Impact of Value Added Tax on Nigerian Economy

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ABSTRACT

The study employed ex-post facto and extracted variables such as Value Added Tax, Corporate Income Tax, Inflation, and Gross Domestic Product from the Central Bank of Nigeria statistical bulletin, Federal Inland Revenue Service (FIRS), and the National Bureau of Statistics (NBS) of the various issues. The analysis of the overall estimate was based on the short-run regression output obtained by Ordinary Least Square (OLS estimates) which showed the statistical evidence from the study that the co-efficient of determination R^2 of the endogenous variables jointly explained 68 percent of the total variation in the dependent variable (GDP). The value of the adjusted R^2 (0.58) reaffirmed the goodness of the fit. The F-statistics (4.09) of the model estimate is statistically satisfactory such that the hypothesis of the equation being equal to zero can be rejected. The joint influence of the explanatory variables was statistically significant at a 5 percent level of significance. Durbin Watson's test of autocorrelation (1.5) is approximately equal to 2.0, which indicates the presence of positive autocorrelation. Specifically, at a 5 percent level of significance, Value Added Tax (VAT) has a negative and insignificant relationship with GDP in Nigeria. At the same time, Corporate Income Tax (CIT) and inflation rate exert positive and significant on economic activities in Nigeria. Overall, the entire findings of the study were not surprising because there has been increased tax evasion in both individual and corporate entities over the years, which has consistently reduced the revenue generated by the government in Nigeria. Consequently, since

VAT has a negative relationship with Economic growth and is insignificant, the study recommends that the Government should provide infrastructure that would yield revenue to the Economy.

1. INTRODUCTION

Every sovereign nation like Nigeria seeks to establish appropriate sources of revenue to provide public goods and meet its programs in a manner that would not retard growth in the private sector. Value Added Tax (VAT) is a consumption tax levied at each stage of the consumption chain and borne by the final consumer of the product or service. Other than revenue from the oil sector, governments impose taxes to generate revenue and it has been a major source of revenue. The major sources of taxes are direct and indirect taxes. The attitude of some Nigerians towards taxation has caused governments to continually lose collectible taxes, particularly from direct taxes. The nation continues to lose a substantial amount of revenue through the unsavory practice of tax avoidance and tax evasion. As a remedy to the problem of tax evasion, the Federal Government in January 1994 introduced the Value Added Tax (VAT) as a consumption tax to replace Sales tax to cushion its resources to cope with the ever-increasing responsibilities.

It was noted by Ogunrinde (2013) that the deficit inherent in Sales Tax administered by States and the Federal Government in 1991 necessitated the set-up of a group study to review the entire tax system in Nigeria. The Value Added Tax was introduced to make a remarkable shift from direct to indirect taxation as it was re-emphasized in section 3.3 of the National Tax Policy to minimize Government dependence on oil revenue. Golit (2008) opined that the high incidence of tax evasion in Nigeria has made it very difficult for the government to accomplish its revenue targets. The value-added tax mechanism is therefore a more effective and equitable approach of sharing the tax burden to the various income strata in the economy.

Soyode and Kajola (2006) posited that value-added tax is a consumption tax the incidence of which is borne by the final consumer and it is relatively easy to administer and difficult to evade. Value-added tax has been acknowledged to have lesser tax evasion problems. However, Naiyeju (2010) stated that value-added tax can lead to an increase in prices, thereby causing inflation in a country in addition to the high administrative cost due to the expanded base of the tax.

Value-added tax is already a significant source of revenue in Nigeria (Ajakaiye 2000; Adereti, Adesina, and Sanni 2011). The obvious anticipated increase in prices of goods and services through the implementation of value-added tax tendsto negatively affect society and therefore negate the objectives of the tax. Nonetheless, Naiyeju (2010) argued that the positive result received from any tax depends on the extent the tax is interpreted, implemented, and properly managed as well and the publicity brought into it will determine how a particular tax meets its objectives. Rena (2011) posited that a strong fiscal policy that would impact economic growth should be delivered in

a sustainable approach by the government through the efficient provision of dependable public goods and services and the establishment of long-termgoals through investments, tax reforms, tackling social exclusion to improve people's quality of life.

In Nigeria, there are various sources of revenue in which governments have engaged in ensuring that public programs and other necessities are met. However, Ekwe and Jones (2015) alluded that the nation's sources of revenue are skewed towards the oil sector accounting for over80% of her earnings, a situation that was also evident during the crisis in the Niger Delta region. This calls for the need to generate other sources of revenue capable of influencing the growth of the economy. Okoye and Gbegi (2013) reported that in 1954 the Value Added Tax system was initiated by the then Joint Director of the tax authority of France, Maurice Laure. VAT came into effect for the first time on 10th April 1954; although, a German Industrialist Wilhelm Van Siemens proposed the concept in 1918; the value-added tax system has been adopted by different nations across the world. VAT has become a major source of revenue in many developing countries. In sub-Saharan Africa for example, VAT has been introduced in Benin Republic, Cote d'Ivoire, Guinea, Kenya, Madagascar, Mauritius, Niger Republic, Senegal, and Togo. Evidence suggests that in these countries, VAT has become an important contributor to total Government tax revenues (Adereti et al., 2011). In 1994, the revenue profile of the federal government and by extension sub-national governments increased. This is because, in addition to oil revenue and other taxes such as company income tax, the government receives revenue at each stage of production. VAT was introduced in Nigeria following a study group set up by the federal government in 1991 to review the nation's tax system. It was this group that proposed VAT and in that same manner, a committee was set up to conduct a feasibility study on the implementation of the VAT. The introduction of VAT in Nigeria through Decree102 of 1993 marks the phasing out of the Sales Tax Decree No. 7 of 1986. The Decree took effect on 1stDecember 1993 and became operational in Nigeria on the 1st of January 1994. VAT is administered centrally by the federal government using the existing tax machinery of Federal Inland Revenue Services (FIRS) in close cooperation with the Nigeria Customs Service (NCS) and the State Internal Revenue Services (SIRS).

Evidence so far supports the view that VAT revenue is already an important source of revenue in Nigeria. For instance, actual VAT revenue for 1994 was =N=8.189 billion, which is 36.5% higher than the projected N6 billion for the year. In terms of contributions to total federally collected revenue, VAT accounted for about 4.06% in 1994 and5.93% in 1995 (Ajakaiye, 2000). While the performance of VAT as a source of revenue in Nigeria is encouraging, it remains difficult to find attempts to thoroughly assess the impact of VAT on economic growth. Since the commencement of value-added tax in Nigeria, it has contributed substantially to the collective

indirect taxes collected by various governments. Some goods were however exempted from the VAT decree which includes some of the following:

☐Medical and pharmaceutical products

☐Basic good items and infant foods

☐Books, magazines, and other educational materials

☐Commercial products and spare parts

☐Agricultural equipment.

☐Veterinary medicine equipment

☐Farming and transport equipment

☐Sundry diplomatic goods etc.

With this exemption, however, the VAT revenue base is still rich and growing. Available data extracted from Central Bank of Nigeria statistical bulletins of 2005 and 2012 revealed that value-added tax contributed 28% to the total indirect taxes collected in 1994. Between the periods 1994 to 1998, the contribution of value-added tax to total indirect taxes averaged 29%. The trend continued to increase over a cumulative 5-year period although there were fluctuations in the annual collections from 1994 to 2012. On average, the percentage contributions of value-added tax to total indirect taxes were 35%, 49%, and 54% between the periods 1998-2003, 2004-2008, and 2009-2012 respectively whereas from 1994 to 2012, value-added tax contributed 41.2% on the average to total indirect taxes in Nigeria.

