

VALUE ADDED TAX AND ECONOMIC GROWTH IN NIGERIA

John Chika Onwuchekwa

Department of Accounting,
Rhema University, Aba, Abia State, Nigeria

Suleiman A.S. Aruwa, PhD

Department of Accounting,
Nasarawa State University, Keffi

ABSTRACT: *Value added tax (VAT) is a consumption tax, levied at each stage of the consumption chain and borne by the final consumer of the product or service. The administration of VAT is relatively easy, unselective and difficult to evade. The study investigated the impact of value added tax on the economic growth of Nigeria. Ordinary Least Square technique was employed to test the hypotheses formulated. The result shows that VAT contributes significantly to the total tax revenue of government and by extension the economic growth of Nigeria. VAT revenue growth had consistent increase though it was not that explosive. To boost tax revenue we need to boost revenue collected from VAT. This can be achieved not necessarily by increasing the VAT rate of 5% percent but by closing every VAT revenue leakage, sensitizing the managers of companies operating in Nigeria on the need to remit the VAT revenue collection and proper training of the Federal Inland Revenue staff in charge of VAT revenue collection.*

KEYWORDS: VAT System, Economic growth, VAT Revenue, VAT Target

INTRODUCTION

Value added tax (VAT) is a consumption tax, levied at each stage of the consumption chain and borne by the final consumer of the product or service. The administration of VAT is relatively easy, unselective and difficult to evade. Countries all over the world, look for ways to boost their revenue, this facilitated many nations to introduce value added tax on goods and services. For instance in Africa, VAT has been introduced in Benin Republic, Cote d'Ivoire, Guinea, Kenya, Madagascar, Mauritius, Senegal, Togo, Nigeria. Evidence suggests that in these countries VAT has become an important contributor to government revenue (Ajakaiye, 2000; Shalizi and Square, 1988; Adereti, Adesina and Sanni, 2011). Nigeria introduced VAT in 1993; however its full implementation began on 1st January, 1994. This has attracted the attention of researchers and academia on its benefit in the economic growth of Nigeria. Economic growth as measured the increase in the national income or total volume of production of goods and services of a country accompanied by improvements in the total standard of living of the people (Chinwuba and Amos, 2011 as cited in Ihendinihu and Onwuchekwa, 2012). Related works on this topic focused on the impact of VAT on economic growth, measured with GDP. Our object here is to

investigate the growth pattern of VAT on GDP, the effect of the changes in VAT target and VAT actual on the economy, and also the impact of VAT revenue on Tax revenue.

Accordingly the study is organized thus: following our introduction section two looks at the findings of related literatures while section three discusses the data, the model and the variables employed in our study, Section four provides the result of our empirical analysis and section five is on conclusion

REVIEW OF RELATED LITERATURES

Theoretical framework

Theory on the institution of value added tax (VAT) is traced to the writings of Wilhelm Von Siemens, who proposed it as an alternative to the German turnover tax. The development of these proposals into prologue in a country is credited to Maurice Faure and Carl Shoup who were responsible with the introduction in France in 1954 of the Taxe sur la Valeur Ajoutee (Smith., Islam, and Moniruzzaman, 2011). From its inception, VAT was imposed on all sectors of France-the first country to use this system. Once instituted it was immediately clear that revenues collected from the VAT system constituted a substantial share of the government revenue in the French economy. Due to the ease of payment and ready comprehensibility, countries across the world have introduced some form of VAT.

