Value Added Tax and Economic Growth in Nigeria

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Abstract
Tax is a major fiscal policy employed by every nation of the world to generate revenue to implement developmental activities and stimulate the economy towards growth. To further boost government revenue generation in Nigeria Value Added Tax (VAT) was introduced by Act No. 102 of 1993 and it became operational in January, 1994. This study focused on Value Added Tax (VAT) and economic growth in Nigeria. It employed time series survey of data covering a lapse period of twenty years (1994-2013). Data were obtained from Central Bank of Nigeria (CBN) statistical bulletin and Federal Inland Revenue Service (FIRS) data. Diagnostic tests consisted of normality test, Ramsey RESET test for misspecification and Breusch–Pagan-Godfrey Serial Correlation LM test for the presence of auto correlation. The statistical tool employed was simple linear Ordinary Least Square (OLS) regression. Data was estimated with computer software E-views 8.0. The study found that VAT is statistically significant, suggesting that VAT has positive relationship with economic growth in Nigeria. Hence, this paper recommends among others that the government should reform the Value Added Tax system for better effectiveness and increase the present VAT rate of 5% to 10% in line the prevailing rate of others countries in the world. The paper concluded that if the Value Added Tax is reformed, the resultant effect will cushion the impact of the fall in oil revenue on government expenditure and its attendant effect on economic growth of the country.

Keywords: Economic Growth, Expenditure, Nigeria, Revenue, Value Added Tax

1. Introduction
Tax is a fundamental source and a pillar of revenue generation in every nation of the world especially in the western world (Azubike, 2009). A tax system represents one of the most effective means of mobilizing a nation’s internal resources and it lends itself to creating an environment conducive to the promotion of economic growth for the three-tiered tax structure between the federal, state and local governments, each of which has different tax jurisdictions (Odusola, 2006; Nzotta, 2007). The need for taxation among others therefore, is to provide a material source of revenue for government in discharging its ever growing obligations and commitments to its citizenry. An efficient tax system ensures the mobilisation of the untapped abundant internal resources and it also stimulates an environment conducive to the promotion of growth of a nation. Therefore, tax is a compulsory levy imposed on a subject or upon his property by the government to provide security, social amenities and create conditions for the economic well-being of the society (Appah & Oyandonghan, 2011).

The need to meet government increasing expenditure and means to generate more revenue gave birth to Value Added Tax (VAT) in 1993 by the Federal Government of Nigeria. According to Unegbu and Irefin (2011), Value Added Tax which is simply known as goods and services tax (GST) was imposed on virtually all goods and services whether produced or rendered in Nigeria so as to support government in raising funds for the implementation of recurrent and capital expenditure and boost economic growth. Aguolu (2000) claims that VAT is a sound concept that has helped to reduce the burden on tax payers, reduce the incidence of tax evasion, and guarantees the collection of revenue to enhance economic growth.

However, there has been debate and arguments since the introduction of Value Added Tax on the likely challenges and prospects on the Nigeria economic growth. According to Azubuike (2009), our basic problem, perhaps is the enforcement machinery of our tax laws which Value Added Tax is inclusive is so innocuous that anybody can go against it without qualms. Azubuike (2009) further contends that those charged with VAT administration are ill-equipped, so ill-trained, highly corrupt and so neglected that they become disillusioned, frustrated and therefore hardly give their best services.

On the other hand, Bryant (2010) notes the following limitations in VAT administration in Nigeria; that VAT incurs increased accounting costs for collection which are often reimbursed by the taxing authority; VAT is being charged indiscriminately in most cases in Nigeria on the populace for services not enjoyed with good reference to former NEPA which latter transformed to Power Holdings Company of Nigeria (PHCN) and finally privatized bearing different names in various states of the federation; the non-remittance of VAT proceeds by VAT agents to the tax authority, and poor accountability of the usage of the VAT proceeds by the three tiers of government. Oladipupo and Izedonmi (2008) contend that poor understanding of the various tax laws by taxpayers could be responsible for the high magnitude of their non-compliance to VAT and as such public attitude towards VAT matters has often be negative, thus, resulting in low revenue generation to boost economic growth.

