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ABSTRACT
This paper examined the effect of different tax components on economic growth in Nigeria. In contrast to existing studies, this study examines the relationship between the components of government Tax revenue (property tax, excess duty, Value added tax, company income tax) and the growth rate of the economy (GDP) with data spanning from 1981 to 2013. The data collected were analysed using relevant descriptive statistics and econometric models such as the Augmented Dickey Fuller test, Johansen test, and Granger Causality test. The results from the various test shows that tax reforms is positively and significantly related to economic growth and that tax components granger cause economic growth. On the basis of the findings, the study concluded that tax reforms tax component improves the revenue generating machinery of government to undertake socially desirable expenditure that will translate to economic growth in real output and per capita basis. However, it was recommended that sustainable economic growth cannot be attained with tax reform processes except obsolete tax laws and rates are reviewed in line with macro economic objectives, corrupt-free and efficient tax administrative machinery with personnel’s and accountability and transparency of government officials in the management of tax revenue.


1.1 INTRODUCTION
Taxation in Nigeria following the extent laws is enforced by the 3 tiers of government, the Federal, the State, and the Local Governments with each having its sphere clearly spelt out in the Taxes and Levies (approved list for collection) Decree, 1998. Nigeria runs a largely centralized revenue collection system, with the federal government collecting the major revenue (petroleum revenue – profit taxes, royalties, crude oil sales; company income tax, value added tax, customs and excise duties) on behalf of the constituent governments.

An attempt to transform and diversify the existing revenue base led to various tax policy reviews in mid 1980s, 1991 and 2003 as well as the yearly amendments given in the annual budget. In spite of the various reforms, the tax system still had some set-backs especially in its structure and administration. While tax revenue was still not significant as the diversification of revenue portfolio was not achieved. The distribution of government revenue is skewed in favor of oil revenue vis-à-vis non-oil revenue; non-tax revenue vis-à-vis tax revenue; but within the tax structure, indirect taxes generate most of the revenue from tax in Nigeria. The distribution of government revenue has a wide range implications on fiscal performance and attainment of government policy objectives. Hence, tax revenue plays a role in maintaining budgetary stability in Nigeria.

The Nigerian tax component even though has been employed to achieve various economic objectives at notable periods, has basically been structured as a tool for revenue collection which was the legacy from the pre-independence government based on 1948 British tax laws. Over time however, it has been observed that the Nigerian tax system has inherent problems in its structure (Adegbie 2011). Nigerian tax structure is concentrated on petroleum and trade taxes while direct and broad-based indirect taxes like the value-added (VAT) are neglected. Thus, making our tax system to
lacks the potential of diversifying the revenue portfolio for the country and contributes higher to economic growth and promoting fiscal sustainability at all tiers of government. The revenue responses to tax structure/component is a major factor in determining how well a tax system will meet up the revenue demand of the economy. On the effectiveness of tax system revenue data alone do not tell it all. Because how revenue was sourced through the different tax component are the product of the tax effective and the base upon which the tax is levied.

The erroneous generalization and inconclusive evidence about effect on growth of tax components has made the study of tax structure on economic growth an important research area. growth effect of taxation especially at a country level open for further research. In view of the foregoing, the paper attempts to provide address following issues, examine  the impact of value added tax on economic growth in Nigeria. understand the type of relationship that exist between company income tax and economic growth in Nigeria. and identify the contribution of excise and import duty on economic growth in Nigeria?

2. REVIEW OF LITERATURE

Concept of Personal Income Tax (PIT)

This is a tax that is imposed on individuals who are either in employment or running their own small businesses under a business name or partnership. The law guiding the taxation of personal incomes is the personal Income Tax Act (Cap P8 L FN 2004). Under the law, Federal and State tax boards are empowered to identify persons living in or earning income from Nigeria who are required to pay tax, and assess incomes and tax their incomes using specified guideline and rules. The law also guides the tax official in identifying the residence of potential tax payers, as well as the sources and origins of their incomes for the purpose of taxing the income. The forms of tax that are administered under the Act are: pay-as-you-earn (PAYE) being taxes from employment and second taxes from self employed person. Until date, several amendments have been made with the current being a tax rate reduction from 25% to 17.5% of top rate.

