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RESEARCH ARTICLE

An Empirical Investigation of the Determinants of Value Added Tax (VAT) in SouthWestern Nigeria

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Abstract

Despite the various tax reforms undertaken by Nigerian Government to increase tax revenue over the year, prior statistical evidence from the literature indicates that the contribution of income tax to the Government's total revenue remained consistently low and is relatively shrinking. The study investigated the determinants of Value Added Tax (VAT) in South Western Nigeria and the influence on revenue profile of the sampled states. Panel method was adopted covering a period of ten (10) years. Random sampling incorporated with Slovin Formula was used to select three hundred and fifty six (356) respondent tax officers, vatable persons and three hundred and fifty three (353) households of VAT rated goods on whom questionnaires were administered. VAT was found positively and significantly (β= 0.7318, p = 0.05) related to revenue profile of the states. Log number of vatable industries was found to be positive (1.45334) and significant (p = 0.05), an indication that increased industrialization led to an increase in VAT. The coefficient of Log of population was negative (-0.5568789) but was significant to VAT revenue which implied that low population was associated with a decrease in VAT revenue. The study revealed that VAT has the potential of positively enhancing revenue generation of the sampled states. This could be achieved given the positive relationship with industrialization of the states and proportionality with income among the populace.

Keywords: *Value Added Tax, Income VAT, South western Nigeria, Vatable persons, Revenue profile.*

Introduction

The recent large increase in fiscal deficit has been attributed to the rapid expansion in expenditure and low revenue collection, thus making fiscal deficit the core issue of most of the developing countries like Nigeria over the past decades [1]. The fiscal deficit is a recurring feature of the public sector financing [2]. VAT is of German and American parentage as the basic principles were developed in both nations shortly after World War 1 and has established itself, over the years, as a robust source of revenue [3].

According to Tait, Robert and Tuan [4], VAT is a broad based business tax imposed at each stage of production and distribution process typically designed to tax final household consumption. It is a type of indirect tax that is imposed on goods and services to influence the rate of production and consumption [5]. VAT is determined on value added where value added is the difference between sales and purchases values [6, 7]. The biggest tax story of the third quarter of the 20th century was the introduction of value added tax in at least 123 countries [8] including Nigeria and some other African countries. Studies conducted by IMF [9], suggested that Value-Added Tax (VAT) raises about 20 percent of the world's tax revenue, and affect about 4 billion people. Widely adopted in sub-Saharan Africa and elsewhere, VAT has been the centrepiece of tax reform in many developing countries as submitted Lockwood, [10].

In developing countries like Nigeria, the establishment of effective and efficient tax systems faces some formidable challenges which include the structure of the economy that makes it difficult, if not impossible, to impose and collect certain taxes, the limited

capacity of the tax administration and the paucity or poor quality of basic data base system [11]. Despite the reforms that the nation had witnessed in tax administration in the past eleven years, a lot of grounds according to Jonathan [12] are needed to be covered. It is obvious that most wealthy Nigerians, who have the means, generally do not pay tax or tax due. Our basic problem perhaps is that the enforcement machinery of our tax laws is so innocuous that anybody can go against it without any qualms. Those charged with its administration are more often than not so ill-equipped, ill-trained and neglected that they become disillusioned, frustrated and therefore hardly give their best services. Tax administration in Nigeria is generally poor in spite of the efforts of government, tax administrators, practitioners and institutions to improve tax administration. There are still myriad of problems militating against effective tax system and the repressiveness' of the Value Added Tax has not insulated it from these problems [13].

