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## Article

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## Impact of Non-Oil Tax Revenue on Economic Growth in Nigeria

Khadijat Adenola Yahaya<sup>1</sup>, Kabir Yusuf<sup>2</sup>

**Abstract:** This study examined the impact of non-oil tax revenue on economic growth in Nigeria. few work have covered non oil taxation and the relationship of company income tax (CIT), value added tax (VAT) and custom and excise duties tax (CED) on Real Gross Domestic Product of Nigeria. The study adopted ex-post facto research design, and data were drawn from the annual reports of Central Bank of Nigeria and Federal Inland Revenue Services publications. Auto Regressive Distributive Lag (ARDL) was employed to analyze the data collected after subjecting the series to unit root test and co-integration test. The result of the study showed that CIT (with coeff of 0.273863 and p-value of 0.0177) had a positive significant relationship with economic growth, while VAT (with coeff of 0.030389 and p-value of 0.8529) and CED (coeff of 0.003951 and p-value of 0.9730) had a positive insignificant relationship with economic growth. The study recommends that government should focus on increasing CIT revenue through strengthened regulations on tax compliance in order to restrain tax evasion and avoidance. More attention to channeling of VAT and CED revenue collections to infrastructural developments will bring about economic growth of the country.

**Keywords:** Growth; Gross Domestic Product; Non-oil Tax; Revenue

**JEL Classification:** H24

### 1. Introduction

All over the world, even among the illiterates, it is well established that the primary responsibility of any government of a country is to provide basic infrastructures for the wellbeing of her citizens. These infrastructure facilities that range from provision of securities for life and properties, good water supply, better healthcare, stable power supply, good road networks and other social amenities are key for economic growth and development of any society. Government spending on these infrastructural developments provides aids in achieving full employment, price stability and increase in production of goods and provision of services within the country which in large extent sustained real economic growth. This explains why governments are concerned with the medium of sourcing revenue to meet its social obligations. Malima (2013) therefore put forward that revenue collection is an important determinant factor of economic growth of any society. Taxation is one of the diverse sources of revenue generation to the government and according to Asaolu, Olabisi, Akinbode and Alebiosu (2018), it is a viable source of revenue generation to provide essential services for the generality of people living in a particular geographical area. It is one of the most effective ways a nation's internal resources is assembled and it tend to establish an environment conducive for the promotion of economic growth (Akwe, 2014). Taxation therefore is a charge imposed by the government of any country on incomes, goods, services and properties of an individual and corporate body to raise money for public revenue generation and other legitimate functions of the government (Oyebanji & Oyebanji,

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2017). A good tax structure plays many roles in the process of economic growth of any nation like Nigeria. According to Musgrave and Musgrave (2004) as cited by Okoli, Njoku and Kaka (2014) maintained that these roles affect the level of public savings, private savings and thus the volume of resources available for capital formation.

In Nigeria, revenue from taxation can be categorized into oil and non-oil tax revenue. Oil tax revenues are revenues that arise from taxes on incomes and profits of oil producing companies operating in Nigeria. These are Petroleum Profit Tax (PPT) and royalty from economic rent relating to oil extraction. On the other hand, non-oil tax revenues are revenues that arise from other taxes than from oil related activities. These are personal income tax (PIT), company income tax (CIT), valued added tax (VAT), capital gain tax, custom and excise duties, and stamp duty, amongst others.

