Assessment of the Impact of Tax Reforms on Economic Growth in Nigeria

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Abstract
The study is an empirical assessment of the impact of tax reforms on the economic growth of Nigeria. Time series data were extracted from the Central Bank of Nigeria statistical bulletin, Federal Inland Revenue Service and Federal Ministry of Finance from the period 1985-2011. The ordinary least squares based multiple regression was adopted to analyse the data. The study found that the adjusted R-square of 0.99 implies that 99% of the total variation in gross domestic product, that is economic growth, is as a result of variation in petroleum profit tax, company income tax, customs and excise duties, value added tax, personal income tax and education tax and tax reforms in Nigeria. Customs and excise duties, value added tax, personal income tax and education tax have no statistical significant impact on economic growth at 5% level of significance. However, Petroleum profit tax and company income tax each has positive significant impact on economic growth at 0.35% and 2.87% level of significance respectively. The Durbin Watson statistic of 1.98 indicates that there is no presence of serial autocorrelation in the model. The probability of the F statistic, a test for the overall significance of the model is rightly specified at zero level of significance. We would therefore conclude that overall, tax reforms have significant impact on the economic growth in Nigeria. This confirms the existence of long-run equilibrating relationship between the variables, i.e. economic growth and all the independent variables in the model. The study therefore recommends that chartered tax practitioners should be allowed to play leading roles in any tax reform process to ensure a robust tax system. There should be harmony in the objectives of tax reforms with macro-economic objectives. Government should always consider tax payers and other key stakeholders' interests in fiscal policy formulation and implementation in order to achieve improved tax compliance rate in the country. All government agencies and other stakeholders should ensure the full implementation of the National tax policy and the long awaited petroleum industry bill should be passed to law.

Keywords: tax reforms, economic growth, non-oil revenue, petroleum profit tax, national tax policy, multiple regression.

1.0 INTRODUCTION

Governments all over the world engage in activities to raise funds in order to finance social goods and its programmes. Various governments have different sources and means of raising revenue with varying magnitudes and capacity, and in process have a principal revenue yielding source. Most often, governments rely on their key revenue sources, improve on them

and at the same time diversify the means of enhancing other revenue sources. In Nigeria, available statistics from 1986 to 2013 reveal that revenue from the petroleum sector has been the dominant revenue yielding source for the Federation contributing over 78% of total revenue. The implication is that, the economy will be vulnerable to fluctuations in the international oil market prices and or social disorder particularly in the oil producing regions. This suggests the need to have a mix of revenue sources to enhance government's revenue base through efficient management of appropriate fiscal policies.

A major source from which government could raise revenue is through taxes. Taxes are veritable source of government revenue which has influence in achieving socio- economic, political and macroeconomic objectives of any country. Ihendinihu, Jones and Ibanichuka (2014) noted that taxes are major source of revenue to many governments, a fiscal instrument for regulating and resolving economic and social policies and a mechanism for enhancing economic growth. It is a fiscal tool for reducing private consumption and transferring resources to the government for economic development.
The level of revenue generation through taxes to provide critical infrastructural development in an economy is depended on the country's existing tax structure and how robust it is to effectively and efficiently assess, collect and account for the collections. Ogbonna and Appah (2012) posit that one means of generating the amount of government revenue to provide the needed infrastructural development is through the means of a structured tax system.

The above provides the need for consistent actions by government to enhance the existing tax system with a view to boosting revenue generation so as to impact on economic growth. An option of achieving a robust structured tax system is notably through tax reforms. Tax reforms are deliberate and continuous actions by government and its agencies to alter the existing tax laws and policies to positively impact on the tax administration and collection process with minimal cost. Consequently, the expectation is to boost revenue generation through appropriate legislations to cover loopholes in the existing tax structure by creating efficient, effective, resilient and responsive fiscal institutions to improve the administration, assessment and collection, making them more accountable, and promote voluntary payment of taxes by tax payers. The more robust the tax reforms, the more efficient the tax system and its structure, and the better the yield from tax revenue generation and its impact on economic growth. Rena (2011) argued that investment and tax reforms are the fundamental for a stronger more productive economy.

No matter how robust the reform and its capacity to enhance revenue generation, tax reforms would not by itself influence economic growth, if governments fail to apply the revenue generated on viable projects that would offer the required investment climate to achieve the desired macroeconomic objectives. It is the efficient application of the tax revenue generated through appropriate tax reforms that would result in the achievement of economic growth and other macroeconomic variables. Tax reforms that are well articulated but poorly implemented will rather retard economic activities. Tax reforms should be capable of eliminating or reducing loopholes to a bearable limit and provide fiscal institutions that adhere to the tenets of fiscal responsibility and accountability. Rewane, (2013) claimed that Nigeria has been short-changed in legitimate taxes through a combination of incompetence, corruption and fraud. This assertion connotes a weak institutional structure and administration.

