

## **DETERMINANTS OF VALUE ADDED TAX, INTEREST RATE, INFLATION AND INFLUENCE ON REVENUE GENERATION IN NIGERIA**

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### **Abstract**

*The study examined the determinants of VAT, Interest rate, Inflation and Influence on revenue generation in Nigeria. Secondary data were gathered from CBN statistics bulletins that cut across 1990 and 2012. This period was selected in order to capture the inflation, Interest rate, prior, during and post implementation of VAT. Data were analyzed with the use of descriptive analysis and Johansen co-integration test. The result revealed that VAT, INT and INF have the means of 461214, 19.06478 and 20.09913 respectively, while their standard deviations stand at 1460060, 3.284060 and 18.93905. Their minimum and maximum values are 0.0000 and 7101500 for VAT, 13.54 and 29.80 for INT, 8641 and 4749200, 5.4 and 72.80 for INF. The descriptive statistics gave a clear picture of the distribution and range of all the series, there exist no significant relationship between VAT and INT ( $r=-0.200$ ,  $p>0.05$ ), INF and VAT ( $r=-0.139$ ,  $p>0.05$ ), INT and INF ( $r=-0.074$ ,  $p>0.05$ ). However, there is significant positive relationship between VAT& INF both on the short and long run, while interest rate exert negative influence on Inflation both on the short and long run. There is strong and positive relationship between VAT and revenue generation in Nigeria. It is recommended that government should provide effective anti-inflationary policy to cushion the inflationary tendencies of value added tax in the country and regulate the rise in the level of interest rate in order not provoke price instability and at the same time maintain the current level of improvement in the revenue generation in the country.*

*Keyword: Value Added Tax, Interest Rate, Inflation, Co-Integration Test, Revenue Generation*

## INTRODUCTION

Taxation is one of the oldest economic phenomena by which the cost of providing essential services for the generality of a given set of people within a geographical area is funded. In some countries, taxation is as old as their history. Historically, it can be asserted that the Sumerian empire could be the first place where taxes were levied and accounts for the utilization made (Abdulrazaq, 2010). The main objective of taxation is to provide revenue needed to finance the budget. This is evidenced by the attention that taxation had received over the years. The main purpose of tax is to raise revenue, meet government expenditures, and redistribute wealth and management of the economy (Ola, 2001, Bhartia, 1991). The importance of tax lies in its ability to generate revenue for the government. It also influence the consumption pattern of the people and regulate the economy through its influence on vital aggregate economic variables such as income, employment, prices of goods and services and a host of others (Fasoranti, 2013). Tax constitutes the process by which the government appropriates part of the income of private sector. The revenues so derived were used to finance government expenditures. Among other things, taxation is an important instrument of fiscal policy in the economy. It generates income for the government for the funding of economic activities capable of raising the growth rate. It is a mean of redistributing income and wealth among consumers.

The ability of the tax system to generate revenue affects the services offered by the government. Unfortunately, the Nigerian tax system has not been able to perform the expected role of revenue generation and regulation of income redistribution (Olaoye, Asaolu and Adewoye, 2009). This is as a result of the structural and administrative defects of the tax system. The machinery and procedures for implementing tax systems are inadequate, resulting into tax evasion and avoidance by most individuals and institutions (Akintoye, 2008). The resultant effect is low revenue yield.

On the other hand, the need for more sources of revenue for the government cannot be over emphasized. Revenue continues to fluctuate due to price fluctuations in the world market. Moreover, revenue from the non-oil sector has been grossly insufficient to meet public needs due to the rise in pressing social and economic needs. It was against the above background that the Edozien-led committee was inaugurated in 1991 to review the Nigerian tax system. The committee clearly identified the need to transform the outmoded sales tax that was then administered by the state government. In the same vein a parallel study group was set up to examine the feasibility of introducing Value Added Tax in Nigeria as an improvement on the existing sales tax (Ijewere, 1993).

