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Research Article

Implications of Economic Recession for Value Added Tax revenue: A Case of Nigeria

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Abstract

Value Added Tax (VAT), a consumption tax was introduced in order to support other source of government revenue in balancing the budget. This study conducts a critical evaluation of the implications of VAT revenue on the economy proxied by Gross Domestic Product (GDP). To achieve this objective data was obtained from repository of the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), Federal Inland Revenue Service (FIRS) and other relevant agencies. Statistical trend analysis and bivariate correlation of VAT revenue with GDP was carried out using the Statistical Package for Social Sciences (SPSS) to evaluate the data. VAT revenue was highly positively correlated with GDP but not with Total Federally Collected (TFC) revenue due perhaps to its minuteness relative to TFC. With the level of GDP, indicative of consumption level, greater amount of VAT should be generated, but bedeviled by laxity in tax administration, corruption on the part of tax officers and taxpayers. It is imperative for the government to overhaul the VAT law, retrain tax officers, reevaluate database of tax agent and reactivate and improve tax enforcement mechanism.

Keywords: VATable, Recession, Underreporting, VAT efficiency.

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Introduction

Value added tax (VAT), a consumption tax, applies to the market value added to a product or material at each stage of its manufacture or distribution to final consumer. It was initially introduced in France in 1954; though first muted in 1918 by Wilhem Siemens of Germany (Okoye and Gbegi, (2013) in Nasiru, Haruna and Abdullahi, (2016)). VAT was introduced in Nigeria through Decree 102 of 1993 to replace the Sales Tax Decree No. 7 of 1986. Nasiru, Haruna, and Abdullahi. (2016) stated further that many country of the world have adopted VAT as a means of financing the government since then.

Revenue from VAT is comprised in the TFC revenue, an important tool of government's fiscal policy. The importance of VAT includes the fact that its net is wider than that of direct taxes because all individuals that consume and/or enjoy VATable product and services pays VAT. The result of the study by Onwuchekwa and Aruwa, (2014) shows that VAT contribute significantly to the total tax revenue of government and by extension the economic growth of Nigeria.

Nigeria was affected by the global crash in oil prices, especially because of its mono-product exporting country status and therefore the need for additional source of revenue of which VAT comes very handy.

Direct taxes are prone to evasion more than indirect taxes of which VAT is one and as well can improve tax compliance, therefore it will be more beneficial for any government to emphasise the use of indirect taxes than direct taxes. As stated in FIRS Information Circular no 9304 of 1993, VAT is relatively easy to administer and relatively difficult to evade. In the view of Weller and Rao (2008), countries may look towards the implementation of consumption taxes such as VAT in order to overcome the constraint of ineffective tax collection bedeviling other type of taxes.

Ugochukwu and Azubike (2016) stated that through VAT, the government can control the production and consumption of certain goods and services, control adverse economic conditions, inflationary rates; help sharpen the economy and curb the level of unemployment.

However, taxation revenue is expected to dwindle during economic downturn while the government, as a duty, is expected to stabilise the economy. To the economist recessions generally occur when there is a wide spread drop in spending (an adverse demand shock) and VAT revenue is dependent on spending, it can be inferred that VAT revenue should reduce in the event of recession because demand for goods and services will as well reduce. This vicious circle is one of the reasons for this paper aiming at evaluating the extent to which the recent economic recession affected VAT revenue generation, TFC revenue and Nigeria economic growth in general.

Review of Previous Relevant Study

National Bureau of Economic Research (NBER) describe recession as 'a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production and wholesale-retail sales. Nigerian economic recession became visible in late 2014 but was officially declared by the minister for finance in September, 2016 (The Sun Online, 14/09/17). The economy has been fraught with antecedent signal of recession long before its official declaration. This is because unemployment has being on the rise while many companies have divested from the economy (such companies includes Michelin, Cadbury, Dunlop, etc). Dike (2009) stated that the Federal Government acknowledged that about 80 per cent of Nigerian youth is unemployed and 10 per cent underemployed (*Daily Trust*, 26/11/08). Nonoil tax revenue is believed to be one of the effective means of mobilising a nation's internal resources and as well engenders conducive environment for economic growth (Ayuba, 2014). Generally, federally generated revenue from oil and nonoil are utilised in funding expenditure incurred in providing the necessary infrastructure for the growth of the economy. Real income and profitability wanes if not totally wiped out during recession, this in turn reduces taxation revenue accruing to the various relevant tax authorities.

Even without recession, taxation, from several studies, has been confirmed to be negatively correlated with GDP; most especially direct taxes (Forbin 2011; Macek 2014; Umoru and Anyiwe 2014; Nwadialor & Ekezie 2016). It was discovered that VAT positively correlation with GDP.

