VALUE ADDED TAX AND ECONOMIC GROWTH IN NIGERIA: (A SIX-YEAR LONGITUDINAL SURVEY FROM 2012-2017)

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Abstract

The study investigated the effect of Value Added Tax on Nigeria’s Economic Growth. A survey was undertaken to evaluate and assess the relationship between Value Added Tax and the measures of Economic Growth used in this research work, that is, the Gross Domestic Product (GDP), Per Capital Income (PCI) and Balance of Payment (BOP). This study made use of longitudinal survey which cuts across several years (six years). The study made use of secondary data which is from the Statistical bulletin of the Central Bank of Nigeria and the FIRS bulletin. Others were sourced from journals, fact books, and seminar papers. The regression analysis was used to analyse the formulated hypotheses. Data relating to the Value Added Tax and economic growth was used to construct the Ordinarily Least Square (OLS) model of regression and SPSS 20 was used to analyse the data. The findings show that there is no significant linear relationship between VAT and GDP, PCI & BOP. The study concluded that even though Value Added Tax reflects an insignificant linear relationship to Nigeria’s economic growth, it still remains an integral part of the Nigeria economy. As such, Nigeria will grow economically if the status quo is sustained; though there is always room for improvement. The results of this study indicate that if more goods and services are taxed, the revenue base of the country will increase.

A. Introduction

Value Added Tax (VAT) has become a major source of revenue in many developing countries. In sub-Saharan Africa for example, VAT has been introduced in Benin Republic, Cote d’Ivoire, Guinea, Kenya, Madagascar, Mauritius, Niger Republic, Senegal, Togo and Nigeria. Evidence suggests that in these countries, VAT has become an important contributor to total government tax revenues (Ajakaiye, 2000). Shalizi and Squire (1988) found out that VAT accounted for about 30% of total tax revenues in Cote d’Ivoire, Kenya and Senegal in 1982. The oil producing countries are not excluded from the list of countries introducing this tax hurdle. Tait (1989) showed that VAT has been in effect in Ecuador and Mexico since at least 1973 and by 1983 accounted for 12.35% and 19.71% of total government revenues in these counties respectively. Indonesia introduced VAT in 1983 and by 1988; the ratio of VAT revenue to GDP had risen to 4.5% (Bogetic and Hassan, 1993).

There are quite a number of definitions of tax or taxation depending on the qualities it possess. In that vein, taxation is the process or machinery by which communities or group of persons are made to contribute... in some agreed quantum and method for the purpose of the administration and development of the society (Igbonyi, 2008). In the present dispensation of Nigerian economy, taxation always been a means by which communities are provided with common facilities such as access roads, religious facilities, security, amongst others from time immemorial (Obadimi, 1994). Modern and well regulated taxation system in Nigeria started in 1940 with the introduction of direct taxation ordinance No. 29 (CAP 54) of the year. Before the 1940 ordinance, income tax has first been introduced in northern Nigeria in 1904 by Lord Lugard. It was known as community tax, several changes were made to the community tax.

VAT became operational in Nigeria on the 1st of January 1994. Though Nigeria joined the league of countries operating VAT just of recent, she has very unique features in the operation of the policy. It is charged at a flat rate of 5% on some items of goods and services.

VAT was introduced in Nigeria following a study group set up by the federal government in 1991 to review the nation’s tax system. It was this group that proposed VAT and in that same manner, a committee was set up to conduct feasibility study on the implementation of
the VAT (Thacker, 2009). VAT was introduced to replace the sales tax because it creates storage incentives to collect than a sale tax does. It differs from sales tax in that, with the latter, the tax is collected and remitted to the government only once at the point of purchase by the end consumer. With VAT, government and credits for taxes already paid occur each time a business in the supply chain purchase products (Tabansi, 2001). Value Added Tax (VAT) in Nigeria is a Federal Government tax, which is administered using the existing machinery of the Federal Inland Revenue Services (FIRS). VAT has a directorate within the frame work of the Federal Inland Revenue Services (FIRS) with the head office in Abuja. It has a network of zonal and local offices throughout the federation. The Directorate of the tax is headed by a director who is assisted by two deputy directors. The Zonal Coordinator of the Federal Inland Revenue Services (FIRS) at Lagos, Ibadan, Enugu, Kaduna and Jos also coordinates the activities of local VAT offices within their areas and are responsible to the VAT Directors in Abuja for all Value Added Tax (VAT) related matters.