Value Added Tax has become a major source of revenue in many developing countries (World Bank, 2004). In sub-Saharan Africa, VAT has been introduced in Benin Republic, Cote

d'Ivoire, Guinea, Kenya, Madagascar, Mauritius, Niger Republic, Senegal, Togo and Nigeria. Evidence suggests that in these countries, VAT has become an important contributor to total government revenues (Ajakaiye, 2000). Despite the opposing views on VAT, it has helped to raise non-oil revenue in oil producing countries of the world. It has been described as a veritable source of revenue to the government (Adereti, Sanni & Adesina, 2011). In France, VAT accounted for about 50 percent of total state revenue (Chelliah, Bass & Kelly, 1975). Tait (1989) asserted that VAT contributed 12.35 and 19.71 percent of total government revenue in Kenya and Senegal. Besides, VAT is also assuming a significant place in revenue generations in the less developed countries.

The main shortcoming of Nigeria's tax structure since independence has been its over-dependence on petroleum revenue and a few other sources of tax revenue (Ayeni-agbaje, Akinleye & Olaoye, 2014). According to Wawire, 2000, Muriithi and Moyi, 2003, Wawire, 2003 & Wawire, 2006) the main sources of tax revenue include: Personal Income Tax, Corporate Tax, Education Tax, Withholding Tax, Stamp Duties, Capital Gain Tax, Capital Transfer Tax (abrogated), Trade Taxes, Customs and Excise, Sales Tax/VAT and Income Tax. According to Ajakaiye (2009), VAT contributes about 20% to total revenue in the less developed countries. In Nigeria, the contribution of VAT to total tax revenue has been on the increase since 1994. It rose from N7, 260m in 1994 to N58 million in year 2000 and by year 2006, its contribution was N221 million (Fasoranti, 2013)

Recent research works on the impact of taxation on revenue generation in Nigeria have lumped up all the various taxes (VAT inclusive). However, there is need to know the determinants of VAT, Interest rate and Inflation in Nigeria. This study addressed the question of whether there is any causality among the economic variables? i.e. Value Added Tax, Interest rate, Inflation and revenue generation in Nigeria .

Evidence so far supports the view of Adereti et.al (2011) that VAT is a significant source of revenue in Nigeria. VAT revenue in the year of its inception (1994) was N8.194 billion, which was 36.5 percent greater than the projected N6 billion for that year (Ajakaiye, 1999). However, the members of the organized private sector have been voicing their reservations in the sense that VAT is taking a toll on the prices of their products. From an economic point of view, one expects the price of goods subject to VAT to rise, however, beyond this expected rise, businesses are taking advantage of the existence of VAT to increase prices of goods and services arbitrarily (Adam, 1998).

According to Aruwa (2008), the resulting price increase has led to higher inflation. This may have prompted Mclure (1989) to state that policy makers should be concerned about the

macroeconomic impact of VAT, especially on prices, output, income and consumption, before considering its adoption.

Ebeke & Ehrhart (2010) in a study on the sources and consequences of instability in tax revenues in sub-Saharan African countries, using panel data for 39 countries over the period 1980 to 2005, give credence to Bleaney, Gemmel & Greenaway (1995), Guillaumont, Jeanneney, & Jean-Francois (1999), Fatas & Mihov, (2003), Telvi & Vegh (2005), Thornton (2008) and Diallo (2009) that tax revenues is not stable in sub-Saharan African countries.

## **CONCEPTUAL CLARIFICATION**

### **Origin of VAT**

Value Added Tax is simply called the Goods and Services Tax (GST), it is levied on the value added that results from each exchange. It is an indirect tax collected from someone other than the person who actually bears the cost of the tax (Ochei, 2010). It was invented by a French Economist, Maurice Laure in 1954 and was first introduced in France on 10<sup>th</sup> April, 1954.

