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Impact of Direct and Indirect Tax on the Nigerian Economic Growth

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ABSTRACT

This research examined the direct and indirect impact of taxation on the Nigerian economic growth. This research centered on two major objectives by focusing on the trend of direct and indirect tax and the impact of the Nigerian tax system on the growth of the economy. The research adopted the descriptive research design. The secondary source of data was also engaged as this data was from CBN statistical bulletin and the annual reports from 1994-2013. The research also used the ordinary least square regression technique. With the use of E-views 7.1 to analyze the data, the first objective was achieved by using graphical analysis while the second objective used ordinary least square regression analysis. The results reveal that the direct and indirect tax have a positive impact on the economy of Nigeria. Therefore, it is recommended that government should take advantage of taxation and promote tax system in Nigeria.

Keywords: direct tax, indirect tax, economic growth, taxation, Nigerian

INTRODUCTION

Every modern state or nation requires a lot of revenue to provide and maintain essential services for its citizens. One of the sources of revenue for the government is through the imposition of tax (Economics Online, 2015). A tax is defined as an involuntary fee that is levied on corporate organizations and individuals and is enforced by a government entity to finance government activities. The imposition of tax by the government is one of the ways that government can finance its expenditure which includes public debt, printing of currency, sale of assets, and drawing down of cash reserve with the central bank. However, tax is a cheaper source of finance for government expenditure compared to the aforementioned alternative sources. Hence, taxation has become a popular source of government expenditure financing. Salami, Apelogun, Omidiya and Ojoye (2015) highlighted that a tax system made itself available as an effective means of mobilizing a nation's internal resources in addition to lending internal resources in a bid to create a conducive environment for the promotion of economic growth. Taxation constitutes an important part of fiscal policy which can be engaged effectively by different countries government and developing economies.

Traditionally, the objective of taxation has been to raise government revenue. However, the objective of taxation in addition to raising government revenue has now included affecting consumption and production, and distribution of income. It is to ensure that the social welfare through economic growth and taxation can be used as a paramount tool in driving optimal allocation of available resources, encouraging investments and savings, accelerating economic growth, and price stability and control mechanism (Edame & Okoi, 2014). Moreover, tax enables the achievement of the redistribution of wealth and re-adjustment of the economy (Ojo, 2009). Therefore, the tax system is one of the most effective levies for the government to stimulate and guide its economic and social development (Abata, 2014). In promoting economic development of a country, tax plays a vital role which includes regional development, resource mobilization, improvement in social welfare, income inequalities reduction, inflation control, and foreign exchange (Nzontta, 2007). As tax has vital role, countries such as Nigeria have not taken full advantage of it. This is evidenced by the low and declining contribution of tax to Gross Domestic Product (GDP) in Nigeria over the years. It was shown by the ratio of tax to GDP of Nigeria in 2011, 2012, 2013, and 2014 with 0,073, 0,007, 0,0062, and 0,053 respectively. This is from tax data obtained from Federal Inland Revenue service (FIRS), and GDP from the statistical bulletin of Central Bank of Nigeria. It highlights the poor tax system development in Nigeria. The low tax receipts are an evidence of a poor tax system in the country. It gives the variety of social and economic objectives of government that is usually insufficient to finance government expenditure. Salami *et al.* (2015) said fiscal laws and regulations of the government should be strengthened to checkmate tax offenders, enhance tax administrative machinery, enhance accountability and transparency of government officials that were involved in the management of tax revenue. In addition, to develop a platform for managing the unsustainable fiscal deficits in Nigeria, facilitating new investment through tax incentives is necessary. Thus, effective tax systems are not only essential to promote economic growth, but they are also paramount for achieving macroeconomic goals in a country (Dickson & Osemwengie, 2013).

The tax has shown positive and negative effects on an economy through its impact on welfare as highlighted by Azubike (2009). Direct and indirect taxes have been argued to have differential effects on economic growth by (Avi-Yonah and Margalioth, 2007). Two third of the total tax revenue generated in developed countries can be traced to direct taxation, but the use of indirect taxation has been advocated by some who recommend developing countries focus on indirect taxation (Avi-Yonah and Margalioth, 2007). In relation to empirical research in Nigeria on the impact of tax on the economy of Nigeria, Tax is found to have a positive effect on economic growth by Abiola and Asiweh (2011); Okafor (2012); Salami *et al.* (2015); Oyewo (2013); and Okoli, Njoku, and Kaka (2014). Similarly, with these findings, Ogbonna and Ebimobowei (2012) found a positive and significant relationship as well as causality between tax reforms and economic growth. It may be valid and economic growth in Nigeria may be promoted by tax reforms. However, tax revenue in Nigeria also has negative effect on economic growth through the negative impact of tax on consumption expenditure (Osundina & Olanrewaju, 2013), growth of Small and Medium Enterprises (SMEs) (Atawodi & Ojeka, 2012), and Investment (Edame & Okoi (2014). Furthermore, Ebiringa and Yadirichukwu (2012) stated that revenue from customs and excise duties adversely affected economic growth in Nigeria.

