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Analysis of Tax Formation and Impact on Economic Growth in Nigeria

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Abstract

As a fiscal instrument, direct taxes are used to adjust people's disposable income and to reduce the parameter of unearned incomes. At the macroeconomic level, taxes are used to redistribute income and therefore contribute to the economic growth of the country. This paper examines the empirical forms of tax on the economic growth in Nigeria. Secondary data were sourced within the periods of 1985-2011 and Model was specified and estimated using some econometric. The result showed that the determinant factor of economic growth in the country through tax, only custom and exercise duties is capable of influencing but has an inverse relationship and significant to the GDP. It is observed that economic instability were experienced between 1986-1987 and 1993 to 1995 but evident in the stability in the economic growth from the graph in the rest of the years of the study around bench mark value of zero line of the GDP predicted graph based on tax generations in Nigeria. The study therefore recommended that the company income tax system should be generally restructured to bring about more yielded revenue results capable of contributing more significantly to the Nigerian economic as it is done in the advanced countries of the world. Custom service operations and revenue generations in the border is not practically reflected in the economy due to no accountability, transparency and leakages in the system.

Keywords: Tax, Model, Granger, Ramsey Reset, Influence and Forecast

1. Introduction

Different political systems have engendered different principles for sharing revenues that are derived from a state or region. In Nigeria, revenues have been allocated according to a formula recommended by ad-hoc Fiscal Commissions or based on a principle chosen by the state. From 1946 to date, a total of thirteen revenue allocation Commissions had been set up. Each Commission recommended a formula for revenue sharing depending on the economic fortunes and purposes, which the government wanted the revenue sharing formula to serve. The revenues are raised mainly through taxation to finance government expenditure and to influence other activities in the economy.

A tax is a compulsory levy imposed on individuals, firms, commodities and communities by the government. But the feature of compulsory levy inherent in taxation is usually undermined because people dislike the civic responsibility that the payment of tax connotes. In Nigeria, people, especially the rich and the elites, deliberately dodge this civic responsibility and sometimes employ the service of tax specialists in order to pay less tax to the government. There is also the problem of falsification of ages and the number of children and dependents one has in order to reduce the amount of tax payable. The sub-national governments (state and local governments) contend that their currently assigned taxes are poor in terms of their bases and, therefore, accruable revenues are not enough to meet their expenditure targets. Also the statutory allocation from the Federation Account has been grossly inadequate. This invariably reduces their overall performance, considering their expenditure profiles.

Nigeria became a sovereign state in 1960.The revenue sharing formula of the proceeds of the DPA was adjusted in 1961 following the pulling out of Southern Cameroon from the federation. The new formula allocated 42, 32.6, and 25.6 per cent to the Northern, Eastern and Western regions respectively. A further adjustment was made in 1963, as a result of the creation of the Mid-western region. With this, the share of the Western region was divided between it and the Mid-western region at a ratio 18.9 and 6.3 per cent for the Western and the Mid-western region respectively. The federal government in 1964 commissioned the Binns Fiscal Commission with the mandate to recommend a widely acceptable tax assignment and revenue sharing system. Following its recommendations, the share of DPA from federally collected revenue was increased to 35 per cent while that of the federal government was reduced to 65 per cent.

The military takeover of governance in Nigeria in 1966 led the federal military government to suspend the Constitution and other related edicts. With decrees, the federal military government made frequent adjustments to tax assignments and revenue sharing formula. With time, it retained most of the taxes such as company income tax, petroleum profit tax and excise duties. Others were the sharing of excise duties on sale of tobacco and petroleum products and import duties on motor spirits equally between the federal and the DPA; export duties on the basis of 3:2 by the state of origin and the DPA, and the introduction of uniform tax structure on personal income and sales taxes in 1975. In addition, the federal government replaced the regional marketing boards with commodity boards and, thus, assumed the control of the operations of the boards. In 1971, with Decree No. 9, it retained all the

off-shore oil revenue, while Decree No. 6 of 1975 channeled all revenue to be shared by the states through the DPA, except for the 20 per cent of on-shore mining rents and royalties due to the states of origin on the principle of derivation (Okunrounmu, 1996).

Against these backdrops, there is the existence of vertical and horizontal fiscal imbalances between the federal, state and local governments in Nigeria, which poses serious threat to the cordial financial relationships between these three entities. The objectives of this research are as follows.

