

VALUE ADDED TAX AND ECONOMIC DEVELOPMENT: EMPIRICAL EVIDENCE FROM NIGERIA

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Abstract

Tax is one of the veritable tools used by government to generate revenue in order to deliver its responsibilities to the teeming population. This paper examines the contributions of Value Added Tax (VAT) to economic development with empirical evidence from Nigeria. The effects of other relevant variables Foreign Direct Investment (FDI) and Total Debt (TD) were examined alongside VAT on economic development; proxy by RGDP. The study period was 1994 to 2013 and time series data were collected from Central Bank of Nigeria (CBN) statistical bulletin. The variables RGDP, FDI, TD and VAT are incorporated into the model in their natural logs because the changes in the log series display a more stable variance than the changes in the original series. The models were evaluated using step-wise multiple regression technique. It was revealed that VAT alone accounted for approximately 94.40% variation in RGDP as indicated by adjusted R^2 of 0.9440. It is worthy to note that VAT is significantly related to economic development in Nigeria. It was discovered that the explanatory variables FDI, VAT are positively related to economic development in Nigeria while TD is negatively related to economic development in line with the a priori expectation. FDI increases the wealth of shareholders, thus contributing positively to economic development. This paper recommended that government should formulate policies that will encourage FDI. There should be compensating advantages such as diversification to reduce earnings volatility and encourage economies of scale. Furthermore, total debt stock of the country should be properly managed as total debt negatively impact on economic development and there should be adequate publicity of the list of VATable goods and services in order to give credibility to the payment and collection of VAT and the enforcement of penalties for VAT related offences should be promptly implemented.

Keywords: *Value Add Tax, Economic development, Foreign Direct Investment, Total Debt, Real Gross Domestic Product*

Introduction

In managing the economy of any nation, government employs various policies which have two aspects; goals and instruments. The broad goals of macroeconomics policies are full employment, price stability, top equilibrium and economic growth and development. There are also various policy instruments employed in achieving these goals. One of such instruments is direct and indirect taxes. Value Added Tax (VAT) is a typical example of indirect tax which is an instrument aimed at attaining the economic goals.

How well a nation discharges its responsibilities of providing essential goods and services such as education, securities, electricity, water and health facilities among others depend on the revenue from various sources including taxation (Ogundele, 1996). Achieving economic development is dependent on the financial resources available. Value Added Tax which is a consumer based tax has assumed a high profile since its introduction in Nigeria in the year 1994.

The VAT generated ₦8.20 billion in 1994 which was over 36% above the projected revenue of ₦6 billion for the period. The revenue generated from VAT has increased progressively over the years. In 2004, ₦163.3 billion was realized while ₦795.60 billion was generated in 2013. VAT amongst all in the stable of tax is a major revenue contributor to the Nigeria's economy (Ajakaiye, 2000). VAT is levied on goods and services of registered businesses in the country.

The revenue generated from VAT is capable of influencing economic development. Jhingan (2005) opined that economic development generally refers to the sustained, concerted actions of policy makers and communities that promote the standard of living and economic health of a specific area. Such actions can involve multiple areas including development of human capital, critical infrastructure, regional competitiveness, environmental stability, social inclusions, health, safety, literacy and other initiatives. (Dwivedi, 2004).

According to Dwivedi (2004), economic development is the process by which a high degree of self-reliant economic growth in a given economy is sustained for a long period of time which is characterized by greater reductions in poverty, unemployment and inequality. Economic growth is seen as characterized by increase in a country's real Gross National Product and per Capita Real Gross National Product. The real GNP is preferred to the nominal GNP in the measurement of economic growth because it will not distort inflation and it will inform us whether or not the country's standard of living is improving on the average.

The enabling law backing the establishment of Value Added Tax (VAT) in Nigeria is Decree 102 of 1993 which actually became effective in 1994. VAT is charged at 5% on all VATable goods and services, either domestic or exported. The tax is collected on behalf of the Government by businesses and organizations which have registered with Federal Inland Revenue Services (FIRS) for VAT Services (Olatunji, 2009).