The ever-increasing burden on government resources and its finance requirements have been major problems of different tiers of government in Nigeria. Hence, the problem with public finance in Nigeria has been that the level of public revenue generated from tax and non-tax sources in recent years have not been sufficient to meet public expenditure of government, especially the State and Local Governments. This results in recurring budgetary deficits or programmed balanced budgets. The poor financial position of the states in Nigeria has been exacerbated by the general non-provision of Federal grants, which, under the constitution are required to be made to assist them in distress.The insufficiency of huge finances needed to cope with the various States assigned services such as water supply, food, shelter, health services and education at primary and secondary school levels, created an added problem for the government [14].In addition, the fiscal authority in respect of tax assignment, which includes power to legislate and set rates, the power of administration and the right to revenue collection, are largely vested in the Federal Government, [15].

The emphasis of the earlier works on VAT in developing countries like Nigeria had been on the importance of VAT and its implementation effects on the people [5]. However, this study improved on earlier ones as it examines both the concept of consumption based VAT and its effect on income of government and the consumption expenditure patterns of taxpayers as a single phenomenon. Further, there is dearth of literature on the revenue performance of the State-level Value-Added Tax (VAT) in developing countries like Nigeria. Other study conducted in India using state level GDP, data of which is yet to be available in Nigeria. Study conducted by Owolabi and Okwu [16] focused only on Lagos state and concentrated on developmental aspects such as infrastructural development, environmental management, education sector development, youth and social development, agricultural sector development, health sector development and transportation sector neglecting the effect of VAT on revenue generation which is the core objective of the tax system.

Despite the various tax reforms undertaken by Nigerian Government to increase tax revenue over the year, prior statistical evidence indicates that the contribution of income tax to the Government's total revenue remained consistently low and is relatively shrinking [17]. The goal of this study is to empirically evaluate the determinants of VAT and its influence on the level of revenue accruable to state governments. The study will address the macroeconomic aspect of a tax system which attracts the attention of policy makers in developing countries such as Nigeria.

Statement of the Research Problem

Several studies on the impact of tax and the response of tax revenues to changes in economic growth measured by Gross Domestic Product (GDP) have been undertaken [18-23]. Most of these studies have also not focused on contribution of VAT in particular to the total revenue of states and also omitted some key determinants of tax revenues, such as the nature of the tax system, and institutional, demographic and structural features of the state's economy

which thus constitute the crux of this current study.

Research Questions

This study generally evaluates the objectives and hypothesis on the basis of which these research questions are critically addressed.

- What are the components of the revenue profiles of State Governments in South Western Nigeria?
- What are the determinants of VAT in the South Western Nigeria?

Objectives of the Study

- To examine the Revenue pprofiles of State Governments in South Western Nigeria;
- To identify and analyze the determinants of VAT in South Western Nigeria.

Research Hypotheses

Ho: There is no significant difference in the perception of factors influencing Value Added Tax in South Western Nigeria.

Literature Review

Concept of Value Added

According to Owolabi and Ekwu, [16] VAT is a tax on consumption; the more you buy the more tax you pay. It is also a neutral tax on businesses in that it does not represent a real cost to anyone but the end consumer. Everybody pays tax to the Government whenever they purchase goods or services. This tax is collected for the government by the supplier of those goods and services. VAT revenue has become a significant source of government revenue in Nigeria. Therefore, the primary objective of fiscal policy is to raise more revenue through value added tax. The tax authorities have been guided by the need to design equitable and efficient VAT system capable of complementing government expenditure and, thus, reduce recourse to public borrowing. VAT rate in Nigeria has been determined in a way that minimizes disincentive effects on economic activities.

Eltony [24] used time-series and cross-sectional country data for the period 1994-2000 for 16 Arab countries to examine the determinants of tax effort. The results showed that the main determinants of tax revenue share in GDP were per capita income, agricultural output-GDP ratio and mining-GDP ratio. The share of exports, imports and outstanding foreign debts were other variables found to be important. Also, country-specific factors such as the political system, attitudes toward government, the quality of tax administration and other institutions of government appeared to be important determinants of tax-GDP ratio. In a recent study,

Teera [25] attempted an assessment of Uganda's tax performance relative to 18 other Sub-Saharan countries aimed at evaluating the feasibility of raising tax revenues in Uganda. The study used pooled data to construct an index of tax effort for these countries, and also applied the model to individual tax shares to pinpoint the source of high and low effort. By extension, the model must have incorporated value added tax. The result showed that Uganda's tax effort index for total taxes on income were less than unity, while the indices for international trade taxes and taxes on goods and services exceeded unity. One may be tempted to consider this as defining a place for value added tax.

