NON-OIL TAX REVENUE AND ECONOMIC GROWTH OF NIGERIA

Daniya Adeiza Abdulazeez
Department of Entrepreneurship and Business Studies, Federal University of Technology, Minna-Nigeria
GSM: +2348039733123   e-mail:daniyad3rd@yahoo.com
(Corresponding Author)

Prof. Kabiru Isa Dandago
Department of Accounting, Bayero University, Kano-Nigeria
GSM: +2348023360386   e-mail:kidandago@gmail.com

Being a paper for presentation at the 1st Annual International Academic Conference on Taxation, organized by the Chartered Institute of Taxation of Nigeria (CITN), in collaboration with Nassarawa State University, Keffi, Nigeria: August 13-16, 2018

Abstract

This study examines the impact of non-oil tax revenue on the economic growth of Nigeria for a period of twenty four (24) years (1994-2017) using GDP as a measure of economic growth while Companies Income Tax (CIT), Value Added Tax (VAT) and Customs and Excise Duties (C&ED) are used as proxies for non oil tax revenue. Time series data were quantitatively retrieved from the reports Federal Inland Revenue Service, Nigeria Customs Service and Central Bank of Nigeria Statistical bulletin. The study uses descriptive statistics, correlation and Arch model time series regression to analyze the data having also carried out some robustness tests such as: VIF test for multicollinearity, Breusch-Pegan test for heteroskedasticity, Shapiro-Wilk test for normality, Dickey fuller test for unit root and breusch-Godferey LM test for autocorrelation. The result of the Autoregressive Conditional Heteroskedasticity (ARCH) model revealed that CIT and VAT have significant positive impact on the economic growth of Nigeria, while C&ED has insignificant positive impact on economic growth. This shows that both CIT and VAT contribute significantly to the growth of Nigeria economy. Consequent upon the findings of this study, it was recommended among others, that Government should continuously mount pressure on FIRS for more robust CIT and VAT revenue through: the extension of VAIDs for five (5) years with a commensurate penalty for non compliance, routine tax audit particularly on companies and sustain the e-platform for registration and remittances to capture more persons and organizations into the tax net.

1.0 Introduction

All over the world, government strive to provide enabling environment (security, electricity, water, education, health and other infrastructures) for businesses to thrive and to ensure total happiness of its citizens. Tejvan (2015) posited that, for any government to discharge its civic responsibilities, a stable revenue flow is required and that taxation provides a stable source of revenue for defraying government expenditure. Also, a carefully planned tax system is required to ensure stable flow of tax revenue.

Most developed countries like United Kingdom, America, Canada, Germany and the likes that are not richly endowed in terms of natural resources were able to reach heights owing to their continuous efforts to perfectly organize their tax system (James & Moses, 2012). However, the situation is not same in African countries particularly Nigeria that is blessed with abundant natural resources as it has not been able to utilize the resources at its disposal to develop other sectors of the economy (Cornelius, Ogar & Oka, 2016). This position was further alluded to by Grace, David and Oliver (2016) and Folajimi, Olajumoke and Jerry (2016) who argued that Nigeria has not been able to develop other sectors of the economy with the huge revenue from oil. Overconcentration and dependence on oil revenue made Nigeria a mono-product economy.

The adverse effect of running a mono-product economy was felt by Nigeria when there was a crash in the world oil price which threw the economy into recession following two consecutive negative growths

in the nation's Gross Domestic Product (GDP) in the first two quarters of 2016 (Anakoya & Afintinni, 2016).

Consequent upon the crash in oil price, the need to diversify the economy of Nigeria became intensified and occupied the fore-front of national discuss among academics and practitioners with a particular attention on non oil tax revenues such as: Companies Income Tax (CIT), Custom and Excise Duties, Value Added Tax (Okafor, 2012). A well organized tax system, that is, from assessment, collection, remittances to utilization is said to have remarkable effect on the health of nation's economy (David & Anyiwe, 2013).

The need for diversification of revenue base of the Nigeria into other sectors of the economy particularly taxation was also extensively advocated by the Nigeria National Tax Policy (2017) with specific focus on indirect taxes which are easier to collect and administer and more difficult to evade. With respect to direct taxation, the Policy also seeks gradual convergence of direct taxes (personal income tax and capital gain tax rates with corporate income tax rates) to reduce opportunities for tax avoidance and build a tax system that will support sustainable growth and development at all times.

Economic growth is an increase in the total value of goods and services produced in a country within one year while economic development is use of the increase in GDP to improve citizens' welfare. The size of a nation's Gross Domestic Product (GDP) depends on the productivity of it resources (David & Anyiwe, 2013).

There are appreciable number of studies in Nigeria that examined the relationship between tax revenue (including oil tax revenue) and economic growth. Studies in this category include: (Okafor, 2012; Fariba & Hojat, 2012; Oyewo, 2013; Thomas, 2013; Mathew, 2014; Adegbite, 2015 and Anokoya & Afintinni, 2016). However, at the instance of the country striving to look beyond oil, researchers are also making efforts to examine the effects of non-oil tax revenue on the economic growth of Nigeria but, a large number of those studies tend to concentrate on individual non-oil tax revenue especially, Value Added Tax. Studies in this group include: (Joyson, 2011; Ude & Agodi, 2012; Yakubu & Jibrin, 2013; Ezeji & Peter, 2014; Izedonmi & Jonathan, 2014; Lawrence, 2015 and Folajimi, et al., 2016).