The above challenges result in ineffectiveness administration of the VAT and its attendant effect on
economic growth in Nigeria. Therefore, the specific objective of this paper is to determine the effect of VAT, government expenditure and government revenue on economic growth in Nigeria.

This paper is executed in five sections. The remaining sections are structured as follows; section II focuses on the review of related literature. Section III contains the methodology. Section IV is on data analysis and discussion of findings, while section V centres on conclusion and recommendations.

2. Review of Related Literature
2.1 Concept of Economic Growth
Economic growth has been major concern of nations whether developed or developing around the world. Economic development and Economic growth have been used interchangeable over the years; despite the slight difference between the two concepts. According to Organisation for Economic Co-operation and Development (OECD), economic development is a deliberate policy intervention aim at enhancing the economic and social well-being of people, while, economic growth is a phenomenon of an active market productivity resulting in increase in Gross Domestic Product (GDP). OECD (2014) defines Gross Domestic Product (GDP) as an aggregate measure of production equal to the sum of the gross values of all resident, institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs). GDP is usually used as a proxy for economic development and economic growth.

Scholars have offered definitions of economic growth in line with the OECD’s definition. Lipsey (1986) defines economic growth as increase in a nation’s total output over a long period of time. Al-Faki (2006) defines economic growth as the increase in the value of goods and services produced by an economy. Todaro and Smith (2011) measure economic growth as increase in per capita income of a nation. Where this measure is not easy available, the attainment of a standard of living by the citizenry of any nation equivalent to that of industrialized countries can be used to ascertain economic growth. In the same vein, Osamwonyi (2005) defines economic growth as the rate of expansion of the national income or total volume of production of goods and services of a country. Nations have achieved economic growth and development through implementation of tax policies such Value Added Tax.

2.2 Value Added Tax in Nigeria
Value added Tax (VAT) as a form of taxation has taken centre stage in the world. Economic development and Economic growth have been used interchangeable over the years; despite the slight difference between the two concepts. According to Organisation for Economic Co-operation and Development (OECD), economic development is a deliberate policy intervention aim at enhancing the economic and social well-being of people, while, economic growth is a phenomenon of an active market productivity resulting in increase in Gross Domestic Product (GDP). OECD (2014) defines Gross Domestic Product (GDP) as an aggregate measure of production equal to the sum of the gross values of all resident, institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs). GDP is usually used as a proxy for economic development and economic growth.

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2.2 Value Added Tax in Nigeria
Value Added Tax (VAT) as a form of taxation has taken centre stage and it is being operated in almost all the developing and developed countries around the world. It is viewed and defined in different perspectives. Afe (1996) defines VAT as a tax levied on the additional value added at each stage of firms’ production cycle. Anyaduba (2003) asserts that Value Added Tax is an indirect tax levied on the increase in value of goods and services in the course of their production or supply. According to Aguolu (2000), Value Added Tax is an indirect tax levied on consumption. The various definitions tend towards the same direction. The modality of its application involves a multi-stage collection procedure. This means that at each stage of a manufacturing or operating process VAT is paid and collected by the buyer and supplier respectively.

The idea of VAT was conceived in Nigeria by the Federal Government in 1991, when a study group was inaugurated to come out with a report on the implementation of VAT that will replace the existing consumption tax (sales tax) in Nigeria. Based on the report of the study group, the Federal Government of Nigeria introduced VAT when Decree (now Act) No. 102 of 1993 was promulgated with commencement date of January 1994. VAT actually replaced an erstwhile sales tax which had been in existence since 1986.

Since, its inception in 1994, VAT is charged at the rate of 5% in Nigeria. The revenue generated from VAT accruable to the government has been consistently on the increase on yearly basis from N8.20 billion in 1994 to N795.60 billion as at 2013, a growth rate is 21%. Although, some countries namely, United States of America, Saudi Arabia and Hong Kong have free VAT rate, while some countries have low VAT rate, India 5% and Malaysia 6%, the VAT rate in Nigeria is among the lowest in the world. Obadan (2015) enumerated the VAT chargeable around the world as follows, in Europe, VAT rate is 20% in Austria, Bulgaria, France and United Kingdom, while in Belgium, Denmark and Hungary the VAT rate is 21%, 25% and 27% respectively. In Africa, VAT rate applicable in some countries are as follows, in Egypt 10%, Ethiopia 15%, South Africa 14%, Ghana 15%, Tunisia 18%, Mauritius 15% and Morocco 20%.