Taxation is dynamic and therefore requires reforms that are necessary to effect the required changes in the national economy at a given period. Azubuike (2009) opine that tax reform is an on-going process, with tax policy makers and tax administrators continually adopting the

tax systems that will reflect changing economic, social, political circumstances in the economy. Asuquo (2014) noted that Nigeria's tax system has undergone several reforms geared towards enhancing tax administration and collection with minimal enforcement cost.

At the core of every reform is the objective to generate higher revenue for government without endangering economic activities undertaken by the private sector and to attain targeted macroeconomic objectives. Tax reforms therefore are expected to improve the fiscal institutions so as to generate increase in revenue and have influence on the economic growth of countries. Against the backdrop, a comparative review of tax revenue percentage of Gross Domestic Product (GDP) index of some select Organization for Economic Co-operation and Development (OECD) countries for the years 2008, 2009, 2010, 2011, 2012, 2013 and 2014 showed that Nigeria comparative figures was at 12% irrespective of the several tax reforms. Premium Times (2014) noted that tax revenue ratio to the country's GDP declined from 20% to 12% and that of the 12%, only 4% was derived from non-oil revenue. This indicates the very high dependence on the oil sector which portends danger for the economy with the present low international oil prices.

Table of Tax Revenue (% of GDP)

Country	2008	2009	2010	2011	2012	2013	2014
United Kingdom	34.0	32.3	32.8	33.6	33.0	32.9	32.6
United States	25.2	23.0	23.2	23.6	24.1	25.4	26.0
France	42.2	41.3	41.6	42.9	44.1	45.0	45.2
Denmark	44.9	45.2	45.3	45.4	46.4	47.6	50.9
Greece	31.0	30.8	32.0	33.5	34.5	34.4	35.9

Source: OECD (2016)

The question now is, to what extent have tax reforms in Nigeria generated sufficient revenue to influence economic growth? Our main objective therefore is to proffer solutions to the question by empirically evaluating the impact of tax reforms on economic growth in Nigeria. Consequently, we hypothesize that tax reforms have no significant impact on economic growth in Nigeria.

2.0. REVIEW OF RELATED LITERATURE

2.1Conceptual Framework

Jhingan (2011) argued that it is a compulsory contribution imposed by the public authority, irrespective of the exact amount of service rendered to the tax payer in return. He further claimed that a tax is a compulsory contribution from a person to the government to defray the expenses incurred in the common interest of all without reference to special benefits conferred.

Tax is defined as a financial charge or levy imposed upon an individual or legal entity by a State or a legal entity of a State; it is a pecuniary burden laid upon individuals or property to support government expenditure. It also defined tax as 'a monetary charge imposed by the Government on persons, entities, transactions or properties to yield revenue. It went further to state that tax is 'the enforced proportional contributions from persons and property, levied by the State by virtue of its sovereignty for the support of Government and the public needs (National Tax Policy, 2013).

Attamah (2004) posits that tax is a compulsory contribution imposed upon persons and firms by a public government to cover government expenses.
The Chartered Institute of Taxation, Nigeria (2002) defined tax as an enforced contribution of money to government pursuant to a defined authorized legislation.
The World Bank (2016) noted that tax revenue refers to compulsory transfers to the central government for public purposes.

2.2 Theoretical Framework

There are several theoretical frameworks on taxation but only few that relates to the study are reviewed.

2.2.1 The Socio-Political Theory

This theory of taxation suggests that social and political objectives should be the deciding factors in choosing the types of taxes. This theory is in support of progressive taxation by using taxation to reduce income inequalities. It further stated that a tax system should not be designed to serve individual members of the society but should be used to cure the ills of a society as a whole. The society is more than the sum total of its individual members and that the society has an existence and entity of its own which need to be preserved, protected and taking care of. The theory also stated that taxation should be used effectively for several purposes such as remedying unemployment, monopolistic and restrictive trade practices, hoarding, cyclical fluctuations, zonal disparities and bringing about a balance growth between the different zones etc.

However, the theory failed to recognize that in a society, there are groups which try to protect and promote the interest of its members and government may be forced to reshape the tax structure to accommodate such pressures which may not be fair or right. The theory did not also consider how taxes will be collected and how it will be practicable.

2.2.2 The Expediency Theory

This theory asserts that every tax proposal must pass the test of practicability and that it must be the only consideration while choosing a tax proposal. The practicability of a tax is an essential consideration in every tax proposal because it makes it ridiculous to impose a tax that cannot be collected.