In their study, Bird, Vazquez and Torgler [8] concentrated on the relevance of demand factors such as corruption, voice and accountability. They opined that not only supply factors matter, but that demand factors matter quite significantly in the determination of tax effort. They concluded that a more legitimate and responsive state is likely an essential precondition for a more adequate level of tax effort in developing countries. This calls for attention to countries' specific factors.

Tanz and Davoodi [26] also found empirical support for the relevance of demand factors. Thus, they argued that the quality of institutions and governance influence tax revenue through their contribution to tax evasion, improper tax exemption and weak administration. This study observes that in Nigeria or Lagos State, the institutions and governance may not likely influence VAT revenue through these outlets but rather through corruption, voice and accountability. However, the Nigerian experience demonstrates the relevance of some of the above propositions.

Value Added Tax in Developing Countries

The revenue structures of most developing countries have not been as productive as desired. The growth in revenue has failed to catch up with government spending pressures, a situation that has occasioned huge imbalances between the demand and supply of public budgetary resources. Ariyo [27] concluded, while applying the test by Blinder and Solov [28], Buiter [29] and Zee [30] that Nigeria was unable to get out of its fiscal deficit profile in the past two decades. Ariyo and Raheem [31] drew the attention to the fact that the unsynchronized revenue and expenditure profile since 1970s caused the recurrent fiscal deficit profile of Nigeria to be unsustainable. However, Alade [32] was of the opinion that fiscal deficits could stimulate aggregate demand and set a country on the path of recovery. Iyoha [33] was of the opinion that given the structural and systematic problems commonly associated with less developed countries, budget deficit invariably appears in the course of governance and such are usually financed by either by borrowing from the central bank, non-banking public and external sources. He emphasized that fiscal deficits raise the level of money supply which in turn sets in motion private sector wealth and asset portfolio decisions with respect to financial and real assets. These countries had to carry out a lot of reforms in tax structures, with the general objectives of revenue adequacy, economic efficiency, equity, fairness and simplicity [18]. The value added tax was introduced in India in place of sales tax from April, 2005. Ajitava et al [34] observed that, though these taxes are in the domain of different state governments within the country's federal set up, it is widely acclaimed to be a better system than the sales tax in India on grounds of efficiency in tax collection. According to Margalioth and Reuven [35], there seems to be a general agreement that consumption taxation such as VAT is superior to income taxation in developing countries in terms of efficiency as well as redistribution. The tax rate of 12.5% was fixed on implementation by a meeting of different state level finance minister in New Delhi to boost tax revenue [5].

Most visible tax reform undertaken by developing countries during the past three decades has been the introduction of the VAT. Since VAT can now be found in an overwhelming majority of the developing countries, the outstanding tax policy issue in the domestic consumption tax area in these countries is no longer the replacement of sales taxes but the proper design of the VAT and its scope to further enhance revenue accruable from the source. For instance VAT constitute 47 % of Kenya total revenue, followed by South Africa (28 %), Ghana (25 %) with Nigeria the least (12 %) as could be seen in the Table 1 below.

Table 1: Components of total revenue in major African economies

Tax as % of Total Revenue	Nigeria	Ghana	Kenya	South Africa
Personal Income Tax	1%	11%	20%	31%
Corporate Tax	15%	13%	19%	24%
VAT	12%	25%	47%	28%
Custom and Excise	18%	18%	9%	8%
PPT & Royalty	55%	0%	0%	0%
Others e.g petroleum levy	0%	33%	5%	9%

Source: National tax policy submitted to the federal executive council (2010)

The low percentage of VAT in the Nigerian revenue profile could be attributed to large chunk accruing from oil revenue. Further most countries of the world had changed their VAT rate since year of introduction except Nigeria that maintained constant rate since 1994 of VAT introduction as could be seen from the IMF data base Report [9] in the table below.