2.3 Relationship Between Value Added Tax and Economic Growth
Value Added Tax and economic growth has been examined empirically in both developed and developing countries by extant studies. In a study carried out by Unegbu and Iretin (2011) found that VAT has significant impact on economic development. Similarly studies have shown that VAT has positive effect on nations’ economic growth and development like provision of infrastructure services, health services and education (Owolabi and Okwu, 2011). Teera (2003) study on the assessment of the feasibility of raising tax revenues through VAT in Uganda relative to 18 other Sub-Saharan countries noted that VAT contributes greatly to the overall tax collection and the nation’s economic growth in those countries.
In Nigeria, VAT is a significant source of revenue in Nigeria. Its accounted for about 4.06%, 5.93% and 5.1% of the total revenue of Nigeria in 1994, 1995, and 2008 respectively and has significantly play dominant role in the development of Nigeria economy since its inception to date (Aderei & Sanni, 2011; Umeora, 2013). Similarly, Ajakaiye (2000) opines that VAT has become an important contributor to total governmental revenues in funding of current expenditure and capital projects. Olaye (2009) posits that the administration of VAT in Nigeria is channeled toward the objective of enhancing government revenue generation in order to provide for infrastructure development towards stimulating the economy for growth. Similar view of VAT being a significant source of government revenue to stimulate economic growth and development among developed and developing nations were expressed by (Ekeocha, 2010; Owolabi & Okwu, 2011; Unegbu & Iretin 2011).

2.4 Relationship Between Government Expenditure and Economic Growth

The effect of government expenditure on long run economic growth has been an area of interest to scholars for decades. Responses to the question in growth theory of whether increase in government expenditure will stimulate economic growth are inconclusive. Some researchers are of the opinion that the impact of government expenditure on economic growth seems not significant, (Niloy, Emranul and Denise (2003); Josaphat and Oliver, 2000; Laudau, 1983), others opine that the impact is positive and significant (Saad and Ali, 2014; Johariji and Starr, 2010).

Saad and Ali (2014) empirically investigated the impact of various expenditure of Saudi Arabia government on economic growth using annual data for the period 1969-2010. Their result revealed that there is positive relationship between government spending and economic growth in Saudi Arabia. Johariji and Starr (2010) also examined the correlation between government spending and non-oil sector GDP in Saudi Arabia. Their finding showed that increase in government expenditure has significant positive long run effect economic growth.

Niloy, Emranul and Denise (2003) in their study, examined the impact of government expenditure on economic growth using a panel of thirty developing countries from 1970-1980. Their study revealed that the share of government capital expenditure in GDP is positively and significantly related with economic growth. Similar study by Landau (1983) using data spanning from 1960-1980 of some developing countries found that there is a negative effect of government recurrent expenditure on the growth of per capita output, while the government capital expenditure has little effect on output growth. Josaphat and Oliver (2000) using a time series data from 1965 – 1996 studied the effect of government expenditure on economic growth in Tanzania. The study revealed that increased government spending on physical investment has a negative effect on economic growth, while expenditure on recurrent expenditure stimulates growth.

In Nigeria, government expenditure is categorised into revenue and capital expenditure. Revenue expenditure entails government spending on administrative and operational activities, such as staff emolument, running costs of government ministries, departments and agencies, while capital expenditure are spending on infrastructure amenities. Studies on impact of government expenditure on economic growth in Nigeria are also mixed. Olorunfemi, (2008) using time series data from 1975 to 2004 studied the relationship between public investment and economic growth in Nigeria. The study observed that there is a positive relationship between public expenditure and economic growth and that there was no link between gross fixed capital formation and Gross Domestic Product. Olopade and Olapade (2010) in their study assessed the impact of components of government expenditure on growth and development. The study revealed that there is no significant relationship between most of the components of expenditure and economic growth. Abu and Abdullah (2010) examined the relationship between government expenditure and economic growth in Nigeria covering a period from 1970 to 2008. Disaggregated analysis was used to unravel the effect of government expenditure on economic growth. Their findings show that government total capital and recurrent expenditure on Education have negative effect on economic growth. While, government total expenditure on communication, health and transport result in an increase in economic growth.

