# THE IMPACT OF VALUE ADDED TAX (VAT) ON NIGERIAN ECONOMIC GROWTH (1994 - 2012): AN INVESTIGATION

BY

**AFOLAYAN, SEGUN MATTHEW (ACA)**
**REG NO: 20104772938**

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# CERTIFICATION

This is to certify that this thesis is an original work of Afolayan, Segun Matthew with Registration No. 20104772938 carried out under the supervision of Dr. (MRS) M.N. Okoli, and it has been accepted in partial fulfillment for the award of Master of Science in Financial Management Technology, of Federal University of Technology, Owerri.


**Dr. (MRS) M.N. Okoli**  ………………..  …………
*Supervisor*  *Signature*  *Date*


**Dr. (MRS) M.N. Okoli**  ………………..  …………
*HoD, FMT*  *Signature*  *Date*


**Prof. S.M. Nzotta**  ………………..  …………
*Dean, SMAT*  *Signature*  *Date*


**Prof. Y.B. Oyoh**  ………………..  …………
*Dean PGS*  *Signature*  *Date*


…......................…  ………………..  …………
*External Examiners*  *Signature*  *Date*

# DEDICATION

This work is dedicated to Mr. and Mrs. Abioye of  Wetland Construction Nigeria Limited for their unflinching love towards me.

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**Afolayan, Segun Matthew (ACA)**
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## *ABSTRACT*

*This study investigates the impact of VAT on the national revenue and economic growth of Nigeria. Problems associated with each sector of the economy in relation to VAT and their effects on economic growth were examined. Time series data used were obtained from Annual Reports and Accounts of the Central Bank of Nigeria (CBN) and Federal Inland Revenue Service (FIRS), CBN Statistical Bulletin and Collection Profile of the Federal Inland Revenue Service (FIRS). Augmented Dickey Fuller unit root test was employed to ensure the stationarity of the data, while Johansen Co-integration is used to estimate whether short-run or long-run equilibrium relationship exist among the variables. The causal relationship is tested using Granger Causality, Error Correction Model (ECM) is used to estimate the models and descriptive statistical method was adopted to trace its impact on economic growth. Sectoral contribution analysis of VAT revenue in the new millennium revealed that Government Sector had the highest overall contribution of 24.9%, followed by Oil and Minning Sector (the only leading productive sector with dramatical growth rate, portraying Nigeria as a mono-economy) with 24.7%, Service Sector (21.6%), Manufacturing Sector (with poor contribution of 16.7%), Financial Institution (5%), Commercial and Trading (3.5%), Building and Construction (3.2%) and Agric and Plantation with a ridiculous contribution of 0.1%. Also, findings reveal that VAT is the second highest significant source of federally collected revenue (FCR) out of the three important taxes in Nigeria. A positive and insignificant correlation exists between VAT Revenue and real GDP. The impact of VAT on economic growth of Nigeria is insignificant as there are some problems inhibiting its potency. This study recommends that all identified problems and administrative loopholes should be plugged for VAT Revenue to contribute more significantly to economic growth of the country. This should be done on the realization that any action taken on either VAT Revenue or the GDP will take four years to become effective.*

# CHAPTER ONE

# INTRODUCTION

## 1.1. Background to the Study

A country's tax system is a major determinant of other macro-economic indices. For both developed and developing economies, there exists a relationship between tax structure and the level of economic growth and development.

Indeed, it has been argued that the level of economics development has a very strong impact on a country's tax base (Ariyo, 1997) and tax policy objective varies with the stages of development. For example, during 1960, the sole objective of taxation was to raise revenue, later on emphasis shifted to the infant industries protection and income redistribution objectives. We can therefore, say that some of the major reasons for tax imposition as mentioned by (Ariyo, 1997) are:

➢ To mop up excess cash in circulation.

➢ To offset increasing cost of social services.

➢ To protect infant and local industries and redistribution income.

➢ To balance budget and sometimes as internal adjustments.

➢ To encourage greater use of local raw materials.

➢ To promote greater geographical dispersion of domestic manufacturing activities. etc.

An increase in government expenditure such as increase in the provision of basic amenities and infrastructure, capital investment projects and other development projects, usually leads to increased money in circulation. Taxation is a means of transferring resources from the private sector to the public sector, so as to ensure continuous provision of these amenities or necessities by the government.

The need to redirect and re-organise the priorities of the Nigerian economy became urgent as the nation approached the new millennium. The international price of crude oil, Nigeria's biggest foreign exchange earner, was falling and Nigeria was faced with the inevitable vulnerability of a monoculture economy. For a nation that had gone through an unprecedented economic boom in the seventies, it was a terrible experience. The Nigerian tax system, which went through a terrible periods in the eighties and seventies as revenue from petroleum took central and dominant role within the economy, was expected through the introduction of this effective tax system to come back to life.(Ijewere, 1993).

It became urgent, therefore, to find alternative means of raising revenue for the government, both internally and externally. The external means is through promoting and exportation of non-oil goods like primary agricultural products and semi-processed agricultural products. One of the internal means is through general over-hauling of Nigeria tax system by introducing a well managed and efficient tax system.

Other factors that prompted government into action was the advice received from the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD-the World Bank)- the two agencies responsible for the establishment and operation and monitoring of Structural Adjustment Programme (SAP). At various times, individuals companies and governments make adjustments on systems and introduce new measures to meet changing needs. It is such that in 1990 when the Structural Adjustment Programme (SAP) was failing, the Federal Government set up a committee to review the tax system in order to reduce dependence on oil revenue (Ijewere, 1993). Earlier before this period macroeconomic instability as evidenced by rising budget deficits had thwarted the nation's economic growth exception that "Nigeria recorded 26years of deficit budgeting worth ₦1.334 trillion out of a total of 32years of its existence as an independent nation (Suleyman, 2003). There is, therefore the need for a paradigm shift of the country's mode of finance.

As part of the effort put in place by the Government to improve the mode of finance, a study group on indirect taxation was set up by the Federal Ministry of Budget and Planning in April 1991 among other things. The aim was to study how to improve the administration of indirect taxes in Nigeria. It was this study group that carried out the feasibility study of Value Added Tax and came up with a firm recommendation in November, 1991 that Value Added Tax should be introduced

in Nigeria. After two years of preparatory work, a Modified Value Added Tax (MVAT) committee was set up in 1992 to undertake preliminary work for the introduction of the new tax. The committee was later to work in close collaboration with the Federal Inland Revenue Service in 1993. The later was to take over the administration of the new tax which was scheduled to come on stream as Value Added Tax (VAT) by first September, 1993 but eventually came on stream on first December, 1993 by Decree No. 102 0f 1993. However, the actual implementation commenced on first of January, 1994.

Value Added Tax (VAT) in Nigeria today replaced the existing sales tax, which had been in operation under the Federal Government Legislated Decree No 7 of 1986 but which was operated on the basis of residence (Buhari, 1993). Value Added Tax is a consumption tax and it had been embraced by many countries world-wide. Almost hundred countries in the world today are operating the Value added Tax (Alan, 2003). But the interesting aspect of Nigeria's Value Added Tax is the very low single rate of 5% which is one of the lowest in the world today and even in the West African sub-region. To mention but a few, Ghana has a rate of 10%, republic of Benin 18% while Togo has multiple rates ranging from 5% to 30% (Olaoye, 2004)

Apart from the high revenue generation capacity of Value Added Tax because it is a consumption tax, it is neither easy to avoid nor evade as other taxes. That is, in

other taxes the tax payer may make use of all relief schemes, exemptions and allowances either to pay less than what he or she ought to pay or criminal or fraudulent means or by willful default (Ola, 1993). The only way one can avoid Value Added Tax is for the person to avoid consuming goods and services that are subjected to tax. The tax is also very progressive in nature because the more you consume the more of the tax you pay. Since the tax is tied to consumption, it helps to rationalize the consumption pattern of the society and it also helps to redistribute income.

The introduction of VAT in 1994 was one of the means of re-organising the Nigerian economic system. This is one of the leaves borrowed from the submission of Carlo (1999): That between 1992 and 1997, most of the transition countries succeeded in getting inflation under control without evident cost in terms of lost output.

An understanding of the factors behind their success would not only shed light on the introduction of Value added Tax but also yield lessons for other countries seeking to tame inflation. In the early stage of Value Added tax in Nigeria precisely 1995 and 1996, most economic fundamentals moved in the desired direction. Macro-economic stability was deepened and strengthened. The estimated growth rate of the economy was 3.25% compared to 2.2% and 1.3% achieved in 1995 and 1994 respectively (Budget, 1997).

By the introduction of Value Added tax (VAT), it was intended that government revenue priorities will move away from crude oil, sales, oil royalties and petroleum profit tax, all which are vulnerable to international petroleum price fluctuations, to a more stable internally generated revenue service. Internally generated revenue was seen by the government as the heart of efficient fiscal policy. It showed how resources needed for the society can come from all various enterprises and be made available for public goods and services (Samuelson, 1980). Such a move would boost government revenue. In the submission of Okele (2003), if government was able to collect more revenue through indirect taxation it should be possible to reduce the tax burden on the income of individuals. This is to stress the need for the government to introduce other indirect taxes such as wealth tax, which could be described as tax on the estates of deceased wealth Nigerians, cash gift, bearing in mind the culture of Nigeria as super tax for high income earners and he said that the tax would be levied on personal income above a stipulated amount to supplement the Value added Tax.

What are then the problems associated with Value Added Tax that warranted the introduction of other indirect taxes? What impact has the VAT on revenue generation which in turn affects the economic growth and development of Nigeria? As it is stated in Yakubu (2003), the source of revenue at this moment is already inadequate for our needs and was still on the decline. That is why there is need to

assess the impact of VAT as a source of revenue generation and its resultant effects together with other sources of revenue generation on economic growth and development.

## 1.2.    Statement of the Problem

Taxation as an instrument of fiscal policy is vital in generating revenue to finance the activities of government, redistribute income, stabilise the economy as well as stimulate growth and development. This view was affirmed by Udoh&Ebong quoted by Damain (2010). For the first two decades after independence the economy was relatively buoyant as a result of favourable balance of payments and the oil boom. However increasing cost of running the government, fluctuation in oil price, inflation and the recent global economic recession have returned the attention of managers of the nation's economy to the importance and sustainability of taxes, especially value added tax.

Consequently, planners have made serious effort to effect reforms in the tax regime. A lot of these reforms have to do with the value added tax and the success recorded in the first few years of administering the tax was an indication that if effectively administered, the tax would contribute very significantly to public revenue and hence economic growth and development. Naiyeju (1996) solidified this view by saying that the effectiveness or otherwise of any tax is a reflection of

the quality of the fiscal system which is a reflection of the domestic economy which in turn, is a mirror of the level of development of the socio-polity.

Bearing in mind the numerous problems that have bedevilled taxation in Nigeria as well as misconceptions about value added tax, the question of the efficiency in the administration of value added tax naturally arises. This study, therefore, intends to investigate value added tax in Nigeria: its performance so far, its problems, its prospects and possible solution to the problems and suggestions on ways of making it an equitable and sustainable means of revenue generation and economic growth.

## 1.3. Objectives of the Study

The major objective of this study is to assess the impact of VAT on Nigerian economic growth. But specifically to:

i.      examine the performance of VAT in meeting target in the new millennium.

ii.     examine the contribution of different sectors of the economy to VAT revenue in the new millennium.

iii.    examine the contribution of VAT to federally collected revenue.

iv.     examine the impact of VAT on economic growth of Nigeria.

## 1.4. Research Questions

The study will examine the following questions:

1. To what extent has VAT performed in meeting the target in the new millennium?

2. To what extent has the different sectors of the economy contributed to VAT revenue in the new millennium?

3. To what extent has VAT impacted on total federally collected revenue?

4. To what extent has VAT impacted on economic growth of Nigeria inception?

## 1.5. Hypotheses of the Study

For the above objectives to be achieved, this study intended to carry out research on the following hypotheses:

**Hypotheses one:**

$H_0$: VAT has not contributed significantly to total federally collected revenue.

**Hypothesis two:**

$H_0$: VAT has not contributed significantly to Economic growth of Nigeria.

## 1.6. Significance of the Study

This study is significant in the following ways:

- It explores the ways through which greater revenue could be generated by government to finance needed developmental projects and to reduce reliance on revenue from crude oil.

- This study will equally bring to the fore how Value Added Tax together with other forms of tax has so far impacted on the Nigerian economic development.

- This research provides an evaluation of the Value Added Tax competence from inception to year 2012 that is, from 1994 to 2012.

- This research provides an evaluation of the performance of VAT in different sectors of the economy from 2005 to 2012.

- To tax consultants or experts, findings on VAT will serve as an aid in the analysis and effective evaluation of the merits and demerits of other related models. This is so because theory is not always the same as practice.

- Findings on VAT will pose challenges on policy makers and revenue officers to further excursion into consumption taxation and to aspire to a higher level of efficiency and effectiveness in policy implementation. Findings will also provide an intellectual menu for the fiscal appetite of government.

- Furthermore, this study will add more information to the existing body of literature on Value Added Tax and may generate more studies in the area.

## 1.7.   Scope and Limitations of the Study

The study centres only on how VAT contributes (either negatively or positively) to economic growth in Nigeria. This is done by considering the analysis of the procedure for the operation of VAT, the problems associated with such procedure, the potential of VAT in Nigeria and both the review and measurement of the effect of VAT proceeds on total federally collected revenue. For the fact that the Nigerian Value Added Tax implementation fully started in 1994, this research therefore, concentrated on period from 1994 to 2012 to bring out its effect on the economy in the past nineteen (19) years.

This research also analysed briefly the impact of VAT on macroeconomic elements of Nigeria's economy by combining a survey of Nigeria manufacturers, service providers and other vatable organizations. It also examines the contribution of different sectors of the economy to VAT revenue from 2005 to 2012(sectorial performance of VAT from 1994 to 2004 was not provided by the FIRS headquarter in Abuja during the research period).

To cap it, it is the hope of the researchers that at the end of the study, the data gathered will afford the ability to draw useful and reliable conclusions on national revenue and development.

## 1.8.    Organisation of Work

The study is organised into five chapters. In chapter one, we presented an introductory part of the study. It is made up of brief background of the study, the statement of problems, the objective and purpose of the study, the scope and limitation of the study, definition of terms and the organisation of work.

The next chapter reviewed the contribution of authors and scholars to the topic of study, just as chapter three focused on the methodology adopted for the study. In chapter four, all the analyses were carried out while chapter five presented the end of the study with summary, conclusion and recommendations made by the study.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1    Sources of Government Revenue

The major reason for constant study and review of VAT is rooted in the economic functions of government. The economic function of government in any country cannot be over emphasized. According to Musgrave (1959), these economic functions of government may be divided into three main categories. The first is to overcome the inefficiency of the market system in the allocation of economic resources. The second is the redistribution of income and wealth in order to move towards the distribution that the society adjudges to be just and equitable. Thirdly, there may be role for government in smoothing out cyclical fluctuations in the economy and ensuring a high level of employment and price stability. Ademola (1999) threw more light by stating five major macro-economic objectives that every modern government seeks:

- **Full employment**: That is, a high level of human and physical resources utilisation or more specifically, the level of employment at which approximately 94 t0 95 percent of those seeking jobs are employed.

- **Price stability**: this is the prevention of upward movement of prices (inflation) or downward movement of prices (deflation).

- **External balance**: this is the promotion of a debt-free and self-reliant economy.

- **An equitable distribution of income and wealth:** That is, to ensure that every citizen has access to the basic necessities of life.

- **Economic growth:** This is the expansion of the production capacity of the economy to generate increase flow of goods and services.

The undertaking of the services mentioned above and provision of infrastructural facilities by the government of any country cost money. This makes it inevitable for government to raise revenue to finance the provision of these goods and services especially those known to be essential to the smooth running of the economy.

The major sources of revenue in Nigeria can be as follows (Oyebanji, 2006):

- **Mining Revenue:** This includes rents and royalties obtained from oil operations and Nigeria National Petroleum Corporation (NNPC).

- **Interest and Repayment:** Of loans granted by the government.

- **Independent Sources:** These include licence, fees, rent on government properties etc.

- **Taxes:** e.g. Petroleum Profit Tax (PPT), Companies Income Tax (CIT), Personal Income Tax (PIT) Import duties, export duties, excise duties, consumption tax etc.

The source of government revenue to consider based on the focus of this study is taxes, most especially, value added tax. Hence, there is need to examine the general overview of tax in Nigeria.

## 2.2    General Overview of Tax in Nigeria

Tax can be defined as "a compulsory contribution to the support of government levied on persons, property, income, commodities, transactions etc. now at a fixed rate mostly proportionate to the amount on which the contribution is levied" (Crowther, 1998) as it can equally be confirmed in (Tilley, 1981).

This, when stripped of its limited view as to the purpose of taxation, its irrelevant description of tax base and its undue stress on proportionate as opposed to progressive taxation, tells us very little, and beyond that taxes are compulsory. To this criterion one may add that taxes are imposed under the authority of the legislature, that they are levied by a public body and that they are intended for public purpose (Duff, 1931).

These criteria become clearer when distinguishing a tax from a charge for a government service, as the Canadian courts have to do. In the first place if the payment is a charge for a government service, some service must be provided directly to the individual (Duff, 1943). There is a substantial difference between paying a bridge toll and paying a tax to be used for the defense of one's country.

Secondly, the charge must be related to the service given, and not varied according to the person's ability to pay or to some other criterion such as the value of his property (Montgomery, 1976). Thirdly, it is no objection that a charge may result in a profit provided only that the profit is a reasonable one. On this basis the steep increase in energy prices or in post office charge not to keep the books balanced but as a fiscal device to restrain domestic consumption, as has been practiced by various governments, gives those charges some of the characteristics of a tax.

Tax payment is as old as the country itself. As far as 1904, taxation has gained its existence in the Northern part of Nigeria. Despite its long existence, there are still problems that hinder effective administration in Nigeria (Ola, C.S. 1999). According to Olaoye (2004), the history of taxation in Nigeria can be traced under five periods: the pre-colonial period, the period between 1900-1918, the period between 1918-1943, the period between 1943-1974, and the period from 1974 to date.

**Pre-colonial period:** During this period, a well-established system of taxation existed in Northern Nigeria under absolutist rule of the Fulani Emirs/Warlords. Perhaps, the reason for well-established systems of taxation in that part of Federation was their religion. During this period, the various forms of tax that were paid included Zaket, Kurdinkaza etcetera. In the Southern part of Nigeria, a less organized system of taxation existed.

**The period between 1900 and 1918:** When the British came to Nigeria, the system of taxation in the North was detailed in two memoranda, namely, the Native Revenue Proclamation No. 4 of 1904 and the Native Revenue Proclamation No. 2 of 1906. During the period, the rates were fixed by Government while assessment and collection were done by the District Heads. The system was later extended to the South West. In 1917, the Oba of Benin accepted the system. In 1918, the system was introduced in Ibadan and Egba land through the Native Revenue Ordinance of 1918.

**The period between 1919 and 1943:** Under this period, it was generally felt that the whole south was ready to accept the introduction of direct taxation. In 1937, the Native Taxation Ordinance imposed taxes on persons and communities. The assessment was based on the annual income of the individual and the community. There was a major legislation in 1940, which accommodated all previous Ordinances including those in Lagos Township. The ordinance was known as Direct Tax Ordinance No. 4 of 1940, which also applied to all expatriates living in Lagos.

**The period between 1943 and 1949:** All the regions of the country had passed their tax law by 1962. As a result of the different laws being passed in the regions, there arose the problem of difference in tax rates. To prevent the issue from being complicated, the Raisman Fiscal Commission (1958) recommended the basic

principle by which the income of an individual other than limited liability companies will be charged. It also recommended that difference was embodied in the Nigeria Constitution Order-in Council 1960 and this formed the basis of the Income Tax Management Act of 1961.

The main provisions of the Act, which do not constitute a complete statute but which centre on the fundamental income tax principle and which apply to the whole country, are chargeable income, determination of residence, treatment of dividends, taxation of partnerships, basis of computing income, capital allowance on income earnings assets, exemptions, quantum of reliefs and double taxation arrangement. The Income Tax Management Act (ITMA) of 1961 was the first attempt made by the government to harmonize tax law throughout the country. As a result of certain clauses in the Act, it has not been able to achieve the desired purpose. In an attempt to rectify these flaws, the joint Tax Board was established in which all the States of the Federation were represented.

In order to conform to the fundamental issues in ITMA, the Western Region Income Tax cap 48 of 1959 was amended by Income Tax (Amendment) Law 1961 while the Finance Law of 1962 was passed to repeal the Eastern Region Finance Law of 1956. The North adopted ITMA in all respects as its own law came up in 1962 after ITMA Legislation in 1961.

**The period between 1979 to Date:** The Nigeria army took over the ruling of Nigeria between 1963 and 1979. Before the handing-over to a civilian Government in 1979, a new constitution was put in place known as 1979 constitution and this constitution prescribed presidential and federal systems of government for the country. In any federal system of government such as that of Nigeria and U.S.A., the constitution always defines the functions and responsibilities of each tier of government and how to raise revenue to discharge those functions and responsibilities. The constitutional arrangement for revenue sharing among the tiers of government is referred to as revenue allocation arrangement. Under the provision of the 1979 constitution, which that of 1999 constitution followed, the states have residual power and could make laws on matters in so far as the matter was not in the exclusive legislative list.

As contained in the Exclusive Legislative list of the 1999 constitution of the Federal Republic of Nigeria (Decree No. 24 of 1999 items 58 and 59 of part 1, second schedule), it is the Federal Government that is vested with the power to legislate and impose stamp duties and taxes on incomes, profit and capital gains both for individuals and corporate bodies. What this means in effect is that it is only the Federal Government that has the exclusive power to impose tax on individuals and corporate bodies by way of Decrees and enactments.

However, while the imposition of taxes on individuals and corporate bodies is under the exclusive list of the constitution, the collection of such taxes is placed under the concurrent legislative list. This means that the power to collect the various taxes is shared among the three tiers of government. The various taxes being administered in Nigeria are shared among the three tiers of government and area of tax jurisdiction of each tier is specifically spelt out in Decree No 21 of 1988. Some of the taxes collected by the Federal Government include Companies' Income Tax, Withholding Tax on companies and residents of Federal Capital Territory (FCT), Petroleum Profit Tax and Value Added Tax (VAT) etc.

Taxes and levies collected by State Government include among others Personal Income Tax in respect of Pay As You Earn (PAYE), direct taxation (self assessment), capital gains tax (individuals only), stamp duties on instruments executed by individuals, road taxes etcetera and taxes collectible by local governments include among others shop and kiosk rate, tenement rates, on and off liquor licence fees, slaughter slab fees, marriage, birth and death registration fees etcetera (Ariwodola, 2001).

Adejuwon, (1998)  observed that there are certain constraints on the effectiveness of tax administration  in Nigeria and that over the years, those in charge of tax administration have come up with a lot of improvements in the mechanism of achieving a steady growth in the way taxes are administered in the country.

Despite all these, there are still some constraints on the effectiveness of tax administration, which include: inadequate funding; lack of qualified and experienced tax personnel, Tax Evasion; neglect of the Tax Authority; improper use of Tax consultants, problem of Manpower and Equipment; problem associated with Tax Payer Education; Staff Motivation; attitude of Auditors, impersonation; and collusion.

## 2.3 Reasons for Tax Imposition and Various Forms of Taxes

One of the major sources of government revenue is tax. Tax is a compulsory levy by the government of any country, through an appropriate agency, on all income, goods, services and properties of an individual, partnership, executor trustee and a corporate body. Government imposes taxes on its citizens to enable it obtain the required revenue to finance its activities, such as payment for public services and other social responsibilities.

Apart from the reason of generating revenue, government may levy taxes for any of the following reasons (Oyebanji, 2006):

1.   To discourage over consumption of certain goods considered as socially undesirable.

2.   To control inflation through fiscal measures.

3.    To protect infant industries in the country. These are young industries that may not be able to compete effectively with foreign industries which had been established for long and have strong financial stability.

4.    To stimulate growth and development in an economy.

5.    To redistribute incomes in the society.

6.    To provide essential needs such as good roads, schools, hospital, electricity and water for its citizens.

7.    To promote export and

8.    To preserve foreign exchange revenue.

Oyebanji (2006) identified two major forms of taxes, these are:

a.    **Direct Taxes:** These are taxes imposed by the government on the income of individuals and companies and which are actually paid by the person or persons on whom it is legally imposed. Examples are; Personal Income Tax (PIT) Company Income Tax (CIT), Capital Gains Tax (CGT), Withholding Tax, Petroleum Profits Tax (PPT), Education Tax and Capital Transfer Tax (CTT). The PIT is imposed on individual earnings, CIT on profit of organizations/corporate bodies, PPT on oil purchasing/exploration companies, CGT on profit from sales of capital assets and CTT on the transfer of property inter-viro and transfer on death. However, CTT was abrogated in 1996.

b.  **Indirect Taxes:** These are taxes by the government on goods and services. Indirect tax can be avoided because it is payable only if one buys the commodities or enjoys the  services on which the tax is imposed and it involves little administrative cost compared to direct taxes. It does not create dis-incentives to efforts as in the case of direct taxes and hence, does not affect the economic functions of the tax payers.

Examples of indirect taxes in Nigeria according to Oyebanji (2006) are:

1.  **Import Duties/Tariffs:** Levied on goods imported into the country.

2.  **Export Duties:** Levied on goods produced for export.

3.  **Excise Duties:** Imposed on specific goods produced in a country.

4.  **Consumption** Tax: Levied on the purchase of any commodity or enjoyment of a service. Examples are: Sales Taxes and Value Added Tax (VAT). One characteristic effect of consumption tax is that it is not included in the price tag by in the affected commodity rather it is added as a percentage of the total of invoice on the goods and/or services rendered.

## 2.4  Classification/System of Taxes

Taxes may be classified with respect to how the burden falls on income earners. Tax may therefore be described as follows:

a.  **Progressive Tax:** A progressive tax is the one which is levied according to the person's ability to pay. It is based on the principle of the more you earn, the more you pay (i.e. PAYE). The burden of a progressive income tax falls on these with higher incomes.

b.  **Regressive Tax:** A regressive tax takes a smaller part of incomes as income increases, or a tax is said to be regressive if it takes a higher proportion of the poor man's income than that of the rich. Poll tax is regressive because each person pays the same amount of money (a flat rate) irrespective of the difference in their earning. The same is Value Added Tax.

c.  **Proportional Tax:** In a proportional tax the same percentage of tax is paid by the tax payer irrespective of the size of income. For example a person who earning N50,000 may be required to pay say 10% of his income and the same percentage is required for an income of N70,000. The essence of this is to address apparent inequality (Oyebanji, 2006).

## 2.5 Reasons for Policy Reformation in Nigeria as related to Vat

An important landmark in tax reform in Nigeria was the adoption of the Value Added Tax (VAT) in January, 1994. Over the past four decades, the country's revenue was largely derived from primary products. Between 1960 and the early 1970s, revenue from agricultural products dominated while revenue from other sources was considered as residual. Since the oil boom of 1970s/80s to date, oil has

dominated Nigeria's revenue structure and its share of federally collected revenue moved from 26.3 percent in 1970 to 81.8, 72.6 and 76.3 in 1979, 1989, and 1999 respectively. Over the past two decades, oil has accounted for at least 70% of the revenue, thus indicating that traditional tax revenue has never assumed a strong role in the country's management of fiscal policy. Instead of transforming or diversifying the existing revenue base, fiscal management has merely transited from one primary product based revenue to another, making the economy susceptible to fluctuations of the international oil market.

The need to address this problem led to several tax policy reforms. To understand the importance of tax policy reforms, one needs to appreciate the urgency for such reforms (Odusola, 2006). Why the need for tax policy reforms in Nigeria? First, there is a compelling need to diversify the revenue portfolio of the country in order to safeguard against the volatility of crude oil prices and to promote fiscal sustainability and economic viability at lower tiers of government.

Second, Nigeria operates on a cash budget system where proposals for expenditure are always increased to revenue projection. Thus, accuracy in revenue projection is vital for devising an appropriate framework for sustainable fiscal management and this can be realized only if reforms are undertaken on existing tax policies in order to achieve some improvement.

Thirdly, Nigeria tax system is concentrated on petroleum and trade taxes while direct and broad based indirect taxes like the value Added Tax (VAT) are neglected. This is a structural problem for the country's tax system.

Fourth, the widening fiscal deficit that over the years has threatened macro-economic stability and prospects for economic growth makes the prospect of tax reform very appealing. The ratio of deficit to GDP averaged 9.98 and 5 percent for the periods 1990-94 and 1999-2001. In 1993 it was 15.5 percent (Odusola, 2006).

Fifth, the study group on the review of the Nigerian tax system in 1991 study highlighted the need to increase tax revenue and reduce expenditure as the major fiscal issues to be addressed. The report of a study group on the workings of the entire Nigeria tax system, set up by the Federal Government in 1991 and headed by Dr. Sylvester Ugoh could be adjusted, the instigator for the introduction of VAT in Nigeria. On August 24th, 1993 the government promulgated the VAT Decree 102, which makes the collection of VAT legal, with effect from 15th December 1993 but for convenience, the effective date of the Decree was from January 1st 1994.

The introduction of VAT became necessary as a result of the many problems faced by the old system of sales tax, especially the problem of evasion. Value Added Tax simply put is a tax imposed on value, which the supplier or seller of a good or service adds before selling it. VAT is an indirect tax charged either at each stage of

the production process known as multi-stage VAT or a single-stage of the production process known as single stage VAT.

Some of the advantages of Value Added Tax over its predecessor are:

1. It is Self-Policing: This is achieved through the input or output mechanism of VAT. Value Asset Tax payers will have a desire to claim refunds so they will insist on obtaining receipt for transaction. As a result of this, the culture of record keeping is enhanced.

2. Evasion: VAT is difficult to evade because of its self-policy characteristic.

3. The low rate of VAT will bring a lot of revenue into the purse of the government.

4. Exporters are encouraged, as VAT incurred in the process of producing the exports can be fully identified and rebated.

5. Built into VAT is the refund or credit mechanism which eliminates the over taxation effect that is a feature of the retail sales tax.

6. The yield from VAT is a fairly accurate measurement of the growth of an economy; since purchasing power (which determines yield) increase with economic growth.

The main disadvantage of VAT is that it adds more to the purchase price of affected commodities.

## 2.6 Brief History of Value Added Tax and its Introduction to Nigeria

Value added tax was first introduced in 1954 to replace turnover tax in France in 1967 many countries of the European Economics Countries (EEC) including the United Kingdom has adapted the use of value added tax about fifty years ago, value added tax was not more than theoretical proposition among fiscal policy schools but today it is a fiscal system in over hundred countries of the world. The first developing country to comprehensively implemented value added tax (VAT) was Brazil in 1957, among the earliest operators of value added tax in developing countries are Ecuador and Uruguay. The French speaking African countries like Cote-dovioe, Algeria, Togo are the first set of countries to introduce value added tax in Africa. As from 1967, the need to increase substantially the revenue of the English Speaking African countries made the international monetary fund (IMF) to encourage them to introduce value added tax.

In 1985, a case was made for value added tax by Ola but was not adopted by the government. In 1991 a study group was set up to look into indirect taxes in Nigeria, the group carried out the feasibility study on value added tax and government welcomed the idea. In 1992, another committee was set up, the modified value added tax to look into the modification of the new tax, the government then settled for what we now have as value added tax (VAT) today by promulgating the relevant decree and giving the administration of the tax to the

Federal Inland revenue service. Value added tax came on stream on 1$^{st}$ of December 1993 but its full implementation began on 1$^{st}$ January 1994 backed up by the Decree N0 102of 1993. Nigeria was the first English speaking African country to introduce value added tax (VAT).

Nigeria's rate of 5% does not compare favourably with the rate in some selected African countries. The rates are as follows: Nigeria 5%, Republic of Benin 18%, Togo 5% to 30% (graduated); Cotedivoire 11%, Kenya 13%, 12%, 16%, 10%, South Africa 14%, Niger 17%, Tunisia 17%, Ghana 10%, Moroco 7%, 10%, 14%, 20%, Senegal 10%, 20% and Uganda 17%.

The recommended minimum rate of 7.5% by the international monetary fund (IMF) is being exceeded by most of the African countries. The Nigeria Value Added Tax (VAT) can be closely identified with the international monetary fund (IMF) and the World Bank. The two agencies of the United Nations Organisation (UNO) advising Nigeria on the need to introduce the tax just after a year when they assited the Federal government of Nigeria in establishing and monitoring the Structural Adjustment Programme of 1987, they argued that tax system in Nigeria needed reformation so as to make the government to be less dependent on the revenue derived from petroleum. The introduction of value added tax (VAT) to Nigeria had been immense importance on the growth of the revenue of the country and over the years, of its introduction it had been exceeding the prorate projections

that about N21 billion was collected from value added tax in 1995 alone against the projected N12 billion (Budget 1996). The realization of this amount might be attributed to the low rate of the tax in Nigeria. Hence it was accepted in Nigeria.

