EFFECT OF COMPANY INCOME TAX (CIT) AND VALUE ADDED TAX (VAT) ON GROSS DOMESTIC PRODUCT IN NIGERIA

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ABSTRACT

The aim of this study is to examine the effect of Company Income Tax (CIT) and Value Added Tax (VAT) on Gross Domestic Product in Nigeria. Relying extensively on secondary sources of data, this study gathered data from Central Bank of Nigeria (CBN) Statistical Bulletins, National Bureau of Statistics (NBS) and published data from Federal Inland Revenue Service (FIRS). Data relating to revenue figures from VAT and CIT as well as GDP indices for a time period from 1995-2015 were used. The study adopted both descriptive and inferential Statistics in analysing the data. Descriptive statistics including mean, minimum and maximum, and measure of variability such as variance and standard deviation were utilized. Ordinary Least Square (OLS) technique and Multiple Linear Regression Analysis were the inferential statistic utilized in this study. Result from analysis confirmed that a positive relationship existed between Company Income Tax (CIT) and Value Added Tax (VAT). It was also observed that the level of gross domestic product rise in CIT and VAT will lead to significant rise in gross domestic product in Nigeria. In addition it was observed that CIT and VAT significantly affect gross domestic product in Nigeria. It was therefore 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 would adversely affect income from petroleum profit tax.There should be a developed federal fiscal system that could guarantee the full potential of Value Added Tax (VAT) and Company Income Tax (CIT) in achieving developmental targets and lastly Value Added Tax should be used as a tool of fiscal control by the Government to improve the economy.

Key Words: *Company Income Tax, Value added Tax and Gross Domestic Product*

INTRODUCTION

The political, economic and social development of any country depends on the amount of revenue generated for the provision of infrastructure in that given country. However, anavenue for generating revenue is through a well structured tax system. Azubike (2009) is of the view that tax is a major player in every society of the world. The tax system is an opportunity for government to collect additional revenue needed in discharging its pressing obligations. A tax system offers itself as one of the most effective means of mobilizing a nation's internal resources and it tends itself to creating an environment conducive to the promotion of economic growth. Nzontta (2007) however, argues that taxes constitute key sources of revenue to the federation account shared by the federal, state and local governments.

Therefore, tax policies need to attract potential investors, and the revenue from tax should be sufficient enough to meet the infrastructural expenditures of the government. It is an instrument used by government to measure, access and control the informal sector that dominates developing economies of the world (Wambai and Hanga, 2013).

Tax is a major tool in which governments at all levels use to generate income, to redistribute income in a society, and to stimulate growth of an economy. Tosuu and Abizadeth (2005) acknowledge that taxes are used as proxy for fiscal policy. They outlined five possible mechanisms by which taxes can affect economic growth and development. First, taxes can inhibit investment rate through such taxes as company and personal income, capital gain taxes. Second, taxes can slow down growth in labour supply by disposing labour leisure choice in favour of leisure. Third, tax policy can affect research and development expenditure. Fourth, taxes can lead to a flow of resources to other sectors that may be having lower productivity. Finally, high taxes on labour supply can distort the efficient use of human capital.

Persons and companies are known to routinely evade and avoid taxes due to corrupt practices and the existence of various loopholes in the tax laws. Recently the Nigerian government undertook various tax law reforms to improve tax administration and to increase tax yield. The Value Added Tax (Amendment) Act, 2007; was for instance intended to widen the Value Added Tax base and improve the machinery for its collection. Similarly, Company Income Tax Act (Amendment). 2007; Federal Inland Revenue Services (Establishment) Act, 2007 and The Personal Income tax

(Amendment) Act, 2011, were all aimed at encouraging tax compliance and increasing tax yield (Aguolu, 2010).

Problem Statement

In less developed countries, government has to play an active role in promoting economic growth because private initiative and capital are limited. Fiscal policy or budget has become an important instrument in promoting growth in such economies.

Tax is an important part of fiscal policy which can be used efficiently by the government and developing economies. Taxes play a vital role in economic growth of a country which include; resources mobilization, reduction in inequalities of income, improvement in social welfare, foreign exchange, regional development, control inflation etc.