2.5 Relationship Between Government Revenue and Economic Growth

Government revenue influences economic growth through the provision of resources in financing the various governmental needs (Illyas and Siddiqi, 2010). The major sources of revenue to the Government of Nigeria are revenue accruing from oil and gas, and non-oil revenue (taxation) with the oil sector accounting for more than 80% of the total revenue. Ihendinihu, Jones and Ibanichuka (2014) opine that taxation is an authentic fiscal policy, a key source of revenue to government and an instrument for regulating economic and social policies. However, the ratio of tax revenue of Nigeria to its GDP is among the lowest in the selected Africa countries studied for the period 2009 to 2012, World Bank Group (2014). The report further highlighted that the nation’s tax revenue to GDP was below the average of 18.3%, 17.6% and 17.6% computed for the years 2009, 2010 and 2011 respectively, and that while the ratio of tax revenue % of GDP in most of the countries are progressively increasing annually, that of Nigeria declined from 5.1% in 2009 to 1.6% in 2012. Worlu and Nkoro (2012) conducted study on tax
revenue and economic development in Nigeria by employing ordinary least square regression method of analysis. Their study revealed that although tax revenue has no independent effect on growth through infrastructural development and foreign direct investment, it never the less stimulates economic growth by way of infrastructural development.

Success, Success and Ifurueze (2012) using the ordinary least square method of analysis on the impact of petroleum profit tax on economic development (2000-2010), their study showed that petroleum profits tax has significant and positive impact on the GDP (used as proxy for economic growth) of Nigeria. They argued that petroleum profits tax and oil revenue are determinants of growth of the GDP of the Nigerian economy which will subsequently lead to economic development via the multiplier effect. Similar study by Abdul-Abdul-Rahamoh, Taiwo and Adejare (2013) but using different time frame (1970-2010) and utilizing multiple regression and correlation to analyse the time series data collected. The variables used were GDP, petroleum profits tax, inflation and exchange rate, and found that petroleum profits tax has a significant effect on the economic growth of Nigeria.

3. Theoretical Framework
This study is anchored on the optimal taxation theory. The theory of optimal taxation posits that a tax system that is chosen should maximize a social welfare function subject to a set of constraints (Mankiw and Weitzner, 2009). Slemrod (1990) opines that the optimal tax theory involves the designing and implementing a tax structure that enhances efficiency and reduces misrepresentation in the market under certain economic constraints. This involves given due attention to individuals’ utility and minimizing the distortions caused by taxation towards optimizing the tax benefits. It therefore implies that the optimal tax theory considers individual preferences and the efficiency in tax collectible to give the best productivity of taxes collectible. The goal of optimal taxation theory is to reduce if not total elimination of inefficiency as much as possible and to enhance government revenue. This is because taxation is perceived to distort the behavior of tax payers especially on consumption in a situation where there are options between two mutually exclusive investments having the same risk profile and returns but different tax rates. A rational investor will choose the investment that offers a tax advantage at the expense of the better benefits the foregone alternative may offer toward economic growth.

4. Methodology
This paper is a time series survey covering time period of seventeen (20) years (1994-2013). It employed secondary source of data collection and data were obtained from the Central Bank of Nigeria Statistical Bulletin and Federal Inland Revenue Service yearly publications.

The multivariate linear regression method applied is expressed in functional form as:

\[ \text{GDP} = F (\text{VAT}, \text{GOVTEXP}, \text{GOVTREV}) \]

and in econometric form as:

\[ \text{RGDP}_t = X_0 + X_1 \text{VAT}_t + X_2 \text{GOVTEXP}_t + X_3 \text{GOVTREV}_t + U \]  

Where:
- \( \text{RGDP} \) = Real Gross Domestic Product in the respective year which is used as proxy for economic growth
- \( X_0 \) = Constant
- \( X_1 \) = Coefficient
- \( \text{VAT}_t \) = Value Added Tax for the respective period of 20 years
- \( \text{GOVTEXP}_t \) = Government Expenditure for the respective period of 20 years
- \( \text{GOVTREV}_t \) = Government Revenue for the respective period of 20 years
- \( U \) = Stochastic Disturbances

The apriori expectation is expressed as: \( X_1 > 0, X_2 > 0, X_3 > 0 \)

Data collected are estimated with computer software (E-views 8.0). Descriptive and Inferential statistics were employed to analyse the data collected. For the Inferential statistics, ordinary least square regression analysis was used.