VAT and Revenue Profile

The empirical literature provided the details of the practices of value added tax in other

Table 2:VAT rate in African Countries

Country	Date of VAT introduction (%)	Standard Rate on Introduction (%)	Current standard rate (%)
Algeria	1997	13	17
Benin Republic	1991	18	18
Botswana	2002	10	10
Burkina Faso	1993	15	18
Cameron	1999	18.7	19.3
Cape Verde	2004	15	15
Central African Republic	2001	18	18
Chad	2000	18	18
Congo Republic	1997	18	18.9
Cote d'Ivoire	1960	8	18
Egypt	1991	10	10
Equatorial Guinea	2005	15	15
Ethiopia	2003	15	15
Gabon	1995	18	18
Ghana	1998	10	12.5
Guinea	1996	18	18
Kenya	1990	17	16
Lesotho	1996	14	14
Madagascar	1994	20	18
Malawi	1989	35	17.5
Mali	1991	14	5
Mauritius	1998	10	15
Morocco	1986	19	20
Mozambique	1999	17	17
Namibia	2000	15	15
Niger	1986	12	19
Nigeria	1994	5	5
Rwanda	2001	15	18
Senegal	1961	20	18
South Africa	1991	10	14
Sudan	2000	10	10
Tanzania	1998	20	20
Togo	1995	18	20
Tunisia	1988	17	18
Uganda	1996	17	18
Zambia	1993	20	17.5
Zimbabwe	2003	15	15

Source: IMF Data Base [9]

countries and how they have influenced the revenue profile of the respective countries. John Whalley and Li Wang [36] observed that China VAT, while seemingly conventional has two major impurities. The first is that a separate export rebate system exists where rebate rates are linked from rates paid on creditable inputs. The other impurity is the use of an income base for which there is no crediting of taxes on capital goods rather than the conventional consumption base with expensing of investment expenditure. China introduced the value added tax in 1994 as part of a general tax reform. It replaced a preexisting wholesale turnover tax and was seen as a major improvement in China fiscal system in terms of removal of tax distortions and provision of stable revenue source. It has a standard rate of 17%. The Venezuela value added tax system and observed that the proposed reform was based on the decentralization of the VAT administration from the Federal to the State Government due to political, administrative and other issues which holds resources from getting to the population through the established mechanisms as observed in many developing countries. The reform will transfer the power to regulate, collect and administer the VAT to the State Government to promote development throughout the region.

Though the empirical work on the issue of revenue effects of VAT are scanty, majority of the associated articles elaborated on effects of VAT introduction in the national tax schemes. These works perceive VAT introduction as tax innovation and they generally follow the same line of modeling which concentrates on the ex-ante and ex-post conditions of VAT-adopting economy. These are being compared through sets of dummies and interaction terms to sort out the implicit effects of VAT introduction on tax revenues, terms of trade and other macroeconomic variables [37]. The works of Ebril and Al. [38], Keen and Lockwood [39],

both using much larger datasets of more than 100 countries with long time series affirmed that the introduction of VAT is associated with a significant increase of tax revenues. To validate the estimation result, authors argue that the revenue increase is justified on efficiency grounds (comparing the VAT to its predecessor, the Sales tax). The same model was applied in the work of Keen and Lockwood [39], where the set of countries was restricted to allow for more qualitative information in the sample. Apart from confirming the effects of VAT introduction, authors examined whether there is a relation between the VAT imposition and growth of government size. Such relation however does not prove significant on the data.