There is limited number of studies that examined the combined effect of non oil tax revenue on economic growth of Nigeria. For instance, Lyndon and Paymaster (2016) examined the impact of companies Income Tax on economic growth of Nigeria, while Inyiama and Ubesis (2016) and Akhor, Atu and Ekundayo (2016) considered economic growth using both Value Added Tax (VAT) and Customs and Excise Duties as proxies for non oil tax revenue.

From the foregoing, there exists a literature gap with respect to the examination of more combined impact of non oil tax revenues such as Value Added Tax (VAT), Companies Income Tax (CIT) and Customs and Excise Duties (C&EDs) on economic growth of Nigeria as the studies of (Inyiama and Ubesie (2016) and Akhor, Atu and Ekundayo (2016) did not capture Companies Income Tax (CIT) in their models. It is therefore on the strength of this background that this study examined the effects of non-oil tax revenue on the economic growth of Nigeria using Value Added Tax (VAT), Companies Income Tax (CIT) and Customs and Excise Duties (C&EDs) for a period of twenty four (24) years, commencing from the effective year of Value Added Tax (1994) to 2017, since all other forms of taxes considered in this study were already in existence before the introduction of Value Added Tax (VAT).

Sequel to the above introduction, the main thrust of this study is to examine the impact of non oil tax revenue on the economic growth of Nigeria. However, other specific objectives are:

    i. To determine the impact of Value Added Tax (VAT) on the Economic Growth of Nigeria.

    ii. To evaluate the impact of Companies Income Tax (CIT) on the Economic Growth of Nigeria.

    iii.To assess the impact of Customs and Excise Duty (C&ED) on the Economic Growth of Nigeria.

The study also formulated the following null hypotheses to be tested by the study.

    i. Value Added Tax (VAT) has no significant impact on the Economic Growth of Nigeria.

    ii. There is no significant relationship between Companies Income Tax (CIT) and Economic Growth of Nigeria.

    iii. Customs and Excise Duty has no significant impact on the Economic Growth of Nigeria.

This paper is divided into five (5) parts. The first part generally introduced the subject matter of the study as above, next is the literature review followed by methodology. The forth segment presents and discusses results while the fifth segment concludes the study.

2.0 Literature Review

This section is in three segments: Conceptual, theoretical and empirical reviews respectively.

2.1 The Concept of Taxation

Taxation represents one of the fiscal measures put in place by the government to generate revenue to finance government expenditure (Akhor, Atu & Ekundayo, 2016). According to Cornelius, et at (2016) and Kwaji and Ishaya (2017) a tax is a compulsory non penal levy imposed by the government on the income, profit and gains of individuals and corporate organizations through government agencies and in compliance with the established laws. The imposition of tax by the government is meant to achieve

some specific objectives. Soyede and Kajola (2006) and Afuberor, Dennis and Okoye (2014) summarized those reasons into three specific reasons. These are: Revenue generation to finance government expenditure, Income/wealth distribution to bridge the gap between the rich and the poor and Price/Economic stability by using tax as instrument of fiscal policy.

In order to achieve tax objectives certain principles must be observed by the government when tax is to be imposed, reduced or increased. The essence of tax principles is to boost the ease of tax payment and collection as well as leaving little or no room for tax evasion (Samorin, 2011). According to Afuberoh et al. (2014), government must strive to ensure that tax is levied fairly and on citizens' ability and that those who are liable to pay tax should know how much to pay, who to pay to and when to pay tax. This implies that tax payers must be properly educated with respect to tax matters that affect them. Samorin, (2011) further added that, while government must strive to keep the cost of tax collection as low as possible, tax imposition must also not be counter-productive to individuals and corporate organizations.

In Nigeria, the methods of apportionment of tax jurisdiction for the purpose of payment and collection cut across the three tiers of government.

Izedonmi and Jonathan (2014) and Lyndon and Payment (2016) opined that for the purpose of giving proper jurisdiction for tax legislation and administration, Decree number 21 of 1998 tax law of the federation clearly specified a number of taxes, fees and levies available to all tiers of government. According to the decree, there are eight (8), eleven (11) and twenty (20) different taxes, levies and fees available to Federal, State and Local Governments respectively. However, since the focus of the study is on the federally collected non oil tax revenues, the study will highlight all federally collected tax revenues with detailed explanations of non oil taxes that of interest to this study.

Patrick, Anwese and Kenneth (2017) posited that the Federal Inland Revenue (FIRS) is responsible for the administration of federal tax matters and as such, collects and remits all taxes due to federal government. Taxes that are exclusively collected by Federal Inland Revenue Service (FIRS) are: Personal Income Tax of members of the Armed forces of the federal republic of Nigeria, the Nigeria Police, residents of the federal capital territory Abuja, Officials of external affairs. Also, Federal Inland Revenue Service (FIRS) is charged with responsibility of charging and collecting Companies Income Tax (CIT), Value Added Tax (VAT), Petroleum Profit Tax (PPT), Capital Gains Tax (CGT), Education Tax (ET) paid by companies in addition to payment of CIT and Stamp Duties (Kwaji & Ishaya, 2017). Customs and Excise Duties are also federally collected taxes charged and collected by the Nigeria Customs Service (Patrick, et al., 2017). Out of the identified federally collected taxes, this study has

carefully selected three (3) taxes termed 'Non-Oil Tax Revenue' which are also extensively reviewed in this study.