This highlights inconsistent findings, and it is difficult to reconcile these two arguments in the case of tax in Nigeria, especially when tax is argued as a tool aiming to promote and boost revenue generation in which a developed tax system features an effective enforcement. It is more in light of tax reforms undertaken by the Nigerian Government (Abiola & Asiweh, 2012). This rises critical thought to the relevance of a tax system to a developing economy like Nigeria by aiming for higher levels of economic growth and development if the tax does not boost economic growth. Furthermore, according to Avi-Yonah and Margalioth (2007), developing countries focus either on direct or indirect tax such as source of tax revenue. This suggests that the impact of tax on economic growth may depend on which direct or indirect tax contributing most to economic growth. There are limited researches and inconclusive results regarding the impact of direct and indirect tax on economic growth of African countries (Onakoya, Afintinni, & Ogundajo, 2017). Seeing this gap, this research seeks to examine the impact of direct and indirect tax on the Nigerian economic growth (with Nigeria being an African country). The findings of this research is expected to inform the Nigerian government on the development of effective policy aiming at promoting the development of the Nigeria tax system so that Nigeria can truly reap the dividends of tax revenue as a source of government finance for expenditure to promote Nigerian government social and economic objectives. In addition, to resolve the lack of consensus regarding both the impact of tax on economic growth and whether direct or indirect tax contributes most to economic growth, the present research will contribute to existing literature on tax and economic growth in developing countries. Furthermore, this research will broaden the frontier of knowledge especially in taxation and the Nigeria econo. This also serves as a reference point for the future researchers and a blue print for policy makers.

The research has two main objectives. First, it is to examine the trend of direct tax and its components, indirect tax and its components, and economic growth of Nigeria. Second, it is to determine the impact of direct tax (Company Income Tax (CIT) and Petroleum Profit Tax (PPT)) and indirect tax (Customs excise duties (CED), and Value added tax (VAT)) on Nigerian economic growth.

METHODS

For the purpose of this research, the central objective is to examine the impact of direct and indirect tax on the Nigeria economic growth. The researchers will engage the descriptive research design as the type of research design to describe, explain, and validates findings. Secondary data are used for this research. Data on GDP, capital formation, PPT, customs and excise duties, company income tax and value added tax needed for this research are derived from Central Bank of Nigeria (CBN) statistical bulletin and annual report for several years. Meanwhile, data on labour force are obtained from the United Nations Conference on Trade and Development (UNCTAD). The period of this research is between 1994 and 2013. Data are analyzed by using Eviews 7.1 econometric software. The first objective are achieved using graphical analysis whereby the trend of tax revenue and GDP over time are examined and discussed. The statistical technique for the second objective of this research study is the ordinary least squares regression in a multiple regression framework. This will be used to estimate the econometric model as specified in equation (2). Ordinary least squares is a popular method of estimating models from its appeal of estimating coefficients with minimum variance. It makes them efficient and enables precision in estimating the value of the coefficients.

To empirically analyze the impact of direct and indirect tax revenue on Nigeria economic growth, this research modifies the model of Azubike (2009). The types of tax revenues are categorized into direct and indirect tax categories and summed together. Therefore, direct and indirect tax constitutes two independent variables. In addition, capital are related to economic growth and the equation is as follows.

$$GDP = F\ (Direct\ Tax,\ Indirect\ Tax,\ Capital) \qquad (1)$$

Equation (1) states that GDP as the dependent variable on direct tax, indirect tax, and capital. It is specified as an econometric model with the independent and dependent variables. It is transformed to logs to be conventional in research. The equation will be as follows.

$$Log\ GDPt = \alpha 0 + \alpha 1 DTAXt + \alpha 2 INDTAXt + \alpha 3 LogKt + \mu t \qquad (2)$$

GDP is Gross Domestic Product. Then, DTax is Direct tax revenue, and INDTax is Indirect tax revenue. K is Capital. Meanwhile, μ is Error Term. α_0 is a constant. α_1….. α_3 are the coefficient of independent variables indicating the marginal effects of independent variables on Log of GDP (interpreted as economic growth). The subscript 't' refers to the period of observations which is from 1994 – 2013. GDP and Capital are transformed into logs in equation (2) to normalize the size of coefficients in estimating the model.