Although VAT as we understand it today, has been established only during the last century (Kauline, 2006). The origins of the tax in the form of applying certain payments to goods under various stages of production and sales dated back to the very early years when the humanity started living together (Igbuguchi, 1996). Adam (1993) report reveals that a general turnover tax was applied to goods sold in markets and auctions already in the ancient Rome. This system was later used also in Egypt, France, Spain and other countries.

In Nigeria today, the primary reason why this tax was implemented without much contemplation and detailed analysis was the Nigeria's foreign policy objective to accede to the other international community's (Abdulrazak, 2009). It should be noted that one of the conditions to reach the objective of harmonization of the tax system, including introduction of a common customs system and harmonization of the indirect tax system (Lekan, 2002). It can be seen that revenues generated by VAT grow not only in absolute numbers but also their percentage of total state budget revenue tends to increase (Ijewere, 1993). In 1995 it exceeded half of all tax revenues in the state budget (Budget, 1996).

According to Mackinnon (2010) and Mansfield (2006) defined VAT "as a tax on the value addition at different stages of manufacturing and distribution of goods and services". It is a form of indirect tax in the nature of a multi-point sales tax with a set off or credit for tax paid on purchases / services. Each transaction of goods sold in the course of business is taxed, thus providing revenue to the government on value addition at each stage.

Bickley (1990) defines Value Added Tax as "A Tax levied at each stage of productions on a firm's 'Value Added'. Old man and Woods (1996) also states that The Value Added Tax

(VAT) as it is generally applied, is a multi-stage consumption tax levied on the difference between a firm's sales and the value of its purchased inputs used in producing goods.

Aluko (1996) defines VAT as a multi-stage tax imposed on the value added goods and services as they proceed through various stages of productions and distribution and to services as they are rendered. Bhatia (1991) regards VAT as a family of sales tax. Ijewere (1993) defined VAT as well, as a tax imposed on the value which the suppliers or sellers of goods or services add to the goods or services before selling it.

### **Features of Nigerian VAT system**

The following are the main features of the Nigerian VAT (ICAN, 2000). First, it is a single rate (5%) VAT which makes it easy to administer. Second, it adopts the input-output tax mechanism, which makes itself policing. Although, it is a multiple stage tax, it is expected to have a single effect on consumer prices and does not add more than the specified rate to the consumer price no matter the number of stages at which the tax is paid. In essence, it is the official view that the VAT should not be cascading whatsoever since the tax liability of a VATable organization is the difference between VAT on output and VAT on inputs. In other words, the credit method of collection eliminates any cascading effects. Third, all goods are VATable with the exception of the following (Adari, 2007):

- (i) Medical and pharmaceutical products;
- (ii) Basic food items such as peas, beans, yam, cassava, maize, rice, wheat, milk and fish; Infant food items;
- (iii) Books, newspapers and magazines;
- (iv) Educational materials (laboratory equipment);
- (v) Baby products such as carriages, clothes and napkins, as well as sanitary towels; Commercial vehicles and spare parts,
- (vi) Tractors,
- (vii) Public transport passenger vehicles,
- (viii) Motorcycles,
- (ix) Tanks and other armoured fighting vehicles, and bicycles;
- (x) Agricultural equipment such as those for soil preparation or cultivation, harvesting or threshing,
- (xi) Milking and dairy machinery and poultry keeping machinery;
- (xii) Veterinary medicine equipment; and
- (xiii) Fertilizers and farming transportation equipment

Similarly, all services are subject to VAT except:

- (i) Medical and health services;
- (ii) Services by community banks,
- (iii) People's banks and mortgage institutions (interest earnings on loans by commercial banks and premiums paid to insurance companies);
- (iv) Performances conducted by educational institutions as part of learning;
- (v) Social services such as orphanages, charities and fire fighting;
- (vi) Pure postal services;
- (vii) Religious services;
- (viii) Non-commercial cultural services;
- (ix) Overseas air transportation;
- (x) Public telephone and telegram services (excluding business or commercial services).

