

## The Impact of Value Added Tax on Nigerian Economic Growth (1994-2012): An Investigation

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### ABSTRACT

Taxation as an instrument of fiscal policy is a critical contributor to revenue generation capacity of government and by extension a stimulator of growth and development. This study merely added to the vast literature on VAT – a component of taxation. By employing the Error correction model, the study ascertained how VAT has impacted on Nigerian economic growth. The result was further re-enforced by assessing the performance of the different sectors in the Nigerian economy in contributing to VAT revenue, with a view to showcase their effect on economic growth in the new millennium. The causal relationship is tested using Granger Causality. A positive and insignificant correlation exists between VAT Revenue and real GDP as there are some problems inhibiting its potency. Both economic variables fluctuated greatly over the period though VAT Revenue was more stable. Granger Causality Test also revealed that the relationship between VAT and real GDP is unidirectional and a lag period of four years exists. That is real GDP granger causes VAT revenue; hence policy makers should favour all economic growth determinant factors for VAT to contribute significantly. This study also recommends that all identified problems and administrative loopholes should be plugged for VAT Revenue to contribute significantly to economic growth of the country. This should be done on the realization that any action taken on either VAT Revenue or the GDP will take four years to become effective.

**Keywords:** Granger Causality, Value Added Tax, Economic Growth

### INTRODUCTION

The precedence for the introduction of VAT in Nigerian was based on the fact that taxation as an instrument of fiscal policy is vital in generating revenue to finance the activities of government, redistribute income, stabilise the economy as well as stimulate growth and development. This view was affirmed by Udoh & Ebong quoted by Damain (2010). For the first two decades after independence the economy was relatively buoyant as a result of favourable balance of payments and the oil boom. However increasing cost of running the government, fluctuation in oil price, inflation and the recent global economic recession have returned the attention of managers of the nation's economy to the importance and sustainability of taxes, especially value added tax.

The need to redirect and re-organise the priorities of the Nigerian economy became urgent as the nation approached the new millennium. The international price of crude oil, Nigeria's biggest foreign exchange earner, was falling and Nigeria was faced with the inevitable vulnerability of a monoculture economy. For a nation that had gone through an unprecedented economic boom in the seventies, it was a terrible experience. The Nigerian tax system, which went through a terrible periods in the eighties and seventies as revenue from petroleum took central and dominant role within the economy, was expected through the introduction of this effective tax system to come back to life. (Ijewere, 1993).

It became urgent, therefore, to find alternative means of raising revenue for the government, both internally and externally. The external means is through promoting and exportation of non-oil goods like primary agricultural products and semi-processed agricultural products. One of the internal means is through general over-hauling of Nigeria tax system by introducing a well managed and efficient tax system.

Other factors that prompted government into action was the advice received from the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD-the World Bank)- the two agencies responsible for the establishment and operation and monitoring of Structural Adjustment Programme (SAP). At various times, individuals companies and governments make adjustments on systems and introduce new measures to meet changing needs. It is such that in 1990 when the Structural Adjustment Programme (SAP) was failing, the Federal Government set up a committee to review the tax system in order to reduce dependence on oil revenue (Ijewere, 1993). Earlier before this period macroeconomic instability as evidenced by rising budget deficits had thwarted the nation's economic growth exception that "Nigeria recorded 26years of deficit budgeting worth ₦1.334 trillion out of a total of 32years of its existence as an independent nation (Suleyman, 2003). There is, therefore the need for a paradigm shift of the country's mode of finance. These are the reasons why VAT was introduced to replace sales tax in 1994.

While the performance of VAT as a source of revenue in Nigeria is encouraging, it remains difficult to find attempts to systematically assess the impact of VAT on the economy. Recent research works on the impact of taxation on the Nigerian economy lumped up all the various taxes together without isolating VAT. How and in what direction has VAT been affecting the Nigerian economy, proxy by real Gross Domestic Product (GDP)? Is there any causality between the two economic variables? How has the different sectors of the economy been contributing to VAT revenue and what are the problems facing each sector in relation to VAT? Finding answers to these and possible solution to the problems and suggestions on ways of making it an equitable and sustainable means of revenue generation and economic growth is the main trust of this paper. The rest of the paper is divided into four sections. Section two is on conceptual framework and review of related literature. Section three is on data and research methodology. Section four is on findings and discussions while Section five summarizes and concludes the paper.

## LITERATURE REVIEW

Tax can be defined as “a compulsory contribution to the support of government levied on persons, property, income, commodities, transactions etc. now at a fixed rate mostly proportionate to the amount on which the contribution is levied” (Crowther, 1998) as it can equally be confirmed in (Tilley, 1981).

This, when stripped of its limited view as to the purpose of taxation, its irrelevant description of tax base and its undue stress on proportionate as opposed to progressive taxation, tells us very little, and beyond that taxes are compulsory. To this criterion one may add that taxes are imposed under the authority of the legislature, that they are levied by a public body and that they are intended for public purpose (Duff, 1931).