The proposition under this theory is that economic and social objectives are effects of a tax system and should be treated as irrelevant. If a tax structure is shaped to conform to the aspirations of pressure groups which protect and promote members interest, then the practicability of the tax will be in doubt.

This theory did not consider equity, economic growth and stability, zonal imbalances etc, Bhatia (2009) noted that taxation provides a powerful set of policy tools to the authorities and should be effectively used for remedying economic and social ills of the society such as income inequality, regional disparities, unemployment, cyclical fluctuations etc.

2.2.3 Cost of Service Theory

This approach emphasizes a semi-contractual relationship between the State and the citizens to a greater extent (Bhatia, 2009). This theory makes it implicit that the citizens of a State must pay for the cost of any State service they receive. It is similar to that of benefit received theory.
The implication of this theory is to measure the cost of the State services and apportion the cost to the beneficiaries. This will be impracticable in real terms. For instance, how would the

State measure the level of consumption by each member of the society? Again, can the State exclude its citizens from the use of a pure social good and service it has provided? There is no rivalry and exclusion in the use of pure social goods and services. Applying this theory means that the State would not concern itself with the income redistribution principle adduced to taxation. However, part of the reasons why taxes are paid is to enable government provide social goods and services which should not be left in the hands of the private sector. But in the modern day, this theory have defects because government provide free education, medical and other social welfare packages to the low income earners.

2.2.4 Ability to Pay Theory

This theory is on the assumption 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 (Bhatia 2009). Similarly, Musgrave and Musgrave (2004) in line with this theory stated that people should contribute to the cost of government in line with their ability to pay. They categorized this theory into two namely; Horizontal and Vertical Equity. In horizontal equity, it calls for people with equal capacity to pay the same amount of tax whereas in vertical equity, that people with greater ability should pay more as tax. Jhingan (2011) argued that this theory of taxation is the 'just, equitable and the most accepted theory of taxation.

This theory favours the income redistribution function and it is a progressive form of tax system. It is practicable in indirect taxes as people with greater ability will pay more. In Nigeria, the Pay as You Earn (PAYE) form of personal income tax is based on the Ability to pay theory as the tax system provide for concessional deductions or relief with respect to dependants, personal allowance, life insurance etc. This theory therefore conforms to the concept of justice and equity as the tax burden is shared among the citizens according to their relative ability of the tax payers to pay.

2.3 Empirical Review

Several empirical studies have been conducted on the impact of taxes on economic growth. The empirical studies of Anyanwu (1997), Engen and Skinner (1996), Tosun and Abizadeh (2005), Arnold (2011) and Ihendinihu et.al (2014) provided different findings on the impact of tax reforms on economic growth.

Enger and Skinner (1996) investigated taxation and economic growth of the U.S economy, large sample of countries and use of evidence from micro level of studies of labour supply, investment demand and productivity growth. Their result suggests modest effects on the order of 2.0 to 0.3 percentage points' differences in growth rates in response to a major reform. They stated that such small effects can have a large cumulative impact on living standards.

Tosun and Abizadeh (2005) investigated of economic growth and tax components; an analysis of tax changes in OECD countries from 1980-1999 using regression analysis reveal that economic growth measured by GDP per capita has a significant effect on the tax mix of GDP per capital. It is shown that while the shares of Personal and Property taxes have responded positively on economic growth, shares of the pay roll and goods and services taxes have shown a relative decline.

Arnold (2011) in his study of tax policy for economic recovery and growth using co-integration test found that short term recovery requires increase in demand while long run growth requires increase in supply. As short term concessions can be hard to reverse, this implies that policies to alleviate this crisis could compromise long run growth.

Ogbonna and Appah (2012) investigated the impact of tax reforms and economic growth of Nigeria using time series data from 1994 to 2009 (a period of 11 years) utilizing Petroleum

profit tax, Companies income tax, Value added tax, Education tax, Personal income tax and Customs and Excise duties as proxy for tax reforms (independent variables) and Gross domestic product (GDP) as the dependent variable, claimed that there is a positive relationship between tax revenue and economic growth of Nigeria. They argued that 54% variation in the dependent variable (GDP) is as a result of change in tax revenue and that there is an existence of a long run equilibrium relationship between GDP and the independent variables. They engaged the Augmented Dickey-Fuller test for the unit root test and the Johansen's Cointegration test and Error correction technique to run the regression analysis.