1. To examine the relationship between economic growth and the various tax forms in Nigeria.

2. To examine the relationship between the tax formations and economic growth in

Nigeria

1.1 Research Hypotheses

According to Evborokhai (2003), hypotheses are declarative statements of assumptions or calculated guesses held by the researcher, which serves as a tentative answer to the problem under investigation. In this study, hypotheses are stated as follows:

- There is no significant relationship between vertical fiscal imbalance of federal and uneven development in the country.
- There is no significant relationship between uneven development and vertical fiscal imbalance of sub national government.

2. Literature Review

Social scientists maintain that there is a social contract between the people and the government, whereby the former accept to forget some of their fundamental rights and also make certain contributions in return for the provision of common services by the latter (Alasan, 2003). These common services include the maintenance of internal and external security, provision of health and educational facilities, roads, electricity, communication networks and so on.

The provision of the aforementioned services is aimed at increasing the welfare of the people subject to the availability of resources. To enable the government carry out these welfare services or responsibilities, it is imperative that adequate finances be raised. One of the means through which such funds are raised by government is taxation.

2.1 The Meaning of Taxation

Taxation is defined by Anyanwu (1997) as a compulsory levy by the government on individuals, companies, goods and services to raise revenue for its operations and to promote social equity through the redistribution of income effect of taxation. In line with this frame of thought, taxation is a source of government revenue by which individuals and cooperate bodies are mandatorily required to pay certain proportion of their earnings to the government for the course of development. Viewed from this perspective, Bhatia (2003) defined tax as a

compulsory levy payable by an economic unit to the government without any corresponding entitlement to receive a definite and 'direct' *quid pro quo* from the government. Note the word direct here. It is not a price paid by the tax payer for any definite service rendered or a commodity supplied by the government. The benefits received by tax payers from the government are not related to or based upon their being tax payers. A tax is a generalized exaction, which may be levied on one or more criteria upon individuals, groups or individuals, or the legal entities. "*quid pro quo* means something given or taken as equivalent to another" (Bhatia, 2003).

Little wonder that Thomas, A. and Chaido (2005) assert that all sums levied by a government or through its accredited agents on the people residing in a country either as individuals or organizations (direct tax) or on goods imported or home produced (indirect tax) to enable the government meet its expenses and for the provision of general benefits are regarded as taxation. On his part, Olorunleka (1985), defines taxation as the process or machinery by which a community or group of people is made to contribute part of their income in some agreed quantum and method for the purpose of the administration and development of the society. It, therefore, follows that a tax is a financial charge or other levy imposed on an individual or a legal entity by a state or a functional equivalent of a state (for more details, see wikipandia org/wiki/tax). It can also be regarded as an enforced charge exerted on persons, corporations and organizations by the government to be used to support government services and programs

(For details, see www.bohmcre.cm/glossary of terms/t. htm)

Alasan (2003) further points out two characteristics that are important in the imposition of taxes. First, its payment is compulsory as the government can coerce people to pay it. And second, non-payment of taxes usually attracts penalties. This implies that it is only the government that can levy taxes and this is done through various government agencies like the Board of Inland Revenue, the Joint Tax Board, the State Board of Internal Revenue, Local Government Revenue Committee and Joint State Committee (Ojo, 2003).

2.2 Taxes and their Components

In economic literature, the distinction is usually made between direct and indirect taxes. Direct taxes are taxes on income or receipt and the incidence of such a tax falls directly on the payer in that it is not possible for the person who pays the tax to shift the burden to someone else. Examples of direct taxes are personal income tax, capital gains tax, corporate income tax, company and payroll tax (Bawa, 2009).

Musgrave and Musgrave (2004) define direct taxes as those which are imposed initially on the individual or household that is meant to bear the burden while the indirect taxes are taxes which are imposed at some other point in the system but are meant to be shifted to whoever is supposed to be the final bearer of the burden. Personal taxes, such as the individual income tax are thus direct and most in rem taxes such as sales and excise taxes are indirect

As a fiscal instrument, direct taxes are used to adjust people's disposable income and to reduce the parameter of unearned incomes. At the macroeconomic level, direct taxes are

used to redistribute income (Alasan, 2003).The income distribution tenets of taxation lead us to the different forms of direct taxes, which are progressive tax, neutral (or proportional) tax and regressive tax. Under the progressive tax system, the higher the tax base, the higher the tax rate. The rate of taxation is graduated progressively as income increases. The regressive tax is the exact opposite of progressive tax. The tax rate diminishes as the income level or tax base increases so that low rate of tax is paid at higher level of income. The neutral tax is a method of setting tax rates so that the taxes paid as a fraction of income remain constant as actual income rises (Bawa, 2009).