These businesses and organizations can claim credit for this tax (called input tax) when goods are sold or services rendered monthly to the Federal Inland Revenue Service (FIRS) by these registered agents. The 5% VAT is called "the output tax", therefore, the VAT payable is the output tax less the input tax and is equivalent to the VAT paid by the final consumer of the product that will be collected by the Government (Olatunji, 2009).

The final consumer is also expected to pay VAT on goods and services supplied to him. This constitutes the VAT input. The difference between the output and the input represents the amount payable to the (FIRS). The amount is payable where the output tax exceeds the input tax. Where the input tax exceeds the output tax, this may be claimed from the FIRS. The methods to be used in claiming such refund are; the credit method, direct cash refund method and a combination (hybrid) of the two (Ojo, 2009).

Statement of the Problem

All over the world, tax is one of the veritable tools used by government to generate revenue which will enhance its responsibilities to the populace. Therefore, tax can be seen as a means by which government appropriate part of the private sector's income. The aggregated revenue is used in meeting both recurrent and capital expenditure. Value Added Tax (VAT) is a composition tax levied on businesses at every stage of production and distribution on the value they add to their purchases of raw materials and other inputs.

Therefore, to stimulate economic development, fiscal policy instrument such as VAT is employed to enable government finance its public activities with a view to minimizing the distortions created by the market forces. There is no doubt that VAT indeed increases government revenue, but how has the revenue generated from VAT impacted on the economic development of Nigeria among other factors is the issue of concern.

Although other researchers have written on similar title or related articles but none have towed the direction of relating VAT, FDI, Total Debt to the economic development of Nigeria and using of Real Gross Domestic Product as a proxy for economic development which covers a period from 1994 to 2013; that is; a twenty (20) year period.

This paper seeks to examine the issue and the administration of VAT in Nigeria. The objectives of this paper are to; analyze the macro economic effects of VAT in Nigeria, evaluate the relationship between VAT and economic development in Nigeria and assess the administration of VAT in Nigeria. The basic assumption of this paper is that there is no significant relationship between VAT and economic development in Nigeria.

Literature Review and Theoretical Framework

The Concept of VAT

Value Added Tax was first introduced by France in 1954. It has been embraced by well over seventy countries all over the world. These include the entire Organization for Economic Co-operation and Development (OECD) countries such as Japan, Canada, the state of Michigan in the United States of America (USA) and many African Countries.

VAT is a gross product type of tax imposed on destination principle. Nigeria adopts a five percentage (5%) VAT charges on all goods and services, either domestic or exported. This is the lowest rates among countries in the African continent. The tax is collected on behalf of the government by businesses and organization which have registered with FIRS for VAT services (Olaoye, 2009).

According to Akpan (2011), the input tax mechanism in VAT makes it self-policing because of the needs to obtain receipt at each stage of transaction. The VAT is imposed on the net sales value of non-exempt, qualifying goods and services in Nigeria. It is levied on any individual, corporation, sole, group, body corporate or organization that consumes, buys, procures, or imports taxable goods or services. During direct sales or open market transactions, the buyers or consumers pays the tax to the seller together with the cost of the goods or services bought. Where the goods or services were supplied to a government Ministry, Department and Agency (MDA) or a company engaged in oil operations, the VAT payable by the MDAs or oil company is deducted or withheld at source (at the point of payment). It is then credited directly to FIRS on behalf of the supplier (Chinwe, 2013).

VAT Administration in Nigeria

All manufacturers, distributors, importers and suppliers of goods and services are obliged to register for VAT payment within six months of commencement of such business. The prospective VAT payer must obtain and complete VAT Form 001 and return to the nearest Local VAT office. A permanent VAT registration number is to be given to each registered payer (Ojo, 2003).

FIRS is assigned by law (Section 7G of Decree No. 102 of 1993), the responsibility of administering VAT in Nigeria. The service is empowered “to do such things as it may deem expedient for the assessment and collection of tax in accordance to Section 2 of the Decree (Ojo, 2009).

In accordance with the above provision of the Decree, the VAT system in Nigeria is administered by FIRS, through the VAT Directorate which is located at its Head Office in Abuja with a network of Zonal and local VAT offices throughout the Federation (FIRS, 1993).