VAT in Nigeria were created as replacement or substitution for the sales taxes that were in operation before. They were imposed on all goods that were manufactured in the country as well as goods that had been made outside the country and were selling there. The impressive performance of VAT in virtually all countries where it has been introduced, according to Ajakaiye (2000), clearly influenced the decision to introduce VAT in Nigeria in January 1994. VAT is a consumption tax that is relatively easy to administer and difficult to evade and it has been embraced by many countries world-wide (Federal Inland Revenue Service, 1993). Evidence so far supports the view that VAT revenue is already a significant source of revenue in Nigeria. For example, actual VAT revenue for 1994 was N8.189 billion, which is 36.5% higher than the projected N6 billion for the year. Similarly, actual VAT revenue for 1995 was N21 billion compared with the projected N12 billion. In terms of contributions to total federally collected revenue, VAT accounted for about 4.06 % in 1994 and 5.93% in 1995. As much as N404.5 billion was collected on VAT (5.1% of total revenue) in 2008.

B. Statement of the Problem

The attitude of Nigerians towards taxation is worrisome as many prefer not to pay tax if given the opportunity and the economy continues to lose huge amount of revenue through the unwholesome practice of tax avoidance and tax evasion (Okoye and Gbegi, 13). These loss of revenue can change the fortune of many economy particularly, developing countries like Nigeria. This problem has been lingering for so long which urgent attention and solution is overdue. The cost of collecting tax in Nigeria (both social and economic cost) is too high to the extent that, if left unchecked, the cost may soon outweigh the benefit or value derived from such operation and that will not be appropriate for the system. The government spends more to realize a miserable pittance. The rate of corruption on the part of tax officials is alarming as most of them connive and collude with supposed-tax- payer to evade and avoid tax. Sometimes, the tax officials are not properly trained on the modern ways of tax administration. The inadequate social infrastructures in Nigeria call for attention as to how tax revenue generated is to be expanded and accounted for, especially where those in authority continue to spend these hard-earned resources in a reckless and wasteful manner.

The significant impact of VAT or the role played by Value added Tax in the development of the nation cannot be overemphasized. Revenue is raised by the government through taxation for the development of the nation’s project. VAT was introduced as a revenue mobilization strategy to cover up the deficiencies experienced with the former sales tax because of its progressive nature. Government ability to adequately and effectively retrieve the proceeds from companies and other agents of collection remains a problem. It does not appear as if there is adequate machinery for effectively monitoring of the remittance of the tax withheld to the relevant tax authorities, this means that the federal inland revenue, the body charged with the administration and implementation of VAT lacks the logistic support, this invariably will give room for tax evasion and avoidance (Margaret N Okoli and Charles Odinakachi Njoku, 2014). Secondly, the dishonest practice by some tax officials also posed a serious threat to effective tax administration in Nigeria, especially when
such practices are capable of having demoralizing effects on the honest tax payers. Consumers will still want to know how much they are paying as VAT as most of these taxes are not duly reflected on their invoice. It is generally believed that VAT is another way of reflecting economic hardship on the consumer to the advantages of the manufacturers and companies. It could be seen as an excuse to raise prices of goods and services arbitrary. For instance, landlords are now charging VAT on house rents, some hotels are charging VAT on their services without remitting same to the appropriate authorities. These are contrary to the regulation governing the VAT system (*Naiyebu, 1996, Oyebode, 2010*).

However, previous researchers like *Okoye, and Gbegi (2009)* discovered that revenue generated through VAT has no significance influence on wealth creation in Nigeria and also has no significant effect on the overall tax revenue in Nigeria while *Nwezeaku and Anyafo (2010)* also discovered that revenue generated from Value Added Tax is so meagre compared to revenue from other sources as such, government can do without VAT. However, the lack of clarity about the effect of Value Added Tax on Nigeria’s Economic Growth is the motivating factor for this study. The present study intends to reduce the knowledge gap by investigating the effect of Value Added Tax on Nigeria’s Economic Growth.

The rest of the paper is organized as follows: section 2 deals with literature review while in section 3 the methodology of the study is examined. Section 4 presents the results and discussion and section 5 concludes the study.

