

# Value Added Tax (VAT) and Its Impact on Growth of Adamawa State

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#### Abstract

The paper investigates the impact of value added tax (VAT) economic growth and development of Adamawa state from 2001 to 2014. Data for the study were sourced through CBN statistical Bulletin and Adamawa state Annual budget report and analyzed through the use of Ordinary Least Square Technique. The results of OLS revealed that increase in total actual revenue and value added tax (VAT) raised economic growth of Adamawa state. The coefficient of total actual revenue and value added tax (VAT) were statistically significant and consistent with the theoretical expectation. The F-statistics values in this study indicated that total actual revenue and value added tax (VAT) were jointly and significantly affecting economic growth of Adamawa state at 1 percent significant level. It can be seen from the result that economic growth of Adamawa state was highly susceptible to change in VAT than change in total actual revenue as shown by their coefficients in Table 4.0.1. This study also found that the major factor affecting economic growth of Adamawa state was value added tax (VAT) administration. This study, therefore, recommended that more attention should be directed towards effective administration of VAT in order that meaningful growth and development can be achieved in the state. This study also recommended that government and its relevant authorities should provide conducive environment for effective revenue generation in the state.

**Keywords:** VAT, expenditure, economic growth

#### 1.0 INTRODUCTION

The value added tax (VAT) was first devised by a German economist in the 18<sup>th</sup> century. His vision was a tax on goods that did not affect the cost of either the manufacturer or the distribution but was collected on the final price charge to the consumer. Thus, how many transactions were made in the process of sale of goods was not a complication while taxing. The tax was always a fixed percentage of final price charge to the consumer, thus, how many transactions were made in the process of sale of goods was not a complication while taxing. The tax was always a fixed percentage of the final price, originally the value added tax (VAT) is now a major part of the tax structure of the most western European nations.

Denmark introduced VAT in 1967, German in 168 and followed by other members of the European community. Developing counties like Brazil and Uruguay also pioneered the VAT in 1968. value added tax (VAT) already been introduced in all European countries as well as organization for economic cooperation and development (OECD) countries accept Switzerland, the United State of America (USA) and Australia where VAT has not been introduced. In Nigeria, the idea of introducing the value added tax (VAT) came from the repot of the study group set up by the federal government in 1991 to review the country entire tax system. Value added tax (VAT) was proposed and a committee was set up to conduct feasibility study on the implementation of such a tax. In January 1993, government introduce VAT with a legal basis contained in Decree No. 102 of 1993. The VAT rate on affected goods and services is 5%. Exports are zero-rated. Although only registration commended on that date, invoicing for VAT purposes did not begin until 1st January 1994. VAT is a replacement of the existing sales tax which has been in operation under federal government legislated decree No. 7 of 1986 but is operated on the basis of the residence. The rationale behind replacing sale tax with the value added tax (VAT) is informed by a number of factors and considerations.

- i. The base of the sale tax in Nigeria as operated under Decree No.7 of 1986 is narrow. It covers only nine categories of goods plus sales and services in registered hotels, motels and similar establishment.
- ii. The narrow base of the tax negated the fundamental principle of the consumption tax which by nature is expected to cut across all consumable goods and services.
- iii. VAT base is broader and includes most professional services and banking transactions, which are high profit generation sources.

Taxation is the central part of modern economic development. its significance arises not only from the fact that it is by far the most important of all revenues but also because of the gravity of the problems created by the present day heavy tax burden (Greene, 2011). The main objective of taxation is raising revenue. A high level of taxation is necessary in welfare state to fulfill its obligations. Musgrave (2008), opined that taxation used as an



instrument of attaining certain social objectives i.e as a means of redistribution of wealth and thereby reducing inequalities. Taxation in a modern government is thus needed not merely to raise the revenue required to meet its ever-growing expenditure on administration and social services but also to reduce the inequalities of income and wealth. Taxation is also needed to draw away money that would otherwise go into consumption and cause inflation.

The pre-occupation of most countries in the world is to strive to achieve rapid overall development through optimum tax collection and expanded revenue base. In order to see that this very objective is accomplished, many countries in the world, especially developing countries, selectively introduced new forms of taxes to boost their revenue capacity with the aim of improving the socio-economic condition of their citizens and achieving rapid economic development of the countries (Lorun, 2012). One of such forms of taxation is the value added tax (VAT), and the impressive performance of VAT virtually in all counties where it has been introduced. Ajakaiye (2000) clearly influenced the decision to introduce VAT in Nigeria in 1st September, 1993 although actual operation did not being until 1st January 1994.

VAT is a consumption tax that is relatively easy to administer and difficult to evade and it has been embraced by many countries of the world, (FIRS circular, 1999). Evidence so far support the view that VAT revenue is already a significant source of revenue in Nigeria and that the yield from VAT is a fairly accurate measurement of an economy, since purchasing power which determine yield increases with the economic development.

VAT is levied on consumption of goods and services; these cover the imported goods and services into the country as well. It is chargeable at a flat rate of five (5%) throughout Nigeria. The 5% VAT (called output tax) is calculated in the overall goods and services supplied by a registered persons and the tax burden is made good by the final consumer (Ajakaiye, 2000). There is a high increase in federal revenue resulting from expanding VAT base, this is an indication that consumption pattern of the generality of Nigerians are on the increase. Increase in the consumption pattern creates market and induces positive spill-over effect on the economic activities of the nation (Unegbu and Irefin, 2011). The research will look at the impact of Value Added Tax (VAT) on economic development of Adamawa state.