The success or failure of any tax depends largely on the extent of how it is properly managed. The extent to which the tax is interpreted and implemented; as well as the publicity brought into it will determine how the particular tax is able to meet its objective. Hence, one of the acid tests in determining the success of a tax is the management of the policy. VAT may be complicated to administer but it is not complex as Personal Income Tax or Company Income Tax (Unwabuike, 2003).

The introduction of VAT in Nigeria through Decree 102 of 1993 marks the phasing out for the Sales Tax Decree No. 7 of 1986. The Decree took effect from 1st December, 1993, but by administrative arrangement, invoicing for tax purpose did not commence until 1st January, 1994. Value-Added Tax is a tax on the supply of goods and services which is eventually born by the final consumer but all collected at each stage of production and distribution chain. With VAT; government reasoned; it will be virtually impossible to evade tax.

The instrument that introduced VAT spells out goods and services that attract the tax. It shows, for instance that food items do not attract VAT. Sellers of goods on which VAT is paid must first of all be registered with the Federal Inland Revenue Service; the aim is to ensure that the 5% VAT is paid

on goods and services. It is the fear of the already pauperized Nigerians, sinking more into an abyss that informed the researchers' decision to look into VAT implementation and its impact on government revenue.

VAT is a self-assessment tax that is paid when return being rendered. In-built in the new tax is the refund or credit mechanism, which eliminates the cascading effect that is a feature of the retail sales tax. The Federal Government was however, not satisfied with the revenue yield from the sales tax whose base is regarded as norms and which covers only nine categories of good plus sales and services in registered hotels, motel and similar establishment. It is felt that the narrow base of the consumption negates the fundamental principles of consumption tax, which by nature is expected to cut across consumption of goods and services. Value Added Tax, in contrary has a broader base and includes most professional services and banking transactions that are high profit generating sectors, only locally manufactured goods were targeted by the sale tax Decree of 1986, although, this might not have been the intention of the law.

Under VAT, a considerable part of the tax to be realized is from imported goods. This means that locally manufactured goods will not be placed at a disadvantage, relative to import and since VAT is based on the general consumption behavior of the people, the expected high yield from it will boost the fortunes of the state government with minimum resistance from the payers of the tax (Olaoye, 2009).

In Nigeria, VAT forms are classified as follows; forms in use by the Tax Authority and Forms in use by the Tax Payers. The VAT forms in use by the Tax Authority are forms VAT 003, 004, 005, 006 and 007. Form VAT 003 is used for monthly Returns of VAT Reconciliation Statement from Local VAT offices to Zonal office while VAT Form 004 is used for monthly Return of VAT Reconciliation Statement Zonal VAT Offices to Headquarter at Abuja.

VAT Form 005 is used for monthly Return of VAT collection to the Federation account. VAT Form 006 It is used for Monthly Return of VAT collection by the Nigerian Customs Service and VAT Form 007 is a Re-assessment Notice Form raised on a tax payer.

On the part of the tax payer VAT 001 and 002 forms are used. Form VAT 001 is VAT Registration Form to be completed by a potential VAT Payer within six months of the commencement of business while form VAT 002 is a standard Value Added Tax Returns to be filed on monthly basis. The collection of VAT is not different from the current system of collecting withholding taxes operated at all levels of government. Essentially, the withholding tax requires the payer to withhold (deduct) percentages, specified by law from his payment and to remit this withheld amount to the government. The law imposes the liability for the underlying obligation being paid is that of the year.

Accounting for VAT

According to Ojo (2009), every VATable person is to remit to the relevant local VAT office the net VAT payable, which is the excess of the output tax over the input tax while filing the VAT return. Remittances are supposed to be made together with the VAT returns filed. The VAT carries a single rate of 5% on VATable goods and services. Zero rate is assumed for export while there are goods and services exempted from the tax. There is need to emphasize, the peculiar aspect in accounting that relates to VAT. These are: the taxable period which is the period covered by any particular return; this is one month in Nigeria. It has been extended administratively by the Federal Inland Revenue Services to the 28th to allow the registered person to adjust him or herself to the system in the first year of the new tax. VAT collected has to be accounted for and the taxable period in which a payment is made or received. In accounting for VAT, it is important for registered person(s) to take note of the following points:

Where, a trader pays VAT in respect of goods for resell, the amount so paid is debited to a VAT account as receivable. When the goods are later sold, the VAT collected is greater that the VAT paid, the VAT account will have a credit balance, which the trader pays to the VAT directorate.