An analysis of the average percent rate contribution of value-added tax to total federally collected revenue in Nigeria within the same period revealed that it averaged 5.8%, 4.6%, 4.2%, 7.8%, 5%, and 7.5% between the periods 1994-1998, 1999-2003, 2004-2008, 2009-2012, 2013-2019 and 2020- 2023 respectively whereas, the average percent rate contribution of value added tax to total federally collected revenue from 1994-2023is 5.8%.The above statistics are suggestive that value-added tax is an important source of revenue as an indirect tax in Nigeria while its percentage contribution to the overall collectible total revenue appears to be insignificant. Izedonmi and Okunbor (2014) noted that the government introduced a value-added tax to generate funds to develop the nation that will accelerate economic growth. Various studies on the impact of government revenue on economic growth hardly consider VAT as a separate variable; hence, the study intends to test the following hypotheses: Ho a: Value Added Tax has no significant positive relationship with economic growth in Nigeria. Ho b: Value Added Tax has no significant long-run effect on economic growth in Nigeria. The main objective of this paper is to test the aforementioned hypotheses.

The tax system from the onset has quite been of help to revenue generation in Nigeria, but looking back on the efficiency and effectiveness of the taxation system, we can see clearly that tax

has met up with several obstacles in Nigeria, especially in the area of tax evasion and avoidance. Due to this situation hindering the tax system and the difficulties experienced in the administrative policy of VAT, the Federal Government in 1991 set up a study group which was led by Sylvester Ugo to recommend the introduction of VAT in Nigeria.

Also in 1992, a Modified Value Added Tax committee led by TAE B.I Ijewere was set up to carry out a feasibility study on the implementation of VAT and how to solve the problems in Nigeria. In Nigeria per se, VAT is one of the instruments that the Federal Government introduced to generate additional revenue. With about twenty-three years into the introduction of Value Added Tax (VAT) in Nigeria and the successful implementation and collection which has so far yielded revenue in billions of naira, it is presumed that certain factors could have enhanced the collection of VAT and its administration in Nigeria.

Given that the country is a complex society, it is necessary to understand the factors that have been responsible for the growth of VAT revenue. Value Added Tax (VAT), also known as sales and service Tax (SST), is a type of tax that is based on the collection, based on the increase in value, relating to a product, or service. This is normally during the stage of production or distribution. VAT has a major role in providing a state, with a particular percentage value of the end market price. The difficulties of VAT collection in Nigeria are as outlined below:

a. Burden on low-income earners
b. Tax evasion
c. Taking an unfair practice
d. Issue of fraud
e. Absence of refund mechanism
f. Difficulty in collecting
g. Not in all cases recoverable
h. Unbalanced collection and distribution of VAT
i. Expensive VAT charges on bank services
j. Inadequate VAT zonal centres for collection

Following the above challenges, this study is being investigated to provide solutions to them.

1.1 Objectives of the Study

The main objective of this research work is to examine the impact of Value Added Tax (VAT) on the Nigerian Economy. However, the specific objectives are:

a. To examine if VAT has any significant impact on economic growth in Nigeria.
b. To ascertain the extent to which revenue from other taxes contributes to economic growth in Nigeria.

   c.   To verify the direction of causality between VAT and economic growth in Nigeria.

1.2 Research Questions

In respect to this study, the following research questions were posed in the course of the research;

   a.   Has VAT any significant impact on economic growth in Nigeria?

   b.   To what extent has revenue from other taxes contributed to economic growth in Nigeria?

   c.   What is the causality between VAT and economic growth in Nigeria?

1.3 Research Hypotheses

H_0: Value Added Tax does not have a significant impact on economic growth in Nigeria.

H_1: Value Added Tax does have a significant impact on economic growth in Nigeria.

H_0: Revenue from other taxes does not contribute to economic growth in Nigeria.

H_1: Revenue from other taxes contributes to economic growth in Nigeria.

H_0: There is no causality between VAT and Economic growth in Nigeria.

H_1: There is a causality between VAT and Economic growth in Nigeria.

1.4 Significance of the study

This study would help to emphasize the importance of VAT when it is properly administered. It is hoped that the findings of this study would be beneficial and of great importance to the Federal Inland Revenue Service which is saddled with the statutory responsibility of collecting VAT. It will also assist the government in policy formulation concerning Value Added Tax. It will also help to expand the nation's revenue base thereby making it less dependent on oil export. This study will go a long way to fill the missing links in the analysis of VAT vis-à-vis sales tax in the existing tax literature.

Finally, this study will serve as a future guide to researchers on this subject; thereby using it as a platform in seeking ways to enhance growth and development of the economy. This study is therefore limited to the core economic growth in Nigeria and not the socio-political factors of the foreign exchange rate. The researcher is further limited by financial constraints, inconsistency of data and time factors.

2. Conceptual Framework

2.1 The Concept of VAT

Tax is a non-penal yet compulsory transfer of resources from the private sector to the public sector levied on all taxable individuals, businesses, and institutions without recourse or expectations for immediate benefits for the tax paid.

Onwuchekwa and Aruwa (2014) asserted similarly that tax is a compulsory payment made by all concerned to the government of a country from which essential services are rendered, without necessarily offering an explanation on how the money generated was spent or equating the services with the money collected. The concept of value-added tax is a consumption tax that is levied at a particular stage in the sale of a product or service. In other words, it is an indirect tax imposed on consumers at every stage of the consumption process from the raw stage to the finished stage. Izedonmi and Okunbor (2014) reiterated that VAT has become a major source of revenue in many developing countries and that VAT has become an important contributor to total government tax revenues. They stressed that in 1982 VAT accounted for about 30% of total revenues in Cote d'Ivoire, Kenya, and Senegal. Indonesia introduced VAT in 1983 and by 1988, the ratio of VAT revenue to GDP had risen to 4.5%.VAT in Nigeria accounted for 4.065 in 1994 and 5.93% in 1995.

Olatunji (2009) posited that the idea of value value-added tax system in Nigeria started with the acceptance of the recommendation of a study group on indirect taxation in November 1991. The decision to accept the recommendation was made in the 1992 budget speech of the head of state. This resulted in setting up the Modified Value Added Tax (MVAT) committee on 1st June 1992 as recommended by the study group. The committee recommended that VAT should be administered by an independent commission, but this was rejected by the government. The government left it in the hands of the Federal Inland Revenue Services (FIRS) which was already saddled with the responsibility of administering most other taxes in Nigeria. Thus, the conceptualization of VAT in 1991 and the subsequent introduction of the VAT system in 1994 through Decree 102 of 1993 marks the phasing out of the Sales Tax Decree No. 7 of 1986. The idea of VAT introduction over sales tax was to broaden the revenue base of the country.

2.2   Origin of VAT in Nigeria

Value Added Tax as stated from the onset is one of the major tools for sustainable development in Nigeria being a means of providing capital to the government to finance various development projects. The main idea behind this imposition of taxes by the government is generally to balance the economy in terms of the redistribution of funds and income from the rich to the poor. VAT has improved the social and the macro-economic level of the economy. A look at the profile of various taxes administered and other means of earning revenue to the government (excluding revenue from petroleum) for the past seven years before the introduction of VAT, one can argue that VAT has contributed a greater percentage to the development of the country.