Income from most sources including pay for work done, interest and dividend income, capital gains, rent and royalties and business or profit income are subjected to taxation. Income taxes are levied on taxable income, which is total income minus exemptions and deductions. Some of these adjustments, especially when used in ways unintended by legislations are sometimes called loopholes (Henderson and Poole, 1991). Viewed from this perspective, Ojo (2003) indicates that under the provisions of the capital gains tax act in Nigeria, tax liability arises on actual year basis when a chargeable asset is disposed. Capital gains arise where the sales proceed on the disposal of the changeable asset is more than the cost of organization. On the other hand, Henderson and Poole (1991) analyze a payroll tax as a fixed-rate tax on earnings (up to a specified level) with no deductions or exemptions, where the money is earmarked (set aside) as contributions to particular social insurance programmes.

An indirect tax is a tax on expenditure or outlay and it is possible to shift the tax incidence (partly or wholly) to someone else Alasan (2003). Custom duty is an example of indirect tax and it consists of both the export and import duties although the latter is usually emphasized in countries where import predominates. Export Duty is a tax on the goods exported to other countries, while import duty is a tax on the goods coming into a country from other countries.

Value added tax is another form of indirect tax rate applied at each stage of production to the value added. The sum of value added at all stages of production equals retail price, so the tax should be the same as a retail sales tax of the same rate (Ojo, 2003). Sales and excise taxes are levied on the consumption expenditure of a wide range of goods and services and tax levied on home made goods respectively.

2.3 Revenue Allocation and Expenditure

According to Aigbokhan (2006), the literature on fiscal federalism provides guidance on how expenditure assignment could be optimally designed on the grounds of locative efficiency, manageability, autonomy and accountability. Furthermore, in the decentralization theory proposed by Oates (1972), local provision of services allows greater responsiveness to the preferences and needs of local residents, as well as enhances inter-jurisdictional competition and innovation in the provision of public services. Thus, the principle provides a case for the lowest of government with goals of a locative efficiency.

There is, nonetheless, a case for some degree of centralization. Firstly, the existence of benefits/costs spillover to non-residents, which may result in under - provision of services

would provide a basis for central provision to internalize such benefits/costs. Second, economies of scale make some services to require jurisdiction larger than a local one for cost effectiveness. And third, on account of administrative and compliance costs, a centralized administration generally leads to lower cost of financing the provision of services. These cost variations are in addition to the stabilization and redistributive functions of the central government.

In the view of Onah and Ukwueze (2006), natural resources are spatially or unequally distributed in Nigeria and there exists unequal distribution of revenue among the various levels of government in the country. As a result, various units of the federation clamour for appropriate methods of sharing federal resources, hence the concept of revenue allocation principle. Revenue allocation involves the redistribution of fiscal capacity between and among the various levels of government or the disposition of the fiscal responsibilities between/among the tiers of government (Anyanwu, 1997). In other words, revenue allocation refers to the transfer of financial resources from one level of government to another, which arises because of the revenue advantage which the former has over the latter, mostly as a result of the powers conferred on it over tax revenues (Mbanefoh and Anyanwu, 1990). In a federal system, each tier of government has numerous duties and responsibilities assigned to it, and, thus needs adequate financial resources to undertake these responsibilities (Onah and Ukwueze, 2006). Although the responsibilities are a necessity in principle, in practice, however, it is impossible to adjust the responsibilities (especially in a federal system) of the tiers to match their financial resources.

2.4 Fiscal Arrangements in Nigeria

Aigbokhan (2006) opines that a comparison of expenditure assignment provided for in the Tax and Levies (approved list for collection) Decree No 21 of 1998 corresponds closely to what is suggested by economic principles as cited by Broadway, Roberts and Shah (1994). As it were, the federal government has responsibility for major economic activities, particularly those with inter jurisdictional benefits, such as international trade, currency and banking, air and rail services. It also has responsibilities for defense, foreign affairs and the police. Conceptually though, responsibility for the police is a responsibility the states and local governments showed share with the sub-national government responsibility for natural resources, with the latter groups having responsibility for such resources as timber and logs, which usually have restricted jurisdictional benefits. There is also joint responsibility for social services such as education and health, as well as economic activities in agriculture and industry. The federal government has responsibility for these services at the tertiary level, while sub - national governments assume such responsibilities at the secondary and primary levels. Education, however, provides a unique example of when this division is not adhered to. The federal government shares responsibility for secondary education with state governments. It also shares responsibility for primary education with local governments, as it specifically pays teachers' salaries. Conceptually, responsibility for environmental issues is to be shared by the three level of government. In practice, local governments are merely involved. Yet, these are services that have significant local jurisdictional consequences (Aigbokhan, 2006).

