has been observed that non-provision of corporate social responsibilities in the communities where there is extraction of crude oil result into constant destruction of production installations, and hindrance to production; tax avoidance and evasion the poor tax administration, and weak fiscal policy have been negating the increase in tax income generated.

Company Income Tax

Companies Income Tax (CIT) is tax on the profits of incorporated entities in Nigeria (Chibu and Njoku, 2015). It also includes the tax on the profits of non-resident companies carrying on business in Nigeria.
The tax is paid by limited liability companies inclusive of the public limited liability companies. It is therefore commonly referred to as corporate tax.

CIT was created by the Companies Income Tax Act (CITA) 1979 and has its root from the Income Tax Management Act of 1961. It is one of the taxes administered and collected by the Federal Inland Revenue Service (‘FIRS’ or ‘the Service’). The tax contributes significantly to the revenue profile of the Service. In 2016, the revenue target for Companies Income Tax is N1.877 trillion representing approximately 40% of the total projected tax revenue of N4.957 trillion for the year (Chibu and Njoku, 2019).

Value Added Tax

VAT is an indirect tax because the person who ultimately pays the tax is not necessarily the same person as the one who pays the tax to the tax authorities. VAT essentially compensates for the shared service and infrastructure provided in a certain locality by a state and funded by its taxpayers that were used in the provision of that product or service. Not all localities require VAT to be charged, and exports are often exempt. VAT is usually implemented as a destination-based tax, where the tax rate is based on the location of the consumer and applied to the sales price. Aliyu and Mustapha (2020) wrote that a value-added tax (VAT), known in some countries as a goods and services tax (GST), is a type of tax that is assessed incrementally. It is levied on the price of a product or service at each stage of production, distribution, or sale to the end consumer. If the ultimate consumer is a business that collects and pays to the government VAT on its products or services, it can reclaim the tax paid. It is similar to, and is often compared with, a sales tax. Ewa, Adesola, & Essien (2020) asserted that there are two main methods of calculating VAT: the credit-invoice or invoice-based method and the subtraction or accounts-based method. In the credit-invoice method, sales transactions are taxed, the customer is informed of the VAT on the transaction, and businesses may receive a credit for the VAT paid on input materials and services. The credit-invoice method is by far the more common and is used by all national VATs. In the subtraction method, a business at the end of a reporting period, calculates the value of all taxable sales, subtracts the sum of all taxable purchases, and applies the VAT rate to the difference. With both methods, there are exceptions in the calculation method for certain goods and transactions that are created to help collection or to counter tax fraud and evasion.

Economic Growth

Economic growth is defined as a sustained annual increase in an economy’s real national income over a long period of time. Uzoka and Chiedu (2018) opined that economic growth is the annual increase in real per capital income of a country over the long period. Thus Professor Arthur Lewis says that “economic growth means the growth of output per head of population. Economic growth refers to increase in a country production or income per capita which is usually measured by GNP of goods and services. Economic growth involve a stress on quantitative measure that is, higher GNP, income per capita, higher production in the societies.

Gross Domestic Product (GDP) is one of the primary indicators used to phase the health of an economy. It represents the total naira value of goods and services produced overall specific time period. Measuring Gross Domestic Product (GDP) can be done using three methods which are Income Approach, Expenditure Approach and Value Added Approach. But Income and Expenditure Approach are regarded as the major methods.

Onakoya and Afintinni (2016) added that the income approach to Gross Domestic Product (GDP) is gotten by adding up total compensation to employees, gross taxes less any subsidies. The expenditure approach is the more common approach and is calculated by adding the total consumption; investment, government spending and net export.
The top economic goal of Nigeria is the sustainability of its economic growth in terms of Gross Domestic Product (GDP), which is the total amount of goods and services produced in a nation, usually within one year (Chibu and Njoku, 2015). This top economic goal of most nations is constant, never ending rise in total Gross Domestic Product (GDP) of varying percent per annum that should be the Nigeria’s economic growth target.