Conceptual Framework

Tax is a compulsory payment made by all concerned to the government of a country from which essential services are rendered, without necessarily offering an explanation on how the money generated was spent or equating the services with the money collected. Anyanwu (1997) defined tax ``as a compulsory levy by the government on individuals, companies, goods and services to raise revenue for its operations and to promote social equity through the redistribution of income effect of taxation``. Value added tax is an indirect tax in which a sum of money is levied at a particular stage in the sale of a product or service. Olatunji (2009) explain that the walk towards VAT system in Nigeria started with acceptance of the recommendation of a study group on indirect taxation in November, 1991. The decision to accept the recommendation was made public in the 1992 budget speech of the Head of State. This resulted in setting up the Modified Value-Added Tax (MVAT) committee on 1st June, 1992 as recommended by the study group. The recommendation of the committee that VAT should be administered by an independent commission was rejected by the government. Tax administration was nonetheless given to federal Inland Revenue Services, which was already charged with the responsibility of administering most other taxes in Nigeria. The introduction of VAT in Nigeria through Decree 102 of 1993 marks the phasing out for the Sales Tax Decree No. 7 of 1986.

Value Added Tax and Economic Growth

Michael and Ben (2007) explore the causes and consequences of the spread of value added tax (VAT). A panel study of 143 countries for 25 years were observed. The result shows that VAT has a significant but mixed impact. This implies that while some countries would have gained revenue from the adoption of VAT, others would not. Collectively, the adoption of VAT had a long run increase in overall revenue to GDP ratio of about 4.5 percent. However, allowing the

impact of VAT to vary with country specifics will shift the effect to become negative though acting in the opposite direction are gains that tend to be greater in higher income and in more open economies. Denis, (2010), investigated the relationship between Value Added Tax (VAT) and Gross Domestic Product (GDP) in Nigeria. The study finds that VAT is not effective as revenue earner; this implies that significant parts of GDP which represent aggregate national income as well as aggregate national expenditure are not collected as tax. In Pakistan, Saeed, Ahmad, and Zaman, (2012) analyze the revenue effect of the value added tax (VAT), in the SAARC region. Panel data of SAARC countries from 1995 to 2010 on various macroeconomic factors were obtained to determine the effect of VAT on revenue ratio. The results indicate prosperous set of determinants of VAT adoption as it proves to be a vital instrument to collect tax and enhance revenue ratio. The result shows that most of the SAARC countries that adopted value added tax have gained a more effective tax instrument to upgrade their GDP to revenue ratio. In the same vein, Zaman, Okasha, and Iqbal, (2012) examine the impact of value added tax in Pakistan's economy. Using household survey data to grasp the effect of value added tax on, social and economic life of the populace. Results show that VAT would disturb economic order of the society. Sali and Chabaan (2010) studied the effect of increasing rate of VAT by targeting poverty and inequality. An empirical model based on consumer theory of demand was established to study the impact. Simulation results showed that increased rate of VAT would have negative significant impact on poverty. Although the increased rate would have a negative impact on overall consumption, yet its effect on poor is greater compared to the rich. Nellor (1987) looked at whether the ratio of government revenue to GDP rises steadily after implementation of VAT in 11 European countries. Nellor, concluded that the implementation of the VAT instantly increased tax ratio, which then continues growing at the higher level.

Smith, Islam, and Moniruzzaman, (2011) attempt to analysis the contribution and performance of VAT in Bangladesh compared to other developing countries. The result shows that the performance of VAT was quite satisfactory in the initial years; afterwards, VAT collection remained stagnant at a certain level. The study finds that the stagnation happened as a result of: relatively small number of VAT tax-payers, a general lack of awareness, and a weak monitoring system. Samimi, and Abdolahi, (2011) Scan the impact of implementing Value Added Tax on Export of goods and services in selected countries. Four different indices for export; export of goods and services, export of goods and services (BOP), export of goods and services (annual % growth), export of goods and services (% of GDP) to investigate the sensitivity to different definitions. Findings of the study based on Mean Difference Statistical Test in a two three-year periods before and after introduction of VAT show that, in different indices, the impact of VAT on export is positive.