In Nigeria, the federal government has exclusive responsibility for natural resources, international trade, company income and value added taxes. The state governments handle responsibility for residence based taxes, while they share with other levels of government access to benefit taxes and user charges. The local governments have the responsibility for taxes on urban properties and services taxes (Aigbokhan, 2006).

The nature of tax assignments reveals that the lower levels of governments have access to taxes that yield small proportions of their revenue needs. This means that they have to depend on transfer from the federal government to finance a greater proportion of their expenditures. Some criticisms have over the years trailed the sharing formula for federally - collected revenues among the three tiers of government and for transfers from the federal to sub - national governments.

In the light of this, we need to ascertain how the pattern of fiscal assignment and transfers translate to growth imperatives. A channel for this is the resultant degree of fiscal decentralization. The most common measure of the extent to which a system is decentralized (or centralized) is the concentration ratio, the proportion of total direct government expenditure made by the central government.

2.5 Tax Policy and Economic Growth

Tax structure varies all around the world with the prime motive of attaining maximum revenue with minimum distortion different country have different philosophies about taxation and have different method for collection, in the same manner countries have different uses of their revenue which affect the growth differently (Masood, Sohaib, and syed, 2000).

Agell et al. (1997) all argue that the different uses of total government expenditure affect growth differently and a similar argument applies to the way tax revenue is raised. During the last few decades, many countries have increased taxation quite dramatically, while others are following suit. Some countries have incorporated value-added taxation and some are going to incorporate such as Pakistan. Romer (1986) emphasizes factors such as "spillover effect and learning by doing" by which firms specific decision to invest in capital and research and development, or individual investment in human capital, can yield positive external effects that benefit the rest of the economy, in this model government spending and tax policies can have a long-run of permanent growth effects. Gordon (1998) shows a low corporate tax rate relative to personal tax rates encourages risk-taking. Viewed from this perspective, Gentry and Hubbard (2000) also provide evidence that a progressive personal tax structure discourages risk-taking.

Solow (1956) was the first to examine how taxation affects growth. The neoclassical growth model of Solow implies that steady state growth is not affected by tax policy. In other words, tax policy; however distortion has no impact on long term economic growth rates, even if it does reduces the level of economic output in the long term. Atkinson (1995) argued that the different uses of total government expenditure affect growth differently and a similar argument applies to the way tax revenue is raised. Due (1964) supports that countries which are based on indirect taxation have grown more rapidly than those based on direct taxation.

For example, the economic growth of Singapore can be attributed to low rates of corporate taxation and personal income taxation. Burgess and Sterm (1993) argue that the structure of taxation in developing countries differs from that of developed. For developing countries, we have roughly two-thirds of tax revenue coming from indirect taxes, while for developed countries two-thirds comes from direct taxes. They suggested that tax structure can change over time to maximize the economic growth rate.

Kneller et al. (1998) studied the effect of the structure of taxation and public expenditure to the steady-state growth. Taking account of the financing assumption associated with the government budget constraint, their results are consistent with the Barro (1990) model. Specifically they find that non-distirtionary taxation and productive expenditure enhances growth. In our study, we examine the relationship and stability of tax system and its impact on economic growth in Nigeria.

3. Research Method

In this study, secondary data are used and were collected from Central Bank of Nigeria Statistical Bulletin, Central Bank of Nigeria Economic and Financial Review, Central Bank of Nigeria Annual Reports and Statement of Accounts. In all cases, the data are annual time series data and covered the period of 1985 to 2011. The data are extracted from textbooks, relevant articles in Newspapers and Journals Central Bank of Nigeria Annual Reports, Statistical Bulletins, National Bureau of Statistics as well as related statistical bulletins. Information is also sourced from websites.

3.1 Model Specifications

Following the work of Masood, Sohaib and Syed (2010),Rapu (2006) and Onah (2006), the model specified for this study is as follows,

Model 1

$GDP = f(CIT, CED, VAT)$

Where:

GDP = gross domestic product

CIT = company income tax

CED = custom and excise duties

VAT = value added tax.