## 2.7 Tax Reforms in Nigeria, Value Added Tax and  Features

The need to reform the Nigeria Tax system was first put forward by both the International Monetary Fund and the International Bank for Reconstruction and Development (IBRD) in 1987. This became necessary because of the over dependence on oil revenue. As one of the means of raising additional non-oil revenue locally, the introduction of VAT-Value Added Tax was suggested to the Federal Government to replace the existing sales tax, because it was considered to be a tax with broader base than sale tax (Olaoye,2004)

Tax experts have argued in different ways as regards the success of Value Added Tax in Nigeria. Some even said that the success of VAT in developing country like Nigeria, is going to be dependent on the level of publicity bring into it, as well as the level of education on potential payer. Babington (1995) argued that quite a number of people are not even aware of VAT and large percentage of the people who are aware do not even know the basis of its computation. This is very common with small scale industries and sole proprietorship who are obviously unable to afford qualified personnel. This category of people will only show interest in VAT as the threat of prosecution.

From the view of Alade (1993) for VAT to be successful in Nigeria, tremendous efforts should be brought into its publicity. This becomes absolutely necessary because the Nigerian economy as mentioned earlier is dominated by informal sector. How this sector is going to react to a new tax system (VAT) in a country with a long trading of tax evasion and non-compliance is a big challenge to Value Added Tax. Other writers agreed with this observation, stressing that a simpler and shorter (less technical) explanation of the law (Decree 102, 1993) guiding Value Added Tax is needed for better understanding of the tax and the legislation guiding it.

Syemour (1994) observed that the combination of underdeveloped data system and tax administration and management should be the main reason why less developed countries, like Nigeria should de-emphasis complicated tax rate. The questions of vertical equity, which simply means that luxurious  goods consumed by the rich could have tax rate higher than other consumed by the poor look very attractive. Its practicability in an economy, like that of Nigeria, that is prone to corruption and mismanagement is highly suspected. Other very issues emanating from Value Added Tax according to Syemour (1994) are the identification of two clear benefits that may be derived from a system of Value Added Tax as transparency of effective rate of indirect taxation and greater information on business. This information, which is lacking presently because of level of development of

business organisation in LDC's, will be immense benefit to the development of tax system in Nigeria. They also recommended that a successful implementation of Value Added Tax could provide such information; they believe that a single rate will run Value Added Tax system will reduce reliance on tariff and provide information based on future tax form.

The relationship between theoretical efficiency of Value Added Tax and its practicability in a developing country, like Nigeria has also come under the searchlight of scholars. They use the failure of sales tax as the proof of inability of tax system in developing country to react to theoretical efficiency and elasticity of demand.

Lewis (1985) has earlier, drawn a line between the theoretical efficiency of Value Added Tax and its practicability, arguing that though it may be a successful tax system, its practicability may pose some difficulties. Later Seymour (1994) argued that the debate on optimal indirect taxation on the dictionary between the theoretical efficiency of taxation, differentiated according to the elasticity of demand and the empirical evidence which gives the constraints of LDCs indicated that a single rate of Value Added Tax may improve long-run efficiency and reduce the level of difficulty. There must be a positive relationship between the growth rate of an economy and efficiency of its tax system. Lewis (1994) observed that the simple fact that direct taxation is more prominent in developed countries is related

to the level of their development. Again the question of tax neutrality and export promotion has been analysed by scholars.

In the reform of the following argument can be extracted. Eldstein (1990) commented that Value Added Tax does not favour external trade, according to him, the Value Added Tax taxes traded goods more heavily than non-traded, which is normally the case of a Value Added Tax in practice probably tends to reduce rather than increase the size of a country's traded goods sectors, even in the short run under fixed exchange rates, a Value Added Tax should not be expected to have any effect on trade. Trade here means external trade. This simple argument show that, though there may be some economic sense in Nigerian's zero rate of export. The argument that it will promote export may not be completely right. Earlier Mckinnon (1995) showed that although the zero status granted foreign bound goods and services are goods, it does not improve external trade extensively. By zero rating exports and taxing inputs, Value Added Tax tends to implicitly subside exports as a deliberate policy of tax incentive. The underlying philosophy of enhancing competitiveness in international trade, may not achieve because of counter measures taken by other countries.

In the submission of Igbwebuchi (1996), he suggested to the government in introduced higher rate of Value Added Tax on luxurious, imported goods as a way of discouraging such goods in affecting the growth of the economy. "Government

for developmental projects could use the increase revenue, which could have been realised from such tax. At the same times this will also discourage the consumption of such luxurious goods. Value Added Tax (VAT) seems as one of the most successful fiscal instrument in Nigeria, which should see to help economic growth. It is therefore, evident from the above review of literature that most studies done to examine the relative advantage of Value Added Tax over sales tax in less developing countries and to project is prospects on the years to come is still hanging. That is why there is need for assessing the administration of VAT as a source of revenue generation in Nigeria.

## 2.8 Consumption as Tax Base

The economic history of both developed and developing countries reveal that taxation is an important weapon in the hands of government, not only to generate revenue but also to achieve fiscal goals, such as influencing the directive of investment and training the consumption of certain goods and services.

The imposition of a tax is based on certain consideration. One of these is how effective as well as equitable the tax can be since a tax can be equitable without being effective and vice versa, the capacity of the base to reflect both equity and effectiveness become a most subject in taxation. It is therefore necessary to look at

consumption, the base of the Value Added Tax (VAT) as prelude to an examination of the tax itself (Naiyeju, 1996).

Consumption may be defined as the purchase and utilization of goods and services for the gratification of the desire of an individual, a businessmen organization, a political entity/any other body from the macro-economic perspective. Consumption may be divided into two as explained by Naiyeju (1996):

i.    **Public Consumption**: All expenditure for the purchase of goods and services including defence and security by a government its agencies and function arise.

ii.   **Private Consumption**: All expenditure by non-government consumer includes the purchase of goods and service by non-profit organization.

A tax on profit/public consumption is thus, an indirect tax since it is levied on the exercise of purchasing power, but only indirectly through the goods and services purchased. In other words, if a consumer has the power but refuse to exercise it, he can avoid paying the tax. The imposition of consumption tax, therefore defined the tax as a compulsory transfer of corporate or personal purchasing power to the government whenever that power is exercised. Generally there are six groups of consumption taxes as enumerated by Naiyeju (1996):

1.    Excise taxes

2.      Export taxes

3.      Import duties

4.      Expenditure tax

5.       Sales tax

6.      Value Added Tax (VAT)

**2.9 The Concepts and Definition of Value Added Tax**

**2.9.1 Definition of Value Added Tax**

The tax which each individual is bound to pay ought to be certain and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributors, and to every other person (Adam, 1993).

Different definition of Value Added Tax have been given, some in relation to its tax incidence, and some in relation to its state of collection, while some are relative to its base.

Value Added Tax can be defined as the incremental value, which a producer, using labour, contributes to his raw materials of purchases before selling the processed goods or services. Here the producer can be manufacturer, a distributor of supplier of goods and services. In other words, the original items purchases or stock of materials must have undergone some processing or improvement to warrant any value being added to the original form or shape. The inputs are processed by labour

to produce the final goods and services, which are sold. Value Added Tax (VAT) can be defined according to Naiyeju (1996) as a tax levied on the Value Added at the various stages of sales. Ogundele (1996) defined VAT as the 'addition type' in which the tax base would be the sum of wages and capital income. He further re-affirmed it as the difference between the sales and the purchases of the taxable firm. Value Added Tax (VAT) is an indirect tax.

Prest and Barr (1974) defined indirect taxes as those taxes levied on expenditure, which incorporates all consumption taxes like sales tax, Value Added Tax (VAT), turnover tax etc.

Broadway (1979), defined Value Added Tax (VAT) in relation to its base as 'the base of VAT is ultimately the final value of the products'. Magner (1983), defined VAT as "a method of assigning tax liability" against the value added at each stage in the process of production and distribution.

Pearce (1985) defined Value Added Tax (VAT) as a tax based on the Value-Added "an equitable way to tax the value of sales, which does not discriminate against any activity as do other specific sales tax". Eckstein (1987), defined VAT relative to its base "As it is the base of the value added at each stage of production and distribution that is taxed".

Bhatia (1991), observed that Value Added Tax (VAT) as a family of sales tax. Ijewere (1993) defined Value Added Tax (VAT) 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. Buhari (1993), defined VAT in relation to its base as the value added by each producer at each stage of production until the goods get the final consumer. Adeleke (1995), define VAT as a tax on spending because it is borne by the final consumer of goods and services as it is included in the final price. Muhammed (1995), defined VAT as consumption tax designed primarily to tax private consumption by individuals of goods or services that are subject to tax. Baiyewu (2000), regarded Value Added Tax (VAT) as the policy thrust to raise higher revenue from non-oil tax sources particularly from consumption taxes (VAT and Duties) without jeopardizing the liberal tax policies. Bickley (1996) defined Value Added Tax (VAT) as a tax levied at each stage of production. Old man et al (1996) defined Value Added Tax as a multi-stage consumption tax levied as the difference between a firm's sales and the value of its purchased inputs used in producing goods. Ogundele (1996) has also defined Value Added Tax as a multi-stage tax imposed on the value added to goods and services as they are processed through various stages of production and distribution and to the service as they are rendered.

These definitions by eminent scholars must have been quite adequate for the audiences for which they were intended. The beauty of these definitions is that they bring out the three essential characteristics of Value Added Tax, which have been emphasised. These characteristics are: Value Added Tax is a consumption tax; Value Added Tax incidence is on the final consumer; and Value Added Tax is a multi-stage tax.

### 2.9.2  Vat Classification

The method of collection classified VAT into two:

    a.  The clerical or multiple stage VAT

    b.  The modified Value Added Tax (MVAT)

These are explained below:

### A. Clerical or Multiple Stage Vat

This is a form of VAT where each stage of the production is Vatable, that is, VAT is charged and collected at the supplier, producer, wholesale and retails stage in a production process. This system has an in-built mechanism where only the difference between the VAT paid by each operators (input VAT) in the production stages and VAT collected by him (output VAT) is either paid to the tax authority or claimed as refund from the tax authority. This is also called full stale VAT.

### B.  Modified Value Added Tax (MVAT)/Single Stage Vat

This is a form of VAT where the charge and collection of VAT is made at a single stage in the production process e.g. manufacturing stage or wholesale stage and at the importing level. VAT collected only at the retail stage is known as PURE VAT. This is to ensure that the maximum value must have been added to the product on sale and in order to collect the maximum revenue from VAT.

### 2.9.3  Value Added Tax Rates

Pure VAT adopts only a single rate but there are six possible VAT ratios and some countries that have adopted them:

1.      One rate: Denmark, Ireland, U.K, Korea, Taiwan, Argentina, Nigeria etc.
2.      Two rates: Germany and Holland.
3.      Three rates: Luxembourg
4.      Four rates: France, Italy
5.      Five rates: Belgium, Brazil
6.      Zero rates: Argentina, Brazil, U.K, Ireland, Nigeria etc.

The below table shows the list of African countries with the various VAT rates adopted:

**African Countries with Rate of Value Added Tax**

| Country | Date introduced | State levied | Tax rate (%) |
|---|---|---|---|
| Algeria | 1992 | Retail | 7,13,21,20 |
| Benin republic | 1991 | Wholesale | 18 |
| Cote. Divoire | 1960 | Wholesale | 5,11,25,35 |
| Guinea | 1960 | Retail | 13,6 |

| | | | |
|---|---|---|---|
| Kenya | 1960 | Retail | 5,18,30,50,75 |
| Madagascer | 1960 | Retail | 15 |
| Malawi | 1989 | Retail | 10,35,55,85 |
| Mali | 1991 | Wholesale | 10,17 |
| Mauritius | 1983 | Retail | 5 |
| Morocio | 1986 | Retail | 7,14,19 |
| Niger | 1986 | Retail | 10,17,24 |
| Senegal | 1961-1980 | Retail | 7,20,30,34 |
| South Africa | 1991 | Retail | 14 |
| Togo | 1984 | Retail | - |
| Tanzania | Mid-1994 | Retail | - |
| Nigeria | 1994 | Wholesale | 5 |
| Tunisia | 1988 | Manufacturing | 1,17,29 |

IMF( Various Reports)

## 2.9.4  Exemptions

Goods and services classified as essential are exempted from VAT, that is no VAT is charged on this category of goods and services. It is however important to note that if VAT has been paid at a lower level of production, it is not refundable.

Nigeria currently adopts one VAT rate of 5% for Vatable goods and services, zero rates for export, that is, goods manufactured for export are free of VAT.

## 2.9.5  Use of VAT Rates

Multiple rates permit the use of different VAT rates for different social and economic goods by levying low rate on necessities and high rate on luxuries. Zero

ratings are levied on goods and services that will improve the living standard of the people. Goods and services classified as essential are exempted from VAT.

Most countries use exemption from VAT rather than zero rating. Only United Kingdom and Ireland use zero-rating exclusively. Zero rated goods and services escape VAT entirely and if any VAT has been paid at a lower level of production, the VAT paid is refundable.

### 2.9.6  Computation of VAT

From the definition of value added, the tax can be looked at or theoretically computed from two perspectives, the addition side (wages plus profit) and the subtraction side (output minus input).

Valued added – Wages + profit = Output – Input.

In order to levy a tax rate (t) on the value added, there are basically four possible methods.

1.     Addition Methods:

a.     Direct or account method: t (Wages + profit)

b.     Indirect method: t (Wages + t (profit).

2.     Subtraction methods:

a.     Direct (also an account) method: t (Output – Input). This is sometimes called the business transfer tax.

b.      Indirect (the invoice or credit) method: t (Output – t (input).

According to Naiyeju 1996, among the four possible methods of computing VAT, the indirect subtraction method has the greatest appeal to many nations including Nigeria. The reasons are not far-fetched. Firstly, the method relates tax liability to a particular transaction. It relies on invoice, which become an important evidence for the transaction and tax liability. Secondly, the invoice method provides a sound basis for matching possible. Finally, the tax liability can easily be calculated whether weekly, monthly, quarterly or annually. Up to date assessment can easily be made even when more than one rate is used.

### 2.9.7  Bases of VAT

Value Added can be defined as the incremental value, which a producer using labour contributes to his raw materials or purchases before selling the processed goods and services. Here, the producer can be a manufacturer, a distributor or supplier of goods or services. In other words, the original item purchased or stock of materials must have undergone some processing or improvement to warrant any value being added to the original form or shape. The inputs are processed by labour to produce the final goods and services, which are sold. As illustrated below it is the tax levied on the value added at the various stages of sales that is known as VAT. (See illustration 1).

Illustration 1:

**Multiple Stages of VAT**

| Stage | Transaction | VAT Payable at each Stage |
|---|---|---|
| P | Sales value N100 | N |
| Producer | Gross VAT = 5% = N5.00 | |
| | Net VAT = N5 | 5.00 |
| M | Sales Value N150 | |
| Manufacturers | Gross VAT 5% N7.5 | |
| | Net VAT N7.50 – 5 | 2.50 |
| W | Sales Value N200 | |
| Wholesaler | Gross VAT 5% = N10 | |
| | Net VAT = N10 – N7.50 | 2.50 |
| R | Sales Value = N300 | |
| Retailer | Gross VAT 5% | |
| | Net VAT = N 15 – 10 | <u>5.00</u><br><u>15.00</u> |

Total VAT collected at the four points = N15.00 (i.e. N5 + 2.50 + 2.50 + N5.00)

5% of 300 = N15.00 (Naiyeju, 1996).

The below diagram also throws more light:

| Sale Price (Before VAT) | | Payment to Government |
|---|---|---|
| **Supplies Price = N1000** | **RAW MATERIALS SUPPLIER** Sales Price = N1050 (Inclusive VAT) | <u>By Suppliers</u> VAT Collected = N50 Less: VAT paid = N— VAT payable = <u>N50</u> |
| **Manufacturer Price = N1500** | **MANUFACTURER** Sales Price = N1575 (Inclusive VAT) | <u>By manufacturer</u> VAT Collected = N75 Less: VAT paid = <u>N50</u> VAT payable = <u>N25</u> |
| **Wholesaler Price = N2000** | **WHOLESALER** Sales Price = N2100 | <u>By Wholesaler</u> VAT Collected = N100 Less: VAT paid = <u>N75</u> VAT payable = <u>N25</u> |
| **Retailer Price = N2500** | **RETAILER** Sales Price = N2625 | <u>By Retailer</u> VAT Collected = N125 Less: VAT paid = <u>N100</u> VAT payable = <u>N25</u> |
| | **CONCUMER** Payment to retailer = N2625 | Total VAT paid = N125 (I.e. 5% of N2500 |

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### 2.9.8  VAT Base Determination

Richard and Peggy Musgrave quoted by Naiyeju (1996) have distinguished three variants of VAT which might have some implications to our understanding of how the base of added value can be determined. These are:

a.    Gross product variant

b.    Income type variant

c.    Consumption type variant

a.    **THE GROSS PRODUCT VARIANT** has the Gross National Product (GNP) as the economic base. It allows deduction for all purchases of raw materials and components. Tax is levied on all sales with no deduction for business inputs. No deduction is made for capital goods such as plant and machinery and depreciation on them from the tax base.

b.    **THE INCOME TYPE VARIANT** allows deduction for purchases of raw materials and components plus depreciation on capital goods. The economic base of income variant is the net National Product. That is, net investment (gross investment minus depreciation) is taxed.

c.    **CONSUMPTION TYPE VARIANT:** With the consumption variant of VAT, the economic base is equivalent to total private consumption. Here deductions are made for all business purchases and capital assets. Of all the three variants of VAT, the consumption variant is popular and widely used

by many countries, including Nigeria. Attention was therefore directed to this variant of VAT and the computation methods of this research work addressed this particular variant as exemplified above.

## 2.9.9  Review of Related Literature

According to Ochei quoted by Adereti, Sanni & Adesina (2011) : 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.

It was invented by a French Economist, Maurice Laure in 1954 and was first introduced in France on April 10, 1954. Feldstein and Krugman (1990) were the first set of researchers to research on the international trade effects of Value Added Taxation. Their research was based on the widespread belief that VAT, because it is levied on imports and rebated on exports, acts as a combination of protection and export subsidy, giving the traded goods sectors of countries with VAT an advantage over the corresponding sectors of countries that rely on income taxation. The research used a simple model to show that this view is almost completely wrong. A VAT is not a protectionist measure; indeed, the allegedly pro-competitive device of export rebates is necessary if the VAT is not to act as an export tax, which in turn is actually a protectionist measure that would reduce both

imports and exports. It was also established that in practice, VAT would almost surely fall more heavily on traded rather than non-traded goods, which would constitute a bias against both exports and imports.

Different scholars had used different explanatory variables to attempt some empirical measurements of tax efforts in various countries. Such variables included agricultural output-GDP ratio, per capital income, mineral exports-GDP ratio, the degree of openness of the economy, money-GDP ratio, etc. Using mining-GDP, agricultural output-GDP ratio, and export – GDP ratio as determinants of tax share in GDP to measure tax efforts, Chelliah, Bass and Kelly (1975) showed that the agriculture share is negative while the mining share is positively related to tax share, and the export ratio is not significant. Using panel data on 43 Sub-African Countries for the period 1990-1995 to measure the determinants of tax-GDP ratio to construct an index of tax effort for these countries, Stotsky and Woldemariam (1977) found that the countries with a relatively high tax-GDP ratio tended to have a relatively high index of tax effort, although the results varied across countries. Tait and Gratz (1979) later updated the work of Chelliah et al. (1975) using the same sample of developing countries for the period 1972-1976. However, they did not find the agric-GDP ratio to be significant but their measure of tax effort indices yielded similar results to the initial study.

Toder and Rosenberg (2010) worked on the effects of imposing a value added tax to replace payroll taxes or corporate taxes (in the US). The research work was conducted against the background that the United States is the only country in the developed world that does not impose a broad-based consumption tax. The typical form of broad-based consumption tax used worldwide is a credit-invoice Value Added Tax (VAT). The credit-invoice VAT, a subtraction –method VAT or Business Transfer Tax (BTT), and a Retail Sales Tax (RST) are all intended to tax the final consumption once at the retail level, but the collection mechanisms differ among the three taxes. The researchers found out that VAT has administrative advantages over both BTT and RST. Both VAT and BTT are easier to enforce than RST because under a tax collected at different stages of production, evasion by the final seller still leaves much of the tax in place. Compared with BTT, VAT makes it easier to exempt sales of categories of consumption goods, including export sales, but more difficult to grant references to selected industries. The distributional burden of VAT, it was found, is roughly proportional at the bottom of income distribution but regressive at the top.

VAT was introduced by The Federal Government of Nigeria in January, 1993. It was believed by many Nigerians that the tax was introduced as a means of avoiding taking loans from international agencies (Ochei, 2010). According to analysts, the tax was intended to be a 'super tax' to eradicate completely many

other taxes related on goods and services. VAT was then imposed on virtually all goods and services, whether produced or rendered in Nigeria or not. Exemptions however were granted in respect of medical and pharmaceutical products, basic food items, fertilizers, agricultural and centenary medicine, books and educational items, farming and transport equipment, etc. VAT effectively replaced the former sales tax, which, under the constitution, was supposed to be charged by states and not the Federal Government.

Although very little literature exists on the subject of VAT in less developed countries, extensive studies have nevertheless been done on the alternation prominence of Indirect Tax in developing countries in general and Nigeria in particular. The core function of taxation as a revenue generating tool in developing countries has been studied by eminent scholars. Naiyeju (1996) argued that the positive result received from any tax depends on the extent of how it is properly managed. The extent of how the tax law is interpreted and implemented as well as the publicity brought into it will determine how a particular tax is able to meet its objectives. Ariyo (1997) in his study on productivity of the Nigerian tax system reported a satisfactory level of productivity of the tax system before the oil boom. The report underscored the urgent need for the improvement of the tax information system to enhance the evaluation of the performance of the tax system and facilitate adequate macroeconomic planning and implementation.

Ajakaiye (2000) worked on the impact of VAT on key sectoral and macroeconomic aggregates, using a Computable General Equilibrium (CGE) model considered suitable for Nigeria. The study developed three scenarios. In order to approximate the presumed Nigerian situation, the study assumed that government pursued an active fiscal policy involving the re-injection of the VAT via increases in government final consumption expenditure in combination with a presumed non-cascading treatment of the VAT. Two other simulations considered an active fiscal policy combined with a cascading treatment of VAT and a passive fiscal policy combined with a non-cascading treatment. As it turned out, the scenario of a cascading treatment of VAT with an active fiscal policy not only had the most deleterious effects on the economy, it was also the one that most closely approximated the situation in Nigeria. VAT revenues under this scenario are more than 3% lower than the first scenario, the general price index increases by 12%, and wage and profit incomes fall by 8.54% and 12.27% respectively. Overall, the GDP declines by 11.34%. Such a situation, as observed by the researcher, poses a great threat to the sustainability of VAT. A United Nations (2000) expert group stated that tax revenue contributes substantially to development. The stark reality in most developing countries is that while there are several budgetary pressures as a result of ever increasing demand for government expenditure, there is a limited scope for raising extra tax revenues.

Desai, Foley and Hines (2004) stated that governments have at their disposal many tax instruments that can be used singly or in concert to finance their activities. These tax alternatives include personal and corporate income taxes, sales taxes, value added taxes, capital gains taxes and numerous others. In choosing what tax instruments to use and what rates to impose, governments are typically influenced by their expectations of the effects of taxation on investment and economic activities, including Foreign Direct Investments (FDI). The researchers stated that there are extensive empirical studies that high corporate income tax rates are associated with low levels of FDI. VAT rate in Nigeria has been determined in a way that minimizes disincentive efforts on economic activities (Owolabi & Okwu, 2011). Musa (2009) opined that economic and social development laws and policies provide the basis for effective state action that lifts society from underdevelopment, improves the standard of living and facilities for the realization of the millennium development goals. Olaoye (2009) worked on the administration of VAT in Nigeria. The objective of the study was to seek ways of improving government revenue generation base in order to improve on the economy. The study among other things, recommended that more awareness was needed on VAT. Adegbie and Fakile (2011) worked on company income tax and Nigeria's economic development. They used the GDP to capture the Nigerian economy and Petroleum Profit Tax (PPT), Company Income Tax (CIT), Customs and Excise

Duties and VAT to measure Company Income Tax. Findings revealed that there is a significant relationship between company income tax and Nigerian economic development and that tax evasion and avoidance are the major hindrances to revenue generation. Owolabi and Okwu (2011) empirically evaluated the contribution of VAT to the development of Lagos State economy. Development aspects considered included infrastructural development, environmental management, education sector development, youth and social development, agricultural sector development, health sector development and transportation sector development. Result showed that VAT revenue contributed positively to the development of the respective sectors. However, the positive contribution was statistically significant only in agricultural sector development.

## 2.10   Why Nations opt for Value Added Tax (A Fiscal Premise)

The basic philosophy of taxation is embedded in the reason for the existence of government. That is, a human being, acting as an individual in society, cannot provide himself certain crucial services in a community. These include, Defense, Roads, Justice, Law etc. government exists to provide these collective services or public goods. In other words, the public sector has to be financed. Taxation is therefore the price of the social contract between the governed and the government for the provision of social goods and services by the latter to the former. There are

four major sources of public finance for government generally; these are: (Naiyeju, 1996):

1. Return on investments/sales of directs and natural resources by government.

2. Borrowing money from domestic/foreign financial institutions or government.

3. Printing currency in tune with the Keynesian prescription of monetary expansion to cure fiscal disequilibrium or unemployment.

4. Imposing taxes on the citizens, their incomes, business profits, assets or consumption.

To provide a fiscal premise for the adoption of the Value Added Tax is naturally to look at the logic for taxation. This section therefore examine why taxes including VAT are imposed from the macroeconomic perspective as explained by Naiyeju (1996).

## 2.10.1  Need to Finance Government Expenditure and Economic Welfare

Historically, taxation constitutes the oldest instrument for financing the public sector in terms of either peace or war, for sacrificing their private resources to the state in the form of taxes; citizens expect the government to reciprocate by expending public revenue in a way that will enhance their welfare. Similarly, economic literature shows that as far back as Adam Smith the place of taxation in

public finance has caught the attention of experts. David Richardo, another classical economist did, in fact, argue that an economic principle' could only be considered useful if "it directs government to the right measures of taxation". The issue is that since access to revenue is basic to the functioning of government, the sources of such revenue including (and most especially) taxation must be prioritized.

In recent years, four major factors seem to have contributed to fine tuning the functioning; these are (Naiyeju, 1996):

- Increasing distillation and understanding of the writings of the classical economists, as well as those of J.M. Buchanan, Karl Marx, J.M. Keynes, Richard Musgrave, Carl Shop and others.

- The demands for economic reconstruction after the second world war that has also witnessed increasing use of tax experts in policy formulation and economic reforms;

- The challenges of a state of economic depression in different countries at different times; and

- The collapse of communism, which led to the strengthening of market economics and the resultant need to stabilize the impact of pricing activities.

## 2.10.2 VAT, A Veritable Tool of Fiscal Policy

Today, it is valid to posit that, apart from the provision of money for defence and social and economic infrastructure, value added tax together with other forms of tax serve as a veritable tool of fiscal policy. It is used to pursue the realization of what have overwhelmingly been accepted as the objectives of fiscal policy. These objectives are:

- Mobilisation and allocation of resources to desired productive sectors of the macro economy.

- Redistribution of income and wealth among different groups of citizens;

- Stabilisation of the effects of market forces on prices.

- Dealing with unemployment problem.

- Dealing with balance of payment deficit among others.

These objectives together with other objectives not mentioned above are discussed giving instances in Nigeria and other countries:

In 1931, the Hoover administration favoured tax increase as a means of combating unemployment and redressing the federal budget deficits that had accompanied the Great Depression in the United States. (paradoxically, the same problem situation was at hand when the Kennedy government favoured tax reduction in 1962).The Nigerian government wanted to, among other reasons shift public consumption

away from liquor and wines by imposing a 10% sales tax on the items (whereas 5% was the tax on other items) from 1986 to 1993.

Similarly, in 1996, Nigeria introduced tax measures that favoured manufacturing companies in order to reduce production costs and inflation, and also introduced more reliefs and cuts in the rate of tax for individuals because VAT was generating substantial revenue.

To encourage people to engage in export production, (in central America & Caribbean capitalized on the 1993 tax reforms which introduced VAT to the country to sharply reduce export taxes).

There is the post-second world wide logic for the imposition of taxes; the need to mobilize savings to support capital formation which, in turn, is expected to smoothen business and industrial growth. The idea, much espoused in the theory of VAT, is that if the taxation of consumption of certain goods and services would reduce consumers' demand for them, then the un utilized disposable income could be saved. Argues Nicholas Kaldor for such same boosting taxes. "By providing a surplus over recurrent expenditure, they make it possible to devote a higher proportion of resources to building up capital base. An established corollary of this savings, capital connection is the view that growth should be the core objective of fiscal policy in developing countries.

The stress on growth has led to heavy public sector investments in social and human capital. To cap it, the growth of the bureaucracy (which means increasing need for revenue) is hardly matched by a corresponding level of efficiency in the dominant public sector enterprises. Besides, especially in sub-Saharan Africa, there has been over-reliance on revenue copper from minerals such as petroleum and which prices often suffer from the vagaries of international trade. Governments therefore need to expand their internal revenue base by introducing such fiscal policies as VAT.

Finally, as the wealth poverty gap rules in these countries, arguments for economic reforms become trenchant. Governments are compelled to continue to explore all means of redistributing resources and improving the welfare of citizens. The result is a look inward approach, which has in turn motivated the introduction of such taxes as the value added tax. The tax scenario thus, presents a recurrent index: wherever there is economic reform, there is often tax reform. The reason is that of all potential sources of government revenue, it is taxation (and, in some cases, returns on investment) that can be most essential in financing public goods and services.

To cap it, it is not the imposition of taxes that matters but their effectiveness in meeting fiscal objectives. As the experience of many countries has shown, VAT has the capacity of taxing a large number of people speedily, inescapably and

painlessly. And as will be demonstrated later on, its socio-fiscal impact cannot all be quantified monetarily.

## 2.11   Characteristics of VAT

## 2.11.1 Contextual Characteristics of the Introduction of VAT

Despite the fiscal regard accorded VAT, the tax has had a chequered history in public finance. In 1949, it was discountenanced in Japan. It similarly never had an easy entry to the United Kingdom, Nigeria, Bolivia or Guatemala and also (1995) Ghana too. This provides a historical premise for what may be termed the contextual characteristics of the introduction of VAT, namely

- Public resistance and controversy;

- A macro- economic problem situation; and

- Need for tax policy reform.

**Public Resistance**

Taxation in whatever form is never joyously received by the taxable public. In the context of VAT, the imposition in many countries has been faced with private resistance, the mobilization of the mass media to knock the bottom off the argument for VAT; an intensive jobbing to disparage the tax or seek an endless gamut for tax exemptions; and bland evasion.

In the United Kingdom, the introduction of VAT on April 1, 1973 was assessed by critics as an economic set back and a tab on the fiscal sovereignty before the EEC member nation. A massive enlightenment campaign had to be carried out to:

a.   Dissuade the critics from their anti VAT posture;

b.   Educate the public on the working of VAT;

c.   Propagate the message for its adoption by the United Kingdom B.E.V. sabine reports that as many as 4.5 million information leaflets were dispatched to the public to sensitize it for the acceptance of VAT.

A characteristic deduction from similar situation is that, because of the paucity of literature on, or the novelty of, the tax, people are generally ignorant of its fiscal and financial dimensions. Its introduction in many countries has seen a barrage of arguments for and against the tax for years; it was hotly debated in the United States. Such a debate, as it resistance and the resultants controversialisation of the tax. The fear inherent in the introduction of tax in Nigeria were

-   Fear of regressiveness

-   Anticipated high administrative costs, especially the cost of monitoring the tax

-   Apprehension that buoyant tax revenue might lead government to extravagant expenditure

-   The established culture of tax evasion

- Compliance cost

- Effect on price

- Incompatibility of VAT with the sales tax; and

- Fear of inability to administer the tax efficiently, which was borne out of similar impression of income tax.

The waters of ignorance of VAT do not, however, often flow in a particular direction. Whereas when VAT was introduced in the UK people had assumed it would be simple to understand and easy to administer (they were later proved wrong) its introduction in Nigeria was knotted with fears that VAT would be too complex to effectively administer or understand (those who nurtured the apprehension were similarly later proved wrong). As would be demonstrated later on, most of the fears about VAT were either overblown, uninformed or driven by the sheer culture of fiscal pessimism that makes every public policy a punch – bag even before it is loaded.