However, economic factors which impinge on the Economic growth of Nigeria, include unequal distribution of resources (revenue), poverty, inflationary pressure, high population growth, low human development, corruption, social injustice, political instability, ethnic-religious crisis, unemployment, lack of basic infrastructure, uncompetitive private sector and other developmental challenges. Okafor, Regina. (2012) examine Tax Revenue Generation and Nigerian Economic Development. Okafor considered periods from 1981-2007. Adereti, Adesina and Sanni(2011) wrote about Value Added Tax and Economic Growth in Nigeria. They considered periods from 1994-2008. Rudolf Macek (2015) researched into "The Impact of Taxation on Economic Growth: Case Study of OECD Countries" He considered the periods from 2000- 2011. Edame and Okoi (2014) examined the impact of taxation on investment and economic development in Nigeria, using data covering the period 1980 – 2010.Confidence and Ebipanipre (2014), researched into taxation as an instrument of Economic Growth in which they imply that Company Income Tax (CIT) and Value Added Tax (VAT) have significant relationship with economic growth in Nigeria. They however considered periods from 1980-2013. Olowolaju, Ajibola and Akintoye (2014), examined taxation as a tool for national development in sub- saharan Africa. They examined periods from 2004-2013. From all the works that have been done by various researchers, it is clear that researchers have researched into the influence of Value Added Tax on economic growth and effect that Company Income Tax has on Gross Domestic Product separately, and within the time frame ending in the period 2013 but this study is combining Company Income Tax with Value added Tax on economic growth from 1995-2014. This period covers the Military Rule and Civilian Regime. Though there are four important determinants of economic growth namely; human resources, natural resources, capital formation and technological development this research will be using Gross Domestic Product (GDP) because of its measurability.

Objectives of the Study

The broad objective of this study is to examine the Effect of Company Income Tax (CIT) and Value Added Tax (VAT) onGross Domestic Product in Nigeria. Specific objectives are to;

i) examine the extent to which economic growth varies over the last 2 decades in Nigeria;
ii) assess the significant relationship between CIT and GDP over the last 2 decades in Nigeria;
iii) ascertain the significant relationship between VAT and GDP over the last 2 decades in Nigeria and
iv) evaluate the joint effect of CIT and VAT on GDP

Research hypotheses

In order to provide support for the objectives of this study, the following hypothesis were advanced and tested;

i) Ho_1: GDP indices has not significantly varied in the past 2 decades in Nigeria
ii) Ho_2: VAT has no significant influence on GDP in Nigeria
iii) Ho_3: CIT has no appreciable influence on GDP in Nigeria
iv) Ho_4: Joint effect of VAT and CIT does not have significant influence on GDP in Nigeria in the last 2 decades.

Literature Review

According to Ogbonna and Appah (2012), this reasons 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 see the socio- political theory of taxation as a theory 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.

Expectancy Theory of Taxation

Bhartia (2009) asserts that the expectancy theory of 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 emphasizes 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

The benefits-received theory assume 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.

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.

Economic Growth Theories

Dwivedi (2004), says economic growth is a sustained increase in per capita national output or net national product over along period of time. It implies that the rate of increase in total output must be greater than the rate of population growth. Another quantification of economic growth is that national output should be composed of such goods and services which satisfy the maximum want of the maximum number of people. Economic growth can be determined by four important determinants namely, human resources, national resources, capital formation and technological development.

Empirical Literature

Many studies have investigated taxation as an instrument of economic growth in different countries with diverse techniques. The outcome of the investigations however, shows degree of relatedness in the results. The tax reform in Nigeria is spearheaded by the Federal Inland Revenue service which is geared to achieving greater revenue collection, voluntary and willing compliance and breaking the long piercing phobia between taxpayers and tax collectors. For instance in a study by Confidence and Ebipanipre (2014), on taxation as an instrument of Economic Growth in which they imply that Company Income Tax (CIT) and Value Added Tax (VAT) have significant relationship with economic growth in Nigeria. The finding of their study implies that taxation is an instrument ofeconomic growth in Nigeria

As surveyed by Olowolaju, Ajibola and Akintoye (2014), who examined taxation as a tool for national development in sub-saharan Africa: Evidence from Nigeria, concluded that taxation is a vital tool for national development.