$GDP = a_o + a_1 CIT + a_2 CED + a_3 VAT + u$

$a_1, a_2, a_3 > 0$

Where:

a_o = intercept

a_1 = the coefficient of company income tax (CIT)

a_2 = co-efficient of custom and excise duty (CED)

a_3 = co-efficient of value added tax (VAT)

u = the error term

We seek in this work to determine whether these variables do or do not habitually move together. According to Koutsioyannis (1973), the coefficient of correlation is a measure of the degree of co -variability of the dependent and independent variables. The values that the correlation coefficient may assume vary from -1 to + 1 when r is positive, dependent and independent variables increases or decrease together. r = + 1 implies that there is perfect positive correlation between dependent (GDP) and independent (CIT, CED & VAT) variables respectively.

3.2 Techniques of Data Analysis

The data gathered are estimated using the simple linear regression technique, with E-Views 4.0 econometric software to authenticate and take decision on the outcome of the results obtained. Various statistical tests such as the F-statistic is used to test the overall significance of the regression equation. The t-test is adopted to test the significance of each variable. The Durbin-Watson test is also used to test the present or absence of autocorrelation among the explanatory variables in model.

3.3 Granger Causality Test

Generally, the variables forecasting have the ability to measure the effect or influence of one variable on the other (Granger, 1987). If a variable, or group of variables, X_2 then X_1 is said to Granger cause X_2 otherwise does not granger causes X_2. Formally, X_1 fails to granger cause X_2 if for all $s > 0$ the MSE of a forecast of $X_{2,t+s}$ based on $(X_{2,t}\ X_{2,t-1},\ldots)$ is the same as the MSE of a forecast of $X_{2,t+s}$ based on $(X_{1,t}\ X_{1,t-1},\ldots)$ and $(X_{2,t}\ X_{2,t-1},\ldots)$. In this study, the variables both the dependent and the independents shall be subjected to Granger Causality test procedure to measure at one point or the other the influence of such variables in short and long run or both which require terms.

Mathematically,

$$\Delta X_2 \rightarrow \Delta X_1 \quad \text{Or} \quad \Delta X_1 \rightarrow \Delta X_2$$

The hypothesis is expressed as: $H_0:\ \Delta X_2 \rightarrow \Delta X_1$ or $\Delta X_1 \rightarrow \Delta X_2$.

3.4 Stability Test

In model Cumulative Stability is used to test how stable is the individual parameter to the endogenous variable (GDP).

4. Empirical Result and Discussion of Findings

Table1

Dependent Variable: LNGDP
Method: Least Squares

Sample: 1985 2011
Included observations: 27

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNCIT	0.391063	0.033475	11.68227	0.0000
LNCED	-0.030053	0.007988	-3.762422	0.0010
LNVAT	1.169226	0.163676	7.143544	0.0000
C	-0.132193	0.023658	-5.587577	0.0000

R-squared	0.992407	Mean dependent var	0.160707
Adjusted R-squared	0.991417	S.D. dependent var	0.023518
S.E. of regression	0.002179	Akaike info criterion	-9.284157
Sum squared resid	0.000109	Schwarz criterion	-9.092181
Log likelihood	129.3361	F-statistic	1002.077
Durbin-Watson stat	1.684181	Prob(F-statistic)	0.000000

Estimation Command:
==========
LS LNGDP LNCIT LNCED LNVAT C

Estimation Equation:
==========
LNGDP = C(1)*LNCIT + C(2)*LNCED + C(3)*LNVAT + C(4)

Substituted Coefficients:
==========
LNGDP = 0.3910626643*LNCIT - 0.03005275481*LNCED + 1.169225528*LNVAT - 0.1321929214