Concept of Companies Income Tax (CIT) and Petroleum Profit Tax (PPT)

Companies’ income tax was introduced in 1961. The original law that created it has been amended many times and is currently codified as the Companies Income Tax Act of 2004 (CITA CAP C21 2004 LFN) amended in 2007. The profit or gain of any company accruing in, derived from, brought into, earned in or received in Nigeria are assessable to tax under Companies’ Income Tax Act CAP C21 2004 LFN amended in 2007. The tax rate has been 30% and it is applied on the total profit or chargeable profit of the company but for the new tax policy that brought it down from 30% to 20%. It should be noted that Oil Marketing Companies, Oil Services Companies are liable to tax under CITA at the rate 20% and Education Tax at the rate of 2% on the assessable profit. Education tax is treated as allowable expense.

The Petroleum Profits Tax Act requires all companies engaged in the extraction and transportation of petroleum products to pay tax. It is particularly related to rents, royalties, margins and profit-sharing elements associated with oil mining, prospecting and exploration leases. Oil producing Companies are liable to tax under the Petroleum Profit Tax Act CAP P13 LFN 2004 at the following rates: Joint Venture Contracts, Risks Service Contracts and Sales Risk Operations – First Five years 65.75 percent; subsequently 85 percent; production Sharing Contract (PSCs) – 50 percent of chargeable profit (mainly for deep off-shore exploration and production). Oil producing companies are to file tax returns within 5months of the year end. PPT is payable in 12 monthly installments plus a final installment payable within 21 days of the date of service of the notice assessment.

Concept of Value Added Tax (VAT)

Value added tax (VAT) came into effect on January 1, 1994 to replace the Sales Tax. Taxable persons are obliged to register under VAT Act. The tax is at a single rate of 5 percent of taxable goods and services. Supply of all goods and services except those specifically exempted are subject to VAT. Non-resident companies, which transact business in Nigeria, are also required to register for VAT and render VAT returns using the address of the company in Nigeria with whom they have subsisting
contract. Since its introduction, 15 of 42 sections of the act have been amended – Value added Tax Act, Cap VI, LFN 2004 amended in 2007.

2.2 THEORY AND FRAMEWORK
2.2.2 Theories of Taxation

According to Bhartia (2009), a taxation theory may be derived on the assumption that there need not be any relationship between tax paid and benefits received from state activities. In this group, there are two theories, namely,

A. Socio-political theory
B. The expediency theory

Also, a taxation theory may be based on a link between tax liability and state activities. This reasoning justifies the imposition of taxes for financing state activities and also providing a basis for apportioning the tax burden between members of the society. This reasoning yield the benefit received theory and cost of service theory. There is also the faculty theory of taxation.

Socio political theory: This theory of taxation states that social and political objectives should be the major factors in selecting taxes. The theory advocated that a tax system should not be designed to serve individuals, but should be used to cure the ills of society as a whole.

Expediency theory: This theory asserts that every tax proposal must pass the test of practicality. It must be the only consideration weighing with the authorities in choosing a tax proposal. Economic and social objectives of the state as also the effects of a tax system should be treated irrelevant (Bhartia, 2009).

Benefit received theory: This theory proceeds on the assumption that there is basically an exchange relationship between tax-payers and the state. The state provides certain goods and services to the members of the society and they contribute to the cost of these supplies in proportion to the benefits received (Bhartia, 2009). Anyanfo (1996) argues that taxes should be allocated on the basis of benefits received from government expenditure.

Theory of Laffer Curve

This theory was propounded by Professor Arthur Laffer; the theory explains the theoretical representation of the relationship between government revenue raised by taxation and all possible rates of taxation. The theory demonstrated with a curve (i.e. the laffer curve) which was constructed by though experiment.

2.3 EMPIRICAL LITERATURE REVIEW

In a study by, Worlu and Emeka (2012), examines the impact of tax revenue on the economic growth of Nigeria, judging from its impact on infrastructural development from 1980 to 2007. The study relied on secondary data from the Central Bank of Nigeria (CBN) Statistical Bulletin, Federal Inland Revenue Service (FIRS) and previous works done by scholars. The data collected were analyzed using the three stage least square estimation technique. The results show that tax revenue stimulates economic growth through infrastructural development. The study also highlights the channels through which tax revenue impacts on economic growth in Nigeria. The study also revealed that tax revenue has no independent effect on growth through infrastructural development and foreign direct investment, but just allowing the infrastructural development and foreign direct investment to positively respond to increase in output. This result contrarily to earlier studies that predict positive role of taxion on economic growth.

