# An Evaluation of the Contribution of Value Added Tax (Vat) To Resource Mobilization in Nigeria

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## ABSTRACT

Taxation as an instrument of fiscal policy has been a source of revenue to nations. This work sets to evaluate the contributions of Value Added Tax (VAT) to resource mobilization in Nigeria. The Ordinary Least Square (OLS) method of simple regression analysis was employed to determine the relationships between VAT and Real Gross Domestic Product (RGDP), VAT and Current Revenue (CREV), VAT and Internal Revenue (INREV); also the impact of VAT on RGDP, CREV and INREV. The general conclusion is that the VAT is an ideal form of taxation in Nigerian tax system and has significantly contributed to resource mobilization as well as capital formation to the economy. The recommendation is that all that are involve (both payer and administrator) should be adequately motivated to enable each in his/her own sphere perform well to ensure higher levels of efficiency and effectiveness. **Key words:** Revenue, Taxation, Resource mobilization, Sales tax, Capital formation, Consumption.

#### 1.0 Introduction

Taxation is the primary source of revenue to the government. It is a compulsory levy on economic agents of an economy by the government without any "quid-pro-quo". Though tax has been defined differently by various authors but the primary aim of any tax system is to raise funds in the public sector for use in promoting government programmes. In some instances, however, a tax may exit primarily, or at least very importantly, for regulatory purposes.

Traditionally, taxes are classified into direct and indirect taxes. Direct taxes are those type of taxes in which its liability is determined with direct reference to the tax paying ability of the taxpayer like, "personal income tax, company income tax, petroleum profit tax, capital transfer tax, capital gains tax, inheritance tax, wealth tax", etc; while in the case of indirect taxes such an ability to pay is assessed indirectly. Examples of indirect taxes in Nigeria include entertainment tax, and the subject of this study: Value Added Tax (VAT), which replaced the sales tax.

Value Added Tax (VAT) is an indirect tax levied on goods and/or services as a percentage of their value added. The consumer pays VAT on purchases in addition to the normal prices; the seller then pays the government the value of the VAT collected on sales less VAT they have paid on purchases inputs.

VAT is levied in many countries. It was introduced in the United Kingdom in 1973. It is a kind of tax on the supply of goods and services, and it is borne by the final consumer but collected at each stage of the production and distribution chain. Originated from the treaty of Rome signed by the European Union countries in the late 1960's. VAT is today practiced in more than sixty other countries cutting across Europe, Latin America, Asia, and Africa including Nigeria. Most of these countries just like Nigeria switched from sales tax to VAT as a major form of collecting revenue (tax) on consumption.

Interestingly, it was first introduced in Nigeria on the 1<sup>st</sup> of January 1994 under Decree 102 of 1993 within the days of General Sani Abacha as the Military Head of State. VAT is a replacement of the then existing sales tax which had

been in operation under the Federal Government Legislated Decree No 7 of 1986; but in operation on the basis of residence.

Since VAT is based on the general consumption behavior of the people, the expected high yield from it will boost the fortunes of the government with minimum resistance from the payers of the tax.

As a result of the importance attached to VAT by the government since inception, it will therefore be necessary if a clear study is carried out in order to evaluate the contribution of VAT to resource mobilization in Nigeria so as to avoid a sweeping conclusion, hence the aims of this study which are to empirically evaluate the contributions of value added tax to resource mobilization in Nigeria.

#### 2.0 LITERATURE REVIEW

#### 2.1 Concept of Taxation

Taxation is one of the forces at work in the economic environment which have direct influence on the behavior of economic agents. Imposition of taxes affects the income of the various agents. Ezirim (2005) sees tax as a compulsory levy imposed by the government (Federal, State, or Local) and other legal entities; the assessee is under every obligation to pay the assessed amounts, since default or evasion attracts legal sanctions.

Therefore, a tax is a compulsory contribution or payment from a person or company to the government to defray the expenses incurred in the common interest of all, without reference to special benefits the individual will device. Note that the benefit received by the taxpayers from the government are not usually related to or based upon being taxpayers.