5. Data Analysis and Interpretation of Results
Outcomes of various results are analysed and interpreted as follows:
Table 1: Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>RGDP</th>
<th>VAT</th>
<th>GOVTREV</th>
<th>GOVTEXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3646708.0</td>
<td>352833.2</td>
<td>8477.690</td>
<td>631.7327</td>
</tr>
<tr>
<td>Median</td>
<td>477533.0</td>
<td>178100.0</td>
<td>87231.34</td>
<td>742.8971</td>
</tr>
<tr>
<td>Maximum</td>
<td>40544100</td>
<td>1271700.0</td>
<td>759323.0</td>
<td>14717.24</td>
</tr>
<tr>
<td>Minimum</td>
<td>275450.6</td>
<td>31000.00</td>
<td>7936.56</td>
<td>256.3000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1216944.0</td>
<td>268757.9</td>
<td>7359323.0</td>
<td>14717.24</td>
</tr>
<tr>
<td>Skewness</td>
<td>3.631883</td>
<td>1.148612</td>
<td>7.754669</td>
<td>7.462309</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>15.07446</td>
<td>3.217745</td>
<td>111.2862</td>
<td>58.51359</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>1.571892</td>
<td>4.215346</td>
<td>1.899674</td>
<td>4.185704</td>
</tr>
<tr>
<td>Probability</td>
<td>0.673036</td>
<td>0.072652</td>
<td>0.589368</td>
<td>0.074217</td>
</tr>
<tr>
<td>Sum</td>
<td>69287452</td>
<td>227.0000</td>
<td>182.0000</td>
<td>704.4675</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>1.53E+15</td>
<td>508.8525</td>
<td>205.0604</td>
<td>41516.62</td>
</tr>
</tbody>
</table>

Source: Researcher’s computation (2016) (E-views.8)

Table 1 above highlighted descriptive statistic values of the variables examined. It is deduced that Jarque-Bera test of respective variable probability values are greater than critical value of 5% indicating that the variables are normally distributed for the purpose of the regression.

Table 2: Ramsey RESET Test

<table>
<thead>
<tr>
<th>Value</th>
<th>Df</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>.65157</td>
<td>16</td>
<td>0.4427</td>
</tr>
<tr>
<td>.59417</td>
<td>(1, 16)</td>
<td>0.6516</td>
</tr>
<tr>
<td>.51311</td>
<td>1</td>
<td>0.7324</td>
</tr>
</tbody>
</table>

Table 2 revealed the Ramsey RESET test for misspecification. The econometric result indicated that the p-values calculated at 0.4427 (44%) and 0.6516 (65%) were greater than the critical value of 0.05 (5%). Hence, it is obvious that there is no apparent non-linearity in the regression equation and we therefore concluded that the simple linear model is appropriate.

Table 3: Heteroskedasticity Test: Breusch-Pagan-Godfrey

<table>
<thead>
<tr>
<th>Value</th>
<th>Df</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>.764053</td>
<td>Prob. F(4, 19)</td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>1.199016</td>
<td>Prob. Chi-Square(4)</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>7.762242</td>
<td>Prob. Chi-Square(4)</td>
</tr>
</tbody>
</table>

Table 3 indicated the Breusch–Pagan-Godfrey Serial Correlation LM test for the presence of auto correlation. The result revealed that the probability values of 0.3251 (33%) and 0.6514 (65%) are greater than the critical value of 0.05 (5%). This implies that there is no evidence for the presence of serial correlation.
Table 4: Simple Ordinary Least Square Regression Result
Dependent Variable: RGDP
Method: Least Squares
Date: 19/02/16 Time: 21:01
Sample: 1994 2013
Included observations: 20

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>23.78529</td>
<td>22.27941</td>
<td>1.067591</td>
<td>0.3006</td>
</tr>
<tr>
<td>VAT</td>
<td>17.07673</td>
<td>4.426615</td>
<td>3.857740</td>
<td>0.0013</td>
</tr>
<tr>
<td>GOVTEXP</td>
<td>46.63907</td>
<td>12.92798</td>
<td>3.607607</td>
<td>0.0005</td>
</tr>
<tr>
<td>GOV Trev</td>
<td>7.066144</td>
<td>1.230252</td>
<td>5.743657</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

