TAX REVENUE AND NIGERIAN ECONOMIC GROWTH

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ABSTRACT: This study was designed to investigate the tax revenue and Nigerian economic growth for period of three decade, using time series data from 1986 to 2015. The objective of this study was to examine the significant difference between the effects of oil and non oil tax revenue on economic growth in Nigeria. Data collected from Central Bank of Nigeria (CBN) Statistical Bulletin and National Bureau of Statistics (NBS). The study utilized both descriptive and Paired Sample T-test with the aid of Statistical Package for Social Science (SPSS) Version 23. The findings showed that, oil and non oil tax revenue were positive and strongly correlated with Real Gross Domestic Product (RGDP) with coefficient (r = .902, P< 0.05) and (r = .975, P< 0.05). The results also showed that, there was significant difference between the effects of oil and non oil tax revenue on RGDP as shown ( t29 = 11.424 , P< 0.05) and ( t29 = 10.968, P< 0.05). Findings also showed that, oil and non oil tax revenue contributed 7.7% and 2.5 % to RGDP from 1986-2015. This research work concluded that, there was significant difference between the effects of oil and non oil tax revenue on economic growth in Nigeria. There should be accountability and transparency from government officials on the management of revenue derived from taxation (oil and non oil) in Nigeria.

KEYWORDS: Tax Revenue, Oil and Non Oil, Real Gross Domestic Product, Economic Growth

INTRODUCTION

Tax is a compulsory levy imposed by government on individuals and companies for the various legitimate functions of the state. All levels of governments in Nigeria do no longer perform their responsibilities simply because of financial crisis experienced from internally generating revenue. This bad financial situation is further aggravated by the prevailing inflationary situation in this country which erodes the value of funds available to render essential social service to the people. Okafor, (2012) and Sanni (2007) advocated the use of tax as an instrument of social engineering, to stimulate general and/or sectoral economic growth. In that regard, taxation could have a positive or negative effect on both the individual and the government. In Nigeria, tax revenue has accounted for a small proportion of total government revenue over the years. This is because the bulk of revenue needed for development purposes is derived from oil. Crude oil export has continued to account for over 80% of the total federal government revenue, while the remaining 20% is contributed by non-oil sector in previous years. (Odusola 2006)

Economic growth specifically means an increase in the value of goods and services produced by a country over a period, and the economists use this increase in country's GDP to measure it. Thus, it is possible to have economic growth without economic development in short or medium term (Hadjimichael, Kemenyy & Lanahan, 2014).
Ihendinihu, Ebieri and Amaps Ibanichuka, (2014) mentioned two main sources of federal government revenue exist namely; oil and non-oil revenue. Oil revenue is revenue from crude oil and gas local sales and exports, receipts from petroleum profits tax and royalties, while non oil revenue includes revenue from Companies income tax (CIT), Custom and Excise Duties, (CED), Valued Added Tax, Education Tax, Personal Income Tax (PIT), Levies, public debt, grants, aids amongst others.

Research Problem

The government of Nigeria is faced with multifaceted problems ranging from corruption, embezzlement, poor financing, mismanagement of funds and poor leadership. This has deterred the growth and developments of all level of government in Nigeria. Lyndon and Paymaster (2016), opined that, tax revenue mobilization as a source for financing developmental activities in Nigeria has been a different issue, primarily because of various forms of resistance, such as tax evasion, tax avoidance and other forms of corrupt practices. These activities are considered as sabotaging the economy and are readily presented as part of the reasons for present state of underdevelopment in Nigeria as tax revenue has been seen as major source of government revenue all over the world.