These criteria become clearer when distinguishing a tax from a charge for a government service, as the Canadian courts have to do. In the first place if the payment is a charge for a government service, some service must be provided directly to the individual (Duff, 1943). There is a substantial difference between paying a bridge toll and paying a tax to be used for the defense of one’s country. Secondly, the charge must be related to the service given, and not varied according to the person’s ability to pay or to some other criterion such as the value of his property (Montgomery, 1976). Thirdly, it is no objection that a charge may result in a profit provided only that the profit is a reasonable one. On this basis the steep increase in energy prices or in post office charge not to keep the books balanced but as a fiscal device to restrain domestic consumption, as has been practiced by various governments, gives those charges some of the characteristics of a tax. Oyebanji (2006) identified two major forms of taxes, these are:

- a. **Direct Taxes:** These are taxes imposed by the government on the income of individuals and companies and which are actually paid by the person or persons on whom it is legally imposed. Examples are; Personal Income Tax (PIT) Company Income Tax (CIT), Capital Gains Tax (CGT), Withholding Tax, Petroleum Profits Tax (PPT), Education Tax and Capital Transfer Tax (CTT). The PIT is imposed on individual earnings, CIT on profit of organizations/corporate bodies, PPT on oil purchasing/exploration companies, CGT on profit from sales of capital assets and CTT on the transfer of property inter-viro and transfer on death. However, CTT was abrogated in 1996.
- b. **Indirect Taxes:** These are taxes by the government on goods and services. Indirect tax can be avoided because it is payable only if one buys the commodities or enjoys the services on which the tax is imposed and it involves little administrative cost compared to direct taxes. It does not create dis-incentives to efforts as in the case of direct taxes and hence, does not affect the economic functions of the tax payers.

Examples of indirect taxes in Nigeria according to Oyebanji (2006) are:

1. **Import Duties/Tariffs:** Levied on goods imported into the country.
2. **Export Duties:** Levied on goods produced for export.
3. **Excise Duties:** Imposed on specific goods produced in a country.
4. **Consumption Tax:** Levied on the purchase of any commodity or enjoyment of a service. Examples are: Sales Taxes and Value Added Tax (VAT). One characteristic effect of consumption tax is that it is not included in the price tag by in the affected commodity rather it is added as a percentage of the total of invoice on the goods and/or services rendered.

## VAT Definition and Concepts

According to Oserogho and Associates as quoted by Adereti, Sanni & Adesina (2011), VAT is a consumption tax levied at each stage of the consumption chain and borne by the final consumer of the product or service. Each person is required to charge and collect VAT at a flat rate of 5% on all invoiced amounts, on all goods and services not exempted from paying VAT, under the Value Added Tax Act 1993 as amended. Where the VAT collected on behalf of the government (output VAT) in a particular month is more than the VAT paid to other persons (input VAT) in the same month, the difference is required to be remitted to the government, on a monthly basis, by the taxable person. Where the reverse is the case, the taxpayer is entitled to a refund of the excess VAT paid or more practically, to receive a tax credit of the excess VAT from the

government. All exports are zero rated for VAT, i.e. no VAT is payable on exports. Also, VAT is payable in the currency of the transaction under which goods or services are exchanged.

### METHODOLOGY

This research work is both inferential and descriptive in nature. The relevant data were sourced from the operational arms of the Federal Board of Inland Revenue and CBN Annual Reports and Accounts (various issues), and CBN Statistical Bulletin which contain the details of the five relevant economic variables are: Real GDP, VAT, Company Income Tax (CIT), Petroleum profits tax (PPT) and as well as Custom and excise duties (CED). The period covered was from 1994 when VAT was introduced into the country to 2012. Data on sectoral contribution to VAT in the new millennium from 2005 to 2012 was also sourced.

### Model Specification

Based on the focus of this research, we applied Ordinary Least Square method to analyse the impact of VAT (regressor) on economic growth of Nigeria (regressand) proxied by real Gross Domestic Product. From sub-macro and micro economic perspectives, this model states that economic growth (real GDP) depends on VAT revenue. Guided by the perceived functional relationship between the matrix of economic growth (RGDP) and VAT revenue, a link is forged between the two variables. The model which is in line with the works of Owolabi and Okwu (2011) and Adereti, Sanni&Adesina (2011) is a modified form of the model specified by Golit (2008) in his study of Nigeria's tax efforts. However other relevant independent variables are considered in this study to actually showcase the performance or impact of VAT among the vibrant taxes in Nigeria on economic growth of Nigeria. Thus, the functional relationship and the resultant models are as specified below.

$$RGDP_t = f(VAT_t, CIT_t, CED_t, PPT_t) \dots \dots \dots (1)$$

From the above functional relationship, the stochastic model is specified below:

$$RGDP_t = \beta_0 + \beta_1VAT_t + \beta_2CIT_t + \beta_3CED_t + \beta_4PPT_t \dots + \epsilon_t \dots \dots \dots (2)$$