**Effect of Tax Revenue on Economic Growth**

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 (Nwezeaku, 2012). Asterious and Hall (2010) stated that tax are imposed to regulate the production of certain goods and services, protection of infant industries, control business and curb inflation, reduce income inequalities etc.

Tax plays a vital role in economic development of a country which includes: resource mobilization, reduction in inequalities of income, improvement in social welfare, foreign exchange, regional development, inflation control, etc (Arisoy&Unlukaplan, 2010). According to the classical economists, the only objective of taxation was to raise government revenue (Dahlby, 2003), but with the progression of knowledge and ideologies, the aim of taxes has also evolved. Aside the fundamental role of public revenue generation by tax, it affects income level of a consumer, consumption level and pattern, production and distribution pattern. Hence, the change in paradigm implies that tax can serve as a tool in allocating available resources, raising government revenue, encouraging savings and investment, accelerating economic growth, price stability, and control mechanism (Emran & Stiglitz, 2005).

**Empirical Review**

Omoh (2022) analyzed the revenue generating capacity of the nine oil producing states. He disposed that the nine states generated internally of total of N97,293bn. He employed simple comparative and descriptive analysis for the study. He posits that the internally generated revenue when compared to the N886.57bn they collected from the federation account was just 10.97 percent of federation allocation to the nine states. He further disclosed that Rivers State generated the highest revenue of N33,217bn during the period which is about 22.78 percent of the net allocation to states from the federation account in the last five years.

In their study of the relationship between company income tax and Nigerian economic development, Festu and Samuel (2021) reported that in Nigeria, the role of tax revenue in promoting economic activities and growth is not felt primarily because of its poor administration, perception and often an undesirable imposition which bears no relation to the responsibilities of citizenship or the service provided by the government. Their study further revealed that an efficient and effective tax administration results in increased revenue yield, but this is not possible because of the presence of evasion and avoidance due to loop holes in the tax laws. On the other hand, people expect that by sacrificing their private resources to the state in the form of taxes, government is expected to reciprocate by spending public revenue in a way that will enhance their welfare. However, government and tax collectors have been dubiously mismanaging the public treasury. There is high level of manipulation and diversion of tax revenue by the collectors. The dwindling tax revenue as presently witnessed results from lack of encouragement to the taxpayer, due to the fact that there is very little evidence to show for taxes collected. For these reasons, there are increased cases of tax evasion. Therefore, this gap in existing literature on tax revenue and economic growth needs to be filled.

Tosun and Abizadeh (2021) in their study of economic growth of tax changes in OECD countries reveal that economic growth measured by GDP per capita has a significant effect on the tax mix of the OECD countries. The analysis reveals that different taxes respond to the growth of the GDP per capita. It is
shown that while the shares of personal and property taxes have responded positively to economic growth, shares of the payroll and goods and services taxes have shown a relative decline.

Okafor (2021) investigated the impact of income tax revenue on the economic growth of Nigeria as proxied by the gross domestic product (GDP). The study adopted the ordinary least square (OLS) regression analysis technique to explore the relationship between the GDP (the dependent variable) and a set of federal government income tax revenue heads. The regression result indicated a very positive and significant relationship between the components of tax revenue and the growth of the Nigeria economy.

Ewa, Adesola and Etim (2020) carried out a study to determine the impact of taxation proceeds on the development of Nigerian economy. The study explored the impact of three tax income streams – Income tax from companies’ profits, income tax from petroleum companies profits and Value Added Tax on economic development represented by Gross Domestic Product (at current basic prices) growth. The study applied Ordinary Least Square statistical tool with the help of SPSS 20.0. The study revealed a positive relationship with a coefficient of determination of 99.2% of the variation in economic development attributable to the tax income streams studied. Also although the study revealed the existence of significant effect of taxes from companies’ profits and Value Added Tax on Gross Domestic Product Growth, there is little or no significant impact of taxes on profits of Petroleum companies on Gross Domestic Product growth in Nigeria due to restriction by Organization of Petroleum Exporting Countries production ceiling on Nigeria’s production/sales and the global price shocks of crude oil over the decade. Also the study revealed tax payers apathy to tax payment and presence of tax leakages due to corruption and administrative inefficiencies by the tax authorities.