Over the years, the major source of revenue to the Nigeria government is oil revenue. It has contributed over half of the total revenue annually up to 85% for the government to neglect the non-oil sector (Okezie & Azubike, 2016). Although oil revenue is large, but unstable, which make the size of government programs to change accordingly. Evidence showed that funds available for distribution among federal, state and local governments in Nigeria have decreased in recent time as a result of decline in oil price (Afuberon & Okoye, 2014). Hence, Nigeria over-dependence on oil revenue faced a serious set-back for sustainable economic growth. This leads to a serious concern for Nigerians and government on the need to diversify the economy. This was made clear when the former Finance and Coordinating Minister of the Economy, Prof. Okonjo-Iweala said “even though the drop in oil prices was a serious challenge, it is an opportunity for the country to focus on greater diversification and refocus efforts towards the non-oil sectors in preparation for a future with less oil revenue” (PM News, 2014). This issue and other factors made President Muhammadu Buhari in Guangzhou, China said that “the diversification of the Nigerian economy was long overdue as continued reliance on crude oil exports had always made the economy vulnerable to shocks” (The Sun Nigeria, 2018). The need for Nigeria government to generate adequate revenue from non-oil tax has become a matter of urgency in a bid to sustain economic growth.

Although, various studies such as Asaolu *et al* (2018); Gwa and Kase (2018); Okoli *et al* (2014); Ibadin and Oladipupo (2015); Cornelius, Ogar and Oka (2016); Okwara and Amori (2017) have made considerable efforts in extant literature on studies that focused on tax revenue and economic growth using related approach. This study therefore seeks to close the knowledge gap by examining the impact of individual types of non-oil tax revenue (company income tax, value added tax and custom and excise duty) on economic growth in Nigeria using different approach. This study is timely and appropriate as Nigeria is diversifying and refocuses on non-oil sector as alternative source of revenue to declining oil revenue. This study will be of benefits to policy makers and those in research and academics community. So, the study attempt to provide answers to the following research questions:

- what is the relationship of company income tax on economic growth in Nigeria?
- what is the influence of value added tax on economic growth in Nigeria?
- what is the effect of custom and excise duty tax on economic growth in Nigeria?

In addressing the above research questions, the study examines the impact of the non-oil tax revenue on the economic growth of Nigeria as general objective. While the specific objectives focus on the research questions.

To achieve the above stated objectives, annual time series data were collected for the period 1981 to 2018 from the Central Bank of Nigeria (CBN) Statistical Bulletin, CBN Economic Report and Federal Inland Revenue Services (FIRS) Tax Statistics for the reference period in order to test the following research null hypotheses formulated.

H<sub>01</sub>: company income tax has no significant relationship with economic growth in Nigeria.

H<sub>02</sub>: value added tax has no significant influence on economic growth in Nigeria.

H<sub>03</sub>: custom and excise duty has no significant effect on economic growth in Nigeria.

## Literature Review

### Conceptual Issues: Tax Revenue

Tax revenue is the receipt by government of a country or state from tax structures. According to Worlu and Emeka (2012), tax is a fee charged or levied on a product, income, or activity by a government. If it is charged directly on incomes of individuals or corporations, it is referred to as a direct tax. If it is charged on the price of a goods or service, then it is referred to as an indirect tax. However, Anyanwu (1997) defined tax revenue as a compulsory transfer or payment from private individuals, institutions or groups to the government. Similarly, Ogundele (1999) defined taxation as the transfer of real economic resources from private sector to the public sector to finance public sector activities. Thus, the government uses the revenue collected from various taxes for providing basic amenities such as hospitals, schools, and public utility services to mention but few which benefit all people (Chigbu, Akujuobi & Appah, 2012).

The classical economists in the early days see revenue generation for the government has the only objective of tax. But with the change in circumstances and ideologies, the purpose of taxes has changed. These days aside from raising revenue, tax is charged to affect production, distribution and consumption with an aim of achieving social welfare through economic development (Asaolu *et al*, 2018). The primary purpose of tax in any society is to generate revenue for the government to meet its expenditures and to redistribute wealth and management of the economy (Ola, 2001; Jhingan, 2004; Bhartia, 2009). According to Nzotta (2007), four important issues must be comprehended for tax revenue to play its functions in the society. One, tax is a compulsory contribution made to the government by the citizens and must be utilize for common use. Second, tax is a general obligation on all the tax payers. Three, there is a conditional principle that the contribution in form of taxes made by the tax payer may not be equivalent to the benefits received. Finally, a tax is not imposed on citizens as a payment for the specific services rendered to the citizens by the government. Thus, it is evident that a good tax structure plays a multiple role in the process of economic development of any nation in which Nigeria is not an exception (Appah, 2010).

