THE IMPACT OF VALUE ADDED TAX REVENUE ON ECONOMIC PERFORMANCE IN NIGERIA

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A PROJECT SUBMITTED TO THE DEPARTMENT OF ECONOMICS, FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc.) HONOURS DEGREE IN ECONOMICS

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CERTIFICATION

This is to certify that the project, **THE IMPACT OF VALUE ADDED TAX REVENUE AND ECONOMIC PERFORMANCE IN NIGERIA** was written by **Mordi Assumpta Chinye** with the Matriculation Number **SSC1709145** has been read and accepted in partial fulfillment of the requirements for the award of Bachelor of Science (B.Sc.) Honours Degree in Economics.

DEDICATION

I Dedicate this research work to my God and my family

ACKNOWLEDGMENTS

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ABSTRACT

This study examines the impact Value Added Tax (VAT) revenue and economic performance in Nigeria using time series data from year 1994-2020. The result of the estimated OLS model shows that there is a positive and significant relationship between VAT revenue and economic performance in Nigeria which was proxied by the real GDP at 5% level of significance. Personal Income Tax was found to positively affect economic growth and was significant at 5% level and lastly, the analysis revealed that a positive relationship exists between VAT revenue and total household consumption expenditure and the relationship was found to have being statistically significant at 5% level. The study recommended that government should consider the implications when making decisions about VAT rates and structure and that a potential solution is to mitigate the negative effects of VAT on lower-income households by implementing a progressive tax system where lower rates are applied to basic necessities and higher rates to luxury goods and services. The study further recommended that in order to enhance economic growth of Nigeria through VAT revenue, the enlightenment of the public on how VAT works, how it is calculated and how it affects them can increase understanding and acceptance of the tax.

CHAPTER ONE

INTRODUCTION

1.0 Preamble

Over the years, taxation has remained one of the major sources of revenue for government to meet the provision of essential amenities and infrastructures for societal growth and development. The government will need financial and material resources to carry out its functions which include the provision of basic amenities of life such as good roads, pipe borne water, electricity, health facilities as well as security of lives and property. Osita (2004:1) defined taxation as a compulsory levy by the government through Its various agencies in the income, capital or consumption of its subject such as salaries, business profits, interest, dividends, commission regularities, rent etc. The Nigerian Government has depended on the oil sector of the economy for most of its revenue since the mid 1970's. But despite the fluctuating and unreliable nature of oil prices in the international oil market, the Nigeria government has still depended on it for its revenue and this has affected the revenue (i.e. leading to shortage of funds) of the Nigeria government which it uses in funding its obligations to stimulate economic growth. Osita (2004) described taxation as the most important source of government revenue from the view point of certainty, consistency, and reliability. The need for taxation among others therefore,

is to provide a material source of revenue for government in discharging its ever growing functions and obligations to its citizenry.

Tax is a compulsory levy imposed on a subject or upon his property by the government to provide security, social amenities and create conditions for the economic well-being of the society (Appah & Oyadonghan, 2011). Tax is divided into two; we have the direct and the indirect tax. Tax revenue plays a vital role in the economic growth and economic development of any economy in the world and this has facilitated many nations to introduce tax on goods and services. Our area of interest which is the Value Added Tax (VAT) happens to fall under the indirect tax. The VAT which is known in some countries as the consumption tax or goods and services tax (GST) is a type of tax levied on the price of a product at a particular stage in the sale of a product or service.

VAT has been introduced in African countries such as; Benin Republic, Cote d'Ivoire, Guinea, Kenya, Madagascar, Mauritius, Senegal etc. The value added tax was introduced in Nigeria on 24th August, 1993 by the Value-Added Tax Decree No.102 of 1993. However, its full implementation began on 1st January, 1994. In Nigeria, VAT revenue has been known to have accounted for a small proportion of total government revenue since its implementation. Kareem, Arije and Avovome (2020) opined that one of the precedence for the introduction of Value Added Tax (VAT) in Nigeria was based on the fact that taxation as an instrument of fiscal policy

is vital in generating revenue to finance the activities of government, redistribute income, stabilize the economy as well as stimulate growth and development.

The issue of VAT has grabbed the attention of so many from researchers to academia in the fields of social sciences and management sciences on its benefits, prospects and challenges. Economic growth measures the increase in the national income or total volume of production of goods and services of a country accompanied by improvements in the total standard of living of the people (Chinwuba & Amos, 2011 as cited in Ihendinihu & Onwuchekwa, 2012).

1.1 Statement of the Research Problem

Several studies have been carried out on topics relating to the Value Added Tax and the economic growth of Nigeria, but the review of previous empirical literature has exposed a lack of unison in the research findings of past researchers thereby indicating the existence of a research gap. The study of Onwuchekwa and Aruwa (2014) on Value-Added Tax and economic growth in Nigeria, relating it to the growth pattern of VAT on GDP, they came to the conclusion that there is no significant relationship between VATR and the economic growth in Nigeria and the study concluded by Frank and Angaye (2019) on the impact of VAT on economic growth in Nigeria gave the conclusion that VAT variables positively and significantly influence the economic growth in Nigeria. These myriad of unresolved controversies surrounding the relationship between VAT revenue and economic

growth in Nigeria is one which this study is being based on. For example Frank and Angaye, 2020; Kareem et al., 2020; Edewusi and Ajayi, 2019; Nasiru et al., 2016; Izedonmi and Okunbor, 2014; and Richard Oghuma, 2017, revealed that there exists a positive relationship between VAT revenue and economic growth in Nigeria. On the contrary, the study of Okoror and Onatuyeh, 2018; Akhor and Ekundayo, 2016; Oraka et al., 2017; and Mohammed et al., 2018; revealed that there exists a negative relationship between VAT revenue and economic growth in Nigeria.

The works of Olarotimi, Sylvester and Alor (2021) for instance, covered the period from 1994 to 2019. Kareem, Arije and Avovome (2020) covered the period of 1994 to 2017, Edewusi and Ajayi (2019) covered the period of 1995 to 2015. Asaolu et al. (2018) covered the period of 1994 to 2015. Onwuchekwa and Aruwa (2014) covered the period of 1994-2011 and so many others. From the above mentioned, we can see that there is no work which started its analysis from the year of VAT implementation in Nigeria to a recent year closer to the year when these works were done and for this, these periods can be regarded as to not too current. Therefore, some of the findings of these studies may not be relied upon in view of the fact that the studies have been taken over by the changes. Additionally, the time period covered by some of the previous studies leaves another gap to be filled.

In view of the above, there is the need to conduct a study with the aim of expanding the scope of the study to 2020 and with a view of filling the gaps that

exist in the literature. This study is adopting Real Gross Domestic Product (RGDP) as a proxy for economic growth and as a dependent variable and instrument for measuring economic growth in Nigeria.

1.2 Research Questions

The following research questions are to be answered.

1. Does VAT revenue have a significant effect on economic growth in Nigeria?
2. What form of relationship exists between Personal income tax revenue and economic growth in Nigeria?
3. What effect does VAT revenue have on total household Consumption expenditure in Nigeria?

1.3 Research Hypotheses

The following hypotheses are stated in their null form and are to be tested.

1. Value Added Tax revenue has no significant effect and on economic growth in Nigeria.
2. There is no significant relationship existing between Personal Income Tax revenue and economic growth in Nigeria.
3. VAT has no significant effect on total household Consumption expenditure in Nigeria.

1.4 Objectives of the Study

The broad objective of this study is to assess the effect of value added tax revenue on economic growth in Nigeria. However, the specific objectives are to:

1. examine the relationship between VAT revenue and economic growth in Nigeria.
2. investigate the impact of Personal Income Tax (PIT) on economic growth in Nigeria.
3. assess the impact of VAT revenue on total household consumption expenditure in Nigeria.

1.5 Significance of the Study

This study would help give a better understanding on the roles played by Value Added Tax revenue to the economic growth in Nigeria. It would help provide a bulk of information for references by individuals, students in tertiary institution mostly in the fields of social sciences and management sciences, researchers, government organizations, and government etc.

Furthermore, the result of the study would be most beneficial to tax analysts and institutions in examining the effectiveness of Value Added Tax as an aid to economic growth in Nigeria.

1.6 Scope of the Study

This study employs an annual time series data ranging from 1994 to 2020. The above mentioned years would be viewed on a yearly basis ranging from 1994 to 2020 (containing 27 sets of observations) so as to obtain a better result. This period of time was adopted for this particular study because 1994 is a year that signifies the introduction of the VAT system in Nigeria and 2020 because it provides the most current data on all variables to be used in this study. 2020 was a remarkable year in issues relating to VAT as it records its first ever rate increase (i.e. 5% to 7.5% increase) since its implementation.

1.7 Limitations of the Study

In the course of this study, the researcher encountered time, financial and information constraints.

1.8 Structure of the Study

This study is structured in six chapters, its contents are; chapter 1 which is the introductory part of the study, chapter 2 contains the background to the study, chapter 3 contains the literature review which entails the findings of related empirical literatures, Conceptual literature and theoretical literatures. Chapter 4 which is the methodology aspect of the study, entails the model specification, the source of data and the estimation techniques or method employed in the course of this study, chapter 5 contains the presentation and analysis of results of the study and

chapter 6 contains the policy implications, recommendations and conclusions made based on this study.

CHAPTER TWO

BACKGROUND TO THE STUDY

2.0 Introduction

This chapter of the study deals with the background to the study. In this section, we are going to explain some of the variables that are relevant to our study. The goal here is to draw a trend that would ascertain the behaviour of our data to show whether they had experienced stability, stagnation, or fluctuations (volatility) over the period under consideration and to make comments about them.