#### Statement of the problem

VAT has become important source of revenue to the Nigerian Government (both federal and state level), the federal government of Nigeria intends increasing percentage of VAT imposed on goods and services because of its relevance to income base and economic growth and development through a shift from direct tax regime to indirect tax regime anchored on consumption, in accordance with best global practice, to achieve stable non-oil revenue flow and to lower companies income and personal income tax. But the citizen's perceptions are difference (such as: too much burden on the final consumers, inflation, threat of prosecution etc.). There are also problems of not remittance of VAT to appropriate channels by personnel and the problem corruption which has eaten deep into the fabric the Nigerian tax administration. This popular opinion of majority of Nigerian citizens has made it pertinent to carry out a research to examine the impact of VAT on the economic development of Nigeria. Thus, there is need to understand with empirical facts the impact of VAT on the economic development of Adamawa state from 2000 to 2014.

#### Objective of the study

The main objective of this study is to ascertain whether value added tax has impact on economic development of Adamawa state. Specific objectives include;

- i. To empirically examine the impact of value added tax on government capital expenditure in Adamawa state.
- ii. To ascertain the impact of value added tax on economic development proxy by gross domestic product (GDP) of the state.
- iii. To highlight the problems of value added tax (VAT) in Adamawa state and proffer solutions to the highlighted problems.

## 1.1 Research Hypothesis

In carrying out this research the following hypothesis will be formulated and tested.

i. **H**<sub>0</sub>: Value added tax (VAT) is not significantly impacting on economic growth of Adamawa state.

# 2.0 Conceptual framework

Value added tax (VAT) is a levy imposed on business at all levels of the manufacture and production of a goods or service and based on the increase in price, or value, provided by each level. Because the consumer ultimate pays a higher price for the taxed commodity, a VAT is essentially a hidden sales tax value added tax (VAT) is a tax community, a VAT is essentially a hidden sales tax. Value added tax (VAT) is a tax on spending. The tax is borne by the final consumer of goods and services because it is included in the price paid. Beckley (2005), value added



tax is tax levied at each stage of production on the value added of firms. Oldman and Wood, (1990;3) defined value added tax is as a multistage consumption tax levied on the difference between a firms sales and the value of its purchase input used in producing the goods. In another view, Aluko, (1993;108) describe VAT as a multi-stage tax imposed on the value added to goods and services as they proceed through various stages of production and distribution and to service as they are rendered.

Similarly, "Value added tax (VAT) is a tax on the supply of goods and services which is eventually borne by the final consumer but collected at each stage of production and distribution chain", SAP (1989:10).

An important landmark in tax reform in Nigeria was the adoption of the value added tax (VAT) in January through the VAT Act No, 102 of 1993 but its implementation actually began in January 1994. Ajakaiye (1999) avert that since its introduction 15 of the 42 sections of the Act have been amended. Replacing sales tax, VAT was originally imposed on 17 categories of goods and 24 services categories. Such items as basic foods, medical and pharmaceutical products, books, newspapers and magazines, house rent, commercial vehicles and spare arts and services rendered by community and peoples banks, however, were VAT free.

Value added tax (VAT) has become a major source of revenue in many developing countries. In subsahara Africa, for example, VAT has been introduced in Benin, D'ivoire, Guinea, Kenya, Madagascar, Mauritius, Niger, Senegal, Togo and lately, Nigeria (Landau, 1983). Evidence suggests that in these countries VAT as become an important contribution to total government tax revenue. Naiyeju (1994) find that VAT accounted for about 30% of total tax revenue in D'ivoire, Kenga and Senegal in 1982. The oil producing countries are not excluded from the list of countries introducing this tax handle. Scnepper (1993) shows that VAT has been in effect in Ecuador and Mexico since at least 1973, and by 1983 accounted for 12.35% and 19.71% of total government revenues in these countries respectively.

The introduction of VAT requires a lot of preparation because of the complexity in the implementation of VAT which require the cooperation of the tax payers. In January, 1994 when the implementation of the tax began there are no adequate machinery, public enlightenments and consumer education (Bargo, 1993). The problems created by inadequate preparation and lack of understanding of the workings of VAT coupled with administrative bottleneck.

Although prices of Vatable goods and services to rise, businesses are taking advantages of the existence of VAT to increase prices of goods and services arbitrarily. The excessive price increase has further led to higher inflation in Nigeria. The VAT rate in Nigeria at 5% is considered too low because of high cost of administration. At 5%, the cost as a proportion of revenue will be very high. Data on cost of introducing and administering VAT are not yet available but it is expected to be significant it is a belief that for most countries, a VAT is probably not worth introducing at least than 10% (Twin, 1993).

Specifically, the traditional incidence studies tend to concentrate on the issue of who pays the tax, so that the question of who gains or loses from the tax, whose income and welfare are educed or increased and whose employment opportunity is threatened or promoted are not sufficiently considered (Ajakaiye, 1999).

For efficient administration of VAT businesses must keep proper source documents and books of accounts. Unfortunately, it is very problem with most enterprises in Nigeria (Aruwa, 2006). The invoicing of all sales, the need to compel business to keep records of transactions and encourage consumers to demand receipts for every purchase have become mandatory.

This study would seek to provide the necessary impetus towards resolving some of these problems identified, to identify the factors contributing or mitigating the efficient administration of VAT in Adamawa State and to suggest possible remedies to identified constraints in the VAT act and its implementation in Adamawa state.