Another kind of analysis was pursued by Desai and Hines [40], who estimated the impact of the VAT introduction on international trade. The authors used large dataset of 143 developed and developing countries and found out that the examined trade indicators which were openness and export performance are negatively affected by the presence of VAT and its increasing weight in the tax system. This unprecedented finding was due to the badly administered tax rebating system in the developing countries in contrast to the developed countries. These market deficiencies are assumed to deter potential domestic exporters thus reducing international trade.

Osoro [18] examined the revenue productivity implications of tax reforms in Tanzania. In the study, the tax buoyancy was estimated using double log form and tax revenue elasticity using the proportional adjustment method. The argument for the use of proportional method was that a series of discretionary changes had taken place during the sample period, 1979 to 1989, making the use of dummy variable technique impossible to apply [18]. For the study period, the overall elasticity was 0.76 with buoyancy of 1.06. The study concluded that the tax reforms in Tanzania had failed to raise tax revenues. These results were attributed to the government granting numerous tax exemptions and poor tax administration.

Ariyo [41] evaluated the productivity of the Nigerian tax system for the period 1970 - 1990. The aim was to devise a reasonable accurate estimation of Nigeria's sustainable revenue profile. The slope dummy equations were used for the oil boom and SAPs. It was found that on the overall, productivity level was satisfactory. However, the results indicated wide variations in the level of tax revenue by tax source. The variations were attributed to the laxity in administration of non-oil tax sources during the oil boom periods. Significant reduction in public expenditure and prudent management of financial resources were suggested as solutions to the fiscal deficit. The study further asserted that there was need to improve the tax information system to enhance the evaluation of its performance and facilitate adequate macro-economic planning and implementation [41].

Muriithi and Moyi [23] applied the concepts of tax buoyancy and elasticity to determine whether the tax reforms in Kenya achieved the objective of creating tax policies that made yield of individual taxes responsive to changes in national income. They used equation 2 to estimate the responsiveness of tax yields on income. The results showed that tax reforms had a positive impact on the overall tax structure and on individual tax handles. The study concluded that despite the positive impact, the reforms failed to make VAT responsive to changes in income. However, VAT had been around for about eleven years only and subjecting it alone in a regression model did not make statistical sense. The current study differs from this study because it separates the effect of average monetary GDP and average total GDP on tax revenue and uses average figures instead of the annual ones because the tax revenue figures are on fiscal year basis that starts on 1 on calendar year that starts on 1st July while the GDP figures are January.

In an attempt to highlight the trends in Kenya's tax ratios, tax effort indices and their implication for further tax reforms, Wawire [21, 22] performed a regression of tax revenue on income. The estimated tax equation was used to compute tax effort indices by dividing the predicted with the

actual figures. After examining the tax effort indices, the study concluded that the slowdown in economic growth had resulted in high levels of taxation that did not match delivery of public goods and services. The study however, never took into account the time trend characteristics of variables that were used.

Most of the literature reviewed so far focused on the justification for adding value added tax to the fiscal revenue profile of government. However, this approach is deficient as government cannot continue to increase the tax rates and coverage indefinitely when increased revenue is desired as this will increase the burden of the taxpayers and encourage tax evasion. There is the need to assess the impact of this revenue source on both the taxpayers who bears the burden of the payment and the government who serves as the revenue collector through the imposing authority and the economic parameter of consumption as a result of the introduction of the tax which forms the basis of this work.

Suleiman [42] analyzed the relevance and the problems of Value Added Tax in Nigeria. The analysis covered a survey of vatable Nigerian Organizations and the way VAT is administered, its relevance in revenue generation, savings and consumption of consumers and the problems hindering its efficiency. He concluded that the way VAT revenue is being shared among the three tiers of Government in Nigeria suggests that these revenue is being re-injected into the economy through public expenditure. Steps should be taken to ensure that the VAT revenue is targeted at sectors most likely to ameliorate the inadvertent adverse effects of VAT on consumer welfare, production, employment and income. Further is the observation of

Adekanola [43] that taxation in this part of the world is seen largely as a source of internally generated revenue. While this view is not necessarily incorrect, seeing taxation merely as a revenue tool is a very limited perspective, the consequences of which may be more than academic. The use of taxation as a tool for encouraging savings and investment, redistributing income, curbing social ills, discouraging the production, importation, exportation and consumption of some goods and services which VAT is intended to achieve would be missed.