The following goods and services are also exempted:

Salt, water, salary or wages from employment, director's emoluments, hobby activities, private transactions such as sale of domestic or household articles, vehicles, personal effects or private motor vehicles, and residential house rent.

Furthermore, the inputs of the above stated goods and services are VATable and they cannot claim credit for such input taxes. On the other hand, all exports are zero-rated, implying that exporters do not collect VAT on exports but they can claim credit for VAT paid on their inputs.

All imports are VATable, whether imported raw materials or finished goods. Moreover, VAT on imports is calculated on the total value of the total cost of insurance and freight (CIF) plus customs duties and all other charges on imported goods. The amounts expressed in foreign currency are converted into naira using the exchange rate adopted by the Nigerian Customs Service (NCS). (CBN, 2006) stated that, between January 1994 and August 1995, the Nigerian Customs Service (NCS) used the exchange rate prevailing on the date the good was cleared from the ports. In this connection, it is recalled that by the beginning of 1995, when the exchange rate depreciated by over 70% in the autonomous foreign exchange market (AFEM), the organized private sector put enormous pressure on the government to review this procedure for computing VAT liability on imports so that by August, the NCS was directed to use 65% of the prevailing exchange rate on the date of clearance of imports to determine the VAT liability on all categories of imports (Asher, 2009).

Fourth, with effect from 1 January 1995, all ministries, parastatals and other agencies of government as well as religious and other organizations and similar persons that are normally

exempted from income tax are expected to pay VAT on items they consumed in addition to the contract price of items consumed too. For the contractors to render monthly returns, all government agencies must obtain receipts from the FIRS for the VAT paid on behalf of the contractors. It may be pertinent to mention that this way of broadening the base of VAT is consistent with the policy of exemptions, especially the provision that all inputs used for the production of VAT exempted goods are themselves VATable.

### Importance of Value Added Tax in Nigeria

If a well administered system comes in, it will not only close options for traders and business men to evade paying their taxes, but also make sure they will be compelled to keep proper records of sales and purchases. At the macro level, two issues make the production of VAT critical for Nigeria. Industry watchers believe that the value added tax system, if enforced properly, will help in addressing issues like fiscal deposits problems in Nigeria and create a high price market for the public (Shankar ,2005).

### Summarization of the Current advantages of Value Added Taxes

1. Covering nearly all the goods and services consumed by all, be it rich or poor,
2. It leads to revenue security for the government,
3. Selection of rates varies state to state due to diversified markets.

### Disadvantages of the Value Added Taxes at Present

1. VAT is recognized as an integral activity,
2. VAT is difficult to operate from the position of both administration and business,
3. Leads to business inflation,
4. It has been identified that value added tax favours capital intensive firms that can meet the global challenges.

Table 1: Contribution of Tax to Total Revenue by Country

<b>TAX AS A PERCENTAGE OF TOTAL REVENUE</b>	<b>Nigeria</b>	<b>Ghana</b>	<b>Kenya</b>	<b>South-Africa</b>
Personal Income Tax	00	11	20	31
Corporate Tax	15	13	19	24
Value Added Tax	12	25	47	28
Customs and Excise	18	18	09	08
Petroleum Profit Tax and Others	55	33	05	09
Total	100	100	100	100

Source; Chartered Institute of Taxation in Nigeria (2005)

## **Inflation Rate**

This is a measure of inflation, or the rate of increase of a price index such as the consumer price index (Usman & Adegbite, 2013). It is the percentage rate of change in price level over time, usually one year. The rate of decrease in the purchasing power of money is approximately equal. The inflation is used to calculate the real interest rate, as well real increase in wages. Official measurements of this rate are input variables to cost adjustment and inflation derivatives price (Engle and Granger, 2007).

Inflation had its bitter toll on the Nigerian economy and monetary and fiscal policies among others have been developed to reduce it. The Central Bank of Nigeria (CBN) has the statutory responsibility of formulating and implementing monetary policy with an emphasis on price stability. The inflationary trend has been cyclical since the mid-1970s, peaking in 1988, 1989, 1992, 1993, 1994, 1995, 1996, 2001 and 2005 respectively (Golit, 2008).