When, a trader is acting as a collecting agent in respect of goods, which he acquired for resale, the VAT should not include in his account as expenses. When a trader renders returns and pays the VAT to the VAT Directorate, the VAT account should be debited and the cashbook credited accordingly.

At the end of the trader's accounting period, any VAT not yet paid over to the government should be reflected as a liability in the statement of financial position.

Value Added tax is calculated by deducting from the value of goods or services the cost of input of other goods or services that were used up in process of the production of the goods or delivery of the services. There are various offences with every stiff penalty under the VAT system some of the offences are; giving false information on matter considered material, failing to notify change of address, failing to issue receipt, failure to keep proper records and obstructing inspection of premises in order to ascertain if premises are used in the taxable goods and services.

There are swift and automatic penalties differentiated by the types of transgression. Some of the penalties are as follows; for furnishing of false document or statement, the offender is liable on conviction to a fine of twice the amount under declared, evasion of tax on conviction attracts a fine of ₦30,000 or two times the amount of tax being evaded, whichever is greater, or imprisonment for a term not exceeding three years, failure to notify change of address within one month of such change attracts a penalty-payment of ₦5,000.00. Others are failure to issue tax invoice for goods sold or services rendered which attracts a penalty or liability on conviction to a fine of 50% on the invoice not issued; offence of resisting or considering or obstructing or attempting to hid or obstruct an authorized officer from performing his duty on inspection, the offenders is liable to a penalty on conviction to a fine of ₦10,000.00 or imprisonment for a term of six months or both.

Failure to submit returns by taxable person, attracts a penalty payment of a fine of ₦5,000.00 for every month in which the failure continues, failure to keep proper records and accounts for his business transaction to allow for the correct ascertainment of tax; attracts a penalty of ₦2,000.00 for every month in which the failure continues.

Concept of Economic Development

Economic development is defined as economic growth accompanied by desirable social changes in such a way that there is progress in respect of virtually all human endeavors (Fashola, 2001). Economic development can be defined as a long-term sustained increase in per capita real national income that is not accompanied by widening income inequality. (Jhingan, 2005).

In the words of Jhingan (2005), it is also important to point out that different patterns of growth and development are common in different parts of the world; countries like Britain, US, Japan, Germany are often referred to as developed nations while countries like Nigeria, Ghana, India are often referred to as developing nations. The variations in the level of development can be due to so many factors. Most often the level of economic development can be measured using the following parameters; income per head, the percentage of resources exploited, capital per head, savings per head, conduciveness to growth of local religion, amount of social capital (roads, railway and schools), degree of education of the working classes. Other factors that may also necessitate economic development are; promotion of individualization, technological development, establishment of educational institutions, good leadership with administrative competence, export promotion, availability of organized market, diversification of the economy, prudent financial resource management and establishment of institutions to check corruption.

Models of Economic Development

The Harrod–Domar model is an early post-Keynesian model of economic growth. It is used in development economics to explain the growth rate of an economy in terms of the level of saving and productivity of capital. It suggests that there is no natural reason for an economy to have balanced growth. The model was developed independently by Roy F. Harrod in 1939 and Evsey Domar in 1946. The Harrod–Domar model was the precursor to the exogenous growth model (Harrod, 1939; Domar, 1946). According to the Harrod–Domar model, there are three kinds of growth namely; warranted growth, actual growth and natural rate of growth.

Warranted Growth rate is the rate of growth at which the economy does not expand indefinitely or go into recession. The model implies that economic growth depends on policies to increase investment, by increasing saving, and using that investment more efficiently through technological

advances. The model concludes that an economy does not "naturally" find full employment and stable growth rates.

Neoclassical economists identified shortcomings in the Harrod–Domar model, and, by the late 1950s, started an academic dialogue that led to the development of the Solow–Swan model (Sato, 1964; Solow, 1994; Hangemann, 2009). The main criticism of the model is the level of assumption, one being that there is no reason for growth to be sufficient to maintain full employment; this is based on the belief that the relative price of labour and capital is fixed, and that they are used in equal proportions.