Aliyu, and Mustapha (2020) carried out a study on “Impact of tax revenue on economic growth in Nigeria. It employed time series data obtained from the CBN statistical bulletins, FIRS annual publications and National Bureau of Statistics (NBS) portal. To achieve the objectives of the study, OLS and ARDL techniques were employed to estimate the relationships and the dynamics and long- run effects of independent variables on dependent variable. ARDL bound test revealed that the variables are co-integrated while ARDL long-run estimation indicated that petroleum profit, value added tax and government domestic debt are significant and positively related to GDP. In addition, company income tax and customs and excise duties came out significant but have negative impact on economic growth. Accordingly, the research recommends that, the government should intensify efforts towards increasing the collection of tax revenue, as low contribution of tax revenue to GDP was discovered over the period of the study. This can be done through blocking all loopholes in our tax laws as well as bringing more prospective tax payers into the tax net especially the informal sector.

Uzoka and Chiedu (2018) studied the effect of revenues from taxation on the growth of the economic in Nigeria between 1997 -2016. The unit root test result revealed incomes from company tax, customs and excise duty and gains from sale of capital assets are stationary at level. While Real Gross Domestic Product (RGDP), Petroleum Profit Tax (PPT), Value Added Tax (VAT) and RDT are stationary at first order, that is after first difference. The co-integration tests showed that a long run relationship existed between the economic growth and RGDP, PPT, VAT and RDT CIT, CED. The results obtained from the analysis of the model revealed CGT and EDT have no major effect on economic growth but there is a significant effect from PPT, CIT, VAT and CED on the growth of Nigeria economic. The study recommended to boost the growth of Nigeria economic, the administration need to ensure the tax revenue generated are channeled towards building capital stock that can create more jobs which will produce more income to government through other forms of taxes. Although there was a significant connection between revenue from non-oil sector and Nigeria economic growth, there is no similar connection between income from company taxation and Nigeria economic growth. The study suggested the administration to endeavor providing welfare services and amenities across the country. Also government should intensify efforts to complete the overhaul of the tax system so as ameliorate the incidence of tax evasion and avoidance. Also in order to expand government tax base, efforts should be made in creating
conducive environment for private enterprises, creativity and employment generation as well as encourage made-in-Nigeria goods using tax proceeds.

Okwara and Amori, (2017) examined the effect of revenue from taxation on growth of Nigerian economic. Gross Domestic Product (GDP) was used as a variable representing economic growth while Value Added Tax (VAT) and non-oil income (tax) was used to measure tax revenue. The result showed non-oil income having substantial effect on gross domestic product but value added tax having adverse association and statistically insignificant for the review period. Therefore, it was concluded that revenue from taxation have positive effect on economic growth of Nigeria and thus recommended for the nation to broaden its revenue sources out of crude oil to other sectors of the economy such as agriculture and extractive industries.

Ojong et al (2016) in their study on the impact of tax revenue on economic growth: Evidence from Nigeria, considered as independent variables, PPT, None Oil Revenue (NOR) and CIT while GDP as the dependent variable. The result of the study reported a significant and very positive relationship between the independent variables under study and economic growth. Also, while PPT and CIT had positive impact on the economic performance, an increase in NOR does not lead to arise or improvement in economic growth as earlier postulated. However, the study revealed that the most major challenge as regards tax leakages is the dearth of transparency and good governance by officials which significantly discourages the citizenry from conforming willingly to their tax responsibilities.

Theoretical Framework

Benefit Principle Theory

The theoretical framework of this study is based on the benefit principle theory developed by Knut Wicksell (1896) and Erik Lindahl (1919), two economists of the Stockholm School. According to this theory, the state should levy taxes on individuals according to the benefit conferred on them. The more benefits a person derives from the activities of the state, the more he should pay to the government. This principle has been subjected to severe criticism on the following grounds:

1. The assumption that the tax should be paid by an individual in proportion to benefits conferred by the State on that individual, is quite unrealistic because the benefits derived cannot be correctly measured in terms of money. Benefit is purely a subjective matter and there is no scientific way to measure the magnitude of benefit and its money value.

