

Effect of Taxation on Nigeria's Economic Growth

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Abstract

In every economy, the important of revenue mobilization and allocation is key to economic growth process. This study seeks to examine the Effect of Taxation on Nigeria's Economic Growth. The study adopts an ex-post factor research design, and by means the Auto Regressive Distributed Lag Model (ARDL), which are standard least squares regressions that include lags of both the dependent variable and explanatory variables as repressors, the analysis are made. The study concludes that petroleum profits tax has a significant positive relationship with Gross Domestic Product and still has 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%. It is therefore 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.

Keywords: Taxation, Economic Growth, Gross Domestic Product, Government Revenue

1. INTRODUCTION

In every economy, the important of revenue mobilization and allocation is key to economic growth process. All the three tiers of Government (Federal, State and Local Governments} need to plan for the future. They need tax to assist them to generate more revenue to finance infrastructures' provision such as education, electricity, pipe borne water, good health facilities, good roads, railways, security (internal and external) etc. which are engine for economic growth. The Institute of Chartered Accountant of Nigeria (2009) defined a tax as a compulsory contribution imposed by government on her citizens in order to provide public goods and services and ensure their social and economic welfare and the Chartered Institute of Taxation Nigeria (2002) defined tax as an enforced contribution of money to the government pursuant to a defined authorized legislation. In other words, every tax must be based on a valid legal framework. Without legal framework, no tax can be imposed. 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 economic growth 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 Emekekwe (2009) 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 (Aboyade, 2010). 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. Odusola (2006) notes 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. Nwete (2004) opines that the objectives of petroleum taxation include; 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. Adedeji and Oboh, (2012) are 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. Also, in the view of Aguolu, (2008), tax administration needs to be revamped and refunds of taxes as well as duty drawbacks administration are inefficient.

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 effect of the Nigerian tax system on businesses has been a matter of increasing interest and concern to many persons. Tax policies and the structure of taxation in Nigeria is resulting to multiple taxation on businesses, forcing most businesses to run into losses or collapse. Businesses make numerous decisions daily. Their inability to make the right decisions can result in their failure. Since taxation is a liability businesses have to incur, businesses are faced with the option of managing their tax liabilities in such a way their tax burden is reduced. Their inability to effectively manage taxation brings about negative effects on the financing, investment and dividend decisions of the business.

Multiple taxation and high tax rates are challenges facing businesses in Nigeria today. Tax liabilities pose two issues for a business. First each and every tax required of a business is just another business expense. An increase in tax has the same effect as would a rise in cost of goods. Ministries, departments, and agencies (MDAs) suffer from limitations in manpower, money, tools, and machineries to meet the ever-increasing needs of individual taxpayers. As a matter of fact, the negative attitude of most tax collectors can be linked to poor remuneration and motivation. Also, it has been noted that that staff are not provided with regular training to keep them ahead of developments in tax related matters. This makes the administration of taxes in terms of coverage and assessment very weak. This necessitates the essence of the study on the effect of taxation on economic growth of Nigeria. Also, the following hypotheses are those which underline this study:

H₀₁: Petroleum profit tax does not have significant effect on the real gross domestic product of Nigeria.

H₀₂: Company income tax does not have significant effect to the real gross domestic product of Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Concept of Taxation

Tax has defined in many ways by different authors. Anyanwu (2007) defined tax as “compulsory transfer or payment of money (or occasionally of goods and services) from private individuals, institutions or and services) from private

individuals, institutions or groups to the government. It may be levied upon wealth or income or in the form of surcharge on price. According to Okpe (2008) "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. 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". Adebao (2009) also defined tax as "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 Okwo (2011) summarized tax as 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 taxpayer's welfare and in which both the taxpayer and the public at large benefit.

2.1.2 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 and poor tax administration, and weak fiscal policy have been negating the increase in tax income generated.

2.1.3 Company Income Tax

Companies Income Tax (CIT) is tax on the profits of incorporated entities in Nigeria (Wooldridge, 2006). 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.