Methodology

The study covered five states of Ondo, Ogun, Lagos, Oyo, and Ekiti located in South-Western Nigeria. Lagos, Ogun, Oyo and Ekiti are specially selected based on their non-oil producing status while Ondo is selected because it is the only oil producing state in the region. Both primary and secondary data were used for this study. The primary data sources were collected from the direct responses from the staff of the state ministry of finance, budget and planning who are the main recipients of the VAT due to their State Government and the tax officers of the Federal Inland Revenue Service of the selected states, as the administrative authorities of the VAT.

In order to collect the primary data, structured questionnaire and interview guide with consumers of VAT rated goods were adopted in the study. The secondary data for the study were extracted from the approved budgets of the selected States for ten years (2002 to 2011) and information from Central Bank of Nigeria and National bureau of statistics for the sampled period. Using structured questionnaire, 361 respondents' tax officers and Vatable persons and 360 household of Vat Rated Goods were selected.

The multiplicative functional form of tax revenue model was used.This model had been used successfully by several studies on empirical assessment of VAT. For this study, the model was specified as:

$$T = e^{\alpha} Y^{\beta} I^{\gamma} e^{\varepsilon}$$

Where: T = tax revenue, ß = estimated parameter, Y = income variable, I= number of vatable industries, □ = constant term, e = natural number, □ = error term

These parameters were used as VAT component of the tax revenue profile of Government is a function of the income from the vatable industries.

Results and Discussions

Revenue Profile of the States for the Sample Period 2002-2011

Results in Table 3 show the descriptive statistics of internally generated revenue of each sampled states across the sample period. The result indicates that Ekiti state has the minimum (0.10) generated revenue for the entire period. The standard deviation value (2.71) for the states also rank Ekiti state as the least stable in terms of internal revenue generation. Based on the result, Oyo state ranked second in terms of volatility/least stable revenue generating state after Ekiti. On the average, the maximum IGR is generated by Lagos followed by Ondo states. However, IGR generation in Ondo state is least stable (SD =0.404) compared to that of Lagos states (S.D = 0.391). The maximum obtained for each of the states after logarithmic transformation is 16.25 for Lagos state, 11.94 for Ondo state, 7.63 for Ogun state, 7.54 for Oyo state and 6.49 for Ekiti state. The overall result showed that Lagos and Ondo states are the leading revenue generating states in Southwest, Nigeria. Available information from CBN has earlier described Lagos as the hub of commerce in the nation while the status of Ondo is boosted by presence of oil which generates extra revenue for IGR generating ventures. Figure 4.1 shows the description of revenue status after pooling both states cross sectional values and time period together.

Table 3: Descriptive statistics of IGR of South Western States for the sample period

Variable	Mean Value	Standard deviation	Minimum Value	Maximum Value
	N'billions			
Lagos	15.821181	.3912034	9.255273	16.252853
Ogun	7.411318	.1768557	7.20412	7.633469
Oyo	7.055537	.4886398	6.516943	7.543322
Ekiti	1.287601	2.714597	0.102141	6.48606
Ondo	10.12476	.4049884	8.26531	11.94374
Descriptive statistics of revenue across states and sample period				
IGR	12.31883	5.870234	2.964812	17.06519

Source: Output of Data Analysis based on Field Survey (2013)