In Luthuanian, Bikas and Rashkauskas (2011) looked at the impact of VAT standard tariff, reduced tariffs and shadow economy on income from this tax. The Lithuanian VAT structure, the dynamics of income from this tax and amendments in the Law on Value Added Tax in terms of narrowing and widening the taxable base according to the theoretical analysis of the sources were analyzed using multiple regression, correlation, and optimization and C-effectiveness ratio analysis. The analysis revealed that, the amendments in the Law on Value Added Tax in terms of narrowing and widening the taxable base has influenced the amount of income from VAT

collected to the budget. Adereti, Sanni, and Adesina (2011) studied the contribution of VAT to GDP in Nigeria. Their findings show that VAT revenue to total tax revenue averaged 12.4% which they considered low compared to other African countries such as Ivory Coast, Kenya and Senegal that had 30%. The study also observed a positive and significant correlation between VAT and GDP. McGowans and Billings (1997) studied the growth pattern of VAT in European Union (EU) countries to ascertain whether the implementation of VAT has led to an increase in the overall tax burden. Using Ordinary Least Square (OLS) and Seemingly Unrelated Regression (SUR). They found that VAT has often been disapproved as it is said to be a money machine for government and a regressive tax. The results however, show that VAT can be put into practice without becoming money machines for government. They submit that EU countries used VAT to substitute a number of indirect taxes and not to boost overall tax burden.

Objective of the Study

The general objective of the study is to investigate the impact of VAT on the economic growth of Nigeria. However the specific objectives are:

1. To observe the growth pattern of VAT revenue and GDP
2. To investigate the relationship between the changes of VAT revenue on the economic growth of Nigeria
3. To examine VAT revenue on tax revenue

Hypotheses Formulation

H1: There is no significant relationship between the changes in VAT revenue and the economic growth of Nigeria

H2: VAT revenue has no significant impact on Tax revenue in Nigeria

METHODOLOGY

The study employed a time series data covering a period of 1994 – 2011, data are obtained from the Central Bank of Nigeria statistical bulletin, the Federal Inland Revenue Service, Nigerian bureau of statistics and the authors' computations.

Model Specification

The models for this study are specified as follows:

$$GDP = X_0 + X_1 CVTR + e_t \dots\dots\dots 1$$

Where GDP = Gross Domestic Product, $\Delta VTVA$ = Changes in VAT Revenue, e_t = error term

$$TAXR = X_0 + X_1 VATR + e_t \dots\dots\dots 2$$

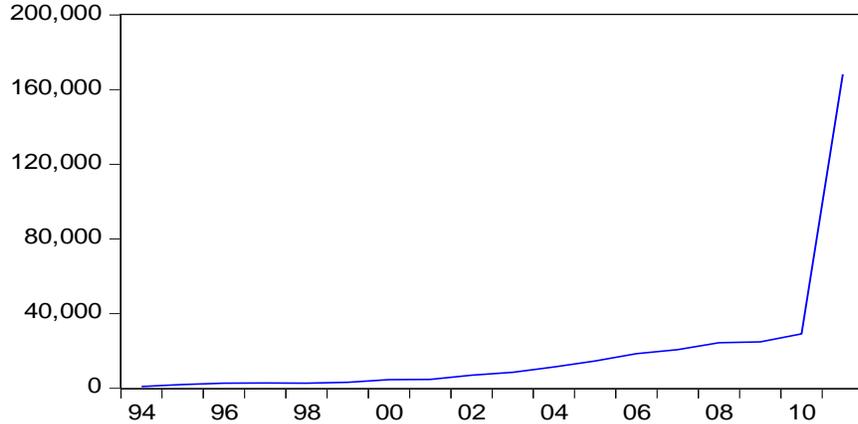
Where TAXR = Tax Revenue, VATR = VAT Revenue, e_t = Error Term