**Fiscal Crisis**

The prescription of VAT by the Group Mission in Japan was in response to the macro-economic problem – situation of the post – second world war era. That is historically, VAT is a fiscal remedy; thus its adoption especially by developing countries is premised on economic problems such as fiscal disequilibrium. In the

1980s, Guatemala had to introduce VAT reforms required to redeem the country from a grave economic recession worsened by political problems.

Jamaica was similarly in economic distress (following the collapse of her bauxite and tourism business; balance of payment problems; high unemployment and fiscal deficits) when it launched the 1986/87 tax policy which contained VAT without the decline in the global oil market neither Nigeria nor should it be forgotten that the introduction of VAT to Chile, Indonesia and Colombia was precipitated by economic needs borne out of fiscal crises. It is however not in all cases that a country is fiscally troubled before it adopts the value added tax.

**Tax Reforms**

The third contextual feature of the introduction of VAT is a prevailing need for tax reforms. Such reforms are, in most causes economically motivated. Although Japan really started implementing VAT only in 1990 charring adopted it in 1989), the tax was originally envisaged as potential remedy to the ineffectiveness of existing Japanese taxes (such as the agricultural tax which the country had collected in kind) after the second world war.

While the argument above holds in many situations, there is a peculiar edge to it in the developing countries. Here there is a striking inadequacy of tax output vis-à-vis, indices of economic growth (GDP or GMP). Less than 15% of GDP is realized

from the imposition of taxes. It has been argued that the paucity of tax ratio in developing countries results largely from "failure to tax the wealthier sectors of the community effectively". In other words, the tax ratio is low because of the existence of an unfulfilled hunger for tax reforms in the fiscal system. In such a situation, the adoption of VAT serves two purposes; one, it helps tax the untaxed sectors of the economy; two it is a significant reform in the tax system.

Again, revenue from indirect taxes predominated in the developing countries where direct taxes have generally not been very fruitful. Even within the matrix of indirect taxation of yield from external trade taxes (import duties and export taxes) predominates. In response, many countries including Nigeria, Ghana, Senegal and even Kenya have over the years tried to diversify the revenue base of their indirect taxes. This has led to the introduction of the purchase or sales taxes in some of these countries as in certain European, Asian and the Caribbean countries.

## 2.11.2 Inherent Characteristics of VAT

These characteristics are deduced from the nature and concept, general perspectives and operations of the tax. These are discussed below:

A.   **Broad Base:** VAT has perhaps the broadest base in tax history. In most countries, it applies to both public and private consumption, thus reducing the disadvantages associated with tax holidays, traffic concessions, etc.

private individuals and enterprises, whose income is usually difficult to determine and tax in developing countries, are one way or the other compelled to pay VAT.

B. **Shifting:** The incidence of the tax is shifted forward or devolved in successive stages so that, at the end, it is the final consumer that pays the tax. Since the elasticity of both demand and supply determines the degree of tax shifting, this qualify of VAT prevents the substitution effect associated with direct taxes on income and profits. It thus induces the taxable business persons to willingness to pay tax while encouraging the production and distribution of the taxable item as it no tax has been imposed on them.

C. **Theoretical Complexity:** An assessment of VAT on the grounds of difficulty or ease of collection often presents conflicting views. A school of thought holds it strongly that VAT is a complex tax (Christopher Fitzgibbon and Miles Walton, for instance, Claim that in many areas, VAT is highly complex). Another believes VAT is simple or (as Feldstein and Krugman argue) relatively invisible and "easy to raise". Based on research, VAT can be said to neither be exclusively complex nor simple, or easy to raise, but its collection is complex. Often, the complexity – theoretical and practical tends to complicate an easy operation of the tax and even its understanding by the public. Generally, VAT appears more complex conceptually, but relatively

easy to handle in the right hands of experienced and seasoned tax administrators.

D.  **Adaptability:** The tax is flexible and has been variously adapted to the political and economic realities of different countries. In developing countries (for instance Nigeria), exemptions are granted on such essential items as medicament, agricultural inputs and educational materials. The logic is to enable VAT operate without hindering health services, food production and literacy, which are badly needed.

E.  **Inconstancy:** VAT is never as constant as the northern star. Rather it is protean. Apart from structural variations from place to place, the tax is conceptually and operationally unstable and continues to record adjustment in each country.

Take the United Kingdom as an example. VAT was introduced there in 1973 as result of the Finance Act of 1972. The original rate was 10%. But by June 18, 1979 the tax policy had been reworked so that a new rate of 15% displaced the 8% (standard) and 12% (higher) rates. It was new until April 1, 1988, that temporary imports for repairs whole ownership remained unchanged were exempted from VAT. The 1987 Finance Act introduced the rule that tour operators in the UK must impose VAT on the margin between their input and output if the services involved are consumed domestically or

within the EEC. From April 1, 1989, a lease became taxable at standard VAT rate. The UK is yet adjusting its VAT in different areas. The VAT rate, which was originally 20% in Uruguay, has been adjusted upwards to 22% from March 1990, while in Guatemala the rate had to be cut from 10% (1983) to 7% (1984).

F.  **Self-Assessment:** The operation of VAT allows the tax payer to determine his tax liability and account for tax collected, thus placing the onus of taxation substantially on the taxable entity. The tax authorities must however monitor the genuineness and accuracy of the self-assessments by the tax payer who is required to supply accurate information and keep records of all transactions. This is a significant element of democracy in the administration of VAT.

G.  **Neutrality:** The tax scheme is often assessed as efficient because it characteristic broad base ensures a low substitution effect and, therefore, a low excess burden. VAT eliminates the cumulative taxation and cascading that hinder the operation of turnover tax in many countries.

The experiences of developing economics do, however, tell us that efficiency cost of the administration is influenced by such externalities as the level of efficiency in the macro economy as well as the degree of tax evasion.

H.   **Paperwork:** The operation of VAT involves a lot of paperwork: return reforms, assessment forms, registration forms, tax invoices, receipts, cheques etc. even at the tax administration level, VAT requires the printing and circulation of a large number brochures, leaflet, i.e. explanatory notes, circular etc. for two reasons.

1.   The tax can only survive on detailed information of business transaction.

2.   Since VAT collectors in each country constitute a large group of the taxable public, communicating with them requires massive utilization of print (not entirely the mass) media.

I.   **Export Rebate**: It is characteristic of the value-added tax to zero-rate exports. That is exports are taxable, but at zero rate; the taxpayer is consequently entitled to a refund of whatever amount he must have paid as input VAT. This is the practice in France, Austria, Nigeria, Greece, Germany, Ireland, Korea, New Zealand, and Kenya.

## 2.12   VAT in Nigeria

### 2.12.1  Background

Rulers and governments always find new and diverse ways of taxing their subjects in order to raise money for development projects. Besides, two agencies of the United Nation (UN), the International Monetary Fund (IMF) and the World Bank, have since 1987, been advising that the tax system in Nigeria needs reforms so as

to make the government less dependent on revenue derived from petroleum. They further argued that the best way to make tax evasion extremely difficult and less attractive is to move towards indirect taxation. In view of all these, the government became convinced that there was the need for tax reforms. Consequently, the federal government in 1991 set up two study groups to make recommendation on the reforms needed in the direct and indirect taxes in Nigeria.

The study group on indirect taxes (which is relevant to this research work) was to recommend reforms based on the following objectives, (Ajakaiye, 2000).

1.    Shift taxation towards consumption (indirect) rather than saving (direct).

2.    Reduce dependence on oil revenue.

3.    Provide incentives for export production.

4.    Improve the administration of indirect taxes.

5.    Maintain a fairly even tax incidence across various lines stages and elements of production, including non-protective elements of taxation on imported goods.

The year 1991 was a major landmark in the tax administration of Nigeria. In that year, the Professor Edozien led study Group on the Review of the Nigerian Tax System first identified the need to transform the outmoded sales tax that was then administered by the state governments within the year (1991), a parallel study on

indirect taxation led by Dr. Sylvester U. Ugoh was given the responsibility to study the feasibility of introducing VAT IN Nigeria as an improvement on the existing sales tax.

After making series of empirical studies and research tours both within and outside the country, the Ugoh study Group came up with a form recommendation in November 1991 that VAT should be introduced in Nigeria after two years of preparatory work. As a follow up, by 1992 the Ijewere led modified Value Added Tax (MVAT) committee was set up to undertake preliminary work for the introduction of the new tax. The committee was later to work in close collaboration with the federal Inland Revenue Service in 1993 for the latter to take over the administration of the new tax which was scheduled to come on stream as VAT by 1$^{st}$ September, 1993.

## 2.12.2  Placement of VAT

Having taken a decision to implement VAT, government was faced with the need to answer the administrative question of which organisation was suitable to administer the tax.

Nigeria was at this cross roads by December 1993 when the new tax was about to start.

The VAT system in Nigeria is administered by the Federal Board of Inland Revenue through its operational arm; the Federal Inland Revenue Service (FIRN). The VAT directorate within the FIRS is centrally located at the head office in Abuja with a network of zonal and local VAT offices throughout the federation.

To some extent, the administration of VAT has some relevance to custom duties because VAT will be applied on import and paid on imports in a manner similar to customs duties. It is on this premise that countries like Britain chose to pitch the VAT administration in the Board of customs and excise. But the expertise and training of customs officials are tailored towards establishing the value of goods across the borders. The personnel are not trained and experienced in such intricacies as examination matching, checking inventory and the likes, which are essential ingredients in efficient VAT administration.

There may be valid reason to leave the administration of VAT to the organization which administers other indirect taxes. After all, it has often argued that the tax replaces another kind of sales tax some degree of skills in handling a similar tax such as VAT. Arguments like these were proffered by some state governments in Nigeria at call for the administration of VAT by them at the initial stage of the tax.

But on a critical look at what VAT entails, the efficient operation of the tax calls for a high level of expertise in auditing similar to that of income tax and very far

from that of other forms of sales tax. Moreover, the information obtainable from VAT returns is very relevant and useful to enforce income tax, such information matching is only possible when the two taxes are under the administration of the same organization. All these considerations tend to favour a united administration under the same organisation for both income tax and VAT as we have in many countries operating VAT today including Nigeria (Naiyeju, 1996).

The alternative of a separate administrative outfit different from the existing direct and indirect tax apparatus is usually borne out of injurance as well as political, periodical and other extraneous reasons is some countries. The consequences are grave because there will be lack of the desired coordination between the VAT administration and other taxes. Besides, the accumulated taxation experience of the existing tax administration will not be placed at the disposal of the new tax especially during its footing period when problems are bound to arise when the VAT and the income tax are administered at different levels of government; and worse when a separate organization administers VAT (Naiyeju, 1996).

Based on the above facts, VAT system in Nigeria is administered by the Federal Board of Inland Revenue through its operational arm; the Federal Inland Revenue services (FIRS). The VAT directorate within the FIRS is centrally located at the head office in Abuja with a network of zonal and local VAT offices throughout the federation. VAT administration shall be considered in details later in this chapter.

## 2.12.3  Criticisms against VAT Introduction

The introduction of VAT in Nigeria, however, was met by some criticism from different sectors of the economy for instance, the Guardian Newspaper dated February 18, 1994 reported that the chairman of Nigeria Insurance  association says 5% VAT charged on all items covered by the new tax, should apply. He said the rate could kill the industry because the public may be driven from insurance. Supporting this view, an insurance practitioner, Mr. Ajomale in the Guardian Newspaper, January 21, 1994, vol. 10, No. 5983 pg. 11 speaking at the 14th Annual Seminar of the Insurance and Actual Sciences Students Association (ASSA) Lagos State Polytechnic commented that the new tax system will make insurance less attractive to investors.

An economist, Mr. Julius Olusola, advised in the Guardian Newspaper of January 8, 1994, that VAT should be abolished. His reasons for this advice are as follows:

1.   There are too many taxes affecting the manufacturing sector.

2.   There is high unemployment, low productivity.

3.   He claims that introduction of VAT will involve additional burden.

4.   Traders and contractors will escape VAT and the organised sector will be affected and;

5. There are difficulties that might be encountered in its administration and implementation.

## 2.12.4  Policy Development

The controversy that greeted the introduction of the Nigeria VAT was not on the desirably of the new tax. In fact, everybody was convinced from the time Dr. Ugoh submitted his report in November 1991 that there was need to revolutionize the Nigeria tax system with the injection of the new tax. The issue at stake was the placement of the VAT administration.

Rather than engage in the required preliminary work to put the new tax properly on stream, the MVAT committee started to canvass for an elaborate separate commission. Unfortunately, government did not favour this stand. The memorandum which presented this periodical view to government in December 1992 was therefore the rejected in it's entirely. While government accepted the introduction date of June 1993 for the new tax, if rejected the use of a separate commission to administer the tax. Consequently, government directed the then Honourable Minister of Finance to Commerce the new tax on an experimental scale with a small outfit within the ministry of finance.

By early 1993, the then Honourable Secretary (Minister) of Finance in the interim National Government, Prince Oladele Olashore, saw the need to commence the

implementation of the new tax without further delay. He was also strongly opposed to creating new government outfits for functions that can be performed by existing agencies even if with slight modification. He believed that such creations had tended to make the public services unwieldy leading to unpleasant retrenchment from time to time. He therefore directed the MVAT committee to liaise with the Federal Inland Revenue Service (FIRS), the Agency responsible for the administration of income tax. In the ministry of finance, for a smooth handling over of the preliminary work done so far on the assignment of the committee. The MVAT committee finally wound up its midwifery activities in June 1993, when FIRS fully took over the implementation of the new tax (Naiyeju, 1996).

Another crucial policy development in the introduction of VAT IN Nigeria was what should be the roles of the Federal, state and local governments in the administration of VAT. The argument of the state governments hinged on their historical involvement in the sales tax which they believe VAT was to replace. They were erroneously made to believe that since they administered sales tax. They should be in a better position to administer VAT and therefore the Federal Agency should not be involved. The state governments also argued for a full claim to the revenue derivable from VAT on this premise.

The argument of the federal government, which appears to have greater strength than that of the states over the matter is that VAT is an improvement over sales tax

in all its ramifications of structure, techniques, principles and coverage make the federal government come into its administration in order to perfect the tax system. Therefore, to leave VAT in the hands of the states will definitely expose the new tax to the unfortunate fate of the sales tax. On the sole claim of the states to the VAT revenue, the Federal Government debunked the argument by reference to its exclusive constitutional right to legislate on tax matters including the taxation of consumption. It is pertinent to explain that the modified value added tax canvassed by the MVAT Committee is nothing but a glorified sales tax because it has no credit system built into it to mitigate the cascading effects of a multistage tax like VAT.

Nigeria has opted for VAT and not a glorified sales tax, if the country had opted for the MVAT, may be it would have been tenable to leave the administration with the state governments because it would have made little or no difference to the former sales tax with all its defects. But Nigeria finally settled for VAT which is out of proportion for any state government to implement effectively independent of the federal government because of its effects across the stage pointers the credit system and the VAT on imports.

## 2.12.5  Salient Provisions of the Value Added Tax Decree 102 of 1993

The enactment that gave legal backing to VAT in Nigeria is the VATD 102 of 1993 (Now VATA 102 of 1993). An appraisal of the salient provisions of the decree and explanations (where necessary) is provided by the FIRS in its various circular on VAT.

The decree in logically arranged into six broad parts with three schedules and contains forty-three sections. The six part cover:

- Imposition of VAT.

- The administration of the tax.

- Returns.

- Remittance.

- Recovery and refund of the tax.

- The establishment of a technical committee to advice on the  tax from time to time. The offences and penalties and other miscellaneous items. The three schedules provide details of taxable goods and the rate of tax; taxable services and the rate of tax; and exempt goods and services.

The decree places the administration and management of the tax on the Federal Board of Inland Revenue (FBIR) and empowers the Board to do such things as it may deem necessary and expedient for the assessment, collection and accounting

for the tax. It is in the exercise of this power that the Board has appointed other statutory bodies like Nigeria customs service (NGS), NITEL, Public and private companies of the tax in their respective areas of operation.

An important feature of the Decree is the catalogue of offences and the attendant penalties for tax offences. For instance, a taxable person who fails to collect tax under the Decree is liable to pay as penalty 15% of the amount not collected plus 5% interest above the CBN rediscount rate. Failure to file the monthly VAT returns attracts a fine of N5,000 for every month of default. Even an officer of the Board or any other person, is culpable and liable on conviction to a tune of N59,000 or to imprisonment for a term of five years if he aids or abets the commission of any offence under the Decree.

Section 42 of the Decree contains a comprehensive list of terms that are clearly defined and interpreted in the context of the legislation. The lucid definition proffered in this interpretation section helps to throw more light on all aspect of the Decree and it helps to narrow down possible areas of conflicts and confusion in its implementation.

## 2.13   Operational System of Value Added Tax (VAT) in Nigeria

VAT operational system involves registration requirements, i.e how the tax is calculated, the books and records to be kept by VAT agents, filling of returns, refund procedures, audits and investigation.

## 2. 13.1  REGISTRATION

All companies are required to register for value added tax within six months of commencement of business or of commencement of the Decree . The penalty of failure to register is N10,000 for the first month and N5,000 for each subsequent month the failure continues. Meanwhile the decree requires manufacturers, wholesalers, importers, suppliers of taxable goods to be registered agents in the administration of Value Added Tax. Non profit organisations, professionals, ministries, agencies and parastatals which deal in taxable activities are all expected to register, small scale traders and retailers are given a three – year concession from registering, however, if they want to enjoy the benefits derived from registration, they are mandated to register. Registrants are expected to obtain all fill value added tax (VAT) form 001 and return to the nearest local VAT office (LVO) where a VAT registration number is given to them to show as evidence of registration.

**Calculation of Value Added Tax (VAT)**

Value Added Tax (VAT) form 002 gives a laid down form of calculating the value added payable or refundable for a period of time. The following should be observed in determining the amount of Value Added Tax due or refundable.

❖ Ascertain the Value Added Tax on the supplies made during the reporting period.

❖ Ascertain the Value Added Tax paid on purchases used to provide the taxable goods and services during the same reporting period.

❖ Find the difference between the Value Added Tax on supplies made.

**CALCULATING OF VAT PAYABLE**

| VAT collected from customers | Subtract | VAT paid on purchase | Equals | VAT payable |
|---|---|---|---|---|
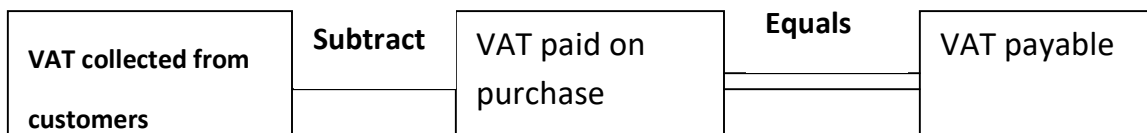
**Source: Primary source**

Import tax credit for purchases made towards supplies. This shows Value Added Tax payable when Value Added Tax collected exceeds Value Added Tax paid.

**CALCULATION OF VAT REFUNDABLE**

| VAT collected from customers | Subtract | VAT paid on purchases | Equals | VAT refundable |
|---|---|---|---|---|

Input tax credit
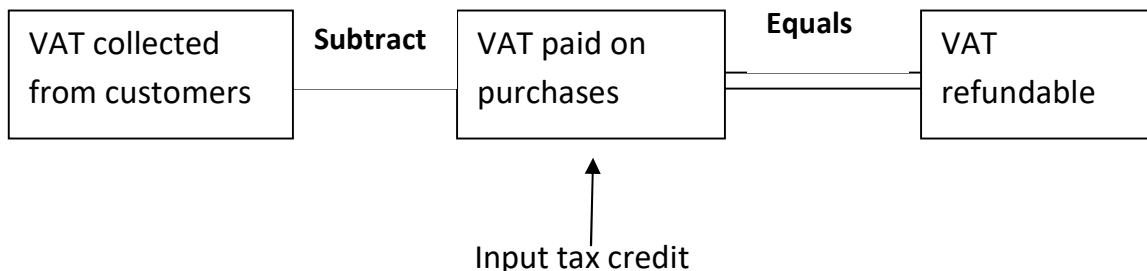
**Source: Primary source**

This shows VAT refundable when VAT paid out is in excess of VAT collected

## 2.13.2 VAT Collection Procedures Condition for Eligibility

Before a taxable person could collect VAT on behalf of the government, he must have been registered as a VAT collector and must issue receipts for the VAT collected. The law imposes it on him the responsibility to render monthly returns, in a specified form, to the nearest local or zonal VAT office, of the VAT so called by him.

Nigeria operates a mixture of multiple stage and single stage VAT system. Therefore for the purpose of reviewing the collection procedure of VAT in Nigeria, VAT collection shall be separated into two, viz:

    i.    VAT on imports

    ii.    VAT on manufactured goods and services.

**VAT on Imports**

Any importer of taxable goods and services is required to pay VAT on the value of the commodity (which is inclusive of customs duties and other charges) at the point of entry. This may be seaport, airport, border station and even post office (where the goods are sent through mail). The distinguishing factors about Vat on imports are:

a. The value of imported taxable goods shall be the amount which equal to price of the goods so imported and shall include (see S.6 VATA, 1993) all taxes, duties and other charges lend outside or by reason of importation into Nigeria, other than the tax imposed by the VATA.

b. The VAT point (i.e. where the VAT is charged) is the relevant point entry be it port or border post.

c. Payments for VAT are made to the Nigeria customs service (NCS) which in turn pays to the Central Bank of Nigeria (payment of VAT is a pre-condition for clearing goods at the ports).

d. Returns are rendered by both the importer on form VAT 002 and the NCS, on form VAT 006 to the nearest local or zonal VAT office.

## VAT on Manufactured Goods and Services

Locally manufactured goods are subject to tax from the point of supply of raw materials through the distribution channel, to the final consumer of the product, lie at each stage of the distribution channel.

The supplier of VATable raw materials (who himself may be a consumer of other VATable services) charges VAT (referred to as output VAT to the supplier but input VAT to a manufacture) on the supplies made by him to a manufacturer. The manufacturer then processes the raw materials (may consume other VATable

services in the process) into finished goods which he then sells to the wholesaler at a price inclusive of 5% VAT on cost plus profit (this is output VAT to the manufacturer but input VAT to the wholesaler). The wholesaler, after providing for his own profit and sells at this price to the retailer (output VAT to the wholesaler but input VAT to the retailer) who then sells to the final consumer at a price that includes 5% of his cost plus profit (output VAT to the retailer).

The VAT payable or refundable is the difference between the output VAT and the input VAT suffered in producing or generating the output VAT. Where the output VAT is greater than the input VAT in any month, the excess is paid to the government through the local or zonal VAT office accompanied by the monthly return. But where the input VAT is greater than the output VAT, a claim for refund is made to accompany the monthly VAT returns of the taxable person.

The question then is "who bears the burden of VAT?" Since taxable persons through the input to output VAT mechanism can transfer the burden of VAT to the next person in the distribution chain, it is the final consumers of the goods that bear the burden of VAT in Nigeria.

An example of this and the consumption of VAT payable at each stage of the distribution chain is present below, to demonstrate are concept and collection procedure of VAT in Nigeria. Note that;

i.      The supplier are not VATable, i.e. input VAT is NILL.

ii.     The supplier suffers VAT on VATable services such as to bank charges telephone, telex etc.

iii.    The manufacturer, wholesaler and retailer consume other VATable goods and services.

iv.     Rate of VAT is 5% at the material supplier stage.

Assume that raw materials worth N105,000 (VAT inclusive) were supplied to a manufacturer. The supplier incurs N10,000 bank charges and N5,000 on Telephone and Telex communication. The computation will proceed as follows:

**STAGE I          RAW MATERIAL SUPPLIER**

| A. | Output VAT: (5/105 x 105,000) | ₦5000 |
|----|-------------------------------|-------|
| B. | Input VAT: (5% of N15,000) | ₦750 |
| | **VAT returns (A – B)** | **₦4,250** |

**STAGE II        MANUFACTURER**

Assume that the finished goods are sold to the wholesaler at N210,000 and the wholesaler incurred the following:

**INPUT VAT CALCULATION**

|  | COST | VAT AT 5% | GROSS VALUE |
|---|---|---|---|
|  | ₦ | ₦ | ₦ |
| Raw materials | 100,000 | 5,000 | 105,000 |
| Other VATable goods and services | 50,000 | 2,500 | 52,500 |
| **Total** | **150,000** | **7,500** | **157,500** |

A VAT return is computed thus:

| A. | Output VAT (5/105 x 210,000) | ₦10,000 |
|---|---|---|
| B. | Input VAT computed above | (₦7,500) |
|  | **VAT returns (A-B)** | **₦2,500** |

**STAGE III          WHOLESALER**

Assume the wholesalers supplied finished goods to the retailer at a price of N367,500 and consumes other VATable goods and services worth N75,000 the goods and services consumed by the wholesaler showing VAT is as follows:

|  | COST | VAT AT 5% | GROSS VALUE |
|---|---|---|---|
|  | ₦ | ₦ | ₦ |
| Finished goods | 200,000 | 10,000 | 210,000 |
| Other VA Table goods and services | 75,000 | 3,750 | 787,750 |
| **Total** | **275,000** | **13,750** | **288,750** |

A VAT return is as follows:

| A. | Output VAT (5/105 x 367500) | ₦17,500 |
|---|---|---|
| B. | Input VAT | (₦13,750) |
| | **VAT returns(A-B)** | **₦3,750** |

**STAGE IV                    RETAILER**

Assume that the retailer sold the goods to the final consumer at N525,000 (VAT inclusive) and consumed N100,000 worth of other VATable goods and services, the computations are as follows:

| | COST | VAT AT 5% | GROSS VALUE |
|---|---|---|---|
| | ₦ | ₦ | ₦ |
| Goods consumed | 500,000 | 25,000 | 525,000 |

The summary of the foregoing is presented in the table below. Note that we are concerned with only the VAT on the manufactured goods and not other services. The "other goods and service" was incorporated to show that returns would be made and to determine the tax payable on making the returns.

| VAT SUMMARY | A Total Invoice price (Cum VAT) | B Output VAT (5/105 of A) | C Ex VAT Price (A-B) | D Cost | E Value Added (C-D) | F VAT (5% of E) |
|---|---|---|---|---|---|---|
| | N'000 | N'000 | N'000 | N'000 | N'000 | N'000 |
| Raw Materials Supplier | 105 | 5 | 100 | - | 100 | 5 |
| Manufacturer | 210 | 10 | 200 | 100 | 100 | 5 |
| Wholesaler | 367.5 | 17.5 | 350 | 200 | 150 | 7.5 |
| Retailer | 525 | 25 | 500 | 350 | 150 | 7.5 |
| **Total tax on value added** | | | | | | **25** |

**Notes on Column 'D'**

i.    The raw materials supplier has nil cost because it was assumed that he did not buy the materials but sourced for them (though this might not be what obtains in reality).

ii.    The ex-VAT price offered by the raw material supplier represents the cost of input to the manufacturer and that of the manufacturer represents the cost of input to the wholesaler and so on.

At each stage of the distribution channel, each actor remits the VAT payable by CBN cheques or bank drafts, payable to the "FG of Nigeria – Federal Board of Inland Revenue – VAT Account". From the example above for instance, the raw materials supplier would remit ₦4,250; the manufacturer, ₦2,500; the wholesaler, ₦3,750; and the retailer, ₦2,500. VAT on fee for services rendered (which is a single stage VAT) would be computed likewise and the excess of output VAT over

input. VAT paid to the FBIR or a refund claimed where input VAT is greater (However by virtue of the 1996 Federal Government budget, VAT payers can now pay directly to designated banks across the country)

From the above example (VAT summary), it is clear that it is the final consumer of a VATable product that bears the burden of the tax VAT. The total tax on Value Added was ₦25 (column F), which was the same with the final VAT borne/paid by the final consumer (stage iv and column B). The VAT collected by NCS (VAT on imports) and the VAT Directorate of the FIRS would be aggregated and distributed amongst the three tiers of government.

## 2.14   Administration of Value Added Tax in Nigeria

The success or failure of any fiscal policy depends to a large extent on how it is managed, so proper emphasis should be laid on the administration of Value Added Tax in Nigeria in this study. The Federal Board of Inland Revenue (FBIR) is the apex body of administering federally collected tax in Nigeria and it carries out the function of collecting Value Added Tax through their executive agency known as the Federal Inland Revenue Services (FIRS). The Federal Inland Revenue Service (FIRS) has six operational departments, one of them is the Value Added Tax directorate. The Federal Inland Revenue Service (FIRS) headquarter also doubles as the value added tax (VAT) directorate and is located in Abuja having Zonal

offices in the regional zones that it Lagos, Ibadan, Enugu, Kaduna and Jos. These various Zonal offices help in supervising and controlling the local VAT office (LVO) under its jurisdiction, for instance the LVO's in Akure, Benin, Oshogbo, Ibadan, Warri, Ilorin and Asaba are all responsible to the Western Zonal coordinator in Ibadan, the zonal coordinator in Ibadan from time to time then report the performance of the local VAT offices (LVO) to the VAT directorate in Abuja. Similar administrative arrangement like this can be found in all the other zones.

The operational arm of the Federal Board of Inland Revenue (FBIR) is administrator of all the Taxes collected by the Federal Government. These taxes include companies' income tax, personal income tax (Army Forces, Police, External Affairs officers, non-residents and Resident of the Federal Capital Territory (Abuja), Capital Gains tax (companies), Stamp Duties, Petroleum profit tax and Value Added Tax.

That Value Added Tax is one of the taxes administered by the Board to ensure full integration of VAT with the other taxes in terms of overall policy formulation.

The membership of the FBIR include the following:

An executive chairman who shall be a person within the service experienced in taxation to be appointed by the president or the head of state as the case may be.

All the Directorate/head of departments of the service (These include Director in charge of the directorate of Value Added Tax), Director for planning Research and Statistics in the Federal Ministry of Finance. A member of the Board of the National Revenue Mobilization Allocation and Fiscal Commission. A member from the Nigerian National Petroleum Corporation not lower in rank than an Executive Director. A Director from the National Planning Commission, a Director from the Nigerian Customs Service; The Registrar – General of the Corporate Affairs Commission. The Legal Adviser to the FBIR; and the Board Secretary (who is an ex-officio member of the Board).

Again, the membership of the Director in charge of the VAT Directorate on the Board is proof of the full integration of VAT with the other taxes in terms of policy formulation. As it has been stated earlier that FIRS is the operational arm of the FBIR. Presently, the FIRS has the following four hierarchical levels of administration:

The headquarters with the office of the chairman and six directorates, the zonal officers to supervise the Area Tax offices and Local VAT offices in each of the five (5) geographical zones into which the country has been divided. The area tax offices whose areas of coverage generally correlate with the territories of the states of the federation and the local VAT offices which are within the Area tax offices

and some designated industrial and commercial centres where there are no Area Tax offices.

## 2.15   Effectiveness of VAT Project and its Impact on National Development

Taxation, like the exercise of any governmental power, say; education, communication facilities, law and even the railway, is only a means to an end. Appraisal of the operation of the value added tax (VAT) in Nigeria is therefore, expected to unravel the extent to which it has assisted the state to pursue its objectives. Having at the back of one's mind the general assessment of developing countries' tax system as weak and less productive, appraising the VAT operation becomes a very necessary exercise.

According to Naiyeju (1996); in appraisal of the Nigerian value added tax, it is perhaps plausible to say there are, so far, no universally acceptable yardsticks for measuring tax effectiveness. The reasonable is that socio-economic situations vary from one economy to another. Even within a nation, especially in Nigeria with a landmass of 923,768.64 square kilometres, divergence of cultures, different climate and uneven literacy spread, a nature of tax might have varying efficiency and effectiveness level in different parts of the country. In assessing the nation-wide federal tax therefore the following points should be borne in mind.

1. The Nigeria tax system is a reflection of the federal political framework of the country.

2. The value added tax is an improvement on the states administered sales tax.

3. The value added tax was introduced in Nigeria at a time of political instability, rising inflation and general fiscal pessimism.

4. Many taxes were in operation at federal, state and local government level when VAT was introduced.

5. The introduction of VAT was to eliminate the multiplicity of taxes at various level of government.

Since a tax system cannot be insulated from its social context, the capacity of the Nigerian VAT to triumph over; or dissolve before the above five factors might be taken as a yardstick for hanging its effectiveness on the social and macro-economic level.