Where

$\beta_0$  = intercept or average RGDP when other variables are not applied

$\beta_1$  = Coefficient of the explanatory variable, VAT

$\beta_2$  = Coefficient of the explanatory variable, CIT

$\beta_3$  = Coefficient of the explanatory variable, CED

$\beta_4$  = Coefficient of the explanatory variable, PPT

VAT = Value added tax

CIT = Company income tax

CED = Custom and excise duties

PPT = Petroleum profit tax

RGDP = Real Gross Domestic Product

$\epsilon_t$  = Stochastic disturbances/ variables

t = time period under study (1994 -2012)

The 'p priori' expectation is that the model parameter is expected to be positively signed. What this means by implication is that some economic growth is expected even when no VAT revenue is collected.

### IV. FINDINGS AND DISCUSSIONS

#### Sectorial Analysis of VAT Collection (2005-2012)

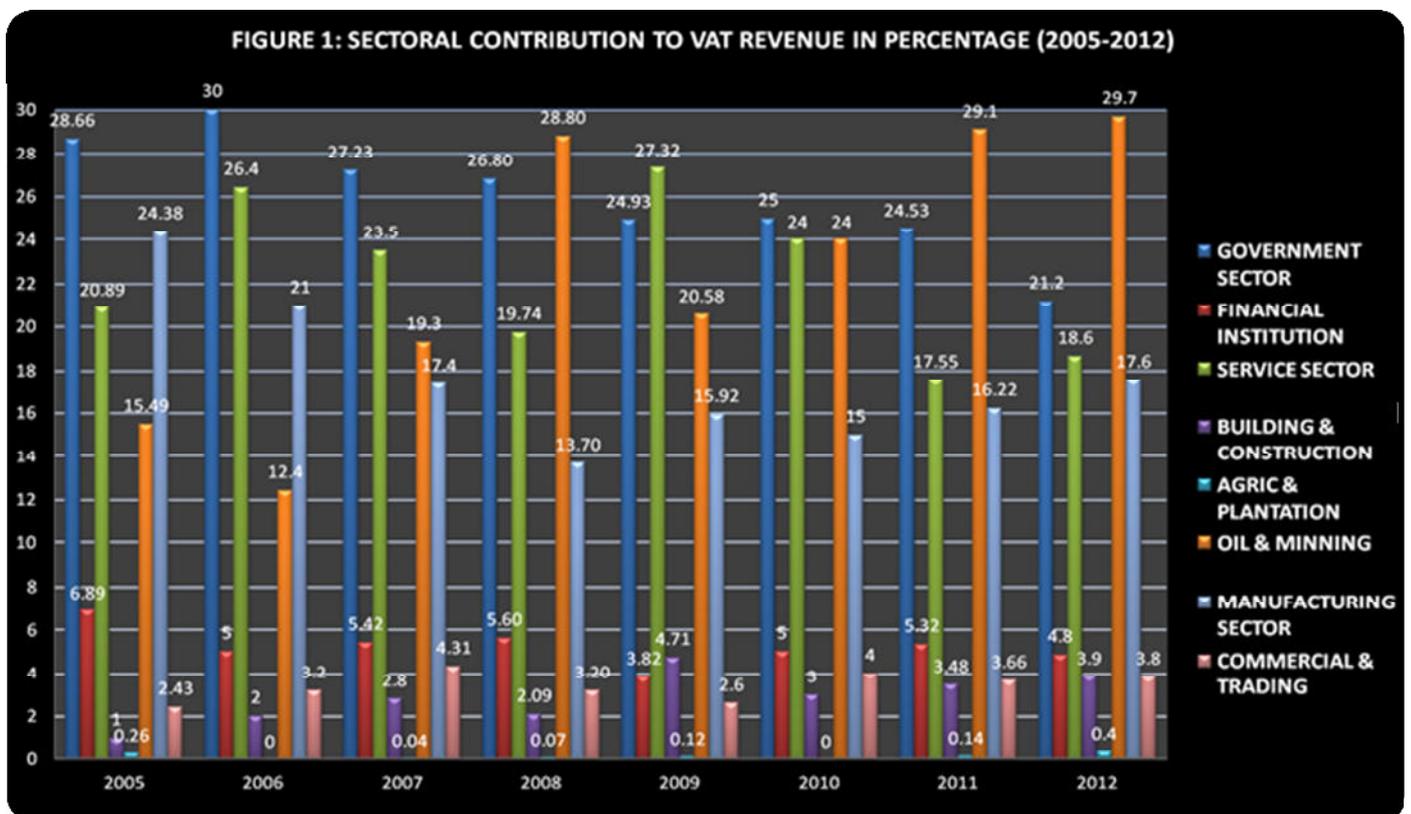
At this stage, effort was made to assess the performance of different sectors of the Nigerian economy in contributing to VAT revenue with a view to showcase their effect on economic growth in the new millennium. Table 1 below shows the result of our findings:

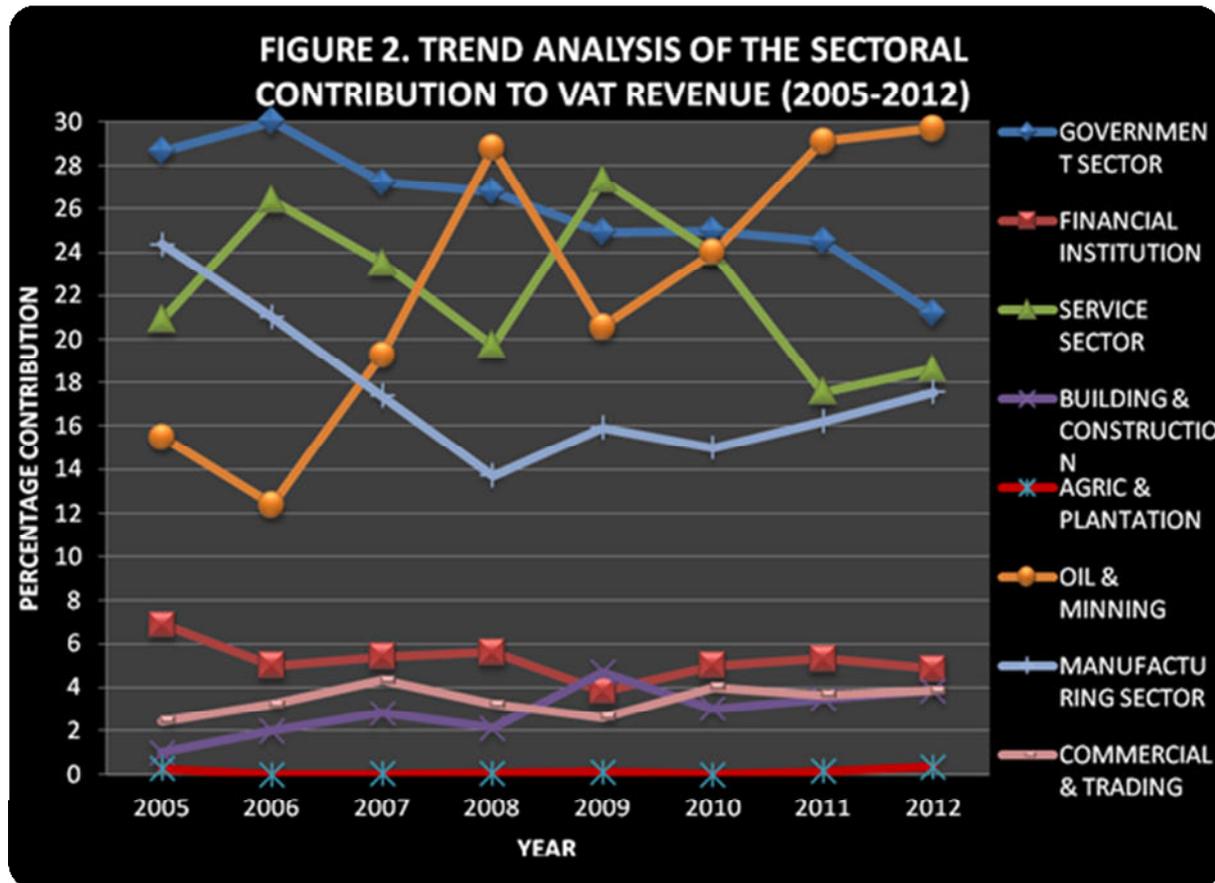
**Table 1 Sectoral Contribution to VAT from 2005 to 2012**

Year	2005	2006	2007	2008	2009	2010	2011	2012
	₦'million							
<b>Sectoral Analysis</b>								
Government Sector	33,907.41	44,508.00	57,384.50	74,629.96	90,638.00	109,152.50	120,702.56	112,633.30
Financial Institution	8,151.50	7,418.00	11,422.11	15,594.32	13,888.37	21,830.50	26,177.65	25,710.90
Service Sector	24,714.79	39,167.04	49,523.90	54,969.98	99,327.32	104,786.40	86,356.71	99,052.20
Building & Construction	1,183.09	2,967.20	5,900.72	5,820.02	17,124.15	13,098.30	17,123.72	20,484.60
Agric&Plantation	307.60	-	84.30	194.93	436.28	-	688.89	1,908.40
Oil & Mining	18,326.09	18,396.64	40,672.82	80,199.36	74,822.71	104,786.40	143,189.75	157,807.40
Manufacturing Sector	28,843.78	31,155.60	36,668.76	38,150.39	57,880.34	65,491.50	79,812.29	93,303.00
Commercial & Trading	2,874.91	4,747.52	9,082.89	8,911.04	9,452.82	17,464.40	18,009.43	20,437.60
<b>Total Non-import VAT</b>	<b>118,309.18</b>	<b>148,360.00</b>	<b>210,740.00</b>	<b>278,470.00</b>	<b>363,570.00</b>	<b>436,610.00</b>	<b>492,061.00</b>	<b>531,337.40</b>

Source: Annual Report and Account of FIRS and CBN Annual Report

The above table can be represented in the following bar chart in order to display the variation of VAT collection from different sectors of the economy in percentage. Also, the trend analysis of the sectoral contribution to VAT speaks volume:





Source: CBN Annual Report and Statistical Bulletin .