## Features of Nigeria's Value Added Tax (VAT)

VAT is a consumption or indirect tax designed to tax private consumption by individuals of goods and services that are subject to tax. It is multi-stage tax which applies whenever goods and service are supplied by a producer. Nigeria's VAT has a number of features that theoretically makes it straight forward and as painless as possible. These features are:-

- i. VAT is a single rate tax of 5% which is easier to administer
- ii. It uses an input output methods, which is self-policing. That is although it is a multiple stage tax, it is expected to have a single effect on consumer prices and should not add more than the specified are to the consumer price no matter the number of stages at which the tax is paid.
- iii. The tax is levied on the value gain in by the product or service before begin sold. It is therefore applied to several points in the production and distribution chain until the item reaches the final consumer. All goods and service are VAT able, with limited and very specific exceptions. All import are vatable, whether imported raw materials or finished goods, and VAT on importers is calculated on the total value of the total cost, insurance and freight.
- iv. Export are zero-rated, implying that exporters do not collect VAT on exports but they can claim credit for VAT paid on their inputs. VAT has a built-in self assessment mechanism which allows a



business to claim credit for the tax paid on its inputs and calculate the tax liability on its output, Ajakaiye, (2002).

#### Objectives of value added tax (VAT) in Nigeria

The main objective of VAT in Nigeria are as follows

- i. To elongate the tax base by bringing in those who ordinary cannot be reached through taxation
- ii. To reduce consumption of luxuries and
- iii. To curb increase in the consumption of non-essentials.

Theoretically, indirect tax on consumption like VAT will reduce consumption from increasing as fast an income. Usually, if the income of the poor increase, their marginal propensity to consume also increase as much as the increase in income. Therefore, the gain of increase in productivity, which lead to the increase in income, would have been wiped off by the rapid increase in consumption. In other to prevent this situation and free some factors production for the purpose of investment, a consumption tax is levied to retain consumption. VAT is a neutral tax because it makes no difference between capital and revenue, goods and services, between export and import or between capital or between efficient and inefficient businesses, except for products that have been exempted r zero-rated. All goods and services supplied by a taxable person are liable to tax although for the purpose of this business all goods and service purchased by him qualify for tax credit.

There are four possible ways of levying tax, but the most popular method is the tax on output less tax on input, normally referred to as the invoice or credit method. The advantage of this method is that is associates the tax liability with the transaction and provides good audit trial trait, (1988;34)

#### Types of value added tax (VAT)

Specifically, there are three types of VAT. The distinction is based on three basic elements, these are

- i. Consumption VAT
- ii. Income (input) VTA
- iii. Output (gross product) VAT
- i. Consumption VAT, consumption VAT is for the purchases or transfer of capital assets. The tax paid on capital assets or goods are deducted as input taxes from output taxes. Thus the tax burden of capital purchase are shifted to consumers rather being paid by the company. Thus companies are encouraged to expand their business. Another advantage of the consumption VAT is that it is straight forward and easy to calculate since it does not require separation of expenditure on capital from expenditure on other items of purchase so as to determine the VAT base. Capital as such is not taxed, but tax is paid when capital is sold or transferred. The original cost of assets and other enhancement cost are allowed before subjecting the balance to tax at 10% firms can claim credit for the tax paid on capital assets. They by improving the firms cash flow situation.
- ii. Income (input) VAT: the Income VAT is paid on capital inputs and raw materials over the expected useful lives of the capital assets. In other world, income VAT requires that the tax paid on purchased on capital inputs are amortized (i.e credited against the firms VAT liability). Throughout the life span of the assets. There is similar to the capital allowance expect that the input is amortized against the output tax of the firm on equal bias over the lifespan of the asset. The income VAT is similar to the consumption VAT except that the capital allowances are set against assessable income while the input VAT is amortized on output tax of the company.
- iii. Output (gross product) VAT: The output does not deduct VAT input of capital purchase on the firms output tax. This means that the tax on capital purchase has to be paid by the company. Taxable firms are treated as the final consumers of all its capital inputs. However, there is a provision for the firms to capitalize the input tax paid for income tax purposes and capital allowance claimed after the life span of asset. This type of VAT does not encourage industrial expansion as it makes plants and machinery more expensive. However, such taxes are been capitalized for the purpose of capital allowance claims.

#### Structure of tax system in Nigeria

The Nigerian tax system is operated at three levels of government, namely, federal, state and local governments. Tax powers and jurisdictions of the country are enshrine in the constitution under the relevant ACT, which include income tax management act (ITMA) company income tax act (CITA) value added tax (VAT) and other relevant legislations. The federal government has the authority to collect companies income tax (CIT), petroleum profit tax (PPT) value added tax (VAT), Education tax, capital gain tax (corporate bodies0, withholding tax companies) personal income tax (PIT) from the personnel of armed forces, police, external ministry. Other areas are rent and royalties on extractive industries/solid mineral customs duties and excise duties.



The state have authority to collect personal income tax on state residents, capital gain tax and stamp duties (individual) toll/road taxes, levies and lees, poor taxes, business premises and registration levies, development levies other fees (registration of occupancy and state market).

Local government are to collect property, tenement rates, shops and kiosk rates, fees on liquor license, slaughter slab fees, marriage, bridg and death registration, street name registration, market/motor park fees, domestic animal license fees, bicycle, truck canoe fees, local/rural right of packing, public convince, sewage and refuse disposal permit fees, cemetery and religious palces permit fees, signboard and advertisement permit fees. Each level of government has agencies, parastatals or institution responsible for the collection of the various taxes as assigned by the relevant authorities.