It also helps in accelerating economic growth by mobilizing privately held resources which automatically boosts public revenue, enhances consumption patterns, and generates savings which helped in a greater deal in sustaining the economic development of the country. Nowadays, there is a global shift in the paradigm, whereby the focus point is moving from a direct taxation policy towards an indirect taxation policy. This action led to the implementation of the Value Added Tax (VAT).

Njogu (2015) stated that VAT was introduced with a standard rate of 17%, but with other 14 rates that made the VAT appear more like a differential community tax regime in Kenya. He was of the view that the analysis of the efforts of tax policy is critical for government decision-makers and the public to make informed policy decisions. This concern over the economy-wide impact of VAT is important because of the possibility that the tax may cause consumers to reduce their consumption of certain commodities that have direct and/or indirect effects on labor productivity. The VAT was undoubtedly the most coincidental innovation of the last half century in taxation policy. No other taxes, not even the income tax, have made an impact so quickly and rapidly to such an extent that the VAT now exists in over 160 countries around the world, including Mauritius and other African countries. This is possible because the VAT is considered an important source of government revenue and evidence has shown that the VAT is not only the least distorting tax but can also be easily administered in most countries.

Ishola (2016) reiterated the fact revenue from indirect taxes has been declining over the years from 85% in 1970 to 12% in 1980 and 13% in 1990, and that the government needed a revenue source that would help in turn around this trend. He explained further that VAT has the tendency to generate a lot of revenue since the incidence falls on the consumer who hardly knows that he is paying the tax, provides incentives for exports, enhances the balance of payments position, and services as a gauge of the economic health of the country. He stressed further that when the earning power increases it is immediately reflected in VAT proceeds. He therefore stated the weaknesses of VAT to the following reasons: compliance and returns by numerous collecting agents is a difficult task, smuggled goods are not captured into the system and the informal sector of the economy is yet to be captured. The discussion is vital to the reform of VAT, which this paper is designed to resolve.

Tamunonimim and Masa (2012) explained that taxation over the years has been a veritable source of funding public sector activities as well as being an economic tool for the management of consumption, investment, and production patterns. They averred that in developing countries, the imposition of various forms of taxes has been without some form of feedback on the effectiveness /efficiency of taxes. In the paper, they explained further that tax is a compulsory payment made on different bases and rates by citizens to the government which is not negotiable but obligatory. They

explained that the usefulness of taxes can be measured by several parameters with theirrevenue-generating capacity and their impact on the consumption and savings patterns in the economy. Further, if the totality of the tax system cannot be measured, the various types of tax can be subjected to this measurement. They opined that using the benefit-received approach, taxation might be adjudged to be inefficient since the taxpayers can hardly trace the taxes paid to any meaningful project that positively impacts their welfare. However, based on the economy, the tax system could be judged effective and efficient if the cost of administering the tax is lower than the revenue derived from the imposition. They based their study on the appropriateness of the tax system concerning the revenue generated about the national income and the respective rates, as well as the assessment of the appropriateness of the tax system concerning the revenue generated, the consumption expenditure, and the standard tax rates. Using the percentage ratio system for the study, they discovered that: the Value Added Tax system was neither effective in generating revenue for public sector activities, nor was it efficient in directing the consumption pattern of the economy when appraised with the gross revenue. They recommended that the Federal Inland Revenue Service in Nigeria should be keeping a record and be proprietary conscious such that the annual budget of the authorities should be funded from the tax revenues they collect while a target amount is paid to the government.

2.3 Value-Added Tax in Nigeria

This is a tax that was introduced by the Federal Government of Nigeria in 1994 by Decree 102 of 1993 to replace the old sales tax. It is a consumption tax imposed on all VAT-able goods and services at the rate of 5% (Soyode and Kajola, 2006). They went further to capture the major attributes of Value Added Tax (VAT):

i. A consumption tax

ii. A multi-stage tax and

iii. A tax with incidence on the final consumer.

As a consumption tax Ochei (2010) Opined that VAT is an indirect tax system where the consumer bears the cost of the tax. Bird (2005) on his part confirmed the multi-stage nature of VAT when he asserted that, Value Added Tax (VAT) is a multi-stage tax imposed on the value added to goods and services as they go through various stages of production and distribution as well as services rendered. Obviously from the shades of opinions highlighted above, it is clear that the final incidence or burden of VAT is borne by the final consumer of goods and services in Nigeria. Tabansi (2001), Okezie (2003), Ojo(2003), and Offiong (2004) were all in agreement when they cited the enabling law (Value Added Tax Act, 1993) and listed the following as Goods and Services exempted from VAT in Nigeria.

1. Medical and Pharmaceutical products;

2. Basic food items;

3. Books and educational materials;

4. Baby products;

5. Commercial vehicles and their spare parts;

6. Agricultural equipment and products and veterinary medicine

7. Fertilizers, farming machinery, and farming transportation equipment;

8. All exports of goods and services;

9. Plant and machinery used in export processing zone

10. Plant, machinery, and equipment purchased for utilization of gas in the downstream petroleum operations;

11. Tractors, plows, agricultural equipment, and implements purchased for agricultural purposes.

12. Services of community banks and primary mortgage institutions;

13. Plays and performances conducted by educational institutions as part of learning;

14. Service related to education and medical services

On his part Oyebanji (2010) helped us to arrange those taxable goods and services as specified in the VAT decree of 1993:

(a) Goods

1. All Goods manufactured and assembled in Nigeria

2. All goods imported into Nigeria

3. All second-hand goods

4. All household furniture and equipment

5. Petroleum and petroleum products

6. Jewel and jewellery

7. Textile, cloth, carpet and rug

8. Bear, wine, liquor, soft drinks, treated water

9. All vehicles and their spare parts exchanged commercial vehicles and their spare parts

10. Perfumes and cosmetics (including toiletries)

11. Soap and detergents

12. Mining and minerals

13. Office furniture and equipment

14. Electrical materials of description

(b) Services

1. All services rendered by financial institutions to consumers

2. Accounting services

3. Provision of reports, advice, information, or similar technical service in the following areas:

i. Management, financial, and taxation

ii. Recruitment, staff, and training

iii. Marketing research

From the above items listed, it becomes obvious that value-added tax covers almost every aspect of our economic and human life. It is a tax that most consumers pay without knowing, yet it helps the government generate substantial revenue for economic growth. Aruwa (2008) added his voice to the broad nature of VAT in Nigeria when he stated that the Nigeria VAT which is a replacement for the sale tax of 1986 has a very wide base with relatively few exemptions and only exports are zero-rated.