From the above graph, it is very clear that government sector had the highest contribution of 28.66%, 30%, 27.23% and 25% in year 2005, 2006, 2007 and 2010 respectively among the sectors. It grew from 28.66% in 2005 to its apex in 2006 (30%) and fell to 27.23% and 26.8% in the two subsequent years respectively. Further dwindling was experienced in 2009 which could be as a result of the prevailing economic downturn during the year. It is surprising that it fluctuated to its lowest (21.2%) in 2012 despite the fact that VAT contributed 14.21% to the N5.007 trillion generated which was the highest cumulative tax collected in the history of the FIRS. This is indicating possible inability to collect all VAT belonging to this sector of the economy.

The manufacturing sector was the second highest (24.38%) contributor to VAT revenue in 2005. This could not be sustained as it fluctuated downward to its lowest (13.7%) in year, 2008. What could account for this majorly is the poor development of the energy sector to meet the energy need of the country and attain the objective of employment generation and wealth creation. Many companies, highly intelligent and creative youth and skillful workers are moving out of the country due to poor infrastructural facilities, inadequate social amenities, lack of access to fund and the nation's comatose power supply (currently at less than 4000 megawatts) which sounded the death knell for the manufacturing sector. Its contribution (i.e. 17.6%) even when the FIRS celebrated the highest total tax collection in year, 2012 was not impressive at all compared to that of year, 2005 (24.38%). This is also showing that this sector is not generating enough activities to boost economic growth resulting to low production of VATable goods and unemployment.

The service sector took the third position (with 20.89%) in contributing to VAT revenue in year, 2005. Its position shifted to second in the three subsequent years with 26.6%, 23.5% and 19.74% respectively. It was surprising that this sector had its highest contribution (27.32%) taking first position among the various sectors in year, 2009, despite the prevailing economic meltdown during the year. However, it dwindled significantly to its lowest (17.55%) in 2011 before it finally rested at 18.6% in the year, 2012 despite the achievement of the FIRS in the same year.

Oil and mining sector had the highest contribution of 28.8%, 29.1% and 29.7% (its apex) in year 2008, 2011 and 2012 respectively among the sectors. It fluctuated from 15.49% in 2005 to its lowest in 2006 (12.4%) maintaining its fourth position in both years. A dramatic growth in its contribution was experienced in the two subsequent years to 19.3% and 28.8% respectively but could not be sustained in 2009 as it fell to 20.58% which may be due to economic recession prevailing that year. It resuscitated thereafter to be the leading sector in 2011 and 2012 indicating its potency to contribute

more in future. However, this portrayed the Nigerian economy as a mono-economy because no other productive sectors of the economy had such a drastic growth within the period under consideration (2005 to 2012) (see the graph above).

Contribution to VAT revenue by the financial sector has not been impressive as it fluctuated between 3.82% and 6.89% over the period. This could be as a result of banks near death experience from a banking crisis that led to costly bailouts, mergers and the formation of a state bad bank, the Asset Management Corporation of Nigeria (AMCON). So also is the commercial and trading sector and building and construction sector that could not even go beyond 4.31% and 4.71% respectively (see the above graph). This is showing that the volume of activities in these three sectors has not impacted significantly on economic growth.

Agric and plantation sector being the least contributor to VAT revenue depicted the fact that the sector had been neglected for so many years especially mechanized farming because of huge revenue from oil sector. Its annual contribution is so ridiculous (not up to 0.3%).

**Contribution of VAT, CED, PPT and CIT on Economic Growth:**

Here, an attempt was made to find out whether VAT revenue contributes significantly on economic growth. In order to test this, Error Correction Model was used, using E-Views Statistical Package, Version 7.2. The raw data collected was subjected to analysis. The properties of the data were examined, efforts were made to establish the model and interpret the results generally and specifically variable by variable. Relevant tests were carried out in line with the methodologies which gave rise to accurate and detailed discussions. The results of the various tests are presented below:

**Table 3 Augmented Dickey-Fuller Unit Root Test (ADF)**

VARIABLE	ADF VALUES	ORDER OF INTEGRATION
COMPANY INCOME TAX	-5.439515*	I(2)
CUSTOM EXCISE	-4.296697*	I(1)
PETROLEUM PROFIT TAX	-4.951067*	I(1)
VAT REVENUE	-3.116760**	I(2)
REAL GDP	-5.191219*	I(2)

Source: Author’s Computation through E-view version 7.2

Note that one, two and three asterisks denote rejection of the null hypothesis at 1percent, 5percent and 10percent respectively. The above result shows that Custom Excise Duty and Petroleum Profit Tax are stationary at first difference while Company Income Tax, VAT Revenue and Real GDP are stationary at second difference. Since the variables are integrated at different orders or levels (that is some at first differencing and some at second differencing), there exist short run disequilibrium or no relationship among the variables. This led us into carrying out co-integration test to find out if there is long run relationship among the variables.