Nigeria operates a federal system of government hence the fiscal operations also adhere to the same principle. This has serious implications on the same principle. This has serious implications on the tax system as administered in the country. The governments fiscal power is based on the three tier structure of federal, state and local government each which has different tax jurisdiction.

The tax and revenue system is lopsided and dominated by oil revenue. The federal government takes lion share of all taxes and other revenues. Odusola (2006) and Philips (1997) as at 1995 the breakdown of total tax and levy collection of the three tiers was 96.4% for federal government, 3.2% for states and 0.4% for local government.

Over the years since the oil boom of the early 1970s, revenue from oil has dominated government revenue source. Instead of transforming or diversifying the revenue base, fiscal management has merely changed from one primary product to another. This over dependence on oil makes the economy susceptible to vagaries of the international oil market (Odusola 2006).

The need to address this problem of near mono economy led to tax policy reforms. The reforms as well as the yearly amendments given in annual budget were geared towards addressing the failures of effective tax system. The need for tax reforms in the country has been justified on some of these reasons.

- i. There is compelling need to diversity the revenue based for the country in order to safeguard against volatility of government revenue.
- ii. Nigeria operates a cash expenditure budget system where proposal for expenditure are always anchored on revenue projections.
- iii. The tax system is concentrated on petroleum taxes and less on indirect taxes because of the dominance of the informal sector. Even the formal sector has limits because there are unions that act as pressure groups to deter any appreciable tax increments.
- iv. There has been and continues to recur government annual fiscal deficits over the decades.
- v. The study group in 1991 high lighted the need to increase tax revenue base. The group recommended the establishment of value added tax (VAT).

Value added tax (VAT) became a landmark source of revenue as a part of tax reform agenda. It was introduced by Decree No. 102 of 1993. The VAT implementation started in January, 1994. The rate was fixed at 5% for eligible goods and services. Theoretically was imposed generally on all goods and services but with these exemptions.

Goods: medical and pharmaceutical product, Basic food educational materials, Baby products, Agricultural equipments and veterinary medicines, Agricultural fertilizers, and Goods for export

# Important of value added tax (VAT)

VAT is the most important of indirect tax introduced taxes in 1993 to replace sales tax. VAT is an ad-volarem tax ie. Levied on the selling price of the commodity. There are currently two rates of 0% and 5% Ogungbesan, (2005:4). Unlike sales tax, which was only collected from manufacturer, VAT is amulti stage of production. Each company pays VAT on full selling price of its products, but can claim it back on its purchases from outside the firm. The difference between its sales and purchase is value added. There are three main elements, which distinguish VAT from all other forms of indirect tax. These are consumption, incidence and multiple stage nature. Relatively it is the method in which the tax is collected through interaction of input-output mechanism. Shaoup, (1990:3) assert that VAT is simple to operate and cheaper to collect with the involvement of numerous agents collecting it round the clock from millions of consumers, most of whom are inspecting". The base of sales tax in Nigeria as operated under Decree no. 7 of 1986 is narrow. It covers only nine categories of goods plus sales and services in registered hotels, motel and similar establishments. The narrow base of tax negates the fundamental principle of consumption, which by nature is expected to cut across all consumer able goods and services. VAT is broader and includes most professional services and banking transactions which are high profit generating sectors" federal Inland Revenue Services FIRS, (1993:2). Acknowledging this feature, Naiyeju (1996:10-11) explain that VAT is perhaps the broadest base in the history of tax. In most countries, it applies to both public and private consumption thus reducing the disadvantages associated with tax holidays, tariff congestions 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.

The wide coverage of VAT normally results in increased revenue for the government. The retailers, the self employed and small scale businesses that usually evade tax will be brought into the tax system. VAT can aptly be described as a low rate tax with high yield. The VAT system is more readily and accepted by the public because it is embedded in the selling price of goods and services. It is unseen by the consumer and it fill on everyone who consumes the taxable item. VAT rate is neutral on all types of consumption since products of all businesses, services of banks, insurance, hotel/motel services etc. will attract a flat rate tax. In addition, profitable and marginally profitable business will be taxed at the same level and government will not be subsidizing inefficiency by sharing an unprofitable business low tax.

#### Administration of value added tax (VAT) system

The VAT system in Nigeria is administered by the federal inland revenue services (FIRS), through the VAT directorate, which is located at the head office in Abuja with a network of zonal and local VAT offices in all the thirty six (36) state of the federation. Although VAT is administered centrally by the federal government using the existing tax machinery of the FIRS in close cooperation with the Nigerian customs services (NCS) and state revenue services (SIRS), the net proceeds from the tax accrue largely to the state and local government after making a relatively small percentage to the federal government to cover the cost of administration. In effect, the state and local government benefit more from the entire VAT collection. the sharing formula for the allocation of VAT revenue is federal 15%, state government 50% and local government 35% (CBN, 2000:169).

### Collection of value added tax (VAT)

value added tax (VAT) is collected on behalf of the government by businesses and organizations which have registered with the federal inland revenue services (FIRS) local government VAT offices for VAT purposes. All businesses and organizations are to register for VAT in the local VAT office or operation bases. Branches of such businesses and organizations are to register independently in their own areas of operation. All registered persons will pay 5% on goods and services purchased but can claim credit for the tax (called input tax) when sold.