**Objective of the study**

The main objective of the study is to assess the implication of Value Added Tax on Nigeria’s economic growth. Specifically, the study attempts to:

i. **Determine the relationship between of Value Added Tax and GDP of Nigeria.**
ii. **Assess the relationship between Value Added Tax and per capital income of Nigeria.**
iii. **Investigate the relationship between Value Added Tax and Balance of Payment of Nigeria.**

**Review of Related Literature**

**Conceptual Framework**

**Administration of VAT in Nigeria**

The VAT system in Nigeria is administered by the federal Inland Revenue services. (VAT directorate). The board is charged with the function of assessment and collection of the tax and shall account for all amounts so collected in accordance with the provision of the decree. Although, it is administered and controlled by the federal government using the existing tax machinery of the federal Inland Revenue services in close co-operation with the Nigeria custom services and the state Inland Revenue services. The net proceeds from VAT are shared among the federal, states and local government in the ratio of 45.35:20. The prospective VAT payer obtains and completes form 002 and returns same to the nearest VAT office. Once, registered, the VAT proceeds are expected on monthly basis to be paid to the VAT office.

This is done in consonance with the regulation establishing these bodies that are in charge of VAT in Nigeria.

i. **The board of federal Inland Revenue services** (The board of FFBIR).
ii. **The Federal Inland Revenue services (FIRS)** which comprises six directors with headquarters at Abuja being headed by one of the directors.
iii. **The technical committees**: These committees come into existence through section 3 of the VAT decree with major responsibility on advisory capacity.
iv. **The VAT directorate**, As explained earlier, the whole administrative machinery of VAT, lies in these directorate, who works in close co-operations with the Nigeria customer's services and the state inland revenue services.

**Theoretical Framework**

**Faculty Theory of Taxation:**

It is known as “ability to pay” theory of taxation. It states that everyone should be taxed according to his ability to pay. (*Hanson 1974*) states that the problem with the theory is that it is not easy to measure with accuracy and fairness to pay of people even in superficially similar circumstance. It suggests that those who have equal ability to pay should shoulder a heavier tax burden.

In a nutshell, the faculty theory of taxation is simply an attempt to make an explicit value judgment
about the distributive effect of taxes.

**Benefit Theory of Taxation:**

Browning (1979) implies a specific method of distribution of the tax burden. He said that taxes should be allocated on the basis of benefits received from government expenditure. The great advantage of the benefit principle is that it emphasizes the essential two-sidedness of government tax expenditure decisions. If people do not receive benefits commensurate with their tax burden, then perhaps the expenditure should not be undertaken at all.

**Single Tax System Theory:**

This theory advocates that the government should raise its revenue from a single tax on income since income taxes can be equally assessed on individual than other taxes. A single tax is a system of taxation based mainly or exclusively on one tax, typically chosen for its special properties, often being a tax on land value. The idea was proposed independently by John Locke and Baruch Spinoza.

The disadvantage of this theory annuities from the fact that to raise the enormous amount of public revenue required by a modern government, such a single tax would have to be extremely high and would therefore have a serious disincentive effect on the desire to work as a result it would have an adverse effect on the size of the national income. Another weakness of the single tax system theory as advocated by the physiocrats is that it would lead to a very bad distribution of the burden of taxation.

**Economic Growth Models**

The emergence of economic growth theory can be traced back to Adams Smith’s wealth nations. In his view, economic growth of a nation strictly deals with wealth of nations, depends on division of labour, and economic growth deals with sustained increase in real gross domestic product, per capita income, expansion of the production possibilities frontier (Arnold 2008). The PPF have been sluggish, fluctuating and very low in Nigeria when compared with other countries due to lack of sufficient utilization of available natural resources, production capacity and systemic corruption.

The following theories of economic growth would be discussed;

**Harrod Domar Growth Model:**

- Increased savings
- Increased income
- Increased investment
- Increased output
- Large capital stock

This model suggests that economy’s rate of growth depends on the level of saving, productivity of investment, that is, capital-output rate which depends on the amount of labour and capital.