## **Interest Rate**

This can be defined as the reward for parting with liquidity and/or the cost of borrowed capital. Interest rate is seen as a determining factor of investment and it shows a negative influence on the level of investment. It is usually measured in percentage (Ogunleye, 2012).

## **METHODOLOGY**

For the empirical study, secondary data were sourced from Federal Inland Revenue service Bulletins and Central bank of Nigeria (CBN) Statistical Bulletins of various issues, which incorporated data from the following VAT regions; Lagos Island region (Ikoyi as the headquarter), Lagos Mainland region (East) Ikeja the headquarter, Lagos Mainland region (west) Ikeja as the headquarter, Western region Ibadan as the headquarter, Eastern region Enugu as the headquarter, South South region Port Harcourt as the headquarter, North Central region Kaduna as the headquarter, North West region Katsina as the headquarter, North East region Bauchi as the head quarter, and FCT region Abuja as the headquarter.

Taking reference from the work of Jideofor, (2012) who investigated the influence on Value Added Tax on price stability in Nigeria and where the nexus between tax structure and economic growth was succinctly investigated. The model of the research is thus structured, to recognize inflation (INF) as the dependent variable, while the explanatory variables are Value added tax (VAT) and Interest Rate (INT)

## **Proposed Model**

$$VATINF = f(VAT, INT, U)$$



## A Priori Expectation

Based on theoretical underpinning the relationship between the dependent variable (INF) and the host of independent variables and the host of independent variable is giving below alongside the transmission mechanism of their interrelationship.

$$\delta(\text{INF})/\delta(\text{VAT}) > 0$$

$$\delta(\text{INF})/\delta(\text{INT}) < 0$$

The rationale for the a priori expectation is delineated in the transmission mechanism of the interrelationship between the economic variables under consideration. Firstly the positive relationship between inflation and value added tax hinges on the fact that value added tax being a form of indirect tax permit the transfer of incidence from the producer to the final consumer in form of higher prices. Thus the higher the valued added tax paid by the producers the higher the transfer of tax burden through inflated prices.

Inflation and interest rates are linked, and frequently referenced in macroeconomics. Inflation refers to the rate at which prices for goods and services rises while interest rates – the amount of interest paid by a borrower to a lender.

In general, as interest rates are lowered, more people are able to borrow more money. The result is that consumers have more money to spend, and as a result of increase in demand inflation arises. Likewise as interest rates are increased, consumers tend to have less money to spend. With less spending, the economy slows and inflation decreases.

## ANALYSIS AND RESULTS

### Descriptive Analysis of Variables

Table 2: Descriptive Analysis of Variables

Variable	Observation	Mean	Std. Deviation	Min	Max
VAT	23	461214	1460060	0.00000	7101500
INT	23	19.06478	3.284060	13.54	29.80
INF	23	20.09913	18.93905	5.4	72.80

The above table revealed the descriptive statistics of the series used in the study as presented in below. The mean, standard deviation, minimum and maximum of all the series including Value Added Tax (VAT), Interest Rate (INT) and Inflation (INF). VAT, INT and INF have the means of 461214, 19.06478 and 20.09913 respectively, while their standard deviations stands at 1460060, 3.284060 and 18.93905. Their minimum and maximum values are 0.0000 and 7101500 for VAT, 13.54 and 29.80 for INT, 8641 and 4749200, 5.4 and 72.80 for INF. The descriptive statistics gave a clear picture of the distribution and range of all the series.

### Correlation Matrix of Selected Variables

Table below revealed that, there exist no significant relationship between VAT and INT ( $r=-0.200$ ,  $p>0.05$ ), INF and VAT ( $r=-0.139$ ,  $p>0.05$ ), INT and INF ( $r=-0.074$ ,  $p>0.05$ ). Since correlation only shows the direction of movement of a pair of variables, inference as to the causal-effect relationship between the variables cannot be established. Therefore in the quest to test causal effect relationship that existed between some of these variables, there will be need for the stationary properties/status of the variables to be ascertained, to avoid misleading conclusions as a result of spurious result.