Most studies evaluating the relationship of VAT revenue to GDP or economic growth concluded that it has positive correlation with GDP (Adegbie, Jayeoba, and Kwabai 2016; Nasiru, Haruna, and Abdullahi 2016; Ehigiamusoe and Lean 2015; Ofishe 2015; Onwuchekwa and Aruwa 2014; Chigbu and Ali 2014; Izedonmi and Okunbor 2014; Umeora 2013).

The study by Adegbie, Jayeoba, and Kwabai (2016) which evaluate the impact of VAT on Nigerian economy from the date it was introduced to 2015 ascertain its imperativeness for reform. They stated that Nigeria VAT rate of 5% is lowest among African countries in which the tax system is being operated. They therefore suggested an upward review and as well intensify appropriate and timely remittance of collection and its proper utilisation.

Nasiru, Haruna, and Abdullahi (2016), in their study investigating the impact of VAT and GDP in Nigeria from the inception of VAT in 1994 to 2014 discovered that VAT has positive and statistically significant long run relationship with GDP. They concluded that VAT has the potentials to assist government in its revenue diversification policy from other type of revenue. They advised that government should plug administrative loopholes bedeviling successful implementation of the VAT taxation system.

Ehigiamusoe and Lean (2015) evaluated the cointegration and causal relationships between VAT and economic development in Nigeria. The Autoregressive Distributed Lagged (ARDL) was employed in their analysis and concluded that a long-run cointegration relationship existed between the two variables.

However, the causal relationship between VAT and economic development examined by Ehigiamusoe and Lean (2015) was found to be unidirectional.

The results of the study by Chigbu and Ali (2014) showed absence of both long-run and short-run relationship between VAT and economic growth. The correlation that existed between VAT revenue and GDP from the study by Izedonmi and Okunbor (2014) was insignificant**.**

However, the correlation between VAT and GDP was negative from the study conducted by Ugochukwu and Azubike (2016) titled "Value added tax and economic development in Nigeria".

Carlson and Patrick (1998) in Adegbie, Jayeoba, and Kwarbai, (2016) adjudged consumption tax (including VAT) as regressive. This, they stated was because taxpayers in low and high income bracket are subjected to the same VAT rate. This in turn reduces quantity of goods and services consumed by individual taxpayer. VAT revenue accruing to the government will increase as rate of consumption increases. With VAT the fraction of taxpayer's income that goes into consumption becomes higher without a proportionate increase in the quantity of goods and services enjoyed. A cutback in taxpayers spending will affect demand and in turn affect output. The reduction in output will also affect the economy because manufacturers will introduce survival strategies by cutting back on the administrative costs or reduction in activities levels.

Although the outcome of study conducted by many researchers showed that VAT has positive correlation with GDP none of them evaluate the implications of economic crises on VAT revenue. GDP is the monetary value of all the finished goods and services produced within a country's borders in a specific time period and VAT revenue is dependent on the level of demand of these goods and services. In recession times supply of goods and services may drop due to reduction in the level of activities of the various sector of the economy. So also businesses will cease to expand, level of activities will shrinks resulting in deteriorating GDP and rise in unemployment rate. In the definition of recession by Garner (2009) in Akpan (2017) recession period is characterized with a sharp slowdown in economic activity, declining employment and decrease in investment and consumer spending hence the likelihood of a drastic decline in VAT revenue. In addition, finance for government expenditure dwindles with the crash in oil prices and reduction in quantity demanded.

These reasons coupled with increase in the need to fight existing and emerging security challenges in the country escalated cost of government financing hence the need to source for additional revenue sources. One of these sources is VAT, which contributes albeit in small measure, serves as a succor in times of dwindling revenue brought about by the recent economic recession. None of the past studies on VAT revenue reviewed in this study examines it in relation to situations of economic downturn.

This reason formed the premise of this study with the aim of ascertaining the extent to which the recent economic downturn in Nigeria affected VAT revenue generation and as well confirm its correlation with the country's GDP.

Objective of the Study

It is intended in this study to contribute to empirical studies on VAT in relation to government revenue and economic development.

The study also aimed at examining the revenue performance of VAT in relation to the total federally generated revenue of the country.

Statement of the Problem
Studies abound on the evaluation of relationships of VAT revenue and economic development. However, studies have not examined the performance of VAT revenue in times of economic crises. This study will critically examine the extent to which the recent economic crisis affected VAT revenue (if it does) and as well relate it to the country's economic development.

Hypothesis
H_1: Economic recession negatively impacted on VAT revenue.
H_1: There is significant relationship between VAT revenue and the country's economic development.