2.1.1 Non-Oil Tax Revenue

The non-oil tax revenues used in this study are: Value Added Tax (VAT), Companies Income Tax (CIT) and Customs and Excise Duties (C&ED). These non oil tax revenues are reviewed as follows.

i Value Added Tax

Lawrence (2015) defined Value Added Tax (VAT) as consumption and indirect tax, charged at 5% which was introduced in Nigeria via decree 102 of 1993 to replace sales tax and it became effective on the 1st January, 1994 which marked the extinction phase of Sales Tax. The primary objective of VAT is to boost government revenue base as well as to make funds available for development with a view to accelerating economic growth (Omeora, 2013). VAT is adjudged a major source of revenue to the government on grounds that; it is easy to collect, unselective, less burden and difficult to evade (John & Suleiman, 2014).

Yakubu and Jibrin (2013), Ezeji and Peter (2014) and Lawrence (2015) opined that, in order to ease collection, VAT is collected on behalf of the government by registered businesses and persons who collect and pay VAT to the Federal Inland Revenue Service (FIRS) and government leveraged on near to no cost and difficulty in VAT evasion to generate fund to grow the economy.

ii. Companies Income Tax

Every Company is registered to engage in business activities with a view to making profit. In order to operate effectively and efficiently, they make use of and enjoy essential facilities provided by the government (Adegbite, 2015). Also, government needs funds to put those facilities in place. It is therefore logical to say that a complementary relationship exists between the government and corporate organizations. From the foregoing, it is imperative for corporate organizations to support government financially through payment of certain percentage of their taxable profit as tax.

Companies Income Tax in Nigeria was introduced and regulated by Companies Income Tax Act (CITA) CAP.60. Law of Federal Republic of Nigeria, 1990 and it is charged at the Rate of 30% on taxable profit of all companies operating in Nigeria except those companies that are specifically exempted by the Act (Adegbite, 2015). The imposition of corporate tax is jurisdiction based particularly, companies that have registered offices in Nigeria with operating outfits in different countries (Adegbite, 2015). This position

often give rise to double taxation the burden of which is can mitigated via double taxation arrangement (George & Contos, n.d. and Akwe, 2014).

George and Contos (n.d.) and Mark, Keightley & Molly (2014) also argued that corporate tax stimulates economic growth especially for companies that enjoy tax credit or tax holiday where the amount which would have been paid as tax is plough back into the operation of the business, thereby leading to increase in output, employment, purchasing power and GDP.

iii. Customs and Excise Duties

Customs and excise duties are forms of indirect tax levied on goods and services crossing a nation's border and those produced locally (Akhor, Atu & Ekundayo 2016). Customs duties was introduced in 1860 as import duties is adjudged one of the oldest forms of modern taxation (Ekeocha, Ekeocha, Malaolu & Oduh, 2012). Policies upon which customs and excise duties were imposed, are often tailored toward growing the economy. This is often achieved by levying more duties on some specific imported items to discourage its import, while levying very low duties on goods and services which are required to grow the economy. In furtherance to this position, Akhor, Atu and Ekundayo (2016) also reported that customs and excise duties are good instruments for; protecting domestic companies from unhealthy competition abroad, regulating business activities and checking inflation.

Efforts Aimed at Improving Non-Oil Tax Revenue in Nigeria

Generally, tax reforms and policies aimed at improving the revenue base of any nation have been a continuous event. Chinwendu and Nneka (2016) opined that the essence of tax reforms is to keep responding to the dynamics of tax environment and that every tax reform focuses on: encouraging compliance via enlightenment, incentive for self assessment, minimizing compliance cost via e-filling system and improving the technical competencies of the tax authorities via acquisition of requisite skills to understand complex tax structure. This will boost tax officials' confidence to take on best private sector tax experts on tax disputes (Chinwendu & Nneka, 2016).

In a bid to boost tax revenue base of Nigeria without oil, both the Federal Inland Revenue Service (FIRS) and Nigeria Customs Service (NCS) have recently carried out fundamental reforms. Abdulwahab (2018) highlighted some of the reforms to include:

Tax Identification Number (TIN). This is a nation-wide tax policy aimed at electronically registering all taxpayers in Nigeria. This is to make the identity of every taxpayer known at the click of few keys and

to assess payment compliance. This exercise helped to capture additional 814,000 taxpayers into the tax net in 2016.

The next phase of the reform was the introduction of tax amnesty programme. This was put in place to promote voluntary compliance and reduce tax burden on taxpayers by granting waiver of penalty and interest for three (3) years (2013-2015) to all defaulting taxpayers. The essence of the amnesty is to enable taxpayers to voluntarily declare their indebtedness and pay at least 25% of the outstanding amount and present a payment plan for settling the balance.

Voluntary Assets and Income Declaration Scheme (VAIDS). Also, and as part of the effort to widen the coast of tax income, the FIRS launched VAIDS on June 2017 to encourage disclosure of all assets and income for the purpose of paying all outstanding tax liabilities. The scheme is targeted at expanding Nigeria's tax base and to improve the current low tax rate to Gross Domestic Product (GDP).

The Nigeria Customs Service has also stepped up its revenue drive by drastically shifting from the previous indiscriminate and unaccountable sale of contraband items to e-auction and transparent platform where remittances of proceeds as well as duties collected are moved immediately into the federation account.

Finally, to keep the non oil sector revenue momentum, government must be faithful, accountable and live up to expectation in utilizing taxpayers' money to improve the welfare of all Nigerian residence.