2.4 Nigerian tax structure

In Nigeria, the government fiscal power is based on a three-tiered tax structure; Federal, State and Local Governments each of which has different tax jurisdictions. Under the current Nigeria tax laws, taxation is enforced by the three tiers of government. Taxes on corporate bodies are enforced and collected by the Federal government while State and Local governments enforce and collect taxes from individuals within their jurisdiction (Odusola, 2006). In 2002, about 40 different taxes and levies were shared by all three levels of government. The Nigerian tax system has undergone significant changes in recent times

The tax structure or system is the process of taxation involving set of rules, regulations and the procedures with the organs of administration interacting with one another to generate fund for government (Agbetunde, 2010). The Nigerian tax structure or system is of tripartite activities which include the tax laws, tax policies and tax administration (Adesola, 2004). In as much as the Nigerian tax system is structured as a tool for revenue generation, Naiyeju (2010) and Odusola (2006) is of the opinion that the system is being lopsided and dominated by oil revenue.

The Nigerian tax system is concentrated on petroleum and trade taxes while direct and broad-based indirect taxes like the value-added (VAT) are neglected (Odusola, 2006). This is a structural problem for the country's tax system

2.5 Tax Laws in Nigeria

The Nigerian tax system is made up of tax laws, policies and reforms. According to Odusola (2006), the major tax laws in existence as of September 2003 and various related amendments include the following: Personal Income Tax Act of 1993, Company Income Tax Act of 1990, Petroleum Profits Tax Act of 1990, The Petroleum Act of 1990, Value Added Tax Act of 1993, Education Tax Act of 1993, Capital Gains Act of 1990, Custom and Excise Management act of 1990, Minerals and Mining Act of 1999, Stamp Duties Act of 1990, Taxes and levies (approved list for collection) act of 1998 and the 1999 constitution of the Federal Republic of Nigeria. Amendments to these laws are a continuous exercise. Few of these tax laws have some administrative bottlenecks in enforcement. The petroleum profits tax act 1990 as amended in 2004 placed different rates of assessment of tax on the chargeable profits of companies depending on the level of production of crude oil (petroleum operations) and the production sharing contract as stated below;

Petroleum profits Tax Act Cap354 LFN, 1990/Cap P 13 LFN 2004 and OR & C Tax consultants (2009).

Rate (in percentage) of Petroleum profits tax based on level of petroleum operations.

On Exports	85
On domestic sales of oil and gas	65.75
On deep offshore PSC	50
Rates of Royalties; -Onshore Production -Offshore production in areas up to 100 metres water depth -Offshore production in areas beyond 100 metres water depth	 20 18.5 16.67

On Deep Offshore PSC; -Up to 1000 metres depth -In excess of 1000 metres depth	Between 12 and 40

The petroleum profit tax act also granted capital allowance, investment tax allowance and investment tax credit to companies in petroleum operations as follows;

Capital Allowance rate per annum

Year 1 to Year 4 Year 5	20% 19%

Investment tax allowance for deep offshore PSC executed after 1st July, 1998 is 50%.

Investment Tax credit	Rate% per annum
Onshore operations	5
Offshore operations in areas up to 100 metres water depth	10
Offshore operations in areas between 100 and 200 metres water depth	15
Offshore operations in areas beyond 200 metre water depth	20
For deep offshore PSC executed prior to 1st July 1998	50

According to Odusola (2006), he stated that petroleum profits tax is applicable to upstream (operations that deal with the production of crude oil and gas; and sale of these as primary stock to the downstream operators who include the added value for sale to the ultimate end-users) operating in the oil sector and it particularly relates to rent, royalties, margins and profit-sharing elements associated with oil mining, prospecting and extracting leases. He further said that petroleum profits tax is complemented with two different contractual relationship not formally covered by tax legislation. The first constitutes joint ventures between international oil companies and the Nigerian National Petroleum Company (NNPC) structured under a Joint operating Agreement (JOA) as set out in the memorandum of understanding (MOU). Following earlier oil shocks, the MOU was introduced in 1986 to provide necessary incentive and has been revised in 1991 and 2000. He argued that this system has been adjudged complex, creating problems for tax authorities. The second measure relates to deep offshore exploration and development under a Production sharing contract (PSC) which allows an oil company to recover its cost at a pre-determined rate and to share in the remaining revenue according to a pre-determined formula. The tax is 50 percent of the cost and production share revenue after deduction of costs in accordance with the PPT provisions. Odusola (2006) again stated that while the JOA imposes some operating and capital expenditures on the federal government, the production sharing contract (PSC) transfers the funding responsibility and most of the risk to the oil companies and that management problems with the JOA and the PSC are further complicated by the lack of coordination between the Department of Petroleum Resources (DPR) and tax authorities on tax policy issues and information sharing on various agreements in the upstream subsector.