Wambai and Hanga, (2013), studied taxation and social development in Nigeria: tackling Kano's hidden economy, they found that the attitude of the government on taxation need to change and recommends a tax system that concentrate on establishing simplicity, predictability, and neutrality. Chiumia and Simwaka, (2012) studied and analyzed the effect of taxation in sub-Saharan Africa, they found that taxes levied on personal and corporate income reduces economic growth. From their study, one may be tempted to conclude that the tax structure is largely irrelevant in less developed economies, but embedded in an effective tax system are benefits for both the taxpayers and the government.

Adereti *et a*l, (2011) explored Value Added Tax and Economic Growth in Nigeria, their result found no causality existing between GDP and Value Added Tax (VAT) revenue, and a positive and significant correlation between VAT revenue and GDP.

METHODOLOGY

The study will make use of data collected mainly through secondary sources. The data will be collected from the Central Bank of Nigeria (CBN) Statistical Bulletin National Bureau of statistic (NBS) and published data from Federal Inland Revenue Service. The study will adopt both descriptive and inferential statistic to achieve the stated objectives. The study will adopt both descriptive and inferential statistic in analyzing the data. The descriptive statistic will include mean, minimum and maximum, and measure of variability such as variance and standard deviation will be utilized. The inferential statistic that will be adopted is Ordinary Least Square (OLS) Techniques, Multiple Linear regression analysis with the aid of statistical package of social science (SPSS) version 20 so as to determine the relationship between some variables of Company Income Tax (CIT) and Value Added Tax (VAT) and GDP.

Table 1:
Summary of Aggregate of Nominal Value of GDP, CIT, and VAT from 1995-2015

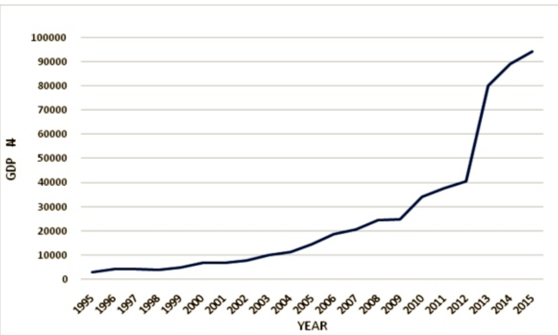
YEAR	GDP	VAT	CIT
1995	2907	20.8	21.9
1996	4032	32.5	22
1997	4189	14.5	26
1998	3989	38.3	33.3
1999	4676	47.7	46.2
2000	6714	60.7	51.1
2001	6895	91.8	68.7
2002	7795	108.6	89.1
2003	9914	131.4	1144.8
2004	11411	163.3	113
2005	14612	192.7	140.3
2006	18565	232.7	244.9
2007	20657	312.6	275.3
2008	24296	401.7	416.8
2009	24794	481.4	568.1
2010	33984	564.9	657.3
2011	37543	659.2	700.5
2012	40544	710.5	848.5
2013	80092	799	956.9
2014	89044	803	1180
2015	94145	767	1451

Sources: CBN: Statistical Bulletin, 2015, Published 31st July, 2016.
NBS: Abstract, 2012
FIRS: Planning, Reporting and Statistical Data Office

Hypothesis 1:Graphical Presentation of chart

Ho_1: GDP indices has not significantly varied in the past 2 decades in Nigeria

Figure 4.1 TREND OF GDP in Nigeria 1995-2015



Source: From data, 2016

The diagram in figure 4.1 above shows a steady growth in Nominal GDP between 1995 and2008. Between 2009 and 2012 there is greater rise in Nominal GDP trend, between 2012 and 2015 there is a sharp and sudden rise in Nominal GDP which could be ascribed to certain macro economic variables like rebasing of GDP. Thus, the null hypothesis is rejected that GDP indiceshas not significantly varied in the past 2 decades in Nigeria while the alternate hypothesis is accepted.

Hypothesis 2:

Ho_2: VAT has no significant influence on GDP in Nigeria

Table 2: Trend Analysis table of VAT on GDP

Dependent	Independent	B	T	F	R^2	Adjusted R^2	R
GDP	VAT	63.9	16.36	267.67	0.934	0.930	0.966

Source: Authors compilation through SPSS 20

Discussion: The slope of 63.9 means that the rate of change of GDP with respect to VAT will bring about an increase in aggregate demand (GDP).That is, it has 63.9 multiplier effects on GDP.Since t =16.36>1.729, there is a statistical evidence that VAT has a significant relationship with GDP.