2.1.3 Economic Growth and Economic Development

According to Arnold (2011), Economic Growth denotes an increase and rise in the total value of goods and services produced by a country over a period usually a year. The growth rate of a country is measured by the size of her Gross Domestic Product (GDP). Akwe (2014) further added that it takes creative and productive nation to grow her GDP by ensuring that all productive activities are fully harnessed including taxation. Also economic development is the use of increase in GDP to improve the welfare of citizens via the provision of basic social service such as health services, education, water supply and other infrastructures (Out, & Theophilus, 2011). Since taxation is a proportion of income, profit and gains from productive and legitimate activities paid to the government, which consequently form part of the total value earned by a country for a given year which can be used to better the life of citizens, a relationship is said to exist between taxation and economic growth and development.

2.2 Theoretical Framework

Theories which explain the subject matter of the study are reviewed as follows.

2.2.1 Ability to Pay Theory

Otu and Theophilus (2011) argued that one of the generally accepted theories of taxation is that which allows citizens to pay tax to the government based on tax payers' ability. Since the introduction of the theory in the 16th century, it has dominated several literatures with a view to explaining basis upon which good tax system should operate (Lawrence, 2015). According to Jones and Rhoades (2011) and Komal (2013), ability to pay theory of taxation is adjudged most reasonable and fair theory of taxation owing to the fact that it takes into account the disparities in income among various tax payers.

2.2.2 The Benefit Theory

The assumption of this theory is that individuals should be subjected to tax in proportion to the benefits derived from the use of tax revenue. Akwe (2014) further explained this to mean apportioning more tax burden on individuals who receive more benefit of the government social services. This implies that, while tax payers prepared to perform their civic responsibility of paying taxes, government must live up to expectation by providing adequate benefits to tax payers in order to motivate them to continue to pay tax.

2.2.3 Cost of Service Theory

The cost of service theory emphasizes on semi-commercial relationship between the government/state and the citizens/taxpayers where the actual cost of public goods and services provided by the government is levied as tax on citizens (Patrick, et al., 2017). Government therefore is said to run a balanced budget policy where tax is only levied to recover the cost of public goods provided by the government.

From the reviewed theories, the study aligns itself with both the ability to pay and benefit theories of taxation respectively in explaining the subject matter of this study. The choice of these two theories stems from the fact that tax must be capable of being collected and paid with ease in such a manner that the burden will not be too much on the tax payer. This will minimize tax evasion tendencies, hence, the choice of ability to pay theory. Also, taxpayers/government rift capable of disrupting the peaceful coexistence between government and citizens can be avoided if a mutual relationship in terms of payment and benefits exists between the taxpayers and the government.

2.3 Review of Empirical Studies

Studies which examined the effect of various non oil tax revenues on economic growth are reviewed as follows.

2.3.1 Value Added Tax (VAT) and Economic Growth

Omeora (2013) examined the effects of Value Added Tax (VAT) on Economic Growth (GDP) in Nigeria for a period of 17 years (1994-2010). Using SPSS to analyze the time series data, the result of the simple linear regression analysis revealed that Value Added Tax (VAT) has significant impact on Gross Domestic Product (GDP). Also, Onaolapo et al. (2013) examined the impact of value added tax on revenue generation in Nigeria. Using time series data, the result of the Stepwise regression revealed a statistically significant positive relationship between Value Added Tax Gross Domestic Product (GDP) of Nigeria. The above findings are in agreement with the finding of Apere and Durojaiye (2016) who investigated the relationship between Value Added Tax (VAT) and Gross Domestic Product (GDP) of Nigeria for a period of 21 years (1994-2014). Patrick, Terlumun and Johnson (2017) also established that Value Added Tax contributes significantly to the Nigerian Economy.

Conversely, Lawrence (2015) examined the impact of Value added Tax on the Economic Growth of Kenya using GDP as proxy for economic growth. Data for the study were retrieved from the annual reports of Kenya Revenue Authority (KRA) from 1990 to 2014. The result of the regression showed that Value Added Tax has insignificant relationship with economic growth of Kenya.

2.3.2 Companies Income Tax (CIT) and Economic Growth

Margaret, Charles and Gift (2014) examined the impact of indirect tax revenues on Economic Growth (GDP) of Nigeria from 1994 to 2012 using Companis Income Tax as proxy for Indirect tax. The study utilized secondary data generated from Central Bank of Nigeria statistical bulletin. Data analysis was carried out using descriptive statistics, correlation and Ordinary Least Square (OLS) regression which revealed a significant positive relationship between Companies Income Tax and Gross Domestic Product (GDP) of Nigeria.

Similarly, Adegbite (2015) empirically analyzes the impact of corporate income tax on the revenue profile and economic growth (GDP) of Nigeria using secondary data from 1994 to 2013. Multiple regressions analysis was employed to analyze the relationship between the variables. The finding of the study revealed that Companies Income Tax (CIT) has significant positive impact on the economic growth of Nigeria. These findings are in tandem with the finding of Lyndon and Paymaster (2016) who also found a significant relationship between CIT and GDP. There is no study within the confines of the knowledge of this study that found contradicting relationship between CIT and GDP.

2.3.3 Customs and Excise Duties (C&ED) and Economic Growth

Inyiama and Ubesie (2016) examined the effect of Value Added Tax on economic growth of Nigeria. The study employed secondary data while regression analysis was used in analyzing the data. The outcome of the study revealed a positive and significant relationship between Customs and Excise Duties and Gross Domestic Product or economic growth of Nigeria.