**Empirical Studies**

Simply called the Goods and Services Tax (GST), it is levied on the value added that results from each exchange. It is an indirect tax collected from someone other than the person
who actually bears the cost (Ochei, 2010). It was invented by a French Economist, Maurice Laure in 1954 and was first introduced in France on April 10, 1954. Feldstein and Krugman (1990) were the first set of researchers to research on the international trade effects of Value Added Taxation. Their research was based on the widespread belief that VAT, because it is levied on imports and rebated on exports, acts as a combination of protection and export subsidy, giving the traded goods sectors of countries with VAT an advantage over the corresponding sectors of countries that rely on income taxation. The research used a simple model to show that this view is almost completely wrong. A VAT is not a protectionist measure; indeed, the allegedly pro-competitive device of export rebates is necessary if the VAT is not to act as an export tax, which in turn is actually a protectionist measure that would reduce both imports and exports. It was also established that in practice, VAT would almost surely fall more heavily on traded rather than non-traded goods, which would constitute a bias against both exports and imports.

Different scholars had used different explanatory variables to attempt some empirical measurements of tax efforts in various countries. Such variables included agricultural output-GDP ratio, per capital income, mineral exports-GDP ratio, the degree of openness of the economy, money-GDP ratio, etc. Using mining-GDP, agricultural output-GDP ratio, and export – GDP ratio as determinants of tax share in GDP to measure tax efforts, Chelliah, Bass and Kelly (1975) showed that the agriculture share is negative while the mining share is positively related to tax share, and the export ratio is not significant. Using panel data on 43 Sub-African Countries for the period 1990-1995 to measure the determinants of tax-GDP ratio to construct an index of tax effort for these countries, Stotsky and Woldemariam (1977) found that the countries with a relatively high tax- GDP ratio tended to have a relatively high index of tax effort, although the results varied across countries. Tait and Gratz (1979) later updated the work of Chelliah et al (1975) using the same sample of developing countries for the period 1972-1976. However, they did not find the agric-GDP ratio to be significant but their measure of tax effort indices yielded similar results to the initial study.

Toder and Rosenberg (2010) worked on the effects of imposing a value added tax to replace payroll taxes or corporate taxes (in the US). The research work was conducted against the background that the United States is the only country in the developed world that does not imposed a broad-based consumption tax. The typical form of broad-based consumption tax used worldwide is a credit-invoice Value Added Tax (VAT). The credit-invoice VAT, a subtraction –method VAT or Business Transfer Tax (BTT), and a Retail Sales Tax (RST) are all intended to tax the final consumption once at the retail level, but the collection mechanisms differ among the three taxes. The researchers found out that VAT has administrative advantages over both BTT and RST. Both VAT and BTT are easier to enforce than RST because under a tax collected at different stages of production, evasion by the final seller still leaves much of the tax in place. Compared with BTT, VAT makes it easier to exempt sales of categories of consumption goods, including export sales, but more difficult to grant preferences to selected industries. The distributional burden of VAT, it was found, is roughly proportional at the bottom of income distribution but regressive at the top.

VAT was introduced by The Federal Government of Nigeria in January, 1993. It was believed by many Nigerians that the tax was introduced as a means of avoiding taking loans from international agencies (Ochei, 2010). Adereti, Adesina & Sanni (2001) examined the impact of Value Added Tax on the economic growth of Nigeria. They used the time series data on the Gross Domestic Product (GDP), VAT revenue, Total Tax Revenue and Total (Federal Government) Revenue from 1994 to 2008. These data were analyzes by using multiple regression modelling. Their findings showed that the ratio of VAT Revenue to GDP averaged 1.3% compared to 4.5% in Indonesia and indicated a positive and significant correlation between VAT Revenue and GDP. It also showed that no causality existed between the GDP and VAT revenue but a lag of two years however existed. Onwuchekwa and Aruwa (2014) investigated the impact of VAT on economic growth of Nigeria. They employed the Ordinary Least Square Technique to test the hypothesis formulated. The result showed that VAT contributed significantly to the total tax revenue of government and by extension, the
economic growth of Nigeria. It was also observed that VAT revenue growth had a consistent, although not explosive increase.

Izedonmi and Okunbor (2014) empirically examined the contribution of VAT to the development of the Nigerian economy. The used time series data on the Gross Domestic Product (GDP), VAT Revenue, Total Tax Revenue and (Federal Government) Revenue from 1994 to 2010. The data were analyzed using multiple regression modelling. Their findings showed that VAT Revenue accounted for 92% significant variations in Nigeria’s GDP. It showed a positive but insignificant correlation between VAT Revenue and GDP. Onaolapo, Aworemi and Ajala (2013) examined VAT and its effect on revenue generation in Nigeria. They used the stepwise regression analysis technique to analyze their data. Their findings showed that Value Added Tax has statistically significant effect on revenue generation in Nigeria. Bakare (2013) investigated VAT on output growth in Nigeria. Using the Ordinary Least Square regression technique, he found a significant relationship between VAT and output growth in Nigeria with emphasis on Balance of Payment. The results of his findings also showed that the past values of VAT could be used to predict the future behaviour of output growth in Nigeria and the surplus/deficit nature of BOP. The main conclusion of the study was that Value Added Tax has the potential to assist in the diversification of revenue sources, thereby providing enough funds for economic growth and development and reducing over dependence on oil for revenue.