However, unfortunately, it is evidenced that, the role of tax revenue in promoting economic growth in Nigeria is not felt, primarily because of its poor administration. The major challenges facing tax revenue in Nigeria include, poor accountability, lack of awareness of the general public on the imperatives and maximum benefits of taxation, corruption of tax officials, tax avoidance and evasion by taxpayers, connivance of taxing officials with taxing population, poor method of tax collection, etc. The serious decline in price of oil in recent years has led to a decrease in the funds available for distribution from federal to state and local governments. The need for governments at all levels to generate adequate revenue from internal sources has therefore become a matter of extreme urgency and importance. This need underscores the eagerness on the part of local, state and the federal governments to look for new sources of revenue wit a view to innovating the mode of collecting revenue from existing sources. Several studies have been carried out in the past on this subject But the review of previous empirical literature revealed a lack of established significant difference between the effects of oil and non oil tax revenue on economic growth in the research findings of past researchers in which indicates the existence of a research gap. Ofoegbu, Akwu & Oliver (2016) studied empirical analysis effects of tax revenue on economic development of Nigeria using annual time series data for the period 2005 -2014..Other research works focused on the impact of tax revenue on economic growth in Nigeria and /or in other countries includes, Ogar & Oka (2016) , Okafor (2012), (Abata, 2014, Ayuba, 2014, Macek 2014, Ude & Agodi, 2014., Otu & Theophilus 2013, Gacanja 2012 and Muriithi 2013). It is observed that, none of research works dealt with oil and non oil tax revenue and Nigeria economic growth as a single phenomenal for period of three decades 1986-2015. The omissions in the literature, therefore, will form major gap in this study. The study therefore, seeks to answer the following fundamental question: What are the significant difference between the effects of oil and non oil tax revenue on economic growth in Nigeria?

Objectives of the Study

The main objective of this study is to examine the significant difference between the effects of oil and non oil tax revenue on economic growth in Nigeria
Significance of the Study

Oil and non-oil revenue are major sources of revenue to the government. This can be used to achieve economic growth, maintaining equilibrium in the economy by combating element of depression, inflation or deflation, achieve equity in income and wealth distribution and address issues of poverty and promote socioeconomic development, hence the need to find out the extent tax revenue impacts on Nigeria’s economic growth. The research findings would be of importance to policy makers at national level as they designed policies aimed at enhancing economic and development through a better tax revenue system. Policymakers, especially federal Inland Revenue Service will use the outcome of the study to gauge its performance, and determine the level of input it would have to make impact positively to the Nigeria

Contributions

This study contributes to the existing literature on how tax revenue can be catalyst to economic growth. This study is one of very few studies that, investigated the significant difference between the effects of oil and non-oil tax revenue on economic growth in Nigeria.

LITERATURE REVIEW

Conceptual Review

Taxation is an instrument employed by the government for generating public funds (Ofoegbu et al (2016) & Anyaduba, 2004). It is a required payment imposed by the government on the income, profit or wealth of individuals, group of persons and corporate organisations which involves the application of tax rate to a tax base (Ofoegbu et al 2016 & Piana 2003). According to Okafor (2012) and Brautigam (2008), a well-designed tax system can help governments in developing countries prioritize their spending, build stable institutions, and improve democratic accountability. The main purpose of a tax is to enable public sector finance its activities so as to achieve some nation’s economic and social goals. It can also be for the purpose of redistribution of wealth to ensure social justice (Ayuba, 2014 and Ola, 2001). Taxes, therefore, can be used as an instrument for achieving both micro and macroeconomic objectives especially, in developing countries such as Nigeria. Macek (2014) and Musgrave and Musgrave (2004) commented that, the dwindling level of tax revenue generation in the developing countries makes it difficult to use tax as an instrument of fiscal policy for the achievement of economic development. Governments of the countries like Canada, United States, Netherland and United Kingdom have substantially influenced their economic development through tax revenue generated from Company Income Tax, Value Added Tax, and Personal Income Tax and have prospered through tax revenue (Oluba, 2008). In Africa, natural resources such as income from production sharing, royalties, and corporate income tax on oil and mining companies yield the significant portion of tax revenue (Pfister, 2009). The sources taxes are the basic and most reliable sources of government revenue because of their certainty and flexibility characteristics.