Government use taxes to influence and control economic behavior; where the type of tax used bears on the regulatory objective. Taxation has been used by many a government for social control; where harmful commodities have had their consumption restricted due to prohibitive prices occasioned by taxes. Taxation equally serves as a tool of economic stabilization. For instance, taxes that restrict purchasing power have been employed in the management of aggregate demand. Taxes are used when the economy wants to maintain or achieve sustained rate of economic growth, price stability, full employment, and balance of payment viability. The particular objectives given more emphasis dictate the rate and direction of taxation.

#### 2.2 Value Added Tax (VAT) In Nigeria

The value added taxes in Nigeria were created as replacement of 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. As per the VAT Decree No. 102 made on the 24<sup>th</sup> of August 1993, certain goods and services have been exempted from the purview of value added taxation in Nigeria. As per the specifications laid down in the above mentioned decree, goods such as all exported goods, medical and pharmaceutical products, products meant for kids, basic food items, commercial vehicles and their spare parts, books and other educational materials, fertilizer, farming machines, agricultural products, faming transportation equipments and veterinary medicines and newspapers.

As per the above mentioned decree and subsequent amendments, a number of services have been declared exempted from Value Added Taxation in Nigeria. These services are all the services that are exported: medical services, plays and performances that are run by educational institutions for educational purposes and services that are provided by community banks, mortgage organizations and specialized banks. In Nigeria, the companies or business organization that function on a non-profit basis are required to pay VAT.

The Nigeria Federal Government enacted the VAT Amendment Act in 2007 under the leadership of Olusegun Obasanjo as the President Commander-in-Chief of Nigeria. This act empowered the Federal Government to fix the rate of the Value Added Taxes to be 10%, which is a 100% increase from the initial 5%.

However, discussions which resulted from protests from the public, trade unions, pressure groups and parties led to the reverse of this act to 5% VAT rate (i.e. 50% of 10%) at the Wake of Yar'adua – Jonathan administration.

#### 2.3 The Contribution of VAT to Resource Mobilization in Nigeria

The Value Added Taxes are one of the major sources of financing in a number of economically developing countries across the world. It is different from the conventional system of sales tax because VAT is charged at every

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stage of value addition, whereas sale tax is imposed on final value of transaction only. The situation is similar in Nigeria as well. During 1994, the revenues earned from VAT in Nigeria exceeded the projections. Value Added Taxes contributed 10.15% of current revenue and 45.98% of internal revenue in1994 alone. In 1995 the rates increase to 12.61% and 57.98% for current revenue and internal revenues respectively. Its contributions to current revenue rose to all time highest of 14.05% in 1999 and lowest at 6.16% in 2005; while its contribution to internal revenue rose to 88.2% in 2006 and lowest at 36.82% in 1995.

However, there have been some teething issues as far as Value Added Taxes in Nigeria are concerned. The members of the organized private sector in Nigeria have been voicing their reservations regarding the value added taxes that are taking a toll on the prices of their products as well as the operation prices of their products. Nevertheless, in all situations, the contribution of Value Added Tax to resource mobilization is not far from desirable. VAT has become more important in many jurisdictions as tariff levels have fallen world wide due to trade liberalization, VAT has essentially replaced lost revenues.

#### 3.0 Model Specification

This statistical expression denotes the relationship between the dependent and independent variables to be studied in mathematical forms. Our models are specified thus:

(1)

(4)

(7)

#### MODEL I

| RGDP = f(VAT)                                    |     |  |
|--|-----|--|
| Econometric transformation of (1)                |     |  |
| $RGDP = \lambda_0 + \lambda_1 VAT + \mu$         | (2) |  |
| Transformation of (2) into a log-linear form     |     |  |
| $L_n RGDP = \lambda_0 + \lambda_1 L_n VAT + \mu$ | (3) |  |
|  |     |  |