Olatunji (2009) did a study on the effectiveness of the administration of VAT to improve government revenue and boost economic growth in Nigeria. It used simple percentage and chi-square to analyze the data. The study showed a positive correlation between VAT and GDP. Okoli and Matthew (2015), examined the extent to which VAT had contributed to Nigeria’s total federally collected revenue and its position among the other tax components from 1994 to 2012. Using the Error Correlation Model (ECM) for the analysis, results revealed that VAT was the second long term source of the total federally collected revenue.

C. Methodology

This study made use of longitudinal survey. The research study cuts across several years (six years). The target population for this study are the Federal Inland Revenue Service (FIRS) and the Central Bank of Nigeria (CBN). Six years audited account of the FIRS was used for the analysis. The researcher used secondary data which is the Statistical bulletin of the Central Bank of Nigeria and the statistical bulletin of the Federal Inland Revenue Service. Other supplementary data sets were collected from secondary sources such as journals, fact books, seminar paper and Economic and Financial Review of various years. The data set covers the period between 2012 and 2017. Data collected were analysed using Statistical Package for Social Sciences (SPSS version 20). The historical data obtained through audited account were further subjected to appropriate test of hypotheses using Pearson Product Moment Correlation Analysis (PPMC) to determine the strength and direction between the independent and dependent variables, and multiple regression analysis to ascertain the contributions of each dependent variable towards predicting changes in the dependent variable.

Model Specification

Model specification for the study is as stated below:

\[ GDP = \alpha_0 + \beta_1 TVAT + \beta_2 PCI + \beta_1 BOP A \]

Where;
GDP= Gross Domestic Product which is the dependent variable
TVAT= Total Value Added Tax
PCI= Per Capita Income
BOP= Balance of Payment
\(\alpha_0\)= Constant
\(\beta_1\)= Beta of the Regression
Results
The data analysis and the hypothesis testing are presented below:

Table 1: Presentation of Data on VAT, BOP, PCI and GDP from 2012 to 2017

<table>
<thead>
<tr>
<th>YEAR</th>
<th>VAT (₦)</th>
<th>BOP (₦'000)</th>
<th>PCI (₦'000)</th>
<th>GDP (₦'000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>4,684,000,000</td>
<td>3,253,851.20</td>
<td>7,296.18</td>
<td>24,794,238.66</td>
</tr>
<tr>
<td>2013</td>
<td>5,629,000,000</td>
<td>3,030,420.30</td>
<td>9,589.01</td>
<td>33,984,754.13</td>
</tr>
<tr>
<td>2014</td>
<td>6,495,000,000</td>
<td>3,751,986.30</td>
<td>10,572.44</td>
<td>37,409,860.61</td>
</tr>
<tr>
<td>2015</td>
<td>7,102,000,000</td>
<td>3,345,419.30</td>
<td>10,808.57</td>
<td>20,544,099.94</td>
</tr>
<tr>
<td>2016</td>
<td>7,956,000,000</td>
<td>3,375,942.00</td>
<td>11,920.31</td>
<td>42,396,765.71</td>
</tr>
<tr>
<td>2017</td>
<td>4,570,400,000</td>
<td>13,060,220.96</td>
<td>14,185.17</td>
<td>52,995,957.14</td>
</tr>
</tbody>
</table>

Source: CBN Statistical Bulletin and NBS for various years.