2. If benefits accrued to an individual are the basis of taxation, the poor must pay higher taxes because in a welfare State the poor get more benefits than the rich from the expenditure of the Government. This is clearly unjust and as such an unacceptable proposition.

3. It is also very difficult to determine under this theory what proportion of the general benefits accrues to particular individuals. Government is for civilized existence and there is, therefore, no basis for valuing the services which the State renders.

4. Most of the services provided by the State are indivisible and beneficiaries are unidentified. For example, it is not possible to divide the benefits of national defense, etc.

5. Certain benefits accrue only to definite persons and in definite proportion. If this principle is followed, the whole of the benefit, they should return to the State as taxes. For example; pension paid to retired servants, definite and clear enough and therefore, they should offer the whole of their pension as taxes.
6. The equitable distribution of wealth, the main objective of most of the modern Governments, will be defeated if this principle is followed.

The above description makes it amply clear that the benefit principle cannot ensure justice in the distribution of burden of taxes among different sections of the society.

The relevance of the theory to the study cannot be overemphasized. People pay tax when they feel the impact of the ones paid in form of quality public goods and services. It is necessary for the government to provide efficient use of the taxes generated to give a sense of accountability, responsibility and then motivate people to pay taxes. This in turn will enhance tax revenues and gross domestic product will increase.

3. Methodology

The researcher adopted ex-post facto research design. This study made use of secondary data obtained from the Central Bank of Nigeria Statistical Bulletins for the relevant years between 1990 and 2020. Historical data covering a period of 1990-2020 were analysed using regression method. The following model was used to evaluate the study:

\[ \text{GDP} = F (\text{PPT}, \text{CIT}, \text{VAT}) \]  \hspace{1cm} (1)

Where:

GDP = Gross Domestic Product (it is used as a proxy for economic growth)

PPT = Petroleum Profit Tax

CIT = Company Income Tax

VAT = Value Added Tax (it is used as a proxy for tax revenue)

In a linear regression form, it will become:

\[ \text{RGDP} = \beta_0 + \beta_1 \text{PPT} + \beta_2 \text{CIT} + \beta_3 \text{VAT} + \mu \]  \hspace{1cm} (2)

Where

\( \beta_0 \) = Constant Term

\( \beta_1 \) = Coefficient of Petroleum Profit Tax

\( \beta_2 \) = Coefficient of Company Income Tax

\( \beta_3 \) = Coefficient of Value Added Tax

\( \mu \) = Error Term
RESULTS

Test of Normality

Table 1: Descriptive Analysis

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<tr>
<th></th>
<th>LPPT</th>
<th>LCIT</th>
<th>LVAT</th>
<th>LGDP</th>
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<td>12.67676</td>
<td>12.50853</td>
<td>16.85431</td>
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<tr>
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<td>12.73753</td>
<td>12.47069</td>
<td>17.00346</td>
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<td>17.28156</td>
<td>13.65005</td>
<td>12.99066</td>
<td>17.50727</td>
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<tr>
<td>Minimum</td>
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<td>11.63514</td>
<td>12.08785</td>
<td>15.61750</td>
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</tbody>
</table>

Observations 30 30 30 30

Source: Author’s Computation with E-views Software Version 9 (2024)

The study conducted the descriptive statistics of the relevant variables involved. Table 1 illustrates vividly these statistics. It shows the total number of observations, mean, median, maximum, minimum, standard deviation, skewness, kurtosis and Jarque-Bera. The dependent variable which is gross domestic product shows the minimum 15.61750 which was observed in 2000 and shows the maximum of 17.50727 which was observed in 2016. The mean value of the dependent variable is 16.85431 and the standard deviation is 0.588514. This implies that there was high fluctuation in gross domestic product for the years. It can be observed from the Table that all the variables have positive average values (means). The minimal deviation of the variables from their means as shown by the standard deviation gives indication of growth rate (fluctuation) of these variables over the period. It can be observed also that company income tax and gross domestic product show signs of negative skewness while petroleum profit tax and custom and excise duties show signs of positive skewness.