On the other hand, Cornelius et al. (2016) examined the impact of tax revenue on the Nigerian economy using Customs and Excise Duties as one of the proxies for tax revenue while Gross Domestic Product was used as proxy for economic growth. Time series secondary data were sourced from Central Bank Statistical Bulletin. Ordinary least square multiple regression analysis was used to establish the relationship between dependent and independent variables. The study found no significant relationship between Customs and Excise Duties (C&EDs) and the economic growth (GDP) of Nigeria. The study of Akhor, Atu and Ekundayo (2016) found a negative and significant relationship between Customs and Excise Duties and Economic Growth in their study on the impact of indirect tax revenues on Economic Growth (GDP) of Nigeria from 1993 to 2013. This implies that Customs and Excise Duties revenue for the period of the study has not contributed positively to the economic growth of the Nigeria.

All the studies reviewed under Value Added Tax concentrated on the examination of VAT and Economic growth. Also, studies reviewed under Company Income Tax have either used only company income tax alone or used it alongside other tax proxies including oil tax revenue and economic growth. However, Akhor et al (2016) and Inyiama and Ubesie, (2016) are the only studies based on the knowledge of this study that examined the combined effects of non oil tax revenue on the economic growth of Nigeria. Also, none of the two studies identified above used company income tax as one of the proxies for non-oil tax revenue, as both studies employed Value Added Tax and Customs and Excise Duties as proxies for non oil tax revenue. It is on the strength of this literature gap that this study included Company Income Tax (CIT) alongside Value Added Tax (VAT) and Customs and Excise Duties (C&EDs) in order to contribute to the existing literature.

3.0 Methodology

This section of the study discusses the research design, population and sample size of the study, sources and method of data collection as well as method of data analysis, model and variables specification and measurement.

3.1 Research Design

This study employed ex-post facto research design using time series data for a period of 24 years (1994-2017). Ex-post facto research design was employed because it allows the use of past records in

establishing the relationship between and among certain phenomena. Since this study utilized past revenue data to establish the relationship between non oil tax revenue and economic growth, ex-post facto research design befits the study.

3.2 Population and Sample Size

The population of the study consists of the two relevant revenue generating agencies (FIRS and Customs and Excise Duties) as well the custodians of economic growth data (Central Bank of Nigeria). All these three (3) government agencies were also used as the sample size of the study.

3.3 Sources and Methods of Data Collection

The study utilized secondary (time series) data which were quantitatively extracted from the reports of FIRS, NCS and CBN statistical bulletin covering a period of 24 years (1994-2017).

3.4 Variables Specification and Measurements

There are two basic variables for the study. These are: (i) Non oil tax revenue (Independent Variable) proxied by VAT, CIT and C&ED and (ii) Economic Growth variable (dependent variable) measured by Gross Domestic Product (GDP) for the periods under consideration.

i. Dependent Variables

The dependent variable for the study is Economic Growth proxied by Gross Domestic Products (GDP). For the purpose of this study, GDP was measured as the total yearly naira value of all goods and services produced in Nigeria for the period under study. This measurement was also used by Akhor et al (2016).

ii. Independent Variables

Independent variables used in this study are:

Value Added Tax (VAT)

The total yearly sum of 5% charged and collected on all goods and services consumed for the years of study was used to measure VAT. Inyiama and Ubesie (2016) employed same method in measuring VAT.

Companies Income Tax (CIT)

This was taken as yearly sum of 30% of corporate profit collected by the Federal Inland Revenue Service for all the periods under study. This measurement is in agreement with measurement used by (Adegbite, 2015)

Customs and Excise Duties (C&EDs)

All yearly sums charged and collected by the Nigeria Customs and remitted into the federation account covering the period of this study was taken as customs and excise duties. This aligns with the measurement used by (Akhor et al 2016).

Summary of all the variables as well as the measurements for each variable are shown in Table 3.1

Table 3.1 Showing variables and applicable measurements

Dependent Variable	Measurements
Economic Growth proxied as GDP	Total yearly value of all goods and services produced in Nigeria for the period under study.
Independent variables	
Value Added Tax (VAT)	The total yearly value of all 5% consumption tax for the period of coverage of this study.
Companies Income Tax (CIT)	The total yearly naira value of all 30% company tax for the period of coverage of the study.
Customs and Excise Duties (C&EDs)	The total yearly value of all customs and excise duties collected and remitted by the Nigeria customs service for the period of coverage of the study.

Source: Generated by the Authors for the study 2018

3.6 Method of Data Analysis

Descriptive statistics was used to summarize the data and describe the phenomenon associated with the variables, while correlation analysis was employed to establish the relationship between the variables. The study also, carried out robustness test such as: Multi-collinearity test through VIF test, Breusch-Pegan test for heteroskedasticity, Shapiro-Wilk test for normality, Dickey-Fuller test for unit root and Breusch-Godfrey LM test to check for serial correlation. Finally, Autoregressive Conditional Heteroskedasticity (ARCH) model was used to analyze the data owing to the presence of hetroskedasticity in the data. All the analyses were carried out using 'Stata' version 11.

3.7 Model Specification

The study adopted and modified the model of Inyiama and Ubasie (2016). The model is stated thus:

$$GDP_t = \beta_0 + \beta_1 VAT_t + \beta_2 CEXD_t + \mu$$

Where: GDP = Gross Domestic Product, VAT = Value Added Tax, CEXD = Customs and Excise Duties and μ = Error Term.

This is modified to capture Company Income Tax used in this study. The modified model which is also the model for this study is stated thus:

$GDP_t = \beta_0 + \beta_1 VAT_t + \beta_2 CIT_t + \beta_3 C\&EDs_t + \mu$

Where: GDP_t = Gross Domestic Product at time t, VAT_t=Value Added Tax at time t, CIT_t Companies Income Tax at time t and C&EDs = Customs and Excise Duties at time t and μ = Error Term.