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>VAT</th>
<th>BOP</th>
<th>PCI</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6072733.333</td>
<td>4969640.0100</td>
<td>10728.6133</td>
<td>35354279.3650</td>
</tr>
<tr>
<td>Median</td>
<td>6062000.000</td>
<td>3360680.6500</td>
<td>10690.5050</td>
<td>35697307.3700</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1354021.959</td>
<td>3970457.18405</td>
<td>2301.26063</td>
<td>11813401.68243</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-1.546</td>
<td>5.927</td>
<td>.870</td>
<td>-.503</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>1.741</td>
<td>1.741</td>
<td>1.741</td>
<td>1.741</td>
</tr>
<tr>
<td>Range</td>
<td>3385600.00</td>
<td>1002980.66</td>
<td>6888.99</td>
<td>32451857.20</td>
</tr>
</tbody>
</table>

Source: Compiled from SPSS version 20.

The above table shows the mean and standard deviation for the variables, GDP having the highest mean value 35354279.3650 and highest standard deviation 11813401.68243 while per capital income is having the lowest mean value 10690.5050 and lowest standard deviation 2301.26063.

Table 3: Correlations showing the relationship between VAT and GDP

<table>
<thead>
<tr>
<th></th>
<th>VAT</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>-.154</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.770</td>
<td>.770</td>
</tr>
<tr>
<td>N</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 4: Correlations showing the relationship between VAT and PCI

<table>
<thead>
<tr>
<th></th>
<th>VAT</th>
<th>PCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.150</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.776</td>
<td>.776</td>
</tr>
<tr>
<td>N</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 4 below reveals the relationship between the two variables Value Added Tax and Gross Domestic Product. The result obtained indicate there is a negative linear relationship between Value Added Tax and Gross Domestic Product and it is not significant at 0.05 or 5% level of significance. The extent to which the explanatory variable (Value Added Tax) Influence the dependent variable (Gross Domestic Product) is to the degree of 0.150 that is approximately (%15).
Table 4 below reveals the relationship between the two variables Value Added Tax and Per Capital Income. The result obtained indicate there is a positive linear relationship between Value Added Tax and Per Capital Income and it is not significant at 0.05 or 5% level of significance. The extent to which the explanatory variable (Value Added Tax) Influence the dependent variable (Per Capital Income) is to the degree of 0.150 that is approximately (%15).

Table 5: Correlations showing the relationship between VAT and BOP

<table>
<thead>
<tr>
<th></th>
<th>VAT</th>
<th>BOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAT</td>
<td>Pearson Correlation</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>-.524</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>BOP</td>
<td>Pearson Correlation</td>
<td>-.524</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.285</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Compiled from SPSS version 20.

Table 4 below reveals the relationship between the two variables Value Added Tax and Balance of Payment. The result obtained indicate there is a negative linear relationship between Value Added Tax and Balance of Payment and it is not significant at 0.05 or 5% level of significance. The extent to which the explanatory variable (Value Added Tax) Influence the dependent variable (Balance of Payment) is to the degree of (0.524) that is approximately (%52.4).

Graphical Analysis
The graph below shows the relationship between the variables; VAT, BOP, PCI and GDP.

Figure 1: Graph showing relationship between the variables

Source: Computations using Microsoft Excel

Test of Hypotheses
Hypothesis one
Ho: There is no significant relationship between VAT and GDP of Nigeria.
H1: There is significant relationship between VAT and GDP of Nigeria.
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.154*</td>
<td>.024</td>
<td>-.220</td>
<td>13049530.65990</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), VAT

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>16621294777844.219</td>
<td>.098</td>
<td>.770b</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>4</td>
<td>170290250443660.970</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5</td>
<td>697782296552488.100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: GDP
b. Predictors: (Constant), VAT

c. ANOVA Table

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>43531503.969</td>
<td>-.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VAT</td>
<td>26710571.031</td>
<td>-.154</td>
<td>1.630</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-.312</td>
<td>.178</td>
</tr>
</tbody>
</table>

a. Dependent Variable: GDP

Interpretations

The table above shows the result for the simple linear regression analysis examining the relationship between Value Added Tax and Gross Domestic Product.

The model summary table reveals a coefficient denoted by R= .154* which indicate a weak and positive relationship dependent variable (gross domestic product) and independent variable (value added tax) it also reveal R square (R^2) the coefficient of determination which is used to explain the percentage of variation in the dependent variable that is explained by the independent variable from the model summary table R^2 = .024 or 2.4%, this indicate that about 2.4% variation in dependent variable (Gross Domestic Product) is explained by the independent variable (Value Added Tax).