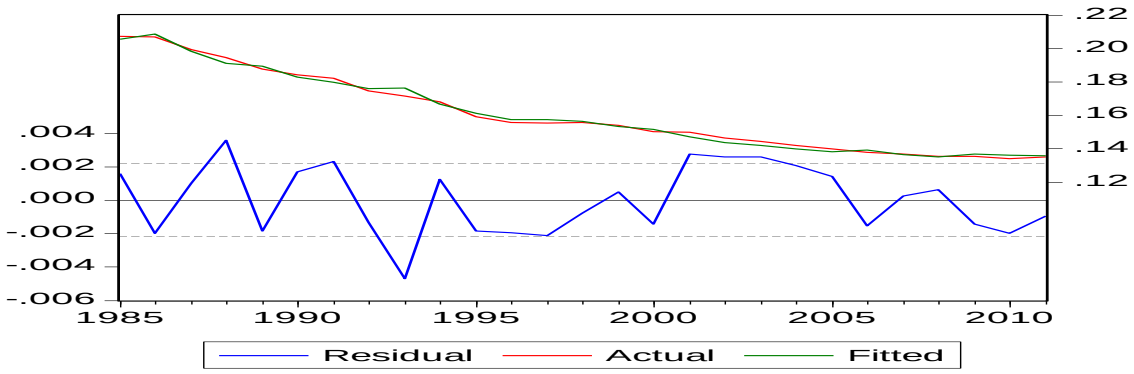
E-Views 4.0 Result output

The empirical result of the estimated model show that the probability value of F- statistics is (0.0000) is less that than the 5 per cent critical level, we accept the alternative hypothesis that the explanatory variables which includes, company income tax (CIT), Custom and Exercise Duties (CED) and Value Added Tax (VAT) are effective determinant factors of the economic growth (GDP), therefore over all significant relationship exists between explanatory variables and the dependent variable.

Analyzing the variables individually, it is observed that the probability value of t-ratio of CID, CED and VAT are jointly less than the 5% critical value. We accept the alternative hypothesis that the parameters (CIT, CED and VAT) are not statistically significant to GDP. This is our expectation, as we expect CIT and CED to be determinant factors of GDP in Nigeria

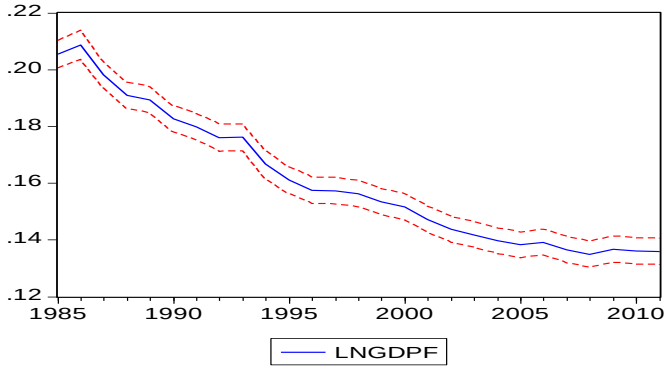
Furthermore, we accept the alternate hypothesis that VAT is statistically significant to the GDP as its probability value of t-ratio is less than 5% critical value, hence it is a determinant factor of gross domestic product (GDP) in Nigeria. This is not as expected that as the value added tax increases, it will generate more funds for economic growth in the country as against general believe of the company income tax and custom exercise duties of the developed and developing countries of the world. The DW-statistics of (1.6841) shows the absence of weak first order serial autocorrelation between the form of taxes and GDP. That is to say that, the form of taxes and GDP is interwoven in Nigeria as far as economic growth is concern.

Fig.1



The residual and fitted trend of GDP based on the tax forms indicate an decreasing exponential decay this may be as a result non tax payer compliance or non policy implementation adherence as regards the importance of tax to economic growth in Nigeria. The actual trend of the economic growth shows raises and falling of economic growth behavior over the year in respect to tax formation. It is observed that economic instability were experienced between 1986-1987 and 1993 to 1995 which could accounted for the military rule in the country and level corruption. However, stability in the economic growth was very evident from the graph in the rest of the years of the study as the trend meander within the zero line of the GDP predicted graph in fig1 above. See forecast graph below in fig2.

Fig2.



Forecast: LNGDPF
Actual: LNGDP
Forecast sample: 1985 2011
Included observations: 27

Root Mean Squared Error	0.002011
Mean Absolute Error	0.001782
Mean Abs. Percent Error	1.108977
Theil Inequality Coefficient	0.006193
Bias Proportion	0.000000
Variance Proportion	0.001905
Covariance Proportion	0.998095

From the analysis of the Gross Domestic Product model estimate, it indicates that company Income Tax and VAT have direct relationship with Gross Domestic Product; signifying that if Company Income Tax and VAT are to be increased in Nigeria, Gross Domestic Product will also increase. From the empirical study; Gross Domestic Product is negatively related to Custom and Excise Duties which implies inverse relationship exist between CED and the GDP in Nigeria. The exogenous variables Custom and Excise Duties Tax) explained about 99 per cent of the total variation in Gross Domestic Product which inform very good estimation for prediction. A relative change in CIT and VAT will result in about 0.39 and 1.2 correspondent increase in GDP respectively while change in CED by a unit rise brings about 0.03 decrease in the economic growth in Nigeria.