2.4   Value-Added Tax and Economic Growth in Nigeria

Empirically the input of Value Added Tax (VAT) is not the same in every country. This may be due to the percentage charged or the willingness of taxpayers to comply. It could also be a function of consumers' financial economic status as well as the intention to consume goods and services. Denis (2010) investigated the relationship between value-added tax and gross domestic product in Nigeria and, the study discovered that VAT is not effective as a revenue earner. This implies that significant parts of GDP which represent aggregate national income as well as aggregate national expenditure are not taxed. Samimi and Abdolahi (2011) scanned the impact of implementing a value-added tax on export goods and services in selected countries. Their findings based on the Mean Statistical Difference test indicated a positive impact of value-added tax on exported goods and services. A cursory backward view of the work done by Ajakaiye (2000) in his study of the Microeconomic effect on value-added tax in Nigeria since its inception revealed that VAT revenue is a significant source of fundsfor the country. In other words, from his findings, revenue from VAT has a significant impact on economic growth for example, he posited that in 1994 (the year of inception) VAT actual revenue was N8.19 billion as against the projected N6 billion. Similarly, in 1995, actual VAT revenue stood at N21 billion as against a projected figure of N12 billion. The result of his findings revealed that three fiscal policy scenarios, namely: reinjection of VAT funds through increased government spending for active fiscal policy; active fiscal policy through cascading treatment of VAT, and passive fiscal policy through non-cascading treatment of VAT. The study revealed that the scenario of a cascading treatment of VAT with active fiscal policy not only had the most harmful effects on the economy but also the one that highlighted the obvious Nigeria situation Owolabi and Okwu (2011) empirically asserted in their study on the contribution of value-added tax (VAT) to the development of Lagos state economy as

positively related. The analysis showed that VAT revenue contributed positively to the seven strategic economic sectors of Lagos. The sectors are Agriculture, infrastructure, education, environment, transportation, health, Youth, and social development sectors. Among all these the study indicated that the Agricultural sector was the only one that is statistically significant with positive contributions to economic growth and development. Similarly, the impact of VAT on the economic development of emerging nations was the research carried out by Unegbu and Irefin (2011). The study was focused on the Adamawa state of Nigeria. The study revealed that VAT allocations alone accounted for 91.2% of variations in expenditure patterns in the state. They showed a very significant impact on economic growth and development. However, data obtained from primary sources indicated minimum VAT impact. They, however, recommended that similar research should be replicated in other states of Nigeria to ascertain the impact of VAT on economic growth and development. Again, Olatunji (2009) researched the administration of VAT in Nigeria with the main aim of finding ways of improving the government revenue generation base to improve the economy. The study among other things recommended the need for government to increase awareness of people on the existence of VAT as well as its contribution to Nigeria's economic growth. Ekeocha (2010) work focused on how the value-added tax rate could be increased from its present 5% to 15%. This may be because the 5% is not significant enough to address positive economic changes.

Various IMF reports as indicated by Olatunji (2009), posited that Nigeria and Mauritius are the only two African countries with the smallest VAT rate of 5%. Kenya and Malawi are as high as 16% and 16.5% respectively. Legally speaking, Sanni (2012) affirmed the intention to review the VAT rate upward. In his work, Current Law and Practice of Value Tax in Nigeria he posited that there have been amendments to the original value-added tax decree of 1993 more than half a dozen timesthe latest being the Value Added Tax (Amendment)Act of 2007. He noted, however, that some of the amendments have made significant changes that are yet to be reflected in the body of existing literature and the economy itself.

Adereti, Sanni, and Adesina (2011) empirically evaluated the contribution of Value Added Tax (VAT) to economic growth in Nigeria between 1994-2008. From their time series data of GDP and VAT revenue, it was observed that VAT revenue to total tax revenue averaged 12.4% which was considered very low when compared to other countries in Africa. The study also observed that there is no causality between VAT revenue and Nigeria's Gross Domestic Product. Both observations indicate that revenue from VAT has no significant impact on economic growth in Nigeria. This is however not the case with Umeora's (2013) investigation on the effects of Value Added Tax (VAT) on economic growth and total tax revenue in Nigeria. The result of his findings shows that VAT has a significant effect or impact on economic growth (GDP) and total tax

revenue. Similarly; Onwuchekwa and Aruwa (2014) observed that VAT contributes significantly to the total tax revenue of the government as well as economic growth in Nigeria. Their study was on the value-added tax and economic growth in Nigeria.

3. Theoretical Framework (Literature review)

Taxation forms the most important source of revenue for the government. The Value Added Tax (VAT) is one of such revenue sources today since its inception in 1994. However, the theory of VAT can be traced to the works of Wilhelm von Siemens, who proposed it as an alternative to the German turnover tax (Onwuchekwa and Aruwa, 2014). The development of these proposals into problems in a country is credited to Maurice Laure; a French economist who introduced it to France in 1954 as the Taxe sur la valeur Adjoutee (Smith, Islam and Moniruzzaman, 2011). Maurice Laure's theory of VAT was envisioned asa sales tax on goods that did not affect the cost of manufacture or distribution but was collected on the final price charged to the consumer (Muhibat, Abdul Azeez, and Tope, 2013). Due to its ease of payment and ready comprehensibility, several countries across the world including Nigeria decided to adopt and use government revenue. Since VAT is a subset of the entire tax system in Nigeria, it becomes imperative to look at the basic theories surrounding taxation. The theories highlighted in this work include the following:

3.1   Socio-Political Theory:This theory of taxation states that social and political objectives should be the major factors in selecting taxes. The theory advocates that a tax system should not be designed to serve individuals but should be used to cure all ills of society as a whole. Wagner the advocate of this theory believes that each economic problem should be looked at in its social-political context and an appropriate solution found accordingly.

3.2   Expediency Theory:This theory posits that every tax proposal must pass the test of practicability. It must be the sole consideration weighing the authorities in choosing a tax proposal. Economic and social objectives of the state as effects of a tax system should be treated as irrelevant.

3.3   Benefit Received Theory:This theory is based on the assumption that there is an exchange relationship between tax-payers and the state. The state provides certain goods and services to the members of the society and they contribute to the cost of these supplies in proportion to the benefits received (Bhartia, 2009). On the other hand, Anyafo (1996) argued that taxes should be allocated based on benefits received.

3.4   Cost of Service Theory:This theory is sometimes similar to the benefits received theory. It emphasizesa semi-commercial relationship between the state and the citizens. The theory emphasizes that the state should give up basic amenities and welfare functions. This simply implies that the citizens are not entitled to any benefits if they however receive any benefits, then they must pay the cost of service thereof.

3.5   Faculty Theories:This theory states that one should be taxed according to the ability to pay (Anyafo, 1996). On the other hand, Bhartia (2009) argued that a citizen is to pay taxes just because he can, and his relative share in the total tax burden is to be determined by his relative paying capacity. The bottom line of this theory is to maximize the distributive effects of taxes within the country.

3.6   Theory of Laffer curve:Laffer (2004), postulated this theory to explain the theoretical representation of the relationship between government revenue raised by taxation and all possible rates of taxation. The theory was demonstrated with a curve based on his observation that increasing tax rates beyond a certain point will become counter-productive for raising further tax revenue because of diminishing returns.

3.7   Ibu Khaldun's theory of Taxation:This theory is explained two-fold; viz: the arithmetic and economic effects. The arithmetic effect states that if VAT rates are lowered, the VAT revenue will be lowered by the amount of the decrease in the rate. The reverse is the case for an increase in VAT rates (Ishlahi, 2006). Conversely, the economic effect recognized the positive impact that a lower VAT rate has on work, output, and employment thereby providing incentives to increase these activities whereas a rising VAT rate has the opposite economic effect by penalizing participation in the taxed activities. Ishlahi (2006) further stated that at a very high VAT rate, negative economic effects would dominate positive arithmetic effects, thereby decreasing VAT revenue.