## 2.15.1 Macroeconomic Effects of VAT on Development in Nigeria

National development has to do with economic development. According to professor J.U. Umoh quoted by Ademola (1999), economic development refers to a process by which a high degree of self-reliant economic growth in a given society, sustained over a long time, is associated with substantial reductions in poverty, unemployment and inequality. It can also be defined as a process of

prolonged and sustained increase in the real national income of a country accompanied by positive changes in the economic, political, technological and social structure of the economy with the result that the real income per capita of the people increase over a long period of time, subject to the stipulation that the number of people below the poverty line does not increase and the distribution of income does not become more unequal and development does not become less sustainable environmentally. From the above definitions, it is obvious that there can never be economic development without economic growth. Economic growth is the expansion of the production capacity of the economy to generate increase flow of goods and services.

As an economic development tool, value added tax together with other forms of tax provides the financial base for providing and maintaining, among others, infrastructure such as roads, electricity, telecommunications and water that have direct impact on living conditions. Despite the fact that, fiscal measures are aimed at promoting rapid economic growth, they also generate some unintended adverse effects, making value added tax a double-edged sword. Therefore, in appraising effectiveness and impact of the tax on the economy, macro-economic effects of the tax are viewed in two perspectives as follows: (Odusola, 2006):

1. Positive effects of VAT on national development.

2. Adverse effects of VAT on national development.

## 2.15.2 Positive Effect of VAT on National Development

In this section, this study focuses our attention on how VAT has been contributing to economic development and national revenue in Nigeria (Naiyeju, 1996). The effects are discussed below:

1. **Accelerating economic growth:** the most plausible index of the capacity of the value added tax to accelerate economic growth is its effectiveness in mobilizing privately – held resources, which automatically boost public revenue enhances consumption pattern and general saving.

2. **Its Profitability:** VAT has not only been impressive but has also been acclaimed as a fiscal breakthrough and one of the best implemented economic policies in Nigerian history. As a result of this, we probably need to be cognizant of the paradox of the profitability on Nigeria. Certain National newspapers declared in news report of the fiscal triumph of VAT; an example of which was @The Federal Inland Revenue Service (FIRS) has made history by successfully administering the value Added Tax VAT. in 1994, despite the many odds against the tax. In the 1995, budget speech, (the head of state General Sani Abacha said "VAT, which was introduced in January 1994), has proved a remarkable success". The Federal Inland

Revenue Service, whose unperfected expertise in VAT administration has been widely commended, is to be strengthened. VAT was the only effective element in the 1994 Budget, contrary to the World Bank projection, that VAT could yield only N4.5 billion in 1994, the tax realized a total of N121 million in January, 1994 alone. The aggregate revenue went up to N2.1 billion in June, N3.78 billion in July, over N4.1 billion in August and hit N5.2 billion in September. By October 1994, VAT had exceeded its annual revenue objective by realizing N6.2 million, VAT revenue rose up to N159.5 billion and N178.1 billion in year 2004 and 2005 respectively.

3. **It promotes saving habit:** the marginal price increase that the 5% tax implies might have awoken many taxable persons to the need for discretion in their expenditure and for savings, an effect that should favourable impact on the loanable funds in the Nigerian financial system.

4. **Moderation of Volume of Currency in Circulation:** the stabilization impact of VAT can be gauge by its effectiveness in reducing excess liquidity from the financial system for the past few years; the Central Bank of Nigeria has periodically mopped up billions of Naira from the financial arteries of the economy. It can be argued that by reducing consumers' power by almost N30 billion in the first two years, VAT contributed to moderating the volume of currency in circulation and by implication, to reducing inflation.

The tax therefore, enhances the power of the Central Bank in regulating the economy in controlling market forces, and in reducing the frequency at which the government borrows from the financial system to finance public goods.

5. **Speedy disbursement of tax revenue to all the governments in the federation:** the VAT Decree 102 of 1993 unambiguously states that revenue from the tax shall be shared between the federal and state government. In pursuance of this objective, the tax administrators make it a duty to ensure that VAT revenue from all the states of the federation is regularly remitted to the VAT account at the Central Bank of Nigeria – just as the taxable persons are expected to make their monthly returns to FIRS VAT offices. The remittance and accounting policy gives the government a quick knowledge of, and access to, monthly VAT revenue. This is turn has contributed to realizing the objective of speedy disbursement of tax revenues to all the governments in the federation which have implication on economic development.

6. **Reduction in financial dependence on external loans:** No sooner had VAT revenue started spluttering into the coffers of the state governments than the federal government instructed them to expend the tax revenue on only capital projects. It must have been motivated by the expenditure profile

of state governments that had to rely on external borrowings to finance their capital projects. According to the statistics available of the Central Bank of Nigeria, such external financing constituted 63.5% of total states capital expenditure in 1993. By making it mandatory for states to invest is encouraging them to reduce their financial dependence on external loans. The same holds for local governments whose estimated receipts from statutory allocation in 1992 fell by 14.4% to 16.488 billion. That VAT provided about N5 billion to local government in first two years is a reflection of the degree to which the tax must have improved the financial standing of the third tier of government. The statutory allocation of VAT revenue to local government increased drastically to N108.1588 billion in 2005. This is also an indicator of reduction in financial dependence on external loans.

7. **Correcting balance of payment deficits:** VAT on imports reduces imports and consequently reduce the deficits in the nation's balance of payments current account (Naiyeju, 1996).

8. **Protecting Infant Industries:** Government levied VAT on imports to protect infant industries, also discouraged the importation of some goods and encourage the consumption of locally produced substitutes. The expansion

of such industries will mean more job opportunities for the unemployed and higher GNP for the economy.

9. **Harmonizing the tax system and reduction of inert taxes and tax rates:** VAT has achieved much in harmonizing the tax system and causing the reduction of inert taxes and tax rates with few years in operation specifically, as a result of the productiveness of the tax, government was compelled to ban many petty taxes which were administered in various parts of Nigeria by the mounting of road blocks by council officials. In January 1995, VAT caused a further reduction of the highest and lowest bands of the rate of personal income tax from 35% and 10% to 30% and 5% respectively. Again, the 1996budget which was laden with tax incentives continued to reflect the positive effects of VAT on the entire tax system, for, according to the government, the reduction in the rate of company's income tax from 35% to 30% with effect from January 1996 was made as a result of financial receipts from VAT. It will also help in eliminating of less productive taxes and nuisance collected at road blocks by the state and local council officials (i.e. in taxes like sales tax) (Naiyeju, 1996).

10. **Cost Effectiveness:** the implementation of VAT in Nigeria was marked by apprehensions that, going by broadness of the base, the cost of monitoring would be too high that costs might eat up the meaty part of the estimated

revenue leaving government with a low cost yield. FIRS itself, keen on keeping costs far below revenue took VAT to the fiscal market on the strength of only 36 local VAT offices nation-wide at the inception of the tax. The VAT department had been estimated to have optimal staff strength of 2500 (which was the target in 1995), but was run by only 850 hands in the first year of operation.

Instead of splitting the inadequate staff strength by pursuing some to collect VAT at the ports, or constituting a ports arm of the VAT directorate; the Nigeria customs service is relied upon in taxing imported goods and services. Again these base sealed down the possible high cost of administering VAT in Nigeria.

Rather than create a separate communicating system for VAT, FIRS expanded the computer facility initially installed for income tax computation to integrate the VAT accounting work. This in turn, has posted an optimal utilization of available resources in VAT collection, field and desk audits, internal and external communications and accounting.

It is internationally accepted that the capital for financing a tax project should neither be more than 10% of the yield nor less than 5% of estimated revenue for an efficient tax administration. Using this standard and considering the shoe string

financial of VAT relative to the returns, reputable scholars and economic like Professor Sam Aluko and others have hailed the Nigeria VAT as cost effective.

## 2.15.3 Adverse Effect of VAT on National Development in Nigeria

The government may be happy about the high and growing VAT revenue but there are increasing complaints from organized private sector about the effects of the VAT on their operating costs and the prices of their products. The complaints about adverse effects of Nigeria's VAT suggest that there is a problem with the way VATable organizations are treating their liabilities especially the VAT they pay on their inputs. Moreover, there may be a problem with the way government is managing the expenditure of the VAT revenues (Ajakaiye, 2000).

According to Ajakaiye (2000), it was confirmed that Nigerian companies treat their VAT expenditure as input costs and pass these on the consumers and the government injects the VAT revenue back into the system as consumption expenditure. This combination results in a serious negative impact on the economy as:

1. It complicates the problem of inflation.
2. Consumers are forced to reduce their consumption and this has adverse effects on their standard of living.

3. There is adverse effect on production (since consumers cut down their consumption) and consequently complicates the problem of unemployment.

4. VAT burden is seriously on low income group since they spend much of their income on consumption rather than savings.

Because this combination results in a serious negative impact on the economy, it is necessary to consider strategies for ensuring that all companies treat VAT properly and that government directs its expenditure toward sectors that are most likely to lessen the adverse effects of VAT on consumer welfare, production, employment and income.

## 2.16 Problems of VAT and its Prospects in Nigeria

In identifying and discussing the problems of VAT in Nigeria, it is essential to explain the chemistry of the Value Added Tax. Going by Professor Carl Shoup's essay quoted by Naiyeju (1996),'Melding Architecture and Engineering: A personal retrospective on Designing Tax System, the chemistry of the Value-added tax can be decomposed into three elements, namely: tax architecture, tax engineering and tax administration.

The first relates to the choice of the tax or VAT; the second to packaging the decisions; and the third to policy implementation. An evaluation of the Nigerian VAT project should, therefore, involve a critical analysis of the inter-relationship

among the three tax elements. It can be taken as a point of departure that matters of tax architecture and tax engineering are neither mutually exclusive nor totally distinct from that of tax administration. The experience of Nigeria in prosecuting the VAT project is that administration appears as the melting point. 'The moment of truth', for the rightness or otherwise of tax architecture and engineering as the following diagram indicates.

**Illustration I: VAT DEVELOPMENT STAGE**

```
                    ┌─────────────────┐
                    │  STUDY GROUPS   │
                    └─────────────────┘
                     ╱               ╲
                    ↓                 ↓
       ┌──────────────────┐      ┌──────────────────┐
       │ VAT ARCHITECTURE │  =   │  VAT COMMITTEES  │
       └──────────────────┘      └──────────────────┘
                │                         │
                ↓                         ↓
       ┌──────────────────┐      ┌──────────────────┐
       │ VAT ENGINEERING  │  =   │    VAT DECREE    │
       └──────────────────┘      └──────────────────┘
                 ╲                       ╱
                  ↓                     ↓
              ┌─────────────────────────────┐
              │     VAT ADMINISTRATION      │
              └─────────────────────────────┘
```
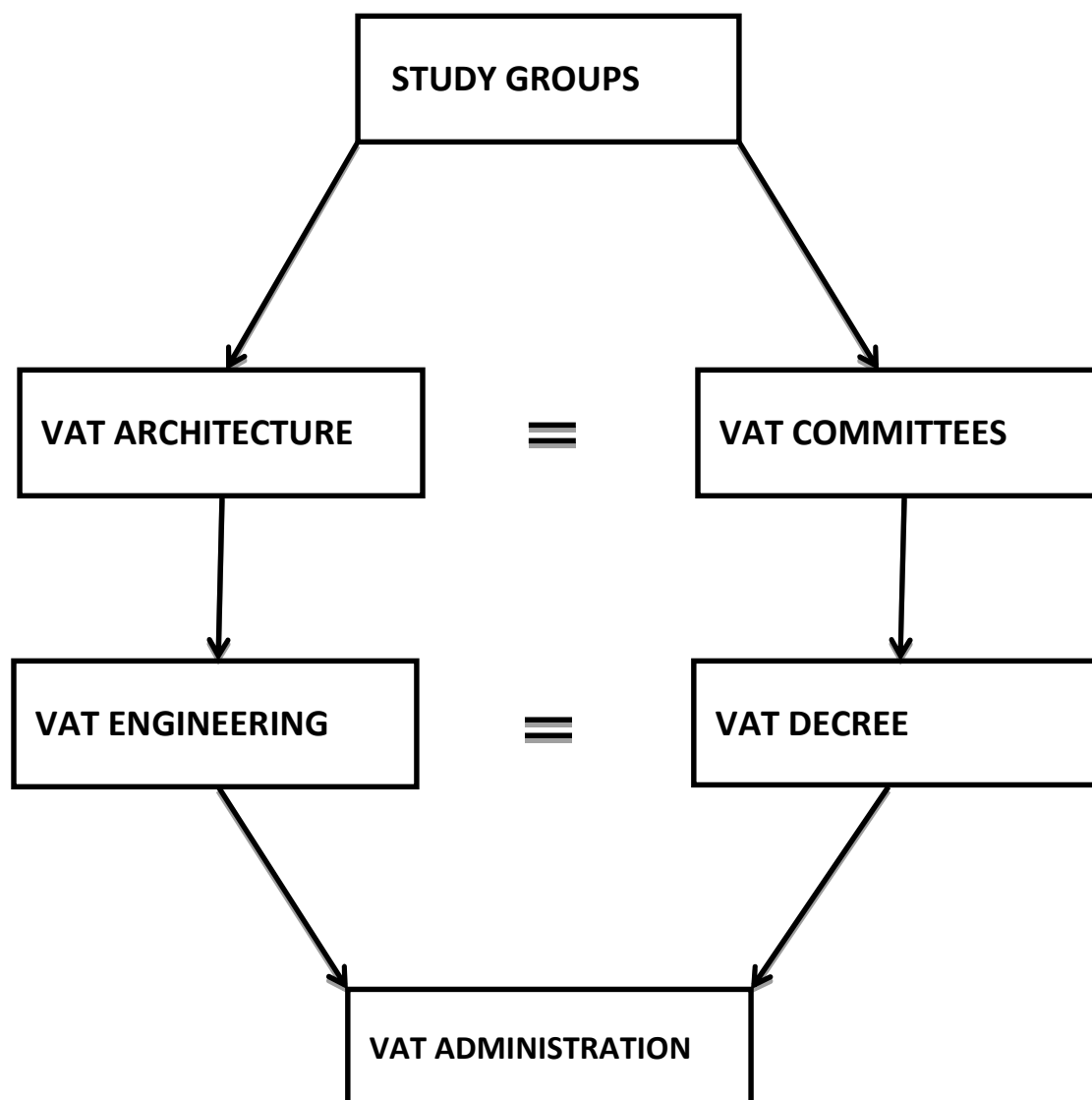
The Shoupran paradigm lacks step I, or its step I is equal to step II in the Nigeria VAT packaging process. Either way, VAT architecture (the committees' level) determines VAT engineering (VAT legislation) which in turn determines VAT administration. In the Nigerian VAT: Step I is the conception level; Step II the decision level; Step III the legislation level; and Step Iv the implementation level. The first three steps constitute the substantive level; while the fourth step (the real level) is expected to equate or reflect the third step. We have attempted to examine how VAT administration has, so far, fulfilled the substantive goals in this chapter. Here, we focused our attention on:

(i) the problems of VAT administration in Nigeria,

(ii) factors that limit the effectiveness of tax effort in the fiscal process; and

(iii) the potentials/prospects of VAT where the limiting factors have been removed or     reduced to the barest level.

## 2.16.1 Problems of VAT Administration

Although, It is agreeable that, there is need for VAT to replace the formal sales tax because of the progressive nature, government's ability to adequately and effectively retrieve the proceeds from companies and other agent of collection remains a problem. It does not appear as if there is adequate machinery for effectively monitoring the remittance of tax withheld to the relevance tax authority.

The Federal Inland Revenue Service (FIRS) lacks logistics support for effective administration of VAT (Olaoye, 2009)

The further problem of VAT administration is the present composition and functions of the tax authorities, which weaken effective tax administration in the country. Nigeria's perform only technical functions and not the needed management functions. The non-performance of management functions given the increasing complexity of the tax administration largely explains the ineffectiveness of tax administration in Nigeria. Basically, the performance of only technical function leads to refusal to complete tax return form, false declaration, fraud, inflation and deductible expenses, smuggling, default, illegal bunkering, etc.

The dishonest practices by some tax officials also, pose a serious threat to effective tax administration in Nigeria especially, when such practices are capable of having demoralizing effect on the honest tax payers. In the same view, consumers still want to know how much of this tax these companies are collecting from VAT, most especially when such tax is not even duly reflected in their invoice. It is believed that VAT is just another way of inflicting economic hardship on consumers to the advantage of manufacturers and companies. Tax experts are of the opinion that seminars and workshops so far organised on the issue are narrow in scope and design. Another problem is that Nigerians see VAT as an excuse to

raise prices of goods arbitrarily-inadequate and lack of information also makes VAT administration difficult.

## 2.16.2 Factors that Limit the Effectiveness of Tax Effort in the Fiscal Process

The effectiveness or otherwise of any tax is a reflection of the quality of the fiscal system, which is a reflection of the domestic economy which, in turn, is a mirror of the level of development of the socio-policy in most situations, especially in the case of the Nigerian VAT, a fiscal policy rarely creates its own problems, rather, it merely mirrors or accentuates the weaknesses existing in the society. A number of such fiscal problems that have been encountered in the implementation of VAT in the country include the following:

1. **Public Resistance**

   Two underlying factors made public resistance a major hurdle on the path of VAT administration in Nigeria. The first is the prevalent lack of confidence in the capacity of government to judiciously allocate fiscal resources. The second is a lingering economic stagnation marked by rising inflation, growing unemployment and under-utilization of industrial capacity. Public resistance to VAT could be measured by the level of compliance, the barrage of exemption applications and outright attempts at running down the tax.

## 2. Small Enterprises

As explained by Naiyeju (1996) although the Nigerian VAT law does not exempt goods and services of small businesses, tax effort is initially concentrated at least in the first three years on the organized sectors. The obvious reason is that it is difficult and may be too costly to pursue the taxation of the informal sector where record keeping is so low and illiteracy prevails among the operators. This is not only a problem, especially since many so-called informal enterprises even deal in multimillion-naira goods and services, but also questions and undermines the practicality of tax engineering. The problem lingers.

## 3. Tax Refunds

Although the VAT Decree provides for a refund where the input tax exceeds the output tax, there was the initial misconception by the tax payers as to what constitutes a refund while tax payers and their consultants anticipated immediate cash refund, FIRS was reluctant to grant automatic cash refund in order to avoid a reckless abuse of the system. The tax authorities later clarified the refund process in their information circular on the subject matter early in 1995. The clarification shows that FIRS prefers an automatic

credit refund pending the time a tax audit exercise would be carried out to verify the refund claim before any cash refund could be given if the need arises. There is a VAT refund account maintained at the Central Bank of Nigeria where definite provision is made every month to take care of verified refund claims.

4. **Post-State Exemptions**

The effectiveness of VAT effort suffered at the hands of exemption-seekers in both the public and the private sectors. In the case of certain government agencies that had placed orders for foreign goods prior to the commencement of VAT, attempts were made to ensure such imports went untaxed. At the inception of the tax, some organized private-sector exemption-seekers practically placed little or no stress on the vetting of their goods and services while lobbying for exemption lasted. Exemption whether official or unofficial, constitutes a serious threat to the tax base (especially at the port) in developing countries.

5. **Accounting Culture**

One factor that influences negatively or positively, public compliance with VAT regulations in Nigeria is the low level of business accounting and record keeping. The problem is prevalent in the informal sector. Yet it is by no means absent in the assumedly fairly 'organised' sector. The practice

flies in the face of the VAT engineering decision that a taxable person "shall keep such records and books of all transactions, operations, import and other activities relating to taxable goods and services as are sufficient to determine the correct amount of tax due". VAT intelligence information confirms to FIRS that evasion is intensified by a poverty of attention to invoicing in business transaction.

6. **VAT and Multiple Taxes**

The existence of many less-productive taxes in the Nigerian tax system has continually been a major threat to the effectiveness of the VAT regime and a source of worries to both taxpayers and the Federal Government.

## 2.16.3    Prospects of VAT in Nigeria

A look into the future relevance of VAT in Nigeria would be from the perspective of its objectives and performance, and the activities of the Government agency saddled with the responsibility of designing an efficient VAT system for the country.

The adoption of the consumption variant of VAT is designed to redress certain anomalies (such as multiplier effect on the sales tax, amongst others) in the Nigeria tax system. Firstly, by tying VAT to consumption coupled with its self-policy mechanism, tax evasion which is clearly evident with income tax is curtailed. This

guarantees higher revenue from VAT. Secondly, the tax aims at increasing revenue for financing a gradual lowering of P.I tax rates (it is worthy of mention here that already, the federal government has been issuing a number of tax cuts which is likely to erase the public's scepticism about the intents of the Government and thus boost VAT's image. Thirdly, the tax aims at equity, fairness and progressively in the distribution or sharing of tax burden on the citizens (which might encourage voluntary compliance and therefore, the success of VAT in Nigeria).

With the commencement of audit of VAT records of business organizations, more and more businesses are joining the list of registered VAT collectors. Even when those that are resistible but are yet to register are caught, they will be made to pay the VAT they ought to have collected and so there is no evasion, no hiding place. This presents a bright future for VAT in Nigeria.

Furthermore, in order to ensure the successful operation of VAT in the country, a series of press releases have been issued by the FIRS to clarify some contentious issues raised by members of the public. In addition, seminars have been and are being organized to enlighten the public on VAT.

The revenue so far generated from VAT is also an indication of a good prospect for the tax concept. The FIRS, in the first year of VAT administration exceeded its target of N6.0 million when it hit the N8.2 billion mark. In the second year i.e

1995, VAT proceeds amounted to N21.0 billion as against N12 billion projected for the year. Consequently, in order to ensure more revenue generation from VAT, the initial 35 VAT offices in the country (i.e. as at 1994) was increased to 50 in 1995 and according to the 1996 budget forecast, 25 additional VAT offices are to be established (The 1996 budget forecast also includes the improvement of the administrative machinery of VAT collection through the elimination of extra statutory exemptions and by aggressive registration and tax collection drives).

In the year 2004 and 2005, revenue generated through VAT was greater than that of companies' income tax (CIT) by 10.1% and approximately 5% respectively. In addition, the VAT base has been broadened by the inclusion of Government parastatal's, ministries and agencies in the list of taxable person (electricity is VATable) and with such developments, VAT in-takes are expected to rise higher in the future.

Many progressive countries of the world have embraced VAT as a veritable source of revenue for its relative advantages over all existing taxes as well as its success in the countries that have adopted it earlier. However, while most of these countries charge multiple and in some cases, high rates, Nigeria charges a single rate of 5% which is relatively one of the lowest in the world (except for zero rated (export). This rate ensures that people are made to pay VAT on what they can afford.

## 2.17 National Income Measurement

The central government in any country must be able to formulate and implement pragmatic economic policies essential to enhance the country's production performance if it desires to improve the average standard of living of the people. This is possible only if the government can measure, in monetary term, the total output of goods and services achieved by the country during any given period of time.

According to Ademola (1999), the four most important measures of national output are Gross Domestic Product (GDP), Gross National Income (NI), Net National Product (NNP) and National Income (NI). However, in order to assess the impact of VAT on national development, gross domestic product (GDP) is used as a measure of national income.

Gross Domestic Product (GDP) is the total money value of all final goods and services produced within the geographical boundaries of the country during a specified period of time, usually a year.

This definition reveals that those goods and services produced in the country but which are sold to the other countries (exports) are included in the GDP, while those ones purchased from other countries (imports) are excluded. The reason for using GDP is that it is very useful when assessing the impact of public policies on the

level of domestic economic activities, especially changes in the level of domestic employment.

## 2.18   VAT Proceeds and other Major Federally Collected Revenue

In 1994, a total of N7260.8 million was generated from VAT. This figure was about 36.5% higher than the projections made for the year. Ever since then, VAT proceed have been on the increase and is now the third highest earner of revenue for the government after Petroleum Profit Tax (PPT) and Company Income Tax (CIT). Details of proceeds are as follows:

**VAT Proceed from 1994 to 2012**

| YEAR | AMOUNT (₦, MILLION) |
|------|---------------------|
| 1994 | 72,60.8 |
| 1995 | 20,761 |
| 1996 | 31,000 |
| 1997 | 34,000 |
| 1998 | 36,900 |
| 1999 | 47,100 |
| 2000 | 58,500 |
| 2001 | 91,800 |
| 2002 | 108,600 |
| 2003 | 136,400 |
| 2004 | 159,500 |
| 2005 | 178,100 |

| | |
|---|---|
| 2006 | 232,700 |
| 2007 | 312,600 |
| 2008 | 401,700 |
| 2009 | 481,400 |
| 2010 | 564,890 |
| 2011 | 659,160 |
| 2012 | 710,560 |

**Source**: 2005 CBN Statistical Bulletin & FIRS Collection Profile 2002 to 2012

The federally collected revenue (FCR) which is indispensible to economic growth and development of Nigeria is made up of oil revenue and non oil revenue. The non oil federally collected revenue consists of:

| | | |
|---|---|---|
| 1 | Value Added Tax | VAT |
| 2 | Education Tax | E/T |
| 3 | Consolidated Account ( established in 1999) | Consolidated |
| 4 | Nigerian Information Technology Development Education Fund (started in 2008) | NITDEF |
| 5 | Companies  Income Tax | CIT |
| 6 | Capital Gains Tax | CGT |
| 7 | Withholding Tax | WHT |
| 8 | Custom and Excise Duties | CED |
| 9 | Stamp Duty | STD |

However, the Petroleum Profit Tax was classified under oil revenue.

## 2.19 Sectoral Analysis of VAT Revenue Sources

There are different sectors contributing to VAT revenue in Nigeria. Sample of sectoral analysis of VAT collection shows the details:

**2012 SECTORAL ANALYSIS OF VAT COLLECTION**

| S/N | LINE OF BUSINESS | ₦' BILLION |
|---|---|---|
| A | **Financial Institutions** | **25.7109** |
| B | **Agric and Plantation** | **1.9084** |
| C | **Manufacturing Sector :** | |
| | a. Conglomerate | 10.0737 |
| | b. Textile and Germent Ind. | 0.8729 |
| | c. Automobile Assembly | 1.3031 |
| | d. Breweries, Bottling and Beverages | 21.5697 |
| | e. Pharmaceuticals, Soap & Toiletaries | 1.9650 |
| | f. Chemicals, Paint & Allied Products | 0.6422 |
| | g. Other Manufacturing | 53.6064 |
| | h. Pioneering | 3.2700 |
| | **Sub-Total** | **93.3030** |
| D | **Building & Construction** | **20.4846** |
| E | **Commercial and Trading** | **20.4376** |
| F | **Service Sector:** | |
| | a. Property and Investment | 2.1445 |
| | b. Stevedoring, Clearing and Forwarding | 0.7801 |
| | c. Profesional Services | 82.4630 |
| | d. Publishing, Printing and Packaging | 3.7259 |
| | e. Hotel and Catering | 5.8145 |
| | f. Transport and Haulage | 4.1243 |
| | **Sub-Total** | **99.0523** |
| G | **Oil and Minning:** | |
| | a. Oil Production | 104.8038 |
| | b. Oil Marketing | 4.3441 |
| | c. Off shore Operation | 2.1544 |
| | d. Petro-Chemical and Refineries | 6.9290 |

| | | |
|---|---|---:|
| | e. Gas | 27.2937 |
| | f. Mining | 12.2823 |
| | **Sub-Total** | **157.8073** |
| **H** | **Government Sector:** | |
| | Federal Ministries and Parastatals | 58.0078 |
| | State ministries and Parastatals | 54.0468 |
| | Local Government | 0.5267 |
| | NGO | 0.0490 |
| | Airline | 0.0030 |
| | **Sub-Total** | **112.6333** |
| | **VAT on Non-Import (Sum A-H)** | **531.3374** |
| | **VAT on Import (Nigerian Custom Service CB)** | **153.5702** |
| | **SECTORAL TOTAL** | **684.9076** |
| | **Cummulative VAT Collection Jan.-Dec.** | **710.5551** |
| | **Variance** | **25.6475** |
| | **% Variance** | **3.6095** |

Source: FIRS, Planning Report and Statistics Department, Abuja

## 2.20   VAT and Inflation in Nigeria

### 2.20.1 VAT and Inflation Rate in the Pre-millennium

It was generally feared that VAT   would lead to increase in inflation when it was introduced in 1994, the below table presents what happened to inflation rate before and after VAT implementation in the pre-millennium.

**Inflation Rates and the Increment in Nigeria between 1990 and 1999**

| Year | Inflation Rate (%) | Increment | % Increase |
|:---:|:---:|:---:|:---:|
| 1990 | 7.5 | | |
| 1991 | 13 | 5.50 | 73.33 |
| 1992 | 44.5 | 31.50 | 242.31 |
| 1993 | 57.2 | 12.70 | 28.54 |

| | | | |
|---|---|---|---|
| 1994 | 57 | | |
| 1995 | 72.8 | 15.80 | 27.72 |
| 1996 | 29.3 | | 0.00 |
| 1997 | 8.5 | | |
| 1998 | 10 | 1.50 | 17.65 |
| 1999 | 6.6 | | |

**Source**: 2005 CBN Statistical Bulletin

From the table above, it could clearly be seen that the percentage increase in the inflation rate was even lower in 1994 when VAT was introduced than any of the years since 1990 and none of the percentage increase after this period (.e. 1994) were higher than the incremental percentage before the period. This is a proof that while VAT may cause a once-and-for-all general increase in the price level, it does not normally lead to inflation as is commonly feared.

Besides, in nearly all countries that have introduced VAT, it has been made to replace an existing tax. This fact is in itself sufficient to make VAT non-inflationary. For example, VAT of 5% was introduced in Nigeria at a time when the rate of Companies Income Tax had come down from 45% to 35% and the marginal rate of personal income tax was reduced from 65% to 30%! It was also a replacement to sales tax, which also had dual rates of 5% and 10%. This is not to say that VAT introduction will not cause changes in relative prices as consumers adjust themselves in the process of making choices. Where the rate of tax is high

and the base of the tax is broad, there can be a general price increase on a once and for all basis.

However, an increase in VAT rate without proper consideration of the various macro- economic variables could be a disaster. This was quite exemplified in 2007, when VAT rate was increased to 10%. The effects were captured below.

## 2.20.2  Effect of an Increase in VAT Rate in year 2007

The office of the Honourable Minister of Finance issued a public notice in the dailies notifying the public on the increase in VAT Rate from 5% to 10% with effect from May 23, 2007, citing section 34(a) of the Value Added Tax (VAT) 1993 (as amended), which vested on the Honourable Minister of Finance, the power to amend rate of tax chargeable under the Act. Reasons adduced for the increase were as follows:

i.    The VAT rate of 5% is the lowest in the African sub region and has remained without change since commencement of VAT in 1993, thereby constituting a source of distortion to trade and discouraging completion within the region.

ii.   Nigeria being a strong member of ECOWAS is obliged to review its current VAT rate in line with the policy directives of the commission in

harmonization of VAT and Excise Duties within the ECOWAS between now and 2009.

iii. The ECOWAS Commission for this reason suggested a transition period of two (2) years, terminating in 2009, within which member states presently applying low VAT regime should close the gap to a point within the range of 10 – 20%.

iv. With the recently promulgated VAT amendments, certain key features or systems are now being introduced into the country VAT system in order to make it attractive for business. The input output credit adjustment mechanism will eliminate inflationary effects; the public notice concluded (Minister of Finance, 2007).

In order to meet the Economic Community of West African States (ECOWAS) common economics endowment policy, the Nigeria Federal Government increased VAT from 5% to 10% in 2007. This had negative effect on Nigerian economy.

African Economic Research Consortium (AERC), in a work carried on VAT system in Nigeria conducted some years ago, stated that Nigerian companies treat their VAT expenses as input costs and pass these to the consumer's while the government injects most of the VAT revenue back into the system as consumption expenditures, causing huge disruptions to the economy. In a country where basic physical infrastructure – for transport, communications, power and information

technology – to strengthen competitiveness and expand predictive capacity are lacking, the increase in VAT was not only ill timed, but counterproductive in the already highly distorted Nigerian economy. Nigeria's infrastructure is of poor quality by any standard and constraint business even if it is better than average for Africa. In recent World Bank survey, manufacturing companies in the country ranked infrastructure as their most severe business constraints. Apart from the negative implications of VAT increase as highlighted above, the following issues are likely to be the problems associated with the increase;

a. **Total collapse of the Real Sector:** Before now, there has been a sharp drop in capacity utilization in our real sector from about 40% in 2005 to more than 50% in 2006 of the manufacturing industries and further increase in VAT rate will further disrupt the manufacturing sector and lead to astronomical increase in prices of produced goods. The sector; which is already grappling with the problem of multiple taxation; poor road network and epileptic and non-functional power supply. The increase will not only lead to higher cost of production but also increase the volume of involved goods with its attendant result in reduced capacity utilization, consequently, it will increase the rate of unemployment and exacerbate the poverty level in the country. Local and foreign investors currently operating in the economy

would find the environment much more economically volatile than ever and be discouraged.

b. **Rise in Inflation:** As a matter of fact, the increase in VAT rates will automatically increase the inflation rate. VAT being a consumption tax will have further excruciating affects.