The Lewis Theory of Development

W. Arthur Lewis in the mid -1950s formulated one of the best known theoretical models of development that focused on the structural transformation of a subsistence economy. Basically, he conceptualized the economy in terms of the sectors, that is, what he called the capitalist sector and the traditional sector. The capitalist sector in his model provides the engine for growth of the economy and as the capitalist sector expands, economic growth and development expand. Initially, the traditional sector represents the large sector and the capitalist sector, the small one. This according to Lewis explains how the capitalist sector gets to grow large in size at the expense of the traditional sector. Lewis looked at development as a process of the transformation of the traditional economy into a modern capitalist sector.

Lewis made three assumptions. First, there is the existence of unlimited supply of labour at subsistence wages in the economic system. He identifies these sources as the agricultural sector and the urban sector. Secondly, employment expands in the capitalist sector as far as capital formation expands. Third, it is only the capitalists that save in the system. The presumption is that for most wage earners, savings is very little out of their wages. If there were to be capital formation, it was to be from the savings of the capitalists; savings from wages and salaries; if they exist; will be minimal. For Arthur Lewis, the increase in the share of savings is very vital for the development process. The expansion of the capitalist sector becomes a very critical process. The process of expansion can be kept going if the productivity of workers in the subsistence sector is improved. Labour is then released to the capitalist modern sector. In the extreme case, a situation will exist when the productivity of labour in the urban modern sector is increased to the level that the productivity will be the same as that in the traditional sector, that is, the marginal productivity will be the same in a situation like that, dualism must have been eliminated. Lewis shows how the size of the traditional sector is reduced and the modern sector increased while transforming the economy.

Foreign Direct Investment and Economic Development

According to the International Monetary Fund, Foreign Direct Investment (FDI) is the net inflows of investment to acquire a lasting management interest in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments.

The primary financial test in evaluating both international and domestic investment proposals is the extent to which a proposed investment leads to an increase in the wealth of shareholders. Evaluation of international investment proposals is more complex than the evaluation of domestic ones. Exchange rates will need to be forecasted and the effect on project cash flows of different taxation systems will need to be considered. The risk arising from the actions and decisions of foreign governments must also be assessed. A company could undertake international operations through licensing, franchising or setting up a foreign branch rather than by investing directly in a foreign subsidiary. This is especially true in the early stages of becoming an international company. Watson and Head (2007) presented both strategic and economic reasons for foreign investment.

Strategic reasons for foreign direct investment can be classified as defensive or aggressive (Brooke, 1996). According to Brooke (1996), defensive reasons for establishing a foreign subsidiary are government action on tariff barriers; import controls or legislation; demands for local manufacture; and transport costs and delays. Others are problems with agents and licensees; technical difficulties

abroad; problems with after-sales services; the need to protect patents and intellectual property; the need to ensure supplies of raw materials and components; the need to internationalize to match competitors; suppliers or customers; and the need to protect patent company shareholders against recession. Brooke (1996) also identified aggressive reasons for establishing a foreign manufacturing subsidiary to include; the search for more profitable uses for underemployed resources; the search for lower factor costs; the development of global plans and strategies; the desire for access to foreign knowledge; and the need to expand beyond the domestic arena.

In a perfect market, foreign subsidiaries would be unable to compete with local companies because of the additional costs imposed by the distance from their parent companies. In order for a foreign subsidiary to compete successfully, the additional costs of operating at a distance from its parent must therefore be overcome. This means that market imperfections must offer compensating advantages such as diversification to reduce earnings volatility and economies of scale which are not available to local companies and which are large enough to make investment in the local market attractive to international companies. Such market imperfections may occur in product differentiation, marketing skills, proprietary technology, managerial skills, better access to capital, economies of scale, financial markets and government-imposed market distortions such as incentives for inward investment (Buckley, 2003).

Methodology and Model Specification

This paper is an empirical investigation of the impact of VAT amongst other factors such as Foreign Direct Investment (FDI) and Total Debt (TD) on the economic development of Nigeria. It covers a twenty year period from 1994 to 2013. Time series data were collected from Central Bank of Nigeria (CBN) statistical bulletin.