PRESENTATION AND ANALYSIS OF RESULTS

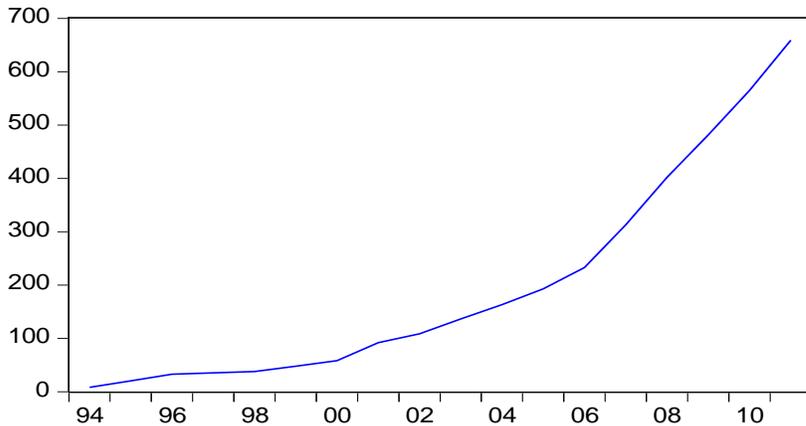
This section contains the presentation, analysis and interpretation of the data collected for this research work. Consequently, it entails the application of statistical techniques to provide the basis for the testing of the research hypotheses.

The growth pattern of VAT and GDP

GDP



VTR



GDP - from 1994 the growth pattern was oscillating however the growth was explosive between 2010 and 2011 as can be seen in the graph.

VTR – a growth increase was also observed for VTR but was not as explosive as that of the GDP though increasing within the time period.

H1; there is no significant relationship between the changes in VATR and the economic growth of Nigeria

Table 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19235.05	8219.067	2.340296	0.0326
CVATR	304.5529	145.1439	2.098283	0.0521
R-Squared	0.21			
Adjusted	0.16			
Durbin Wartson Stat	1.30			
F-statistic	4.400			
Prob.(F-Statistic)	0.051			

Source: Researchers computation of data from field survey using Eviews 7.

In Table 1 above, the R-square and co-efficient of determination of 0.21 indicates that about 21% of the systematic variations in the dependent variable (GDP) has been explained by the changes in VAT revenue (VATR). The adjusted R-squared shows that after adjusting for the degree of freedom the model could explain about 16% of the systematic variations in GDP which is low for forecasting. On the basis of the overall statistical significance of the model as indicated by the F-statistic, we observe that the model was statistically significant since the calculated F-value of 4.40 is greater than the critical F-value. It was observed that changes in vat revenue have a marginal significant impact on GDP as indicated by the p-value of 0.05. Therefore we reject the null hypothesis and declare that there is significant relationship between the variance of VAT target and VAT budgeted on economic growth

H2: VAT revenue has no significant impact on tax revenue in Nigeria

Table 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.302185	125.6147	-0.034249	0.9731
VTR	6.172294	0.448654	13.75735	0.0000
R-Squared	0.92			
Adjusted	0.91			
Durbin Watson Stat	1.80			
F-statistic	189.26			
Prob.(F-Statistic)	0.0000			

Source: Researchers computation of data from field survey using Eviews 7.

Table 2, Tax revenue (TXR) = $-4.30 + 6.17 \text{ VTR}$. The co-efficient of 6.17 suggests that a unit increase in VAT revenue will increase tax revenue by 6.17 units. The R-square and co-efficient of determination of 0.922 indicates that about 92% of the systematic variations in the dependent variable (TXR) has been explained by the explanatory variable (VTR). The adjusted R-squared stood at 91%, only about 8% of the systematic variation of TXR was left unaccounted for by the model hence captured by stochastic disturbance term in the model. This indicates a good fit of the regression line and also the model has a high degree of forecasting power. We observed VAT revenue has a significant impact on tax revenue in Nigeria as shown by the p-value of 0.00. Consequently we reject the null hypothesis and assert VAT revenue has a significant impact on tax revenue in Nigeria.