### Non-Oil Tax Revenue

Tax revenue accruing to economy, such as Nigeria, can be divided into two main categories, which are; Oil tax revenue and Non-oil tax revenue. Oil tax revenue includes revenues from petroleum profit tax (PPT), royalty and gas tax. On the other hand, non-oil tax revenue is revenues from direct and indirect taxes paid by other sectors of the economy other than the oil sector. The direct taxes are personal income tax (PIT), company income tax (CIT), capital gain tax, withholding tax and education tax, while the indirect taxes are valued added tax (VAT), and custom and excise duties.

### **Company Income Tax (CIT)**

Company Income Tax is payable upon the profit of all incorporated entities in Nigeria accruing in, derived from, brought into or received in Nigeria. This form of taxes extended to the profits of non-resident companies (both private and public limited liability) accrued from carrying on business in Nigeria (Appah, 2010). CIT was created by the Companies Income Tax Act (CITA) 1979 which regulates the assessment and collection procedures. It is one of the taxes administered and collected by the Federal Inland Revenue Service (FIRS), and the tax had been contributing significantly to the revenue profile of the government. The profits of Nigeria incorporated companies shall be deemed to accrue in Nigeria wherever they have arisen (worldwide) and whether or not they have been brought into or received in Nigeria (Ugochukwu & Azubike, 2015). These profits chargeable to tax shall be in respect of: any trade or business; rent or premium arising from use of property; dividends, interest, royalty, discounts, charges or annuities; fees, dues and allowances for services rendered; and any gains arising from acquisition and disposal of short term money instruments. The present chargeable rate of CIT is 30%.

### **Valued Added Tax (VAT)**

Valued Added Tax (VAT) can simply be referred to as consumption tax which is payable on the goods and services consumed. According to Abata (2014), VAT is described as a consumption tax where the tax burden is bear by the consumers. He explained that tax burden is passed from the producer to middle men (wholesaler and retailer) and finally to the consumer who ultimately bear the burden. Therefore, payment of VAT cannot be avoid except if an individual or entity avoid buying and consuming value added tax goods and services. VAT in Nigeria was established by VAT Decree No 103 of 1993 which came into effect from 1<sup>st</sup> December 1993 but effect date for invoicing was from 1<sup>st</sup> January 1994. The Nigerian VAT system is a multi- stage tax system under which VAT is collected at every stage of the production chain from the manufacturer to the consumer (Valued Added Tax Act of 1993). Peter and Adesina (2016) put forward that to eliminate the effect of VAT at every stage of production, a credit mechanism system is put in place to allow the VAT paid on imports or purchase of raw materials to be deducted from the VAT charged on sales or consumption. Presently, the VAT rate in Nigeria is 5%

### **Custom and Excise Duty Tax (CED)**

Customs duties consist of import and export duties that are indirect taxes paid to the government for goods imported into and exported out of the country respectively. Excise duties on the other hand are indirect taxes imposed on specific goods produced and consumed within the country with the aim of discouraging the consumption of such goods. CED is used by the government of a country to promote economic growth and development. Imposing of high import duties is not only to generate revenue but also to protect infant industries in the country. According to Olurotimi (2013) as quoted by Asaolu *et al* (2018), CED has over the years been used as fiscal policy instrument to stimulate economic growth.

### **Economic Growth**

Economic growth simply refers to as an increase in the value of goods and services produced by a country over a period and can be used to reflect the size of a country. According to Dwivedi (2004), economic growth is a sustained increase in per capita national output or net national product over an extended period. It implies that the rate of increase in total output must be higher than the rate of population growth thereby resulting to improvement or increased in standard of living of the citizens.