On the c, Contrary Okafor (2012), explored the impact of income tax revenue on the economic growth of Nigeria as proxied by the gross domestic product (GDP). The ordinary least square (OLS) regression analysis was adopted to explore the relationship between the GDP (the dependent variable) and a set of federal government income tax revenue heads over the period 1981-2007. The regression result indicated a very positive and significant relationship. However actual tax revenue generated in most years fell below the level expected. This was attributed dysfunctionalities in the income tax system, loopholes in tax laws and inefficient tax administration. Baranova et al (2012) in their research, “Taxation of Corporations and Their Impact on Economic Growth: The Case of EU Countries” observed that One of the most debated questions in economy is the relationship between tax rates and economic growth.
Chigbu et al (2012) and Ogbonna and Appah (2011) in separate studies examine Causality between Economic Growth and Taxation in Nigeria. Chigbu et al 2012 using secondary data from CBN and FIRS and applying econometric models such as Augmented Dickey-Fuller, Diagnostic Tests, Granger Causality and Johansen Co-integration concluded that taxation is a very important instrument of fiscal policy that contributes to economic growth of any country. On the basis of the conclusion useful recommendations were provided that will improve the generation of revenue from taxation that would stimulate the economy of Nigeria positively.

Recently researcher (Keho 2010; Arisoy and Unlukaplan 2010; Onaolpa, Aworemi and Ajala 2013; and Cengiz and Yeliz 2013) are moving away from analysis impact of tax revenue on economic growth to evaluation of tax components that contribute more to growth. While many are debated the superiority of direct tax over indirect tax (Bonu and Pedro 2009; Mawire and Nzomol, 2013 and Wawire 2011, some are calling for expansion of the tax base.

Onaolpa, Aworemi and Ajala (2013), in the study “Assessment of Value Added Tax and Its Effects on Revenue Generation in Nigeria”, examined the impact of value added tax on revenue generation in Nigeria, the study sought Secondary data from the Central Bank of Nigeria statistical Bulletin (2010), Federal Inland Revenue Service Annual Reports and Chartered Institute of Taxation of Nigeria Journal, applying stepwise regression analysis, the result showed that Value Added Tax has statistically significant effect on revenue generation in Nigeria, in view of the result Onaolpa et al (2013), recommends that there should be dedication and apparent honest on the parts of all agents of VAT in collections and payment.

Udoh and Ebong (2011) in the research Global Economic Crisis and Nigeria’s Economic Recovery: A Role for Taxation assert that failure to develop the Nigerian tax system has been the result of over dependence on oil revenue as the basis of fiscal action. The study recommend that tax reforms should, therefore, not only focus on broadening tax base to maximize tax revenue and improve the incentives to work and to invest, but also on reducing the bias in favour of debit vis-à-vis equity financing.

Similarly, Adereti, Adesina and Sani (2011), in the study Value Added Tax and Economic Growth of Nigeria observed that a positive and significant correlation exists between VAT Revenue and Gross Domestic Product (GDP). In the study under reviews both economic variables fluctuated greatly over the period though VAT Revenue was more stable. No causality exists between the GDP and VAT Revenue, but a lag period of two years exists.

A look at studies on other component of tax show similar results. Earlier, Egboh (2009) maintained that oil exploration and production activities in Nigeria in its over fifty years of operations is yet to operate at standards and levels of efficiency expected of a twenty century oil and gas industry. The operating landscape, business and competitive environments, both locally in Nigeria and internationally have continued to change rapidly in the last few years in such a manner that the Nigeria’s oil and gas industry as it is currently set up, can no longer operate in a sustainable manner. Despite the evolution, reforms and internal restructuring, the public sector of the industry has yet to fully meet the aspiration of the Federal Government and key stakeholders.

Adegbie and Fakile (2011), on the study Petroleum Profit Tax And Nigeria Economic Development, assessed the relationship between petroleum profit tax and economic development. Using Primary and secondary data, and applying chi-square and multiple regression statistical models reveals that there is a very strong relationship between petroleum profit tax and economic development of Nigeria, and conclude that tax avoidance and evasion are major hindrance to income growth in the oil sector.