**Table 4. Johansen Co-integration Test**

Date: 05/08/14 Time: 18:11  
 Sample (adjusted): 1996 2012  
 Included observations: 17 after adjustments  
 Trend assumption: Linear deterministic trend  
 Series: COMPANY INCOME TAX REVEN CUSTOMS EXCISE DUTIES PETROLEUM PROFIT TAX REAL GDP VAT REVENUE  
 Lags interval (in first differences): 1 to 1

Unrestricted Co-integration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.983639	155.5787	69.81889	0.0000
At most 1 *	0.944515	85.66031	47.85613	0.0000
At most 2 *	0.679281	36.50240	29.79707	0.0073
At most 3 *	0.635713	17.17019	15.49471	0.0277
At most 4	0.000198	0.003359	3.841466	0.9520

Trace test indicates 4 co-integrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

From the above table, the result of the co-integration test for the model reveals that four or more co-integrating vectors exist among the variables of interest (That is, at least four of the variables of interest have relationship in the long run). This means that we can estimate the Error Correction Model.

**TABLE 5: Result of Error Correction Model, Testing the Contribution of VAT to Economic Growth**

Dependent Variable: D(DDRGDP)

Method: Least Squares

Date: 05/09/14 Time: 13:20

Sample (adjusted): 1997 2012

Included observations: 16 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DDVAT)	0.481380	0.309431	1.555695	0.1708
D(DPPT)	-0.013472	0.009367	-1.438321	0.2004
D(DCED)	0.165807	0.244955	0.676887	0.5237
D(DCIT)	-0.126018	0.146611	-0.859537	0.4231
DDRGDP(-1)	-1.435881	0.515175	-2.787172	0.0317
DDVAT(-1)	0.880998	0.565312	1.558429	0.1701
DPPT(-1)	-0.023519	0.023749	-0.990308	0.3603
DCED(-1)	0.405554	0.420875	0.963597	0.3725
ECT(-1)	-0.260318	0.124947	-2.083433	0.0823
C	-3169.842	6235.600	-0.508346	0.6294
R-squared	0.914169	Mean dependent var	-540.9650	
Adjusted R-squared	0.785423	S.D. dependent var	27004.72	
S.E. of regression	12509.25	Akaike info criterion	21.97549	
Sum squared resid	9.39E+08	Schwarz criterion	22.45836	
Log likelihood	-165.8040	Hannan-Quinn criter.	22.00022	
F-statistic	7.100554	Durbin-Watson stat	2.068076	
Prob(F-statistic)	0.013450			

From the above table, the regression model can be restated as below:

$$RGDP_t = -3169.842 + 0.481380VAT_t - 0.126018CIT_t + 0.165807 CED_t - 0.023519 PPT_t$$

The result obtained from the model indicates that the overall coefficient of determination ( $R^2$ ) shows that 91.4 percent of RGDP is explained by the variables in the equation. The Durbin Watson (D.W) statistics of 2.06 was not substantially further away from the traditional benchmark of 2.0. The study can conclude that there is no sign of auto-correlation or serial correlation in the model specification, hence, the assumption of linearity is not violated.

From the above model, both Value Added Tax (VAT) and Custom Excise Duties (CED) have positive relationship with real GDP. That is, one percent increase in VAT revenue and that of Custom and Excise Duties will lead to increase in the real GDP by 48.13 percent and 16.58 percent respectively. However, they are both not significant at influencing real GDP.

On the other hand, Companies Income Tax (CIT) and Petroleum Profit Tax (PPT) have negative correlations. This implies that increase in the coefficient of Companies Income Tax Revenue and that of Petroleum Profit Tax by 1 percent will lead to a decrease in real GDP by 1.34 percent and 12.60 percent respectively. The negative correlations of the two variables are hinting at those factors inhibiting their potentials to contribute more to the economic growth. Despite the fact that Petroleum Profit Tax is the most significant contributor to Federally Collected revenue as explained in the first hypothesis, its insignificance at influencing real GDP is indicating that Nigeria has mono-economic problems. This view was also affirmed by the sector by sector contribution analysis to VAT revenue earlier discussed in this chapter. It revealed that oil and mining sector was the only leading productive sector indicating government inability to diversify the economy. Being a mono-economy and Africa's highest producer of crude oil, the country still grapples with dysfunctional refinery, poverty and erratic power supply among other challenges, putting the Nigerian economy in double tragedy. These factors also accounts for what made the contribution of VAT revenue from oil and gas sector to be insignificant to the economic growth. Experts have listed factors such as; risk of fall in production; risk of demand; risk in fall in price; and the run out of reserves, as some of the risks associated with a mono product economy.