GDP is measured using the value of output of the economy. In transforming GDP to logs, the researchers can express GDP as growth rather than an absolute figure. Moreover, direct tax is aggregated to direct tax revenue comprising the sum of CIT and PPT. Indirect tax is aggregated to indirect tax revenue consisting of the sum of VAT and customs and excise duties. Then, capital is measured by the value of gross fixed capital formation. By transforming capital to logs, capital can be seen as growth than an absolute figure.

RESULTS AND DISCUSSIONS

The trend of direct and indirect tax revenue of Nigeria and the individual components of direct and indirect tax are presented in Figure 1.

From Figure 1, it can be seen that direct tax and its components (CIT and PPT), indirect tax and its components (CED and VAT) have been following an upward trend from 1994 to 2013. The direct tax computed excludes personal income tax in which data are unavailable for the research. All the types of direct taxes in Nigeria, PPT has been the highest component especially since 2000 till 2013. Meanwhile, all the types of indirect taxes in Nigeria, VAT is the highest component.

Furthermore, observing the trend of direct tax revenue of Nigeria and comparing it with the trend of its component taxes (PPT and CIT), the trend of direct tax is similar to that PPT. It indicates that direct tax revenue of Nigeria is constituted majorly by PPT revenue than CIT. This suggests that PPT is a significant source of direct tax revenue for the government and the Nigerian government which have generated significant revenues from the oil exploration activities of petroleum firms in Nigeria. However, if the significant oil revenues generated by the Nigerian government from PPT is not used to the benefit of the citizens, the economic growth of Nigeria may remain low despite the huge oil resources of Nigeria. It is because social welfare is adversely affected and this affects the productive capacity of the Nigerian economy.

By observing the trend of indirect tax, and comparing it with the trend of its component taxes (CED and VAT), the trend of indirect tax is similar to VAT. It indicates that indirect tax revenue of Nigeria is constituted majorly by VAT revenue than CED. This suggests that VAT is a significant source of indirect tax revenue for the government and the Nigerian government. If it can generate more tax revenue from VAT, It can use such revenue to achieve significant economic growth for Nigeria.

The trend of Real Gross Domestic Product (RGDP) of Nigeria is presented in Figure 2. From 1994 to 2013, there is a steady increase in RGDP from N345,2b to N950b. This increase indicates that the Nigerian economy has been steadily growing. It is highly probable that increased tax receipts by the Nigerian government in the form of company tax revenues, petroleum profit tax revenues, VAT and

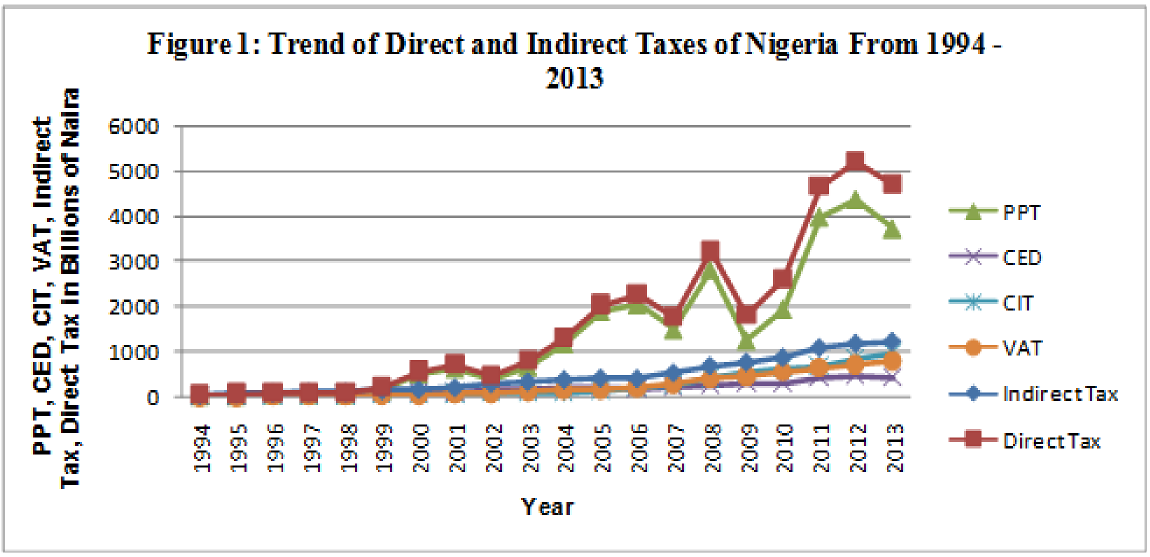

Figure 1 Trend of Direct and Indirect Tax Revenue in Nigeria
(Source: Researcher's Computation, 2016)