#### **MODEL II**

| CREV = f(VAT)                                      |     |  |
|--|-----|--|
| Econometric transformation of (4)                  |     |  |
| $CREV = \phi_0 + \phi_1 VAT + \varepsilon$         | (5) |  |
| Transformation of (5) into a log-linear form       |     |  |
| $L_n CREV = \phi_0 + \phi_1 L_n VAT + \varepsilon$ | (6) |  |

#### **MODEL III**

| INREV = f(VAT)                                    |     |
|---|-----|
| Econometric transformation of (7)                 |     |
| INREV = $\pi_0 + \pi_1 VAT + \omega$              | (8) |
| Transformation of (8) into a log-linear form      |     |
| $L_{n}INREV = \pi_{0} + \pi_{1}L_{n}VAT + \omega$ | (9) |

#### A priori Expectations:

MODEL I  $\lambda_1$ > 0 MODEL II 0 > $\phi_1$ MODEL III > 0  $\pi_1$ Where: RGDP **Real Gross Domestic Product** = CREV = Current Revenue INREV = Internal Revenue VAT= Value Added Tax  $\mu, \varepsilon, and \omega =$  Stochastic Variables.

#### 4. Presentation and Analysis of Results

This section provides an empirical test and analysis of data sourced for this study using the economic approach of Ordinary Least Square (OLS). Three econometric equations are estimated to test the three formulated hypotheses. In the hypotheses Real Gross Domestic Product (RGDP), Current Revenue (CREV) and Internal Revenue (INREV) are the dependent variables, while the Value Added Tax (VAT) is the regressor.

# **RESULT OF MODEL I**

Dependent Variable: RGDP Method: Least Squares Date: 03/13/13 Time: 07:36 Sample: 1994 2010 Included observations: 17

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.    |
|--------------------|-------------|-----------------------|-------------|----------|
| С                  | 258109.7    | 10576.58              | 24.40390    | 0.0000   |
| VAT                | 1.180793    | 0.055797              | 21.16246    | 0.0000   |
| R-squared          | 0.967592    | Mean dependent var    |             | 429805.4 |
| Adjusted R-squared | 0.965432    | S.D. dependent var    |             | 150470.2 |
| S.E. of regression | 27976.31    | Akaike info criterion |             | 23.42624 |
| Sum squared resid  | 1.17E+10    | Schwarz criterion     |             | 23.52426 |
| Log likelihood     | -197.1230   | F-statistic           |             | 447.8499 |
| Durbin-Watson stat | 0.779917    | Prob(F-stati          | stic)       | 0.000000 |

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Source: Computation using E-Views Statistical Software Package.

# **RESULT OF MODEL II**

Dependent Variable: CREV Method: Least Squares Date: 03/13/13 Time: 07:30 Sample: 1994 2010 Included observations: 17

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.    |
|--------------------|-------------|-----------------------|-------------|----------|
| С                  | -528819.7   | 280055.2              | -1.888270   | 0.0785   |
| VAT                | 7.196727    | 1.477427              | 4.871124    | 0.0002   |
| R-squared          | 0.612682    | Mean dependent var    |             | 517636.0 |
| Adjusted R-squared | 0.586861    | S.D. dependent var    |             | 1152499. |
| S.E. of regression | 740779.5    | Akaike info criterion |             | 29.97892 |
| Sum squared resid  | 8.23E+12    | Schwarz criterion     |             | 30.07695 |
| Log likelihood     | -252.8209   | F-statistic           |             | 23.72785 |
| Durbin-Watson stat | 1.009417    | Prob(F-stat           | istic)      | 0.000203 |

Source: Computation using E-Views Statistical Software Package.

# **RESULT OF MODEL III**

Dependent Variable: INREV Method: Least Squares Date: 03/13/13 Time: 07:39 Sample: 1994 2010 Included observations: 17

| Variable           | Coefficient | Std. Error            | t-Statistic | Prob.    |
|--------------------|-------------|-----------------------|-------------|----------|
| С                  | -67297.42   | 35292.62              | -1.906841   | 0.0759   |
| VAT                | 0.913519    | 0.186186              | 4.906493    | 0.0002   |
| R-squared          | 0.616110    | Mean dependent var    |             | 65534.74 |
| Adjusted R-squared | 0.590517    | S.D. dependent var    |             | 145885.3 |
| S.E. of regression | 93353.22    | Akaike info criterion |             | 25.83630 |
| Sum squared resid  | 1.31E+11    | Schwarz criterion     |             | 25.93432 |
| Log likelihood     | -217.6085   | F-statistic           |             | 24.07368 |
| Durbin-Watson stat | 0.968188    | Prob(F-statistic)     |             | 0.000190 |

Source: Computation using E-Views Statistical Software Package.