2.1 Study Environment

Nigeria is located geographically in Africa. It is a country situated in West Africa with a population of over 216 billion people and accounting for 2.7 percent of the global population according to the United Nations Department of Economic and Social Affairs. Nigeria had a total land area of 923,768 km2 (356,669 square miles) with 98.59 percent of it being land and 1.41 percent being covered with water. 52 percent of the Nigerian population resides in the urban areas. Nigeria is Africa's most populous country with its capital city in Abuja which is located in the centre of the nation. Nigeria shares boundaries with four West African countries. It is bordered by the Republic of Benin to the west, Chad and Cameroon to the east, and Niger to the north and Its coast lies on the Gulf of Guinea in the south and it borders Lake Chad to the northeast. Nigeria is not only large in area but it is said to be four times

the size of UK, larger than the U.S. state Texas and slightly more than twice the size of the U.S. state California. The common language of Nigerians is English (formal). The major ethnic groups in Nigeria are the Hausa, Igbo and Yoruba.

The federal republic of Nigeria is the official name for Nigeria because it practices federalism. Federalism is a system of government in which power is shared among the different tiers of government. Nigeria's natural resources include but are not limited to petroleum, tin, columbite, iron ore, coal, limestone, lead, zinc, natural gas, hydropower, and arable land. The Nigerian economy is a developing economy and it is known to be the largest in Africa. He is also known to be the 30th largest in the world by GDP. Nigeria is referred to as the Giant of Africa owing to its large population and economy and he's considered to be an emerging market by the World Bank. According to UNCTAD, Nigeria and other African countries remain predominantly dependent on exports of primary products in the agricultural, mining and extractive industries, leaving adverse impacts on inclusive growth in the long term, as it dims the prospects of industrialization and human capital development, among others. One of the disadvantages of producing primary products is that they consist mostly of raw materials and these tend not to sell for much in the world market as they are not readily available for consumption unlike the products gotten from secondary and tertiary production which consists mainly of semi-finished and finished goods. The Nigerian economy till date is still known to be dependent on the

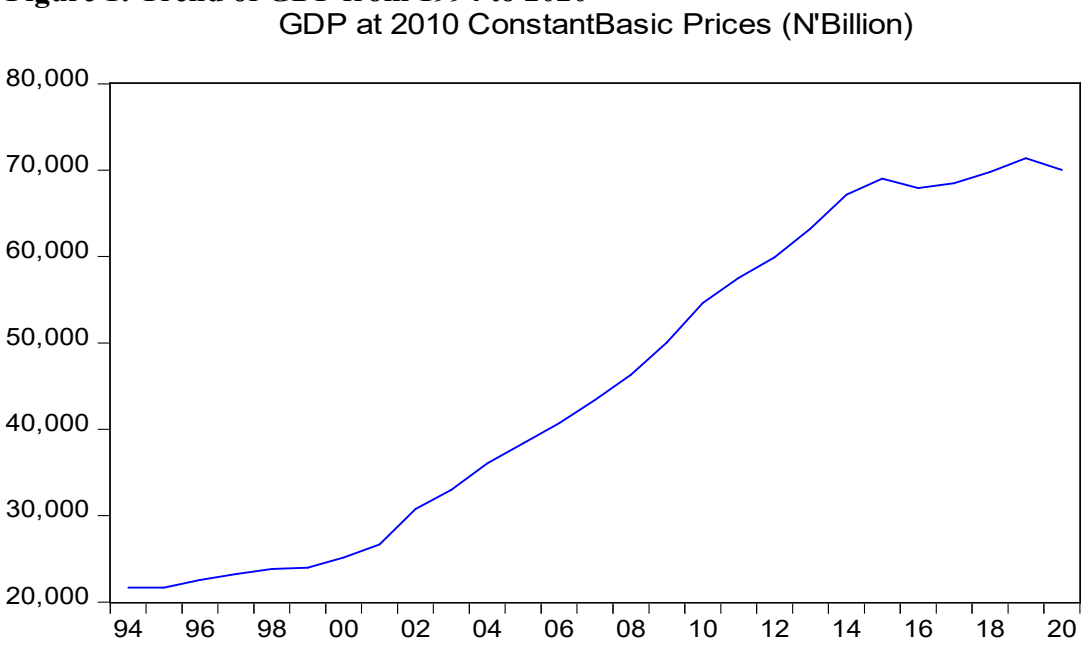
oil sector for the bulk of its fiscal revenues and foreign exchange earnings and this had made the Nigerian economy vulnerable to volatilities in oil prices and a victim of external shocks because of its dependency in the oil market. In recent times, the Nigeria non- oil sector (agriculture, banking, communication, courier services etc.) and non-oil revenue producing sector consisting of revenue from value added tax, corporate income tax and customs, has witnessed improvement in its contribution to the real gross domestic product and revenue of the country.

Years	GDP at 2010 constant basic prices (₦'Billion)
1994	21,676.85
1995	21,660.49
1996	22,568.87
1997	23,231.12
1998	23,829.76
1999	23,967.59
2000	25,169.54
2001	26,658.62
2002	30,765.19
2003	33,004.80
2004	36,057.74
2005	38,378.80
2006	40,703.68
2007	43,385.88
2008	46,320.01
2009	50,042.36
2010	54,612.66
2011	57,511.04
2012	59,929.89
2013	63,218.72
2014	67,152.79
2015	69,023.93
2016	67,931.24
2017	68,490.08

2018	69,799.94
2019	71,387.83
2020	70,014.37

Source: CBN data.

Figure 1: Trend of GDP from 1994 to 2020



Source: Author's Computation using CBN Data.

Figure 1 above shows that the trend of real gross domestic product has been on a constant rise for the period of our observation. A slight fall can be observed in year 2001 before a significant rise in year 2002 and from 2002 up to year 2015, the real gross domestic product rose significantly. In year 2016, we can see a fall in trend and this fall can be attributed to the fall in the price of oil and other commodities in the world market, the increase in the value of dollar and the weakening of the country's currency that is the weakening of the naira note. These were not only the

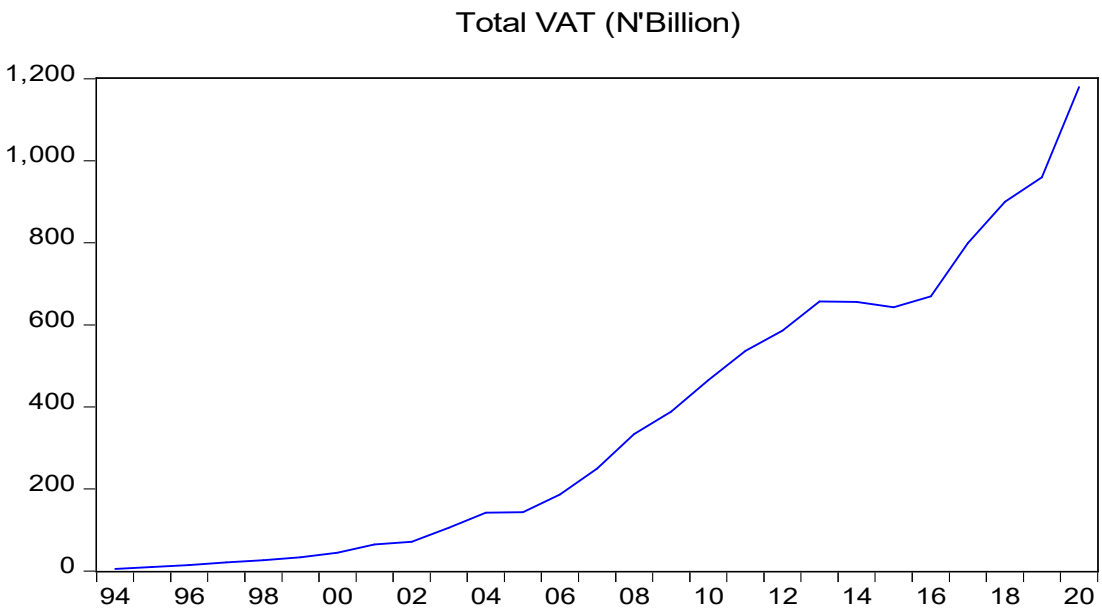
causes of the fall in trend but the causes of the 2016 recession. The 2016 recession was said to be the first in 25 years after the last being around 1991 to 1995 and said to be the worst decline since 1987. From year 2016 up till year 2018 there was steady rise till year 2019 where we can see a noticeable increase. The rise in 2019 is put down to the increase in both the oil and non-oil sector of the country. The growth of the non-oil sector was driven mainly by growth in the Information and Communication (Telecommunications), Agriculture (Crop Production), Financial and Insurance Services (Financial Institutions), and Manufacturing. The 2019 increases can therefore be simply said to have been brought about by increase in economic activities. In year 2020, we can see a fall in the trend of the real gross domestic product of Nigeria. This fall can be attributed to the breakout of the global pandemic COVID-19 which led to the partial/total lockdown of the country and reduction in trade and economic activities within the country and the country with other countries of the world.

2.2 Trend of Value Added Tax Revenue in Nigeria, 1994-2020

Years	Total VAT (₦'Billion)
1994	5.03
1995	9.82
1996	14.60
1997	20.74
1998	26.38
1999	33.31
2000	44.55
2001	65.01
2002	71.36
2003	105.54
2004	142.19
2005	143.24
2006	186.49
2007	249.47
2008	333.99
2009	388.70
2010	464.67
2011	536.23
2012	586.24
2013	656.85
2014	655.71
2015	642.92
2016	669.55
2017	798.90
2018	900.03
2019	959.56
2020	1,179.33

Source: CBN Statistical Bulletin, 2020.

Figure 2: Trend of Total Value Added Tax Revenue



Source: Author's Computation using data from CBN Statistical Bulletin, 2020.