Methodology

Data for this study were majorly secondary and obtained from publications of CBN, NBS, Ministry of Finance and FIRS. In ascertaining the performance of VAT revenue during the recession period, trend analysis was carried out in the pre- and post-crisis period. The evaluation period was set at ten years (2008 to 2017) in order to have a pre-recession period of five years for comparison purposes. In order to confirm the relationship of VAT revenue performance during the crisis period with TFC revenue and economic development, correlation test was conducted with SPSS.

Data Analysis of VAT revenue Movement in Recession Times
The amount of revenue derived from a tax system and the cost incurred in raising the revenue will not be an appropriate basis of assessing the policy's efficiency and fairness. Though, the premise for the introduction of VAT in Nigeria was majorly to increase the government revenue base. One of the canons of taxation expected of a good tax system is being economical; VAT has been adjudged to fulfill this and other principles. Prevailing economic, political and other environmental factors will affect the success of any taxation system therefore; these other factors should be factored in.

This section of the study examines the extent to which the recent economic crisis in Nigeria affected VAT revenue and as well evaluated its impact on the country's total revenue and economic development in general.

The movement in VAT revenue during the recent economic recession as stated in the Table 1 revealed that there has not been steady but fluctuating growth rate between 2008 and 2013 with 15.8% in 2008 increasing to 20.2% in 2009 but nosedived to 15.4%, 09.4% and 12% in 2011, 2012 and 2013 respectively. The growth rate was in the negative in years 2014 and 2015 at -0.05% and -02.1% respectively. These years 2012 and 2013 were the onset of the economic recession while 2014 and 2015 was the full blown recession period. The growth rate picked up again by increasing from -2.1% in 2015 to 4.14% in 2016 and astronomically increased to 19.3% in 2017.

Table 1: Growth in Value Added Tax Revenue

Year	VAT (₦ '000)	Annual Growth (₦ '000)	(%)Growth
2008	404,500.00	-	-
2009	468,400.00	63,900.00	15.80
2010	562,900.00	94,500.00	20.18
2011	649,500.00	86,600.00	15.38
2012	710,200.00	60,700.00	09.35
2013	795,610.00	85,410.00	12.03
2014	795,220.00	-390.00	-0.05
2015	778,730.00	-16,490.00	-02.07
2016	811,000.00	32,270.00	04.14
2017	967,660.00	156,660.00	19.32

Source: Author's computation

VAT revenue during the years of this study was further evaluated by relating it to the country's total revenue and GDP. The highest percentage was in 2016 at 14.28% and lowest in 2011 and 2012 with 4.02% and 4.48% respectively. These two years were identified earlier as the onset years of economic downturn in Nigeria.

When VAT performance was evaluated by comparing it with GDP, the highest percentages were from 2008 to 2010 with 1.7%, 1.89% and 1.01% respectively. The percentages of VAT revenue to GDP were less than 1% from 2011 to 2017.

The impact of VAT revenue on TFC revenue and GDP were not robust enough as expected i.e. to shore up government revenue as succour to lost revenue (from evasion and avoidance) prevalent with direct taxes and widening of tax net.

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Table 2: Percentage of VAT Revenue to Total Revenue and GDP

YEARS	VAT/TOTAL REV	VAT/GDP
2008	5.14	1.66
2009	9.67	1.89
2010	7.71	1.01
2011	4.02	0.70
2012	4.48	0.66
2013	8.22	0.99
2014	7.97	0.89
2015	11.26	0.82
2016	14.28	0.79
2017	13.17	0.84

Source: Author's computation

The performance of VAT revenue in the years under study is as well illustrated in the Figure 1.