The real income of the final consumer (especially fixed income earners), Manufacturer had already jolted these prices of goods and services, even where such goods and services are not expressly subject to VAT. For instance, composite goods producers and services provider may still be indirectly exposed to adverse condition that could lead them under necessity to increase price because the spate of uncontrolled hike in price already being witnessed. Nigerians, who are already living under the $1 (Dollar) with the attendant low purchasing power of the already improve Nigeria's income earners, will only but compound the poverty situation in the country. Already analysis are projecting possible rise of inflation to 18 % arising from the ratchet effect of the increase of VAT rate.

c. **Unemployment:** One of the attendant implications of the VAT rate increase for the economy is the high rate of unemployment. Already it is estimated that 8 million graduates of tertiary institutions operating claim social vices like armed robbery, which are already on the increase are likely to become

more pronounced in the society and many other social vices will be embraced by the Nigerian graduates. The fact of the matter is no longer whether Nigerian graduates are responsible for these vices but the simple truth is that, they are one of the social groups always at the receiving end of the whole bad economic policies.

d. **Strike:** The recent hike in the VAT rate and fuel prices resulted to total collapse of the economy for over 4 days; the entire Nigerian economy witnessed a terrific slump. Economy watchers estimated the cost at over N160 billion. Such trend is not good for a growing economy like ours.

To provide further empirical evidence of the effect of VAT when it was increased from 5% to 10% in 2007 some sector of the economy are examined as well as the view of some industrial analysts.

Some industrial analysts envisaged that if government should go on with the policy it would have following effects on the economy (Iheanyi, 2007):

i.      It would lead to a drop in over-all consumption level.

ii.     Increase in inflation.

iii.    Fall in revenue of investors both local and foreign.

iv.    The increase will discourage investors both local and foreign.

v.      The increase will discourage investors coming into Nigeria when they evaluate the effect it will have on their revenue.

To manufacturers, the increase was like a stab at the back. Though the policy makers and stakeholders in the revenue sectors said that the 10% VAT rate would benefit exporters (because exported goods would now enjoy zero VAT charges) but industry analysts said that 10% VAT rate would discourage both local and foreign investors in Nigeria. The multiplier effect of this discouragement would have negative effect on private sector development and the growth of the nation's economy.

Increase in VAT if not reverted, would have negative multiplier effect on all consumer goods and consumers will have to pay more for every VATable goods they consume. In the telecoms sector, consumers felt the impact of the increase in VAT through the increased airtime rate by five percent in line with ten percent increase in VAT. For instance, MTN informed its over thirteen million customers of the price adjustment which took effect from June 1, 2007. The message reads: "please note that MTN has implemented a rate increase in line with Federal Government ten percent VAT directive". This means for instance that all MTN services would attract 10% VAT charge as against the five percent increase on all MTN calls. The development is what analysts describe as additional five percent consumption burden Nigerians using MTN have to bear to make our country

respond to ECOWAS policy directive. Other telephone operators are not left out. According to Celtel: "Due to the recent changes in VAT, all our call tariffs (except SMS and data) have been adjusted accordingly".

To the financial institutions sector, banks started notifying their customers of the increase to 10 percent. It was reported that two of the 25 banks have sent notice to all the customers, the increase became effective Wednesday May 23, 2007, signalling the beginning of the implementation of the new VAT regime. The report also noted that the Central bank of Nigeria (CBN) had sent circulars to all the bankers intimating them of the increment thereby making banks to notify their customers. Some forms of VAT charged by banks include COT (Commission on Transfer) on current account and general banker's tariff.

To Nigeria Textile Manufacturing Association (NTMA), the VAT increase was said to be "the last nail on the coffin of the sector" which was already in a critical condition before the introduction of the VAT new policy (Iheanyi, 2007).

To Chartered Institute of Taxation of Nigeria (CITN), a tax regulatory body; its view was that the increase might not be in the nation's best interest. According to the Institute, "the government had failed to implement steps that would ameliorate the effect of the increment as proposed by the study group to the tax reform bills". Some of the steps the institute stated that need to be taken before the increase are

reduction in the rates of direct taxes such as Company Income Tax (CIT) and Personal Income Tax (PIT), and the Incorporation of Education Tax into the Company Income Tax. These serious adverse effects made government to abolish the policy the same years.

## 2.21 Developments in the Nigerian Economy During 2011

Tracing the impact of VAT on national development, it is pertinent that we examine the developments in the Nigerian economy during year, 2011. The Nigerian economy performed relatively well in 2011. Output, represented by the growth rate of the real GDP, expanded by 7.36% in 2011 as against 7.98% in 2010. Growth was driven largely by the non-oil sector (of which VAT. Played important role), which accelerated by 8.85% in 2011 as against 8.51% in 2010. This accounted for over 101.22% of total GDP growth in 2011. The strong growth performance was underpinned by the resilience of the Nigerian economy supported by a domestic market size of over 164 million Nigerians, clement weather, sustenance of prudent macro-economic policies, and escalation of Federal Government expenditure by 6.23% from ₦4,047.06 billion in 2010 to ₦4,299.16 billion in 2011. Improved performance of capital budget implementation, which was estimated at about 80% in 2011 as against 50% in 2010, also helped to mitigate the pace of slowdown on the economy.

The 2011 general elections, with the subsequent inauguration of a new Administration and amendment of the Budget Bill, contributed to the less than full implementation of the capital budget. The declining growth rate of the oil sector from 5.96% in 2010 to -0.57% in 2011 dampened the pace of the overall growth of the economy. This was attributed to the simultaneous shut-in of four oil production facilities in the first and second quarters of the year for turn-around maintenance of installations, as well as incidents of vandalism of pipelines in oil producing communities in the Niger Delta region.

The sustenance of the growth momentum and increasing Government expenditure did not translate into reduction in the rate of unemployment, which climbed to 23.9% in 2011 from 21.1% in 2010. Persistent unemployment in the country was due to a hoard of problems including the near industrial paralysis arising from the poor business environment including dilapidated physical infrastructure. However, the average CPI trended downwards to 10.8% in 2011 from 13.7% in 2010, reflecting a combination of tight monetary policy, steady supply of fuel and availability of food items in the market.

In the money market, prime and maximum lending rates declined respectively from 17.59% and 22.51% in 2010 to 16.02% and 22.38% in 2011, although still positive. The capital market experienced improved performance driven by enhanced fortunes of stocks in the banking, food and beverages and oil and gas

sectors. Government revenue earnings did not keep pace with growth in spending; despite enhanced revenue receipts during the year. Although oil revenue surged in the face of relatively high oil prices and improved output, fiscal deficit stood at ₦1,158.52 billion, or 3.11% of GDP. The external debt stock was US$5.6 billion as at end December 2011 from US$4.5 billion in the corresponding period of 2010 and US$3.9 billion in 2009. The external debt stock of the 36 States of the Federation (multilateral) stood at US$2.16 billion while that of the Federal Government stood at US$3.5 billion.

In the foreign exchange market, the Naira exchange rate depreciated significantly against major world currencies including the US Dollar at 2.4%, Pounds at 5.97%, Euro at 7.97% and CFA Francs at 7.55% in 2011, reflecting speculative activities in the foreign exchange markets and depletion of foreign reserves. The international reserves could only support about 6 months of merchandise imports as against 7.6 months in 2010.

The performance of the economy in 2011 is further analysed in detail with respect to development in overall output performance.

## 2.21.1 2011 Overall Output Performance

## 1. GDP at Current Basic Prices:

The GDP at current basic prices stood at ₦37,303.41 billion, equivalent to US$242.40 billion in 2011, compared to ₦33,984.75 billion, or US$226.14 billion in 2010 (Table 1 ).This represents an addition of ₦3,318.66 billion, or an equivalent of US$16.26 billion to the nominal GDP. This compares favourably with the targets under the Transformation Agenda by ₦2,981.77 billion (Table 1).

**Table 1:  The Gross Domestic Product (GDP)**

|  | 2010 | 2011 |
|---|---|---|
| Real GDP (₦ billion) | 776.33 | 833.44 |
| Real GDP (US $ billion) | 5.17 | 5.42 |
| Real GDP Growth Rate (% ) | 7.98 | 7.36 |
| Nominal GDP (₦ billion) | 33,984.75 | 37,303.41 |
| Nominal GDP (US$ billion) | 226.14 | 242.4 |
| Population, full-year (million) | 159.29 | 164.39 |
| Population Growth Rate (%) | 3.2 | 3.2 |
| GDP Per Capita, Nominal (Naira values) | 213,351.43 | 226,920.19 |
| GDP Per Capita, Nominal (US$) | 1,419.69 | 1,474.56 |
| Real Per Capita GDP Growth Rate (%) | 4.78 | 4.16 |
| Conversion Rate (₦/US$1) | 150.28 | 153.89 |

**Source**: NPC, NBS and CBN

A breakdown of this performance into oil and non-oil sectors reveals that non-oil nominal GDP rose from ₦19,478.99 billion in 2010 to ₦22,027.72 billion in 2011. Similarly, nominal oil GDP increased to ₦15,275.68 billion from ₦14,505.76 billion in 2010, indicating improvements by over ₦2.548.73 billion and ₦769.92

billion respectively during the year. The performance of the oil sector exceeded the target under the Transformation Agenda by ₦3,223.22 billion while that of non-oil sector fell below the projected nominal GDP by ₦241.46 billion during the period under review. Relative to the size of some comparator economies in 2011, Nigeria will require not less than US$650 billion to achieve the NV20:2020, as many of the top 20 economies by GDP are more adversely affected by the prolonged global economic crisis.

**Table 2: Gross Domestic Product at Current Basic Prices in 2011: Actual Versus Target**

|  | **Actual** | **TA Target** | **Deviation from Target** |
|---|---|---|---|
| Overall GDP (₦ billion) | 37,303.41 | 34,321.64 | 2,981.77 |
| Oil GDP (₦ billion) | 15,275.68 | 12,052.46 | 3,223.22 |
| Non-Oil GDP (₦ billion) | 22,027.72 | 22,269.18 | -241.46 |
| Overall GDP (US$ billion) | 242.4 | 222.29 | 20.11 |
| Oil GDP (US$ billion) | 99.26 | 78.06 | 21.2 |
| Non-Oil GDP (US$ billion) | 143.14 | 144.23 | -1.09 |
| Conversion Rate (₦ /US$1) | 153.89 | 154.4 | -0.51 |

**Sources:** NPC and NBS

1. **TA = Transformation Agenda**

Further disaggregation of the nominal GDP reveals that agriculture, industry and services expanded by ₦1,279.46 billion, ₦900.07 billion and ₦1,139.12 billion to ₦11,590.12 billion, ₦16,559.59 billion and ₦9,153.70 billion respectively during the year. Evidently, agriculture and crude petroleum production activities still dominate GDP. The two sectors accounted for 72.04 % of the total nominal GDP in 2011.

## 2. Per Capita GDP

At current population growth rate, nominal per capita GDP rose to ₦226,920.19 (US$1,474.56) in 2011 from ₦213,351.43 (US$1,419.69) in 2010.

**Table 3: Per Capita GDP and Consumption**

|  | 2010 | 2011 |
|---|---|---|
| Population Growth Rate (%) | 3.2 | 3.2 |
| Per Capita GDP at Current Naira Prices (₦) | 213,351.43 | 226,920.19 |
| Per Capita GDP at Current Dollar Prices (US$) | 1,419.69 | 1,474.56 |
| Population, full-year (million) | 159.29 | 164.39 |

**Source:** NPC and NBS

This is higher than the current minimum wage of ₦18,000 per month and ₦216,000 per annum by ₦910.02 and ₦10,920.19 respectively, and translates to a real GDP per capita growth rate of 4.16%, indicating a higher standard of living in 2011 than in 2010. It also implies that Nigeria kept her place as a middle low

income country, which she attained in 2006 in line with the World Bank's analytical incomes categorization.

### 3. GDP at 1990 Constant Prices

Real GDP registered ₦833.44 billion, or US$5.42 billion, in 2011, up from ₦776.33 billion, or $5.17 billion, in 2010 (Table 4.4). Real oil and non-oil GDP stood at ₦123.27 billion and ₦653.06 billion in 2010 respectively as against ₦122.57 billion and ₦710.87 billion in 2011. These performances were below targets set under NV 20:2020.

### Table 4: Gross Domestic Product

|  | 2010 | 2011 |
|---|---|---|
| Real GDP (Naira Billions) | 776.33 | 833.44 |
| Real GDP (US $ Billion) | 5.17 | 5.42 |
| Real GDP Growth Rate (% ) | 7.98 | 7.36 |
| Nominal GDP (Naira Billions) | 33,984.75 | 37,303.41 |
| Nominal GDP (US$ Billions) | 226.14 | 242.4 |
| Population, full-year (Million) | 159.29 | 164.39 |
| Population Growth Rate (%) | 3.2 | 3.2 |

| | | |
|---|---|---|
| GDP Per Capita, Nominal (Naira values) | 213,351.43 | 226,920.19 |
| GDP Per Capita, Nominal (US$) | 1,419.69 | 1,474.56 |
| Real Per Capita GDP Growth Rate (%) | 4.78 | 4.16 |
| Conversion Rate (₦/US$1) | 150.28 | 153.89 |

**Source**: NBS & NPC

A breakdown of real GDP into agriculture, industry and services also showed improvement in their performances in 2011 by ₦18.11 billion, ₦4.78 billion and ₦34.21 billion respectively to ₦335.39 billion, ₦202.93 billion and ₦295.11 billion.

## 4. Growth Rate of Real GDP

The economy continued to grow, albeit at a slower rate of 7.36% in 2011 amid growing uncertainties in the external environment. Growth of GDP at 1990 constant basic prices was 7.98% in 2010 (Table 4). This also represents 1.14 percentage points short of the growth target of 8.5% set for 2011 under the Transformation Agenda. The growth moderation was largely attributed to decline in crude petroleum and natural gas production.

## 5. Summary of 2011 Nigerian Economic Development

The performance of the Nigerian economy during 2011 was mixed. Overall growth rate of GDP was 7.36% as against 7.98% recorded in 2010 in the face of global economic uncertainty, high unemployment and increasing level of poverty. Total government revenue increased from ₦6,362.56 billion in 2010 to ₦9,987.63 billion in 2011. Average inflation rate declined from 13.7% in 2010 to 10.8% in 2011. The current account surplus increased from US$7.43 billion in 2010 to US$17.85 billion in 2011. The reserves position increased slightly from US$32,339.25 billion in 2010 to US$32,639.78 billion in 2011.

## 2.22 Achievement of the Federal Government in Diversifying Revenue away from oil as at 2012

As earlier pointed out, one of the major reasons for VAT introduction was to shift revenue away from oil. This is because revenue from oil is volatile. It is therefore pertinent that we examine the extent to which the federal government has achieved this goal.

The total tax revenue for the year, 2012 was N5.0trillion (US$31.8billion) which was, no doubt, a cheery one for watchers of global economic trends. This made experts to laud the performance of FIRS.

According to Emmanuel Obeta, Director, Communications and Liaison Department of FIRS, the service closed the 2012 financial year with a total collection of N5.007trillion; N1.806 trillion (36.07 per cent) of which came from non-oil taxes. Oil taxes contributed N3.201 trillion (63.93 per cent) and were N3.070 trillion in 2011.

These sums are significantly over the budget of N3.635trillion for all its taxes. Compared with 2011, the all-taxes figure grew by N379.4 billion or 8.20 per cent on. FIRS collected N4.628 trillion in 2011. The contribution of non-oil taxes increased from N1.557 trillion or 33.65 in 2011 to N1.806 trillion or 36.07 per cent in 2012. The N5.007 trillion was the highest cumulative tax collected in the history of the FIRS.

Compared with the N715.4billion in 2011, Companies Income Tax (CIT) returned N847.5 billion in 2012. Value Added Tax (VAT) was N710.5billion against N659.15billion in 2011, while Education tax (EDT) recorded N188.43 billion against the N130.74 billion in 2011. National Information Technology Development Fund (NITDF) accounted for N9.13 billion against the N8.67 billion it returned in 2011.

However, with this achievement, experts at First Bank of Nigeria Capital Research noted:

> *While we applaud the increase in tax revenues, we believe the share of oil taxes in relation to the whole is still disproportionately high and implies that only limited success has been made by the Federal Government in its effort at diversifying revenues away from oil.*

They added that data from the service's website showed that oil related taxes accounted for N3.2trillion or 64 per cent of the overall tax revenue during the period. Although oil prices are currently above US$110/barrel, the cyclical nature of the commodity leaves the nation exposed to the vagaries of commodity prices. This implies that the federal government is yet to achieve its goal.

Tax experts have argued that major factors constraining a higher revenue contribution from non-oil taxes include the huge informal economy estimated at close to 50 per cent of GDP, a weak infrastructure base which poses a challenge for small businesses to thrive and the limited database of the tax collection authorities (the Tribune, 2013).

# CHAPTER THREE

# RESEARCH METHODOLOGY

This chapter discussed the research methods and procedures used in carrying out the research on this work. The sub-headings include: Research design, population, sample size and sampling method, type and sources of data and statistical tools of analysis or the method of data analysis.

## 3.1. Research Design

This research work is both inferential and descriptive in nature. Oniye (1997) describes descriptive survey design as the method of research that examines the efforts of the researcher on the collection of information from representative sample upon which inferences are drawn about the attitude or opinion of the target population.

In this study, representative sample of federally collected revenue and real Gross Domestic product (GDP) are collected. These will be used to test the hypotheses of the study and inferences will be made therefrom about the target population.

## 3.2. Population

The target population of this study includes VAT collection from 1994 to 2012, real gross domestic product from 1994 to 2012, total federally collected revenuefor the same period and sectorial contribution to VAT revenue from 2005 to 2012.

## 3.3. Sample and Sampling Method

The sample of the study consists of federally collected revenue, VAT collection and real gross domestic product from 1994 to 2012. The sampling method used is the purposive sampling techniques as the sampling procedure in which researchers purposely select certain groups as samples because of their importance to the investigation under consideration. The figures from those years are relevant considering the fact that VAT was introduced in 1994 and its importance became obvious as from 1994.Also the sample of the study for the new millennium consists of VAT revenue target from 2002 to 2012 and sectoral contribution to VAT revenue from 2005 to 2012 (based on the data made available by the FIRS headquarter in Abuja)

## a.    Sources of Data

 The relevant data records and information were sourced from the operational arms of the Federal Board of Inland Revenue (in Lagos, Rivers and Kwara States of Nigeria) and its headquarter in Abuja, FIRS collection profile, Annual Reports and

Accounts (various issues) of FIRS and Central Bank of Nigeria (CBN), CBN statistical bulletin (which contains the details of federally collected revenue including VAT, company income tax and petroleum profits tax and as well as real Gross Domestic Product (GDP) which measures the level of economic growth and Nigerians' standard of living), text books, journals, magazines, government gazettes, newspapers, seminar papers, annual abstract of statistics, internet reports of various experts and international magazines to give an accurate picture of VAT's impact on economic growth.

### b. Models specification

In this study, two models were used to analyse the impact of VAT on total federally collected revenue, and economic growth respectively. The models are explained and stated below.

Based on the focus of this research, we applied Ordinary Least Square method to analyze the impact of the four relevant sources of federally collected revenue (VAT, CIT, CED and PPT (regressors)) on total federally collected revenue (regressand) which is very essential for economic growth and development. The model is as stated below:

$TFCR_t = f(VAT_t, CIT_t, CED_t, PPT_t)$………………………………...(3.1) and

$TFCR_t = \beta_0 + \beta_1 VAT_t + \beta_2 CIT_t + \beta_3 CED_t + \beta_4 PPT_t + \varepsilon_t$................................(3.2)

Where

$\beta_0$ = intercept or average federally collected revenue when other variables are not applied

$\beta_1$ = Coefficient of the explanatory variable, VAT

$\beta_2$ = Coefficient of the explanatory variable, CIT

$\beta_3$ = Coefficient of the explanatory variable, CED

$\beta_4$ = Coefficient of the explanatory variable, PPT

VAT = Value added tax

CIT = Company income tax

CED = Custom and excise duties

PPT = Petroleum profit tax

TFCR = Total federally collected revenue

$\varepsilon_t$    = Stochastic disturbances/ variables

t    = time period under study (1994 -2012)

This was used to estimate the relationship existing between the regressand(Federally Collected Revenue) and the regressors (VAT, CIT, CED and

PPT), that is to test the extent to which VAT contributes to federally collected revenue and to determine its position among the foursources of federally collected revenue in Nigeria.

For the second model, we also applied Ordinary Least Square method to analyse the impact of VAT (regressor) on economic growth of Nigeria (regressand) proxied by real Gross Domestic Product. From sub-macro and micro economic perspectives, this model states that economic growth (real GDP) depends on VAT revenue. Guided by the perceived functional relationship between the matrix of economic growth (RGDP) and VAT revenue, a link is forged between the two variables. The model which is in line with the works of Owolabi and Okwu (2011) and Adereti, Sanni&Adesina (2011) is a modified form of the model specified by Golit (2008) in his study of Nigeria's tax efforts. However other relevant independent variables are considered in this study to actually showcase the performance or impact of VAT among the vibrant taxes in Nigeria on economic growth of Nigeria. Thus, the functional relationship and the resultant models are as specified below.

$$RGDP_t = f(VAT_t, CIT_t, CED_t, PPT_t)\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

From the above functional relationship, the stochastic model is specified below:

$$RGDP_t = \beta_0 + \beta_1 VAT_t + \beta_2 CIT_t + \beta_3 CED_t + \beta_4 PPT_t \ldots + \varepsilon_t \ldots\ldots\ldots\ldots(2)$$

Where $\beta_0, \beta_1, \beta_2, \beta_3$ and $\beta_4$ are model parameters and $\varepsilon_t$ is the stochastic error term.

The 'priori' expectation is that the model parameter is expected to be positively signed.

## 3.4 Method of Analysis

In addition to the above models, we applied the following models and tests to analysing and finding the impact of VAT on economic growth in Nigeria: Coefficient of determination is used to measure the proportion of the variation in the independent variable explained by the regression equation. The adjusted coefficient of determination is used to measure the proportion of variation of explanatory variables not captured by coefficient of determination. Autocorrelation is used to identify the repeating patterns and periodic signals that have been buried under noise. The time series properties of the variables are examined through the use of Augmented Dickey Fuller, (ADF) unit root test, while the long-run relationship was established between dependent and independent variables using the Johansen co-integration test. Granger causality test is used to examine the direction of causality between two economic variables. The aforementioned tests and other relevant tests are discussed in further details below.

### 3.4.1  Error Correction Model (ECM)

This can be used when the result of a co-integration test for a particular model reveals that more than one co-integrating vectors exist among the variables of interest. An Error Correction Model is designed for use with non-stationary series that are known to be co-integrated. The ECM has co-integration relations built into the specification so that it restricts the long-run behavior of the endogenous variables to converge to their co-integrating relationships while allowing for short-run adjustment dynamics. The use of the methodology of Co-integration and ECM add more quality, flexibility and versatility to the econometric modeling of dynamic systems and the integration of short-run dynamics with the long-run equilibrium. For Error Correction Test (ECT) to be acceptable, its coefficient must be negative and its probability value must be significant (i.e. less than 10%).

### 3.4.2  F-test

This is used to determine the joint significance of the entire explanatory variables. If the F-ratio is greater than F-critical, (i.e. F-ratio $> F_{(k-1, \ n-k-1)}$, at 5% level of significance or less, we conclude that the variables are  jointly significant and vice versa. Where n is number of observations, k is number of columns and (k-1, n-k-1) is the degree of freedom.

### 3.4.3 T-test

This is used to ascertain the significance of each of the explanatory variables. If t-statistic is greater than t-critical, i.e. if t-statistic > $t_{\alpha/2}(n-1)$ at 5% or less level of significance, we accept the null hypothesis and conclude that the variable is significant, otherwise we reject the null hypothesis.

### 3.4.4 Coefficient of Determination ($R^2$)

This is used to ascertain how fit the model is in explaining the regressand. Its value ranges from 0 to 1. $R^2$ close to 0 indicates that the regressors are not fit in explaining the regressand while $R^2$ close to 1 indicates that the model is robust and significantly explains the regressand. This means that the model is reliable in making informed decisions.

### 3.4.5 Autocorrelation Test (DW)

This test reveals whether error term is serially correlated with other variables or not. Its values range from 1 to 4. If DW is 2 or less, it shows that there is absence of serial correlation between the error term and the variables, DW value greater than 2 indicates the presence of serial correlation while DW of 4 and above prove presence of multi-collinearity.

### 3.4.6 Augmented Dickey-Fuller (ADF) Unit Root Test

To avoid spurious regression, ADF is used to discover the existence of unit root in a set of data. This means that most regression carried at levels could not be stationary which calls for first and second differencing until stationarity is attained. There are three stages or levels or order of integration which are order zero, first order and second order. The decision rule is that for a variable to be stationary, the ADF test statistic value must be greater than the Mackinnon critical value at 5% and at absolute value (Machinnon 1996; Pesaran 2007).

### 3.4.7 Johansen Co-integration Test

To establish whether a long-run relationship exists among the variables or not, Co-integration test using Johansen's multivariate method was employed. The decision rule is that if the Engles maximum likelihood ratio is greater than 5% critical value at none and the existence of a co-integrating equation, there exist a long-run relationship among the variables.

### 3.4.8 Granger Casualty Test

Granger proposed the idea of Granger-causality in his 1969 paper to describe the 'causal relationships' between variables in econometric models. Before this, econometricians and economists understood the idea of 'causal relationships' as asymmetrical relationships. Causal relations are studied because policy makers

need to know the consequences of the various actions which they will take or are considering taking. For example; given a relationship between output and price level, we need to know whether this relationship is expected to hold if actions controlling output are implemented, when actions controlling the price level are implemented, or when both of these cases occur ( Oreutt, 1952). The use of the term causality is identical to that of Weiner who provided the base idea for Granger's work in the early fifties.

Granger-causality indicates the existence of casual relationship between two variables. The idea is that a variable X Granger-causes variable Y if variable Y can be better predicted using the histories of both X and Y than it can be predicted using the history of Y alone. This is shown if the expectation of Y given the history of X is different from the unconditional expectation of Y:

$$E\ (Y \backslash Y_{t-k,}\ X_{t-k}) \neq E\ (Y \backslash Y_{t-k})$$

This relationship can be bi-directional, uni-directional or independent. A bi-directional relationship exists if two variables Granger cause each other; a uni-directional relationship exists if only one of the variables Granger causes the other, while an independent relationship indicates no casual relationship. A variable Granger causes the other if the F-statistic is greater than the F-critical at 5% or less level of significance.

# CHAPTER FOUR

# DATA PRESENTATION AND ANALYSIS

This chapter focuses on the provision of empirical evidence on the findings of this study. Here, the research is analysed and interpreted

## 4.1 DATA PRESENTATION

## 4.1.1 Assessment of VAT Performance in the New Millennium(Yearly Target Basis)

At this stage, effort was made to assess the performance of VAT in respect of the yearly target to know the extent to which it has been meeting targets and its effect on expected revenue and economic growth in the new millennium. Table 4.1.1 below shows the result of our findings:

**Table 4.1.1 VAT Budget and Actual Collections from 2002 to 2012**

| Year | Actual VAT Collection | Budgeted VAT Revenue | % of the Target Achieved | Deviation from Target | Deviation from Target | Effect on Expected Revenue and Growth |
|---|---|---|---|---|---|---|
| | ₦' b | ₦' b | | ₦' b | % Variance | |
| 2002 | 108.6 | 90.0 | 120.7 | 18.6 | 20.7 | Increase/Favourable |
| 2003 | 136.4 | 113.0 | 120.7 | 23.4 | 20.7 | Increase/Favourable |
| 2004 | 163.3 | 161.0 | 101.4 | 2.3 | 1.4 | Increase/Favourable |
| 2005 | 192.7 | 231.0 | 83.4 | -38.3 | -16.6 | Decrease/Adverse |
| **2006** | **232.7** | **77.8** | **299.1** | **154.9** | **199.1** | **Increase/Favourable** |
| 2007 | 312.6 | 265.0 | 118.0 | 47.6 | 18.0 | Increase/Favourable |
| 2008 | 401.7 | 323.0 | 124.4 | 78.7 | 24.4 | Increase/Favourable |
| **2009** | **481.4** | **580.0** | **83.0** | **-98.6** | **-17.0** | **Decrease/Adverse** |
| 2010 | 564.89 | 580.0 | 97.4 | -15.1 | -2.6 | Decrease/Adverse |
| 2011 | 659.16 | 770.04 | 85.6 | -110.9 | -14.4 | Decrease/Adverse |
| 2012 | 710.56 | 802.92 | 88.5 | -92.4 | -11.5 | Decrease/Adverse |
| **overall performance** | 3964.0 | 3993.8 | 99.3 | -29.8 | -0.7 | Decrease/Adverse |

**Source: FIRS Collection Profile from 2002 to 2012**

From the above table, actual VAT collection is increasing every year indicating that VAT is capable of generating more revenue for the government in future. VAT collected by the Federal Inland Revenue Service (FIRS) rose from N47.1 billion in 1999 to N232.7 billion in 2006. Value Added Tax (VAT) was N710.5 billion in 2012 against N659.15billion in 2011.

In 2005, a total of N1.7 trillion was generated from different taxes with VAT Contributing 11.10%. In year 2007, VAT represented 12.53% of the N1.8 trillion generated from various types of taxes including the petroleum profit tax and educational tax. In 2012, VAT contributed 14.21% to the N5.007 trillion generated which was the highest cumulative tax collected in the history of the FIRS. This makes it to be among the three vibrant taxes we have in Nigeria. The Vibrant taxes in Nigeria are:

1. Petroleum Profit Tax(PPT)
2. Companies Income Tax (CIT)
3. Value Added Tax (VAT)

The overall performance of the tax when compared with budgeted revenue was 99.3% (see the overall percentage achieved in the above table) which is very reasonable. The highest percentage achieved was in year 2006(i.e. 299.1%) while

the lowest was in year 2009 (i.e. 83%) which may be due to economic meltdown in that year.

However, a critical look at the percentage deviation from target shows decrease in expected revenue by 16.6%, 17%, 2.6%, 14.4% and 11.5% which adversely affected expected growth in year 2005, 2009, 2010, 2011 and 2012 respectively. VAT failed to meet its target five years out of eleven years under consideration. This is indicating that there are still administrative problem in VAT collection as earlier explained in this study. For instance Nigeria being rated the 8th most corrupt country in the world (by Anti-corruption nonprofit Transparency International) in year 2013 might be loosing greater percentage of the VAT revenue to corrupt officials or as a result of care-free attitude of Nigeria government towards its affairs or as a result of poor and very loose internal control.