Table2:

Ramsey RESET Test:

F-statistic	4.465690	Probability	0.010328
Log likelihood ratio	17.89460	Probability	0.001294

Test Equation:
Dependent Variable: LNGDP
Method: Least Squares
Date: 09/25/12 Time: 03:59
Sample: 1985 2011
Included observations: 27

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNCIT	770.1728	275.8515	2.791983	0.0116
LNCED	-59.16785	21.19409	-2.791714	0.0116
LNVAT	2304.416	825.2644	2.792337	0.0116
C	-325.9128	116.4708	-2.798236	0.0115
FITTED^2	-23529.03	8534.407	-2.756962	0.0125
FITTED^3	139386.6	51240.68	2.720233	0.0136
FITTED^4	-409445.0	152708.2	-2.681225	0.0148

FITTED^5	477314.3	180758.7	2.640615	0.0161

R-squared	0.996087	Mean dependent var	0.160707
Adjusted R-squared	0.994645	S.D. dependent var	0.023518
S.E. of regression	0.001721	Akaike info criterion	-9.650623
Sum squared resid	5.63E-05	Schwarz criterion	-9.266672
Log likelihood	138.2834	F-statistic	690.8621
Durbin-Watson stat	2.145769	Prob(F-statistic)	0.000000

E-Views 4.0 Result output

The table2 confirm the structural stability of the fitted model using Ramsey Reset test statistic, the probability associated with the F-statistic is less than 5% critical level. We reject the null hypothesis and accept the alternative that the model is in functional form and highly fitted.

To investigation the existence of causality effect of the forms of tax on the economic growth in Nigeria, granger causality result reveal that custom and exercise duty granger causes GDP but GDP does not granger cause CED. This implies short run relationship between the custom and exercise duties and the economic growth in Nigeria between the study periods.

Table3

Granger Causality Tests

Sample: 1985 2011
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Probability
LNCIT does not Granger Cause LNGDP	25	0.14861	0.86285
LNGDP does not Granger Cause LNCIT		1.43375	0.26189
LNCED does not Granger Cause LNGDP	25	6.36952	0.00724
LNGDP does not Granger Cause LNCED		1.08510	0.35695
LNVAT does not Granger Cause LNGDP	25	0.29428	0.74824
LNGDP does not Granger Cause LNVAT		0.87777	0.43112
LNCED does not Granger Cause LNCIT	25	8.66617	0.00195
LNCIT does not Granger Cause LNCED		1.47494	0.25264
LNVAT does not Granger Cause LNCIT	25	0.28487	0.75511
LNCIT does not Granger Cause LNVAT		1.44936	0.25834
LNVAT does not Granger Cause LNCED	25	0.31102	0.73618
LNCED does not Granger Cause LNVAT		0.82250	0.45366

E-Views 4.0 Result output

The uni-directional of custom and exercise duties tendency indicates short run relationship between the GDP and CED in Nigeria. Among the forms of tax as the determinant factor of economic growth in the country only custom and exercise duties is capable of influencing but negatively impact on the GDP. Others are not effective enough by the analysis to exert

influence on GPD but they are positively related to the economic growth (GDP). The actual trend of the economic growth shows raises and falling of economic growth behavior over the year in respect to tax formation. It is observed that economic instability were experienced between 1986-1987 and 1993 to 1995 but evident in the stability in the economic growth from the graph in the rest of the years of the study around bench mark value of zero line of the GDP predicted graph.

5. Conclusion

From the analysis, we conclude that changes in the existing tax assignment will go a long way in protecting our nascent democracy. Company income tax, value added tax and custom and exercise duties are have significantly affected the rate of economic growth in the country. The granger investigation of what form of tax system can influence growth in Nigeria, Custom and exercises duties among all other forms of tax can influence GDP in the short run.

6. Recommendations

The empirical findings of this research have some implication for policy formulation and implementation for the Nigeria economy and listed as follows:

Firstly, one thing that has emerged clear with the coming into force of the 1999 constitution is that the fate of the Education Trust Fund cannot be different from that of the petroleum (special trust fund). By extension education tax revenue is now part of the federation Account Revenue and should be paid into that account. The VAT Pool Account should be abolished and merged with the federation Account for simplicity and transparency as well as in conformity with the constitutional provisions.