R-squared 0.913962
Mean dependent var 4862072.
Adjusted R-squared 0.873835
S.D. dependent var 1216944.
S.E. of regression 3.718736
Akaike info criterion 34.43861
Sum squared resid 2.15E+14
Schwarz criterion 25.36578
Log likelihood -325.1668
Hannan-Quinn criter. 25.74874
F-statistic 14.88215
Durbin-Watson stat 2.003438
Prob(F-statistic) 0.001262.

Source: Researcher’s Computation (2016) (E-views 8.0)

Table 4 highlighted the regression results. VAT which revealed a positive coefficient value of 17.077 with Gross Domestic Product (GDP), implied that a unit increase in Value Added Tax (VAT) would definitely affect economic growth proxied with Real Gross Domestic Product with 17.08 units. Also, there will be increase in economic growth by 46.64 units following a unit change in government expenditure (GOVTEXP). In addition, a unit increase in government revenue could accelerate economic growth by 7.07 units. The respective value indicated elasticity impact of the explanatory variables to economic growth. The coefficient of determination $R^2$ which stood at value of 0.9140 with RGDP, indicated that over 91% of the systematic variations in the dependent variable was accounted for by the explanatory variables, while only 9% was unaccounted. On adjusting the coefficient of determination ($R^2$) the adjusted R-square which indicated 0.8738 implied that about 87% of the changes in the dependent variable (RGDP) was explained, while only 13% was unexplained, hence captured by variables not included in the model. The overall F-statistics stood at 14.88 is greater than standard error of regression which stood at minimal value of 6.9255, indicated that the result is suitable for prediction. The Durbin Watson (D.W) which stood at 2.0034, indicated absent of autocorrelation. The entire results proved impressive and suitable for forecasting.

However, all the explanatory variables examined t- statistic probability value (0%) are less than critical value of 5% indicating that all the explanatory variables are statistically significant with economic growth. The results show that we reject all the hypotheses formulated previously. Hence the results infer that there exist a positive relationship between explanatory variables (VAT, government revenue and government expenditure) and economic growth proxied by real gross domestic product (RGDP). The results are in line with our a priori expectation and consistent with extant studies of Owolabi and Okwu (2011), Success, et.al (2012), Worlu and Nkoro (2012), Ihendinihu, et.al., (2014) etc., that revenue generated by government through Value Added Tax (VAT) could be used to provide and implement essential services and projects that could as well lead to economic growth in countries like Nigeria.

6. Recommendations
Based on the finding, we recommend as follows:

i. Government should reform the Value Added Tax system for better effectiveness and efficiency. The VAT rate should be increased from its present 5% to 10% in line the prevailing rate in world especially now the revenue from oil has fallen drastically.

ii. Government should ensure that VAT revenue generated is effectively utilised for the development of the economy clearly visible for tax payers to see and appreciate. This will enhance compliance and reduce tax avoidance and evasion which is common under the present VAT regime.

iii. Government should sensitise the general public on the need for the enhancement of the VAT rate and the cooperation of the tax payers in the realization of the objectives of the new tax regime through well organised seminars, workshops, symposia and jingles on
television and radio.

iv. The workforce of the Federal Inland Revenue Service (FIRS) the body charged with the collection of VAT in Nigeria should be increased. The capacity of FIRS staff should equally be enhanced in term of training and retraining for an effective VAT administration.

v. Government should concentrate more of her expenditure on capital projects and industries that could assist to create employment and enhance economic growth.

Conclusion

VAT as a source of revenue to government has significantly enhanced economic growth through its contribution to government expenditure for infrastructural development in Nigeria. We therefore conclude that if the Value Added Tax is reformed and effective implemented, it will cushion the impact of the fall in oil revenue on government expenditure and its attendant effect on economic development of the country.

References


Ekeocha, P. C. (2010). Modelling the potential economic effects of VAT reform: Simulation analysis using computable general equilibrium analysis, paper submitted for ECOMOD/Stanbul Turkey, July 7-10


(WIDER) Paper, No.2006/03.