There are different proxies used for measuring economic growth but the most accepted is Gross Domestic Product (GDP). GDP is the monetary value of goods and services produced in a nation during a particular period by the residents of that nation irrespective of the nationality of the residents. GDP can be measured at current basic prices (Nominal GDP) or constant basic prices (Real GDP) or current market price. Real GDP has been seen as a good measure of economic growth because it accounts for the change in the price level of goods and services produced within the nation at a particular period. This makes it to be an attraction to economics, finance and accounting researchers (Peter & Adesina, 2016). Based on this, the study used real GDP as economic growth proxy. GDP can be derived or calculated using aggregate expenditure approach or aggregate income approach or aggregated output approach. Expenditure approach is based on the total spending on all final goods and services in an economy and it stated GDP as a function of Household consumption (C), Investments (I), Government expenditure (G) and Net imports (X-M). The aggregate income approach is based on the inputs to production and it stated GDP as a function of Household consumption (C), Savings (S) and Taxes (T). The output approach is based on the total output volume of goods and services, and other economic activity each year. All the three approaches will result to the same total GDP.

### **Theoretical Background**

This study is hinged on Benefits theory and Expediency theory.

#### **Benefits Theory**

The benefit theory was initially developed by Knut Wicksell (1896) and Erik Lindahl (1919). The theory had been applied to such subjects as tax progressivity, corporation taxes, and taxes on property or wealth. The benefits theory of taxation by Cooper (1994) stipulated that government should levy tax on individual based on the benefits the individuals achieved from the services (social goods) rendered by the government. This theory assumed that there is exchange relationship between the taxpayers and the government. This is found in the CIT, VAT and CED relationship with the economic growth in which the levies paid for these non-oil taxes is a reflection of the benefits received in the consumptions of social goods. While the tax revenue so received by the government is ploughed back for the sustenance of the country economy growth through the provision of infrastructures, maintenance of law and law and other social amenities

#### **Expediency Theory**

According to Adam (1776), every tax proposal must pass the test of practicality and that must be the only consideration government authority should consider in choosing a tax policy. This theory which is embedded in the canon of economy explains the economy, effectiveness and efficiency of tax collection instrument. Taxation is seen to provide a powerful set of policy tools to the authorities and such tools should be effectively used for remedying economic and social ills of the society such as income inequalities, regional disparities, and unemployment and so on. (Afuberon & Okoye, 2014)

#### **Empirical Review**

Macek (2014) evaluated the impact of taxation on economic growth in OECD countries, for the period of 2000 – 2011. A mathematical multiple regression model was adopted to capture the linearity correlation between the variables of the study. Tax variables by OECD classification include personal income tax, corporate income tax, social security contribution, property tax, value-added tax and tax on consumption. The World Tax Index classification is only short by social security contribution.

While economic growth variables captured in the model include gross domestic product, capital accumulation, human capital and government spending. The study found that corporate income tax was statistical significant on economic growth. The study also confirmed the impact of value-added tax on economic growth to be negatively significant.

Kalas, Mirovic and Andrasic (2017) estimated the impact of taxes on the economic growth in the United States for the period 1996 – 2016. The study measured the effect of tax revenue growth and tax form as a personal income tax, corporate income tax and social security contributions on gross domestic product as a proxy for economic growth using correlation matrix. The study found a strong and positive relationship between tax revenue growth and corporate income tax on one hand and also found corporate income tax does not have a significant impact on gross domestic product growth on the other hand.

Akwe (2014) examined the impact of non-oil tax revenue growth in Nigeria, from the period 1993 - 2012 using secondary data collected from the Statistical Bulletin of the CBN. The study employed OLS technique to analyze the study data collected on the variables. The results showed that non-oil tax revenue impacted positively on economic growth in Nigeria.