Profile of oil and non-oil tax revenues in Nigeria

From the independence to date, there have not been many changes in the country’s tax structures because the demarcation between oil and non-oil revenue is thin. But the type of
primary commodity involved has changed: prior to the mid-1970s, it was agricultural commodity but crude oil thereafter. Even the advent of VAT in 1994 did not make a significant difference, and the revenue base of the country has been oscillating from one primary commodity to another. In the 1960s, the Nigerian economy was characterised by the dominance of agricultural tax, which served as a proxy for personal income tax because of the difficulty in correctly determining tax liability and accessing individual farmers. During this period, various marketing boards were responsible for collecting the tax (Odusola 2006 & Ariyo 1997). Oil and non oil tax revenue was 75% and 25% shared in total revenue covered the period of 1984-2015. Also, oil and non oil tax revenue contributed 7.7% and 2.5% to RGDP from 1986-2015.

Theoretical Review

The following theories of taxation are discussed in this study

**Socio political theory of taxation:** Ogbonna and Appah (2012) affirmed this reasoning justifies the imposition of taxes for financing state activities and for the provision of a basis for apportioning the tax burden between members of the society. They advocated that, advocates for a tax system which is not designed to serve individuals but one that cures the ills of the society as a whole. The society is made up of individuals but is more than the sum total of its individual members; consequently, the tax system should be directed towards the health of the society as a whole, since individuals are integral part of the broader society (Chigbu, Akujuobi and Appah, 2012).

**Expectancy theory:** Ayuba (2014) and Bhartia (2009) asserts that, the taxation is such that every tax proposal passes the test of practicality and must be the sole consideration before the tax authorities in a bid for tax proposal. It strongly emphasises that, the economic and social objective of the state is considered irrelevant since it is meaningless to have a tax that cannot be levied and effectively collected.

**Benefits-received theory:** This assumes an exchange or contractual relationship between the state and the tax-payers, certain goods and services are provided by the state and the cost of such goods and services are contributed in the proportion of the received benefits, thus, the benefits received present the basis for distributing the tax burden in specific manner. This theory overlooks the possible use of the tax policy for bringing about economic growth or stabilization. Chigbu, *et.al*, (2012) see the cost of service theory as very similar to the benefits-received theory. The theory emphasize on semi commercial relationships between the state and the citizens to a greater extent. The implication according to Chigbu, *et.al*, (2012) was that, the citizens are not entitled to any benefits from the state and if they do, they must pay the cost thereof. In this theory, the costs of services are scrupulously recovered unlike the benefits-received theory where a balanced budget is implied.

**Ability to pay theory:** This theory of taxation upholds that, taxes imposed on tax-payers should be based on the progressive tax approach which maintains that taxes should be levied according to a tax-payer’s ability to pay. This system of taxation requires that higher earning persons pay taxes higher than those with lower income. The basic tenet of this theory is that, the burden of taxation should be shared by the members of the society on the principle of equity and justice and that this principle necessitates that tax burden is apportioned according to their relative ability to pay. Adam Smith is the brain behind the principle of equity and justice. He advocates that, the amount of tax payable should be equal, this by implication
means that, tax payable is in proportion to earned income. Equity and justice is assumed only when the tax system is based on the ability of the tax payer to pay the amount levied as tax liability.

Empirical Review

Many studies have investigated on the impacts of tax revenue on economic growth in Nigeria, and in different part of the countries with diverse techniques and opinions. The outcomes of the investigations however, have shown that, tax revenue has a significant relationship with economic variables.

Lyndon and Paymaster (2016) examined the impact of companies’ income tax, value-added tax on economic growth (proxy by gross domestic product) in Nigeria, using secondary time series panel data covered the period 2005 to 2014. Their results of the analysis showed that, both company income tax and value-added tax have positive impact on economic growth .Macek (2014) similarly, investigated the impact of taxation revenue on economic growth in OECD countries, using time series secondary data for the period 2000 – 2011. He adopted a mathematical multiple regression model to capture the linearity correlation between the variables of the study.