4.1 Results and Discussion

The results of the descriptive statistics, correlation of the variables and the regression results are presented in tables: 4.1, 4.2 and 4.3 respectively.

4.2 Descriptive Statistics

The results of the summary statistics for the variables are shown in Table 4.1.

Table 4.1 Descriptive Statistics of the Variables

Variables	Mean	Std. Dev.	Minimum	Maximum
GDP	54.58274	9.061985	39.29	73.25098
CIT	25.96162	1.528353	23.23081	28.19377
VAT	16.72063	2.434733	12.76	23.29159
C&ED	21.11696	2.008883	17.92201	24.52419

Source: Generated from FIRS, NCS reports and CBN statistical bulletin through 'stata' (2018)

The mean value for Companies Income Tax (CIT) as shown in table 4.1 is 25.9 with a standard deviation of 1.5. This implies that, the average corporate tax collection by the Federal Inland Revenue Service is very high considering the maximum collection value of 28. Also, the yearly collection of Companies Income Tax slightly varies from one year to the other as shown by the standard deviation value of 1.5.

Value Added Tax (VAT) has a mean value of 16.7 and a standard deviation of 2.5. Considering the maximum collection value of 23, the Federal Inland Revenue Service (FIRS) has been able to keep VAT collection relatively above average and the collection changes moderately from one year to the other.

The result of the descriptive statistics shows a mean value of 21 and a standard deviation value of 1.9 with respect to Customs and Excise duties (C&ED). Giving the maximum collection of 24.5, it implies that the Nigeria Customs Service generated C&ED far above average during the years under study and the collection vary also from one year to the other.

4.3 Correlation Matrix

Table 4.2 presents the correlation coefficients of the Dependent Variable (GDP) and Independent Variables (CIT, VAT and C&ED).

Table 4.2 Correlation Matrix of Dependent and Independent Variables.

	GDP	CIT	VAT	C&ED
GDP	1.0000			

CIT	0.9698	1.0000	
VAT	0.8487	0.7733	1.0000
C&ED	0.4498	0.3403	0.4868	1.0000

Source: Generated from FIRS, NCS reports and CBN statistical bulletin through 'stata' (2018)

The diagonal correlation coefficients of 1.0000 show that each variable has a perfect positive linear relationship with itself. The correlation results revealed that each explanatory variable (CIT VAT C&ED) are positively correlated with the explained variable (GDP) which implies that a positive change in the explanatory variables will lead to an increase in the size of the GDP. The result also shows that the explanatory variables are not themselves highly correlated as none has a correlation coefficient of above 0.8 on the other. According to Gujarati and Porter, as cited in Ajoka, Iyoha and Obigbemi (2014), the threshold for the identification of multi-collinearity is a correlation coefficient of 0.8. However, both VAT and CIT are highly correlated with the GDP which implies that a change in the dependent variable (GDP) is significantly accounted for by the positive change in both VAT and CIT.

4.4 Robustness Tests

Various robustness tests conducted herein include: Multi-collinearity test through VIF test, Breusch-Pegan test for heteroskedasticity and Shapiro-Wilk test for normality.

Statistically, Multi-collinearity exists when two or more predictor variables are themselves highly correlated. Ajoka et al. (2014) posited that the Variable Inflation Factor (VIF) of above ten (10) suggests the presence of multi-collinearity. The result of the VIF test shows a mean VIF of 2.24 which is less than ten (10) which depicts absence of multi-collinearity (See Appendix III). Both the Dickey-Fuller and Breusch-Godferey tests respectively showed that the data are stationary and no presence of serial correlation respectively (See Appendix IV).

In order to ascertain whether the set of data used in this study comes from normal distribution, the study carried out Shapiro-Wilk test for normality. The Shapiro-Wilk test for normality holds that, where the p-value of the test is greater than 0.05, then the null hypothesis which states that 'the population or the data are normally distributed should be accepted (Ajoka, et al., 2014). The Shapiro-Wilk test for normality conducted in this study shows that the data are normally distributed as all the variables used have p-values greater than 5% (See Appendix V).

The result of the heteroskedsticity test revealed that there is presence of hetroskedasticity owing to the chi-square value of 0.0464 (See Appendix VI). This shows that there is an unequal variability in the

predictor variables. Consequent upon the outcome of the hetroskedasticity test, the study resulted to Autoregressive Conditional Heteroskedasticity (ARCH) model to analyze the data.

4.5 Regression Results

Sequel to the outcome of the robustness tests, the study presents Autoregressive Conditional Heteroskedasticity (ARCH) model results in table 4.3. The regression was carried out in sequence. First, each of the non-oil tax revenues was regressed against the dependent variable (GDP) and finally, all the independent variables were regressed against the dependent variable. This was done to provide justification for the previous studies that concentrated only on each of the non-oil tax revenue and to give effect to the combined impact of non-oil tax revenues on the GDP.

Table 4.3 Showing the Autoregressive Conditional Heteroskedasticity (ARCH) Model Results.