Table 3: Pooled OLS Regression Result of Estimated GDP/ VAT Analysis

Variables	Coefficient	t- Statistics	P- Value
Constant	1318.634	0.595	0.559
VAT	63.933	16.361	0.000
F- Statistics		267.663	
F- Significant			0.000
R		0.966	
R^2		0.934	
Adjusted R^2		0.930	

Source: Author's compilation through SPSS 20

The fitted regression line from the above result is as shown below:

GDP= 1318.634 + 63.933VAT..…eqn (3)

Interpretation:

The intercept is 1318.6 and the slope is 63.9. The slope means, the rate of change of GDP with respect to VAT will bring about an increase in aggregate demand (GDP).

That is, it has 63.9 multiplier effects on GDP. To test the significant influence, the t-statistics shall be evaluated. With the significance level of &=0.05 and n-1, to_5=1.729. Since t =16.36>1.729, there is a statistical evidence that VAT has a significant relationship with GDP. The f- test shown by the

Anova table in the appendix can also be used to test for the significance in regression. The F-statistics is 267.7 and the P- value of 0.000<& =0.05, the Ho_2 is rejected then, it can be interpreted that VAT has a significant influence on GDP in Nigeria.

The coefficient of determination (R –square) which is 0.934 means about 93.4% variation is explained by the regression equation only 6.6% cannot be explained. This is a good indicator. All the statictical indicators confirm the statictical significant influence of VAT on GDP. The coefficient of VAT that is positive (63.9) also confirm the positive influence of VAT on GDP. Hence, Ho_2 is rejected and alternative hypothesis is accepted. That is VAT has a significant influence on GDP.

Hypothesis 3:

Ho_3: Company Income Tax (CIT) has no appreciable influence on GDP in Nigeria

The result for test of Ho_3 are shown in table 4.3.1, while the pooled OLS result of the estimated GDP/CIT is shown in table 4.3.2

Table 4:Trend Analysis Table of CIT on GDP

Dependent	Independent	B	T	F	R^2	Adjusted R^2	R
GDP	CIT	89.1	9.68	93.78	0.832	0.823	0.912

Source:Author's compilation through SPSS 20

Discussion: The slope of 89.13 means that an increase in Company Income Tax will bring a positive increase in GDP by about 89.13%.To test the significant influence, the t – statistic will be evaluated. With the significant level of &=0.05 and degree of freedom (n-1), to_5=1.729. Since t = 9.684>1.729, there is a statistical proof that CIT has a significant influence on GDP.

Tables 5:Pooled OLS Regression Result of estimated GDP/ CIT Model

Variables	Coefficient	t- Statistics	P- Value
Constant	-2406.958	-0.616	0.545
CIT	89.132	9.684	0.000
F-statistics		93.784	
F-significance			
R		0.912	
R2		0.832	
Adjusted R2		0.823	

Source: Author's compilation through SPSS 20

The fitted regression line from the above result, that is, the (table 4.3.2.) is given as:

GDP=-2406.95+89.13 CIT…..........eqn(8)

Interpretation

The intercept is -2406 and the slope is 89.13.

This means company income tax has a positive influence on GDP since the coefficient of CIT is positive (89.13). An increase in Company Income Tax will bring a positive increase in GDP by about 89.13%. To test the significant influence, the t – statistic will be evaluated. With the significant level of &=0.05 and degree of freedom (n-1), to_5=1.729. Since t = 9.684>1.729, there is a statistical proof that CIT has a significant influence on GDP.

The F-test shown by the Anova table in the appendix, can also be used to test the statistical significant in regression. The F-statistics is 93.73and the P-value of the F-statistics is 0.000. Since the P-value of 0.000<$=0.05, the Ho_5 is rejected. Hence alternative hypothesis is accepted. This means, CIT has a significant influence on GDP. R-Square which is coefficient of determination is 0.832, this means, model explain 83.2% of what actually happens to GDP while only 16.8% is explained outside the model. This is also a good indicator that supports the significant influence of CIT or GDP. Hence, the positive sign of the coefficient and the statistical indicators led evidence to the fact that CIT has an appreciable influence on GDP. Alternative hypothesis is accepted.