Stoilova & Patonov (2012) also examined the impact of taxation on economic growth in 27 European Union countries, using data for the period 1995 – 2010. They discovered that, direct tax revenue made more efficient impact on economic growth in EU countries than indirect taxes. Ogbonna & Appah (2012) observed the impact of tax reforms on economic growth in Nigeria using data collected from the Statistical Bulletin of the Central Bank of Nigeria (CBN) for the period 1994 - 2009. They found that, tax reform variables such as petroleum profit tax, companies’ income tax, value-added tax, education tax, personal income tax, and custom and excise duties had significantly impact on economic growth in Nigeria. They concluded that, tax reforms improved government revenue. In a related study, Umoru & Anyiwe (2013) investigated the correlation between the New National Tax Policy and economic growth in Nigeria using co-integration technique and error correction model to analyze data. The results of their analysis revealed that, direct taxation revenue had significant positive relationship with economic growth, while indirect tax revenue had insignificant but negative impact on economic growth in Nigeria. They concluded that, Nigeria’s tax policy towards indirect taxation lack justification, rather the country should strengthen the structures of direct taxation. Ihenyen and Mieseigha (2014) viewed taxation as a financial instrument for economic growth in using data obtained from the Central Bank of Nigeria for the period 1980 – 2013. They employed Ordinary Least Squares technique (OLS). The results revealed that, corporate income tax and value-added tax impacted positively on gross domestic product. They concluded that, taxation is an instrument of economic growth in Nigeria.

In a similar study, Edame & Okoi (2014) examined the impact of taxation on investments and economic development in Nigeria, using data covering the period 1980 – 2010. They discovered that, corporate income tax and personal income tax were negatively related to investment, but positively related to government expenditure. They concluded that, taxation is an instrument for government expenditure. Chude & Chude (2015) also investigated the impact of company income tax on the profitability of brewery companies in Nigeria. The work revealed that, there was a positive correlation between taxation and profitability.
Ayuba, (2014) investigated the impact of non-oil tax revenue on economic growth in Nigeria, using secondary data collected from the CBN Statistical Bulletin from the period 1993 - 2012. His results showed that, non-oil tax revenue impacted positively on economic growth in Nigeria. Ofoegbu et al.( 2016) studied empirical analysis of effects of tax revenue on economic development of Nigeria using annual time series data for the period 2005 - 2014. They discovered that, there was a significant relationship between tax revenue and economic development. The results also revealed that, measuring the effects of tax revenue on economic development using HDI gave lower relationship than measuring the relationship with GDP gives a painted picture of the relationship between tax revenue and economic development in Nigeria.

Cornelius, Ogar & Oka (2016) examined the impact of tax revenue on the Nigerian economy. The study covered the period from 1986 to 2010 using CIT, PPT and NOR as independent variable against GDP. Their findings revealed that, there was a significant relationship between petroleum profit tax and the growth of the Nigeria economy. It also showed that, there was a significant relationship between non oil revenue and the growth of the Nigeria economy. They found that, there was no significant relationship between company income tax and the growth of the Nigeria economy. Okafor (2012) studied tax revenue generation and Nigerian economic development cover the period 1981 - 2007. A simple hypothesis was formulated in the null form which states that there is no significant relationship between federal collected tax revenue and the GDP in Nigeria. The regression result indicated a very positive and significant relationship.

Abata (2014) wrote on the impact of tax revenue on Nigeria economy using descriptive survey design and simple random sampling technique. His findings revealed that, tax revenue has a significant impact on Federal Government Budget implementation and revenue generated in Nigeria. Macek (2014) investigated the impact of taxation revenue on economic growth in OECD countries, using time series secondary data for the period 2000 – 2011. A mathematical multiple regression model was adopted to capture the linearity correlation between the variables of the study. Tax variables by OECD classifications include personal income tax, corporate income tax, social security contribution, property tax, value-added tax and tax on consumption.