The registered person or organization has to make regular VAT returns and either pays to or receives from FIRS (VAT Directorate), the difference of the input tax and output tax. VAT return (and payments) are normally made monthly to the local VAT office on or before the 30<sup>th</sup> day of the month following that in which the supply was made. No individual business organization or government agency is exempted from the tax. Only goods and services specified activities are exempted.

#### Offences and penalties under VAT system

There are various offences with very stiff penalties under the VAT system. Some of the offences are:-

- i. Failure to register
- ii. Failure to provide required information
- iii. Making false claims
- iv. Obstructing VAT inspectors and
- v. Failure to submit returns
- vi. Connivance of tax officials with VAT payers.

These offences carry penalties ranging from fines of up to N10,000 to various term of imprisonment. In some cases the fines or penalties depend on the amount of evasion involved. For instance the law prescribes a penalty of N10,000 for the 1 month of failing to register and N5,000 for every subsequent depend on the amount of month that the failure persists. The sanction the law imposes on failure to register is a clear evidence of the weight attached to registration. If vatable persons are not brought to the net by compulsory registration, very little would be achieved in terms of collections.

The law also stipulate penalty to any VAT officer who aids or abets the commission of any of the offences under the VAT law will be liable to a fine of N5,000 and or imprisonment for five years. Any tax, penalty or interest, which remains unpaid after the period specified for payment, may be recovered by the board through proceedings in the federal high court FIRS (1999:8-9).

#### **Theoretical Framework**

Taxation forms the most important sources of revenue to the government. Tax is a compulsory payment imposed by various tiers of government on individuals and corporate organizations. The most basic things about taxation are that taxation is compulsory and imposed by authority of government on people within a territory. Since it is compulsory any person who is within the jurisdiction must pay or be given some form of punishment. Also there is no quid pro quo' between tax payer and how the government spends the tax paid. In other words, the governments need not to explain to a payer how his own particular payment will be utilized.

Adam Smith the father of economics gave it as four canons of taxation in his book the Wealth of Nations



(1776). The canons or maxims are-

- (a) The subjects of every state ought to contribute towards the support f the government, as nearly as possible in proportion of his ability
- (b) The tax payable must be certain and devoid of arbitrariness or capriciousness
- (c) Tax should be levied at the time it is convenient for the payer to pay
- (d) There must be efficiency in tax administration

Lambert (1992) amplified Adam Smith's four canon into sixteen modern principles of taxation. They are-

- i. Simplicity is essential
- ii. Certainty of what to pay must be there
- iii. Neutrality to payers savings and spending must be maintained
- iv. Low cost of collection
- v. Net beneficiaries according to him are exempt from tax-although the meaning of net beneficiaries is not clear
- vi. Double taxation should be avoided
- vii. PAYE should be at source as it is the practice
- viii. There should not be affected by varying circumstance
- ix. There should be the ability to pay
- x. Tax should be based on on economic power not legal form
- xi. Basis of taxation should be realistic
- xii. Convince of the payer is paramount
- xiii. Tax payer should get adequate advice
- xiv. No discretion of tax exemption is allowed
- xv. Tax is a compulsory and there is no 'quid pro quo' between when the payer pays and benefits he gets from government.

Lambert (1992) concludes that his modern principles of taxation "constitute the bedrock of a system of taxation which is simple, just and lasting, for it should command the support of everyone, all parties and all nations".

Other theories are cost of services theory, the benefit theory, ability to pay theory. Cost of service theory states that the cost of running government and provision of social services and infrastructure should be collectively met by the people who are the ultimate receivers of the services. It is an indirect tax which must be paid on consumption of vatable goods. However, as indirect tax is criticized as being regressive. Regressive tax is where the incidence (tax burden) falls relatively more on the low income earners. They spend a large proportion of their income on consumption.

#### **Empirical Framework**

Ezeji and Peter (2014) investigate the econometric analysis of the impact of Value Added Tax on economic growth in Nigeria. They employed Engel and Granger cointegration technique on annual data sample covering 1994 to 2012. They found that VAT has positive effect on economic growth proxied by real GDP. Their results also show the absence of both long-run and short-run relationship between VAT and GDP. John and Aruwa (2014) conducted a study on value added tax and economic growth in Nigeria through the use of Ordinary Least Square technique to test the hypotheses formulated. They found that VAT contributes significantly to the total tax revenue of government and by extension the economic growth of Nigeria. Umeora (2013) conducted a study on the effects of Value Added Tax (VAT) on the economic growth of Nigeria from 1994-2010. He employed linear regression method and found that VAT has significant effect on GDP and also on total tax revenue in Nigeria. The government is encouraged to sensitize the people to enable it increase the tax rate so as to enlarge its annual revenue for economic development.