Real Gross Domestic Product (RGDP) is used as a proxy for economic development. Hence, the basic relationship is expressed by the function;

$$RGDP = f \left(\begin{matrix} (+) \\ FDI, \end{matrix} \begin{matrix} (-) \\ TD, \end{matrix} \begin{matrix} (+) \\ VAT \end{matrix} \right)$$

The variables RGDP, FDI, TD and VAT are incorporated into the model in their natural logs. This is to enable us index all the variables and to aid interpretation of results. An a priori expectation is that while FDI and VAT are positively related to RGDP, TD is negatively related to economic development.

Lutkepohi and Kratzig (2004) reveal that constructing a model for the logs is likely to be advantageous because the changes in the log series display a more stable variance than the changes in the original series.

Thus, the models are;

$$\text{Log RGDP} = \alpha_0 + \alpha_1 \log FDI + \alpha_2 \log TD + \alpha_3 \log VAT + e \quad - \quad \text{Model 1}$$

$$\text{Log RGDP} = \beta_0 + \beta_1 \log TD + \beta_2 \log VAT + e_1 \quad - \quad \text{Model 2}$$

$$\text{Log RGDP} = \gamma_0 + \gamma_1 \log VAT + e_2 \quad - \quad \text{Model 3}$$

This model will be evaluated using step-wise multiple regression technique. The other variables introduced into the models are determinants of economic development. The analysis of economic growth of a country is a combination of many variables in the order of their contributions to the growth rate of GDP. FDI is often seen as an important contribution for economic growth and development. According to Sethi and Sucharita (2011), countries pursuing outward-oriented development strategies are more likely to achieve higher rates of economic growth than those that are internally focused.

Total Debt is another determinant of economic development. Debates are on-going on the impact of government budget deficits and debt on long run economic growth. The global economic meltdown resulted in huge budget deficits in most economies and nations as tax revenues collapse and as government bailout financial institutions in an attempt a counter cyclical fiscal policy.

Data Presentation and Results of Analysis

Model 1

$$\text{Log RGDP} + \alpha_0 + \alpha_1 \log \text{FDI} + \alpha_2 \log \text{TD} + \alpha_3 \log \text{VAT} + e$$

Table I: Result of Analysis of Model I:

Dependent Variable: LOG(RGDP)

Method: Stepwise Regression

Date: 07/07/16 Time: 14:24

Sample: 1994 2013

Included observations: 20

Number of always included regressors: 4

No search regressors

Selection method: Stepwise forwards

Stopping criterion: p-value forwards/backwards = 0.5/0.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.48395	0.385342	29.80200	0.0000
LOG(FDI)	0.125395	0.052401	2.392995	0.0293
LOG(TD)	-0.007278	0.038292	-0.190061	0.8517
LOG(VAT)	0.185540	0.044571	4.162766	0.0007
R-squared	0.955147	Mean dependent var	13.08545	
Adjusted R-squared	0.946737	S.D. dependent var	0.423693	
S.E. of regression	0.097783	Akaike info criterion	-1.635267	
Sum squared residue	0.152986	Schwarz criterion	-1.436121	
Log likelihood	20.35267	Hannan-Quinn criter.	-1.596392	
F-statistic	113.5730	Durbin-Watson stat	1.301616	
Prob(F-statistic)	0.000000			

From the Table I, the estimated model is:

$$\text{Log RGDP} + 11.483995 + \alpha_1 0.125395 - \alpha_2 0.007278 + \alpha_3 0.815540 + e$$

Adjusted $R^2 = 0.946737$ which implies that the independent variables accounted for approximately 95% of the variations in the dependent variable.

However, log TD is negatively signed implying that total debt is negatively related to RGDP. The value of Akaike info criterion (-1.635269) and Schwartz criterion (-1.46121) indicate that the model is significant. Dublin Watson (DW) value of 1.301616 indicates that there is no evidence of autocorrelation among the independent variables. Hence, the estimates are statistically significant.