CONCLUSION AND RECOMMENDATION

Countries all over the world, look for ways to boost their revenue, this facilitated many nations to introduce value added tax on goods and services. We examined the effect of value added tax on the economic growth of Nigeria. The result shows that VAT contributes significantly to the total tax revenue of government and by extension the economic growth of Nigeria. The growth pattern of GDP from 1994 (the year of inception) to 2009 was oscillating. It increased geometrically between 2010 and 2011. VAT revenue growth had consistent increase though the growth was not as explosive as that of the GDP. To boost tax revenue we need to boost revenue collected from VAT. This can be achieved not necessarily by increasing the VAT rate of 5% percent but by closing every VAT revenue leakage, sensitizing the managers of companies operating in Nigeria

on the need to remit the VAT revenue collection and proper training of the Federal Inland Revenue staff in charge of VAT revenue collection.

REFERENCES

- Adereti, S.A., Sanni M.R. & Adesina J.A. (2011). Value Added Tax and economic Growth of Nigeria. *European Journal of Humanities and Social Science*. 10(1), 456-471.
- Anyanwu, J. C. (1997). *Nigeria Public Finance*. Onitsha, Joance Education Publishers.
- Ajakaiye D. Olu and Odusola A. F. (1996) "Price Effects of Value Added Tax in Nigeria" *Policy Analysis Series*, 2(2), 48-68
- Bikas, E. & Rashkauskas., J. (2011). Value Added Tax Dimension: The Case of Lithuania. *Ekonomika*, 90(1)
- Denis, B. (2010). Investigating the Relationship Between VAT and GDP in Nigerian Economy. *Journal of Management and Corporate Governance*, 2
- Ihendinihu, J.U. and Onwuchekwa, J.C. (2012) Stock Market Performance and Economic Growth in Nigeria (1984 - 2011), *Journal of Emerging Trends in Economics and Management Sciences*, 3(6), 971- 977.
- McGowan, J and Billings, B. A. (1997). "An Analysis of the European Community VAT: Implications for U.S. Tax Policy". *Journal of International Accounting Auditing & Taxation*, 6(2), I - 148.
- Michael., K and Ben, L (2007) "The Value-Added Tax: Its Causes and Consequences" *IMF, Working Paper 183*.
- Nellor, D. (1987). "The effect of value-added tax on the tax ratio", *IMF Working Paper*,87(47), 1-28.
- Olatunji, C.O. (2009). A Review of Value Added Tax (VAT). *International Business Management* 3(4) 61-68
- Saeed., A., Ahmad ., and Zaman., K(2012) Validity of the Value Added Tax in the SAARC Region. *The Romanian Economic Journal*, 143- 170
- Salti, N. and Chaaban, J. (2010). "The Poverty And Equity Implications Of A Rise In The Value Added Tax: A Microeconomic Simulation For Lebanon". *Journal of Economic Literature classification*, 1-30
- Smith, A. M C., Islam, A., and Moniruzzaman, M (2011) Consumption Taxes in Developing Countries – The Case of the Bangladesh VAT. *IMF Working Paper*, 82. <http://hdl.handle.net/10063/2167>
- Samimi, A. J., and Abdolahi, M. (2011). Value Added Tax & Export: the Case of Selected Countries around the World. *Journal of Economics and Behavioural Studies* 2(6), 298-305
- Soyode L. and Kajola S.O. (2006) *Taxation Principles and Practice in Nigeria*. Lagos, Silicon Company
- Shalizi, Z and Squire, L. (1988). Consumption Taxes in Sub-Africa: Building on Existing Instruments. In M. Gillis, C.S Shour and Sicat, G.P, eds, *Value And Taxation in Developing Countries*, Washington, D.C, The World Bank, Washington D.C.
- Zaman, Q, Okasha, and Iqbal, M (2012). Value Added Tax-Theoretical Aspects and Empirical Evidence for Pakistan. *Journal of Managerial Sciences*, 44 (1).