Similarly, Onaolapo, Fasina and Adegbite (2013) on “The Analysis of the Effect of Petroleum Profit Tax on Nigerian Economy”, empirically examines the effect of petroleum profit tax (PPT) on Nigeria economy, using secondary data from central bank of Nigeria statistical bulletin covering the period of 1970 to 2010. Through multiple regressions, data on such variables Gross Domestic Product (GDP), petroleum profit tax, inflation, and exchange rate were all found to have significant effects on the Economics Growth with the Adjusted R² of 86.3%. from the result, in line with the above, the study therefore concluded that the abundance of petroleum and its associated income has been beneficial to the Nigerian economy for the period 1970 to 2010. Onalapo et al emphasized that Income from a nation’s
natural resource has a positive influence on economic growth and development. The findings give support to Onyemaechi, (2012) and Success (2012), that conclude that The Nigerian economy relies heavily on the revenue derived from petroleum products, as they provide 70 percent of government revenue and about 95 percent of foreign exchange earnings.

The contributions of the petroleum industry to growth and development of the Nigerian economy can be enumerated in terms of the industry’s impacts on the economic variables responsible for economic growth in Nigeria. The contributions of petroleum industry can also be analysed in terms of its share of revenue generation in the Nigerian economy. The petroleum industry has contributed immensely in both foreign exchange reserves and government revenues( Onyemaechi 2012). It has been observed that the government share of crude oil revenue as a result of various joint venture agreements with the international oil producing companies is roughly 70 percent of revenues accruing from crude oil transactions. He said further that the petroleum industry can also contribute significantly to growth and development of the Nigerian economy through foreign direct investment (FDI). Foreign direct investment (FDI) has been referred to as real investment interactions of the rest of the world with a given domestic economy. Whether these interactions encourage or discourage economic growth depends on the area of strength of the economy concerned and purpose of the investment.

Petroleum profit tax, according to Attamah (2004), is a legislation which imposes tax upon profits from the mining of petroleum in Nigeria and provides for the assessment and collection thereof and for the purposes connected therewith. One of the sources of petroleum income is the Petroleum Profit Tax. Accounting for income from oil and gas producing activities according to Gallun and Stevenson (1986), differ in many respects from financial accounting. The purpose of tax accounting is to gather information for the efficient preparation of income tax returns according to rules established by the Federal Board of Inland Revenue Code and Regulation (now Federal Inland Revenue Services). Besides the petroleum profit tax, Nigeria needs to meet its export commitment or quota approved by the Organization of Petroleum Exporting Countries (OPEC), scheduled dates of each supply agreement and resolve all necessary regulatory issues between government agencies and oil companies as operators of oil fields. Azaiki and Shagari (2007), brought out that countries blessed sufficient to have petroleum, can base their development on this resource. They point to the potential benefits of enhanced economic growth and the creation of jobs, increased government revenues to finance poverty alleviation, the transfer of technology, the improvement of infrastructure and the encouragement of related industries. Ogbonna (2009) expressed the view that the administration of Petroleum Profits Tax in Nigeria has mainly been focused on revenue generation to the detriment of stimulating economic growth and development. The petroleum tax system has also been designed to provide neutrality, so that an investment project which is profitable for an investor before tax will also be profitable after tax. This makes it possible to harmonise the desire to secure significant revenues for the community with the requirement to provide sufficient post-tax profitability for the companies (Kjell and Petter 2011). Conversely, increases in natural resources income encourages rent-seeking in the economy whereby all economic units, whether public and private, domestic and foreign have overwhelming incentives to seek links with the state in order to share in the resource pie( Onaolapo, Fasina and Adegbite 2013).

Further study was carried out by Ogbonna and Appah (2012) to investigate 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, Jarque Bera, 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. On the basis of the empirical analysis, the study concludes that petroleum profit tax is one of the most important direct taxes in Nigeria that affects the economic growth of the country and therefore should be properly managed to reduce the level of evasion by petroleum exploration companies in Nigeria and recommends among others that companies involved in petroleum operations...
should be properly supervised by the relevant tax authority (FIRS) to reduce the level of tax evasion; government should show more accountability in the management of tax revenue and finally, the level of corruption in Nigeria and that of government officials should be drastically reduced to win the confidence of tax payers for voluntary tax compliance.

3. RESEARCH METHODOLOGY
3.1 RESEARCH DESIGN
The study has its basic consideration as “Effect of Tax components on Economic Growth in Nigeria”. The study will apply quantitative research design, the study has carefully observed the distinctive criteria for chosen the above survey method in the investigation of our research problem. Time series will be collected and the data will cover monetary policy target of the federal government and Nigerian external balances. Data will be collected from 1981 -2013 for these variables; Gross Domestic Product (GDP), Personal Taxes(PT) Corporate taxes on income and profit (CT) Property taxes (PPROP) Goods and Service Taxes (GST) and Petroleum Tax (PetT).