From Figure 2 above we can see that value added tax has been on a steady rise for our period of interest (1994-2020) but even with the steady rise, some galloping movement is noticed from year 2001 to year 2005 and 2014 till 2020. We can see from the trend that there is a slight fall in year 2002 and 2005 and from there it rose steadily till year 2014 and fell sharply in 2015. This fall in value added tax is maintained till year 2016 and this can be linked to the recession of 2016. From 2017, it continued on a steady rise right until 2020 where it took a great leap. This significant increase in year 2020 is not attributed to any increase in economic activities cause as we can recall, the measure (lockdown) taken to curb the spread of the COVID-19 pandemic put a damper on economic activities in the country and not

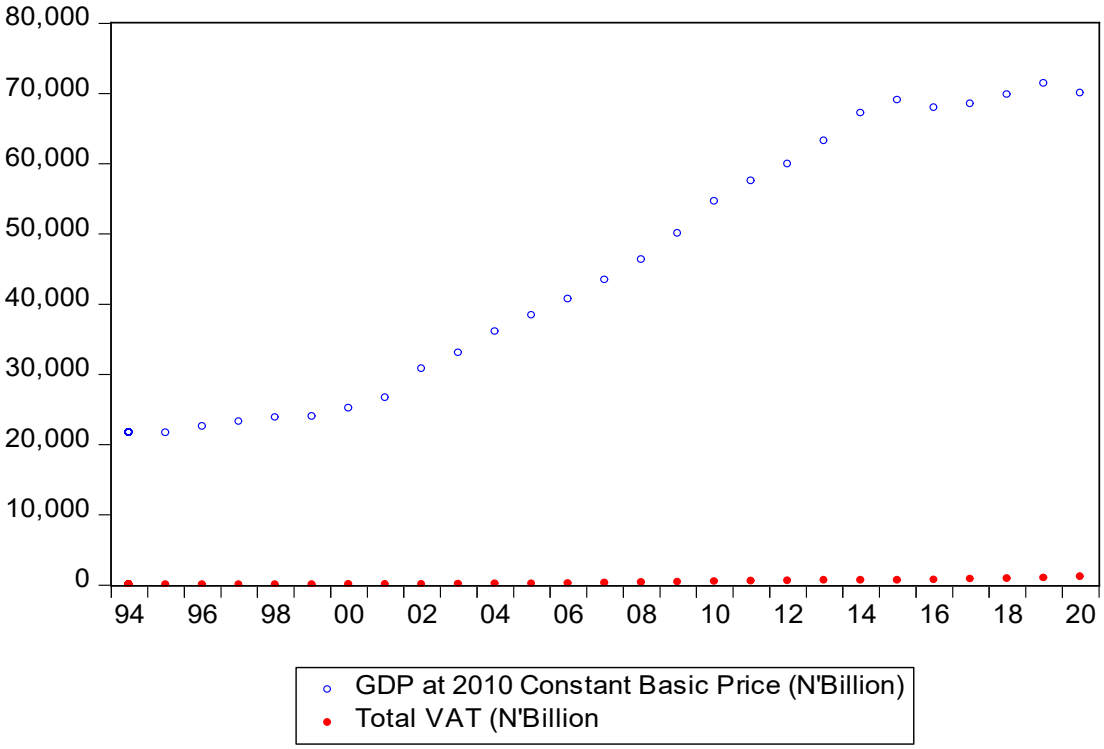
only that but causing a decline in global oil prices. But despite the economic downturn experienced by the country, value added tax rose significantly in year 2020 and this is to a large extent attributable to the increase in VAT rate from the flat rate of 5% to 7.5% under the Finance Act implemented in February 2020.

2.3 Value Added Tax and Economic Growth, 1994 to 2020

Years	Total VAT (₦'Billion)	GDP at 2010 Constant Basic Prices (₦'Billion)
1994	5.03	21,676.85
1995	9.82	21,660.49
1996	14.60	22,568.87
1997	20.74	23,231.12
1998	26.38	23,829.76
1999	33.31	23,967.59
2000	44.55	25,169.54
2001	65.01	26,658.62
2002	71.36	30,745.19
2003	105.54	33,004.80
2004	142.19	36,057.74
2005	143.24	38,378.80
2006	186.49	40,703.68
2007	249.47	43,385.88
2008	333.99	46,320.01
2009	388.70	50,042.36
2010	464.67	54,612.66
2011	536.23	57,511.04
2012	586.24	59,929.89
2013	656.85	63,218.72
2014	655.71	67,152.79
2015	642.92	69,023.93
2016	669.55	67,931.24
2017	798.90	68,490.08
2018	900.03	69,799.94
2019	959.56	71,387.83
2020	1,179.33	70,014.37

Source: CBN Statistical Bulletin, 2020.

Figure 3: Trend of value added tax and real gross domestic product, 1994-2020



Source: Author's Computation using data from CBN Statistical Bulletin, 2020.

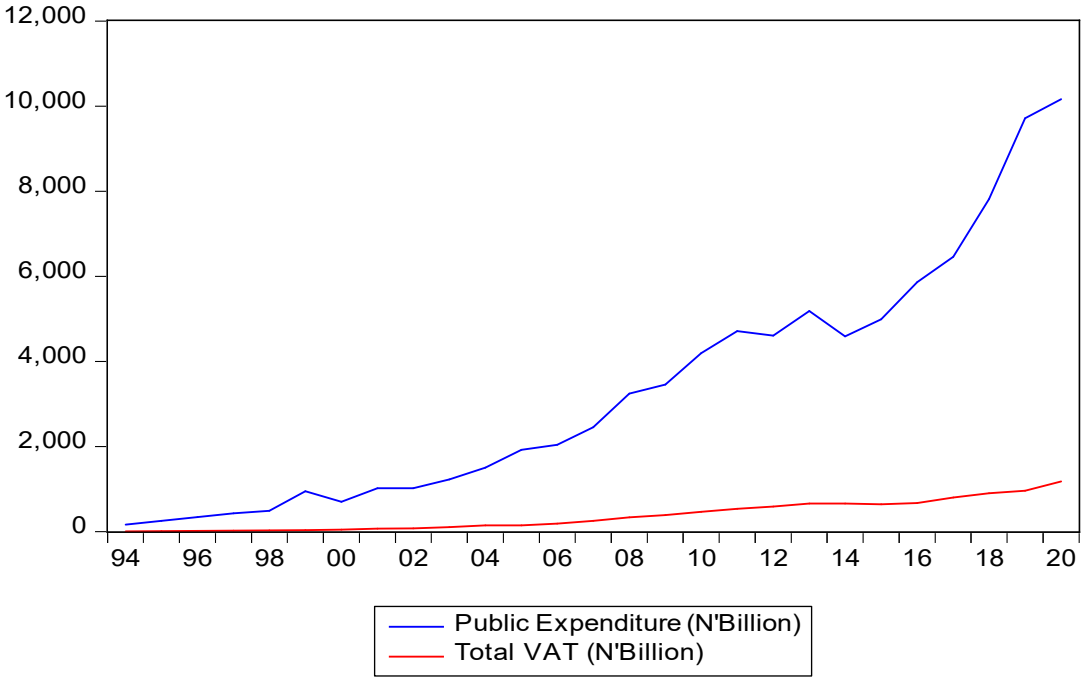
Figure 3 above is a combination of graphs in figure 1 and figure 2. The trend of the value added tax is represented by the red line and is depicted here as a straight line as opposed to how it should look (as shown in figure 2). This depiction of the value added tax as a straight line is caused by the large difference in the figures of the real gross domestic product represented by the blue line and that of the value added tax represented by the red line. Therefore the accurate explanation of this graph i.e. figure 3 can be gotten from the explanation of both trends in figure 1 and 2.

2.4 Public Expenditure and VAT Revenue in Nigeria, 1994 – 2020

Years	Total VAT (₦'Billion)	Public Expenditure (₦'Billion)
1994	5.03	160.9
1995	9.82	248.8
1996	14.60	337.2
1997	20.74	428.2
1998	26.38	487.1
1999	33.31	947.7
2000	44.55	701.1
2001	65.01	1,018.0
2002	71.36	1,018.2
2003	105.54	1,226.0
2004	142.19	1,504.2
2005	143.24	1,919.7
2006	186.49	2,038.0
2007	249.47	2,450.9
2008	333.99	3,240.8
2009	388.70	3,453.0
2010	464.67	4,194.6
2011	536.23	4,712.1
2012	586.24	4,605.3
2013	656.85	5,185.3
2014	655.71	4,587.4
2015	642.92	4,988.9
2016	669.55	5,858.6
2017	798.90	6,456.7
2018	900.03	7,813.7
2019	959.56	9,714.6
2020	1,179.33	10,164.6

Source: CBN Statistical Bulletin, 2020.

Figure 4: Trend Graph for total value added tax and public expenditure



Source: Author's Computation Using Data from CBN Statistical Bulletin, 2020**.**

The figure 4 shows the trend for total value added tax and public expenditure for the periods within 1994 and 2020. The blue line shows the trend for public expenditure while the red line shows the trend for total value added tax. We can see from the above that the red line shows a semblance to the movement of the original trend in figure 2 as opposed to the straight line depicted in figure 3 because of the large differences between the figures of interest. The explanation of the trend for the total VAT can be accurately reflected by figure 2 and can be explained also by the explanation of the trend for figure 2.