Determinants of Value Added Tax in South Western Nigeria

Table 4 shows the results of analysis of determinants of VAT in South Western Nigeria. The results indicate that sales tax structure is elastic with total revenue of the South Western States. This means that a percentage change in value of sales tax leads to a more percentage change in total VAT revenue of south west. The finding indicates the direction of industrial activities in the zone, which is lacking in manufacturing of basic necessities for the populace. If the source of tax structure emanates from production of necessities, inelastic response would have been obtained. Log of income was found to be positive but less than unity. This implies the variable is inelastic to the value added tax, indicating that a percentage change in income earning leads to a less percentage change in value added tax. This finding might be relevant to the availability of necessities goods and services among the populace of the study area. Number of vatable industries is also found to be positive and significantly related to value added tax. The result also shows that increase in industrialization would lead to more than proportionate increase in value added tax, implying that more revenue may be generated from increase in industries. Expectedly, lag volume of trade was found to be positive and significantly related to VAT revenue to the state. Increase in volume of trade arising from increase in industrial activities, will make the availability of tax revenue easier.

A negative and significant coefficient was observed on log of population on VAT. The negative coefficient indicates that relatively low population will decrease VAT revenues. This can be attributed to low demand for taxable goods and services associated with low population and also to the over reliance

on oil revenue rather than intensification of internal revenue generation. The elasticity of lag volume of sales tax was found to be greater than unity, indicating the possibility of underground economy in the study area. This might be due to the closeness of some of the sampled states to international border. The results from the state dummy shows that the elasticities of Lagos, Ondo, Oyo and Ogun states are greater than the elasticity of Ekiti state. This result implies that revenue generation of Ekiti state is proportionately lower to the rest of the sampled states.These might be explained due to the population of the state and the limited industrialisation of the state. Ekiti state is the least populated state in South Western Nigeria and VAT, being a consumption tax and number of industries based might have accounted for this result. Using lagged dependent variable in a cross sectional equation increase the data requirements but it also provides a simple way to account for historical factors that cause current differences in the dependent variable that are difficult to account for in other ways.

The primary reason for including the lagged volume of sales tax is to obtain a better estimate of effect of log of volume of sales tax on log of VAT. It aids in getting a better estimate f the effects of policy variables on various outcomes. The Akaike and Schwarz information criterion were used to determine the appropriate lag [44-57].

Table 4: Determinants of Value Added Tax in South Western, Nigeria

Variables	Coefficient	t-value
Constant	1.682542	2.41***
Log of sales tax	1.013214	1.99**
Log of Income	.0447953	3.13***
Log No of Vatable industry	1.45334	1.97**
Population	-.0556879	-4.02**
Lag volume of trade	0.723238	2.37***
Lag volume of sales tax	1.566676	2.30***
Ondo	1.706211	2.35***
Oyo	1.410965	1.77*
Ogun	1.10032	1.89*
Ekiti	-0.64203	1.69
Lagos	1.89764	3.78***
R-sq	0.7697	
Wald chi2(7)	1252.46	
Prob > chi2	0.0000	

*** 5%: ** 10%: * 1%.
Source: Field Survey(2013)

Conclusion

The result from the study affirmed that VAT had a significant impact on the revenue profiles of the sampled states. The results further indicate that sales tax structure is elastic with total revenue of the South Western States. This means that a percentage change in value of sales tax leads to a more percentage change in total VAT revenue of south west. Also, the direction of industrial activities in the zone, which is lacking in manufacturing of basic necessities for the populace.

Recommendations

In the light of the above the following suggestions could make for sustained contributions of VAT:

- Policies that will endear the States to industrial development should be implemented. This will not only increase the number of vatable industries but provide employment that will increase the income of the people which in turn increase consumption expenditure and VAT respectively.This will increase the overall economic development and sophistication of the economic structure in the SouthWestern Nigeria.

- Deliberate policies to adequately train the tax authority staff on tax assessment through provision of manual of tax procedures should be put in place by the FIRS to minimise avoidance through underassessment of VAT payable.

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