Okoli *et al* (2014) empirically analyzed taxation and economic growth in Nigeria, covering the period 1994- 2012. Taxation was disaggregated into valued added tax, personal income tax, company income tax and petroleum income tax, while the gross domestic product was used as a parameter for measuring economic growth in Nigeria. The study used granger causality approach in analyzing the variables and found VAT and CIT to be significant to economic growth in Nigeria.

Ibadin and Oladipupo (2015) also attempted to measure the impact of indirect taxes (valued added tax, petroleum income tax and custom and excise duty) on economic growth (Real GDP) from 1981 to 2014. Error correction model was used to evaluate the impact and found VAT and CED to be positively significant to real GDP.

Cornelius *et al* (2016) examined the impact of tax revenue on economic growth: evidence from Nigeria from 1986 to 2010. The study examined the impact of petroleum profit tax, company income tax and non-oil revenue on Nigeria economy. Ordinary least square of multiple regression models was used to establish the relationship between the independent and dependent variables. The study finds that there is no significant relationship between company income tax and economic growth of Nigeria.

Okwara and Amori (2017) also carried study on the impact of tax revenue on the economic growth in Nigeria from the period of 1994-2015. The study used ordinary least square (OLS) with the aids of statistical package for social science (SPSS) to test the significant of valued added tax and non-oil income tax as proxy for tax revenue on gross domestic product proxy for economic growth. The result revealed that non-oil income tax has significant impact on the gross domestic product while valued added tax has insignificant impact for the period under review.

Amos, Uniamikogbo and Aigienohuwa (2017) in their study, tax revenue and economic growth of Nigeria explored the effect of Petroleum Profit Tax (PPT), Value Added Tax (VAT), Company Income Tax (CIT) and Education Tax (EDT) on the economic growth of Nigeria, proxies by Gross Domestic Product (GDP) for the period 1995 to 2015. The study adopted the econometric model of multiple linear regressions and ordinary least square (OLS) technique. The study finds that CIT has positive and statistically significant to the country economic growth while VAT had positive but statistically insignificant to economic growth of Nigeria.

Oraka, Okegbe and Ezejiofor (2017) in the study, Effect of value added tax on the Nigeria Economy, determined the extent to which value added tax has affected the Nigerian economy proxies by gross domestic product for the period 2003 to 2015. Simple regression analysis was employed and found that VAT has not significantly affected gross domestic product of Nigeria economy.

Gwa and Kase (2018) examined the contribution of tax revenue on the economic growth of Nigeria, for the period of 1997 to 2016 using time series secondary data. Ordinary least square of multiple regression models was adopted to ascertain the contribution of Petroleum Profit Tax (PPT), Value Added Tax (VAT) and Company Income Tax (CIT) on economic growth proxy by Gross Domestic Product (GDP). The study found that there is a significant contribution of CIT and VAT on the economic growth in Nigeria.

Asaolu *et al* (2018) examined the relationship between tax revenue and economic growth in Nigeria from 1994-2015. The study measured tax revenue with Valued Added Tax (VAT), Petroleum Profit Tax (PPT), Company Income Tax (CIT) and Custom and Excise Duties (CED) while Real Gross Domestic Product (RGDP) proxy for economic growth. The study employed Auto regressive distributed lag (ARDL) regression technique and found that VAT and CED had a significant relationship with economic growth, while CIT has negative significant relationship with economic growth.

Yelwa, Awe and Mohammed (2018) studied impact of value added tax on economic growth in Nigeria from 1994-2016. The study made use of ordinary least squares (OLS) and Granger causality techniques to examine the impact of Valued Added Tax (VAT) and Customs and Excise Duties (CED) on gross domestic product. The study revealed that VAT and CED have no significant effect on economic growth.