Table 3: Correlation Matrix of all the Time Series Employed in the Research Models

	VAT	INT	INF
VAT	1.0000		
INT	-0.2001	1.0000	
INF	-0.138585	0.0736	1.0000

The normalized long run equation is thus estimated as:

$$\begin{array}{cccc} \text{LNINF} & \text{LNVAT} & \text{LNINT} & \text{C} \\ 1.000000 & 0.086914 & -2.207691 & 3.784166 \\ & (0.03203) & (0.94785) & \end{array}$$

The result of Johansen co-integration test carried with respect to the model (model relating Inflation to Value Added Tax and Interest Rate) of the study is presented in table above. The result revealed that there are 3 co-integrating equation(s) at 5% significance level that is, there is long run association ship among Inflation Rate, Value Added Tax and Interest Rate. It means that the short run disequilibrium is corrected over time in such a way that on the long run equilibrium relationship is attained.

The result revealed that there is positive relationship between Inflation and Value Added Tax on the long run, which is an increase in Value Added Tax will lead to increase in the level of Inflation on the long run. These findings is in agreement with the a-priori expectation, and also corroborate the work of Ibe (2012) which discovered a long run positive relationship between Inflation and Value Added Tax and also the finding of Ikpe and Nteegah (2013) about the relationship between Inflation and Value Added Tax. The result also revealed that Interest Rate exert negative influence on the level of inflation on the long run which is in agreement with the a priori expectation.

### Error Correction Model (ECM)

After establishing that long run relationship existed between the dependent variable and the independent variables through Johansen co-integration estimation of the normalized co-integration equation, Error Correction modeling (ECM) was also carried out, using autoregressive distributed lags (ARDL) techniques, in order to validate the presence of such long run relationship and examined the speed at which the short run inconsistencies/discrepancies were corrected and incorporated into the long run equilibrium dynamics.

An over Parameterized Error Correction Mechanism (ECM) was carried out to allow for the identification of the main dynamic pattern of the model and ensure that the dynamics of the model have not been constrained by a too short lag length after which a parsimonious Error Correction Model is generated by selecting the significant or less insignificant variables from the over-parameterized model.

Table 4: Parsimonious (ECM) (model1)

Series: LNINF LNVAT LNINT; Dependent Variable: D(LNINF)

Variable	Coefficient	Std Error	t-statistics	Prob.	Remarks
C	0.234849	0.207243	1.133209	0.2749	Not significant
D(LNINF(-1))	0.758342	0.225567	3.361943	0.0043	Significant
D(LNVAT(-1))	0.214385	0.085140	2.518036	0.0236	Significant
D(LNINT)	-1.730775	0.613971	-2.818985	0.0130	Significant
ECM(-1)	-0.731937	0.165550	-4.421243	0.0005	Significant