2.1.4 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 is imposed to regulate the production of certain goods and services, protection of infant industries, control business and curb inflation, reduce income inequalities etc. Odusola, (2009:45) say taxes are used as proxy for fiscal policy. They outlined five possible mechanisms by which taxes can affect economic growth. First, taxes can inhibit investment rate through such taxes as corporate and personal income, capital gain taxes. Second, taxes can slow down growth in labour supply by disposing labour leisure choice in favour of leisure. Third, tax policy can affect productivity growth through its discouraging effect on research and development expenditures. Fourth, taxes can lead to a flow of resources to other sectors that may have lower productivity. Finally, high taxes on

labour supply can distort the efficient use of human capital high tax burdens even though they have high social productivity.

2.2 Empirical Review

Akwe (2014) analysed the impact of oil Tax Revenue on Economic Growth from 1993 to 2012 in Nigeria. To achieve this research objective, relevant secondary data were used from the 2012 Statistical Bulletin of the Central Bank of Nigeria (CBN). These data were analyzed using the Ordinary Least Squares Regression. The result from the test shows that there exists a positive impact of Non-oil Tax Revenue on economic Growth in Nigeria. Ogbonna and Ebimobowei (2012) investigated the impact of petroleum profit tax on the economic growth of Nigeria. To achieve the objective of this paper, relevant secondary data were collected from the Central Bank of Nigeria (CBN) and the Federal Inland Revenue Service (FIRS) from 1970 to 2010. The secondary data collected from the relevant government agencies in Nigeria were analysed with relevant econometric tests of Breusch-Godfrey Serial Correlation LM, White Heteroskedasticity, Ramsey RESET, JarqueBera, Johansen Co-integration and Granger Causality. The results show that there exists a long run equilibrium relationship between economic growth and petroleum profit tax. It was also found that petroleum profit tax does granger cause gross domestic product of Nigeria. Omoh (2007) analyzed the revenue generating capacity of the nine oil producing states. He disposed that the nine states generated internally of total of N97.293bn between 1993 and 2003. 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 between June 1999 and July 2004 is 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.

Adegbe and Fakile (2011) examined the relationship between company income tax and Nigeria's economic development for the period 1981 – 2007. They used the GDP to capture the Nigerian economy which was measured against total annual revenue from company income tax for the same period. They employed the use of chi square and multiple linear regression analysis method to analyze data obtained from both primary and secondary sources. Their variables included various taxes regressed against GDP. With an R squared of 98.6% and an adjusted R squared of 98.4%, revealing that company income tax impact on GDP is very high and impressive. It 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. Overall the study examined only company income tax which calls for the need to see the impact of all tax revenues on the Nigerian economy. In their study of the relationship between company income tax and Nigerian economic development, Festu and Samuel (2007) 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, Adedeji and Oboh (2010) stated that 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.

2.3 Theoretical Framework

2.3.1 Benefit Principle Theory

The theoretical framework of this study is based on the benefit principle theory. The benefit principle theory is a concept in the theory of taxation from public finance. It bases taxes to pay for public-goods expenditures on a politically-revealed willingness to pay for benefits received. The principle is sometimes likened to the function

of prices in allocating private goods. In its use for assessing the efficiency of taxes and appraising fiscal policy, the benefit approach was initially developed by Knut Wicksell (1896) and Erik Lindahl (1919), two economists of the Stockholm School. Wicksell's near-unanimity formulation of the principle was premised on a just income distribution. The approach was extended in the work of Paul Samuelson, Richard Musgrave, and others. It has also been applied to such subjects as tax progressivity, corporation taxes, and taxes on property or wealth. The unanimity-rule aspect of Wicksell's approach in linking taxes and expenditures is cited as a point of departure for the study of constitutional economics in the work of James Buchanan. 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.