4. Empirical Review

The relationship between value-added tax and economic development was examined by Okoror and Onatuyeh (2018). The data were put through diagnostic tests, examined for stationarity using the Augmented Dickey-Fuller methodology, and then analyzed using the Ordinary Least Squares regression method. Value-added tax has a negative relationship with economic growth, according to the analysis's findings. We replaced the dependent variable with the sum of all

federally collected money and all tax revenue to assess the robustness of the outcome. Both outcomes had statistically substantial negative effects. The inverse connection demonstrates leaks resulting from Nigeria's inept value-added tax management. To address the increasing difficulties of efficient tax administration in the long run, it is advised that the FIRS undertake human resource development and awareness campaigns.

Akor and Ekundayo (2016) investigated the impact of indirect tax revenue on the economic growth of Nigeria. They used secondary data obtained from the Central Bank of Nigeria statistical bulletin covering 1993-2013. Specifically, value-added tax and custom and excise duties were adopted as proxies for indirect taxes and real gross domestic product as a proxy for the economic growth of Nigeria. Its study used correlation and the error correction model regression to analyze the data. They claimed that value-added tax has a negative significant impact on real gross domestic product while customs and excise duties have a negative and weak significant impact on real gross domestic product.

Eugene and Abigail (2016) examined the effect of tax policy on Economic Growth in Nigeria. The study used annual time series data for 20 years from 1994-2013. OLS regression analysis was adopted to estimate the relationship between the dependent and independent variables. The findings revealed that taxes have a significant effect on the economic growth of Nigeria. It also revealed that the proportion of indirect to total tax has increased over the years. The study therefore recommended among others that the government tax policy should shift more to indirect tax due to its expansionary and non-distortionary nature.

Madugba and Azubike (2016) empirically examined value-added tax and the economic growth of Nigeria to ascertain their relationship using time series data between the period 1994 and 2012 obtained from the Central Bank of Nigeria statistical bulletin of various years. They used the ordinary least squares-based multiple regression to analyze the data and claimed that a negative significant relationship exists between value-added tax and the gross domestic product of Nigeria. It recommended that the government should educate the general public more on the essentials of value-added tax payment and that value-added tax be increased.

Okoli and Matthew (2015) examined the extent to which VAT has contributed to Nigeria's total federally collected revenue and its position among the other tax components using data spanning the period 1994-2012. Adopting the Error Correction Model (ECM) for the analysis, the findings revealed that VAT was the second long-term source of the total federally collected revenue.

Ihendinihu, Jones, and Ibanichuka (2014) in their study of the assessment of the long-run equilibrium relationship between tax revenue and economic growth in Nigeria extracted time series data for 1986 to 2012 sourced from various Central Bank of Nigeria statistical bulletin adopting

different types of taxes and real gross domestic product as variables. The study employed the ARDL technique (Bounds Test) of data analysis and found that VAT has no statistically significant impact on the economic growth in Nigeria.

Ezeji and Peter (2014) in their study analyzed the relationship between VAT and economic growth in Nigeria using the Engle-Granger two-stepcointegration method. The Augmented Dicky Fuller (ADF) unit root test shows that VAT and real GDP which proxy economic growth are both integrated of order two (I (2)). The estimates of the co-integrating regression showed that the VAT has a positive impact on economic growth. The analyses of residuals from their co-integrating regression showed that VAT and economic growth are not co-integrated, that is, they share no long-run relation. Similarly, estimates from the error correction model provide evidence to show that VAT and real GDP series do not converge to a long-run co-integrating equilibrium. The ECM results also showed that short-run changes in VAT have a negative but statistically insignificant impact on short-run changes in real GDP. They therefore conclude that the government should put in place measures to enhance productivity to increase the contribution of VAT to economic growth in Nigeria.

Onwuchekwa and Aruwa (2014) investigated the impact of value-added tax on the economic growth of Nigeria. The study used the ordinary least square technique to test the hypothesis of the research with data spanning the period 1994-2011. The result revealed that VAT contributes significantly to the total tax revenue of the government and by extension, to the economic growth of Nigeria. It further showed that VAT revenue had consistently increased but it is not that explosive.

Izedonmi and Okubor (2014) investigated the contribution of value added to the development of the economy of Nigeria by engaging secondary data. It used value-added tax, total tax revenue, total Federal Government revenue, and gross domestic product as variables for the study from 1994 to 2010 sourced from Central Bank of Nigeria reports. The variables were analyzed using the simple regression technique of data analysis and found that value-added tax and total revenue accounted for 92% variation in the gross domestic product of Nigeria. They claimed that there is the existence of a positive insignificant correlation between value-added tax revenue and the gross domestic product and recommended that all identified administrative loopholes should be plugged for value-added tax revenue to contribute more significantly to the economic growth of Nigeria.

Bakare (2013) investigated the impact of VAT on output growth in Nigeria. The study used the Ordinary Least Square (OLS) regression technique. It was found that a positive and significant relationship exists between VAT and output growth in Nigeria. The results of the findings from this work also showed that the past values of VAT could be used to predict the future behavior of output

growth in Nigeria. The main conclusion of the study was 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 over-dependence on oil for revenue.

Asogwa and Okeke (2013) in their paper on Value Added Tax and Investment Growth in Nigeria, "Time Series Analysis" used multiple regression to test the variables and the results show that VAT and Net Export are the only significant variables in the model while others are not statistically significant. The sign of VAT does not conform to the a priori expectation of the model. There is a long-run relationship between investment growth and value-added Tax as shown by the co-integration result.

Asogwa and Okeke (2013) examined the impact of value-added tax on investment growth in Nigeria. Time series data on investment, government expenditure, real exchange rate, real interest rate, and trade openness from the Central Bank of Nigeria Statistical Bulletin (CBN) were analyzed, using multiple regression analysis. The results showed that Value Added Tax has a significant effect on investment growth in Nigeria. The study recommends that there should be dedication and honesty on the parts of all agents of VAT concerning the collection, and the government should try as much as possible to improve the way of collecting value-added tax.

Umeora (2013) investigated the effects of value-added tax on the economic growth of Nigeria using time series data from1994-2010. The study adopted value-added tax, total revenue, and gross domestic product as variables. Amongst others, the researcher hypothesized that value-added tax does not have a significant effect on the gross domestic product of Nigeria. The study found that value-added tax has a significant effect on gross domestic product and also on the total revenue of Nigeria and recommends that the government should sensitize the people to increase the rate to enlarge its annual revenue for economic development.

Yadirichukwu and Ebiringa (2012) examined empirically, the effect of various forms of tax on the economic growth of Nigeria. Secondary data was utilized within the periods of 1985-2011, and the econometric techniques adopted were OLS regression and Granger causality technique The result showed that among the determinant factors of economic growth in the country through tax, only custom and excise duties are capable of influencing growth, and have significantly inverse relationship with the GDP. The study therefore recommended that the company income tax system should be generally restructured to bring about more revenue capable of contributing more significantly to Nigerian economic growth as is evident in the advanced countries of the world. The study also observed that custom service operations and revenue generationon the border are not practically reflected in the economy due to non-accountability and transparency as well as leakages in the system.

Another study by Owolabi and Okwu (2011) empirically evaluated the contribution of VAT to the development of Lagos State's 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. The findings revealed that VAT revenue contributed positively to the development of the respective sectors. However, the positive contribution was statistically significant only in agricultural sector development.