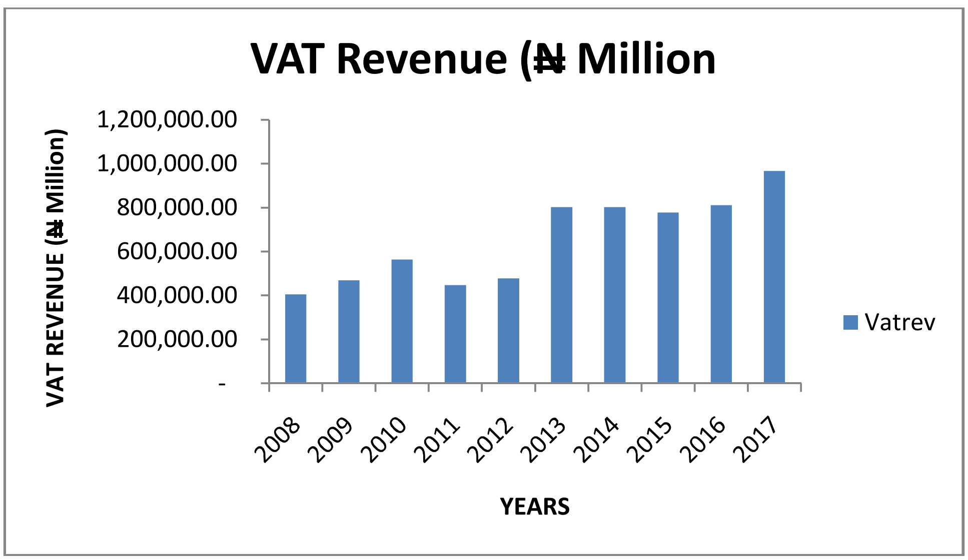

Figure 1: VAT Revenue

However, when graphically illustrated (Figure 2 and 3) along VAT revenue with TFC revenue and GDP, it depicts an insignificant contribution. This performance is linked to the inefficiencies in the administration of the taxation system and perhaps low VAT rate. Since increase in VAT rate can escalate poverty level, a differential rate can be consider which according to Proshare (2016) is being practiced in Egypt where VAT on standard goods and services is 10%; and 25% on luxury items; and exports attracts 0%.They stated further that VAT rate in Kenya is between 12% and 16% and in India VAT rate of 5.5% being lowest and highest at 14.5% as differential rate on perhaps Giffen goods and luxury items respectively.

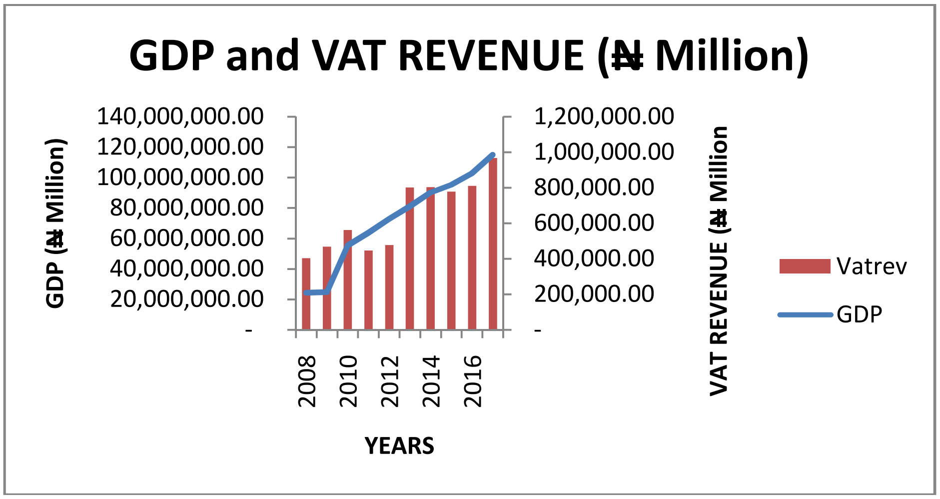

Figure 2: VAT Revenue and GDP

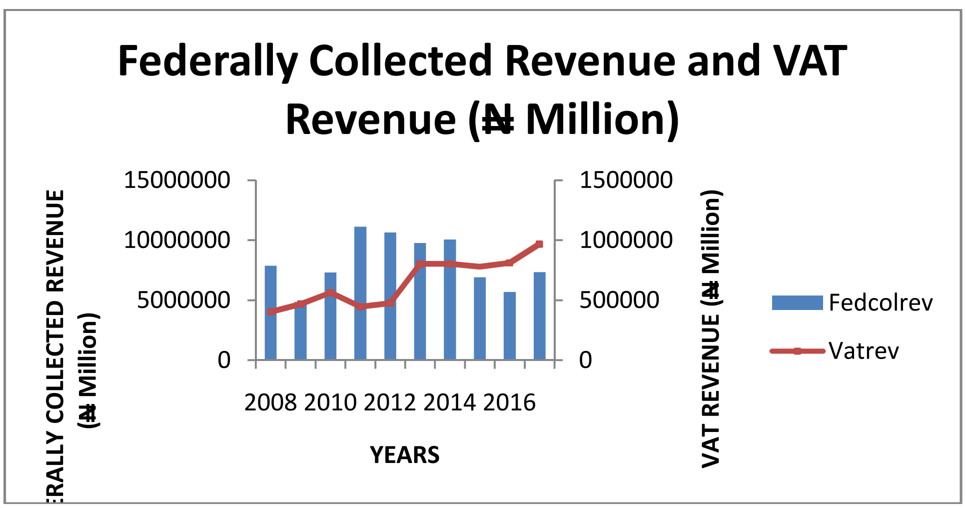

Figure 3: VAT Revenue and Federally Collected Revenue

An increase in VAT rate will be disastrous to cost of living as according to Proshare (2016), Nigeria has the highest poverty rate in the world as such VAT would be a huge burden on the average Nigerian. They stated further that Nigeria is among countries with unequal income distribution. It is believed that an increase in VAT rate will shrink the purchasing power of the already impoverished Nigerian income earner.