### 4.1.2 Sectorial Analysis of V]AT Collection(2005-2012)

At this stage, effort was made to assess the performance of different sectors of the Nigerian economy in contributing to VAT revenue with a view to showcase their effect on economic growth in the new millennium( the data made available by the FIRS was from 2005 to 2012). Table 4.1.2 below shows the result of our findings:

**Table 4.1.2 SectoralContribution to VAT from 2005 to 2012**

| Year | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|
| | ₦'million | ₦'million | ₦'million | ₦'million | ₦'million | ₦'million | ₦'million | ₦'million |
| **SectoralAnalysis** | | | | | | | | |
| Government Sector | 33,907.41 | 44,508.00 | 57,384.50 | 74,629.96 | 90,638.00 | 109,152.50 | 120,702.56 | 112,633.30 |
| Financial Institution | 8,151.50 | 7,418.00 | 11,422.11 | 15,594.32 | 13,888.37 | 21,830.50 | 26,177.65 | 25,710.90 |
| Service Sector | 24,714.79 | 39,167.04 | 49,523.90 | 54,969.98 | 99,327.32 | 104,786.40 | 86,356.71 | 99,052.20 |
| Building & Construction | 1,183.09 | 2,967.20 | 5,900.72 | 5,820.02 | 17,124.15 | 13,098.30 | 17,123.72 | 20,484.60 |
| Agric&Plantation | 307.60 | - | 84.30 | 194.93 | 436.28 | - | 688.89 | 1,908.40 |
| Oil &Minning | 18,326.09 | 18,396.64 | 40,672.82 | 80,199.36 | 74,822.71 | 104,786.40 | 143,189.75 | 157,807.40 |
| Manufacturing Sector | 28,843.78 | 31,155.60 | 36,668.76 | 38,150.39 | 57,880.34 | 65,491.50 | 79,812.29 | 93,303.00 |
| Commercial & Trading | 2,874.91 | 4,747.52 | 9,082.89 | 8,911.04 | 9,452.82 | 17,464.40 | 18,009.43 | 20,437.60 |
| **Total Non-import VAT** | **118,309.18** | **148,360.00** | **210,740.00** | **278,470.00** | **363,570.00** | **436,610.00** | **492,061.00** | **531,337.40** |

**Source: Annual Report and Account of FIRS and CBN Annual Report**

The above table can be represented in the following bar chart in order to display the variation of VAT collection from different sectors of the economy in percentage. Also, the trend analysis of the sectoral contribution to VAT speaks volume:

FIGURE 4.1.1 SECTORAL CONTRIBUTION TO VAT REVENUE IN PERCENTAGE (2005-2012)

**FIGURE 4.1.2 TREND ANALYSIS OF THE SECTORAL CONTRIBUTION TO VAT REVENUE (2005-2012)**
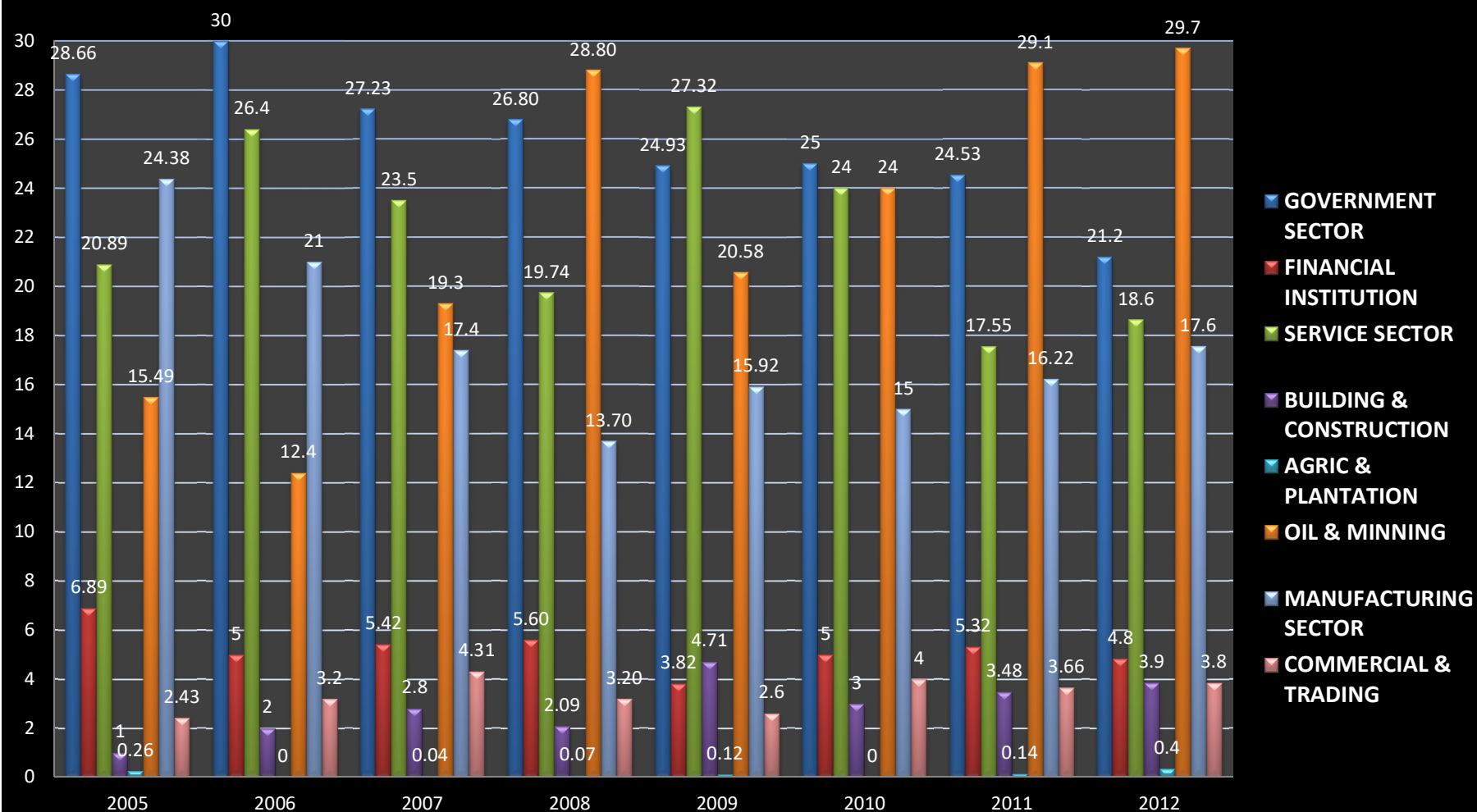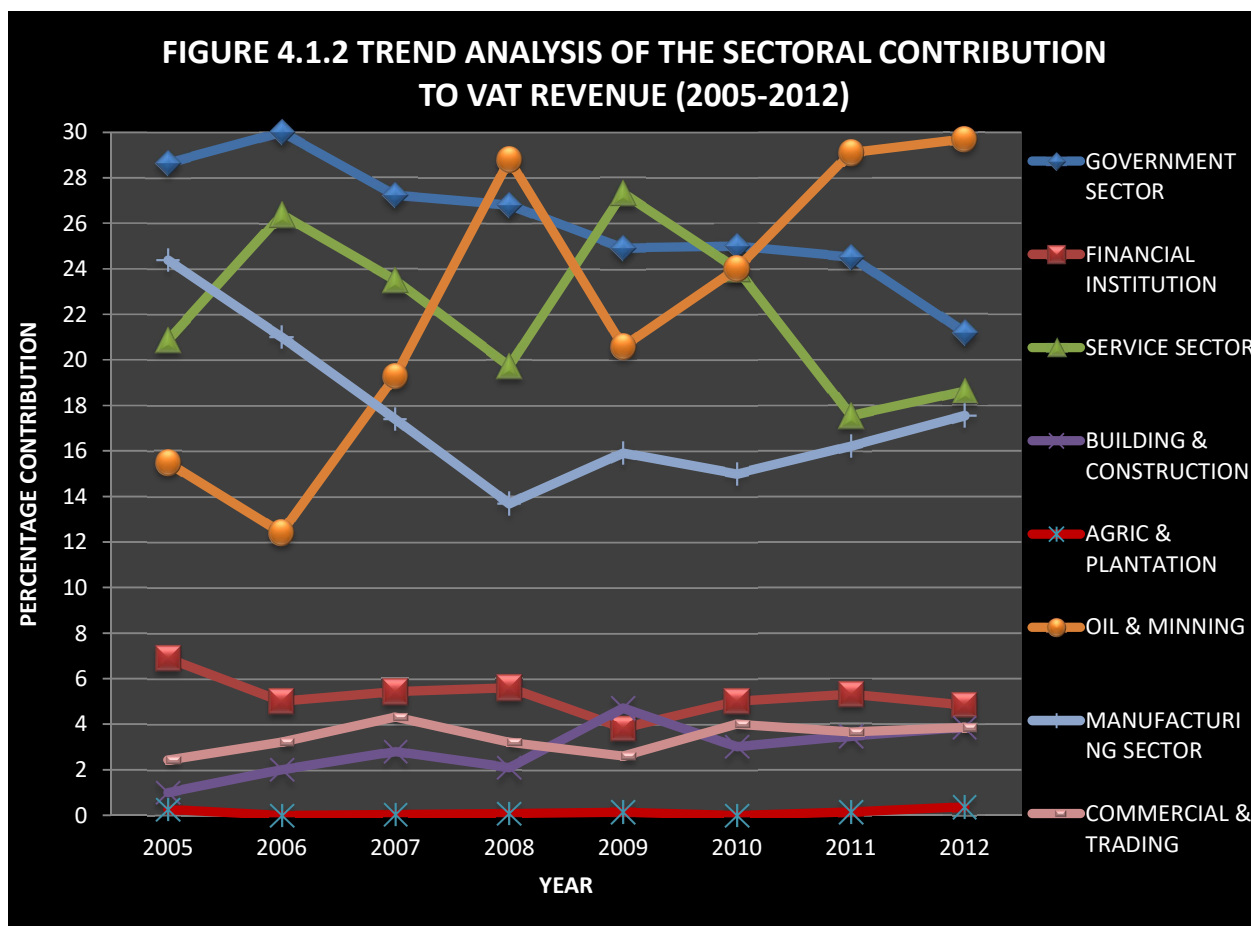
From the above graph, it is very clear that government sector had the highest contribution of 28.66%, 30%, 27.23% and 25% in year 2005, 2006, 2007 and 2010 respectively among the sectors. It grew from 28.66% in 2005 to its apex in 2006 (30%) and fell to 27.23% and 26.8% in the two subsequent years respectively. Further dwindling was experienced in 2009 which could be as a result of the prevailing economic downturn during the year. It is surprising that it fluctuated to its lowest (21.2%) in 2012 despite the fact that VAT contributed 14.21% to the N5.007 trillion generated which was the highest cumulative tax collected in the history of the FIRS. This is indicating possible inability to collect all VAT belonging to this sector of the economy.

The manufacturing sector was the second highest (24.38%) contributor to VAT revenue in 2005. This could not be sustained as it fluctuated downward to its

lowest (13.7%) in year, 2008. What could account for this majorly is the poor development of the energy sector to meet the energy need of the country and attain the objective of employment generation and wealth creation. Many companies, highly intelligent and creative youth and skillful workers are moving out of the country due to poor infrastructural facilities, inadequate social amenities, lack of access to fund and the nation's comatose power supply (currently at less than 4000 megawatts) which sounded the death knell for the manufacturing sector. Its contribution (i.e. 17.6%) even when the FIRS celebrated the highest total tax collection in year, 2012 was not impressive at all compared to that of year, 2005 (24.38%). This is also showing that this sector is not generating enough activities to boost economic growth resulting to low production of VATable goods and unemployment. This view was also affirmed by Professor Patrick Utomi (2013):

> *In developed countries, manufacturing contributes as much as 40% to the GDP. The neglect of the manufacturing sector over time saw the dearth of indigenous goods in the country. The textile industry, which once flourished began to fold up because foreign goods were given precedence over locally produced ones. The whole idea of indigenization like many policies of the government was thrown to the dust.*

Administrative problem of VAT collection from this sector also cannot be overlooked. Tax experts have argued that one of the major factors constraining a higher revenue contribution from non-oil taxes include the huge informal economy estimated at close to 50 per cent of GDP (the Tribune, 2013).Some companies are not registered and so to collect VAT from such companies is very difficult. Those that registered do not remit adequately and would not disclosed most of their VATable activities. These pose serious challenges to this sector of the economy.

The service sector took the third position (with 20.89%) in contributing to VAT revenue in year, 2005. Its position shifted to second in the three subsequent years with 26.6%, 23.5% and 19.74% respectively. It was surprising that this sector had its highest contribution (27.32%) taking first position among the various sectors in year, 2009, despite the prevailing economic meltdown during the year. However, it dwindled significantly to its lowest (17.55%) in 2011 before it finally rested at 18.6% in the year, 2012despite the achievement of the FIRS in the same year.

Oil and mining sector had the highest contribution of 28.8%, 29.1% and 29.7% (its apex) in year 2008, 2011and 2012 respectively among the sectors. It fluctuated from 15.49% in 2005 to its lowest in 2006 (12.4%) maintaining its fourth position in both years. A dramatic growth in its contribution was experienced in the two subsequent years to 19.3% and 28.8% respectively but could not be sustained in 2009 as it fell to 20.58% which may be due to economic recession prevailing that year. It resuscitated thereafter to be the leading sector in 2011 and 2012 indicating its potency to contribute more in future. However, this portrayed the Nigerian economy as a mono-economy because no other productive sectors of the economy had such a drastic growth within the period under consideration (2005 to 2012) (see the graph above).

Contribution to VAT revenue by the financial sector has not been impressive as it fluctuated between 3.82% and 6.89% over the period. This could be as a result of banks near death experience from a banking crisis that led to costly bailouts, mergers and the formation of a state bad bank, the Asset Management Corporation of Nigeria (AMCON).So also is the commercial and trading sector and building and construction sector that could not even go beyond 4.31% and 4.71% respectively (see the above graph). This is showing that the volume of activities in these three sectors has not impacted significantly on economic growth.

Agric and plantation sector being the least contributor to VAT revenue depicted the fact that the sector had been neglected for so many years especially mechanized farming because of huge revenue from oil sector. Its annual contribution is so ridiculous (not up to 0.3%). No wonder why the Minister of Agriculture and Rural Development, Dr. AkinwumiAdesina quoted by Patrick Utomi (2013) lamented at the 19th Nigerian Economic Summit: *"Nigeria's dependence on oil has been a disaster. If Nigeria had developed palm oil, cocoa, cassava and other non-oil products, the country would have fared better".*He added that *"a nation that does not feed itself becomes a threat to its own sovereign existence" and that growing our own food, processing what we produce, becoming competitive in export markets and creating jobs across all our economy are crucial for national security"*

### 4.1.3 Overall Sectoral Performance (2005-2012)

The table and the pie chart below show the overall performance of each of the sectors:

**Table 4.1.3 Eight Years Overall Sectoral Contribution to VAT Revenue (2005 to 2012)**

|  | 8 years overall performance | | |
|---|---|---|---|
|  | ₦'Million | % | Rank |
| Government Sector | 643,556.24 | 24.9 | 1st |
| Oil &Mining | 638,201.17 | 24.7 | 2nd |
| Service Sector | 557,898.34 | 21.6 | 3rd |
| Manufacturing Sector | 431,305.67 | 16.7 | 4th |
| Financial Institution | 130,193.35 | 5.0 | 5th |
| Commercial &Trading | 90,980.62 | 3.5 | 6th |
| Building &Construction | 83,701.80 | 3.2 | 7th |
| agric& plantation | 3,620.40 | 0.1 | 8th |
| **total non import vat** | **2,579,457.58** | **100.0** | |

FIGURE 4.1.3 SUMMARY OF 8 YEARS SECTORIAL CONTRIBUTION TO VAT (2005-2012)

COMMERCIAL & TRADING 3.53%

MANUFACTURING SECTOR 16.72%

GOVERNMENT SECTOR 24.95%

FINANCIAL INSTITUTION 5.05%

OIL & MINNING 24.74%

SERVICE SECTOR 21.63%

AGRIC & PLANTATION 0.14%

BUILDING & CONSTRUCTION 3.24%
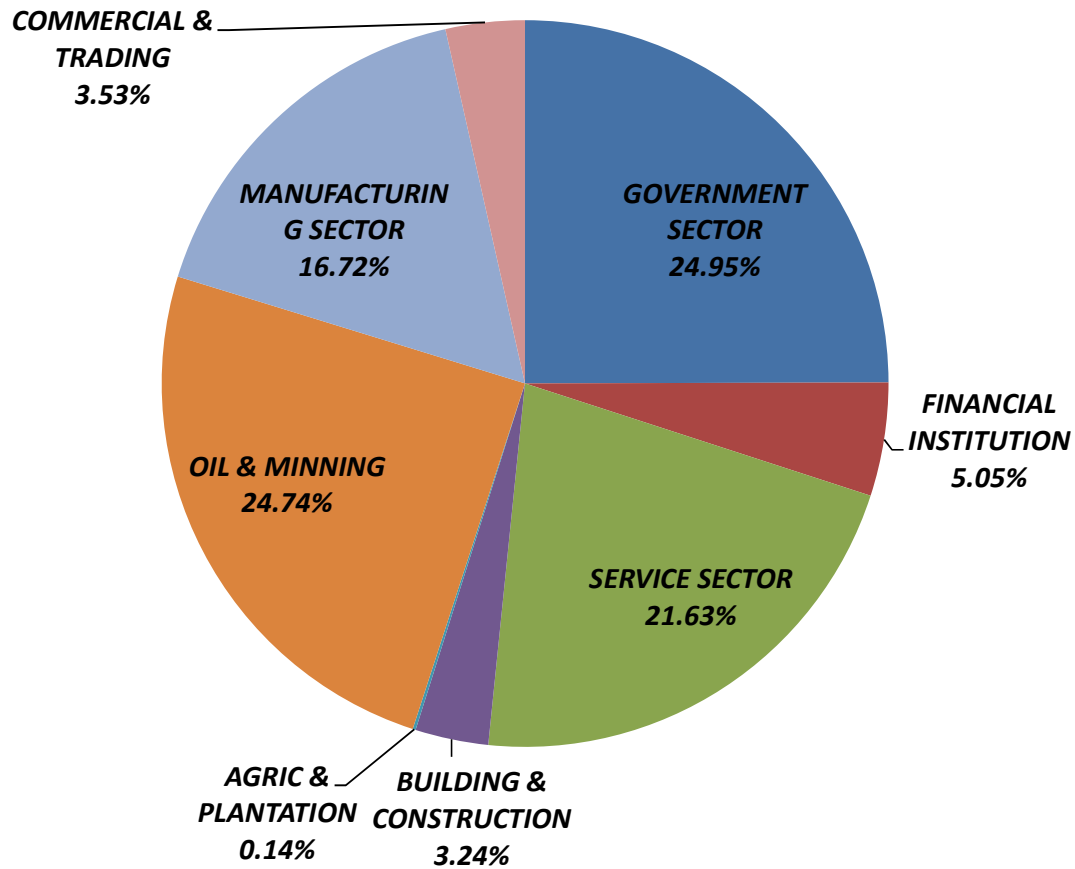
From the above pie chart, the VAT that is withheld from Government contracts (at Federal, State and Local levels) having the highest overall contribution (24.95%) to total VAT collection is suggesting that more work was needed to improve VAT compliance by the private sector. It is not generated from the productive activities but it is part of already earned revenue of government withheld at the point of expenditure. This sector could perform better if corruption and embezzlement which is the order of the day is reduced to the barest minimum.

Oil and mining sector taking second position and the only leading productive sector indicates government inability to diversify the economy. Being a mono-economy and Africa's highest producer of crude oil, the country still grapples with dysfunctional refinery, poverty and erratic power supply among other challenges, putting the Nigerian economy in double tragedy. Expert and economic analysts have also highlighted the dangers inherent in an economy that is dependent on one source of revenue. They have described such economies as vulnerable. They have listed factors such as; risk of fall in production; risk of demand; risk in fall in price; and the run out of reserves, as some of the risks associated with a mono product economy. Key stakeholders within the private sector have also called for an "integrated approach" of all sectors of the economy. They have suggested improved governance and the need to tackle corruption head-long as some of the ways that the diversification policy can work effectively (Patrick Utomi, 2013).

The service sector took third position in contributing to the overall VAT revenue for the eight years indicating that this sector is playing important role in the economic growth and development. While the fourth position was taken by manufacturing sector due to the setbacks explained earlier.

The poor sectors of the economy that contributed least are Financial institution sector (5th position),Building & Construction (6th position)Commercial & Trading(7th position)  and agric and plantation (8th position).

**Research Hypotheses:**

$H_0$:    VAT has not contributed significantly to total federally collected revenue

$H_0$:    VAT has not contributed significantly to economic growth of Nigeria

## 4.2    Test of Hypothesis

### 4.2.1  Hypothesis one:  Findings and Discussions

Here, an attempt was made to find out whether Value Added Tax contributes significantly to Total Federally Collected Revenue. In order to test this, Error Correction Model was adopted. The raw data collected was subjected to analysis. The properties of the data were examined, efforts were made to establish the model and interpret the results generally and specifically variable by variable. Relevant tests were carried out in line with the methodologies which gave rise to accurate decisions and detailed discussions. The results of the various tests (see input data result generated in Appendixes) are presented below:

### Table 4.1.4   Augmented Dickey-Fuller Unit Root Test

Time series data are prone to spurious regression, to ensure their stationarity, Unit Root Test is carried out. The result is presented in the below table.

| VARIABLES | ADF VALUES | ORDER OF INTEGRATION |
|---|---|---|
| COMPANY INCOME TAX | -5.439515* | I(2) |
| CUSTOM EXCISE DUTY | -4.296697* | I(1) |
| PETROLEUM PROFIT TAX | -4.951067* | I(1) |
| TOTAL FEDERAL COLLECTED REVENUE | -4.298816* | I(1) |
| VAT REVENUE | -3.116760** | I(2) |

Source: Author's Computation through E-view version 7.2

Note that one, two and three asterisks denote rejection of the null hypothesis at 1percent, 5percent and 10percent respectively. The above results show that

Custom and Excise Duty, Petroleum Profit Tax and Total Federally Collected Revenue are stationary at first differencing while Company Income Tax and VAT Revenue are stationary at second differencing. Since the variables are integrated at different orders or levels (that is some at first differencing and some at second differencing), there exist short run disequilibrium or no relationship among the variables. This led us into carrying out co-integration test to find out if there is long run relationship among the variables.

**Table 4.1.5 Johansen Co-integration Test**

Date: 05/08/14   Time: 18:43
Sample (adjusted): 1996 2012
Included observations: 17 after adjustments
Trend assumption: Linear deterministic trend
Series: VAT REVENUE  TOTAL FEDERALLY COLLECTED REV
PETROLEUM PROFIT_TAX__PP CUSTOMS EXCISE DUTIES COMPANY
INCOME TAX REVEN
Lags interval (in first differences): 1 to 1

Unrestricted Co-integration Rank Test (Trace)

| Hypothesized No. of CE(s) | Eigenvalue | Trace Statistic | 0.05 Critical Value | Prob.** |
|---|---|---|---|---|
| None * | 0.997634 | 172.7162 | 69.81889 | 0.0000 |
| At most 1 * | 0.872823 | 69.92832 | 47.85613 | 0.0001 |
| At most 2 * | 0.758177 | 34.87128 | 29.79707 | 0.0119 |
| At most 3 | 0.440191 | 10.73897 | 15.49471 | 0.2280 |
| At most 4 | 0.050239 | 0.876269 | 3.841466 | 0.3492 |

Trace test indicates 3 co-integrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
**Source**: Computation using E-Views Statistical Package, Version 7.2

From the above table, the result of the co-integration test for the model reveals that three or more co-integrating vectors exist among the variables of interest (That is, at least three of the variables of interest have relationship in the long run). This means that we can estimate the Error Correction Model. An Error Correction Model is designed for use with non-stationary series that are known to be co-integrated. The ECM has co-integration relations built into the specification so that it restricts the long-run behavior of the endogenous variables to converge to their co-integrating relationships while allowing for short-run adjustment dynamics. The use of the methodology of Co-integration and ECM add more quality, flexibility and versatility to the econometric modeling of dynamic systems and the integration of short-run dynamics with the long-run equilibrium.

**Table 4.1.5 Result of Error Correction Model Testing the Contribution of VAT to Federally Collected Revenue**

Dependent Variable: D(DTCFR)
Method: Least Squares
Date: 05/09/14   Time: 12:09
Sample (adjusted): 1997 2012
Included observations: 16 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(DDVAT) | 48.40022 | 13.47994 | 3.590538 | 0.0089 |
| D(DPPT) | 2.175056 | 0.248155 | 8.764896 | 0.0001 |
| D(DDCIT) | -6.217070 | 3.147132 | -1.975472 | 0.0888 |
| D(DCED) | -6.707078 | 3.630619 | -1.847365 | 0.1072 |
| DTCFR(-1) | -0.443925 | 0.372988 | -1.190186 | 0.2728 |
| DDVAT(-1) | 69.09953 | 26.26809 | 2.630551 | 0.0339 |
| DPPT(-1) | 0.914813 | 0.866985 | 1.055166 | 0.3264 |
| ECT(-1) | -1.977665 | 0.745309 | -2.653483 | 0.0328 |
| C | -82403.99 | 212888.8 | -0.387075 | 0.7102 |

| | | | | |
|---|---|---|---|---|
| R-squared | 0.976279 | Mean dependent var | | -32861.55 |
| Adjusted R-squared | 0.949170 | S.D. dependent var | | 2427651. |
| S.E. of regression | 547325.3 | Akaike info criterion | | 29.56180 |
| Sum squared resid | 2.10E+12 | Schwarz criterion | | 29.99638 |
| Log likelihood | -227.4944 | Hannan-Quinn criter. | | 29.58405 |
| F-statistic | 36.01279 | Durbin-Watson stat | | 1.712667 |
| Prob(F-statistic) | 0.000052 | | | |

**Source**: Computation using E-Views Statistical Package, Version 7.2

From the above table, the regression model can be restated as below:

$TFCR_t = -82403.99 + 48.40022 VAT_t - 6.217070\ CIT_t - 6.707078 CED_t + 2.175056 PPT_t$

The result obtained from the model indicates that the overall coefficient of determination $(R^2)$ shows that 97.62percent of Total Federally Collected Revenue is explained by the variables in the equation. The Durbin Watson (D.W) statistics of 1.71 was not substantially further away from the traditional benchmark of 2.0. The study can conclude that there is no sign of auto-

correlation or serial correlation in the model specification, hence, the assumption of linearity is not violated.

From the above model, both Value Added Tax (VAT) and Petroleum Profit Tax (PPT) have positive relationship with Federally Collected Revenue. That is, one percent increase in VAT revenue and PPT revenue will lead to increase in the Total Federally Collected revenue by 48.40percent and by 2.17 percent respectively. The P- values of both variables also indicates that they are significant at influencing total federally collected revenue at less than 1percent (which is lower to the traditional benchmark of 10%).

On the other hand, Companies Income Tax (CIT) and Custom and Excite Duties (CED) have negative correlations. This implies that increase in the coefficient of Companies Income Tax Revenue and that of Custom and Excite Duties by 1 percent will lead to a decrease in Total Federally Collected Revenue by 6.22 percent and 6.71 percent respectively. The P- values of the two variables also indicates that the coefficient of CIT revenue is significant at influencing total federally collected revenue at 10 percent while that of revenue from CED is not significant at 10 percent. Based on the probability values above it is evident that VAT is the second most significant contributing source to Federally Collected Revenue among the three vibrant taxes in Nigeria. The vibrant taxes are Petroleum Profit Tax, Value Added Tax and Companies Income Tax.

However, the negative coefficient of CIT might be hinting at those factors that have bedeviled Nigerian companies and manufacturing sector over the years which inhibited their potency to contribute more to the federally collected revenue. The major f actor is the poor development of the energy sector to meet the energy need of the country and attain the objective of employment generation and wealth creation. Between the years 2000 to 2008, 820 manufacturing companies closed down due to inadequate and obsolete infrastructure, tough operating environment, high cost of diesel for operating generators, unstable electricity, high interest rates and smuggling (Emmanuel Nnadozie (2011). Recently, the Nigerian Association of Chambers of Commerce, Industry Mines and Agriculture also reported that no fewer than 800 companies closed down in the country between 2009 and 2011 due to harsh operating environment (Agency Reporter (2012)). More so, most companies are relocating to other countries because of these factors. This is also what account to poor generation of VAT revenue from manufacturing sector. The trend analysis of sectoral contribution to VAT revenue earlier explained in this chapter gives a clear picture of the situation.

Similarly, the negative coefficient of Custom and Excise Duties is indicating factors delimitating its performance such as our porous borders, corruption and embezzlement of revenue generated which has been the normal practice in Nigeria. This is also what account for poor VAT revenue generated from imported goods and services despite the fact that the country rely heavily on foreign goods and services.

The lag of Total Federally Collected Revenue (-1) and the lag of petroleum profit tax (-1) are also not significant in influencing the current Total Federally Collected Revenue while the lag of Value Added Tax (-1) is significant at impacting on current Total Federally Collected revenue at less than 5 percent.

What policy makers can deduced from this is that the revenue generated from VAT last year can be used to predict the current year Total Federally Collected Revenue.

A value of (-1.977665) for the ECT coefficients suggests a very fast speed adjustment strategy. This implies that it will take about less than 1year before convergence will be achieved. That is, whatsoever the short run disequilibrium, it will take less than a year for all the variables to converge (come together or be in equilibrium).

The probability of F-statistic, which is a measure of the overall significance of the regression, shows that the model is significant at less than 1 percent. Hence, it can be concluded that the result is significant overall. Thus, null hypothesis is rejected while the alternative hypothesis is accepted; this translates to mean that VAT has contributed significantly to total federally collected revenue. Its positive correlation indicates its potency to generate more income for economic growth in future if all loopholes mentioned in this research are plugged.

### 4.2.2 Hypothesis two: Findings and Discussions

Here, an attempt was made to find out whether VAT revenue contributes significantly on economic growth. In order to test this, Error Correction Model was used, using E-Views Statistical Package, Version 7.2. The raw data collected was subjected to analysis. The properties of the data were examined, efforts were made to establish the model and interpret the results generally and

specifically variable by variable. Relevant tests were carried out in line with the

methodologies which gave rise to accurate decisions and detailed discussions.

The results of the various tests (see input data and relevant result generated in

Appendixes) are presented below:

**Table 4.1.6   Augmented Dickey-Fuller Unit Root Test (ADF)**

| VARIABLE | ADF VALUES | ORDER OF INTEGRATION |
|---|---|---|
| COMPANY INCOME TAX | -5.439515* | I(2) |
| CUSTOM EXCISE | -4.296697* | I(1) |
| PETROLEUM PROFIT TAX | -4.951067* | I(1) |
| VAT REVENUE | -3.116760** | I(2) |
| REAL GDP | -5.191219* | I(2) |

Source: Author's Computation through E-view version 7.2

Note that one, two and three asterisks denote rejection of the null hypothesis at

1percent, 5percent and 10percent respectively. The above result shows that

Custom Excise Duty and Petroleum Profit Tax are stationary at first difference

while Company Income Tax, VAT Revenue and Real GDP are stationary at

second difference. Since the variables are integrated at different orders or levels

(that is some at first differencing and some at second differencing), there exist

short run disequilibrium or no relationship among the variables. This led us into

carrying out co-integration test to find out if there is long run relationship among

the variables.

**Table 4.1.7 Johansen Co-integration Test**

Date: 05/08/14   Time: 18:11
Sample (adjusted): 1996 2012
Included observations: 17 after adjustments
Trend assumption: Linear deterministic trend
Series: COMPANY INCOME TAX REVEN CUSTOMS EXCISE DUTIES PETROLEUM PROFIT
TAX  REAL GDP  VAT REVENUE
Lags interval (in first differences): 1 to 1

Unrestricted Co-integration Rank Test (Trace)

| Hypothesized No. of CE(s) | Eigenvalue | Trace Statistic | 0.05 Critical Value | Prob.** |
|---|---|---|---|---|
| None * | 0.983639 | 155.5787 | 69.81889 | 0.0000 |
| At most 1 * | 0.944515 | 85.66031 | 47.85613 | 0.0000 |
| At most 2 * | 0.679281 | 36.50240 | 29.79707 | 0.0073 |
| At most 3 * | 0.635713 | 17.17019 | 15.49471 | 0.0277 |
| At most 4 | 0.000198 | 0.003359 | 3.841466 | 0.9520 |

Trace test indicates 4 co-integrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level

From the above table, the result of the co-integration test for the model reveals that four or more co-integrating vectors exist among the variables of interest (That is, at least four of the variables of interest have relationship in the long run). This means that we can estimate the Error Correction Model.

**TABLE 4.1.8: Result of Error Correction Model, Testing the Contribution of VAT to Economic Growth**

Dependent Variable: D(DDRGDP)

Method: Least Squares
Date: 05/09/14   Time: 13:20
Sample (adjusted): 1997 2012
Included observations: 16 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(DDVAT) | 0.481380 | 0.309431 | 1.555695 | 0.1708 |
| D(DPPT) | -0.013472 | 0.009367 | -1.438321 | 0.2004 |
| D(DCED) | 0.165807 | 0.244955 | 0.676887 | 0.5237 |
| D(DCIT) | -0.126018 | 0.146611 | -0.859537 | 0.4231 |
| DDRGDP(-1) | -1.435881 | 0.515175 | -2.787172 | 0.0317 |
| DDVAT(-1) | 0.880998 | 0.565312 | 1.558429 | 0.1701 |
| DPPT(-1) | -0.023519 | 0.023749 | -0.990308 | 0.3603 |
| DCED(-1) | 0.405554 | 0.420875 | 0.963597 | 0.3725 |
| ECT(-1) | -0.260318 | 0.124947 | -2.083433 | 0.0823 |
| C | -3169.842 | 6235.600 | -0.508346 | 0.6294 |

| | | | |
|---|---|---|---|
| R-squared | 0.914169 | Mean dependent var | -540.9650 |
| Adjusted R-squared | 0.785423 | S.D. dependent var | 27004.72 |
| S.E. of regression | 12509.25 | Akaike info criterion | 21.97549 |
| Sum squared resid | 9.39E+08 | Schwarz criterion | 22.45836 |
| Log likelihood | -165.8040 | Hannan-Quinn criter. | 22.00022 |
| F-statistic | 7.100554 | Durbin-Watson stat | 2.068076 |
| Prob(F-statistic) | 0.013450 | | |

From the above table, the regression model can be restated as below:

$$RGDP_t = -3169.842 + 0.481380 VAT_t - 0.126018 CIT_t + 0.165807\ CED_t - 0.023519\ PPT_t$$

The result obtained from the model indicates that the overall coefficient of determination ($R^2$) shows that 91.4percent of RGDP is explained by the variables in the equation. The Durbin Watson (D.W) statistics of 2.06 was not substantially further away from the traditional benchmark of 2.0. The study can conclude that there is no sign of auto- correlation or serial correlation in the model specification, hence, the assumption of linearity is not violated.