Olatunji (2009) conducted a study on the effectiveness of the administration of VAT in improving government revenue and boosting economic growth in Nigeria. It used simple percentages and chi-square to analyze the data. The study showed a positive correlation between VAT and GDP.

5. Gap in Literature

There is a need to enhance the legal or regulatory environment for business by periodically reviewing and improving on the tax laws and the enforcement of the laws relating to taxation; strengthen the anticorruption agencies, enhancing property rights and respect for the rule of law and due process as well as ensuring good governance. This will give the people more confidence in the public sector and will ensure the efficient use of value-added tax. There is a need for the government to ensure the effective utilization of revenue generated from VAT to better the lives of the people. This can be done through effective monitoring of the revenue collected and projects embarked upon with the funds. This will go a long way in mitigating the challenges of VAT collection and administration because when the government does its part, the citizens will not default in the payment of the tax and this will in the end affect the overall tax system. Thirdly and most importantly, there is a need for fiscal discipline, and effective fiscal and monetary policies to regulate government expenditure and maintain macroeconomic stability to ensure productive use of VAT revenue in the form of efficient investment of the proceeds into productive venture and infrastructural development to bring about more productivity in the economy. Also, there is a need for the economy to be able to save a reasonable portion of its Gross Domestic Product (GDP) and diversify investment to other sectors of the economy like agriculture, manufacturing, solid minerals, and human capital development for greater output and employment. This would also make the country generate more VAT revenue, output for export, and improve Customs and Excise Duties (CED) and foreign exchange rate as well as the balance of payment position of the country.

6. RESEARCH METHODOLOGY

6.1 Research Design

Research design can be defined as a blueprint that guides a researcher in carrying out his/her research. In other words, it is a general plan employed by a researcher to provide answers to research questions. We adopted an ex-post facto research design for the study because the choice of design was deliberate. After all,the ex-post facto design is suitable for comparative studies descriptive studies, and assessment of large data groups which are the characteristics of this study. The decision to study VAT from inception is purposive and judgmental because it would allow us to study the trend in the collection and the relationship with the Nigerian economy. The position in the economy would enable us to decide if VAT should maintain the status quo or review the existing rate. However, the stationary state of all the variables will be determined using the Augmented Dickey-Fuller (ADF) unit root test. Also, after confirming the stationary status of the series, the co-integration test and Error Correction Mechanism (ECM) will be respectively used to determine the long-run effect and speed of adjustment in case of disequilibrium error in the short run.

6.2 Model Specification

To specify the model of study, the study first states that the Ordinary Least Square (OLS) technique was used to determine the impact of Value Added Tax (VAT) on the Nigerian economy. The main choice of OLS is mainly because it minimizes the error sum of squares and has several advantages such as unbiasedness, minimum variance, consistency, and sufficiency; it is simple, widely used, and easy to understand. The model that will analyze the relationship is implicitly stated as follows:

$$GDP = f(VAT, CIT, INF) \tag{1}$$

Stating the model in its explicit form gives credit to equation (2) as given below:

$$GDP_t = \beta_0 + \beta_1 VAT_t + \beta_2 CIT_t + \beta_3 INF_t + \mu_t \tag{2}$$

Where:

GDP_t = Gross Domestic Product

β_0 = Constant parameter

$\beta_1 - \beta_3$ = Coefficient of independent variables

VAT_t = Value Added Tax

CIT_t = Corporate Income Tax

INF_t = Inflation

μ_t = error term

t= time subscript

It has been agreed that a log-linear form is more likely to give a more suitable result than a linear form, Cameron (1994). We therefore log-linearize the equation as:

$$LogGDP_t = \beta_0 + \beta1 LogVAT_t + \beta2 LogCIT_t + \beta3 INF_t + \mu_t \qquad (3)$$

Where all variables are as previously defined and a priori, it is expected that all variables are non-negative.

6.3 Description of Variables

The variables captured in the model specified for this study are both the dependent and the independent variables measured as follows:

6.3.1 Gross Domestic Product (GDP)

The Gross Domestic Product (GDP) is a monetary measure of the market value of all the final goods and services produced in a specific period, often annually. This is a vital statistic that shows whether an economy is expanding or contracting. Providing a quantitative figure for GDP helps a government make decisions such as whether to stimulate the economy by pumping money into it if the economy is not growing fast enough and needs a stimulus. In case the economy is getting overheated, a government could also act to prevent it from doing so. On the other hand, one way of arriving at the GDP of a country is to calculate the money spent by different groups that participate in the economy. For instance, consumers spend money to buy various goods and services, and businesses spend money as they invest in their business activities, by buying machinery and also, Governments also spend money. All these activities contribute to the GDP of the country. There are various approaches to computing GDP which includethe Income approach, Expenditure approach, and Production approach. For this study, GDP was calculated based on the expenditure approach which is at constant value:

$$Y = C + I + G + (X - M) \qquad (4)$$

Where:

Y = GDP

C = Consumption

I = Investment

G = Government spending

X – M = Net exports

6.3.2 Value Added Tax (VAT)

VAT is an indirect tax because the tax is paid to the government by the seller (business) rather than the person who ultimately bears the economic burden of the tax (the consumer).

Opponents of VAT claim it is a regressive tax because the poorest people spend a higher proportion of their disposable income on VAT than the richest people. Those in favor of VAT claim it is progressive as consumers who spend more pay more.

6.3.3 Corporate Income Tax (CIT)

A corporate tax, also called corporation tax or company tax, is a direct tax imposed by a jurisdiction on the income or capital of corporations or analogous legal entities. Many countries impose such taxes at the national level, and a similar tax may be imposed at state or local levels. The taxes may also be referred to as income tax or capital tax. Corporation Tax is calculated and paid annually based on your 'corporate tax accounting period', which is usually the same as your company's financial year. This is also measured in percentage.

6.3.4 Inflation Rate

In this study, the rate of inflation formula measures the percentage change in purchasing power of a particular currency. As the cost of commodity prices increases, the purchasing power of the currency decreases. The rate of inflation formula as shown below uses the Consumer Price Index (CPI) which is released by the National Bureau of Statistics (NBS) in the US unit.

$$\text{Inflation Rate} = \frac{CPI_{t+1} - CPI_t}{CPI_t} \times \frac{100}{1} \tag{5}$$

Where:

CPI_t is the initial consumer price index (CPI), and

CPI_{t+1} is the ending Consumer Price Index (CPI) for the period being calculated.

However, other similar indices may be used at times. If another index is used, "CPI" in the rate of inflation formula is replaced by the alternate index. The subscript "t" refers to the initial consumer price index for the period being calculated, or time t. As such, subscript "t+1" would be the ending consumer price index for the period calculated, or time t+1.

6.4 Method of Data Analysis

The data were subjected to a unit root test using the ADF approach to check the stationary state of the data to be sure that one is not analyzing spurious results. This is because most time series data are not stationary but become stationary at their first and second difference. The study adopts the OLS of simple regression in explaining the pattern of relationship between the variables. The study also adopts co-integration statistical techniques (Johansen test) and an error correction model used to show the long-run and short-run relationship among the variables. The co-integration was due to the spurious result of the OLS analysis based on the rule of thumb when R^2 is greater

than DW statistics. The following test will also be estimated; the coefficient of determination (R2): is used to measure the explanatory power of the model, the t-test and f-test to determine the individual and joint significance of the explanatory variable, and finally a Granger causality test was conducted to verify the direction of causality between Value Added Tax (VAT) and economic growth in Nigeria.