Secondly, the Federal government through the Revenue mobilization, allocation and Fiscal Commission (RMAFC) should establish a good and accepted statistical base for the purpose of revenue collection and sharing across the sub-national governments. This is in terms of derivation, industries population and geographic area. This should also, be reviewed at regular intervals through independent surveys.

Thirdly, the company income tax system should be generally restructured to bring about more yielded revenue results capable of contributing more significantly to the Nigerian economic as it is done in the advanced countries of the world.

Finally, political climate of Nigeria must be improved upon with strict adherence to the rule of law so as to stimulate economic growth. As observed, the custom exercise duties tax has reflected negatively to GDP. Custom service operations and revenue generations in the border is not practically reflected in the economy due to no accountability, transparency and leakages in the system.

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Appendix1

Table 2

The Forms of Taxes and Their Contributions to Gross Domestic Product (GDP)

YEAR	CIT	CED	VAT	GDP
1985	67908.60	2183.50	0.00	201036.30
1986	69147.00	1728.20	0.00	205971.40
1987	105222.80	3540.80	0.00	204806.50
1988	139085.30	5672.00	0.00	219875.60
1989	216797.50	5815.50	0.00	236719.60
1990	267550.00	8640.90	0.00	267550.00
1991	312139.70	11456.90	0.00	265379.10
1992	532613.80	16054.80	0.00	271365.50
1993	683869.80	15486.40	0.00	274833.30

1994	899863.20	18294.60	7260.80	275450.60
1995	1933211.60	37364.00	20761.00	281407.40
1996	2702719.10	55000.00	31000.00	293745.40
1997	2801972.60	63000.00	340000.00	302022.50
1998	2708430.90	57700.00	36900.00	310890.10
1999	3194015.00	87900.00	47100.00	312183.50
2000	4582127.30	101500.00	58500.00	328178.70
2001	4725086.00	170.600.0	91.800.0	356994.30
2002	6912381.30	181400.00	108600.00	433203.50
2003	8487031.60	195800.00	136400.00	477533.00
2004	11411066.90	217700.00	159500.00	527576.00
2005	14572239.10	237800.00	178100.00	561951.40
2006	18564594.70	177700.00	221600.00	595821.60
2007	20657317.67	241400.00	289600.00	634251.10
2008	24296329.29	281300.00	404500.00	674889.00
2009	24794238.66	233466.67	305233.33	634987.23
2010	29205782.96	252055.56	333111.11	648042.44
2011	26098783.64	255607.41	347614.81	652639.56

SOURCE: CBN Statistical Bulletin, 2012

Table 2.

The Forms of Taxes and Their Contributions to Gross Domestic Product (GDP)

Data Log Transformation

Year	LNCIT	LNCED	LNVAT	LNGDP
1985	0.206957	0.299477	0	0.188563
1986	0.206621	0.308871	0	0.188189
1987	0.199119	0.281761	0	0.188276
1988	0.194428	0.266401	0	0.18719
1989	0.187404	0.265633	0	0.186073
1990	0.18425	0.254029	0	0.18425
1991	0.182005	0.246362	0	0.18437
1992	0.174629	0.237778	0	0.184042
1993	0.17138	0.238666	0	0.183855
1994	0.167949	0.234614	0.259001	0.183822
1995	0.159077	0.218701	0.231629	0.183509
1996	0.155477	0.210954	0.22265	0.182883
1997	0.1551	0.208362	0.180783	0.18248
1998	0.155455	0.210032	0.218961	0.182063
1999	0.153744	0.202266	0.213994	0.182003
2000	0.150126	0.199742	0.209769	0.181287
2001	0.149826	0.191132	0.201497	0.180094
2002	0.146207	0.190163	0.198577	0.177409
2003	0.144326	0.188971	0.194749	0.176087
2004	0.141697	0.187341	0.192206	0.174755
2005	0.139596	0.186005	0.190452	0.173922
2006	0.137576	0.190488	0.187071	0.173157

2007	0.136704	0.185779	0.18309	0.172347
2008	0.1354	0.183514	0.178351	0.171549
2009	0.135238	0.186281	0.182328	0.172332
2010	0.13395	0.185134	0.181074	0.17207
2011	0.134832	0.184926	0.18047	0.171979

Source: Authors Computational Result, 2012.