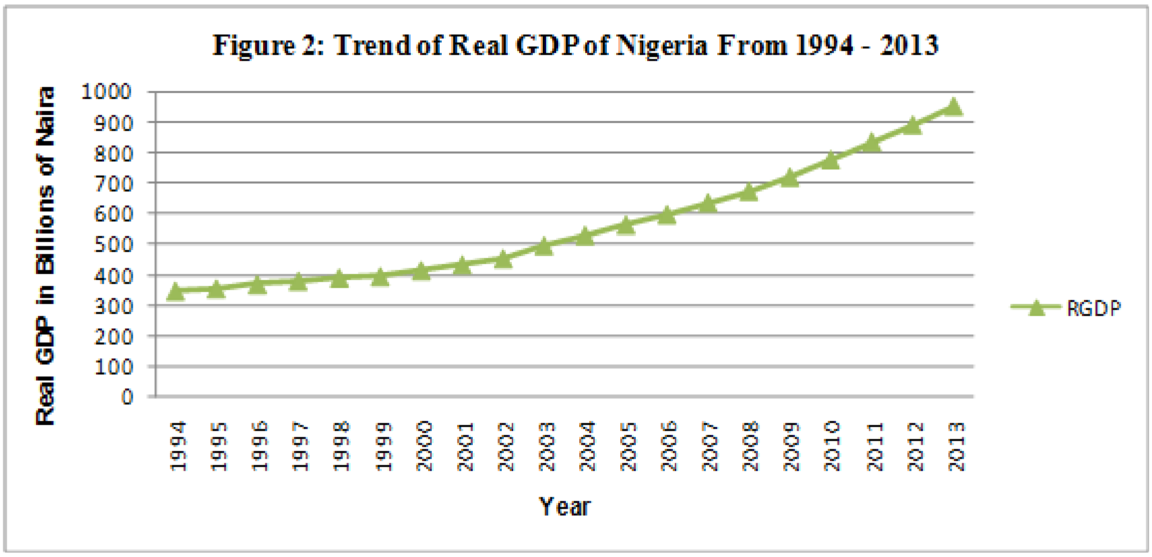

Figure 2 Trend of Real GDP of Nigeria
(Source: Researcher's Computation, 2016)

customs and excise duties in addition to other factors contributed to the steady growth in RGDP.

Moreover, the descriptive statistics of dependent and independent variables in the model are displayed in Table 1. From 1994 to 2013, the mean of RGDP, capital of direct and indirect tax are N558,77 billion, N2352,84 billion, N1642,02 billion, and N451,07 billion respectively. These may be compared with the maximum values of RGDP, capital of direct and indirect tax which are N950,10 billion, N9363,03 billion, N5213,96 billion, and N1229,20 billion respectively. From the significant difference between the mean values of the variables as listed in Table 1, it can be concluded that the means of all variables are significantly lower than its maximum values. It suggests that RGDP, capital, direct tax and indirect tax are low on average in Nigeria from 1994 to 2013. While RGDP can be argued to be substantial average over the period suggesting that the Nigerian economy has been experiencing growth over the years, the same cannot be said to capital and indirect tax which are extremely low. Furthermore, from Table 1 regarding the distribution of data, skewness and kurtosis measure all observed variables. Skewness is a measure of asymmetry of the distribution of the series around its mean. The skewness of all variables is above zero. It indicates a positive skewness. Thus, a right long-tailed distribution is for the observation of each of the variables. Furthermore, kurtosis measures the peakedness or flatness of the distribution of the observations of each variable. The kurtosis of the normal distribution is 3. From the Table 1, RGDP, capital, direct tax, and indirect tax have kurtosis less than three. It shows that they have a platykurtic distribution respectively.

From Table 2, the coefficient of direct tax is

Table 1 Summary of Descriptive Statistics of Dependent and Independent variables

Variables	RGDP (In Billions of Naira)	Capital (in Billions of Naira)	Direct Tax (In Billions of Naira)	Indirect Tax (In Billions of Naira)
Mean	558,77	2352,84	1642,02	451,07
Median	511,30	621,26	1047,40	354,30
Maximum	950,10	9363,03	5213,96	1229,20
Minimum	345,20	85,02	55,08	25,56
Skewness	0,65	1,20	0,92	0,80
Kurtosis	2,17	1,20	2,63	2,35
Observations	**20**	**20**	**20**	**20**