Unit Root Test

This test tries to examine the property of the variables. It is used to check for the presence of a unit root i.e. whether the variables are stationary. It is also used to ascertain the regression technique to adopt for analysis and testing of hypotheses. This test is carried out using the Augmented Dickey Fuller (ADF) test. The ADF is carried out using E-views software package and the results from the test are tabulated below:

<table>
<thead>
<tr>
<th></th>
<th>ADF</th>
<th>cv@5%</th>
<th>Probability</th>
<th>Inference</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPPT</td>
<td>-2.538871</td>
<td>-1.995865</td>
<td>0.0186</td>
<td>I(1)</td>
</tr>
<tr>
<td>LCIT</td>
<td>-3.164169</td>
<td>-3.017328</td>
<td>0.0351</td>
<td>I(0)</td>
</tr>
<tr>
<td>LVAT</td>
<td>-2.885408</td>
<td>-1.995865</td>
<td>0.0100</td>
<td>I(1)</td>
</tr>
<tr>
<td>LGDP</td>
<td>-3.124923</td>
<td>-1.995865</td>
<td>0.0065</td>
<td>I(0)</td>
</tr>
</tbody>
</table>

Source: Eviews 9.0 Computation by Author

The a priori expectation when using the ADF test is that a variable is stationary when the value of the ADF test statistic is more negative than the critical value at 5%. Log of petroleum profit tax, log of custom and excise duties and log of gross domestic product are stationary at first difference (I(1) while log of company income tax is stationary at level I(0).
Tests for Autocorrelation

Auto correlation often occurs in time series data and it can make an OLS inefficient for drawing inferences. For instance, positive autocorrelation makes the standard error biased and too small while negative autocorrelation makes the standard error too large.

Table 3  Test for Autocorrelation

<table>
<thead>
<tr>
<th>Breusch – Godfrey Serial Correlation LM Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>F- statistics</td>
</tr>
<tr>
<td>Probability Values</td>
</tr>
</tbody>
</table>

Source: Author’s Compilation from E-views 9 (2024)

Decision Rule:

Accept that there is no autocorrelation when the probability value is greater than 5% otherwise accept that there is auto correlation.

The null hypothesis for autocorrelation says that there is no autocorrelation.

For the fact that the probability value is greater than 5%, it is therefore concluded that there is no auto correlation.

Regression Analysis

Auto Regressive Distributed Lag Model Table Analysis

The Auto Regressive Distributed Lag Model (ARDL) was adopted for analysis and test of hypotheses based on the premise that the unit root test was a combination of I(0) and I(1).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGDP(-1)</td>
<td>0.530298</td>
<td>0.206820</td>
<td>2.564058</td>
<td>0.0829</td>
</tr>
<tr>
<td>LPPT</td>
<td>0.047262</td>
<td>0.045217</td>
<td>3.045229</td>
<td>0.0327</td>
</tr>
<tr>
<td>LCIT</td>
<td>0.291310</td>
<td>0.276788</td>
<td>2.752467</td>
<td>0.0169</td>
</tr>
<tr>
<td>LCIT(-1)</td>
<td>0.535851</td>
<td>0.244526</td>
<td>2.191385</td>
<td>0.1161</td>
</tr>
<tr>
<td>LVAT</td>
<td>0.377467</td>
<td>0.336987</td>
<td>1.120125</td>
<td>0.0342</td>
</tr>
<tr>
<td>C</td>
<td>9.109371</td>
<td>3.093538</td>
<td>2.944645</td>
<td>0.0603</td>
</tr>
</tbody>
</table>