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#### 4.1 Interpretation

From the results of the analyses, there is a strong and positive relationship between Real Gross Domestic Product (RGDP) and Value Added Tax (VAT); between Current Revenue (CREV) and VAT; and between Internal Revenue (INREV) and VAT. These were informed by their respective correlation coefficients (0.98, 0.78, and 0.784). These conformed to a priori expectations. The coefficients of determination ( $R^2$ ) of the respective models (I, II, and III) which are 0.98, 0.61 and 0.62 suggest that VAT has reasonable high impact on RGDP, CREV and INREV.

The tests of significance, using t-Statistic, on the parameters of estimate of the models confirmed that the explanatory variable (VAT) passed the test (t-test) in the three models as 21.16, 4.87 and 4.9 are all individually greater than the theoretical t-value ( $t_{0.025}$  = 2.131). Also the F-test carried out to ascertain the significance of each model confirmed that (the F-Statistic with the probability of 0.00) each of the models (on its own) is statistically significant. This support Adereti et al (2011) that VAT revenue is making unique significant contribution to the economic development/growth of Nigeria.

## 5.1 Conclusion

We set out to evaluate the contribution of VAT to revenue mobilization in Nigeria in an attempt to crystallize the benefit to the economy. Having reviewed the mass of literature available and the analyses of data available, along with personal observations, the analyses performed yielded a lot of facts that ultimately become useful in the study.

The indirect nature of VAT makes resistance less and so the system has been a reasonable means of revenue generation to the Nigeria economy; consumers looked at VAT as a mean in which manufacturers and wholesalers and even retailers cheat on them because of relative additional cost aside the real price without obstacle; patchy information causes doubts to the citizens on the benefit of VAT as well has posed as implementation obstacle; VAT is an ideal tax in Nigerian tax system; it has positive and signification impact on revenue mobilization in Nigeria; it also has positive relationship with investment and a negative relationship with consumption; it is also envisaged by some experts that there are complications/problems that will erupt, for example inflation, as the system is being operated. This burden, they maintain may manifest into higher prices of goods and services.

VAT has been a kind of replacement to sales tax and therefore has the

potentials of discouraging domestic production since these goods has to pass through some chain of distribution before the final consumers, which will make the home-made goods less competitive price-wise in relation to the imported ones.

However, it is an ideal form of tax in the Nigerian tax system, and has contributed positively and significantly to resource mobilization as well as capital formation to the Nigerian economy.

#### 5.1 Recommendations

(i) Since the introduction of Value Added Tax in 1994 in Nigeria, its implementation and administration has been tough and tedious but its contributions to resource mobilization are fruitful. In order to maintain a good tax system with VAT, the Federal Inland Revenue Services (FIRS) should continue to ensure that the tax is collected promptly and accurately accounted for.

This can be achieved through a regular training of the staffs of FIRS and also enlightenment of the public about VAT; as these will definitely enhance efficiency and effectiveness.

- (ii) There should be judicious use of the proceeds of VAT and other forms of taxes because the tax-payers are watching out for areas of development to be properly addressed with the money they are paying. Anything contrary will de-motivate them from further payment.
- (iii) Stock measures like the computerization of tax information to enhance the status of collection, should be devised to ensure that falsification, fraud, non-invoicing, under-invoicing etc, are brought to barest minimum, if not totally eliminated.
- (iv) All that are involved (both the payer and administrator) should be adequately motivated to enable each in his/her own sphere perform well to ensure higher levels of efficiency and effectiveness

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