Squared=0.645358

Adjusted R-Square=0.527144

Durbin Watson stat=1.864164

F-statistics= 5.459235

Prob(F-statistics)=0.004659

Figure 1: Inflation Rates in Nigeria

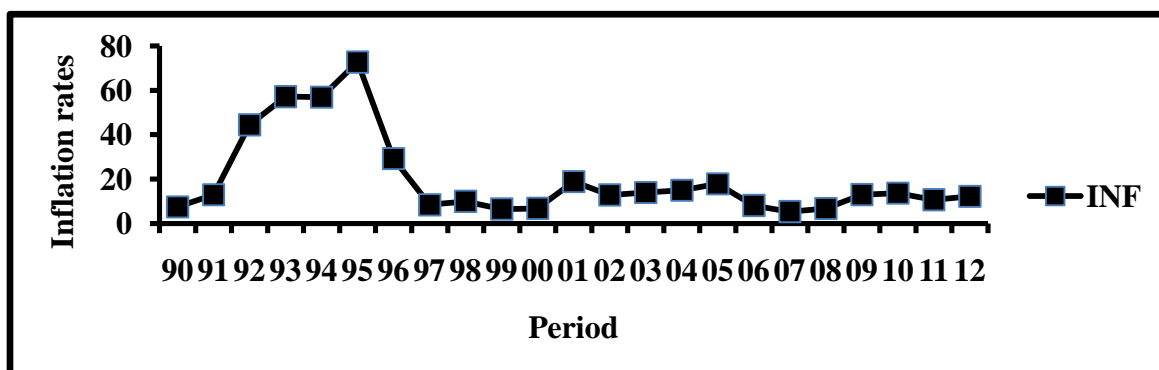


Figure 2: Interest Rates in Nigeria

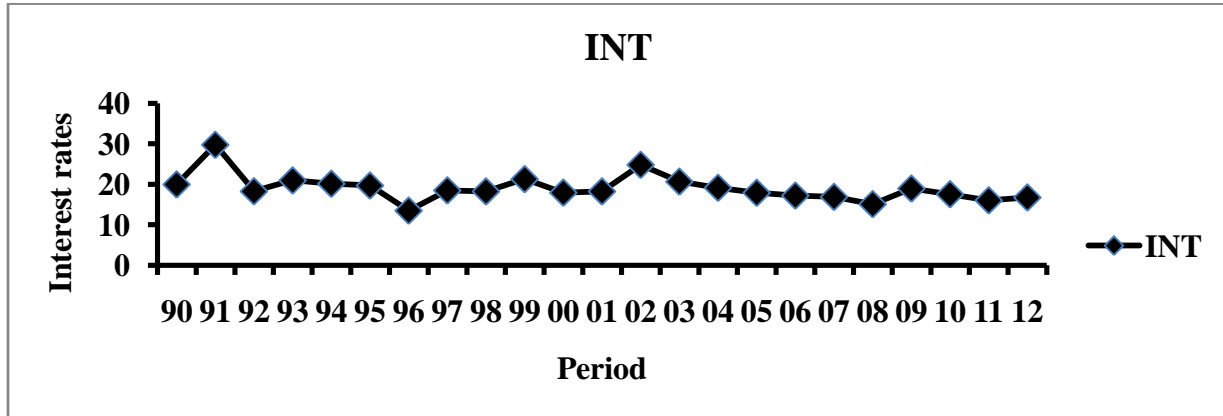
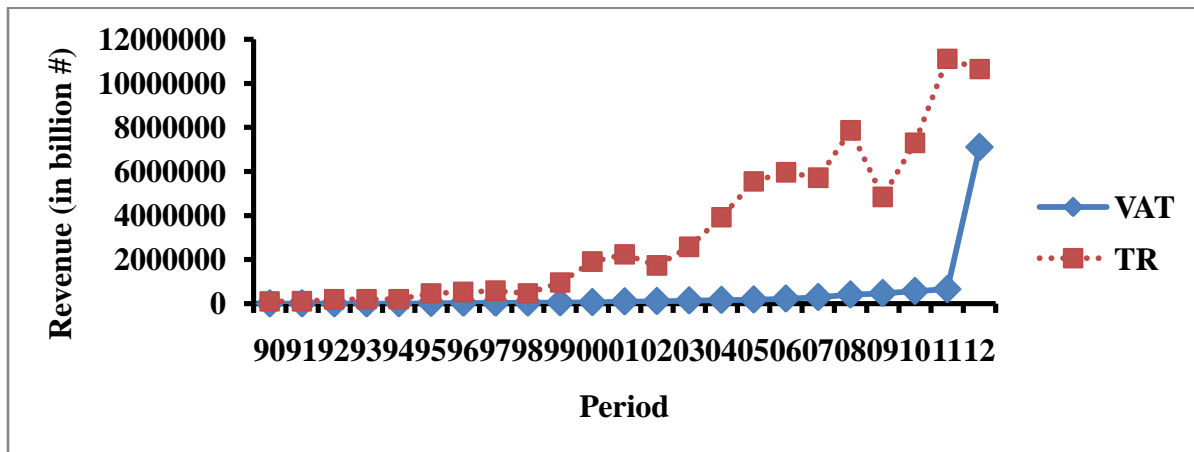