3.5 DATA COLLECTION AND TECHNIQUES OF DATA ANALYSIS
Secondary data will be sourced from CBN bulletin and NBS annual report. The data set will run from 1981 to 2013. Basic conventional statistical instruments that are frequently employed for statistical analyses and measurement will be adopted for this study. Data and results will be presented in tables and charts. The charts (bar and pie charts) are equally used to present the information displaying their trend or movement over time and space (Larry 2004).

A descriptive analysis of data will be made and means of central tendencies such as Mean, standard deviation and range will be carefully evaluated. Econometrics analysis (ADF, Serial Correlation And Error correction Model) of Time series data will be conducted. A VAR Model will be analyzed based on the specified model below. The model is to test the relationship between the dependent variable (Gross Domestic Product) and independent variables (Personal taxes, corporate tax, Property taxes, Goods and Services taxes and petroleum Tax). The model is specified as:

\[
GDP = f(PT, CT, PPROP, GSP, PETT) \quad (1)
\]

We can also specify the above equation in an econometric form

\[
GDP = a0 + a1PT + a2CT + a3PPROP + a4 GST + a5 PETT + Ut \quad (2)
\]

While the log-linear function of the model is specified as thus:

\[
Log GDP = Log a0 + a1Log PT + a2Log CT + a3 Log PPROP + a4 log GST + a5log PETT + Ut
\]

...............................................................................................................(3)

Where:

- GDP \( t \) = Gross Domestic Product at time \( t \)
- CT\( t \) = Corporate Taxes at time \( t \)
- PPROP = Properties Taxes at time \( t \)
- GST\( t \) = Goods and Service taxes at time \( t \)
- Ut = Error term at time \( t \)
- \( a0, a1, a2 a3 a4 \) and \( a5 \) are parameters to be estimate

4. DATA PRESENTATION AND ANALYSIS
The study employs the Augmented Dickey - Fuller test for unit root. If any of the series is found to be integrated, then a co-integration test will be conducted using Johansen Co-integration test to determine if there exists a long run relationship between dependent and independent variables. If the series are co-integrated, then they will be most efficiently represented by an Error Correction Method which is used to tie the short run behavior to its long run value (Wooldridge, 2006; Asterious and Hall, 2007; Gujarati and Porter, 2009). They also perform Granger Causality test between the dependent and independent variables. However, the e-view software is used for the analysis of data.
### RESULT OF ANALYSIS

#### TABLE 1: WHITE HETEROSKEDASTICITY TEST

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>Probability</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.61994</td>
<td>0.76179</td>
<td></td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>11.402</td>
<td>0.4948 19</td>
</tr>
</tbody>
</table>

Eview output

#### TABLE 2: RAMSEY RESET TEST

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>Probability</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.304090</td>
<td>0.596392</td>
<td>0.43976</td>
</tr>
<tr>
<td>Log likelihood ratio</td>
<td>0.59691</td>
<td></td>
</tr>
</tbody>
</table>

Sources: CBN Bulletin 2013 and FIRS 2013 Annual Report
The Table 1 shows the White test of heteroskedasticity. The table reveals that the p-value of about 49% is greater than the critical value of 5%. This shows that there is no evidence for the presence of heteroskedasticity since the p-values are considerably in excess of 0.05.

Table 2 of the Ramsey RESET test shows that p-value of about 60% is greater than the critical value of 5%. This shows that there is no apparent non-linearity in the regression equation and it would be concluded that the linear model is appropriate.

Table 3 shows the unit root test for stationarity using Augmented Dickey-Fuller. The result shows that all the variables are stationary at 1(1) series at -4.89009, -4.230010, -3.772350, -4.345981, -4.923842, -3.393410, and -4.961772 for gross domestic product, petroleum profit tax, companies income tax, value added tax, education tax, customs and excise duties and personal income tax. All the series were significant at 1 and 5% except Companies Income Tax (CIT) and customs and excise duties (CED) that was significant only at 5%. The Table 4 shows the Granger Causality test for the causality between tax reform and economic growth proxied with gross domestic product. The result reveals that petroleum profit tax with a p-value of 0.92 is greater than the critical value of 0.05, which implies the rejection of the null and acceptance of the alternative that petroleum profit tax in Nigeria granger cause gross domestic product while gdp does not granger cause ppt. The table also shows that companies income tax, value added tax, education tax, customs and excise duties and personal income tax granger cause GDP, but GDP does not granger cause any of the tax variables.