In a related study, Otu & Theophilus (2013) examined the effects of tax revenue on economic growth in Nigeria, utilizing time series data for the period spanning from 1970 to 2011. Their results shown that, domestic investment, labour force and foreign direct investment have positive and significant effects on economic growth in Nigeria. Ogbonna & Appah (2016) investigated the effects of tax administration and revenue on economic growth of Nigeria. Data collected from the questionnaires and secondary data were analyzed using relevant regression analysis. Their results revealed that, there was a significant relationship between the following: Personal income tax revenue (PITR) and per capita income; Company income Tax Revenue and Gross Domestic product of Nigeria; VAT revenue and PCI of Nigeria, Petroleum Profit Tax revenue and GDP of Nigeria.

Ihendinihu, et al (2014) investigated long-run equilibrium relationships between tax revenue and economic growth in Nigerian between 1986 and 2012. Their results indicated that, total tax revenue has a significant effect on economic growth; explaining about 73.4% of the total variation in RGDP. CIT, EDT and OTR were discovered to have significant effects on economic growth; sustaining long-run equilibrium relationships with RGDP. Murithi (2013) examined the relationship between government revenue and economic growth in Kenya. His
studied showed that, there is a direct relationship between income tax and economic growth. He further concluded that, increase in VAT leads to positive effects on the rate of economic growth.

In addition, Ude & Agodi (2014) investigated the time series roles of non-oil revenue variables on economic growth in Nigeria for period of 1980-2013. They discovered that, non-oil revenue variables analysed are: agricultural revenue and manufacturing revenue and interest rate have significant impact on economic growth in Nigeria. Meanwhile, Medee & Nenbee (2011) studied the econometric analysis of the impact of fiscal policy variables on Nigeria’s economic growth (1970-2009) using Vector Auto-regression and Error correction mechanism techniques and claimed that, tax revenue have effects on the gross domestic product both at the short and long run, meaning that tax revenue has positive impact on the economic growth in Nigeria. Gacanja (2012) did an empirical case study in Kenya on tax revenue and economic growth. His results revealed a positive relationship between economic growth and tax revenues.

RESEARCH METHOD

This section discusses the methodological issues of the study. Precisely, this deals with source of data collection, model specification, and estimation techniques as well as data description. Secondary data was used for this study and these data were collected from the Central Bank of Nigeria (CBN) statistical bulletin and National Bureau of Statistics (NBS) between 1986 and 2015. This study is to be estimated with the use of the paired sample T-test. It is imperative because it desires to estimate the significant difference that exists between the dependent and independent variables. The statistical test for the measurement of the parameter estimate includes the co-efficient of determination r, the t-test. The significance level at which the hypotheses are accepted is 5% (0.05).

RESULTS AND DISCUSSION

Table 1: Summary of Descriptive Statistics of RGDP, OTR and NOTR

<table>
<thead>
<tr>
<th></th>
<th>RGDP</th>
<th>OTR</th>
<th>NOTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>1002500.06</td>
<td>76854.61</td>
<td>25513.59</td>
</tr>
<tr>
<td>Range</td>
<td>53785.94</td>
<td>8870.86</td>
<td>3270.63</td>
</tr>
<tr>
<td>Mean</td>
<td>33416.6687</td>
<td>2561.8203</td>
<td>850.4530</td>
</tr>
<tr>
<td>Minimum</td>
<td>15237.99</td>
<td>8.11</td>
<td>4.49</td>
</tr>
<tr>
<td>Maximum</td>
<td>69023.93</td>
<td>8878.97</td>
<td>3275.12</td>
</tr>
<tr>
<td>Standard dev.</td>
<td>17281.66980</td>
<td>2814.72754</td>
<td>1046.60053</td>
</tr>
<tr>
<td>Variance</td>
<td>2.987E8</td>
<td>7922691.151</td>
<td>1095372.667</td>
</tr>
<tr>
<td>Skweness</td>
<td>0.827</td>
<td>0.834</td>
<td>1.213</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-0.721</td>
<td>-0.642</td>
<td>0.192</td>
</tr>
<tr>
<td>Observations</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Author’s compilation Using SPSS window 23