7. PRESENTATION AND ANALYSIS OF RESULTS

To achieve the objectives of this study, this session provides empirical tests and analysis of results and a discussion of the findings to enable the researcher to ascertain the statistical reliability of the parameter estimates about VAT and economic growth in Nigeria.

However, the Augmented Dickey-Fuller (ADF) test was adopted to ascertain the stationarity state of the variables of interest in the model. Other tests conducted in this study include; the co-integration test, to examine the stable long-run relationship among the variables; the error correction model, to check the speed of adjustment in case of disequilibrium in the short run and the Granger causality test, to verify the direction of causality between VAT and economic growth.

7.1 The Unit Root Test

In time series analysis, it is a standard practice to conduct a unit root test for macroeconomic variables to help ascertain their stationarity state and thereby prevent spurious results in the analysis. In other words, the unit root test was conducted in this study to check for the stationarity of variables in this model. The null hypothesis is that the variable contains a unit root (i.e., not stationarity), and the alternative is that the variable has no unit root (i.e., stationarity). For the variable to be stationary, the ADF test statistic should be greater than the test critical value at a 5% level of significance in absolute terms. Table 1 below shows the summary of the Augmented Dickey-Fuller (ADF) unit root test for the variables in this study.

Table 1: Summary of Augmented Dickey-Fuller Unit Root Test

Variables	1% Critical Value	5% Critical Value	10% Critical Value	T-Statistic	Order	Prob.
(GDP)	-3.769597	-3.004861	-2.642242	-7.736401	I(1)	0.0000
(VAT)	-3.769597	-3.004861	-2.642242	-4.007193	I(1)	0.0059
(CIT)	-3.769597	-3.004861	-2.642242	-4.991095	I(1)	0.0007
(INF)	-3.769597	-3.004861	-2.642242	-4.744129	I(1)	0.0011

Source: Author's Computation, 2019

The unit root test as presented in Table 1 above shows that the variables, LogGDP (log of Gross Domestic Product), LogVAT (log of Value Added Tax), and LogCIT (log of Corporate Income Tax) are all integrated in order one {I(1)}, i.e., they are stationary at the first difference and

have no unit roots. Having confirmed the stationary status of the series, the study proceeded to test for the co-integration to establish the long-run relationship among the variables.

7.2 The Co-integration Test

This study adopted the Johansen co-integration test, which utilizes two statistics tests namely: the trace test and the maximal Eigenvalue test. The first row in each of the tables tests the hypothesis of no co-integrating relation, the second row tests the hypothesis of one co-integrating relation, and so on, against the alternative of the full rank of co-integration. The essence of this test is to establish whether there exists a stable long-run relationship among GDP, VAT, CIT, and INF rates in Nigeria. The result of the co-integration test is presented in Table 2 below.

Table 2: Cointegration Test of GDP Model
Series: GDP VAT CIT INF
Lags interval (in first differences): 1 to 1
Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.925364	88.89386	47.85613	0.0000
At most 1 *	0.693093	31.80099	29.79707	0.0290
At most 2	0.165331	5.814387	15.49471	0.2313
At most 3	0.080174	1.838556	3.841466	0.2311

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values
Source: E-view 9.0

The co-integration test as contained in Table 2 suggest that the likelihood and maximal Eigenvalue statistics indicate the presence of two co-integrating equation at a 5% significance level which implies that GDP, VAT, CIT, and INF are co-integrated. This further shows that there will be a rejection of the null hypothesis of no co-integration and acceptance of the alternative of co-integration. Thus, the implication of the above estimate revealed that there is the existence of a stable long-run relationship between Value Added Tax, Corporate Income Tax, and economic growth in Nigeria.

7.3 Result of Error Correction Model (ECM) Estimates

This test is necessary having confirmed that all the series engaged in the study exhibit a stable long-run relationship. However, there may be a tendency for disequilibrium in the short run and this justifies the application of the error correction model to know the speed of adjustment in case there is disequilibrium in the short run. The ECM estimate is shown in table 3 below;

Table 3: Error Correction Model
Dependent Variable: LOGGDP
Method: Least Squares
Date: 29/01/20   Time: 01:17
Sample (adjusted): 1994 2017
Included observations: 23 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.095127	3.263300	-0.948465	0.3579
LOGVAT	-1.050661	5.975753	-1.758208	0.0991
LOGVAT(-1)	8.943625	5.677358	1.575315	0.1360
LOGCIT	6.543246	2.457900	2.662129	0.0178
LOGCIT(-1)	-2.948270	2.078614	-1.418383	0.1765
INF	1.342253	1.046749	0.128231	0.8997
INF(-1)	6.176738	9.628304	0.064152	0.9497
ECM(-1)	-0.326478	0.281012	-1.161795	0.2635

$R^2 = 0.89$; Adj. $R^2 = 0.65$; F-test = 8.03; Prob. (F stat) = 0.007; DW stat. = 1.6
Source: E-View 9.0

It has been pointed out earlier that the Error Correction Mechanism (ECM) is meant to tie the short-run dynamics of the co-integrating equations to their long-run static dispositions to maintain equilibrium. To capture the short-run fluctuation, the Error Correction Method (ECM) was employed. From the above table, the ECM (-1) was consistent by assuming negative values. It suggests that if in the short run, variables deviate from equilibrium, they tend to re-adjust themselves back to equilibrium in the long run. The speed of this adjustment is 33 percent per annum. Thus, the overall result of the ECM estimate is not only negative but large and statistically significant as expected. This suggests that there is a reasonable speed of adjustment in case of disequilibrium in the short run between economic growth and Value Added Tax (VAT) in Nigeria, within the period under review.

7.4 The Granger Causality Test

This test is necessary in this study to verify whether Value Added Tax causes economic growth or vice versa. However, the Granger causality test is a statistical hypothesis test for determining whether a one-time series is useful in forecasting another reflected by measuring the ability to predict the future values of a time series using past values of another time series. Thus, to capture the causal effect, the Granger causality is presented in Table 4 below;

Table 4: Granger Causality Test
Pairwise Granger Causality Tests
Date:29/01/20   Time: 01:32
Sample: 1994 2017
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.

VAT does not Granger Cause GDP	22	1.23174	0.3165
GDP does not Granger Cause VAT		0.12150	0.8863
CIT does not Granger Cause GDP	22	3.25623	0.0635
GDP does not Granger Cause CIT		5.44280	0.0149

Source: E-view 9.0

From the above estimate, the first hypothesis postulates that VAT does not Granger cause GDP, which is accepted since the probability value (0.3165) is greater than 0.05 showing that Value Added Tax (VAT) does not Granger cause Gross Domestic Product (GDP) in Nigeria. In the same way, the study accepted the second hypothesis which stipulates that GDP does not Granger cause VAT in Nigeria. This is so because the value of the probability (0.8863) is far greater than 0.05 percent point. Again, the corporate income tax (CIT) does not Granger cause GDP was accepted considering the value of the probability while GDP does not Granger cause CIT was rejected since its probability value is less than 0.05

In conclusion, it means that there is a bidirectional causality between Value Added Tax (VAT) and Gross Domestic Product (GDP) in Nigeria, while there exists a unidirectional causality between Gross Domestic Product (GDP) and Corporate Income Tax (CIT) in Nigeria.