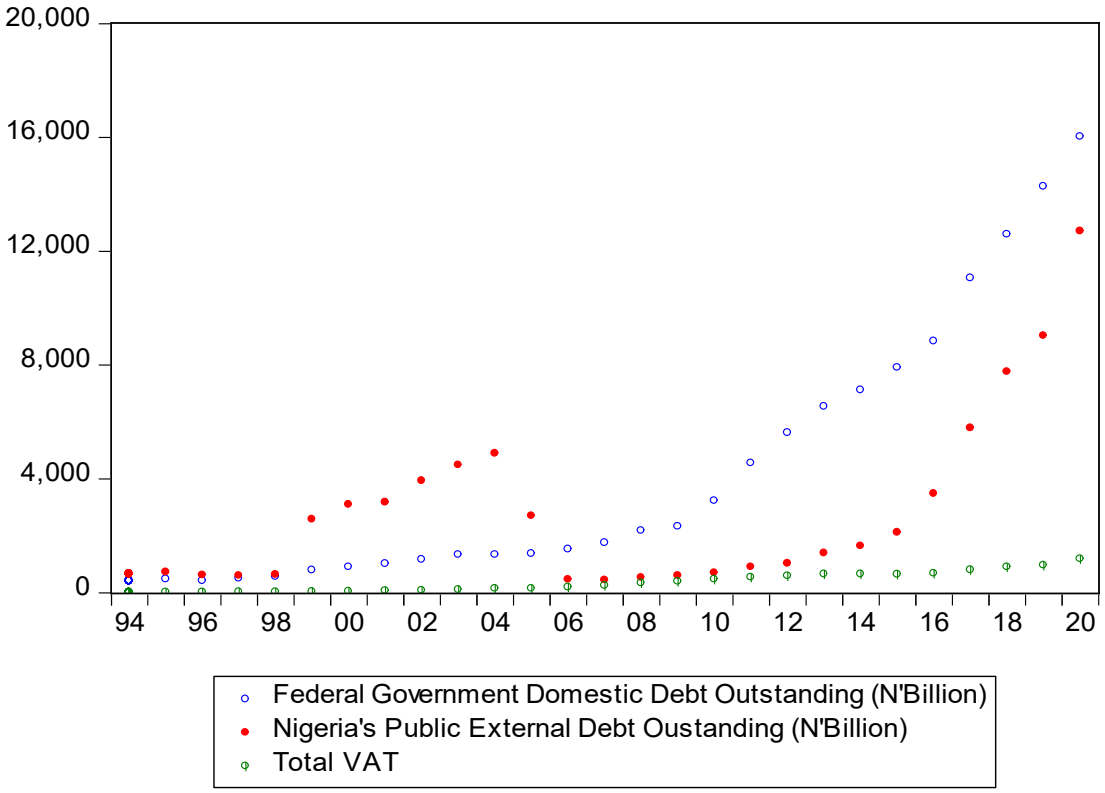
The trend for public expenditure as depicted by the blue line in our graph shows a steady rising trend from 1994 to 1998. From 1999 till 2020, a galloping movement can be noticed. In 1999, a significant rise can be seen this rise could be due to the change of administration from military rule to civilian rule and the goal of the then president his excellency Olusegun Obasanjo whose aim was to restructure the Nigerian economy by attempting a new social and economic order that would make the country exploit its enormous resources. The goal was to accelerate economic growth to alleviate the widespread poverty in the country. A significant fall in the trend can be seen in year 2000. After the fall in 2000, there was a rise in public expenditure from 2001 to 2011. Though there was a rise in 2001 to 2011, this rise was not steady like the period of 1994 to 1998. In year 2012 there is a noticeable fall in the trend and then a rise in 2013 and a fall again in 2014. From 2015 upward a steady increase is shown by the trend. This increase shown by the trend for period 2015 till 2020 can be attributed to the growth of the economy and increases in public revenue cause as we know public expenditure increases as the economy grows. The slight increase in year 2020 can be chalked up to the COVID-19 pandemic cause according to Peacock and Wiseman, public expenditure tends to increase in period of wars, pandemics, crises, famine etc. Therefore we can attribute that slight increase in 2020 to the existence of the global pandemic COVID-19 which was ravaging the world in 2020.

2.5 Debt Experiences and Value Added Tax Revenue in Nigeria, 1994-2020

Years	Total VAT (₦'Billion)	Federal Government's Domestic Debt Outstanding (₦'billion)	Nigeria's Public External Debt Outstanding (₦'Billion)
1994	5.03	407.58	648.81
1995	9.82	477.73	716.87
1996	14.60	419.98	617.32
1997	20.74	501.75	595.93
1998	26.38	560.83	633.02
1999	33.31	794.81	2,577.37
2000	44.55	898.25	3,097.38
2001	65.01	1,016.97	3,176.29
2002	71.36	1,166.00	3,932.88
2003	105.54	1,329.68	4,478.33
2004	142.19	1,329.68	4,890.27
2005	143.24	1,370.83	2,695.07
2006	186.49	1,525.91	451.46
2007	249.47	1,753.26	438.89
2008	333.99	2,169.64	523.25
2009	388.70	2,320.31	590.44
2010	464.67	3,228.03	689.84
2011	536.23	4,551.82	896.85
2012	586.24	5,622.84	1,026.90
2013	656.85	6,537.54	1,387.33
2014	655.71	7,118.98	1,631.50
2015	642.92	7,904.03	2,111.51
2016	669.55	8,837.00	3,478.91
2017	798.90	11,058.20	5,787.51
2018	900.03	12,589.49	7,759.20
2019	959.56	14,272.64	9,022.42
2020	1,179.33	16,023.89	12,705.62

Source: CBN Statistical Bulletin, 2020.

Figure 5: Trend of total VAT and total debt experiences



Source: Author's Computation using data from CBN Statistical Bulletin, 2020.

Countries borrow to finance their wants and Nigeria is not left out. From the trend above, we can see that the green dotted lines which represents the country's total VAT is in a straight form. This can be as a result of the huge differences in the figures of the variables in the trend. Therefore, to get the accurate explanation for total VAT, we go back to the explanations under figure 2.

From the graph, the blue dotted line represents the trend for federal government domestic debt outstanding and the red dotted line represents the trend

for federal government external debt outstanding. From the trends we can see that they both exhibited a relatively constant trend from 1994 to 1998. From 1999 to 2020 the domestic debt outstanding debt has being on a constant rising trend which signifies that domestic debt outstanding had been on the increase since 1999 to 2020. For the external debt outstanding we can see that from 1999 to 2003 it rose sharply and significantly and also fell sharply in 2004 to 2006 and from 2007 on till 2020 it maintained a rising trend. While the reason for increase of external debt outstanding within the period of 1999 to 2003 can only be attributed to increase in government deficit financing that is borrowing to finance budget and developmental plans, the reason for the decrease cannot be farfetched. In 2005, Nigeria became the first African country to settle its public debt under a scheme devised to help the world's poorest and indebted states. The country under the administration of former President Olusegun Obasanjo and the then minister of finance Dr Ngozi Nkonji-Iweala paid off $18 billion to secure forgiveness of the balance of its nearly $30 billion debts to the London and Paris clubs of foreign creditors with this deal, the nation's external debt was near zero.

According to reports Nigeria has accumulated the most amount of external debt in the Nigerian history under the administration of President Muhammadu Buhari. As at 2020 the rate of public debt to GDP was at 34.98. Increase in external debt is more worrisome than increases in domestic debt cause while domestic debt is paid in Naira which is in constant value, external debt is paid mostly in dollars and in

respect to the exchange rate prevailing in that period irrespective of the exchange rate as at the time the debt was incurred. Huge public debts might crowd out private sector investment and inhibit efforts to finance capital infrastructure.

2.6 Appraisal of VAT Revenue and Economic Growth in Nigeria

Over the years, revenue derived from taxes has been growing very slowly and it seems that no significant physical development actually took place and according to Okafor, 2012, the impact of tax revenue on the poor is not being felt.

The value added tax has been too often spoken about in recent years. The Value Added Tax (VAT) is a consumption tax that is being embraced and administered in many developed and developing countries because of its merits of it being relatively easy to administer and the difficulty of it being evaded. The revenue gotten from VAT has continually being on the increase and has being a major contributor to the revenue of the Nigerian economy in recent years. VAT revenue is said to be a major contributor to non-oil sector in the country cause as it is known, crude oil has being the major source of all government revenue since its discovery in the 1950's. Value Added Tax in the year of its introduction accounted for about 36.5% of the budgeted revenue and 4.06% of the total government revenue. It is said to have gone up in the following year amounting to 5.93% of the total government revenue.

It is often times said that economic growth and development of any economy depends on the ability of government to generate adequate revenue in order to

effectively provide the various infrastructural facilities needed to satisfy the needs of the general population and to put themselves among developed countries of the world. The problems of inadequate tax personnels, poor implementation of tax laws, poor administration, fraudulent activities of tax collectors and the lack of understanding of the importance of tax on the part of tax payers are some of the problems linked to the tax system in Nigeria.

CHAPTER THREE

LITERATURE REVIEW

3.0 Introduction

This chapter is divided into four sections. The first being the introduction itself, the second is the conceptual literature review, the third the theoretical literature review and the last part which is the fourth contains the empirical literature review. This section contains conceptual, theoretical and literature review studies of value added tax and economic growth and other variables of interest in our study.

3.1 Conceptual Literature Review

3.1.1 Economic Growth

The term economic growth and economic development are most times used interchangeably and this is a misconception as both have different meanings and scenarios for which they can be used.

Todaro and Smith (2011) measure economic growth as increase in per capita income of a nation. According to World Bank, growth in an economy is measured by change in the volume of its output or in the real expenditure or income of its residents. Economic Growth is simply the increase in per capital national product over a long period of time. The Nigerian economy using the Real Gross Domestic Product (RGDP) has being growing since the 20th century and even before the discovery of commercial amount of oil in the late 1950s. Fiscal policy is said to be

one of the most crucial economic tool that have a significant effect on all economic sectors and have real effect on economic variables like gross domestic product (GDP), unemployment, inflation etc.