2.3.2 Ability to Pay Theory

The ability to pay theory was propounded by MS Kendrick in 1939. The theory considers tax liability in its true form-compulsory payment to the state without quid pro quo. It does not assume any commercial or semi-commercial relationship between the state and the citizens. According to this theory, a citizen is to pay taxes just because he can and his relative share in the total tax burden is to be determined by his relative paying capacity. This doctrine has been in vogue for at least as long as the benefits theory. A good account of its history is found in Seligman. This theory was bound to be supported by socialist thinkers because of its conformity with the ideas and concepts of justice and equity. The basic tenet of this theory is that the burden of taxation should be shared by the members of society on the principles of justice and equity and that these principles necessitates that the tax burden is apportioned according to their relative ability to pay.

2.3.3 Faculty Theory

According to Ola, (2011), this theory states that one should be taxed according to the ability to pay. It is simply an attempt to maximize an explicit value judgment about the distributive effects of taxes. Okafor, (2012) argue that a citizen is to pay taxes just because he can, and his relative share in the total tax burden is to be determined by his relative paying capacity.

3. METHODOLOGY

The researcher adopted ex-post facto and he choice of the ex-post facto design is because the research relied on secondary data that have occurred in the past. The study is centered on Nigeria and it makes use of secondary data obtained from the Central Bank of Nigeria Statistical Bulletins for the relevant years. Historical data covering a period of 10 years are to be estimated using Auto correlation test, it often occurs in time series data and it can make an OLS inefficient for drawing inferences. Heterskedasticity test is also a factor commonly associated with time series data. It affects the standard error as well as the t-statistics. Bound test is a test for measuring long run relationship. It measures whether a long run relationship exists between the independent variables and the dependent variable. The Auto Regressive Distributed Lag Model (ARDL) are standard least squares regressions that include lags of both the dependent variable and explanatory variables as repressors' (Greene, 2008). The following model was used to evaluate the study:

$$\text{GDP} = F(\text{PPT}, \text{CIT}, \text{CED}) \dots\dots\dots (1)$$

Where:

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

PPT = Petroleum Profit Tax

CIT = Company Income Tax

CED = Custom and excise duties (it is used as a proxy for tax revenue)

In a linear regression form, it will become:

$$\text{RGDP} = \beta_0 + \beta_1 \text{PPT} + \beta_2 \text{CIT} + \beta_3 \text{CED} + \mu \dots\dots\dots (2)$$

Where

β_0 = Constant Term

β_1 = Coefficient of Petroleum Profit Tax
 β_2 = Coefficient of Company Income Tax
 β_3 = Coefficient of Custom and excise duties
 μ = Error Term

4. RESULT AND DISCUSSION

The data presentation, estimation and results of the empirical investigation carried out are presented and also analyses the relationship between each of the types of tax revenue (petroleum profit tax(PPT), companies income tax(CIT), custom and excised duties(CED)) and gross domestic product(GDP). Table 4.1 shows the data that was used in the analysis in this study.

Table 4.1: Data showing GDP, PPT, CIT and CED

YR	GDP (N'M)	PPT(N'M)	CIT(N'M)	CED(N'M)
2007	6061700	683500	114800	195500
2008	11411067	1183600	113000	217200
2009	15610882	1904900	140300	232800
2010	18564595	2038300	244900	177700
2011	23280715	1500600	275300	241400
2012	25424948	2812300	420600	281300
2013	25236056	1256500	593700	297500
2014	34494583	1944700	658400	309200
2015	38016970	30700000	663020	438300
2016	40115340	32010000	847500	438300

Source: CBN Statistical Bulletins

The data were log transformed as in table 4.2 to minimize the values of the data in order to get an improved regression result.