Figure 3: Value Added Tax and Revenue Generation in Nigeria



The study found that there is significant positive relationship between Inflation rate and Value Added Tax both on the short and long run. This implied that as Value Added Tax increases in the country Inflation rate will respond positively, because increase in VAT connote that more levies are charged at each level of production in the country as a result , the cost of production will increase and VAT burden will undoubtedly be transferred to consumers in form of high price and if this burden is continuously transferred to final consumers it will lead to inflation.

It was also discovered that the relationship between Inflation rate and Interest rate both on the short and long run is negative that is, a decrease (increase) in interest rate will cause the inflation rate to increase (decrease). This is so, because in Nigeria savers respond faster to changes in interest rate than investors because of low level of investment culture in the country, due to unpromising environment for investment, institutional instability and low level of infrastructural facilities. As a result, reduction in the interest rate more than necessary will reduce the saving rate as people will be discouraged to save and as such spend greater fraction

of their income on consumption. This has the potential of raising the aggregate demand in the country beyond what aggregate supply can shoulder thus culminating into demand pull inflation on the long run.

The study found out that Interest Rate exerts negative influence on the inflation both on the short and long run. The research work also found out that there is significant positive relationship between Values added Tax and inflation both on the short and long run, while interest exert negative influence on Inflation both on the long and short run.

## CONCLUSION & RECOMMENDATIONS

Premised on the findings of the study, the following conclusions were drawn: if government can maintain a good tax structure in the economy, it has the potential of engendering increase in the revenue generated and as such curb the influence of deficit budgeting and the dependence on external sources of budget financing. Government should provide effective anti-inflationary policy to cushion the inflationary tendencies of value added tax in the country. Government should regulate the rise in the level of interest rate in the country in order not provoke price instability in the country. The Value Added Tax rate of 5% should be increased by 50%, it will double the total revenue contributed to the nation. In order to be more effective in the administration of VAT, all the VAT Agencies should be connected with Information Communication Technology and the Federal Board of Inland Revenue. VAT in Nigeria is positively influence revenue generation.

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## APPENDICES

Table 5. Data 1990-2012

YEAR	INF	TFCR	INT	VA
1990	7.5	98,102	20.01	-
1991	13	100,992	29.8	-
1992	44.5	190,453	18.32	-
1993	57.2	192,769	21	2651680
1994	57	201,911	20.18	3447184
1995	72.8	459,987	19.74	3414038
1996	29.3	523,597	13.54	3480330
1997	8.5	582,811	18.54	3513476
1998	10	463,609	18.29	3516127
1999	6.6	949,188	21.32	3723953
2000	6.9	1,906,160	17.98	2731230
2001	18.9	2,231,533	18.29	3864823
2002	12.9	1,731,838	24.85	3221791
2003	14	2,575,096	20.71	3053243
2004	15	3,920,500	19.18	3524457
2005	17.9	5,547,500	17.95	7433010
2006	8.2	5,965,102	17.26	3209195
2007	5.4	5,715,500	16.94	4328602
2008	6.8	7,866,590	15.14	3833831
2009	13.1	4,844,600	18.99	3100874
2010	13.72	7,303,672	17.59	3760596
2011	10.8	11,116,900	16.08	7931022
2012	12.26	10,654,725	16.79	7796484

WHERE:

INF=INFLATION RATE

INT=INTEREST RATE

TREND ANALYSIS



Figure 5: Value Added Tax as a Source of Revenue Generation in Nigeria