Michael and Ben (2007) explore the causes and consequences of the spread of value added tax (VAT). A panel study of 143 countries for 25 years were observed. The result shows that VAT has a significant but mixed impact. This implies that while some countries would have gained revenue from the adoption of VAT, others would not. Collectively, the adoption of VAT had a long run increase in overall revenue to GDP ratio of about 4.5 percent. However, allowing the impact of VAT to vary with country specific will shift the effect to become negative though acting in the opposite direction are gains that end to be greater in higher income and in more open economics. In Pakistan, Saeed, Ahmad and Zaman, (2012) analyze the revenue effective of the value added tax (VAT), in the SAARC region. Panel data of SAARC countries from 1995 to 2010 on various macroeconomic factors were obtained to determine the effect of VAT on revenue ratio. The results indicate prosperous set of determinants of VAT adoption as it proves to be vital instrument to collect tax and enhance revenue ratio. The result shows that most of SAARC countries that adopted value added tax (VAT) have gained a more effective tax instrument to upgrade their GDP to revenue ratio. In the same vein, Zaman, Okasha, and Iqbal, (2012) examine the impact of value added tax (VAT) in Pakistan's economy. Using household survey data to grasp the effect of



value added tax (VAT) on social and economic life of the populace. Results shows that VAT would disturb economic order of the society. Salti and Chabaan (2010) studied the effect of increasing rate of VAT by targeting poverty and inequality. An empirical model based on consumer theory of demand was established to study the impact. Simulation results showed that increase rate of VAT would have negative significant impact on poverty. Although the increased rate would have a negative impact on overall consumptions, yet its effect on poor is greater compared to the rich. Nellor (1987) looked at whether the ratio of government revenue to GDP rises steadily after implementation of VAT in 11 European countries. Nellor, concluded that the implementation of the VAT instantly increased tax ratio, which then continues growing at the higher level.

Smith, Islam, and Moniruzzaman, (2011) attempt to analysis the contribution and performance of VAT in Bangladesh compared to other developing countries. The result shows that the performance of VAT was quite satisfactory in the initial years, afterwards, VAT collection remained stagnant at a certain level. The study finds that the stagnation happened as a result of; relatively small number of VAT tax-payers, a general lack of awareness's, and a weak monitoring system. Samimi and Abdolahi, (2011) scan the impact of implementing value added tax (VAT) on export of goods and services in selected countries. Four different indices and export; export of goods and services, export of goods and services (BOP), export of goods and services (annual % growth), export of goods and services (% of GDP) to investigate the sensitivity to different denitions. Findings of the study based on mean difference statistical test in a two three-year periods before and after introduction of VAT show that, in different indices, the impact of VAT on export is positive.

In Luthuanina, Bikas and Rashkauskas (2011) looked at the impact of VAT standard tariff, reduced tariffs and shadow economic on income from this tax. The Lithuanian VAT structure, the dynamics of income from this tax and amendments in the La on value added tax (VAT) in terms of narrowing and widening the taxable base according to the theoretical analysis of the sources were analyzed using multiple regression, correlation, and optimization and C-effectiveness ratio analysis. The analysis revealed that, the amendments in the Law on value added tax in terms of narrowing and widening the taxable base has influenced the amount of income from VAT collected to the budget,. McGowans and Billings (1997) studied the growth pattern of VAT in European Union (EU) countries to ascertain whether the implementation of VAT has lead to an increased in the overall tax burden. Using ordinary least square (OLS) and seemingly unrelated regression (SUR). They found that VAT has often been disapproved as it is said to be a money machine for government and a regressive tax. The results however, show that VAT can be put into practice without becoming money machines for government. They submit that EU countries used VAT to substitute a number of indirect taxes and not to boost overall tax burden.

Bakare (2013) investigated the enormity of the impact of the value added tax on output growth in Nigeria. Ordinary least square regression analytical technique (OLS) was employed for the empirical study. The a priori expectation is that value added tax will impact positively on output growth in Nigeria. The study found that a positive and significant relationship exist between value added tax and output growth in Nigeria. The results of the findings showed that, the past values of value added tax could be used to predict the future behavior of output growth in Nigeria. The main conclusion of this study therefore is that value added tax has the potential output growth in Nigeria. The main conclusion of this study therefore is that value added tax has the potential to assist in the diversification of revenue sources, thereby providing enough funds for economic growth and development and reducing dependence on oil for revenue.

Komal (2013) focused on the impact of VAT on Business Enterprises, wholesalers, retailers, chartered accountants, tax official and consumers in Delhi and to come up with practical and viable suggestions for better implementation of VAT. The primary data is collected from the business enterprises, tax official, chartered accountants, wholesalers, retailers, and consumer with the help of questionnaire. A questionnaire with three sections was developed and finalized. The first part of the questionnaire comprises demographic factors with optional questions. The study reveals that the requirement of transparency in VAT is needed in all the states of India. It is found that equal channel of distribution of VAT is prevailing among wholesalers, retailers and

Unegbu and Irefin (2011); examined the impact of value added tax (VAT) on economic and human developments of emerging nations from 2001 to 2009. The scope of study centered on Adamawa state of Nigeria. Data were collected from both primary and secondary sources. Regression, discriminate analysis and ANOVA were used in testing the hypothesis. We found out that VAT allocation alone accounts for 91.2% of the variations in expenditure patter of Adamawa state from and that VAT allocations to the state within the said periods were very significant. The facts obtained via secondary data attest to a very significant VAT impact on economic and human development of the state from 2001 to 2009 but data obtained from primary sources suggest minimum VAT impacts. Thus study concludes that VAT allocations to the state within the said periods were very significant when compared with the total revenues of Adamawa state within the same period. The perceptions of VAT impacts on economic and human development across the administrative areas of Adamawa state are not significantly different.