R-squared     | 0.986952    | Mean dependent var | 16.99174
Adjust R-squared | 0.965206    | S.D. dependent var | 0.420932
S.E. of regression | 0.078517    | Akaike info criterion | -2.016274
Sum squared resid | 0.018495    | Schwarz criterion | -1.884791
Log likelihood   | 15.07323    | Hannan-Quinn criter. | -2.300014
F-statistic          | 45.38468    | Durbin-Watson stat | 3.621337
Prob(F-statistic)    | 0.005001    |                      |

*Note: p-values and any subsequent tests do not account for model selection
Source: Author’s E-View 9.0 Output, 2024

From the above regression analysis, the R² is 0.986952 which is about 99%. The R² is used to explain the goodness of fit. Therefore, since it is about 99%, it implies that about 99% change in GDP is explained by the independent variables and the higher the R² the better fit the independent variables. Since the F – statistics is 45.38468 which is greater than 2.5 and the probability value is 0.005001 is <0.05. This shows that the model is significant and has a high goodness of fit.
Test of Hypotheses

The test of hypothesis was carried out as follows:

Step 1: Re-statement of the hypothesis in the null and alternate forms

Step 2: Statement of decision criteria

Step 3: Presentation of test result

Step 4: Decision

Test of Hypothesis one

Step 1: Restatement of the hypothesis.

Petroleum profit tax does not have significant effect on the gross domestic product of Nigeria.

Step 2: Statement of Decision Criteria

Reject $H_0$ if the probability of the t-statistics is <0.05.

Table 8: Regression results for hypothesis one

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
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R-squared 0.986952  Mean dependent var 16.99174
Adjusted R-squared 0.965206  S.D. dependent var 0.420932
S.E. of regression 0.078517  Akaike info criterion -2.016274
Sum squared resid 0.018495  Schwarz criterion -1.884791
Log likelihood 15.07323  Hannan-Quinn criter. -2.300014
F-statistic 45.38468  Durbin-Watson stat 3.621337
Prob(F-statistic) 0.005001

Source: Author’s E-View 9.0 Output, 2022

Step 4: Decision

Given the decision criteria to reject $H_0$ if the probability value is < 0.05. Table 8 shows a probability of 0.0327<0.05. We accept the alternative hypothesis (H1) and conclude that petroleum profit tax has significant effect on the gross domestic product of Nigeria.

Test of Hypothesis Two

Step 1: Restatement of the hypothesis.

Company income tax does not have significant effect on the gross domestic product of Nigeria.
Step 2: Statement of Decision Criteria

Reject $H_0$ if the probability of the $t$-statistics is <0.05.

Step 3: Presentation of Test Result

Table 9: Regression results for hypothesis two

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>$t$-Statistic</th>
<th>Prob.*</th>
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R-squared   | 0.986952    | Mean dependent var | 16.99174 |
Adjusted R-squared | 0.965206 | S.D. dependent var | 0.420932 |
S.E. of regression | 0.078517 | Akaike info criterion | -2.016274 |
Sum squared resid | 0.018495 | Schwarz criterion | -1.884791 |
Log likelihood | 15.07323 | Hannan-Quinn criter. | -2.300014 |
F-statistic | 45.38468 | Durbin-Watson stat | 3.621337 |
Prob(F-statistic) | 0.005001 |

Source: Author’s E-View 9.0 Output, (2022)

Step 4: Decision

Given the decision criteria to reject $H_0$ if the probability value is < 0.05. Table 9 shows the probability value of 0.0169<0.05. We reject the null hypothesis ($H_0$) and conclude that company income tax has significant effect on the gross domestic product of Nigeria.

Test of Hypothesis Three

Step 1: Restatement of the hypothesis.

Value Added Tax does not have significant effect on the gross domestic product of Nigeria.

Step 2: Statement of Decision Criteria

Reject $H_0$ if the probability of the $t$-statistics is <0.05.