Var.	GDP	GDP	GDP	GDP
CIT	*5.789914* *(0.000)****			*4.669338* *(0.000)****
VAT		*3.141135* *(0.000)****		*0.7377415* *(0.002)****
C & ED			*2.543012* *(0.008)****	*0.3845294* *(0.147)*
R^2	0.9405	0.7263	0.2874	0.9701
P. Value	0.0084	0.0000	0.0000	0.000

Source: Generated from FIRS, NCS reports and CBN statistical bulletin through 'stata' (2018)
*** shows 1% significance

The Autoregressive Conditional Heteroskedasticity (ARCH) model result displayed in table 4.4 shows an R^2 of 0.9701 which show that the variation in the dependent variable (GDP) is explained by the explanatory variables (CIT, VAT and C&ED) to the tone of 97% and this is statistically significant at 1% as shown by the p-value of 0.0000. This shows the goodness of fit of the model for the study. Generally, all the independent variables show a significant positive relationship with the dependent variable when considered individually. However, only C&ED became insignificant though still positive, when all the variables were considered jointly.

The relationship between the explanatory and explained variables respectively together with their respective levels of significance as well as confirmation of hypotheses are explained under the following headings:

4.5.1 Value Added Tax (VAT) and Economic Growth of Nigeria

From the regression result value added tax has significant positive relationship with gross domestic product which suggests that every naira increase in VAT will lead to an increase in GDP by 74%. This finding is in agreement with the findings of (Omeora (2013), Apera and Durojaiye (2016) and Patrick et

al. (2017) but disagrees with the finding of Lawrence (2015) a study of which was carried out in Kenya. Owing to the finding of this study, the study rejects the null hypothesis which states that there is no significant relationship between VAT and Economic Growth of Nigeria.

4.5.2 Companies Income Tax (CIT) and Economic Growth of Nigeria

The regression result on table 4.3 reveals a significant positive relationship between companies income tax and gross domestic product. This implies that an increase in CIT revenue will increase the size of Nigeria's GDP and consequently lead to better economic growth. This finding is consistent with findings of (Margaret, et al., 2014; Adegbite, 2015 and Lyndon & Paymaster, 2016). Consequent upon this finding, the study rejects the null hypothesis which states that 'Companies income tax has no significant impact on the economic growth of Nigeria.

4.5.3 Customs and Excise Duties (C&ED) and Economic Growth of Nigeria

Customs and Excise Duties (C&ED) from the regression results shows an insignificant positive relationship with Gross Domestic Product (GDP). This suggests that C&ED contributes passively towards the growth of the Nigerian economy but the size of the contribution is statistically insignificant. This finding agrees with the finding of Cornelius et al (2016) but disagrees with the findings of Inyiama and Ubesie (2016) and Akhor et al (2016). To this end, the study accepts the null hypothesis which states that 'customs and excise duties has no significant impact on economic growth of Nigeria.

5.1 Conclusions and Recommendations

The study examined the impact of non-oil tax revenue on the economic growth of Nigeria for a period of twenty four (24) years (1994-2017) and has carefully reviewed relevant literature and deployed appropriate methodology to achieve the objective of the study. The results of the regression showed a possibility of getting different results when each of the non oil tax revenues is considered individually and collectively and this was the basis upon which this study was built. The study found a significant positive relationship between companies income tax, value added tax; and economic growth of Nigeria. An indication that Nigeria economy can be supported to a great extent via companies income tax and value added tax. The study likened the insignificant contribution of customs and excise duties to leakages, compromise on the part officers at the border, poor remittances and poor tax drive on the part of government.

Consequent upon the findings of this study, the following recommendations have been suggested.

    i.   Government should continuously mount pressure on FIRS for more robust company income tax and value added tax through the extension of VAIDS to five (5) years with a commensurate

penalty for non compliance, routine tax audit particularly on companies and sustain the e-platform for registration and remittances to capture more persons and organizations into the tax net.

ii. With respect to Customs and Excise Duties, government should strengthened patrol and surveillance system around Nigerian borders by officers of proven records of integrity, maintain fair tariff to dissuade smuggling activities, fish out the 'bad eggs' who use their positions for personal benefit and improve on the e-platform system recently developed by the Nigeria Customs Service.

References

Abdulwahab, T. (2018). Curbing Tax Evasion with Renewed Vigure. *International Journal of Taxation.*

Adeigbite, T. (2015). Analysis of the Effects of Corporate Income Tax (CIT) on Revenue Profile in Nigeria. *American Journal of Economics, Finance and Management* , pp.312-319.

Afuberoh, K., & Okoye, E. (2014). the Impact of Taxation on Revenue Generation in Nigeria. *International Journal of Public Administration and Management Research, Vol.2*, pp.22-47.

Akhor, S., Atu, E., & Ekundayo, O. (2016). Impact of Indirect Tax Revenue on Economic Growth: The Nigeria Experience. *Igbinidion University Journal of Accounting, Vol. 2*.

Ajoka, S., Iyoha, F. and Abigbemi, I. (2014). Effectiveness of audit committee and firm financial performance: An empirical analysis. *Journal of Accounting and Auditing Research and Practice*

Akintoye, I., & Tashie, G. (2013). The Effect of Tax Compliance on Economic Growth and Development in Nigeria, West Africa. *British Journal of Arts and Social Sciences*.

Akwe, J. (2014). Impact of Non-oil Tax Revenue on Economic Growth: The Nigerian Perspective . *International Journal of Finance and Accounting* , pp.300-307.

Anakoya, S., & Afintini, D. (2016). Taxation and Economic Growth in Nigeria. *Asian Journal of Economic Modeling*, pp.199-210.

Anaolapo, A., Aworem, R., & Ajala, O. (2013). Assessment of Value Added Tax and its Effects on Revenue Generation in Nigeria. *International Journal of Business and Social Science, Vol. 4*.