Sources of Economic Growth

There are two main sources of economic growth:

- Growth in the size of the work force.
- Growth in the productivity (output per hour worked) of that workforce.

Indicators of Economic Growth

- **The Human Development Index (HDI):** The HDI is an instrument formed by the United Nations to enable them compare economies and to measure various countries' levels of social and economic development. The HDI is composed of four principal areas of interest namely: mean years of schooling, expected years of schooling, life expectancy at birth, and standard of living.
- **Gross Domestic Product (GDP):** GDP measures the final market or monetary value of all goods and services that are produced in a country in a given period of time (say a quarter or a year). It counts all of the outputs generated within the borders of a country. GDP itself is classified into two we have the nominal and the real GDP. The nominal GDP is the Gross Domestic Product without any effect of inflation while the real GDP is the inflation-

adjusted GDP of a country and it is the most widely used type of GDP because it accounts for the effects of inflation.

- **Gross National Product (GNP):** GNP measures the total market value of all the finished goods and services produced using the country's factors of production irrespective of their location. The gross national product (GNP) can also be said to be the value of all finished goods and services owned by a country's citizens, whether or not those goods are produced in that country.
- **GNP per capita**: This is simply the dollar value of GNP divided by the total number of persons in a country's population.
- Birth and death rates.
- Literacy rate.
- Life expectancy.

3.1.2 Tax

Tax is a compulsory levy imposed by the government on individuals, companies, goods and services to raise revenue for its operations and to promote social equity through the redistribution of income effect of taxation (Anyanwu, 1997). According to Azubike (2009), Tax is a compulsory levy imposed on a subject or his/her property by the government to provide social amenities and create conditions for the economic prosperity of the society. Ofishe (2015) equally defined tax as a non-punishing but compulsory transfer of resources from the public sector to

the private sector imposed on individual's personal income, corporations and institutions without recourse for immediate benefits for the tax paid. Chigbu and Njoku (2015) emphasize that tax is a major source of revenue for every economy and it's usually an instrument used in reducing the gap between the rich and the poor.

3.1.3 Value Added Tax Revenue

According to the Federal Inland Revenue Service (FIRS) a body which is saddled with the responsibility of collection of VAT revenue, VAT is a consumption tax paid when goods are purchased and services rendered. Adebayo (1995) defined Value Added Tax as the value which is added to goods and services as they pass through the various stages in the business chain by registered persons in the course of their taxable activities up to the final consumer. According to Osanyande (1998), Value Added Tax can be defined as the incremental value, which a producer, using labor, contributes to his raw materials, or processed goods or services. Here the producer can be a manufacturer, a distributor or a supplier of goods and services.

Types of Value Added Tax (Source: Zabeel Institute)

There are three kinds of VAT, they are:

- Usage kind.
- Earnings kind.
- Gross National Product (GNP) type.

1. **Intake-Kind VAT**

A consumption tax obligation is a tax imposed on consumption costs on items and solutions. Under usage kind VAT, all resources items bought from other firms, in the year of purchase, are omitted from the tax base while depreciation is not subtracted from the tax obligation base in succeeding years. The tax base of such a tax is the cash spent on intake.

2. **Revenue-Type VAT**

The income-kind VAT does not leave out resources, goods bought from other companies from the tax base in the year of acquisition. This kind, however, leaves out depreciation from the tax obligation base in subsequent years. The tax obligation drops both on intake and internet financial investment. The tax base of this type is the internet nationwide income.

3. **GNP-Kind VAT**

Under this type, resource goods purchased by a company from other firms are not deductible from the tax obligation base in the year of acquisition. It additionally does not enable the reduction of devaluation from the tax obligation base in subsequent years. Tax obligation is levied both on intake and a gross investment. The tax obligation base of this type is the GDP.

Development of VAT in Nigeria

The subject of VAT revenue in recent times has been discussed in so many ways from its implementation, to its collection and down to its distribution. VAT is a type of indirect tax that is paid at each stage of production in the value chain. It is a tax paid on the consumption of goods and services by individuals, government and corporate entities. Although VAT is referred to as a multiple stage tax, it has a single effect and does not add more than the specified rate to the consumer price no matter the number of stages at which the tax is paid and this particular feature has made it more popular than other forms of indirect tax like the sales tax which carries a double effect of tax**.**

In Nigeria, the history of VAT can be dated back to 1991 when the federal government felt that there was a need to review the entire system of taxes in the country with a view to expanding the financial base for revenue generation (FIRS, 1999; Abdul-Rahman, Joshua & Ayorinde, 2013). Abdul-Rahman, et al. (2013) further argued that this became necessary because sales tax could not guarantee wider and better tax administration, as many states were resentful of its uniform nature due to differences in their political orientation. Sanni (2012), in his own contribution, said before the advent of VAT, sales tax was under the jurisdiction of the States and generally was poorly administered with marginal contribution in terms

of revenue. The rationale behind the adoption of VAT in Nigeria can be summarized as the need to achieve:

(i) Simplification of indirect tax system

(ii) Enhancement of tax neutrality in international trade

(iii) Reduction in tax evasion, and

(iv) Expansion of tax base promotion and investment.

Value added Tax in Nigeria is believed to have commenced in 1993 following the enactment of Decree No. 102 of VATA 1993. It was introduced by the then military administration. The Value Added Tax came into effect in January 1, 1994. Before the introduction of the Value Added Tax (VAT) in Nigeria there had been in existence the sales tax. The initial reason for this transition from sales tax to Value Added Tax was because of the dissatisfaction with the then existing tax structure. The dissatisfaction is that sales tax which was under the jurisdiction of the States was generally poorly administered with marginal contribution in terms of revenue. According to Ochei (2010), it was believed by many Nigerians that the tax was introduced as a means of avoiding taking loans from international agencies. As at the time of its introduction, the rate that was charged to be paid by each person was a flat rate of 5% but this has being changed to 7.5 %. The 7.5% rate came into effect in February, 2020. The decision to increase the VAT rate did not come as a surprise as different administrations have made several attempts to increase the VAT

rate. Past administrators has only contended on this decision up until year 2019 when the Finance Act 2019 changed the collectible VAT rate from 5% to 7.5% and it's full implementation in January 2020. All goods and services (produced within or imported into the country) are taxable except those specifically exempted by the VAT Act with VAT rate at 7.5%. It is important to note that VAT imposition on all goods and services does not include exempted goods. Exempted goods are those goods which are not subject to VAT as specified in No. 102 of VATA 1993. Some examples of exempted goods are; medical and pharmaceutical products, Basic food items, Books and educational materials, Baby products, Fertilizer (locally produced), agricultural and veterinary medicine, farming machinery and farming transportation equipment, Plant and Machinery imported for use in the Export Processing Zone or Free Trade Zone; provided that 100% production of such company is for export, Proceeds from the disposal of Short-Term Federal Government of Nigeria Securities and Bonds, Proceeds from the disposal of Short-Term State, Local Government and Corporate Bonds (including supra-national Bonds) Limited to ten years etc.

A taxable person is required to register for VAT within six (6) months of commencement of the Act or within six (6) months of commencement of business, whichever is earlier. Taxable persons are obliged to register under the VAT Act as a failure or refusal to do so attracts a penalty especially in the case of Nigerian residents outside Nigeria who fails to register for VAT administration within 6

months of carrying out economic activities in Nigeria is subjected to a fine of N50,000 for the initial month in which the failure to register and inability to notify the Federal Inland Revenue Service (FIRS) of variation in business address or perpetual termination of trade or business and failure to file returns occurs. All other subsequent months of failure attract a fine of ₦25,000 each month in addition to the initial ₦50,000 in the first month that the failure is occurs. The amount to be paid by taxable persons for failure to file VAT returns was reviewed by the finance Act of 2020 changing the amount to be paid from ₦10,000 to ₦50,000 for the first month and ₦5000 to ₦25,000 for the subsequent months or periods. If this persists, the business premises will be sealed up after a considered reasonable period.

The distribution of VAT revenue as stated by the provisions of the Act, VAT is administered on behalf of the federation and not on behalf of the Federal Government. This means that VAT is administered not by the federal government but administered on behalf of the three tiers of Government i.e. the 774 Local Governments, the 36 States & the FCT and the Federal Government. The revenue accruing from VAT is shared amongst the three tiers of Government based on extant provisions. Presently, 35% of the revenue accrued from VAT goes to the Local Governments, 50% goes to State Governments and 15% goes to the Federal Government. By this arrangement, 85% of VAT collected goes to the States and Local Governments while only 15% goes to the Federal Government. As opposed to

most belief, the Value Added Tax revenue is not paid to the federal government or federation account but rather it (i.e. VAT revenue) is into a VAT pool account. It is important to note that it is only after the VAT revenue has been shared and allocated using the rate made available by provisions to the three tiers of Government that the portion due to the Federal Government goes into the relevant consolidated revenue account.

3.1.4 Personal Income Tax Revenue

Personal Income Tax is a form of direct tax. Personal Income Tax (PIT) can be defined as a statutory obligation imposed by the government on the incomes of individuals, communities and families, trustees or executors of any settlement. The taxation of a trade or profession in Nigeria is established and covered by the Personal Income Tax Act (PITA). Until Tuesday, 13 December 2011 when the then President of the Federal Republic of Nigeria Dr. Goodluck Ebele Jonathan reviewed the PIT Act, the act that governed the administration of PIT in Nigeria was the Personal Income Tax Act Cap .P8 Laws of The Federation of Nigeria (LFN) 2004. Though the PIT (amendment) Act is said to be reviewed in December 2011, it is dated 24 June, 2011.