### Research Gap

Most of the existing studies in Nigeria (such as Akwe ,2014; Cornelius *et al*,2016; Okwara and Amori ,2017; Gwa and Kase ,2018 and others) on taxation and economic growth made use of ordinary least square (OLS) technique in examining the relationship between the variables, even when the assumptions of the technique has been violated. Only few studies (such as Asaolu *et al*, 2018) made use of Auto Regressive Distributed Lag (ARDL) technique in determining the relationship between taxation and economic growth in Nigeria after subjecting the variables series to unit root test and co-integration test.

Based on this, the study sought to close the research gap by examined the relationship and impact of CIT, VAT and CED on economic growth of Nigeria using Auto Regressive Distributed Lag (ARDL) technique.

### Methodology

The study examined the impact of non-oil tax revenue on economic growth in Nigeria. The Ex- post facto research design was adopted for the study. This is on the basis that the required data cannot be manipulated because they have already existed. Economic growth was measured using Real Gross Domestic Product (RGDP) while the non-oil tax revenue (independent variable) was proxy by company income tax (CIT), value Added Tax (VAT) and Custom and excise duty tax (CED). The study used annual time series secondary data obtained from Central Bank of Nigeria (CBN) Statistical Bulletins, CBN Economic Reports and the Federal Inland Revenue Services tax statistics for the

relevant years. The study used Auto Regressive Distributed Lag (ARDL) technique to investigate the hypotheses formulated for the study. This technique was adopted after subjecting the series in the model of the study to unit root test and co-integration test.

### Model Specification

The study adapted an economic model previously used by Asaolu *et al*, (2018) to examine tax revenue and economic growth in Nigeria. The work examined Petroleum Profit Tax (PPT), Company Income Tax (CIT), Value Added Tax (VAT) and Custom and Excise Duty (CED) on real GDP. The model was presented as

$$GDP_t = \beta_0 + \beta_1 CIT_t + \beta_2 VAT_t + \beta_3 CED_t + \beta_4 PPT_t + \mu_t \quad (3.1)$$

The study modifies the model by removing PPT in order to accommodate variables suit for the study. This is because PPT is one of the oil tax revenues. Thus, the model was modified as:

$$GDP_t = \beta_0 + \beta_1 CIT_t + \beta_2 VAT_t + \beta_3 CED_t + \mu_t \quad (3.2)$$

Where GDP is Gross Domestic Product measured as real GDP; CIT is Company Income Tax; VAT is Valued Added Tax; CED is Custom and Excise Duty Tax;  $\mu$  = Error term.

*A-priori* expectations of the model are  $\beta_1, \beta_2$ , and  $\beta_3 > 0$

### Data Analyses And Discussion Of Results

The data collected for the study were subjected to descriptive statistics and presented for better understanding of the nature and distribution of the series. The results of unit root test, co-integration test and regression analysis were also presented as well as discussion of findings.

### Summary Statistics

Table 4.1 shows the summary statistics of the study variables. The means of RGDP, CIT, VAT and CED are ₦33725.22 billion, ₦297.4871 billion, ₦370.0694billion, and ₦178.9871 billion respectively for the period covered by the study. It is evidence from the table that there is significant variation in the trends of the variables as there is large difference between the maximum and minimum values of the series over the period of consideration. RGDP has the highest standard deviation of ₦19578.10 billion which implies that RGDP has the highest variations compared to other variables.

**Table 4.1. Summary Statistics of the Study**

	RGDP (₦'B)	CIT (₦'B)	VAT (₦'B)	CED (₦'B)
Mean	33725.22	297.4871	370.0694	178.9871
Maximum	69810.02	1421.799	1108.142	705.4500
Minimum	13779.26	0.403000	7.608000	1.616000
Std. Dev.	19578.10	426.6624	345.3866	198.4667
Observations	38	38	25	38

Source: Author's computation, (2019).