Table 4.2: Data showing log of GDP, PPT, CIT and CED

YR	LPPT	LCIT	LCED	LGDP
2007	13.43498	11.65095	12.18332	15.61750
2008	13.98407	11.63514	12.28857	16.25009
2009	14.45994	11.85154	12.35793	16.56348
2010	14.52763	12.40861	12.08785	16.73677
2011	14.22138	12.52562	12.39421	16.96314
2012	14.84951	12.94944	12.54718	17.05124
2013	14.04384	13.29413	12.60317	17.04378
2014	14.48062	13.39757	12.64174	17.35631
2015	17.23977	13.40456	12.99066	17.45354
2016	17.28156	13.65005	12.99066	17.50727

Source: E-views Output

Normality Test

Table 4.3: Descriptive Analysis

	LPPT	LCIT	LCED	LGDP
Mean	14.85233	12.67676	12.50853	16.85431
Median	14.47028	12.73753	12.47069	17.00346
Maximum	17.28156	13.65005	12.99066	17.50727
Minimum	13.43498	11.63514	12.08785	15.61750
Std. Dev.	1.325524	0.772085	0.309113	0.588514
Skewness	1.182592	-0.218003	0.408500	-0.863609
Kurtosis	2.901597	1.512170	2.082318	2.941134

Jarque-Bera	2.334910	1.001558	0.629012	1.244477
Probability	0.311158	0.606058	0.730149	0.536742
Sum	148.5233	126.7676	125.0853	168.5431
Sum Sq. Dev.	15.81313	5.365042	0.859955	3.117142
Observations	10	10	10	10

Source: Author's Computation with Eviews Software Version 9

The study conducted the descriptive statistics of the relevant variables involved. Table 4.3 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 Table 4.2 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 Eviews software package and the results from the test are tabulated below:

Table 4.4 Unit root test

	ADF	cv@5%	Probability	Inference
LPPT	-2.538871	-1.995865	0.0186	I(1)
LCIT	-3.164169	-3.017328	0.0351	I(0)
LCED	-2.885408	-1.995865	0.0100	I(1)
LGDP	-3.124923	-1.995865	0.0065	I(1)

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).

Test 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 4.5 Test for Autocorrelation

Breusch – Godfrey Serial Correlation LM Test

F- statistics	553.0092
Probability Values	0.1302

Source: Author's Compilation from Eviews 9

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.

Test for Heteroskedasticity

Heteroskedasticity is also a factor commonly associated with time series data. It affects the standard error as well as the t-statistics.

Table 4.6 Test for Heteroskedasticity

Heteroskedasticity Test: Breusch – Pagan Godfrey

F- statistics	2.222109
Probability Values	0.2716

Source: Author's Compilation from Eviews 9

Decision Rule:

Accept that there is no heteroskedasticity when the probability value is greater than 5% otherwise accept that it exists. For the fact that the probability value is greater than 5%, it is therefore concluded that there is no heteroskedasticity.

Bound Test

Bound test is a test for measuring long run relationship. It measures whether a long run relationship exists between the independent variables and the dependent variable.

Table 4.7 Bound Test

ARDL Bounds Test

Date: 06/09/18 Time: 17:32

Sample: 2008 2016

Included observations: 9

Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K
F-statistic	5.558477	3

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.72	3.77
5%	3.23	4.35
2.5%	3.69	4.89
1%	4.29	5.61

Decision Rule:

If the F-statistics is greater than the upper bound, reject the null and conclude that there is long run relationship.

If the F-statistics is less than the lower bound accept the null and conclude there is no long run relationship.

If the F-statistic falls in between the upper and lower bound, the result becomes inconclusive.

Decision:

Since the F-statistic been 5.558477 is greater than the upper bound (3.77), it is therefore concluded that there is long run relationship between the independent variables and the dependent variable.

Regression Analysis

Tables 4.7: Auto Regressive Distributed Lag Model Table Analysis

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The Auto Regressive Distributed Lag Model (ARDL) was adopted for analysis and test of hypotheses based on the premise that the unit root test in table 4.4 was a combination of I(0) and I(1).

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LGDP(-1)	0.530298	0.206820	2.564058	0.0829
LPPT	0.047262	0.045217	3.045229	0.0327
LCIT	0.291310	0.276788	2.752467	0.0169
LCIT(-1)	0.535851	0.244526	2.191385	0.1161
LCED	0.377467	0.336987	1.120125	0.0342
C	9.109371	3.093538	2.944645	0.0603
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			

*Note: p-values and any subsequent tests do not account for model selection.