From the above model, both Value Added Tax (VAT) and Custom Excise Duties (CED) have positive relationship with real GDP. That is, one percent

increase in VAT revenue and that of Custom and Excise Duties will lead to increase in the real GDP by 48.13percent and 16.58 percent respectively. However, they are both not significant at influencing real GDP.

On the other hand, Companies Income Tax (CIT) and Petroleum Profit Tax (PPT) have negative correlations. This implies that increase in the coefficient of Companies Income Tax Revenue and that of Petroleum Profit Tax by 1 percent will lead to a decrease in real GDP by 1.34 percent and 12.60 percent respectively. The negative correlations of the two variables are hinting at those factors inhibiting their potentials to contribute more to the economic growth. Despite the fact that Petroleum Profit Tax is the most significant contributor to Federally Collected revenue as explained in the first hypothesis, its insignificance at influencing real GDP is indicating that Nigeria has mono-economic problems. This view was also affirmed by the sector by sector contribution analysis to VAT revenue earlier discussed in this chapter. It revealed that oil and mining sector was the only leading productive sector indicating government inability to diversify the economy. Being a mono-economy and Africa's highest producer of crude oil, the country still grapples with dysfunctional refinery, poverty and erratic power supply among other challenges, putting the Nigerian economy in double tragedy. These factors also accounts for what made the contribution of VAT revenue from oil and gas sector to be insignificant to the economic growth. Experts have listed factors

such as; risk of fall in production; risk of demand; risk in fall in price; and the run out of reserves, as some of the risks associated with a mono product economy.

In the same vein, negative correlation of CIT to real GDP and its insignificance indicate that the revenue generated from CIT is too infinitesimal to influence economic growth due to those factors explained in the first hypothesis, which bedeviled the Nigerian companies especially the manufacturing sector over the years.

Moreover, the P- values of the four variables indicate that the coefficient of each of the variables is not significant at influencing real GDP at 10% speaks volume. This means that the revenue generated from VAT, PPT, CIT and CED does not reflect significantly on economic growth due to those factors identified under sectoral analysis of VAT revenue and in the first hypothesis.

To actually find out the root of VAT insignificance to the economic growth, it is pertinent to look at the modern view of economic growth. According to Harrod and Domer, the key factor in the process of economic growth is the generation of income on one hand and increase in production capacity on the other hand (that is, capital accumulation). The inability of VAT revenue to reflect significantly on economic growth can therefore be explained in two ways:

Firstly, the revenue generated yearly is too small to reflect on economic growth due to administrative problem of VAT as earlier explained in this study. Another factor that also complicated this problem is that of the huge informal economy estimated at close to 50 per cent of GDP by expert (the Tribune, 2013).Some companies are not registered and so to collect VAT from such companies is very difficult. Those that registered do not remit adequately and would not disclosed most of their VATable activities. These pose serious challenges to VAT revenue generation in Nigeria.

Secondly, Income generated from VAT together with other sources of income was not utilized efficiently and effectively to provide infrastructural facilities and social amenities that will help the various economic sectors to function well. Nigeria being rated the 8th most corrupt country is an irrefutable testimony that corruption and embezzlement still affect total revenue generated to reflect on the economy. Neglect and Poor funding of the real sectors of the economy(especially, manufacturing and agricultural sectors), comatos power supply and mismanagement of public fund put the various sectors of the economy into mess. The sectoral analysis to VAT revenue in this chapter affirmed this.

The lag of Petroleum Profit Tax (PPT), Custom and Excise Duties (CED) and Value Added Tax (VAT) are insignificant in influencing current RGDP while the lag of RGDP is significant in influencing current RGDP at less than 5

percent. What the policy makers can deduced from this is that the revenue generated from VAT, CIT, CED and PPT last year cannot be used to predict the current year RGDP. Only the last year real GDP can be used to predict the current RGDP.

A value of (-0.260318) for the ECT coefficients suggests a very fast speed adjustment strategy of roughly 26.03% annually. This implies that it will take about 4years before convergence will be achieved. That is, whatsoever the short run disequilibrium, it will take about 4years for all the variables to converge (come together or be in equilibrium).

The probability of F-statistic, which is a measure of the overall significance of the regression, shows that the model is significant at less than 5 percent. Hence, it can be concluded that the result is significant overall. Thus, null hypothesis is accepted while the alternative hypothesis is rejected; this translates to mean that VAT has not contributed significantly to the Nigerian economic growth. However, its positive correlation indicates its potency to generate more income for economic growth in future if all loopholes mentioned in this research are plugged.

**Granger Casualty Test (Analysis and Interpretation of Result)**

Granger Casualty Test also revealed that the relationship between VAT and real GDP is unidirectional. That is real GDP granger causes VAT revenue (see the

appendix for the result of Granger Casualty Test). This means that only historical variation of the explanatory variable (real GDP) can be used to predict or explain future variation in VAT value. It follows therefore that the performance of real GDP (economic growth) influences to a large extent VAT revenue

There is a lag period of four years. Many factors are responsible for it. Firstly, the ratio of VAT Revenue to real GDP was never stable. It was only 2.6% at the inception of VAT in 1994, rose drastically to 7.4% in 1995 and fluctuated to its peak (15.1%) in 1999 during the pre-millennium. The new millennium witnessed a continuous increase in the ratio up to 25.7% in 2001, reducing slightly to 25.1% in 2002 and continued to increase to its apex (79.9%) in 2012. (See figure 4.1.4).

**FIGURE 4.1.4 The Ratio of VAT Revenue to Real GDP (1994-2012)**
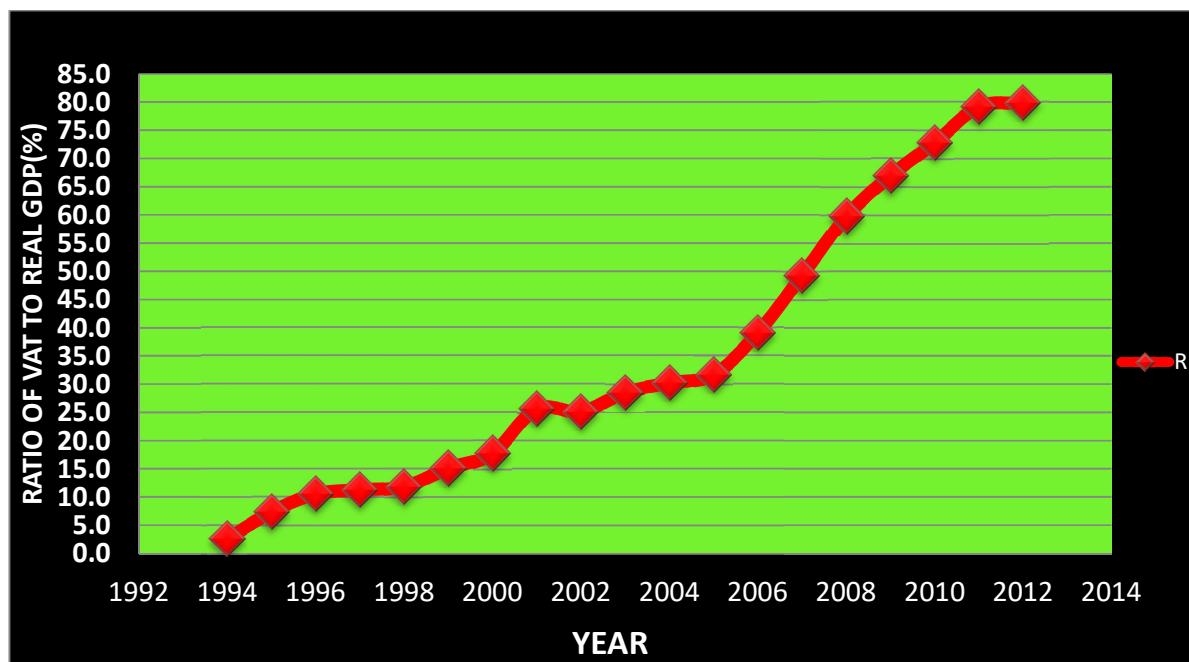
Secondly, the reason for the fluctuation of VAT Revenue/real GDP is that the growth rate of real GDP itself was never stable over the period under review (Figure 4.1.5). It grew from 0.2 percent in 1994 to 4.4% in 1996 and fell to 0.4% in 1999. The new millennium witnessed a drastic growth from 5.4% in 2000 and reached its Zenith (21.3%) in 2002 which could not be sustained as it fell significantly to 10.2% in 2003. There was a further downward fluctuation before it finally dropped to 6.7% in 2012. The claim here is that poor real GDP also contributed to poor revenue generation from VAT. This is because an increase in real GDP signifies increase in output. Greater output of goods and services would lead to more consumption of VATable goods and services. Since VAT is a consumption tax, the more people consume, the more they pay VAT and this will invariably lead to greater generation of VAT revenue and vice versa.

**FIGURE 4.1.5: The Real GDP Growth Rate in Absolute Term (1994-2012)**
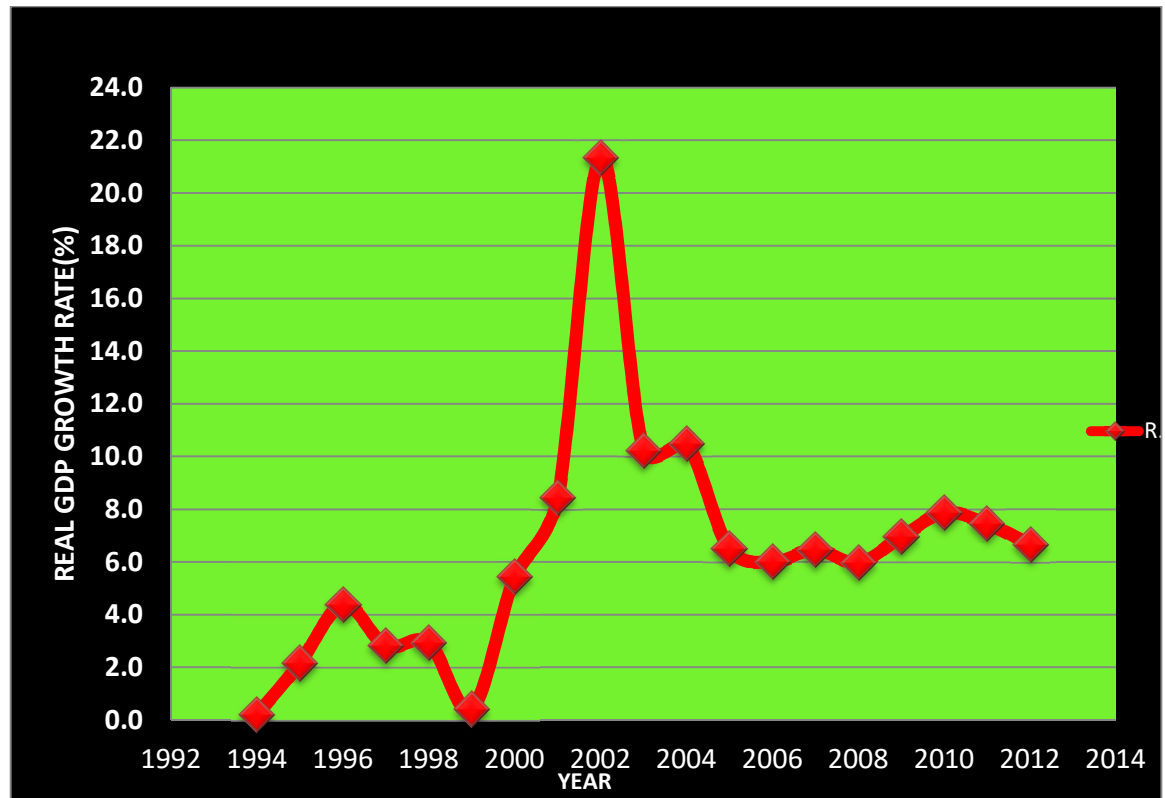


When absolute figures are used however, VAT Revenue is more stable than the real GDP (Figure 5 and 6). It must be pointed out that Total Federally Collected Revenue consists of oil revenue and non-oil revenue which are very essential for economic growth and development.
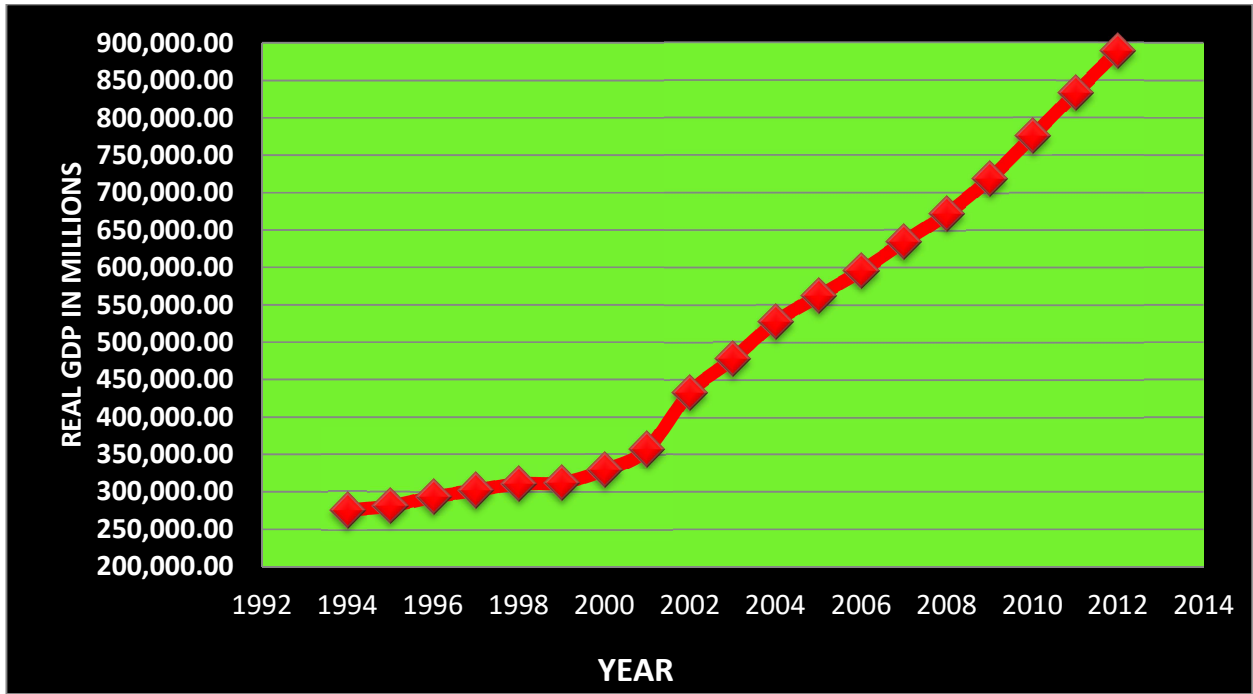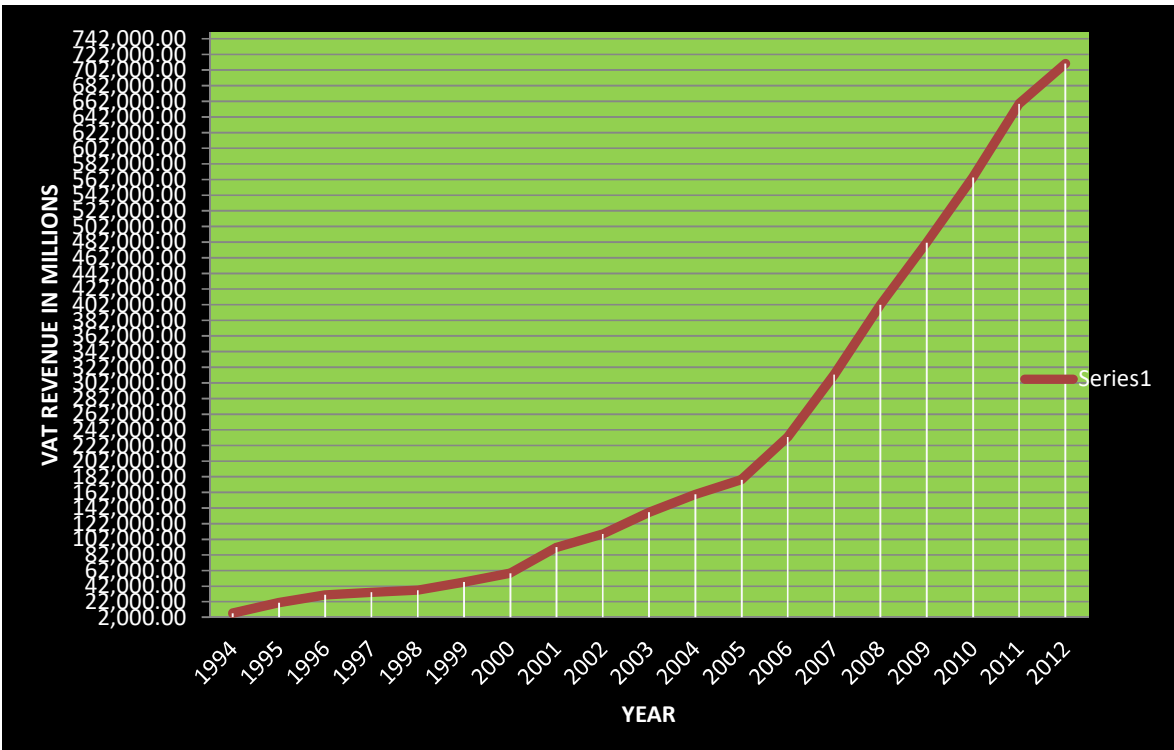
**FIGURE 4.1.6: Real GDP in Absolute Figures**



**FIGURE 5: VAT Revenue in Absolute Figures**

Since the results revealed that there is positive relationship between VAT revenue and Total Federally collected Revenue as well as VAT and Real GDP, Policy makers could deduce from these findings that in order to increase Real GDP (i.e. economic growth), they should put in place those policies that favour increase in VAT revenue. This is because an increase in VAT revenue signifies that more revenue is available for economic growth. Also, to increase VAT revenue, they should put in place those policies that favour increase in GDP, since real GDP granger causes VAT.

Gross Domestic Product (GDP) is the total money value of all final goods and services produced within the geographical boundaries of the country during a specified period of time, usually a year. Increase in GDP signifies expansion in a country's productive capacity which leads to greater output of goods and services. Greater output of goods and services would lead to more consumption of VATable goods and services. Since VAT is a consumption tax, the more people consume, the more they pay VAT and this will invariably lead to greater generation of VAT revenue. Therefore, to improve on economic growth of Nigeria, policy makers must favour the following important determinant factors as stated by Dwivedi (2008):

1. **Human resources and its quality:** The human resource base of a country is the most crucial factor in its economic growth. Human resource is comprised of the available labour force and its quality. Quality

of labour force depends on the level of its education, training, skills and its inventive and innovative abilities. Quantity and quality of manpower are both equally important. For instance, scarcity of skilled labour in the US is providing a serious constraint to its economic growth. And the excess of labour force in Nigeria and India has proved a burden on the economy and a barrier to rapid economic growth, particularly the uneducated, untrained and unskilled manpower. This is evidence that the labour force along with its skill is the source of all goods and services.

2. **Natural resources:** Natural resources of a country include the area of usable land, and resources on the land surface and underground. Land surface resources include sources of natural water (rivers and lakes), forests, landscape; e.t.c. Underground resources include oil and natural gas and other minerals. Favourable climatic and environmental conditions add to the natural resources endowments of a country. The countries with rich natural resource endowments have a much larger growth potential than those lacking natural resources. However, natural resources are passive factors of growth. The exploitation and use of natural resources depend on the quality of manpower, availability of capital and technology. The countries endowed with rich natural resources and a highly skilled and motivated manpower can perform miracles in economic growth.

3. **Capital formation:** Creating or acquiring man-made means of production is known as capital formation or capital accumulation. Capital includes machinery, plant and building; means of transport and communication, electricity plants, and social overheads like roads, railways, schools, colleges, hospitals etc. Capital formation enhances the availability of capital per worker. A high capital/labour ratio enhances the productivity of labour i.e. a larger quantity of goods and services are produced per unit of time. This means a high growth rate.

4. **Technological Development:** Technology refers to scientific methods and techniques of production. In effect, technology means the nature and kinds of machinery and technical equipment used with a given amount of labour. Capital-labour ratio is a broad measure of technology. Technological development means improving the technique of production through research and innovations. It results in larger output from a given number of men, materials and time. Invention of steam engine and the railway, the telephone and wireless, electricity, airplanes and computers are a few examples of technological developments over the past two centuries.

5. **Social and political factors:** Social and political systems, organizations, institutions, social values, e.t.c, also play an important role in the development process of an economy. Social factors like customs, traditions, beliefs, institutions, social (communal) harmony, and well-

being, determine to a considerable extent, the pace of economic growth. A society of illiterate and ignorant people living with superstitions and unscientific beliefs resists modern ways of life and rational organisations of society. Such a society finds it very difficult to achieve a high growth rate. The form of government and its economic roles and policies matter to a great extent in determining the level and rate of the economic growth of a country.

The policy makers should also put in mind that the lag period of four years means that any action taken on any of the variables (VAT Revenue, CIT revenue, CED revenue, PPT revenue and the real GDP) will take four years to become effective.

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1. Summary

An attempt was made in analysing the impact of VAT on national revenue and Economic growth. This research empirically investigated the contribution of Value Added Tax (VAT) to the real GDP and Federally Collected Revenue (FCR) from the time of its inception to 2012. This was done against the background that it was introduced by the Federal Government of Nigeria in 1993 to replace Sales Tax. The aim was to increase the revenue base of government and make funds available for developmental purposes that will accelerate economic growth. Sectoral Contribution to VAT revenue between 2005 and 2012 was also examined to showcase the performance of VAT in each sector in the new millennium, problems associated with each sector of the economy and how they reflected on economic growth. Time series data on the real GDP, Federally Collected Revenue, VAT Revenue, Petroleum Profit Tax (PPT) Revenue, Companies Income Tax (CIT) revenue and revenue from Custom and Excise Duties (CED) from 1994 to 2012 were sourced from CBN Statistical Bulletin, Annual Reports and Accounts of the Central Bank of Nigeria (CBN) and Collection Profile of the Federal Inland Revenue Service (FIRS). Time series data on Federally Collected Revenue, VAT Revenue, PPT Revenue, CIT Revenue and revenue from Custom and Excise Duties were

analysed using Error Correction Model to find out their respective contributions to Federally Collected Revenue which is indispensable for economic growth of Nigeria. Also, time series data on the real GDP, VAT Revenue, PPT Revenue, CIT Revenue and revenue from Custom and Excise Duties were analysed using Error Correction Model (ECM) and descriptive statistical method to find out its impact on economic growth.

From the sectoral analysis of VAT revenue, findings showed that government sector had the highest overall contribution of 24.9% to VAT revenue for the period under review. However it is not the major or real sector of the economy so its impact on economic growth is at minimum. It performance was hindered majorly by corruption and embezzlement. Nigeria being rated 8th most corrupt country in the world is an irrefutable testimony. Oil and mining sector was the only leading productive sector of the economy that had the overall contribution of 24.74% to VAT revenue over the period, indicating government inability to diversify the economy but relied majorly on this sector. Being a mono-economy and Africa's highest producer of crude oil, the country still grapples with dysfunctional refinery, poverty and erratic power supply among other challenges, putting the Nigerian economy in double tragedy. The service sector taking the third position with 21.63% and having the highest contribution (27.32%) among the various sectors in year 2009, despite the prevailing economic meltdown during the year is indicating its potency to contribute more

if government could provide necessary facilities. Manufacturing sector which is one of the major and inevitable sectors as far as economic growth is concerned; contributing 16.7% to VAT revenue is indicating its neglect over the years due to huge revenue from oil. The sector was bedeviled with poor infrastructural facilities, inadequate social amenities, lack of access to fund and the nation's comatose power supply sounded the death knell for the sector. Between years 2000 and 2011, 1,620 companies closed down due to the harsh operating environment while some relocated to other countries, complicating the problems of unemployment in which 54% of Nigerian youth were unemployed as at year 2012. This also accounts for high crime rate in Nigeria (e.g. suicide bombing by Boko Haram group). Another factor that also contributed to poor VAT revenue from this sector is that of the huge informal economy estimated at close to 50 percent of GDP by experts. Some companies are not registered and so to collect VAT from such companies is very difficult. Those that registered do not remit adequately and would not disclose most of their VATable activities. All these pose serious setback to the sector to contribute significantly.

Contribution to VAT revenue by the financial sector has not been impressive as it fluctuated between 3.82% and 6.89% over the period. This could be as a result of banks near death experience from a banking crisis that led to costly bailouts, mergers and the formation of a state bad bank, the Asset Management Corporation of Nigeria (AMCON). Also the contribution of commercial and

trading sector and building and construction sector could not even go beyond 4.31% and 4.71% respectively over the period. Agric and plantation sector being the least contributor to VAT revenue depicted the fact that the sector had been neglected for so many years especially mechanized farming because of huge revenue from oil sector. Its annual contribution to VAT revenue was so ridiculous (not up to 0.3%)

Findings from the first model showed that both Value Added Tax (VAT) and Petroleum Profit Tax (PPT) contribute positively to Federally Collected Revenue. Hence, as VAT and PPT revenue increase, the Federally Collected Revenue increases. On the other hand, Companies Income Tax (CIT) and Custom and Excise Duties (CED) have negative correlation. This implies that increase in CIT and CED will reduce Federally Collected Revenue. Only the contribution of CED was found insignificant to Federally Collected revenue. The negative coefficient of CIT is hinting at those factors that have bedeviled Nigerian companies and manufacturing sector over the years as identified under sectoral analysis of VAT revenue above. Similarly, the negative coefficient of Custom and Excise Duties is indicating factors delimitating its performance such as our porous borders, corruption and embezzlement of revenue generated which has been the normal practice in Nigeria. This is also what account for poor VAT revenue generated from imported goods and services despite the fact that the country rely heavily on foreign goods and services. From the result, it is

evident that VAT is the second most contributing source to Federally Collected revenue out of the three major taxes in Nigeria. Its positive correlation indicates its potency to contribute more in future if all loopholes are plugged.

With the introduction of Value Added Tax, there is increase in revenue base of federal government of Nigeria, because the problem of tax avoidance and tax evasion are reduced. (Naiyeju, 1996).

Also VAT has shifted the burden of tax toward consumption rather than savings hence encourages investment. With the increment in investment, this leads to increase in the level of national income.

VAT in addition to the above contributes to increase in the standard of living of the citizens. This is because certain goods like drugs, books, food stuff and other items necessary for existence are exempted from VAT and because of its profitability government uses its proceeds together with other types of tax to provide public goods like roads, bridges, schools and hospitals, which will be of equal benefit to both the rich and the poor. It has also generated employment for many Nigerians. This is because the introduction of VAT encourages savings and consequently investment. With increase in the level of investment, employment level would be increased. Its introduction improved Nigeria's incessant adverse balance of payment. This is because with the introduction of VAT, export production was boosted and this has had the effect of ameliorating the deficit balance of payment. Other benefits of VAT include accelerating

economic growth, moderating the volume of currency in circulation, speedy disbursement of tax revenue to all the governments in the federation, reduction in financial dependence on external loans, protecting infant industries, cost effectiveness and harmonizing the tax system and reduction of inert taxes.

Despite the increased level of revenue from VAT, the second model of the study revealed that its impact on economic growth and that of other variables have not been significant as there are some problems inhibiting their potency. Although, VAT and CED have positive correlation with real GDP while reverse is the case of PPT and CIT on real GDP. VAT average ratio to RGDP stood at 45%. Both economic variables (VAT and real GDP) fluctuated greatly over the period though VAT Revenue was more stable. Unidirectional relationship exists between the real GDP and VAT Revenue, a lag period of four years exists indicating that any action taken on any of the variables will take 4 years to become effective.

From the modern view of economic growth, two major reasons for VAT insignificance were identified. Firstly, the revenue generated yearly is too small to reflect on economic growth due to administrative problem of VAT and the huge informal economy estimated at close to 50 per cent of GDP by expert (the Tribune, 2013).Some companies are not registered and so to collect VAT from such companies is very difficult. Those that registered do not remit adequately and would not disclosed most of their VATable activities. These pose serious

challenges to VAT revenue generation in Nigeria. Its ratio to Federally Collected Revenue stood at 3.68%

Secondly, Income generated from VAT together with other sources of income was not utilized efficiently and effectively to provide infrastructural facilities and social amenities that will help the various economic sectors to function well. Nigeria being rated the 8th most corrupt country is an irrefutable testimony that corruption and embezzlement still affect total revenue generated to reflect on the economy. Neglect and Poor funding of the real sectors of the economy(especially, manufacturing and agricultural sectors), comatos power supply and mismanagement of public fund put the various sectors of the economy into mess. The sectoral analysis to VAT revenue in this research affirmed this.

Generally, there is a problem with the way VATable organizations are treating their liabilities, especially the VAT they pay on their inputs. Also there is a problem with the way government is managing the expenditure of the VAT revenues. Nigerian companies treat their VAT expenses as input costs and pass these on to the consumer. The government also injects the VAT revenue back into the system as consumption expenditures. This combination results in serious negative impacts on the economy. It complicates the problem of inflation; while consumers are forced to reduce their consumption level with the adverse effects on their standard of living; there is adverse effects on production

and consequently complicating the problem of unemployment. Its burden is seriously on low income group since they spend much of their income on consumption rather than savings.

Since this combination results in a serious negative impact on the economy, it is necessary to consider strategies for ensuring both that companies treat VAT properly and that government directs its expenditure towards sectors that are most likely to lessen the adverse effects of VAT on consumer welfare, production, employment and income.

To cap it, poor VAT administration was also identified by Olaoye (2009) as one of the problems confronting VAT in Nigeria. The present composition and functions of the tax authorities weaken the effective tax administration in the country. Tax authorities perform only the technical functions and not the needed management functions. The non-performance of management functions, given the increasing complexity of tax administration largely explains the ineffectiveness of tax administration. Basically, the performance of only technical functions leads to false declaration, refusal to complete tax return forms, fraud, inflation of deductible expenses, smuggling, default, illegal bunkering, etc. The dishonest practices by some tax officials also pose a serious threat to the effective tax administration in Nigeria especially when such practices are capable of having demoralizing effects on honest tax payers. It has to be acknowledged however that the FIRS is currently being reorganized and it

is hoped that the reorganization would take care of this administrative short-coming (Adereti, Adesina&Sanni (2011)).

## 5.2. Conclusion

The study evaluated the impact of VAT on national revenue and economic growth. It also indicated most of the economic problems that debar economic growth and development in Nigeria.

The study also revealed that VAT has a high potential of becoming a major contributor to the pool of federal purse. With the existing procedure for the administration and collection of VAT, VAT has achieved a great deal of success right from the time of its implementation. It has been embraced by the populace and now forms an important source of Government revenue. On the basis of success achieved so far by VAT, the future of VAT in Nigeria is bright.

However, failure to address identified problems and administrative loopholes and the inadvertent adverse effects of VAT will ultimately decimate the overall benefits derivable from the tax system to the economy, and will indeed threaten its sustainability especially if an increase in the tax rate is contemplated. Probably it is the low initial tax rate that has obscured the adverse effects so far; without remedial measures, at a higher VAT rate they will be much more visible and much more damaging.

## 5.3. Recommendations

As already indicated at the beginning of the chapter, it is pertinent at this point to reflect on the various findings in a bid to offering proper useful suggestions or recommendations which would help in improving the implementation procedure of VAT policy in future.

In the light of the problems referred to earlier, to the problem addressed, the following suggestions are recommended:

- **Administrative Loopholes:** All identified administrative loopholes should be plugged for VAT Revenue to contribute more significantly to economic growth of the country. This should be done on the realization that any action taken on either VAT Revenue or the real GDP will take four years to become effective.

- **Systematic Approach:** Nigeria charges the lowest percentage of VAT in West Africa. Any increase in this rate should only be made to compensate relief and reduction of rates granted on personal income tax (PIT) or companies' tax. Some VATable organizations tend to exploit consumers by charging VAT to non- VATable items. A way must be found to stop this practice.