## Unit root test

**Table 4.2. ADF unit root test Results**

LEVEL				
Variable	Constant	Constant and Trend	None	I(d)
RGDP	-0.027819	-1.503995	2.499733	-
CIT	-1.640984	-0.276163	0.848830	-
VAT	-3.108183**	-3.279969***	2.908263	I(0)
CED	-0.884087	-1.091909	2.866999	-
FIRST DIFFERENCE				
RGDP	-3.395053**	-3.319501***	-2.136880**	I(1)
CIT	-5.458204*	-5.717483*	-1.390239	I(1)
CED	-5.893454*	-5.922778*	-4.334759*	I(1)

\*, \*\* and \*\*\* imply significance at 1%, 5% and 10% respectively.

*Source: Author's Computation, (2019)*

The Augmented Dickey Fuller (ADF) unit root test was employed to assess the order of integration of the data under study. Table 4.2 shows the results of the ADF test at level I(0) and first difference I(1). From the results, only value added tax in the model was stationary at level I(0), other variables become stationary at first difference I(1). This indicated that there is short run variance among the variables. Hence, this requires the conduct of co-integration test to check for the longrun relationship among the variables.

## Co-integration test

The appropriate co-integration technique for the study unit root test results is Auto Regressive Distributive Lag (ARDL) Bounds test proposed by Pesaran, Shin and Smith (2001). It is appropriate when dealing with variables that have combination of different order of integration (I(0) and I(1)). Engle-Granger single equation co-integration technique will be appropriate when the variables have the same order of integration (I(0) or I(1)) (Salisu, 2016).

**Table 4.3. ARDL Bound Test**

Test Statistic	Value	K		
F-statistic	6.355837	3		
Critical Value Bounds				
Significance	I0 Bound	I1 Bound		
10%	2.72	3.77		
5%	3.23	4.35		
2.5%	3.69	4.89		
1%	4.29	5.61		

*Source: Author's computation, (2019)*

Table 4.3 presents the result of ARDL Bounds test for co-integration. The result revealed that F-statistics 6.36 of the test is greater than the upper critical value bounds I(1) of 4.35 at 5% level of significance. Thus, there is long run relationship among the variables. Consequently, both long and short run (dynamic) model was estimated using ARDL co-integrating and long run form regression technique. The use of ordinary least square (OLS) technique on this study estimate is inappropriate because some of the assumptions of the technique had been violated.

## Regression Analysis

**Table 4.4. ARDL Co-integrating and Long Run Form Regression Estimates**

Variable	Coefficient	Standard error	t-statistics	p-value
DLOG(CIT)	0.273863	0.105910	2.585800	0.0177
DLOG(VAT)	0.030389	0.161817	0.187799	0.8529
DLOG(CED)	0.003951	0.115268	0.034276	0.9730
C	9.063005	0.209523	43.255359	0.0000

Short Run Estimation				
Variable	coefficient	Standard error	t-statistics	p-value
LOG(CIT)	0.077254	0.042593	1.813753	0.0847
LOG(VAT)	0.008572	0.044918	0.190848	0.8506
LOG(CED)	0.001115	0.032515	0.034277	0.9730
ECM(-1)	-0.282089	0.068517	-4.117069	0.0005
R <sup>2</sup> 0.572297		F-statistics 6.355837		
Durbin-Watson stat 1.796501		Prob. (F-stat) 0.002016		

Source: Author's Computation, (2019).

The result of the regression in Table 4.4 revealed that the overall estimated model is good as it has a R<sup>2</sup> of 0.572297. It implies that 57% of variation in RGDP (dependent variable) can be explained by the CIT, VAT and CED (independent variables) while the remaining 43% would be explain by other variables not included in the model. Similarly, the F- statistic value of 6.355837 and probability (F-statistic) of 0.002016 showed that the overall model is statistically significant at 5% level of significance. This implies that non-oil tax revenue has significant impact on economy growth in Nigeria. The Durbin-Watson value of 1.80 implies that there is no autocorrelation among the variables in the model.