3.1.5 Total Household Consumption Expenditure

Total household consumption expenditure is the amount of final consumption expenditure made by resident households to meet their everyday needs, such as food,

clothing, housing (rent), energy, transport, durable goods (notably cars), health costs, leisure, and miscellaneous services.

3.2 Theoretical Literature Review

Several theories that explain the general principles of taxation, the different tax instruments, optimum tax systems, distributional effects of taxation, systems of taxation and efficiency and equity issues of taxation etc. had evolved over the years. These theories will be reviewed in two broad categories: the positive theory of taxation and the normative theory of taxation. For the aim of this study, more emphasis would be placed on the first which is the positive theory of taxation.

3.2.1 Positive Theory of Taxation

The positive theory of taxation centers on the general principle of taxation and the economic effects of the various taxes introduced by the government. There are different theories existing under the positive theory of taxation. These theories are concerned with the effects that taxes exert on individual's propensity to consume, save and supply labour or on firm's desire to invest and the incidence of taxes on the corporate sector.

Adam Smith (1776) an 18th century economist and philosopher in his study "an enquiry into the nature and causes of the wealth of nations" explained that the general principle of taxation are necessary premises that must be considered before entering into the explanation of tax theories. Adam Smith in chapter 2 of his study

set down four general canons in an attempt to systemize the rules that should govern a rational system of taxation. The four canons or principles are fairness, certainty, convenience and efficiency.

I. The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state. This is explaining the canon of fairness.

II. The tax which each individual is bound to pay ought to be certain, and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributor, and to every other person. This is the principle of certainty.

III. Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it. This is based on the principle of convenience and;

IV. Efficiency which is the last of the four says that every tax ought to be so contrived as both to take out and keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state.

Although the four canons have needed to be reinterpreted from time to time, these principles retain remarkable relevance. From the first can be derived some

leading views about what is fair in the distribution of tax burdens among taxpayers. These are: (1) the belief that taxes should be based on the individual's ability to pay, known as the ability-to-pay principle; (2) the benefit principle, the idea that there should be some equivalence between what the individual pays and the benefits he subsequently receives from governmental activities.

Selignam (1893) affirmed in his "Theory of Progressive Taxation" that the arguments that have been advanced in favour of progressive taxation may be grouped into two classes, Socialistic and economic. According to selignam, the foremost advocate of the socialistic theory is Wagner with his doctrine of socio-political taxation. This doctrine was of the opinion that government may adjust its strict fiscal policy, taking into consideration fundamental economic and social objectives of the government to her citizens. Hence, it is perfectly and absolutely possible to reject the socialistic theory of taxation and yet advocate progression. Also the economic doctrine was that of benefits and the natural conclusion was proportional taxation and the latter was soon modified by the introduction of clear income theory.

The Ability-to-Pay theory has numerous theories but the one by the economist M.S. Kendrick stood out. According to Kendrick (1939), "Ability-to-Pay Theory of Taxation" is the dominant theory of taxation. To Kendrick, this theory is often explained in the context of sacrifice, and it is applied to justify progressive

taxation by taking into consideration any one of the three possible interpretations of sacrifice: the equal, equal-proportional and least sacrifice theories. Furthermore, the theory asserts that the funds for government funding should come from "him that hath" instead of "him that hath not ", and that sacrifice is the basic principle to which the levy of taxes should confirm for that is their meaning to tax payers.

Brown and Jackson (1990) explained that "The Benefit Theory of Taxation" has its roots firmly established in the voluntary exchange and price theory of public finance, and that the theory examines the costs and benefits of public sector activities that faces individual citizens. Hence, the theory could suffer from the strategic behaviour of the free riders. However the theory does not take into account the redistribution of income aim of the government. It concentrates purely on the efficient allocation of resources to the public and private sector activities.

Bhatia (2008) discussed the "Expediency" and "Socio-Political" theories of taxation. According to Bhatia, the expediency theory argued that every tax proposal must pass the test of practicality. Also, the latter theory assumed that economic and social objectives of the government should be relevant to the tax system adopted. While the socio-political theory simply postulates that social and economic objectives should be the deciding factors in choosing taxes. Furthermore, the social and political theory states that each economic predicament of the society should be

looked at in its social and political context, and appropriate solution found by raising revenue through taxes.

Bhatia (2009) enumerated the following as the theories of taxation: social-political theory, the expediency theory, benefit received theory, cost of service theory and ability-to-pay theory. The theoretical foundation of tax reform is gotten from the Supply-siders. These are sets of economists who had their hay days between 1970 and early 1980s. The Supply-siders believed in the use of economic incentives to encourage production. They positioned that higher marginal tax rate will not only create disincentive to work, investment and saving, but encourages tax avoidance and evasion, that reduces public generated revenue (Oriakhi & Ahuru, 2014).

1. **Socio-Political Theory**

This theory of tax revenue 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 the ills of society as a whole.

2. **Expediency Theory**

This theory asserts that every tax proposal must pass the test of practicality. It must be the only consideration weighted by the authorities in choosing a tax proposal. Economic and social objectives of the state and the effects of a tax system

should be treated as irrelevant (Ayuba, 2014). Ofishe (2015) explained that the expediency theory is based on a link between tax liability and state activities. It assumes that the state should charge the members of the society for the services provided to it. This reasoning justifies imposition of taxes for financing state activities by inferences, which provides a basis for apportioning the tax burden between members of the society. This proposition has a reality embedded in it, since it is useless to have a tax which cannot be levied and collected efficiently.

3. **Benefit Received Theory**

This theory is based on the assumption that there is basically an exchange relationship between taxpayers and the state because the state provides certain goods and services to the members of the society. Therefore, members of the society should contribute to the cost of these supplies in proportion to the benefits received (Ayuba, 2014).

4. **Cost of Service or Faculty Theory**

This theory implies that the Government should tax the citizens according to the cost of service rendered by it. That the tax an individual should bear must be equal to the cost of benefit he receives. According to Ayuba (2014), the faculty theory states that one should be taxed according to the ability to pay. It is simply an attempt to maximise an explicit value judgment about the distributive effects of taxes.

Ayuba (2014) argues that a citizen is to pay tax just because he can, and his relative share in the total tax burden is to be determined by his relative paying capacity.

According to Ayuba (2014) a tax revenue theory may be derived on the assumption that there need not be any relationship between tax paid and benefits received from state activities.

5. **Ability to Pay Theory**

The ability-to-pay principle requires that the total tax burden will be distributed among individuals according to their capacity to bear it, taking into account all of the relevant personal characteristics. The most suitable taxes from this standpoint are personal levies (income, net worth, consumption, and inheritance taxes). Historically there was common agreement that income is the best indicator of ability to pay. There have however, been important dissenters from this view, including the 17th-century English philosophers John Locke and Thomas Hobbes and a number of present-day tax specialists. The early dissenters believed that equity should be measured by what is spent (i.e., consumption) rather than by what is earned (i.e., income); modern advocates of consumption-based taxation emphasize the neutrality of consumption-based taxes toward saving (income taxes discriminate against saving), the simplicity of consumption-based taxes, and the superiority of consumption as a measure of an individual's ability to pay over a lifetime. Some theorists believe that wealth provides a good measure of ability to pay because assets

imply some degree of satisfaction (power) and tax capacity, even if (as in the case of an art collection) they generate no tangible income.

The ability-to-pay principle also is commonly interpreted as requiring that direct personal taxes have a progressive rate structure, although there is no way of demonstrating that any particular degree of progressivity is the right one. Indirect taxes such as VAT, excise, sales, or turnover taxes can be adapted to the ability-to-pay criterion, but only to a limited extent for example, by exempting necessities such as food or by differentiating tax rates according to urgency of need." Such policies are generally not very effective; moreover, they distort consumer purchasing patterns, and their complexity often makes them difficult to institute.

3.2.2 Normative Theory of Taxation

Normative tax theory fundamentally uses the combination of positive tax theory on the effects of tax changes, as well as the ethical criteria for the evaluation of these effects to assess the overall performance of the tax system. It is interesting that the normative tax arguments balances the economic criteria of efficiency, equity and revenue and all these are done against administrative, political, demographic, constitutional, or any other constraints.

Ramsey (1927) provided answers to questions; what set of commodity taxes will raise the required revenue and leave the tax payers as well off as possible? Or what set of taxes minimize the efficiency cost of tax burden?. Ramsey's optimal

commodity taxation assumed a purely competitive system with no foreign trade, General utility function and a quadratic utility function. To this end , the net utility (U) of producing and consuming (or saving) a given number of n commodities (X_1, X_2, . . . X_n) on which incomes are spent can be expressed as:

$$U = F(X_1 \ldots\ldots X_n) \qquad (3.1)$$

From equation (3.1), if there is no taxation, stable equilibrium will occur for values of the X's which makes U a maximum. Suppose new taxes are levied on different commodities at the rate $\lambda_1, \lambda_2 \ldots \lambda_n$ per unit in money whose marginal utility is unity. Hence, the new equilibrium is determined by:

$$\frac{\partial U}{\partial X_r} = \lambda_r \quad r = 1, \ldots n \qquad (3.2)$$

By virtue of equation (3.2), we can regard the λ's as functions of the X's and subscript r is the tax per unit of commodity taxed which may vanish at the values of X's where stable equilibrium occurs as a result of no taxation and satisfy identically:

$$\frac{\partial \lambda_r}{\partial X_s} = \frac{\partial \lambda_s}{\partial X_r} * \left(= \frac{\partial^2 U}{\partial X_r \, \partial X_s} \right) \qquad (3.3)$$

Also, with the presence of tax rates (see equation 3.2), the tax revenue (R) can be expressed as:

$$R = \Sigma \lambda_r X_r \qquad (3.4)$$

In this case, we shall always suppose R to be positive but there is no apriori reason why some of the tax rates (λ's) should not be negative.