Source: Auhtor's E-View 9.0 Output, 2018

From the above regression analysis, the R^2 is 0.986952 which is about 99%. The R^2 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 R^2 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 Hypothesis one

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LGDP(-1)	0.530298	0.206820	2.564058	0.0829
LPPT	0.047262	0.045217	3.045229	0.0327
LCIT	0.291310	0.276788	2.752467	0.0169
LCIT(-1)	0.535851	0.244526	2.191385	0.1161
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C	9.109371	3.093538	2.944645	0.0603
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			

*Note: p-values and any subsequent tests do not account for model selection.

Source: Auhtor's E-View 9.0 Output, 2018

Test of Hypothesis Two

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
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LPPT	0.047262	0.045217	3.045229	0.0327
LCIT	0.291310	0.276788	2.752467	0.0169
LCIT(-1)	0.535851	0.244526	2.191385	0.1161
LCED	0.377467	0.336987	1.120125	0.0342
C	9.109371	3.093538	2.944645	0.0603
R-squared	0.986952	Mean dependent var		16.99174
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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: Auhtor's E-View 9.0 Output, 2018

4.1 Discussion of Findings

The regression analysis showed the R^2 to be 0.986952 which is about 99%. The R^2 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 R^2 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. 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 been 0.0327 was less than 0.05. 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. Customs and excise duties have significant effect on the gross domestic product of Nigeria because its probability value been 0.0342 is less than 0.05.

5. CONCLUSIONS AND RECOMMENDATIONS

The following findings are made for this study; 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 Customs and excise duties have significant effect on the gross domestic product of Nigeria. From the findings of this study, it is concluded that petroleum profits tax has a significant positive relationship with Gross Domestic Product and still have a long run relationship among themselves 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%. Consequently, the following recommendations are made for this study:

- i. 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.
- ii. Government agencies should effectively devise procedures for the collection of company income tax as it contributes to economic growth as reported in the findings.
- iii. Government agencies should as well ensure timely payment of custom and excise duties as it also contributed positively to economic growth as reported in the findings of the study.

References

Aboyade, L. (2010). *Principles of International Finance*. Lagos: Forthright Educational Publishers.

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- Adebao, K. (2009). Perceived relationship between Exchange rate and Economic growth in Nigeria. *American Journal of Humanities and Social Sciences*, 11(3), 116-124
- Adedeji, H. & Oboh, I. (2010). Effects of tax revenue on economic growth of Nigeria. *International Journal of Business and Social Science*. 5(2), 302-309.
- Adegbie, E. & Fakile, A. (2011). The relationship between company income tax and Nigeria's economic development for the period 1981–2007. *Global Journal of Management and Business Research*. 11(96), 1-5.
- Adereti, I. Sanni, K. & Adesina, U. W. (2011). Relationship of Value Added Tax and Economic Growth in Nigeria, *Academy of Management Journal*, 33 (9), 663-691.
- Aguolu, I. (2008). Effect of Tax Reforms and Economic Growth of Nigeria. *Czech Journal of Economics and Finance*, 54, (7), 2-21.
- Akwe, H. (2014). Impact of oil Tax Revenue on Economic Growth of Nigeria. *International Journal of Arts and Commerce*. 2(2); 27-32
- Anidiobu, G.A., Agu, B.O. & Ezinwa, C.E. (2016). Responsiveness of economic growth to external debt in Nigeria. *Journal of Policy and Development Studies*, 10(3), 1-19.
- Anidiobu, G. A. and Okolie, P. I. P. (2016) Responsiveness of Foreign Exchange to foreign debt: Evidence from Nigeria. *International Journal of Arts, Humanities and Social Sciences*, 1(3), 11-20.
- Anyanwu, J. C. (2014). *Monetary Economics: Theory, Policy and Institutions*. Onitsha: Hybrid Publishers.
- Anyawaokoro, M. (2004). *Banking Method And Processes*. Enugu: Hossana Publication.
- Asterious, D. & Hall S. (2010). *Applied Econometrics: A Modern Approach*. London: Palgrave Macmillan.
- Adegbie, E. & Fakile, A. (2011). The relationship between company income tax and Nigeria's economic development for the period 1981 – 2007. *Global Journal of Management and Business Research*, 11(96), 1 - 5.
- Adereti, I., Sanni, K. and Adesina, U. W. (2011). Relationship of Value Added Tax and Economic Growth in Nigeria. *Academy of Management Journal*, 33 (9), 663-691.
- Akwe, H. (2014). Impact of oil Tax Revenue on Economic Growth of Nigeria. *International Journal of Arts and Commerce*, 2(2), 27-32
- Alli, B. D. (2009). *Managing the tax reform process in Nigeria*. Enugu: Abic Books and Equipment.
- Anyanwu, J.C. (2011). *Nigerian Public Finance*. Onitsha: Joanne Educational Publishers.
- Anyanfo, O. (2011). *Public Finance in a Developing Economy: The Nigerian Case*. Enugu: Department of Banking and Finance, University of Nigeria, Enugu Campus.
- Anyanwu, J.C., (2003). *Monetary Economics: Theory, Policy and Institutions*. Onitsha: Hybrid Publishers,.
- Appah, E., (2009). *Principles and Practice of Nigerian Taxation*. Port Harcourt: Ezevin Mint Printers and Publishers.