Model 2

$$\text{Log RGDP} = \beta_0 + \beta_1 \log \text{TD} + \beta_2 \log \text{VAT} + e_1$$

Table 2: Result of Analysis of Model 2

Dependent Variable: LOG(RGDP)

Method: Stepwise Regression

Date: 07/07/16 Time: 14:46

Sample: 1994 2013

Included observations: 20

Number of always included regressors: 3

No search regressors

Selection method: Stepwise forwards

Stopping criterion: p-value forwards/backwards = 0.5/0.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
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C	12.25517	0.238804	51.31902	0.0000
LOG(TD)	-0.075878	0.028699	-2.643935	0.0171
LOG(VAT)	0.285020	0.018174	15.68246	0.0000
R-squared	0.939094	Mean dependent var	13.08545	
Adjusted R-squared	0.931928	S.D. dependent var	0.423693	
S.E. of regression	0.110544	Akaike info criterion	-1.429327	
Sum squared resid	0.207739	Schwarz criterion	-1.279967	
Log likelihood	17.29327	Hannan-Quinn criter.	-1.400170	
F-statistic	131.0587	Durbin-Watson stat	1.743953	
Prob(F-statistic)	0.000000			

From Table 2 above the estimated model is:

$$\text{Log RGDP} = 12.25577 - \beta_1 0.075898 + \beta_2 0.28520 + e_1$$

In a stepwise regression, eliminating FDI, the result shows that adjusted $R^2 = 0.931928$ which implies that the independent variables (TD, VAT) account for about 93.2% variations in RGDP. Here, also, TD is negatively related to RGDP. Akaike info criterion and Schwarz criterion indicate that the model as significant further confirmed by the p-values. DW value of 1.743953 indicates that there is no autocorrelation between the independent values. Here the estimates are statistically significant.

Model 3

$$\text{Log RGDP} = \gamma_0 + \gamma_1 \log \text{VAT} + e_2$$

Table 3: Result of Analysis of Model 3:

Dependent Variable: LOG(RGDP)

Method: Stepwise Regression

Date: 07/07/16 Time: 14:17

Sample: 1994 2013

Included observations: 20

Number of always included regressors: 2

No search regressors

Selection method: Stepwise forwards

Stopping criterion: p-value forwards/backwards = 0.5/0.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.629183	0.500333	19.24556	0.0000
LOG(VAT)	1.768401	0.098619	17.93160	0.0000
R-squared	0.946987	Mean dependent var	18.27001	
Adjusted R-squared	0.944042	S.D. dependent var	2.545378	
S.E. of regression	0.602119	Akaike info criterion	1.917915	
Sum squared resid	6.525843	Schwarz criterion	2.017488	
Log likelihood	-17.17915	Hannan-Quinn criter.	1.937353	
F-statistic	321.5424	Durbin-Watson stat	1.410050	
Prob (F-statistic)	0.000000			

From the Table 3, the estimated model is

$$\text{Log RGDP} = 9.629183 + \gamma_1 1.76840 + e_2$$

VAT alone accounted for approximately 94.4% variations in RGDP as indicated by adjusted R^2 of 0.944042. The calculated F-statistic (F_{cal}) is greater than the critical or tabulated F-statistic (F_{tab})

hence, the basic assumption of this paper that there is no significant relationship between VAT and economic development (proxy by RGDP) in Nigeria is rejected.

Discussion of the Findings

It was discovered that market women are charging VAT on food items, with the obvious that this tax simply increases their profit margin, landlords are charging VAT on house rent, and hotels are also charging VAT. All these are contrary to the regulation governing this system. The fear is that very soon Nigerians will pay VAT on everything. However, Appendix I show the list of VATable goods and services in Nigeria. The study finds that majority of the populace in the country are unaware of its existence consequently, the low level of awareness and seemingly credibility issues of government makes people scorn the payment and collection of VAT. As a result of the uncommon nature of this tax system, the country has not maximized the benefits inherent in the system.

From the analysis of the three models it is discovered that the explanatory variables FDI, VAT were positively signed, TD was negatively signed in line with a priori expectation. This implies that foreign direct investment and VAT are positively related to economic development in Nigeria while total debt is negatively related to economic development.

Basically, VAT is significantly related to economic development in Nigeria accounting for 94.4% variation in economic development. However, sellers of goods and providers of services are charging VAT on some goods and services which are excluded from the list of VATable goods and services.