7.5 Analysis of Results

The analysis of the overall estimate was based on the short-run regression output obtained by Ordinary Least Square (OLS estimates) as shown in Table 5 below:

Table 5: Short-run Regression Output by OLS
Dependent Variable: LOGGDP
Included observations: 24

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.579261	2.606467	-0.989562	0.3342
LOGVAT	-1.764037	1.913138	-0.922065	0.3675
LOGCIT	3.180251	1.308104	2.431190	0.0246
INF	3.202438	6.544829	0.489308	0.6299

$R^2 = 0.68$; Adj. $R^2 = 0.58$; F-test = 4.09; Prob. (F stat) = 0.02; DW stat. = 1.5
Source: E-View 9.0

The regression estimates above showed that there is the existence of a linear and proportionate relationship between Value Added Tax and economic growth in Nigeria. The signs of the co-efficient estimates were rightly assigned, though that of VAT contradicts a priori expectation. The estimated model is as specified below;

GDP = -2.579261 -1.764037VAT + 3.180251CIT + 3.202438INF   (6)

(-0.989562) (-0.922065)   (2.431190)   (0.489308)

Where; all variables remain as previously defined and the values in parentheses are the asymptotic t-values.

Thus, the statistical evidence from the study showed that the coefficient of determination R^2 of the endogenous variables jointly explained 68 percent of the total variation in the dependent variable (GDP). The value of the adjusted R^2 (0.58) reaffirmed the goodness of the fit. The F-statistics (4.09) of the model estimate is statistically satisfactory such that the hypothesis of the equation being equal to zero can be rejected. The joint influence of the explanatory variables was statistically significant at a 5 percent level of significance. Durbin Watson's test of autocorrelation (1.5) is approximately equal to 2.0, which indicates the presence of positive autocorrelation.

Specifically, at a 5 percent level of significance, Value Added Tax (VAT) has a negative and insignificant relationship with GDP in Nigeria. At the same time, Corporate Income Tax (CIT) and inflation rate exert positive and significant on economic activities in Nigeria. The implications of the above estimates suggest that Value Added Tax hurts economic growth in Nigeria within the period under review. However, the study further revealed that a one percent increase in VAT may have decreased GDP by 1.8 percent point. Also, a one percent rise in corporate Income Tax (CIT) may increase GDP by 3.1 percent point, whereas a one percent rise in the inflation rate may encourage economic activities by 3.2 percent point. Overall, the entire findings of the study were not surprising because there has been increased tax evasion in both individual and corporate entities over the years, which has consistently reduced the revenue generated by the government in Nigeria.

This empirical finding coincides with those of Madugba and Azubuike (2016), who examined value-added tax and economic growth of Nigeria to ascertain their relationship using time series data between the period 1994 and 2012 obtained from the Central Bank of Nigeria statistical bulletin of various years. Their study found that there is a negative significant relationship that exists between Value Added Tax (VAT) and Gross Domestic Product (GDP)in Nigeria. Our findings rather contradicted those of Okoli and Matthew (2015), who examined the extent to which VAT has contributed to Nigeria's total federally collected revenue and its position among the other tax components using data spanning the period 1994-2012. Their findings revealed that VAT was the second long-term source of the total federally collected revenue in Nigeria. Finally, evidence documented in this study seemed to deviate from those of Ezeji and Peter (2014), who in their study analyzed the relationship between VAT and economic growth in Nigeria using the Engle-Granger two-stepcointegration method. The estimates of the co-integrating regression showed that VAT has a positive impact on economic growth in Nigeria.

7.6 Test of Hypothesis

Hypothesis 1:

H$_0$: Value Added Tax does not have a significant impact on economic growth in Nigeria.

H$_1$: Value Added Tax does have a significant impact on economic growth in Nigeria.

To test Hypothesis 1 as postulated above, we refer to the regression output as indicated in Table 5. Here, the coefficient of Value Added Tax was negative and the computed t-value was greater than 0.05, we therefore accept the null hypothesis and conclude that Value Added Tax does not have any significant impact on economic growth in Nigeria.

Hypothesis 2:

H$_0$: Revenue from other taxes does not contribute to economic growth in Nigeria.

H$_1$: Revenue from other taxes contributes to economic growth in Nigeria.

In this instance, the study referred to Corporate Income Tax (CIT) as revenue from other taxes. From the estimates as contained in table 5, the value of CIT was found to be positive and the probability value is less than 0.05. Based on the above evidence, we reject the null hypothesis and conclude that revenue from other taxes (i.e., corporate income tax) contributes positively to economic growth in Nigeria.

Hypothesis 3:

H$_0$: There is no causality between VAT and Economic growth in Nigeria.

H$_1$: There is a causality between VAT and Economic growth in Nigeria.

To test the third hypothesis, we refer to Table 4, where the result of the Granger causality test was documented. The hypothesis postulates that VAT does not Granger-cause GDP, which is accepted since the probability value (0.3165) is greater than 0.05. Therefore, we conclude that Value Added Tax (VAT) does not Granger cause Gross Domestic Product (GDP) in Nigeria.

8. SUMMARY, CONCLUSION, RECOMMENDATION

8.1 Summary of Findings

The study has examined the impact of Value Added Tax on the Nigerian Economy using annual time series data spanning from 1994 to 2017. The methodologies used in the study were Augmented Dickey-Fuller (ADF), Co integration test, Error Correction Model (ECM), and Granger Causality Test, while the variables used in the study were Gross Domestic Product (GDP), Value Added Tax (VAT), Corporate Income Tax (CIT) and Inflation Rate. The implications of this

study suggest that Value Added Tax has a negative on economic growth in Nigeria within the period of review.

Finally, after the tests have been carried out using the methods listed above, the results of the findings are:

I.   Value Added Tax does not have any significant impact on economic growth inNigeria.

II.   Revenue from other taxes (i.e.,Corporate Income Tax) contributes positivelytoeconomic growth in Nigeria.

III. Value Added Tax (VAT) does not Granger cause Gross Domestic Product (GDP)in Nigeria.

8.2 Conclusions

This study is aimed at finding out the actual impact of Value Added Tax on the Nigerian Economy. Value Added Tax (VAT) was also examined as the main subject, its significance to economic growth, its contribution to economic growth, and its causality between VAT and economic growth. The operational problems that attended its introduction in Nigeria were also reviewed. Although these problems appeared formidable, they would not defy solutions. The administrative machinery can be strengthened and a record-keeping culture can be developed over time with an adequate policy of business. The initial confusion that created the introduction of the tax has been lessened with education. What is desirable and necessary is the determination on the part of the government and the people to make it succeed.

On a final note, the study of Value Added Tax in Nigeria can be said to be a success. This can be argued when one considers the yearly collection side by side with the set targets. If the identified loopholes in the law are properly plugged and the inadequacies properly addressed, it is my humble view that realizable proceeds would be generated from Value Added Tax.

8.3 Recommendations

Based on the findings of this study, the following recommendations were made, which are:

I. The Government should provide infrastructure that would yield revenue to the economy.

II. VAT through the government would encourage economic growth through its positive impact on savings and investment while at the same time discouraging excess consumption.

III. The Government should continue to emphasize VAT because it is an indirect tax and it raises revenue to finance government spending like any other tax.

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