According to Onwuemenyi, (2011) *"the proceeds from the sale of crude oil and gas including other receipts are received into the CBN/NNPC JP Morgan Crude Oil and Gas Revenue Account. From this account, NNPC transfers money to JV Cash Call Account and the balance swept to the Federation Account each month. These transfers and sweepings are carried out by CBN on receiving instructions or mandate from NNPC"*.

Notwithstanding the huge revenue generated, the petroleum sector in recent years has contributed poorly to the growth of the Nigeria economy. According to the CBN (2008), they the industrial output fell by 2.2 percent mainly due to poor performance of the petroleum sector.

Odusola (2006) noted that the petroleum profits tax operates under two contractual relationships not covered by tax legislations. Rewane, (2013) noted that *"major foreign airlines in Nigeria once admitted to the non-remittance of the 5% passenger fuel surcharge on their tickets to the Nigeria Civil Aviation Authority as required by global aviation practice. According to the Nigerian Extractive Industry Transparency Initiative, major oil companies and ironically the State owned Nigerian National Petroleum Corporation (NNPC), routinely underpay taxes and statutory remittances due to the government and the House of Representatives recently identified some Federal and State enterprises that had been defaulting in filling tax returns while tax agencies had failed to scrutinize tax returns of some individuals and firms because of political affiliations"*. (Rewane, 2013).

2.6 Tax policy reforms in Nigeria

Nigeria's fiscal policy measures have been largely driven by the need to promote macroeconomic activities such as promoting rapid growth of the economy, generating employment, maintaining price stability and improving the balance of payment conditions of the country. Although policy measures change frequently, these objectives have remained relatively constant. Until the mid-1980's, tax policies for instance, were geared to achieving specific objectives such as

1) Ensuring effective protection for local industries,
2) Encouraging greater use of local raw materials,
3) Enhancing the value added of locally manufactured and primary product,
4) Generating increased government revenue (Odusola, 2006).

Since the implementation of the Structural Adjustment Programme (SAP), taxes have been used to enhance the productivity and competitiveness of business enterprises. Consequently, attention has been focused on promoting exports of manufacturers and reducing the tax burden of individuals and companies. In line with this change in policy focus, many measures were undertaken, these amongst others include, reviewing custom and excise duties, continuing with the reduction of company and income taxes, expanding the range of tax exemptions and rebates, introducing capital allowances, expanding the duty drawback scheme and manufacturing-in-bond scheme, abolishing Excise Duty, implementing VAT, monetizing fringe benefits and increasing tax relief to low income earners.
There is always the need for constant review of tax laws and administration.

Tax reforms are enunciated to also accomplish certain macroeconomic objectives in the economy.According to Alli (2009), the objectives of tax reforms in Nigeria are;
1. To bridge the gap between the country's development needs and the funding of the needs.
2. To enhance taxation as a fiscal policy instrument.
3. To improve on the level of tax revenue generation from non-oil activities in relation to revenue derived from oil activities.
4. To facilitate efforts at constantly reviewing the tax laws to reduce and manage tax evasion and avoidance.
5. To achieve improved service delivery by the tax institutions to the public.
6. To improve the tax administration to make it more efficient, responsive, reliable, skilful and taxpayers friendly; and
7. To achieve other fiscal objectives.

Recognizing the importance and role of taxation in stimulating economic activities, the Federal government initiated an economic blueprint known as the National Economic Empowerment Development Strategy (NEEDS) which anchored the tax system as a critical

part of the reform agenda to foster increase in tax revenue on a year to year basis. As part of the agenda, the National tax policy was enunciated to serve as a tool of economic development through the following:

1. Stimulating the growth of the Nigerian economy by using tax revenues to develop basic infrastructure such as power, roads, transportation and such other infrastructure which will stimulate economic growth.
2. Direct stimulation of certain sectors of the economy which are identified to be important for the creation of employment opportunities for Nigerians.
3. Regulating and strengthening financial and economic structures and for correcting market imbalances and economic distortions.
4. Income redistribution such that tax earned from high income earners are used for the provision of infrastructure for the lowest income earners. Taxes shall act as a means to create a social security net and,
5. Stimulating domestic and foreign investment. (Federal Inland Revenue Service 2012).

The aim of the tax reform is to increase the non-oil tax revenue generation on a year to year basis so as to increase economic activities.

2.7 Economic Growth

The International Monetary Fund (2009) and CBN (2010) stated that economic growth is the increase in the amount of the goods and services produced in an economy over time. It is conventionally measured as the percent rate of increase in real gross domestic product, or real GDP (RGDP). Growth is usually calculated in real term i.e. inflation- adjusted terms, in order to net out the effect of inflation on the price of the goods and services produced.