The ANOVA table shows how good the model is. It reveals that the F statistic of .098 and a significance of 0.770 were greater than 0.05 showing that the variables were not statistically significant. The un-standardized co-efficient table shows the relevant figure for the multiple linear regression model, which indicates how a unit change in the dependent variable will affect the dependent variable.

Hypothesis Two

H0: There is no significant relationship between VAT and per capital income of Nigeria.
H1: There is significant relationship between VAT and per capital income of Nigeria.

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.150*</td>
<td>.023</td>
<td>-.222</td>
<td>2543.69824</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), VAT

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>597399.413</td>
<td>.092</td>
<td>.776a</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>4</td>
<td>6470400.762</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5</td>
<td>26479002.459</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: PCI

c. ANOVA Table

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>9178.348</td>
<td>5206.596</td>
<td>1.763</td>
</tr>
<tr>
<td></td>
<td>VAT</td>
<td>2.553E-007</td>
<td>.150</td>
<td>.304</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PCI
a. Dependent Variable: PCI

**Interpretations**

The table above shows result for the simple linear regression analysis examining the relationship between Value Added Tax and Gross Domestic Product. The model summary table reveals a co-efficient denoted by $R = .150$ which indicate a weak and positive relationship dependent variable (gross domestic product) and independent variable (value added tax) it also reveal $R^2$ the co-efficient of determination which is used to explain the percentage of variation in the dependent variable that is explained by the independent variable from the model summary table $R^2 = .023$ or 2.3%, this indicate that about 2.3% variation in dependent variable (Per Capital Income) is explained by the independent variable (Value Added Tax).

The ANOVA table shows how good the model is. It reveals that the F statistic of .092 and a significance of 0.776 were greater than 0.05 showing that the variables were not statistically significant. The un-standardized co-efficient table shows the relevant figure for the multiple linear regression model, which indicates how a unit change in the dependent variable will affect the dependent variable.

**Hypothesis Three**

Ho: There is no significant relationship between VAT and Balance of Payment of Nigeria.
H1: There is significant relationship between VAT and Balance of Payment of Nigeria

**Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.524*</td>
<td>.275</td>
<td>.094</td>
<td>3779503.0301</td>
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</table>

*a. Predictors: (Constant), VAT*

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>21684078631301.860</td>
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<tr>
<td></td>
<td>Residual</td>
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<td>14284643155180.598</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5</td>
<td>78822651252024.250</td>
<td>78822651252024.250</td>
<td></td>
</tr>
</tbody>
</table>

*a. Dependent Variable: BOP
b. Predictors: (Constant), VAT*

**Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>14309577.886</td>
<td>.001</td>
<td>-.524</td>
</tr>
<tr>
<td></td>
<td>VAT</td>
<td>7736116.093</td>
<td>.001</td>
<td>-1.232</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: BOP*

**Interpretations**

The table above shows result for the simple linear regression analysis examining the relationship between Value Added Tax and Gross Domestic Product.

The model summary table reveals a co-efficient denoted by $R = .524$ which indicate a positive relationship dependent variable (gross domestic product) and independent variable (Value Added Tax) it also reveal $R^2$ the co-efficient of determination which is used to explain the percentage of variation in the dependent variable that is explained by the independent variable from the model summary table $R^2 = .0275$ or 27.5%, this indicate that about 27.5% variation in dependent variable (Per Capital Income) is explained by the independent variable (Value Added Tax).

The ANOVA table shows how good the model is. It reveals that the F statistic of 1.518 and a significance F of 0.285 were greater than 0.05 showing that the variables were not statistically significant.
statistically significant. The un-standardized co-efficient table shows the relevant figure for the multiple linear regression model, which indicates how a unit change in the dependent variable will affect the dependent variable.

D. Discussion of Findings

The research was carried out to evaluate the influence of Value Added Tax on economic growth of Nigeria. In order to establish whether these factors have a relationship or not, three hypothesis were put to test.

The first hypothesis sought to establish whether there is significant relationship between Value Added Tax and Gross Domestic Product. Having tested the research hypotheses formulated, it was found out that there is a weak and positive relationship between Value Added Tax and Gross Domestic Product. Therefore, the result indicates that there is no significant linear relationship between Value Added Tax and Gross Domestic Product due to the fact alpha value is greater than P-value (0.05< 0.770). The results of our findings corroborate the assertion made by Liu et al (2008), he examined the casual relationship between GDP and Value Added Tax for US data for 1947-2002.