Effect of Taxation on Nigeria's Economic Growth

- Arnold, J.M., (2011). *Tax policy for economic recovery and growth*. Illinois: Richard Irwin Inc.
- Azubike, J.U.B., (2009). *Challenges of tax authorities in the management of tax reform processes*. Enugu: Africana Fep Publishers Ltd.
- Asterious, D. & Hall S., (2010). *Applied Econometrics: A Modern Approach*. London: Palgrave Macmillan.
- Bhartia, H.L. (2010). *Public Finance - 14th Edition*. New Delhi: Vikas Publishing House PVT Ltd.
- Darrah, W. (2005). Tax revenue and economic growth of West African Countries. *European Review*, 10 (7), 4-8.
- Dwivedi, D.N. (2012). *Managerial Economics - 6th Edition*. New York: McGraw Hill Inc.
- Darrah, W. (2005). Tax revenue and economic growth of West African Countries. *European Review*, 10 (7), 4-8.
- Engen, E. & Skinner, J. (2011). *Taxation and economic growth*. New Jersey: Prentice hall International.
- Odusola, A., (2009). *Tax Policy Reforms in Nigeria*. Enugu: Providence Press Nigeria Limited.
- Okwo, I. (2011). *Challenges of tax authorities in the management of tax reform processes*. Enugu: Africana Fep Publishers Ltd.
- Osiegbu, P.I. & Nnamdi, I (2009). *Public Finance: Theories and Practices*. Asaba: C.M. Global Company Ltd.
- Ogbonna, A. L. & Ebimobowei, G. (2012). Impact of petroleum profit tax on the economic growth of Nigeria. *International Journal of Multidisciplinary Education and Research*, 1(5), 5-10 22.
- Okafor, M. (2012). Impact of income tax revenue on the economic growth of Nigeria, *Journal of Abnormal Psychology*, 67, 422-436
- Omoh, W. I. (2007). Revenue generating capacity of the nine oil producing states. *Arabian Journal of Business and Management Review*, 4 (2), 34 – 39.
- Onaolapo, S. Aworemi, E. I. and Ajala, K. (2013). Impact of value added tax on revenue generation in Nigeria, *Quarterly Journal of Economics*, 122 (19), 729 – 773.
- Owolabi, M. and Okwu, U. (2011). Contribution of VAT to the development of Lagos State economy. *British Journal of Education Studies*, 35(2), 129-148.
- Tosun, E. and Abizadeh, J. (2005). Responsiveness of Economic Growth to Taxation in Nigeria. *International Journal of Business and Social Sciences*, 5 (2), 19 – 26.
- Wooldridge, J.M., (2006). *Introductory Econometrics: A Modern Approach*. New York: Thomson Higher Education, Mason