3 Research Methodology

The study adopted historical research design to analyse the relationship of the behaviour between the variables over time.

3.1 Method of data collection

Secondary data was extracted from Central Bank of Nigeria statistical bulletin, Federal Inland Revenue Service and Federal Ministry of Finance. The data extracted were Gross Domestic Product (GDP) and the major tax revenue from the period 1985-2011. Gross domestic product was adopted as proxy for economic growth. The study adopted dummy variables of one and zero to represent years with and without tax reforms respectively.

3.2 Data estimation technique

The secondary data were analysed using the ordinary least square technique based multiple regression. The t statistic was used to determine the significance of the individual variables while the F statistic and the adjusted R square explain the significance of the overall model in the study.

3.3 Model Specification and operational definition of the variables

The study adopted the model of Ogbonna and Appah (2012) on the impact of tax reforms and economic growth of Nigeria and in line with literature but made certain modification.

The model specification is therefore;

$GDP = f\,(PPT, CIT, VAT, ET, PIT, CED, TNREF)$…………………………….. (1)

$GDP = \beta_0 + \beta_1 PPT + \beta_2 CIT + \beta_3 VAT + \beta_4 ET + \beta_5 PIT + \beta_6 CED + \beta_7 TNREF + U$…. (2)

$GDP_t = \beta_0 + \beta_1 PPT_t + \beta_2 CIT_t + \beta_3 VAT_t + \beta_4 ET_t + \beta_5 PIT_t + \beta_6 CED_t + \beta_7 TNREF_t + u_t$…..…. (3)

$GDP_t = \beta_0 + \beta_1 TNON_t + \beta_2 TNREF_t + u_t$……………………………………………………….. (4)

Where;
GDP = Gross Domestic Product,
PPT = Petroleum Profit Tax
CIT = Companies' Income Tax,
VAT =- Value Added Tax,
ET = Education Tax,
PIT = Personal Income Tax,
CED = Custom and Excise duties,
TNREF = Tax Reform to be represented by Dummy variable,
TNON = Total non-oil tax revenue

Where (from equation 3 above); β_0=Intercept term (parameter). This gives the average effect on GDP of all the variables excluded from the model. In other words, it is the average value of GDP when PPT, CIT, VAT, ET, PIT, CED and TNREF are sets equal to zero.
β_1- β_7 are parameters known as partial regression coefficients or partial slope coefficients (Gujarati and Porter 2009; Gujarati 2006). β_1 measures the change in the mean value of GDP per unit change in PPT holding the values of CIT, VAT, ET, PIT, CED and TNREF constant. β_2 would measure the change in the mean value of GDP per unit change in CIT holding PPT, VAT, ET, PIT, CED and TNREF constant. β_3 measures the change in the average effect of GDP per unit change in VAT holding PPT, CIT, ET, PIT, CED and TNREF constant. β_4 measures the change in the mean effect of GDP per unit change in ET holding PPT, CIT, VAT, PIT, CED and TNREF constant. β_5 measures the change in the average value of GDP per unit change in PIT holding PPT, CIT, VAT, ET, CED and TNREF constant. β_6 measures the change in the mean value of GDP per unit change in CED holding PPT, CIT, VAT, ET, PIT and TNREF constant. β_7 measures the change in the mean value of GDP per unit change in TNREF holding PPT, CIT, VAT, ET, PIT and CED constant.

U_t= Represents the random or stochastic disturbance term or error term or unexplained variables. It represents the residual term of all the other variables not included in the model and it follows normal distribution with mean zero and constant variance σ^2. Sweeney, Williams, and Anderson (2006) stated that it accounts for the variability in the dependent variable that cannot be explained by the linear effect of all the independent variables in the model.
t denotes the value of the variable at time t.
Equation (4) is a multiple regression of the summation of all the non-oil tax revenue taking into consideration of tax reforms on those taxes that are covered by the data set.

4 Results and Discussions

The regression results as specified in the model are presented below in tables 4.1 and 4.2 as follows:

Table 4.1 Dependent Variable: GDP
Method: Least Squares
Date: 02/20/13 Time: 22:11
Sample(adjusted): 1985 2011
Included observations: 26 after adjusting endpoints

Variable	Coefficien	Std. Error	t-Statistic	Prob.