In the same vein, negative correlation of CIT to real GDP and its insignificance indicate that the revenue generated from CIT is too infinitesimal to influence economic growth due to those factors explained earlier which bedeviled the Nigerian companies especially the manufacturing sector over the years.

Moreover, the P- values of the four variables indicate that the coefficient of each of the variables is not significant at influencing real GDP at 10% speaks volume. This means that the revenue generated from VAT, PPT, CIT and CED does not reflect significantly on economic growth due to those factors identified under sectoral analysis of VAT revenue.

To actually find out the root of VAT insignificance to the economic growth, it is pertinent to look at the modern view of economic growth. According to Harrod and Domer, the key factor in the process of economic growth is the generation of income on one hand and increase in production capacity on the other hand (that is, capital accumulation). The inability of VAT revenue to reflect significantly on economic growth can therefore be explained in two ways:

Firstly, the revenue generated yearly is too small to reflect on economic growth due to administrative problem of VAT as earlier explained in this study. Another factor that also complicated this problem is that of the huge informal economy estimated at close to 50 per cent of GDP by expert (the Tribune, 2013). Some companies are not registered and so to collect VAT from such companies is very difficult. Those that registered do not remit adequately and would not disclosed most of their VATable activities. These pose serious challenges to VAT revenue generation in Nigeria.

Secondly, Income generated from VAT together with other sources of income was not utilized efficiently and effectively to provide infrastructural facilities and social amenities that will help the various economic sectors to function well. Nigeria being rated the 8<sup>th</sup> most corrupt country is an irrefutable testimony that corruption and embezzlement still affect total revenue generated to reflect on the economy. Neglect and Poor funding of the real sectors of the economy, (especially, manufacturing and agricultural sectors), comatos power supply and mismanagement of public fund put the various sectors of the economy into mess. The sectoral analysis to VAT revenue in this chapter affirmed this.

The lag of Petroleum Profit Tax (PPT), Custom and Excise Duties (CED) and Value Added Tax (VAT) are insignificant in influencing current RGDP while the lag of RGDP is significant in influencing current RGDP at less than 5 percent. What the policy makers can deduced from this is that the revenue generated from VAT, CIT, CED and PPT last year cannot be used to predict the current year RGDP. Only the last year real GDP can be used to predict the current RGDP.

A value of (-0.260318) for the ECT coefficients suggests a very fast speed adjustment strategy of roughly 26.03% annually. This implies that it will take about 4years before convergence will be achieved. That is, whatsoever the short run disequilibrium, it will take about 4years for all the variables to converge (come together or be in equilibrium).

The probability of F-statistic, which is a measure of the overall significance of the regression, shows that the model is significant at less than 5 percent. Hence, it can be concluded that the result is significant overall. Thus, null hypothesis is accepted while the alternative hypothesis is rejected; this translates to mean that VAT has not contributed significantly to the Nigerian economic growth. However, its positive correlation indicates its potency to generate more income for economic growth in future if all loopholes mentioned in this research are plugged.

### **Granger Casualty Test (Analysis and Interpretation of Result)**

Granger Casualty Test also revealed that the relationship between VAT and real GDP is unidirectional. That is real GDP granger causes VAT revenue. This means that only historical variation of the explanatory variable (real GDP) can be used to predict or explain future variation in VAT value. It follows therefore that the performance of real GDP (economic growth) influences to a large extent VAT revenue

There is a lag period of four years. Many factors are responsible for it. Firstly, the ratio of VAT Revenue to real GDP was never stable. It was only 2.6% at the inception of VAT in 1994, rose drastically to 7.4% in 1995 and fluctuated to its peak (15.1%) in 1999 during the pre-millennium. The new millennium witnessed a continuous increase in the ratio up to 25.7% in 2001, reducing slightly to 25.1% in 2002 and continued to increase to its apex (79.9%) in 2012. Since the results revealed that there is positive relationship between VAT and Real GDP, Policy makers could deduce from these findings that in order to increase Real GDP (i.e. economic growth), they should put in place those policies that favour increase in VAT revenue. This is because an increase in VAT revenue signifies that more revenue is available for economic growth. Also, to increase VAT revenue, they should put in place those policies that favour increase in GDP, since real GDP granger causes VAT.