The result of the Johansen’s cointegration test as presented in Table 5 shows the existence of a cointegrating equation. This shows that there exist a long run equilibrium relationship between GDP and the fundamentals used in the model.

Table 3: Unit root test (ADF)

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF</th>
<th>1%</th>
<th>5%</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>-4.89009</td>
<td>-4.1366</td>
<td>-3.1222</td>
<td>1st diff</td>
</tr>
<tr>
<td>PPT</td>
<td>-4.230010</td>
<td>-4.1366</td>
<td>-3.1222</td>
<td>1st diff</td>
</tr>
<tr>
<td>CIT</td>
<td>-3.772350</td>
<td>-4.1366</td>
<td>-3.1222</td>
<td>1st diff</td>
</tr>
<tr>
<td>VAT</td>
<td>-4.345981</td>
<td>-4.1366</td>
<td>-3.1222</td>
<td>1st diff</td>
</tr>
<tr>
<td>ET</td>
<td>-4.923842</td>
<td>-4.1366</td>
<td>-3.1222</td>
<td>1st diff</td>
</tr>
<tr>
<td>CED</td>
<td>-3.393410</td>
<td>-4.1366</td>
<td>-3.1222</td>
<td>1st diff</td>
</tr>
<tr>
<td>PIT</td>
<td>-4.961772</td>
<td>-4.1366</td>
<td>-3.1222</td>
<td>1st diff</td>
</tr>
</tbody>
</table>

Table 4: Granger causality test

<table>
<thead>
<tr>
<th>Pairwise granger causality tests</th>
<th>Date: 11/07/14</th>
<th>Time: 20:07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample: 1981-2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lags: 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Null hypothesis:</td>
<td>Obs</td>
<td>F-statistic</td>
</tr>
<tr>
<td>PPT does not granger cause GDP</td>
<td>31</td>
<td>0.07747</td>
</tr>
<tr>
<td>GDP does not granger cause PPT</td>
<td>0.39032</td>
<td>0.03776</td>
</tr>
<tr>
<td>CIT does not granger cause GDP</td>
<td>31</td>
<td>0.03 884</td>
</tr>
<tr>
<td>GDP does not granger cause CIT</td>
<td>0.905 17</td>
<td>0.04834</td>
</tr>
<tr>
<td>VAT does not granger cause GDP</td>
<td>31</td>
<td>2.19229</td>
</tr>
<tr>
<td>GDP does not granger cause VAT</td>
<td>3.28530</td>
<td>0.04186</td>
</tr>
<tr>
<td>ET does not granger cause GDP</td>
<td>31</td>
<td>0.10703</td>
</tr>
<tr>
<td>GDP does not granger cause ET</td>
<td>4.0 1002</td>
<td>0.0486</td>
</tr>
<tr>
<td>CED does not granger cause GDP</td>
<td>31</td>
<td>0.43 805</td>
</tr>
<tr>
<td>GDP does not granger cause CED</td>
<td>10.6110</td>
<td>0.00429</td>
</tr>
<tr>
<td>PIT does not granger cause GDP</td>
<td>31</td>
<td>0.24270</td>
</tr>
<tr>
<td>GDP does not granger cause PIT</td>
<td>5.06911</td>
<td>0.03354</td>
</tr>
</tbody>
</table>
L.R.: test indicates one co-integrating equation at 5% level of significance

Table 6: Error correction estimates

<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimated coefficient</th>
<th>t-value</th>
<th>probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>27.9116</td>
<td>4.938490</td>
<td>0.0008</td>
</tr>
<tr>
<td>AGDP</td>
<td>0.1527</td>
<td>5.4410</td>
<td>0.0032</td>
</tr>
<tr>
<td>APPT</td>
<td>0.3114</td>
<td>2.4113</td>
<td>0.0125</td>
</tr>
<tr>
<td>ACIT</td>
<td>0.1883</td>
<td>3.4462</td>
<td>0.0113</td>
</tr>
<tr>
<td>AVAT</td>
<td>0.2126</td>
<td>3.7113</td>
<td>0.0106</td>
</tr>
<tr>
<td>AET</td>
<td>0.2359</td>
<td>2.261993</td>
<td>0.0480</td>
</tr>
<tr>
<td>ACED</td>
<td>0.2982</td>
<td>5.980437</td>
<td>0.0002</td>
</tr>
<tr>
<td>APIT</td>
<td>0.0816</td>
<td>3.6618</td>
<td>0.0016</td>
</tr>
</tbody>
</table>