Table 10: Regression results for hypothesis three

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>$t$-Statistic</th>
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</tbody>
</table>

R-squared   | 0.986952    | Mean dependent var | 16.99174 |
Adjusted R-squared | 0.965206 | S.D. dependent var | 0.420932 |
S.E. of regression | 0.078517 | Akaike info criterion | -2.016274 |
### Step 4: Decision

Given the decision criteria to reject $H_0$ if the probability value is $< 0.05$. Table 10 shows that a probability value of $0.0342 < 0.05$. We reject the null hypothesis ($H_0$) and conclude that Value Added Tax have significant effect on the gross domestic product of Nigeria.

### 4. Discussion of Findings

#### Effect of Petroleum Profit Tax on the Real Gross Domestic Product of Nigeria

It is also discovered that petroleum profit tax has significant effect on the gross domestic product of Nigeria due to the fact that probability value being $0.0327$ was less than $0.05$. The importance of taxation on petroleum profits cannot be overemphasized as tax revenue derived from tax in petroleum profits contributes, largely, to the total tax revenue available to the Nigerian government. Aboyade, (2010) stated that Petroleum Profit Tax is a major source of revenue for the Federal Government of Nigeria to meet its statutory obligations of ensuring the economic development of Nigeria. It assists the government to achieve the country’s macroeconomic objective in the areas of fiscal and monetary policies.

#### Impact of Company Income Tax on the Real Gross Domestic Product of Nigeria

It is also discovered that company income tax has significant effect on the gross domestic product of Nigeria as its probability value been $0.0169$ was less than $0.05$. The tax contributes significantly to the revenue profile of the country. In 2016 alone for instance, the revenue from Companies Income Tax was N1.877 trillion representing approximately $40\%$ of the total tax revenue of N4.957 trillion for the year (Chibu and Njoku, 2019). They further showed that there is a significant relationship between company income tax and Nigerian economic development and that tax evasion and avoidance are the major hindrances to revenue generation.

#### Impact of Value Added Tax on the Real Gross Domestic Product of Nigeria

Value Added Tax have significant effect on the gross domestic product of Nigeria because its probability value been $0.0342$ is less than $0.05$. VAT essentially compensates for the shared service and infrastructure provided in a certain locality by a state and funded by its taxpayers that were used in the provision of that product or service. In a similar finding, Owolabi and Okwu (2011) evaluated the contribution of VAT to the development of Lagos State economy. Development aspects considered included infrastructural development, environmental management, education sector development, youth and social development, agricultural sector development, health sector development and transportation sector development. Adereti, Sanni and Adesina (2011) studied value added tax and economic growth in Nigeria and the result showed that VAT revenue contributed positively to the development of the respective sectors. Findings showed that the ratio of VAT Revenue to GDP averaged $1.3\%$ compared to $4.5\%$ in Indonesia, though VAT Revenue accounts for as much as $95\%$ significant variations in GDP in Nigeria. A positive and significant correlation exists between VAT Revenue and GDP. Both economic variables fluctuated greatly over the period though VAT Revenue was more stable. No causality exists between the GDP and VAT Revenue, but a lag period of two years exists.
4.1 Conclusion

From the findings of this study, it is concluded that petroleum profits, company income tax and value added tax had significant positive relationships with Gross Domestic Product and still have a long run relationship among them for the period covered in the study. It was also concluded that about 99% changes in the dependent variable are explained by the independent variable. This implies that the goodness of fit measured by the $R^2$ is about 99%. Tax revenue is a veritable source of government revenue. The whole essence of tax revenue is to generate revenue to advance the welfare of the people of a nation with focus on promoting economic growth and development of a country through the provision of basic amenities for improved public services via proper administrative system, and structures.

4.2 Recommendations

The following recommendations are made for this study:

1. Given the dwindling revenue from petroleum related sources, the government should embark on the strategic pursuit of broadening the economy to enhance economic growth and development.

2. Government agencies should effectively devise procedures for the collection of company income tax as it contributes to economic growth as reported in the findings.

3. Government agencies should as well ensure timely payment of value added tax as it also contributed positively to economic growth as reported in the findings of the study.

References