	Coefficient			
PPT	2.640892	0.786057	3.359669	0.0035
CIT	51.91829	21.83899	2.377321	0.0287
CED	14.95009	8.257287	1.810533	0.0869
VAT	-16.79956	28.59824	-0.587433	0.5642
PIT	9.918969	5.739624	1.728157	0.1011
ET	-46.74050	24.30770	-1.922869	0.0705
TNREF	313176.7	597148.2	0.524454	0.6064
C	-251737.5	630979.7	-0.398963	0.6946

R-squared	0.992944	Mean dependent var	7109336.
Adjusted R-squared	0.990199	S.D. dependent var	9075784.
S.E. of regression	898482.1	Akaike info criterion	30.50246
Sum squared resid	1.45E+13	Schwarz criterion	30.88957
Log likelihood	-388.5320	F-statistic	361.8395
Durbin-Watson stat	1.987283	Prob(F-statistic)	0.000000

From the result in table 4.1 above, the adjusted R-square of 0.99 implies that 99% of the total variation in gross domestic product, that is economic growth, is as a result of variation in petroleum profit tax, company income tax, customs and excise duties, value added tax, personal income tax and education tax and tax reforms in Nigeria. This implies that the model is well specified and there is goodness of fit. Considering the individual independent variables using the probability values of each t statistic result, customs and excise duties, value added tax, personal income tax and education tax have no statistical significant impact on economic growth at 5% level of significance. Tax reforms also on by itself have no significant impact on economic growth in Nigeria during the period covered by the study. Petroleum profit tax and company income tax at their t -statistic probabilities of 0.35% and 2.87% level of significance, each has positive significant impact on economic growth of Nigeria. The Durbin Watson statistic of 1.98 indicates that there is no presence of serial autocorrelation in the model.

Adopting the probability of the F statistic which is a test for the overall significance of the model, it implies that at zero level of significance, the model is rightly specified. We would therefore not accept the null hypothesis and conclude that overall tax reforms have significant impact on the economic growth in Nigeria. This confirms the existence of long-run equilibrating relationship between the variables, i.e. gross domestic product and all the independent variables in the model. The result above is in consonance with the results of Ogbonna and Appah (2012).

Table 4.2 Dependent Variable: GDP
Method: Least Squares
Date: 02/20/13 Time: 22:20
Sample(adjusted): 1985 2011
Included observations: 26 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TNON	16.47978	0.859779	19.16748	0.0000
TNREF	720801.8	1095487.	0.657974	0.5171
C	-403725.5	1145946.	-0.352308	0.7278

R-squared	0.954485	Mean dependent var	7109336.
Adjusted R-squared	0.950527	S.D. dependent var	9075784.
S.E. of regression	2018678.	Akaike info criterion	31.98195
Sum squared resid	9.37E+13	Schwarz criterion	32.12712
Log likelihood	-412.7654	F-statistic	241.1645
Durbin-Watson stat	1.256190	Prob(F-statistic)	0.000000

Table 4.2 is the multiple regression of the sum of non-oil tax revenue and the tax reforms. The t statistic probability of zero level of significance indicates that there positive significant impact of the non-oil taxes on economic growth of Nigeria while the tax reforms are not statistically significant. The overall model using the adjusted R square and the probability of the F statistic indicate that there is goodness of fit and the model is well specified. Adopting the adjusted R square, it explains that 95% of the total variation in economic growth is as a result of variation in the sum of non-oil taxes and tax reforms included in the model. The value of the F statistic of 241.16 with probability value at zero level of significance means that the model is statistically significant and we therefore reject the null hypothesis and conclude that overall, non-oil taxes and tax reforms have significant impact on the economic growth of Nigeria.

5. Conclusion and Recommendations

The ordinary least square based multiple regression was used to estimate the relationship between tax reforms and economic growth in Nigeria. The study found that 99% of the total variation in economic growth is as a result of variation in petroleum profit tax, company income tax, customs and excise duties, value added tax, personal income tax and education tax and tax reforms in Nigeria. This confirms the a priori expectation that there exist of long-run equilibrating relationship between the tax reforms and economic growth in Nigeria.
The study therefore recommended that, chartered tax practitioners should be allowed to play leading roles in any tax reform process to ensure a robust tax system. Government should review obsolete laws and rates to align with current macroeconomic target and promote fiscal responsibility and sustainability.
There should be harmony in the objectives of tax reforms with other industrial and macro-economic objectives.
Adequate time and resources should be committed to the legislative process in order to have tax laws that are easily implementable. In this regard the powers of the national and state houses should be left sacrosanct in line with provision of the 1999 constitution.
Government should always consider tax payers and other key stakeholders' interests in fiscal policy formulation and implementation in order to achieve improved tax compliance rate in the country. All government agencies and other stakeholders should ensure the full implementation of the National tax policy.
There should be accountability and transparency on the part of government and tax officials in the management of tax revenues for the benefit of the citizens and the economy as a whole. This will motivate the tax payers to comply willingly.
A Corrupt – free and efficient administrative machinery with adequately trained, well equipped and motivated personnel would enable Nigeria to make appreciable progress in revenue generation.
Tax authorities should endeavor to cultivate the co-operation of the professional bodies connected with tax matters such external auditors and corporate tax consultants to minimize the current level of abuses on tax returns.