Naibei, Momanyi and Oginda (2012); in their study seek to establish relationship between the size of



income of taxpayers, inspection by tax authorities and VAT compliance among private firms in Kenya. Both quantities and qualitative techniques were used to analyze the data. A combination of the techniques was used because descriptive methods tend to be in reliability but weak in validity. Findings revealed that there is no significant relationship between the size of the tax payer's income and VAT compliance. However, the study revealed that VAT non-compliance is high among mid-income sized private firms with turnover ranging five million hundred million shillings per annum. The study furthers a significant positive relationship between inspections by tax authorities on VAT compliance. The study concluded by recommending that stringent compliance measures and close monitoring should be observed among the mid-sized private firms. Tax authorities should also encourage effective use of tax registers through regular but impromptu inspections.

Also, an empirical investigation into the relationship between Value Added Tax (VAT) and Gross Domestics Product (GDP) in Nigeria by Denis (2010) shows that VAT is significant for planning and policy formulation as regards revenue generation. Data based on VAT revenue figure and GDP figure from 1994 to 2008 obtained from Central Bank of Nigeria statistical bullentin, 2008 was collected and used. GDP and Vat figure for the period of study are tested for correlation. The test revealed a strong pearsons product moment correlation (PPMC) at about 96 percent strength. Further a test of significant confirmed that VAT revenue is significantly different at 99 percent confidence level in relation to GDP. The study suggests the maintenance of the status quo as it could suggest support to the economy and convinces principles of taxation.

Similarly, Olatunji (2013), in his work determined the impact of VAT on the revenue generation in Nigeria and the perception of the citizen on VAT and inflation. He adopted the descriptive research approach for the study. Accordingly, data gathered were, primary data from oral interviews and structured questionnaires, while secondary data were obtained from federal inland revenue service (annual reports), Nigerian tax news, value added tax decree, federal office statistics. The study concludes that for a success of any fiscal policy, VAT must be properly planned, the duration depending on the level of the development of the country, also effective communication should be used to improve the quality of its implementation and increase the revenue collected. Adereti, Sanni, and Adesina (2011) in analyzing the Value Added Tax and economic growth of Nigeria, used time series data on the Gross Domestic Product (GDP), VAT revenue, Total Tax Revenue and Total (federal Government) Revenue from 1994 to 2008 sourced from Central Bank of Nigeria (CBN) were analyzed, using both simple regression analysis and descriptive statistical methods. Findings showed that the ratio of VAT revenue to GDP averaged 1.3% compared to 4.5% in Indonesia, though VAT revenue accounts for as much as 95% significant variations in GDP in Nigeria. Positive and significant correlations exist between VAT revenue and GDP. Both economic variables fluctuated greatly over the period though VAT revenue was more stable. No causality exists between the GDP and VAT revenue, but a lag period of two years exists. This paper therefore recommends that all identified administrative loopholes should be plugged for VAT Revenue to continue 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 of the GDP will take two years to become effective Ruebling, (1973) discussed the concept of value added tax and factors affecting its economic impact. Its main purpose, however, was to illustrate some of the necessary, but often overlooked, ingredients for analysis of any tax proposal. Two basic points made in this article are: (1) the consequences for income distribution economic growth, and the international balance of payments of a VAT substitution in the tax structure depend largely on what happens to prices (2) the effects on prices of the imposition of a VAT in place of another tax depend to a consideration extent on monetary conditions the rate of growth of the money supply and the velocity of money and on the price impact of an alternative tax or other use of funds. In contrast to some widely alleged consequences of a VAT, it is noted that a VAT need not be followed by inflation or greater inequality of income distribution.

# 3.0 Methodology of the research

This section explains the procedures used by the researcher in eliciting the necessary and or relevant data needed for the study. It presents the methodology of the research. The source of data for this study is secondary through CBN statistical Bulletin and Adamawa budget report. In order to analyze the data generated for the study, the statistical tool utilized is OLS technique (multiple regression).

#### **Model Specification**

To establish the relationship between economic growth proxy by expenditure (EXP) and VAT; this study adopted the model by John and Aruwa (2014) and incorporate expenditure to replace GDP. Therefore, the model for this research is specified as follows:

$$EXPt = \beta_0 + \beta_1 VATt + \beta_2 TORt + \xi_1$$

$$InEXPt = In\beta_0 + \beta_1 InVATt + \beta_2 InTORt + In\xi_2$$
2

Where InEXP is natural logarithm of expenditure, InVAT is natural logarithm of Value Added Tax, InTOR is natural logarithm of total revenue accrued to the Adamawa state over the period under the study and Ei is stochastic



variable or error term (random walks).

#### **Apriori** expectation

It is expected that  $\beta_0$   $\beta_1$   $\beta_2 > 0$ 

# 4.0 RESULT AND DISCUSSION Tabl 4.0.1 LINEAR OLS RESULTS

Dependent Variable: EXPD Method: Least Squares Date: 05/29/15 Time: 08:38

Sample: 2001 2014 Included observations: 14

| Variable   | Coefficient   | Std. Error   | t-Statistic                      | Prob.  |
|--|---|--|----------------------------------|--|
| C<br>TORE<br>VAT   | 1.02E+09<br>0.434245<br>5.913931  | 3.16E+09<br>0.087922<br>0.930133   | 0.322141<br>4.939005<br>6.358157 | 0.7534<br>0.0004<br>0.0001   |
| R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic) | 0.941731<br>0.931136<br>6.40E+09<br>4.51E+20<br>-334.2936<br>88.88904<br>0.000000 | Mean dependent var<br>S.D. dependent var<br>Akaike info criterion<br>Schwarz criterion<br>Hannan-Quinn criter.<br>Durbin-Watson stat |                                  | 3.64E+10<br>2.44E+10<br>48.18480<br>48.32174<br>48.17213<br>2.172813 |