The results revealed that the linear relationship between VAT and GDP is not significant enough compared to other sources of revenue that constitute the Gross Domestic Product. This is however in compliance with the research work carried out by Okoye, and Gbegi (2009) where they discovered that revenue generated through VAT has no significance influence on wealth creation in Nigeria and also has no significant effect on the overall tax revenue in Nigeria. Nwezeaku and Anyafo (2010) also discovered that revenue generated from Value Added Tax is so meagre compared to revenue from other sources as such, government can do without VAT. Izedonmi and Okunbor (2014) empirically examined the contribution of VAT to the development of the Nigerian economy. They used time series data on the Gross Domestic Product (GDP), VAT Revenue, Total Tax Revenue and (Federal Government) Revenue from 1994 to 2010. The data were analyzed using multiple regression modelling. Their findings showed that VAT Revenue accounted for 92% significant variations in Nigeria’s GDP. It showed a positive but insignificant correlation between VAT Revenue and GDP. However, the insignificant effect VAT has on GDP of Nigeria may be attributable to corruption and embezzlement in the system that something might be wrong with the computation of the figure. It also showed that government could generate more revenue if revenue leakages are checked.

The second hypothesis sought to determine whether there is significant relationship between Value Added Tax and per capital income of Nigerians. Hypothesis two also shows weak and positive relationship between VAT and Per Capital Income. The result of this test indicates that there is no significant linear relationship between VAT and per capital income of Nigeria due to the fact alpha value is greater than P-value (0.05< 0.776). This implies that the relationship between VAT and per capital income of Nigeria is not significant enough. The analyzed results showed that VAT has had no significant effect on per capital income of Nigerians for the years covered by the analysis. Per capital income is a key indicator of economic growth as researched by Okoye, and Gbegi (2009) showed that VAT has no effect on wealth creations of Nigerians. The analysis showed that the effect of VAT on per capital income is so insignificant and meagre. Also, the finding is consistent with that of Koman and Brahimssrene (2007). They examined the association between VAT and per capital income in Thailand, by employing the Granger Causality test. The results showed that Value Added Tax and per capital income do not co-integrate. Hence, if further exposed, the unidirectional relationship between as causality runs from VAT to per capital income, the results expressed a positive effect of VAT on per capital income. The positive coefficient of real per capital income also tends to suggest that Wagner’s hypothesis holds for Nigeria. The results showed that there is a long run positive relationship between income per capital and Value Added Tax.

The third hypothesis sought to determine whether there is significant relationship between Value Added Tax and Balance of Payment of Nigeria. In test for hypothesis three, it revealed that there is a weak and positive relationship between VAT and balance of payment. The result of this test indicates that there is no significant linear relationship between VAT and
Balance of Payment of Nigeria due to the fact alpha value is greater than P-value (0.05< 0.285).

Bakare (2013) investigated VAT on output growth in Nigeria. Using the Ordinary Least Square regression technique, he found a significant relationship between VAT and output growth in Nigeria with emphasis on Balance of Payment. The results of his findings also showed that the past values of VAT could be used to predict the future behaviour of output growth in Nigeria and the surplus/deficit nature of BOP. The main conclusion of the study was that Value Added Tax has the potential to assist in the diversification of revenue sources, thereby providing enough funds for economic growth and development and reducing over dependence on oil for revenue. He also assert that Balance of Payment basically complies to measure gross deficits or surpluses with the rest of the world. However, the balance of payment statement has become increasingly important in recent years, as it has been devised to describe in a concise fashion the state of international economic relationship of the country, as a guide to its monetary, fiscal exchange control and other policies. Thus, Onwuchekwa and Aruwa (2014) investigated the impact of VAT on economic growth of Nigeria. They employed the Ordinary Least Square Technique to test the hypothesis formulated. The result showed that VAT contributed, but not much significantly to the total tax revenue of government and by extension, the economic growth of Nigeria. It was also observed that VAT revenue growth had a consistent, although not explosive increase.

Based on the findings, it is established that Value Added Tax does not influence Economic Growth of Nigeria.

E. Conclusion
The indication of this is that even though Value Added Tax reflects an insignificant linear relationship to Nigeria's economic growth, it still remains an integral part of the Nigeria economy. As such, Nigeria will grow economically if the status quo is sustained; though there is always room for improvement. The results of this study indicate that if more goods and services are taxed, the revenue base of the country will increase.

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