References

Adesola, S. M. (2004): *Income tax law administration in Nigeria* Ile-Ife; University of Ife Press Ltd.

Agbetunde, L. A (2010): *Principles and practice of Nigerian personal income tax* 2nd ed. Lagos, El-Toda Venture Ltd.

Alli, B.D (2009). *Managing the tax reform process in Nigeria*, Nigeria: Niger Account 42(1):45-51

Anyanwu, J. C. (1997): *Nigerian public finance* Onitsha, Joanne educational publishers.

Arnold, J. M (2011*):* "Tax policy for economic recovery and growth" *Economics Journal*. 121:59-80.

Asuquo, R.G. (2014). Tax System in Nigeria: Issues and Challenges, *Vanguard march 24,2014*

Attamah, N. (2004). *Taxation and Fiscal Policy*. Enugu-Nigeria: Nigmos Publishers.

Azubuike, J. U. B (2009): "Challenges of tax authorities, tax payers in the management of tax reform processes". The *Nigerian Accountant 42(2)* 36 -42.

Bhatia, H. L (2009): *PublicFfinance* 14th edition New Delhi, Vikas publishing house PVT Ltd.

Central Bank of Nigeria (2010). Annual report and financial statements.

Chartered institute of taxation of Nigeria (2002). *Nigeria tax guide and statutes*, Nigeria: CITN publications.

Engen, E. and Skinner J. (1996): "Taxation and economic growth" *National Tax Journal; 49(4):* 617-642.

Federal Inland Revenue Service (2012) *Taxation reform in Democratic Nigeria*.Firs.Html.

Gujarati, D.N (2006). *Essentials of Econometrics. 3rd Edition*, Boston Mcgraw-hill International Edition.

Gujarati, D.N and Porter, D.C (2009). *Basic Econometrics, 5th Edition*, Boston: Mcgraw Hill International Edition.

Ihendinihu, J.U, Jones, E., Ibanichuka, E.A (2014). *The Standard International Journals Transactions on Industrial, Financial & Business Management, Vol 2, No. 2: 39-47*

International Monetary Fund (2009). Deflation, Economic Growth, BOP. Celebrating the spirit of small enterprise, June 2009 imf.htm p1-2

Jhingan, M.L (2011). *Money, Banking, International Trade and Public Finance, 8th Edition* Delhi: urind Publication ltd, Mayur Vihar Phase 1.

Musgrave, R. A and Musgrave, P. B (2004): *"Public finance in theory and practice"* 5th edition , New Delhi, Tata McGraw-Hill.

Naiyeju, J. K (2010): *Nigeria speaks on taxation: a tool for social change administration in Nigeria and the issue of tax refund* A Paper presented as part of Nigeria 50th anniversary celebration at Aso Hall, October 1, 2010.

National Tax Policy, 2013. Nigeria

Odusola, A (2006). Tax policy reforms in Nigeria, United Nations University- *World Institute for Development Economics and Research* , Research paper no 2006/03, http://www.wider.unu.edu

Odusola, A. (2006): *Tax policy reforms in Nigeria* paper presented at World Institute for Development Economics research paper No. 2006/3 p. 1-45; United Nations university.

Ogbonna, G.N and Appah, E (2012). Impact of tax reforms and economic growth of Nigeria: A time series analysis, *Current Research Journal of Social Sciences 4(1): 62-68, 2012.*

Organization for Economic Co-operation and Development (2016). Revenue statistic-comparative table, OECD Stat, https://stat.oecd. Extracted Feb, 22, 2016

Premium Times (2014). Nigeria's tax revenue ratio to GDP drops, Okonjo-Iweala says. April 7, 2014, www.premiumtimesng.com

Rena, R.(2011), *Public Finance and Taxation* Windhoek centre for lifelong learning, Polytechnic of Nambia.

Rewane, B (2013). Nigeria's chaotic tax system. *Punch Editorial board, Punch newspapers, April 9, 2013.*

Sweeney, D.L, Williams, T.A and Anderson, D.R(2006). *Fundamentals of Business Statistics*, International Student Edition Thomson South-Western

Tosun, M. S and Abizadeh S. (2005): *Economic growth and tax components: an analysis of tax change in OCED, Appl. Econ 37*:2251-2263.

World Bank Group (2016). Tax Revenue (% of GDP) data.worldbank.org