Hypothesis 4

Ho_4: There has not been significant joint effect of VAT and CIT on GDP in Nigeria in the last 2 decades

The results for test ofHo_6 are shown in tables 4.4.1. The pooled OLS regression result is also shown in table 4.4.2

Table 6: Trend Analysis Tableof Joint effect of VAT and CIT on GDP

Dependent	Independent	B	T	F	R^2	Adjusted R^2	R
GDP	CIT	-18.45	-0.898	132.8	0.937	0.930	0.968
	VAT	75.91	5.459	132.8	0.937	0.930	0.968

Source:Author's compilation through SPSS 20

The slope of CIT is -18.4 and the slope of VAT is 75.9. The slope of CIT means the rate at which GDP changes with respect to CIT. The slope of VAT means the rate at which GDP change with respect to VAT.

With -18.4 as the coefficient of CIT, it means an increase in Company Income Tax (CIT) will have a negative effect on Aggregate

Demand (GDP). While an increase in Value added Tax will have a positive effect on aggregate demand (GDP).

The joint effect of CIT and VAT shows R^2 which is coefficient of determination as 0.937(93.7%).This is a very high coefficient of determination. It means about 93.7% of variation in GDP are explained by CIT and VAT while only 6.3%are explained outside the model.

Table 7
Pooled OLS multiple Regression Result of estimation GDP, VAT and CIT model

Variables	Coefficient	t- Statistics	P- Value
Constant	2568.664	0.978	0.341
CIT	-18.446	-0.898	O.381
VAT	75.911	5.459	0.000
F-statistics		132.872	
F-significant			0.000
R		0.968	
R2		0.937	
Adjusted R2		0.930	

Source: Author's compilation through SPSS 20

The fitted regression equation derived from the above result (table 4.4.4) give below.

$GDP = 2568.664 - 18.446\ CIT + 75.911 VAT$……eqn(9)

SUMMARY OF FINDINGS

The study investigated the Effect of Company Income Tax (CIT) and Value Added Tax (VAT) on Gross Domestic Product (GDP) using annual time series data spanning from 1995 -2015. By focusing on a possible measure of taxation that has not been studied previously in other countries, this study adds to literature in Nigeria that attempts to understand the Effect of VAT and CIT on GDP while multiple linear regression was the inferential statistics used to determine the level and interaction of relationship between the independent and the dependent variables.

The study provided answers to research questions and hypothesis tested which were accepted. The result of this study shows that the variables were independently significant this implies that the empirical results offer tantalizing evidence that Value Added Tax and Company Income Tax have positive and negative influence respectively on Gross Domestic Product in Nigeria.

CONCLUSION

Based on the findings of this study, it could be concluded that there is a great level of interaction between Value Added Tax (VAT) and Company Income Tax (CIT) and Gross Domestic Product (GDP)

This study has generally revealed that Value Added Tax (VAT) has a very positive effect on Gross Domestic Product (GDP) while Company Income Tax (CIT) has a positive effect on Gross Domestic Product (GDP) when considered separately but has a negative effect on Gross Domestic Product (GDP) when considered jointly with Value Added Tax (VAT) in Nigeria, especially in its socio-economic contributions since the 1970's. The researcher concluded that Value Added Tax (VAT) and Company Income Tax (CIT) were an integral part of effective fiscal policy instrument and a major potential catalyst to growth. Yet the benefits of these taxes do not reflect significantly on the level of human growth in Nigeria. Results obtained in this study confirm that a positive relationship exist between Companies Income Tax (CIT) and Value Added Tax (VAT) and the level of GDP, this however implies that a significant rise in the performance of VAT and CIT, which of course may be the mainstay of our economy as a result of falling of the crude oil prices at international market will lead to a significant increase in GDP.

Recommendations

In the light of the foregoing findings and conclusions, the following recommendations are suggested:

i. 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 would adversely affect income from petroleum profit tax.

ii. Government should expand the Tax yield through improved tax system administration.

iii. There should be a developed federal fiscal system that could guarantee the full potential of Value Added Tax (VAT) and Company Income Tax (CIT) in achieving developmental targets

iv. Value Added Tax should be used as a tool of fiscal control by the Government to improve the economy.

v. The tax execution agencies should forge good relation with the professional associations involved in tax matters so as to increase their support In reducing tax malpractices perpetrated by Tax payers

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