Table 1 above provides the summary of descriptive statistics of RGDP, OTR and NOTR for the study. Given the scope of the study (1986-2015) and the frequency of the annual data, all the variables have 30 observations. As shown in Table 2, the sum, range, mean, maximum
and minimum, standard deviation and variance as well as the skewness and kurtosis of our variables of interest are evident. The various statistics indicate that the variables have different distributions. The skewness statistic reveals that all the variables have normal distributions so also applicable for all the variables with the kurtosis statistic

**Hypothesis**

There is no significant difference between the effects of oil and non-oil tax revenue on economic growth in Nigeria

**Table 2: Paired Samples Correlations**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Real Gross domestic Product &amp; Oil Tax revenue</td>
<td>30</td>
<td>.902</td>
<td>.000</td>
</tr>
<tr>
<td>Pair 2 Real Gross domestic Product &amp; Non oil Tax revenue</td>
<td>30</td>
<td>.975</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Table 3: Paired Samples Test**

<table>
<thead>
<tr>
<th></th>
<th>Paired Differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Std. Err.M</td>
<td>Lower</td>
<td>Upper</td>
</tr>
<tr>
<td>Pair 1 Real Gross domestic Product - Oil Tax revenue</td>
<td>30854.84</td>
<td>14793.83</td>
<td>2700.97</td>
<td>25330.72</td>
</tr>
<tr>
<td>Pair 2 Real Gross domestic Product - Non oil Tax revenue</td>
<td>32566.21</td>
<td>16263.56</td>
<td>2969.26</td>
<td>26493.38</td>
</tr>
</tbody>
</table>

**Source:** Authors’ Compilation from SPSS output, using window 23

From the results analyzed in table above 2 the independent variables oil tax revenue was strongly positive perfectly correlated with RGDP (r = .902, P< 0.05), while non oil tax revenue was also strong and positive correlated and there was linearity in the result with the dependent variable (RGDP) as shown (r = .975, P< 0.05). The results in the table 3 above shows that there was significant difference between the effects of oil and non oil tax revenue on RGDP as shown (t_{29} = 11.424 , P< 0.05) and (t_{29} = 10.968, P< 0.05) Therefore, the null hypothesis is rejected and accept the alternative. This implies that there is a significant difference between the effects of oil and non oil tax revenue on RGDP. The implication of this rejection is that the oil tax revenue (crude oil and gas exports, receipts from petroleum profits tax and royalties, revenue from domestic crude oil sales) has significant difference in contribution to economic growth in Nigeria at 5% significance level than the contribution of non oil tax revenue which comprised of revenue from companies income tax, value added...
CONCLUSION AND RECOMMENDATIONS

Based on the findings of this study, we concluded that, there was a great level of difference between the effects of oil and non oil tax revenue on economic growth in Nigeria. This study has equally generally revealed that, tax revenue has a very positive impact on economic growth in Nigeria; especially in its socio-economic as oil and non oil tax revenue contributed 75% and 25% shared in total revenue covered the period of three decade 1986-2015. Also, oil and non oil tax revenue contributed 7.7% and 2.5% for the 1986-2015 to RGDP. The results obtained in this study confirm that, a positive and strong correlation exists between Oil Tax Revenue (OTR) and Non Oil Tax Revenue (NOTR) and the level of economic growth proxy by RGDP in Nigeria.

It was recommended that, Government should seriously work towards diversifying the revenue base of the economy as the reduction in the price of crude oil at the international market that adversely affect income from petroleum profit tax. The regulatory authorities charged with the sole responsibility of collecting tax should further be strengthened to enforce compliance by taxpayers. There should be accountability and transparency from government officials on the management of revenue derived from taxes and also citizens should be able to benefit from the payment of taxes in Nigeria.

REFERENCES