Table 3: Quarterly Growth in VAT Revenue in 2014, 2015 and 2016

Years	**2013**	**2014**				**2015**				**2016**
Quarters	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**
VAT (₦ 'bn)	222.0	213.80	194.15	193.39	192.88	195.66	203.18	202.11	177.78	196.57
Growth (%)	-	-03.69	-09.19	-0.39	-0.26	01.44	03.84	-0.53	-12.04	10.57

Source: Author's computation

Further analysis by quarters of fourth quarter of 2013 to first quarter of 2016 (Table 3 above), being purported period of economic recession, revealed that there was negative growth in VAT revenue in all the quarters starting with the first quarter of 2014 at -03.69%. The incessant negative growth changed to positive in the first and second quarters of 2015 at 1.44% and 3.84% respectively. However this positive growth was not sustained in the third and fourth quarters of 2015 because there was negative (i.e. -0.53%) growth in quarter three and highest at -12.04% in quarter four. Positive growth was not experienced until the first quarter of 2016.

Table 4: Correlation of VAT with Total revenue and GDP (N = 10)

	GDP	VATREV	TOTALREV	VATREV
GDP/TOTALREV Pearson Correlation Sig. (2-tailed)	1	.879 .001	1	-.146 .688

The outcome of the bivariate correlation of VAT revenue with TFC revenue and GDP (Table 4) revealed that the correlation of VAT revenue with GDP at 0.001 is statistically significant while this is not so with TFC because the significance level is greater than 0.05. This outcome corroborates the hypothesis that VAT revenue has significant relationship with GDP but confirmed that VAT revenue has weak relationship with TFC. With r = .897 for GDP and r = -0.146 for TFC revenue, the relationship of VAT revenue with GDP is strong while the relationship with TFC is very weak.

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Conclusion and Recommendation

VAT was introduced in an attempt to shoring up government finance, to widen tax net and in all to reduce the level of tax evasion and avoidance prevalent in direct taxes. The outcome of this study has confirmed the fact that the tax system will help to improve the economy via the GDP. The outcome has revealed that increase in VAT revenue will positively improve GDP and the economy in general.

The recent recession, as observed from the trend analysis, negatively affected VAT revenue because the growth rate was negative at -03.69% in the fourth quarter of 2013; and continued until the fourth quarter of 2016 at -0.53% (Table 3).

Amount of taxation revenue that can be generated will be dependent on the efficiency and effectiveness of tax administration; availability of information on the appropriate VAT agents; dedication and loyalty of tax officers. Other factors are existence of defect in VAT law; underreporting and weak enforcement of tax law.

With the level of GDP which depict high level of consumption and in essence the amount of VAT revenue derivable should be more than what is presently been reported. An examination of productivity of VAT revenue will reveal that there is inefficiency in the administration of tax law. Tax evasion due to corruption resulting from underreporting of tax due, low level of taxpayer compliance and inefficient tax officers are the bane of low VAT revenue.

It is therefore imperative for the government to overhaul VAT law; retrain tax officers at improving their performance and dedication to duty, reevaluate the VAT agent records in order to reduce corruption in the taxation system. The enforcement mechanism should as well be strengthened in order to improve administrative efficiency and capability which in turn can reduce underreporting and improve taxpayer compliance.

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GDP at Current Market price, Total Federally Collected Revenue and VAT Revenue Between 2008 and 2017

YEARS	GDP @ Current Market Prices ₦ 'Million	Total Federal Revenue ₦ 'Million	VAT Revenue ₦ 'Million
2008	24,296,329.30	7,866,600.00	404,500.00
2009	24,794,238.70	4,844,600.00	468,400.00
2010	55,469,350.31	7,303,700.00	562,900.00
2011	63,713,359.39	11,116,900.00	446,598.94
2012	72,599,629.97	10,654,750.00	477,412.20
2013	81,009,964.61	9,759,790.00	802,683.50
2014	90,136,984.65	10,068,850.00	802,964.60
2015	95,177,735.68	6,912,500.00	778,230.00
2016	102,684,407.96	5,677,950.00	811,000.00
2017	114,906,663.52	7,349.290.00	967,660.00