$R^2$: 0.5827; Adjusted $R^2$: 0.5432; F-ratio: 4.2431; DW: 2.02

Table 7 shows the error correction estimates with an adjusted $R^2$ of about 54% of the variation of the dependent variable GDP as a result of change in tax revenue. The independent variables are correctly signed indicating a positive relationship between tax revenue as a result of reforms to economic growth. This is consistent with Ola (2001). The F-statistics confirm the significance of the overall regression equation.

**FIG 1:** Graphical illustration of growth rate of GDP, VAT, CIT, PPT Exduty and residual over time (years).

![Graphical illustration of growth rate of GDP, VAT, CIT, PPT Exduty and residual over time (years).](image)

**Fig 2:** Graphical represented of GDP – Resident over time.
4.4 TEST OF HYPOTHESIS

Hypothesis One. There is no significant relationship between tax components and economic growth in Nigeria.

Hypothesis Two. There is no significant relationship between tax revenue and economic growth in Nigeria.

Hypothesis Three;

Hypothesis Four:

Test of Hypothesis One

The hypothesis seek to know if there is any statistical significant relationship between tax components and economic growth in Nigeria. The result of the linear regression estimation of growth against different tax components show strong positive correlation between economic growth (GDP) and tax variables. With the result of $R^2$: 0.5827; Adjusted $R^2$: 0.5432; F-ratio: 4.2431; DW: 2.026. It implies that 58.27% variation in gross domestic product (GDP) is accounted for by changes in tax components and P-values are < 0.05 we reject the null hypothesis and accepted the alternative that there is a significant relationship between Tax components and economic growth in Nigeria.

Hypothesis Two

Hypothesis 2. H0; there is no significant relationship between tax revenue and economic growth in Nigeria. Using the result in table 4.6, where $R^2$: 0.5827; Adjusted $R^2$: 0.5432; F-ratio: 4.2431; DW: 2.02. There is strong positive correlation between tax revenue and economic goal, this implies that tax revenue granger cause growth in Nigeria. $R^2$: 0.5432 implies that 54.32% variation in gross domestic product GDP is as a result of changes in tax revenue. The Durbin Watson statistics (DW) of 2.02 show the absence of serial correlation, p-value of 0.003<0.05, hence we reject the null hypothesis and accepted the alternative that H1; there is a significant relationship between tax revenue and economic growth in Nigeria.
5.0 CONCLUSION AND RECOMMENDATIONS

CONCLUSION

The objective of this study is to evaluate the impact of tax structure on economic growth in Nigeria. It seeks to uncover the contribution of different tax types like petroleum profit tax, companies income tax, value added tax, personal income tax, education tax and customs and excise duties tax on economic growth measured with Gross Domestic Product (GDP) in Nigeria. To achieve this, time series data were collected from 1980-2013. The Johansen Co-integration test applied confirmed that a long run relationship exists between tax structure and economic growth and the Granger causality result also shows that tax structure granger cause economic growth.

The implication of this study is that a country can achieve more in revenue and growth if effort is geared toward sustaining the best tax structure. Tax structure is significant in determining growth in an economy and hence government and tax agencies should function collectively in ensuring that the tax components of the tax system is improved to impacts on economic growth. A proper reformed tax system will indeed charted a road map that will drive the Nigerian economy to international relevance. A well structured tax system is to provide adequate revenue for the government to undertake socially desirable expenditure that will translate to economic growth in real output.

5.3 RECOMMENDATIONS

In line with the findings and literature covered in this study, the following recommendations is made

- First government expenditure on capital will have differential impact on economic growth when the funds are properly managed, invested in more productive sectors rather than non – productive to reduce corruption and mismanagement of the Nation’s resources and foster economic growth.

- Second, the government should intensify effort to ensure that the country is export focused, with attention given to Agriculture, manufacturing and other export driven sectors to improve balance of trade.

- Third, government should explore more avenue of generating revenue rather than procure huge debt either internally or externally.

- Finally, with proper handling of the above, it will be easier for the government to manipulate Macroeconomic variables such as exchange rate, inflation and so on, to ensure steady and accelerate growth.

Reference


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