### **SUMMARY AND CONCLUSIONS**

This paper empirically investigated the impact of Value Added Tax (VAT) on Nigerian economic growth (represented by RGDP) from the time of its inception to 2012. This was done against the background that it was introduced by the Federal Government of Nigeria in 1993 to replace Sales Tax. The aim was to increase the revenue base of government and make funds available for developmental purposes that will accelerate economic growth. Time series data on the RGDP, VAT Revenue, Petroleum Profit Tax (PPT) Revenue, Companies Income Tax (CIT) revenue and revenue from Custom and Excise

Duties (CED) from 1994 to 2012 were sourced from CBN Statistical Bulletin, Annual Reports and Accounts of the Central Bank of Nigeria (CBN) and Collection Profile of the Federal Inland Revenue Service (FIRS).

From the sectoral analysis of VAT revenue, findings showed that government sector had the highest overall contribution of 24.9% to VAT revenue for the period under review. However it is not the major or real sector of the economy so its impact on economic growth is at minimum. Its performance was hindered majorly by corruption and embezzlement. Nigeria being rated 8<sup>th</sup> most corrupt country in the world is an irrefutable testimony. Oil and mining sector was the only leading productive sector of the economy that had the overall contribution of 24.74% to VAT revenue over the period, indicating government inability to diversify the economy but relied majorly on this sector. Being a mono-economy and Africa's highest producer of crude oil, the country still grapples with dysfunctional refinery, poverty and erratic power supply among other challenges, putting the Nigerian economy in double tragedy. The service sector taking the third position with 21.63% and having the highest contribution (27.32%) among the various sectors in year 2009, despite the prevailing economic meltdown during the year is indicating its potency to contribute more if government could provide necessary facilities. Manufacturing sector which is one of the major and inevitable sectors as far as economic growth is concerned; contributing 16.7% to VAT revenue is indicating its neglect over the years due to huge revenue from oil. The sector was bedeviled with poor infrastructural facilities, inadequate social amenities, lack of access to fund and the nation's comatose power supply sounded the death knell for the sector. Between years 2000 and 2011, 1,620 companies closed down due to the harsh operating environment while some relocated to other countries, complicating the problems of unemployment in which 54% of Nigerian youth were unemployed as at year 2012. This also accounts for high crime rate in Nigeria (e.g. suicide bombing by Boko Haram group). Another factor that also contributed to poor VAT revenue from this sector is that of the huge informal economy estimated at close to 50 percent of GDP by experts. Some companies are not registered and so to collect VAT from such companies is very difficult. Those that registered do not remit adequately and would not disclose most of their VATable activities. All these pose serious setback to the sector to contribute significantly.

Contribution to VAT revenue by the financial sector has not been impressive as it fluctuated between 3.82% and 6.89% over the period. This could be as a result of banks near death experience from a banking crisis that led to costly bailouts, mergers and the formation of a state bad bank, the Asset Management Corporation of Nigeria (AMCON). Also the contribution of commercial and trading sector and building and construction sector could not even go beyond 4.31% and 4.71% respectively over the period. Agric and plantation sector being the least contributor to VAT revenue depicted the fact that the sector had been neglected for so many years especially mechanized farming because of huge revenue from oil sector. Its annual contribution to VAT revenue was so ridiculous (not up to 0.3%)

The model of the study revealed that VAT impact on economic growth and that of other variables have not been significant as there are some problems inhibiting their potency. Although, VAT and CED have positive correlation with real GDP while reverse is the case of PPT and CIT on real GDP. VAT average ratio to RGDP stood at 45%. Both economic variables (VAT and real GDP) fluctuated greatly over the period though VAT Revenue was more stable. Unidirectional relationship exists between the real GDP and VAT Revenue, a lag period of four years exists indicating that any action taken on any of the variables will take 4 years to become effective.

From the modern view of economic growth, two major reasons for VAT insignificance were identified. Firstly, the revenue generated yearly is too small to reflect on economic growth due to administrative problem of VAT and the huge informal economy estimated at close to 50 per cent of GDP by expert (the Tribune, 2013). Some companies are not registered and so to collect VAT from such companies is very difficult. Those that registered do not remit adequately and would not disclosed most of their VATable activities. These pose serious challenges to VAT revenue generation in Nigeria. Its ratio to Federally Collected Revenue stood at 3.68%. Secondly, Income generated from VAT together with other sources of income was not utilized efficiently and effectively to provide infrastructural facilities and social amenities that will help the various economic sectors to function well. Nigeria being rated the 8<sup>th</sup> most corrupt country is an irrefutable testimony that corruption and embezzlement still affect total revenue generated to reflect on the economy. Neglect and Poor funding of the real sectors of the economy (especially, manufacturing and agricultural sectors), comatos power supply and mismanagement of public fund put the various sectors of the economy into mess. The sectoral analysis to VAT revenue in this research affirmed this. This paper therefore recommends that all identified administrative loopholes should be plugged for VAT Revenue to contribute significantly to economic growth of the country and all identified determinant factors of economic growth should be pursued to boost economic growth, the result of which will lead to increase in VAT revenue. This should be done on the realization that any action taken on either VAT Revenue or the GDP will take Four years to become effective.

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