FDI increases the wealth of shareholders, thus contributing positively to economic development. This was confirmed by the result of the three models (FDI positively related to RGDP).

Conclusion and Recommendations

The paper concludes that VAT significantly and positively impact on economic development in Nigeria. In the same vein FDI is positively related to RGDP the proxy for economic development. However, TD is negatively related to RGDP. Therefore, the paper proffers the following recommendations.

- a. Given the significant impact of VAT on economic development, VAT collected has to be properly accounted for. The VAT Directorate should be strengthened with skilled and honest personnel to avoid leakage of the required revenue.
- b. Government should formulate policies that will encourage FDI. There should be compensating advantages such as diversification to reduce earnings volatility and encourage economics of scale. The total debt stock of the country should be properly managed as TD negatively impacts on economic development.
- c. On the administration of VAT in Nigeria, there should be adequate publicity of the list of VATable goods and services in order to give credibility to the payment and collection. The enforcement of penalties for VAT related offences should be promptly implemented.

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Appendix 1

LIST OF VATABLE GOODS AND SERVICES AND THEIR RATES

VATable good	Rate (%)
All goods manufactured or assembled in Nigeria	5
All goods imported to Nigeria	5
All of second hand goods	5
House hold furniture and equipment	5
Petrol and all petroleum products	5
Jewels and Jewelries	5
Textiles; clothing, carpets and rugs	5
Beer, wine, sprit, soft drink and bottled water	5
Perfumes and cosmetics (including toiletries)	5
Cigarette and tobacco	5
All vehicles and their spare part	5
All air crafts, air crafts bodies and their spare part	5
Soaps and detergents	5
Mining and minerals	5
Officer furniture and equipment	5
Electric materials of description	5
Such other goods that made be determine by the board from time to time as taxable goods	5
VATable services	5
All services rendered by financial institution to (Excluding People's Banks and Mortgage institution)	5
Accountancy service including any type of auditing, Book-keeping or related services	5
Legal services including services supplied in connection there with	5
Computer including the provision of bureau facilities system analysis, design software, site development and training service supplied by architect	5
Service supplied by brokers	5

Services supplied by security companies and enterprises	5
Courier services	5
Repairs, alterations, processing or any other services provided in connection with designated good by designated dealer	5
Tele communication equipment, installment and maintenance services	5
Letting of video tapes or any other audio visual recording or hiring copying and rewriting of video tapes and similar services	5
Entertainment services including plays and performance, crime shows and music concerts concluding plays and performance conducted by educational institution as part of learning	5
Air travels and company car hires	5
Any other services as may be prescribed by the board from time to time as taxable goods.	5

Appendix 2

VAT, FDI, TD and RGDP from 1994 – 2013

Year	Revenue from VAT ₦ Billion	Foreign Direct Investment ₦ Billion	Total Debt ₦ Billion	Real Gross Domestic Product ₦ Billion
1994	8.20	70.715	908.174	275,450.6
1995	20.32	119.392	965.6401	281407.4
1996	32.47	122.601	960.9941	293745.4
1997	14.74	128.332	954.9611	302022.5
1998	38.28	152.410	1,170.508	310890.1
1999	47.68	154.189	3,372.181	312183.5
2000	60.68	157.535	3,995.638	329178.7
2001	91.75	162.343	4,193.267	356994.3
2002	108.60	166.632	5,098.886	433203.5
2003	313.42	178.478	5,808.0093	477533.0

2004	163.30	249.221	6,260.595	527576.0
2005	192.70	324.657	4,220.979	561931.4
2006	232.70	481.239	2,204.721	595,821.6
2007	312.60	552.499	2619.7732	634,251.1
2008	401.70	586.310	401.9058	674889.0
2009	481.40	2,224.047	472.4391	716949.7
2010	564.89	2,845.496	607.8332	775525.7
2011	659.15	2,999.439	723.4294	832914.6
2012	710.50	3,370.112	945.2383	888,893.06
2013	795.60	3,882.435	1,259.0862	902533.07

Source: *CBN Statistical Bulletin (2014) and CBN annual report and statement of accounts for various years and International Monetary Fund, International Financial Statistics and Balance of Payments Databases, world Bank, International Debt Statistics, and World Bank and OECD GDP estimates.*