Apere, T., & Durojaiye, O. (2016). Impact of Value Added Tax on Government Revenue and Economic Growth in Nigeria. *International Journal of Management and Applied Sciences*.

Arnold, M. (2011). Tax Policy for Economic Recovery and Growth. *The Economic Journal.*

Chinwendu, E., & Nneka, O. (2016). Tax: From Line Item to Front Burner. *International Journal of Taxation, Vol.27*.

Cornelius, M., Ogar, A., & Oka, F. (2016). the Impact of Tax Revenue on Economic Growth: Evidence from Nigeria. *IOSR Journal of Economics and Finance, Vol. 7*, pp 32-38.

David, U., & Anyiwe, M. (2013). Tax Structure and Economic Growth in Nigeria: Disaggregated Empirical Evidence. *Research Journal of Finance and Accounting, Vol 4*.

Ekeocha, P., Ekeocha, C., Malaolu, V & Oduh, M. (2012). Revenue Implication of Nigeria's Tax System. *Journal of Economic and Sustainable Development, Vol.3 no.8*

Ezeji, E., & Peter, I. (2014). Econometrics Analysis of the Impact of Value Added Tax on Economic Growth of Nigeria. *European Journal of Business and Management*.

Folajimi, F., Olajumoke, J., & Jerry, K. (2016). Assessment of Value Added Tax on the Growth and Development of Nigeria Economy: Imparative for Reforms. *Research Journal of Finance and Accounting*.

Grace, N., David, O., & Oliver, O. (2016). Empirical Analysis of Effects of Tax Revenue on Economic Development of Nigeria. *Asian International Journal of Social Science*.

Inyiama, O., & Ubesie, M. (2016). Effects of Value Added Tax and Customs and Ecxise duties on Nigeria Economic Growth. *International Journal of Managerial Studies and Research* , pp53-62.

Izedonmi, F., & Jonathan, A. (2014). The Role of Value Added Tax in the Economic Growth of Nigeria. *British Journal of Economics Management and Trade*.

James, A., & Moses, A. (2012). Impact of Tax Administration on Government Revenue in a Developing Economy- A Case of Nigeria. *International Journal of Business and Social Sciences, Vol 3*.

James, A., & Moses, A. (2012). Impact of Tax Administration on Government Revenue in Developing Economy- A Case of Nigeria. *International Journal of Business and Social Science, Vol.3*.

John, C., & Suleiman, S. (2014). Value Added Tax and Economic Growth in Nigeria. *european Centr for Research training and Development* , pp. 62-69.

Jones, S., & Rhoades, C. (2011). *Principles of Taxation for Business and Investment Planning, 14th Edition.* Amazon, Tryprime.

Joyson, M. (2011). The Economic Impact of Corporate Tax Rate Reduction on Canadian Manufacturers and Exporters. *Retrieved from www.cme-mee.ca*.

Komal, O. (2013). An Analysis of the Impact of Value Added Tax in Delhi. *Global Journal of Management and Business Studies*.

Kwajio, I., & Ishaya, A. (2017). empirical Analysis of Tax Revenue Collection by the Federal Government of Nigeria . *European centre for Research, Training and Development*.

Lawrence, K. (2015). The Effect of Value Added Tax on Economic Growth in Kenya. *international Academic Journal of Economics and Finance* , pp10-30.

Lyndon, M., & Paymaster, B. (2016). The Impact of Company Income Tax and Value Added Tax on Economic Growth: Evidence from Nigeria.

Margaret, N., Charles, O., & Gift, N. (2014). Taxation and Economic Growth in Nigeria: A Granger Causality Approach. *International Journal of Research in Management Sciences and Technology.*

Mark, P., & Molly, F. (2014). The Corporate Income Tax System: Overview and Option for Reform. *Congressional Research Service.*

National Tax Policy, (2017). Policy Document by Ministry of Finance.

Okafor, R. (2012). Tax Revenue Genration and Nigerian Economy- A Case of Federal Board of Inland Revenue. *Journal of policy and Development Studies, Vol. 4.*

Omeora, C. (2013). The Impact of Value Added Tax (VAT) on the Economic Growth of Nigeria. *journal of Economic and Sustainable Development, Vol. 4.*

Otu, H., & Theophilus, O. (2013). The Effect of Tax Revenue on Economic Growth in Nigeria (1970-2011). *International Journal of Humanities and Scocial Science Invention.*

Oyewo, B. (2013). Taxation and Tax Policy as Government Strategy Tool for Economic Development in Nigeria. *IOSR Journal of Business and Management, Vol. 13.*

Patrick, I., Anwase, F., & Kenneth, T. (2017). The Impact of Value Added Tax on the Nigerian Economic Growth . *International Journal of Scientific Reseach.*

Soyede, L., & Kajola, S. (2006). *Tax: Principles and Practice in Nigeria, 1st edition.* Ibadan: Silicon.

Tajvan, P. (2015). Differences Between Economic Growth and Development retrieved from http://www.economicshelp.org/blog/1187/develop.

Thomas, L. (2010). The Economic Effects of Capital Gains Taxation. *Congressional Research Service.*

Ude, D., & Agodi, J. (2012). Investigation of the Impact of Non-Oil Revenue on economic Growth of Nigeria. *International Journal Science and Reaserch .*

Yakubu, M., & Jibrin, A. (2013). Analysing the Impact of Value Added Tax (VAT) on Economic Growth in Nigeria. *Mathematical Theory and Modeling .*