The regression result in Table 4.4 also revealed that in the long run estimate, all the independent variables (VAT, CIT and CED) have positive relationship with the economic growth. This is indicated by their coefficients,  $\beta_1 = 0.273863 > 0$ ;  $\beta_2 = 0.030389 > 0$ ;  $\beta_3 = 0.003951 > 0$ . This is consistent with the *a-prior* expectation of the study, implying that 1% increase (decrease) in CIT, VAT and CED will lead to 27%, 3% and 0.3% increase (decrease) in economic growth in the long run respectively, all other things being equal.

The coefficient of the error correction model (ECM) in the short run was both negative and statistically significant, indicating that an established long run relationship can be attained. The speed of adjustment as indicated by ECM coefficient is at 0.282089. This showed that 28.2% of the deviation of RGDP from long run equilibrium value can be recognized per annum.

Table 4.4 also revealed that the p-value of CIT was 0.0177 while that of the VAT and CED were 0.8529 and 0.9730 respectively. This suggests that independent variables in the model are statistically insignificant to the economic growth in Nigeria except the CIT that is significant at 5% and 10% level of significance. Thus,  $H_{01}$  of the study is rejected and concluded that CIT has significant relationship with economic growth in Nigeria. Meanwhile, the  $H_{02}$  and  $H_{03}$  of the study were accepted.

### Discussion of Findings

The study regression result revealed that company income tax, value added tax and custom excise duties tax had positive relationship with the economic growth in Nigeria. This conforms to the *a-prior* expectation of the study.

The regression result of this study also revealed that company income tax has a positive and statistical significant relationship with economic growth in Nigeria. This implies that all things being equal increase in the company income tax collections will impact positively on the economic growth in Nigeria. This is consistent with the findings of Macek (2014), Okoli *et al* (2014), Amos *et al* (2017) and Gwa and Kase (2018) but inconsistent with the findings of Cornelius *et al* (2016), Kalas *et al* (2017) and Asaolu *et al* (2018).

The study also revealed that value added tax has a positive influence on economic growth in Nigeria but statistically insignificant under the review period. This simply means that value added tax as a tool is weak in controlling economic growth in Nigeria. This conforms to the findings of Amos *et al* (2017), Okwara and Amori (2017), Yelwa *et al* (2018) and Oraka *et al* (2018). Although, this is against the findings of Macek (2014), Okoli *et al* (2014), Ibadin and Oladipupo (2015), Asaolu *et al* (2018) and Gwa and Kase (2018).

The study hypothesized that custom and excise duty has no significant relationship with economic growth in Nigeria. The study found the hypothesis to be true. This implies that CED has no significant impact in controlling economic growth in Nigeria. This is consistent with Yelwa *et al* (2018) but negates the findings of Ibadin and Oladipupo (2015) and Asaolu *et al* (2018).

The study estimated result also showed that the overall model is significant and a good fit to explain the economic growth in Nigeria. This suggested that non-oil tax revenue had impact on economic growth in Nigeria. This is in agreement with the findings of Akwe (2014) and Okwara and Amori (2017).

### Conclusion and Recommendations

In the course of the study, annual time series data were accessed and analyzed to examine the impact of individual types of non-oil tax revenue ( CIT, VAT and CED) on economic growth (real GDP) in Nigeria over the period 1981- 2018. Based on the findings of the study, it was concluded that CIT has positive impact on economic growth in Nigeria, while VAT and CED had positive but insignificant impact on the real gross domestic product of Nigeria for the study period.

Therefore, the study recommends that:

- (i) the government of Nigeria should focus on increasing CIT revenue by encouragement of entrepreneur development and strengthened regulations on tax compliance in order to restrain tax evasion and avoidance.
- (ii) the revenue from VAT should be properly redistributed or channel to infrastructural developments that will bring about economic growth of the country.
- (iii) the CED revenue collections should be properly monitor and invested in economic growth activities of the country.

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