Now, given equation (3.2), how should the λ's be chosen in order that the values of the X's shall make U maximum. Hence, U is to be a maximum subject to equation (3.4). Therefore we must have:

$0 = dR = \Sigma \lambda_r dX_r + \Sigma_r \Sigma_s X_s \frac{\partial \lambda_s}{\partial X_r} dX_r$, and so we have:

$$\frac{\lambda_1}{\Sigma_s X_s \frac{\partial \lambda_s}{\partial X_1}} = \frac{\lambda_2}{\Sigma_s X_s \frac{\partial \lambda_s}{\partial X_2}} = \cdots \frac{\lambda_n}{\Sigma_s X_s \frac{\partial \lambda_s}{\partial X_n}} = \frac{R}{\Sigma \Sigma \frac{\partial \lambda_s}{\partial X} X_r X_s} = -\theta$$

Equation (3.5) presents the fundamental equation that determines the values of the X's which are critical for the maximum U. Additionally, there can as well be plurality of solutions to determine conditions under which the fundamental equations gives true maximum values. The intuition behind Ramsey's optimal commodity taxation is that government must raise a fixed amount of real resources and can levy only commodity taxes costlessly. Also, tax payers are taken to be identical (in taste and endowment) therefore, there is no need to be concerned with the issues of vertical and horizontal equity. Also the result can be extended to the study of the elasticity of demand and supply of commodities that are independent, have their own demand and supply equations.

Other scholars of the Normative Theory of Taxation includes Mirrlees, Diamond, Atkinson, Stiglitz, Newbery, Markiw, Weinzierl and Yagan, etc.

3.2.3 Theories of Economic Growth

There are different types of economic growth theories for example we have the; Classical growth theory, Neoclassical growth theory, Endogenous growth model and the Unified growth theory. But for the purpose of this study, we would focus on the first two mentioned above.

The Classical Growth Theory

The Classical Growth Theory is a modern category of economic theory that is used in the works of several economists who wrote about the process and sources of economic growth in their time, roughly in the 18th and 19th centuries. Some of the important theorists associated with these ideas include Adam Smith, Thomas Malthus and David Ricardo. The Classical Growth Theory is an economic theory that maintains that an increase in population growth leads to a decrease in economic growth. According to this theory, economic growth ceases when there is a rise in population, this is because when population increases, resources become limited causing a decline in economic growth. Proponents of this theory belief that population explosion or increase is caused by a temporary increase in the real gross domestic product of a country. However, when there is population explosion, there is a higher demand and limited resources which will in turn cause the end of an economic growth. Generally, classical growth theories focus on the concept of economic growth and population growth.

The predominant classical growth theories were developed by Adam Smith and Thomas Malthus. These theories explored the impacts of population increase on economic growth. For instance, in the early days, there are sufficient amount of lands for families, this is where they work and get their livelihood. At some point, all good and productive lands were occupied and as the number of people increased, the available lands required more efforts and produced little harvests. Land became a limitation for the population and productivity diminished. This outplay of situations gave the belief that when humans continue to reproduce and increase in population, hunger and war is at hand. Thomas Malthus stated the major controls of population which are;

- Abstinence from sex which he described as a form of 'moral self-restraint.'
- Sexual practices with no intention of procreation or reproduction, and Hunger, diseases and wars.

Being a Reverend, Malthus placed more emphasis on the first solution. However, there are many classical theory ideas that do not resonate with the belief of Thomas Malthus, different classical theories emerged in the eighteenth century when a massive growth occurred. According to Ricardo and Marx, a major factor for economic growth is capital. An increase in the number of workers influence capital, workers also increase when there is an accumulation of capital (Jason Gordon's, 2022). Classical growth theory explains economic growth as a result of capital

accumulation and the reinvestment of profits derived from specialization, the division of labor, and the pursuit of comparative advantage (Will Kenton, 2021)

The Neoclassical Growth Theory

The Neoclassical growth theory says that there are three factors necessary for a growing economy. The Neoclassical Growth Theory is an economic model of growth that states how a steady economic growth rate can be attained with the appropriate amounts of three driving forces: labour, capital and technology. However, the theory lays emphasis on its claim that temporary, or short-term equilibrium, is different from long-term equilibrium and does not require any of the three factors. The simplest and most popular version of the Neoclassical Growth Model is the Solow-Swan Growth Model.

The solow-swan growth neoclassical growth model which is credited to two economists by name Robert Solow and Trevor Swan, states that short-term economic equilibrium is as a result of differing amounts of labor and capital that plays a major role in the production process. The theory argues that technological changes significantly influence the overall functioning of an economy.

The Production Function in the Neoclassical Growth Model

The Neoclassical Growth Model claims that capital accumulation in an economy, and how people make use of it, is important for determining economic growth. It further claims that the relationship between capital and labor in an

economy determines its total output. Finally, the theory states that technology augments labor productivity, increasing the total output through increased efficiency of labour. Therefore, the production function of the neoclassical growth model is used to measure the economic growth and equilibrium of an economy. The general production function in the neoclassical growth model takes the following form:

$$Y = AF (K, L)$$

Where:

Y = Income, or the economy's Gross Domestic Product (GDP)

K = Capital

L = Amount of unskilled labor in the economy

A = Determinant level of technology

Also, because of the dynamic relationship between labor and technology, an economy's production function is often re-stated as Y = F (K, AL). This states that technology is labor augmenting and that workers' productivity depends on the level of technology

3.3 Empirical Literature Review

3.3.1 VAT Revenue and Economic Growth in Nigeria

Adereti, et al. (2011) studied value added tax and economic growth in Nigeria. Time series data on the Gross Domestic Product (GDP), VAT Revenue, Total Tax Revenue and Total (Federal Government) Revenue from 1994 to 2008,

were sourced from Central Bank of Nigeria (CBN) and were analyzed using both simple regression analysis and descriptive statistical method. 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. A positive and significant correlation exists 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.

Kareem, Arije and Avovome (2020) examined the impact of Value Added Tax and economic growth in Nigeria using secondary data ranging from 1994 to 2017 collected from the Central Bank of Nigeria (CBN) statistical bulletins and annual reports. Their study was conducted using the Autoregressive Distributive Lag (ARDL) which was computed using the E-Views Econometric Software. Before carrying out the ARDL analysis, the unit root test properties of the variables were ascertained (Dang, 2013). The Augmented Dickey-Fuller (ADF) Unit Root Tests (Gujarati & Porter, 2009) was conducted to ascertain the stationarity of the data before performing the test. The results showed that VAT has a positive and significant effect on economic growth in Nigeria.

The study of Ogwuru and Agbaraevah (2017) investigated the influence of selected components of tax revenue in Nigeria on the growth and development of the

country from 2000-2015. Two models were specified where in one, the Gross Domestic Product (GDP) measuring economic growth, was the dependent variable. The second model measured economic development as depicted by Human Development Index (HDI). The two equations had Value Added Tax (VAT) Company Income Tax (CIT) and Customs and Exercise Duties (CED) as independent variables. Data were sourced from the CBN statistical bulletins and annual reports and statement of accounts, the World Bank and the United Nations Development Programme (UNDP) Human Development Index Report. The data were analyzed using the ordinary least square (OLS) regression technique. Results showed that there were positive and significant relationships between GDP and VAT as well as CED. The model on HDI showed that VAT was negative while CIT was positive but both were significantly related to HDI. The implication of the results is that to drive economic growth and development in Nigeria, these three components of the country's tax revenue have to be aggressively pursued and proceeds from these judiciously utilized for the benefit of the country.

Mohammed et al. (2018) wrote on the topic the Impact of Value Added Tax on Economic Growth in Nigeria. The study examined the effect of value added tax (VAT) on economic growth in Nigeria in the period 1994-2016. The research used Ordinary Least Squares (OLS) and Granger causality technique using secondary data sources. The dependent variable is growth rate of gross domestic product (GDP)

while the explanatory variables are value added tax (VAT) and customs and excise duties (CED). The results of the study revealed that VAT and CED have no significant effect on economic growth. It also showed that there is no causality among the variables.

Ofishe (2015) in his study used OLS technique to empirically analyse the impact of VAT on economic growth in Nigeria (1994 to 2012). The result demonstrated that VAT meaningfully impacted on economic growth and total tax revenue in Nigeria.

The study of Onwuchekwa and Aruwa (2014) is aimed at empirically analyzing the impact of Value Added Tax (VAT) on economic growth (GDP) in Nigeria from 1994 – 2012. Relevant data were collected from Central Bank of Nigeria (CBN) statistical bulletin and Federal Inland Revenue Service (FIRS) reports. The Ordinary Least Square techniques were used to estimate three models in line with the formulated hypotheses. The results from the models revealed a strong positive significant impact of VAT on economic growth as proxy by GDP in Nigeria. It also revealed that there is positive relationship or impact of VAT on total tax revenue over the period studied.

3.3.2 Personal Income Tax (PIT) Revenue and Economic Growth in Nigeria

The study of Adeyemi and Mieseigha (2019) used yearly time series data of personal income tax and the gross domestic product (GDP) were obtained from the

Federal Inland Revenue Service (FIRS) and the Central Bank of Nigeria (CBN) statistical bulletins during the period 1987–2017. The data obtained was analysed using the Vector Auto-Regression (VAR) model via STATA 13.0. This paper investigated the effect of Personal Income Tax (PIT) on economic growth. The findings of the study revealed the PIT has significantly contributed to the level of economic growth in Nigeria, though negatively.