- **Tax Education:** There must be intensive tax education, particularly on VAT. In so doing, people will know the importance of tax on the economy and will broaden their knowledge on any new tax policy. The researcher believes that with tax education people will see reasons why

this or that should be done. Also, public enlightenment programmes and seminars should be organized as to keep the public aware of VAT and its objectives.

- **Publication of VAT Result/Performance:** the result or performance of VAT should be published at regular intervals and compared with the estimates for the period.

- **Quarterly Press Briefing:** For VAT to be more popular, the administrators of VAT should brief the public frequently on contentious matters affecting the tax. To further buttress this suggestion, the Government should make clarifications as regards the following:

  i. **Treatment of cost of fixed assets:** There should be an awareness of the fact that fixed assets costs are business cost and should not be included in the cost of the assets on which capital allowance could be claimed for income tax purpose.

  ii. **Branch registration:** The public should be made to realize the reasons for separate branch registration and that the returns collected where the main company makes VAT remittance and where separate branches do so boils down to the same thing, as such, there is no room for double taxation.

  iii. **Registration for VAT**: There should be no misinterpretation of the VATA in relation to the registration for VAT by taxable persons. It is to be known that the interpretation of 5.8 of VATD 1993 is that

any company that commences business before the enactment of the decree must register for VAT within six months after the decree become enforced.

- **What the Masses Stand to Gain:** The government should have it in mind that it is the masses that pay tax, so it is their right to know that they stand to gain by paying the tax. Also funds generated from VAT should be employed to provide infrastructural facilities to improve the welfare of the people.

- **The Decree/Act:** There should be periodic review of the enabling Decree/Act to incorporate things that were previously left out but have now come to light. The legislative deficiencies should be addressed urgently, stating clearly what the position of the tax law is, as regards the problems identified.

- **Improved Information System:** A viable, efficient and reliable data base should be created for VAT.

- **Penalties for Offences:** Contravention of any provision of the VAT Decree 102 of 1993 must be met with stiff penalties according to the dictates of the Decree as amended. Any erring tax officer found guilty of infringing the VAT laws should be given appropriate punishment.

- **Development of Manpower:** Competent and experienced personnel should be recruited and existing staff trained and their skills developed.

- **Public Confidence in VAT:** In order to build public confidence and to attain one of the goals and objectives of VAT, the personal income TAX (PIT) should indeed be reduced to the bearest minimum by the Government (and not phased out as posited by some experts).

- Constant Monitoring of the registered persons to ensure that they render returns as at when due.

- More necessary goods and services should be exempted from VAT to minimize the adverse effect on final consumers.

- Our porous economic border should be well monitored to ensure that all imported goods are VATed (i.e. subjected to value added tax).

- Close liason with other countries that have been successful in the introduction and implementation of VAT.

- Consultancy service and advice section should be set up within the structure to assist the registered entity and the general public.

- Policy makers should deduce from these findings that in order to increase Real GDP (i.e. economic growth and development), they should put in place those policies that favour increase in VAT revenue taming its effects on other macro-economic objectives of every modern government such as full employment, price stability, external balance maintenance, equitable distribution of income and wealth and expansion of production capacity. This is because an increase in VAT revenue signifies that more revenue is available for economic growth and development.

- Promotion of Economic Growth Determinant Factors: To increase VAT revenue, Policy makers should put in place those policies that favour

increase in GDP. Increase in GDP signifies expansion in a country's productive capacity which leads to greater output of goods and services. Greater output of goods and services would lead to more consumption of VATable goods and services. Since VAT is a consumption tax, the more people consume, the more they pay VAT and this will invariably lead to greater generation of VAT revenue. Therefore, to improve on economic growth of Nigeria, policy makers must favour the following important determinant factors: improvement on human resources and its quality, Natural resources, Capital formation, Technological Development, Social and political factors.

## 5.4. Problems for Further Research

The researcher feels that more research can still be conducted in the area of implementation and sharing. The researcher believes that this will help in improving the economy of the country.

Also further research can still be carried out in the area of VAT engineering (i.e. VAT legislation) which in turn determines VAT administration and recommendation provided in this study should be critically examined and improved upon. Consequently, any loopholes identified therefore should be corrected appropriately.

# REFERENCES

Abdulrazaq M.T. (2002). *Nigerian Income Tax Law and procedure.* Maples and Temples pp 7 &13.

Adam, Smith (1993). *The Wealth of Nation's* Vol. 28, 15th edition Encyclopedia.     Britannica University of Chicago pp397-421

Adegbite, F.F and Fakile, A.S (2011). Company Income Tax and Nigeria Economic Development, *European Journal of Social Sciences,* 22 (2): 309-32.

Adejuwon, J.A. (1998).  *Analysis of Taxation, Principle for Nigeria Students,* Lagos: J.A.  Adejuwon and Co.

Adeleke, A. (1995). "Value Added Tax in Nigeria". 3ʳᵈ edition, *The Journal of the     Business and Social Science,* University of Ilorin. pp12.

Ademola, A. (1999). *Economics: A Simplified Approach*, (2nd ed.). Volume 2, Lagos: Nigeria. African International Publishing Limited.

Adereti, S.A., Adesina, J.A. and Sanni, M.R.(2011). "Value Added Tax and Economic Growth of Nigeria" *European Journal of Humanities and Social Sciences Vol. 10, No.1 (Special Issue) ,http://www.journalsbank.com/ejhss _10_4.pdf* .

Ajakaiye D.O. (2000). *"Macroeconomic Effect of VAT in Nigeria: A Computable General Equilibrium Analysis"*: African Economic Research Consortium  (AERC), February.

Alade, S.O. (1993): "Value-Added Tax in Nigeria" Vol. 18, No2, *CBN Bullion.* April/June pp 33-40.

Alan, A.tait (2003): *"VAT: International Practice and problems"* International Monetary Fund (IMF).

Ariwodola J. A. (2001). *Personal Taxation in Nigeria.*  4ᵗʰ edition. J.A.A. Nig. Ltd.

Ariyo A. (1997). *"Productivity of the Nigerian Tax System: 1970-1990"*, AERC Research Paper 67. Nairobi: African Economic Research Consortium.

Babington, A. (1995): "Value Added Tax in Nigeria, Problems Sources and Prospect" *second series of Seminar Lecture.* Lagos.

Baiyewu, F.A. (2000). *Nigerian Taxation: A practical Approach,* Nigerian, Bhoti: International Publishing Ltd. p140.

Bhatia, H.I. (1991). *Public Finance,* Delhi: Vikas publishing House.

Bickley, J.M. (1996). *The value Added Tax: Concepts, Issues and Experience,* Lagos: Libriservice Ltd.

Bogetic, Z and Hassan, F (1993). *Determinants of Value Added Tax Revenue: A Cross Sectional Analysis.* Washington D.C: Working Paper Series no 1203, World Bank,

Broadway, R. (1979). *Public Sector Economics:* Massachusetts Cambridge.

Budget (1996). "Budget of Economic Growth and development" Approved budget 96 fiscal year *Federal Government Press*.

Budget (1997). *'Budget of economic Growth and Development. Approved Budget 97 Fiscal year'* Federal Government Press.

Buhari, A. (1993). *Straight to the point ICAN/Polytechnic Public finance.* Ilorin:, University of Ilorin press.

Carlo, C and Peter, D (1999). *"Taming inflation in the Transition Economics"* Finance and Development International Monetary fund (IMF) June Available at *www.imf..org/Fandd. pp9.*

CBN (Central Bank of Nigeria) (2005). *CBN Statistical Bulletin*, Volume 16: December.

CBN (Central Bank of Nigeria) (2010): *CBN 2010 Annual Report*, pp91-112

Chelliah, R.J, Bass; H.J and Kelly, M.R (1975). *Tax Ratios and Tax Effort in Developing Countries,* 1967-1971 IMF Staff Papers, 22 (1):187-205.

Crowther Jonathan (1998). *Oxford Advance Learners Dictionary of current English,* special edition, England University Press. Pp 606.

Damian Nwosu (2010). Tax Structure and Economic Growth in Nigeria, *http://www.grin.com/en/e-book/183035/tax-* structure-and-economic-growth-in-nigeria. Munich: GRIN Publishing GmbH,

Daramola S.O. (1992) *Research Method and Statistical Analysis in Education.* Ado-Ekiti: Petao Educational Publishers,

Desai, M.A; Foley, C.F and Hines, J.R. (2004). Foreign Direct Investment in a World of Multiple Tax, *Journal of Public Economics,* 88: 2727-2744.

Duff, C.J. (1943). "In References Tax on foreign legations and High Commissioners Residences" SCR 208 (CAN).

Duff, J. (1931). "In Lawson V interior Tree fruit and vegetable committee of Direction", SCR 357 (CAN)

Dwivedi D.N (2008). *Managerial Economics,* 7th edition, New Delhi: Vikas Publishing House PVT Ltd.

Eckstein, O. (1987). *Public Finance.* New Delhi. Prentice Hall India.

Eckstein, O. (1993). *Public Finance.* New Delhi. Prentice Hall India.

Emmanuel Nnadozie (2011): "Collapse of Public and Private Enterprises in South-East Nigeria : Critical Issues and Way Forward"
*http://southeasteconomicsummitgroup.org/docs/collapse-of-public-and-private-enterprises-in-south-east-nigeria-critical-issues-and-way-forward-by-professor-emmanuel-nnadozie.pdf*


Federal Inland revenue Service (1994): "Value Added Tax decree number 102 of 1993" Produced under the authority of the *Federal Inland Revenue Service Abuja.*

Feldstein, M and Krugman, P (1990). Internal Effects of Value Added Taxation, assessed from www.nber.org/papers/w3163 on 4th July, 2011.

Golit, P.D (2008). *Appraising Nigeria's Tax Efforts: A Comparative Econometric Analysis, Economic and Financial Review*, Central Bank of Nigeria, 46(1): 69-103.

Igbwebuchi, O. (1996). *"Value Added tax in Nigerian", Daily Times*, 20th April.

Iheanyi N. (2007). "Budget 2008: 10 percent non-oil Sector Growth to Drive Revenue"; June, *www.businessdayonline.com.* Business Day Media Ltd.

Jens Arnold (2008). "Do tax Structure Affect Aggregate Economic Growth? Empirical Evidence from a Panel of OECD Countries" *Economic*

*Department Working Papers No. 643, www.oecd.org/eco/working_papers*

Lewis, S. (1984). *Taxation for Development: Principle and Application:* New York: Oxford.

Magner Richard (1983)**.** *Public Finance: Revenue and Expenditure in Demographic society.* Borton: Little Brown.

Mckinnon, R. in Naiyeju (1996). *Tax Neutrality and Export Promotion in Reading in Taxation,* 3$^{rd}$ edition Bird and Oldman Baltrimore John Hopkins University press.

Montgomery, J. (1976). "In societe central D'Hypotheques V cite de Quebee(1961) All ER 697; Daymond V South West Water Authority, AC 609 All ER 39".

Muhammed, A. (1995). "Value Added Tax in Nigeria (VAT)". 4$^{th}$ edition. The financer, *Journal of the finance students Association* Unilorin pp35.

Muhammed, A. (1995). "Value Added Tax in Nigeria (VAT)". 4$^{th}$edition. *The financier the pearl of student Journal Business and social science University of Ilorin. pp36 of the finance students Association* Unilorin pp35.

Musa, W.E (2009). Tax Planning and Economic Development, *International Research Journal on Economics, 5 (4): 134-141.*

Naiyeju J.K. (1996). *Value Added Tax: The Facts of a positive Tax in Nigeria,* Lagos: KUPAG Public Affairs,

National Accounting Standard Board (NASB) (2003)."Statement of Accounting standard" SAS 19 Vol. 2 *Accountancy tutors Ltd.*

Ochei, O.O (2010): Nigerian Tax Reform: Challenges & Prospects, assessed from *http://www.org/others/nigeria-tax reforms. PDF on July 4, 2011.*

Odusola A. (2006). *"Tax Policy Reforms in Nigeria"* Paper Presented to WIDER, January.

Ogundele, E. A. (1996). *Value Added Tax (VAT.) Theory and Practice, 1$^{st}$* edition. Lagos: Libriservice Ltd

Okele, (2003). "VAT EX. CITN boss Canvasses Introduction of Indirect taxes" *The Guardian Newspaper* Wednesday October 29th.

Ola, C. (1981). *Income tax law for corporate and incorporate Bodies in Nigeria.* London: Heinmann Educational Books Inc.

Ola, C.S. (1999). *Nigerian Income Tax and Practice.* Ibadan: Heinemann Education Books Nigeria PLC.

Ola, O. (1993). *"The concept of Tax mitigation"* *The Nigerian Accountants* April/June. pp 10.

Olaoye C.O (2009). "A Review of Value Added Tax Administration in Nigeria" *https://www.academia.edu/1104753/A_Review_of_Value_Added_Tax_VA T_Administration_in_Nigeria*

Olaoye, C.O. (2004). An assessment of administration of value added tax as a source of revenue generation in Nigeria *(Unpublished master's thesis).* University of Ilorin, Ilorin, Kwara State, Nigeria.

Oldman Olivers; Woods La Verne (1996). "Would shifting Emphasis to a VAT system Relieve Tax Compliance problem.

Osakwe, J. (1999). "Recent Reform in Personal income taxation in Nigerian" *Vol. 37 No 3 Economic and financial Review central Bank of Nigeria* September pp 27.

Oserogho and Associates (2008). Legal Alert March 2008 VAT & Foreign Non Resident Companies in Nigeria assessed from *http://www.oseroghoasso-ciates. com/pdf/200803.pdf* on July 2, 2011.

Owolabi S.A and Okwu, A. T (2011).Empirical Evaluation of Contribution of Value GDP from *World Bank national accounts data, and OECD National Accounts data files.*

Oyebanji J.O. (2006). *Principle and Practice of Taxation in Nigeria.* Ibadan: Fronthine Publishers Adesola.

Oyeniyi T.O. (2002). *Statistical Technique in Economics and Business,* Cedar Publications

Patrick Utomi (2013) "Advancing Beyond a Backwater Mono Economy", *Nigeria Spur Magazine* Vol. *2, No. 7*, December, pp 16

Pearce David (1985). *The Dictionary of modern economic.* London: Macmillan.

Prest, A. and Barr A. (1979). *Public Finance in Theory and Practice.* London Widenfield and Nicolson.

Richard A. Musgrave (1959). *The Theory of Public Finance www.jstor.org/stable/ 2976491*

Seymour and Mabro (1994). *"Energy Taxation and Economic Growth"* Opex fund pamphlet series Vienna.

Suleyman, N. (2003). "Nigeria Records N1.3 Trillion Deficit Budget in 26 years" Vol. 9 Abuja. *Business world Investment watch* This day news paper Sept. 22 pp 27

The Tribune (2013). As experts laud FIRS for N5trn tax revenue collection, assessed from *http://www.tribune.com.ng/news2013/index.php/en/business-package/2012-10-29-11-36-27/carcare/item/5279-as-experts-laud-firs-for-n5trn-tax-revenue-collection.html*

Yakubu, O. (2003). "Nigeria Records N1.3 Trillion Deficit Budget in 26 years" Vol. 9 Abuja Business world investment watch *Thisday Newspaper*. Sept. 22 pp 27

# APPENDIX A

## Data Summary in Tabular Form

| YEAR | RATIO OF VAT TO REAL GDP (%) | VAT REVENUE (₦'M) | REAL GDP (₦'M) | FEDERALLY COLLECTED REVENUE (₦'M) | RATIO OF VAT TO FEDERALLY COLLECTED REVENUE (%) | REAL GDP GROWTH RATE (%) |
|---|---|---|---|---|---|---|
| 1994 | 2.6 | 7,260.80 | 275,450.56 | 201,911 | 3.6 | 0.2 |
| 1995 | 7.4 | 20,761.00 | 281,407.40 | 459,981 | 4.5 | 2.2 |
| 1996 | 10.6 | 31,000.00 | 293,745.38 | 523,597 | 5.9 | 4.4 |
| 1997 | 11.3 | 34,000.00 | 302,022.48 | 582,811 | 5.8 | 2.8 |
| 1998 | 11.9 | 36,900.00 | 310,890.05 | 463,609 | 8.0 | 2.9 |
| 1999 | 15.1 | 47,100.00 | 312,183.48 | 949,188 | 5.0 | 0.4 |
| 2000 | 17.8 | 58,500.00 | 329,178.74 | 1,906,160 | 3.1 | 5.4 |
| 2001 | 25.7 | 91,800.00 | 356,994.26 | 2,231,600 | 4.1 | 8.4 |
| 2002 | 25.1 | 108,600.00 | 433,203.51 | 1,731,838 | 6.3 | 21.3 |
| 2003 | 28.6 | 136,400.00 | 477,532.98 | 2,575,096 | 5.3 | 10.2 |
| 2004 | 30.2 | 159,500.00 | 527,576.04 | 3,920,500 | 4.1 | 10.5 |
| 2005 | 31.7 | 178,100.00 | 561,931.39 | 5,547,500 | 3.2 | 6.5 |
| 2006 | 39.1 | 232,700.00 | 595,821.61 | 59,651,002 | 0.4 | 6.0 |
| 2007 | 49.3 | 312,600.00 | 634,251.14 | 5,715,600 | 5.5 | 6.4 |
| 2008 | 59.8 | 401,700.00 | 672,202.55 | 7,866,590 | 5.1 | 6.0 |
| 2009 | 67.0 | 481,400.00 | 718,977.33 | 4,844,692 | 9.9 | 7.0 |
| 2010 | 72.8 | 564,890.00 | 775,525.70 | 7,303,672 | 7.7 | 7.9 |
| 2011 | 79.1 | 659,160.00 | 833400.00 | 4,628,000 | 14.24 | 7.5 |
| 2012 | 79.9 | 710,560.00 | 889000.00 | 5,007,000 | 14.19 | 6.7 |

VAT CONTRIBUTION TO FCR AVERAGED 3.68% WHILE VAT

CONTRIBUTION TO REAL GDP AVERAGED 45%

## Data Impute for Error Correction Model (Model 1)

| YEAR | TFCR (₦'M) | VAT (₦'M) | PPT (₦'M) | CIT (₦'M) | CED (₦'M) |
|------|------------|-----------|-----------|-----------|-----------|
| 1994 | 201,910.80 | 7,260.80 | 42,802.70 | 12,274.00 | 18,294.60 |
| 1995 | 459,981.30 | 20,761.00 | 42,857.90 | 21,878.30 | 37,364.00 |
| 1996 | 523,597.00 | 31,000.00 | 76,667.00 | 22,000.00 | 55,000.00 |
| 1997 | 582,811.10 | 34,000.00 | 68,574.10 | 26,000.00 | 63,000.00 |
| 1998 | 463,608.80 | 36,900.00 | 100,700.10 | 33,300.00 | 57,700.00 |
| 1999 | 949,187.90 | 47,100.00 | 51,400.00 | 46,200.00 | 87,900.00 |
| 2000 | 1,906,159.70 | 58,500.00 | 947,200.00 | 51,100.00 | 101,500.00 |
| 2001 | 2,231,600.00 | 91,800.00 | 934,300.00 | 68,700.00 | 170,600.00 |
| 2002 | 1,731,837.50 | 108,600.00 | 496,300.00 | 89,100.00 | 181,400.00 |
| 2003 | 2,575,095.90 | 136,400.00 | 998,400.00 | 144,800.00 | 195,500.00 |
| 2004 | 3,920,500.00 | 159,500.00 | 1,498,400.00 | 130,100.00 | 217,200.00 |
| 2005 | 5,547,500.00 | 178,100.00 | 1,995,700.00 | 162,200.00 | 232,800.00 |
| 2006 | 59,651,001.90 | 232,700.00 | 1,353,000.00 | 246,000.00 | 177,700.00 |
| 2007 | 5,715,600.00 | 312,600.00 | 1,132,000.00 | 323,000.00 | 241,400.00 |
| 2008 | 7,866,590.10 | 401,700.00 | 2,060,880.00 | 420,580.00 | 281,300.00 |
| 2009 | 4,844,592.34 | 481,400.00 | 939,410.00 | 600,590.00 | 297,500.00 |
| 2010 | 7,303,671.55 | 564,898.00 | 1,480,360.00 | 657,300.00 | 309,200.00 |
| 2011 | 4,628,000.00 | 659,600.00 | 3,070,000.00 | 715,400.00 | 438,628.40 |
| 2012 | 5,007,000.00 | 710,160.00 | 3,201,000.00 | 847,500.00 | 474,900.00 |

Where

FCR=Federally Collected Revenue

VAT= Value Added Tax

PPT= Petroleum Profit Tax

CIT= Company Income Tax

CED= Custom and Excise Duties

# APPENDIX C

## Data Impute for Error Correction Model (Model 2)

| YEAR | REALGDP(₦'M) | VAT(₦'M) | PPT (₦'M) | CIT(₦'M) | CED(₦'M) |
|------|------|------|------|------|------|
| 1994 | 275,450.56 | 7,260.80 | 42,802.70 | 12,274.00 | 18,294.60 |
| 1995 | 281,407.40 | 20,761.00 | 42,857.90 | 21,878.30 | 37,364.00 |
| 1996 | 293,745.38 | 31,000.00 | 76,667.00 | 22,000.00 | 55,000.00 |
| 1997 | 302,022.48 | 34,000.00 | 68,574.10 | 26,000.00 | 63,000.00 |
| 1998 | 310,890.05 | 36,900.00 | 100,700.10 | 33,300.00 | 57,700.00 |
| 1999 | 312,183.48 | 47,100.00 | 51,400.00 | 46,200.00 | 87,900.00 |
| 2000 | 329,178.74 | 58,500.00 | 947,200.00 | 51,100.00 | 101,500.00 |
| 2001 | 356,994.26 | 91,800.00 | 934,300.00 | 68,700.00 | 170,600.00 |
| 2002 | 433,203.51 | 108,600.00 | 496,300.00 | 89,100.00 | 181,400.00 |
| 2003 | 477,532.98 | 136,400.00 | 998,400.00 | 144,800.00 | 195,500.00 |
| 2004 | 527,576.04 | 159,500.00 | 1,498,400.00 | 130,100.00 | 217,200.00 |
| 2005 | 561,931.39 | 178,100.00 | 1,995,700.00 | 162,200.00 | 232,800.00 |
| 2006 | 595,821.61 | 232,700.00 | 1,353,000.00 | 246,000.00 | 177,700.00 |
| 2007 | 634,251.14 | 312,600.00 | 1,132,000.00 | 323,000.00 | 241,400.00 |
| 2008 | 672,202.55 | 401,700.00 | 2,060,880.00 | 420,580.00 | 281,300.00 |
| 2009 | 718,977.33 | 481,400.00 | 939,410.00 | 600,590.00 | 297,500.00 |
| 2010 | 775,525.70 | 564,898.00 | 1,480,360.00 | 657,300.00 | 309,200.00 |
| 2011 | 833,400.00 | 659,600.00 | 3,070,000.00 | 715,400.00 | 438,628.40 |
| 2012 | 889,000.00 | 710,160.00 | 3,201,000.00 | 847,500.00 | 474,900.00 |

MODEL 1

Pairwise Granger Causality Tests
Date: 04/21/14   Time: 11:59
Sample: 1994 2012
Lags: 4

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|---|---|---|---|
| VAT_REVENUE__VAT_____M_ does not Granger Cause TOTAL_FEDERALLY_COLLECTE | 15 | 2.85719 | 0.1211 |
| TOTAL_FEDERALLY_COLLECTE does not Granger Cause VAT_REVENUE__VAT_____M_ | | 6.87449 | 0.0199 |
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause TOTAL_FEDERALLY_COLLECTE | 15 | 1.31475 | 0.3634 |
| TOTAL_FEDERALLY_COLLECTE does not Granger Cause PETROLEUM_PROFIT_TAX__PP | | 1.91047 | 0.2281 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause TOTAL_FEDERALLY_COLLECTE | 15 | 6.89010 | 0.0198 |
| TOTAL_FEDERALLY_COLLECTE does not Granger Cause FG_INDEPENDENT_REVENUE__ | | 6.26731 | 0.0246 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause TOTAL_FEDERALLY_COLLECTE | 15 | 4.39697 | 0.0533 |
| TOTAL_FEDERALLY_COLLECTE does not Granger Cause CUSTOMS____EXCISE_DUTIES | | 1.15454 | 0.4158 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause TOTAL_FEDERALLY_COLLECTE | 15 | 1.33198 | 0.3583 |
| TOTAL_FEDERALLY_COLLECTE does not Granger Cause COMPANY_INCOME_TAX_REVEN | | 4.09455 | 0.0616 |
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause VAT_REVENUE__VAT_____M_ | 15 | 2.84701 | 0.1218 |
| VAT_REVENUE__VAT_____M_ does not Granger Cause PETROLEUM_PROFIT_TAX__PP | | 1.90552 | 0.2289 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause VAT_REVENUE__VAT_____M_ | 15 | 3.78582 | 0.0720 |
| VAT_REVENUE__VAT_____M_ does not Granger Cause FG_INDEPENDENT_REVENUE__ | | 5.26409 | 0.0364 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause VAT_REVENUE__VAT_____M_ | 15 | 2.99617 | 0.1114 |
| VAT_REVENUE__VAT_____M_ does not Granger Cause CUSTOMS____EXCISE_DUTIES | | 1.26545 | 0.3786 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause VAT_REVENUE__VAT_____M_ | 15 | 1.98642 | 0.2158 |
| VAT_REVENUE__VAT_____M_ does not Granger Cause COMPANY_INCOME_TAX_REVEN | | 3.79855 | 0.0715 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause PETROLEUM_PROFIT_TAX__PP | 15 | 4.22297 | 0.0579 |
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause FG_INDEPENDENT_REVENUE__ | | 3.52514 | 0.0826 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause PETROLEUM_PROFIT_TAX__PP | 15 | 8.79910 | 0.0110 |
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause CUSTOMS____EXCISE_DUTIES | | 0.80560 | 0.5640 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause PETROLEUM_PROFIT_TAX__PP | 15 | 1.68328 | 0.2706 |
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause COMPANY_INCOME_TAX_REVEN | | 1.35206 | 0.3524 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause FG_INDEPENDENT_REVENUE__ | 15 | 8.23389 | 0.0129 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause CUSTOMS____EXCISE_DUTIES | | 1.35877 | 0.3504 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause FG_INDEPENDENT_REVENUE__ | 15 | 16.8884 | 0.0020 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause COMPANY_INCOME_TAX_REVEN | | 5.58485 | 0.0319 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause CUSTOMS____EXCISE_DUTIES | 15 | 5.13299 | 0.0384 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause COMPANY_INCOME_TAX_REVEN | | 14.9603 | 0.0028 |

From the first observation, a uni-directional casualty exist between total federal collected revenue and VAT revenue.

From the second observation, no directional casualty.

From the third observation, there is a bi-directional casualty.

From the fourth observation, there exist a uni- directional casualty between custom excise duties and totally federal collected revenue.

From the fifth observation, there is a uni-directional casualty between totally federal collected revenue and company income tax revenue.

From the sixth observation, there is no directional casualty.

From the seventh observation, there is a bi-directional casualty.

From the eight observation, there is no directional casualty.

From the ninth observation, there is a uni-directional casualty between VAT revenue and company income tax revenue.

From the tenth observation, there is a bi-directional casualty.

From the eleventh observation, there is a uni-directional casualty between custom excise duties and petroleum profit tax.

from the twelveth observation, there is no directional casualty.

From the thirteenth observation, there is a uni-directional casualty between custom excise duties and FG independent revenue.

From the fourteenth observation, there is a bi-directional casualty.

From the fiftentth observation, there is a bi-directional casualty.

## MODEL 2

Pairwise Granger Causality Tests
Date: 04/21/14   Time: 10:54
Sample: 1994 2012
Lags: 4

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|---|---|---|---|
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause REAL_GDP_____M_ | 15 | 0.62396 | 0.6627 |
| REAL_GDP_____M_ does not Granger Cause PETROLEUM_PROFIT_TAX__PP | | 1.80992 | 0.2458 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause REAL_GDP_____M_ | 15 | 0.09401 | 0.9807 |
| REAL_GDP_____M_ does not Granger Cause FG_INDEPENDENT_REVENUE__ | | 3.01296 | 0.1103 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause REAL_GDP_____M_ | 15 | 1.14969 | 0.4176 |
| REAL_GDP_____M_ does not Granger Cause CUSTOMS____EXCISE_DUTIES | | 0.66817 | 0.6373 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause REAL_GDP_____M_ | 15 | 0.02936 | 0.9978 |
| REAL_GDP_____M_ does not Granger Cause COMPANY_INCOME_TAX_REVEN | | 5.79476 | 0.0294 |
| VAT_REVENUE__VAT_____M_ does not Granger Cause REAL_GDP_____M_ | 15 | 0.86995 | 0.5328 |
| REAL_GDP_____M_ does not Granger Cause VAT_REVENUE__VAT_____M_ | | 8.52253 | 0.0119 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause PETROLEUM_PROFIT_TAX__PP | 15 | 4.22297 | 0.0579 |
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause FG_INDEPENDENT_REVENUE__ | | 3.52514 | 0.0826 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause PETROLEUM_PROFIT_TAX__PP | 15 | 8.79910 | 0.0110 |
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause CUSTOMS____EXCISE_DUTIES | | 0.80560 | 0.5640 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause PETROLEUM_PROFIT_TAX__PP | 15 | 1.68328 | 0.2706 |
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause COMPANY_INCOME_TAX_REVEN | | 1.35206 | 0.3524 |
| VAT_REVENUE__VAT_____M_ does not Granger Cause PETROLEUM_PROFIT_TAX__PP | 15 | 1.90552 | 0.2289 |
| PETROLEUM_PROFIT_TAX__PP does not Granger Cause VAT_REVENUE__VAT_____M_ | | 2.84701 | 0.1218 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause FG_INDEPENDENT_REVENUE__ | 15 | 8.23389 | 0.0129 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause CUSTOMS____EXCISE_DUTIES | | 1.35877 | 0.3504 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause FG_INDEPENDENT_REVENUE__ | 15 | 16.8884 | 0.0020 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause COMPANY_INCOME_TAX_REVEN | | 5.58485 | 0.0319 |
| VAT_REVENUE__VAT_____M_ does not Granger Cause FG_INDEPENDENT_REVENUE__ | 15 | 5.26409 | 0.0364 |
| FG_INDEPENDENT_REVENUE__ does not Granger Cause VAT_REVENUE__VAT_____M_ | | 3.78582 | 0.0720 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause CUSTOMS____EXCISE_DUTIES | 15 | 5.13299 | 0.0384 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause COMPANY_INCOME_TAX_REVEN | | 14.9603 | 0.0028 |
| VAT_REVENUE__VAT_____M_ does not Granger Cause CUSTOMS____EXCISE_DUTIES | 15 | 1.26545 | 0.3786 |
| CUSTOMS____EXCISE_DUTIES does not Granger Cause VAT_REVENUE__VAT_____M_ | | 2.99617 | 0.1114 |
| VAT_REVENUE__VAT_____M_ does not Granger Cause COMPANY_INCOME_TAX_REVEN | 15 | 3.79855 | 0.0715 |
| COMPANY_INCOME_TAX_REVEN does not Granger Cause VAT_REVENUE__VAT_____M_ | | 1.98642 | 0.2158 |

## INTERPRETATION OF THE RESULT:

From the first observation, there is no directional casualty between petroleum tax and Real gross domestic product.

From the second observation, there is also no directional casualty between federal government independent revenue and RGDP.

From the third observation, there is no directional casualty between custom excise duties and RGDP.

From the fourth observation, there is a uni-directional casualty between RGDP and company income tax revenue.

From the fifth observation, there is a uni-directional casualty between RGDP and VAT REVENUE.

From the sixth observation, there is a bi-directional casualty between FG independent revenue and petroleum profit tax.

From the seventh observation, there is a uni-directional casualty i.e custom excise duties granger causes petroleum profit tax.

From the eight observation, there is no directional casualty between company income tax revenue and petroleum profit tax.

From the ninth observation, there is no directional casualty between VAT Revenue and petroleum profit tax.

From the tenth observation, there is a unidirectional casualty between custom excise duties and FG independent revenue.

From the eleventh observation, there is uni-directional casualty between company income tax and FG independent revenue

From the twelveth observation, there is a bi-directional casualty between VAT revenue and FG independent revenue.

From the thirteenth observation, there is a bi-directional casualty between company income tax and custom excise duties.

From the fourteenth observation, there is no directional casualty between VAT revenue and custom excise duties.

From the last observation, there is a uni-directional casualty VAT revenue and company income tax revenue.