Table 2 Ordinary Least Squares Regression Results

Dependent Variable: Log RGDP
Method: Least Squares
Date: 04/09/16 Time: 18:15
Sample: 1994 2013
Included observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5,230088	0,094486	55,35317	0,0000
Direct Tax	4,32E-06	1,81E-05	0,239151	0,8140
Indirect Tax	0,000291	0,000104	2,810309	0,0126
Log CAP	0,134220	0,018677	7,186555	0,0000

R-squared	0,989288	Mean dependent var	6,272571
Adjusted R-squared	0,987280	S.D. dependent var	0,330736
TSE of regression	0,037302	Akaike info criterion	-3,562683
Sum of Square Residual	0,022263	Schwarz criterion	-3,363537
Log-likelihood	39,62683	Hannan-Quinn criter.	-3,523808
F-statistic	492,5533	Durbin-Watson stat	1,485587
Prob (F-statistic)	0,000000		

(Source: Researcher's Computation, 2016)

0,00000432 (4,32E-06). It is positive and statistically insignificant. This means that a unit increase in direct tax results in 0,0432% (0,00000432*100). It increases in real economic growth as measured by the log of RGDP of Nigeria. This means that direct tax makes a significant positive contribution to economic growth of Nigeria. Therefore, indirect tax is important in contributing to Nigerian real economic growth.

The coefficient of indirect tax is 0,000291. It is positive and statistically significant at the one percent level of statistical significance. This means that a unit increase in indirect tax results in 0,0291% (0,000291*100). It increases in real economic growth as measured by the log of RGDP of Nigeria. This means that indirect tax makes a significant positive contribution to economic growth of Nigeria. Therefore, indirect tax is important in contributing to Nigerian real economic growth. The coefficient of log of capital is 0,134 and positive and statistically significant at the one percent level of statistical significance. This means that one percent increase in capital results in 0,134% increase in real economic growth as measured by the log of RGDP of Nigeria. This means that capital makes a significant positive contribution to economic growth of Nigeria. Therefore, capital is important in contributing to Nigerian real economic growth.

The first objective is to examine the trend of direct tax and its components, indirect tax and its components, and economic growth of Nigeria. The trend of aggregated direct and indirect tax, disaggregated direct and indirect tax, and RGDP are examined using graphical analysis. It is observed that the trend of variables has generally been rising over time.

In investigating the impact of direct and indirect tax on the Nigerian economic growth, the results of ordinary least squares indicate that indirect tax in relative to direct tax has a positive and significant impact on economic growth in Nigeria. It suggests that Nigeria can achieve higher economic growth through increasing the indirect tax receipt. Furthermore, the finding of positive relationship between direct and indirect taxes respectively with economic growth is consistent with findings of Abiola and Asiweh (2011); Okafor (2012); Oyewo (2013); and Okoli, Njoku and Kaka (2014); Salami *et al.* (2015). They argue there is a positive relationship between tax and economic growth in Nigeria. The insignificant coefficient of direct tax is consistent with findings by Arisoy and Unlukaplan (2010) in Turkey.

CONCLUSIONS

The research has been an examination of disaggregated tax which is direct and indirect tax on the growth of the Nigerian economy for the period of 1994 to 2013. The trend of direct and indirect tax components and GDP are examined using graphical analysis. Moreover, the relative impact of direct and indirect tax on economic growth of Nigeria is determined using ordinary least squares regression. The results of graphical analysis suggest that Nigerian taxes and GDP have been increasing over time. Meanwhile, the results of ordinary least squares regression show that indirect tax has a positive and significant impact on economic growth related to direct tax which has a positive but insignificant impact on economic growth of Nigeria. The policy implications of the finding is that the Nigerian government boosts economic growth through realizing the increase in tax revenues should focus on boosting tax revenue from indirect tax sources while expanding the catchment of those liable to pay direct taxes especially informal sector businesses which have been excluded from being charged company income tax in the past.

Based on the results, several recommendations are made. First, the government should focus more on indirect tax as a means of boosting the economic growth of Nigeria. Second, VAT which has been considerable value to the Nigerian economy since 1994 when it was introduced should also be increased especially in items of non-essential nature. Thus, it does not harm the welfare of the poor people but at the same time those more likely to purchase expensive consumer goods. Therefore, they who have high incomes are charged with VAT and consequently Nigeria economic growth will be boosted. Third, the government should look into maximizing the direct tax revenues by extending company income tax charges to informal sector businesses which are more numerous than formal sector firms and have been left out of the loop of company income tax paying organizations in the past. Last, a complete re-organization of the Nigerian tax system should be embarked by the government to reduce the tolerable limit in the twin problems of tax evasion and avoidance.

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