#### Source: E-Views 8 output

Table 4.0.1 represents the growth effect of both total actual revenue and Value Added Tax (VAT) in Adamawa state of Nigeria. The constant is found to be statistically insignificant as indicated by its high probability value of 0.7534 which implies that growth of Adamawa state proxy by expenditure depends on total actual revenue (TORE) and Value Added Tax (VAT). The coefficients of total actual revenue (TORE) and value added tax (VAT) were found statistically significant at 1 per cent as indicated by their probability values of 0.0004 and 0.0001. The coefficients of total actual revenue (TORE) and value added tax (VAT) were found significantly and positively affected economic growth in Adamawa state; this is consistent with the theoretical expectation of this study. This result, therefore, implied that as total actual revenue (TORE) and value added tax (VAT) increases by one naira economic growth of Adamawa state raises by 0.4343 naira and 0.9139 respectively as shown in table 4.2. This further implies that VAT has much more positive effect on economic growth (EXPD) in Adamawa state than total actual revenue (TORE). The F-statistics 88.88904, which measured the joint significance of the parameter estimates, was found statistically significant at 1 per cent level as indicated by the corresponding probability value of 0.000000. This implies that all the variables of the model were statistically and jointly significant affected economic growth proxy by total actual expenditure in Adamawa state. This result indicated that both total actual revenue and value added tax affects economic growth of Adamawa state, which if properly control may translate to improvement in welfare of the people of the state.

The  $R^2$  value of 0.9417 (94.17%) implied that 94.17per cent total variation in economic growth of Adamawa state was explained jointly by total actual revenue and value added tax in Adamawa state. This further confirmed that economic growth of Adamawa state was significantly explained by total actual revenue (TORE) and value added tax (VAT). Coincidently, the goodness of fit of the regression remained very high after adjusting for the degree of freedom as indicated by the adjusted  $R^2$  ( $R^2 = 0.9311$  or 93.11%). The Durbin-Watson statistic 2.172813 was observed to be greater than  $R^2$  0.9417 indicating that the model is non-spurious (meaningful) and can be used for policy purpose. Durbin-Watson statistics value 2.172813 showed there was absence of autocorrelation among the error value thus making it possible to use the result of this study for policy purpose.

#### HYPOTHESIS TESTING

Here, the afore formulated hypothesis in chapter one was tested at 5% level and the rule of thumb, through the application of F-Statistic which test the joint significant of the variables of the model. Given the rule of thumb that whenever F-Statistic value is at least 2 the null hypothesis that the variables are not significant is rejected and therefore, the variables of the model are significantly and jointly affecting economic growth of the state. The hypothesis is as follows:

i. Ho: Value added tax (VAT) is not significantly impacting on economic growth in Adamawa state.



Given the T-Statistic value of VAT in Table 4.0.1 of 46.358157 showed that value added tax (VAT) was statistically significant at 1 percent as indicated by the probability values of 0.0001 in Table 4.0.1. This implies that value added tax (VAT) has significant relationship with expenditure in Adamawa state and was impacting significantly on economic growth and development of the state. The F-statistic values in Table 4.0.1 signifies that total actual revenue and value added tax were jointly and significantly affecting economic growth and development of Adamawa state at 1 per cent as indicated by the probability value of 0.000000. The null hypothesis (Ho) above was rejected at 1% level. In conclusion, therefore, both total actual revenue and value added tax have significant effect on economic growth and development of Adamawa state.

- (i) There was a positive and significant relationship between economic growth of Adamawa state and total actual revenue and value added tax during the years under review, suggesting that increase in actual total revenue increase the rate of economic growth in the state.
- (ii) There was a positive and significant relationship between economic growth of Adamawa state and value added tax (VAT) during the years under review as indicated by the results, suggesting that increase in value added tax increases economic growth of. This result is consistent with the a priori expectation of the study.
- (iii) There was an insignificant positive intercept, suggesting that other exogenous variables apart from actual total revenue and value added tax exact insignificant impact on the economic growth of Adamawa state. The existence of the intercept confirmed the Keynesian position that growth of the economy proxy by GDP has autonomous component.
- (iv) Finally the null hypothesis that there is no significant relationship between VAT and expenditure in Adamawa state as well as the null hypothesis that VAT has not impacted significantly on economic growth and development of Adamawa state was rejected; hence, this study found that VAT is significantly related to actual total expenditure and also impacted significantly on economic growth and development of Adamawa state for the period under review.

#### 5.0 Concluding Remark

The study was conducted to investigate the impact of value added tax (VAT) economic growth and development of Adamawa state from 2001 to 2014. The results of OLS revealed that increase in total actual revenue and value added tax (VAT) raised economic growth of Adamawa state. The coefficient of total actual revenue and value added tax (VAT) were statistically significant and consistent with the theoretical expectation. The F-statistics values in all models of this study indicated that total actual revenue and value added tax (VAT) were jointly and significantly affected economic growth of Adamawa state at 1 percent significant level. It can be concluded that economic growth of Adamawa state was highly susceptible to change in VAT than change in total actual revenue as shown by their coefficients in Table 4.0.1. This study also concluded that the major factor affecting economic growth of Adamawa state was value added tax (VAT) administration. This study, therefore, recommended that more attention must be directed towards effective administration of VAT in order that meaningful development can be achieved in the state. This study also recommended that government and its relevant authorities should provide conducive environment for effective revenue generation in the state.

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