Ogundana et al. (2017) research examined the direct and indirect impact of taxation on the Nigerian economic growth. This research centered on two major objectives by focusing on the trend of direct and indirect tax and the impact of the Nigerian tax system on the growth of the economy. The research adopted the descriptive research design. The secondary source of data was also engaged as this data was from CBN statistical bulletin and the annual reports from 1994-2013. The research also used the ordinary least square regression technique. With the use of E-views 7.1 to analyze the data, the first objective was achieved by using graphical analysis while the second objective used ordinary least square regression analysis. The results reveal that the direct and indirect taxes have a positive impact on the economy of Nigeria.

3.3.3 Value Added Tax Revenue and Total Household Consumption Expenditure in Nigeria

The study of Gidigbi et al. (2021) examine the effect of indirect taxation on household consumption in Nigeria, using secondary data extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin and World Development Indicators for the period covering 1981 to 2017. He used value-added tax, exchange rate, per capita income, interest rate, inflation rate, custom and excise duty as independent variables and household consumption as the dependent variable. Some of the variables were improved upon (such as per capita income and customs and excise duty) in order to have complete data on them. Autoregressive Distributed Lag (ARDL) was used to examine long-run and short-run relationship dynamics that existed between the variables. The result revealed that value-added tax (0.1918), interest rate (0.0035) and two-period lagged interest rate (0.0040) have a positive and significant impact on household consumption. In the same vein, past custom and excise duty (0.0299) had a positive and significant impact on real household consumption at 5% level of significance.

Roland et al. (2015) study employed ex-post facto research design to investigate the effects of value added tax on consumption expenditure pattern and consumer price index in Nigeria. The study considered value added tax revenue, house hold consumption expenditure on durable and non-durable goods as well as

consumer price index for the period 1994 - 2014. Data used for analysis were extracted from National Abstract of Statistics of the National Bureau of Statistics and the Statistical Bulletin of the Central Bank of Nigeria. The tools of analysis were multiple regression models on households' durable and non-durable goods consumption expenditures and consumer price index with lagged valued variants. Results showed that value added tax and one-period lagged consumption expenditure on durable goods significantly affected households' consumption expenditure on durable goods. Further, positive significant effects were established for value added tax in relation to households' consumption expenditures on non-durable goods; and VAT, its variants and previous spending levels did not discourage households' consumption expenditures; and value added tax did not bear significant relevance on consumer price index.

CHAPTER FOUR

METHODOLOGY

4.0 Introduction

This chapter entails the methodology relevant to this research. It consists of five (5) parts starting with the introduction next the theoretical framework then the model specification, the estimation Techniques / method of data analysis and apriori expectation/variable measurement and lastly the source of data.

4.1 Theoretical Framework

This study is hinged on the neoclassical growth theory. The Neoclassical growth theory is chosen because it is more relevant to this study as well as to the case of Nigeria itself. Therefore, the neoclassical growth theory is adopted as the theoretical framework of this study. The neoclassical growth theory is an economic theory which states how labour, capital and technology are the economy forces that comes to play to in order to attain a steady economic growth rate. The theory states that the only way of achieving a state of equilibrium is by varying the amount of labour and capital in the production function. The theory also argues that technological changes have a major effect on an economy, and that economic growth cannot continue without technological advancements.

The theoretical framework of this study as has been said before is built on the neoclassical growth model which is also similar to the Cobb-Douglas production

function. The Cobb-Douglas production function was formulated by Charles Cobb and Paul Douglas in year 1928. The Cobb-Douglas production function in economics is used to show the relationship between two or more inputs and the amount of output that would be produced using these inputs. In their opinion, production output is as a result of the capital and labour that was invested as inputs. The basic form of the Cobb-Douglas production function model is given below as;

$$Y = AL^{\beta} K^{\alpha}$$

(4.1)

Where;

Y = Total production

K = The capital input

L = The labour input

A = The total factor of productivity

β = A constant value and also the output elasticity of labour

α = A constant value and also the output elasticity of capital

The Neoclassical Growth Theory model is also given below in order to show the similarity between both models though the neoclassical growth theory is used to measure growth and equilibrium in an economy.

$$Y = AF (K, L) \qquad (4.2)$$

Where:

Y = Income, or the economy's Gross Domestic Product (GDP)

K = Capital

L = Amount of unskilled labor in the economy

A = Determinant level of technology

4.2 Model Specification

This study will examine two models one is to measure possible input of VAT and PIT revenue on economic growth over a period of time and the second is to measure the impact of VAT on total household consumption expenditure.

Model 1

Based on the perceived functional relationship between VAT and GDP and PIT and GDP, and in order to analyze the effect of Value Added Tax (VAT) revenue and Personal Income Tax (PIT) revenue on economic growth which is proxied by the Real Gross Domestic Product (RGDP), We give the following functional equation in its implicit form using the ordinary least squares (OLS) regression method.

$$RGDP = F(VAT, PIT) \quad (4.3)$$

Converting equation (4.1) to a linear or stochastic model we have:

$$RGDP_t = \beta_0 + \beta_1 VAT_t + \beta_2 PIT_t + U_t \quad (4.4)$$

The econometric form of equation (4.2) is given as:

$$LnRGDP_t = \beta_0 + \beta_1 LnVAT_t + \beta_2 LnPIT_t + U_t \quad (4.5)$$

Model 2

In order to assess the effect of VAT on total household consumption expenditure (THCE), we give the following functional equation in its implicit form.

$$THCE = F(VAT) \quad (4.6)$$

The linear form of equation (4.4)

$$THCE_t = \beta_0 + \beta_1 VAT_t + U_t \quad (4.7)$$

The econometric form of equation (4.5) is specified as:

$$LnTHCE_t = \beta_0 + \beta_1 LnVAT_t + U_t \quad (4.8)$$

Where:

RGDP = Real Gross Domestic product (₦' billion).

PIT = Personal Income Tax revenue (₦' billion).

VAT = is the total yearly VAT revenue (₦ billion).

THCE = Total Household Consumption Expenditure (₦' billion).

β_0 stands for the intercept term.

βi stands for parameters to be estimated.

U stands for the error terms.

The error or stochastic term captures all variables which are not stated in the model.

Ln stands for the natural logarithm.

t = ith of the observation of the time series data (1994-2020).

4.3 Estimation Techniques

The study is a time series covering time period of twenty-seven (27) years (1994-2020) for all variables that are involved. The design of this study is structured to use time series data that would enable the researcher to determine the impact of Value Added Tax revenue on economic growth in Nigeria for the period ranging from 1994 to 2020. In addition, the principal method common to this kind of research is empirical method. This method entails the use of quantitative, statistical or regression techniques in evaluating the research problems. The empirical methods to be utilized in the course of this study is the descriptive statistics which is to be used to test the reliability of data via mean, median skewness and standard deviation and the econometrics method of Ordinary Least Square (OLS) multiple regression is to be used in exploring the effect of the explanatory variables on the explained (dependent) variable. This is because the Ordinary Least Square (OLS) is known for its property of being the Best Linear Unbiased Estimator.

The population of the study covered the period of 1994 to 2020 using yearly data and the sample size covered by the period of 1994 to 2020 is based on a convenient sampling techniques. This period is adopted because of the non-availability of data on value added tax before 1993 as Value Added Tax was fully introduced in 1994.

4.4 Apriori Expectation/Variable Measurement and Source of Data

S/N	Variables	Definitions	Data Sources	Expected Signs Based Apriori Expectation
1.	VAT	Value Added Tax Revenue.	2020 Statistical Bulletin: Public Finance Statistics.	Positive
2.	PIT	Personal Income Tax.	Statista.com (rates) and 2020 statistical bulletin: Public Finance statistics.	Positive
3.	THCE	Total Household Consumption Expenditure.	2020 statistical bulletin: Real sector statistics.	
4.	RGDP	Real Gross Domestic product.	2020 statistical bulletin: Real sector statistics.	

Source: Author's Computation, 2023.

CHAPTER FIVE

DATA PRESENTATION, ANALYSIS AND DISCUSSION

5.0 Introduction

This chapter presents the research findings in line with the empirical model suggested in chapter four above. It further estimates the overall significance of the model and the significance of the individual variables. The research findings are discussed as follows

5.1 Descriptive Statistics

Descriptive statistics are summarized statistical coefficients that describe or explain a given data set, which can be either a representation of the entire or a sample of a population. Descriptive statistics are broken down into measures of central tendency, measures of variability (spread) and sometimes measures of normality. These measures help to provide some basic and useful information about the variables in question the measures employed here includes, the mean, median, maximum, minimum, standard deviation, skewness, kurtosis, and the Jarque-Bera statistic.

The Mean measures the average of a given set of data observations or series. The median captures the middle value of a series of observation. The maximum is simply the data point that holds the highest value in the series. The standard deviation is a measure of spread or dispersion or variability from the mean.

Skewness is a measure of symmetry or asymmetry of a given series. If series is symmetric, it means that is equally distributed to the left and to the right. However, if a series is asymmetric, it connotes that it has a longer tail to the left (negatively skewed) or it has a longer tail to the left (positively skewed). Kurtosis is a measure of the peakedness or flatness of a given series or data distribution. A kurtosis coefficient of 3 implies that the series has a mesokurtic distribution, while a kurtosis coefficient greater than 3 implies that the series has a Leptokurtic distribution (highly peaked), and a kurtosis coefficient less than 3 implies a platykurtic distribution (flattened).

Table 5.1a: Descriptive Statistics

	PIT	RGDP	THCE	VAT
Mean	191.8253	45425.7	35664.53	366.3113
Median	117.855	43385.88	22945.53	249.47
Maximum	498.7598	71387.83	108638.3	1179.33
Minimum	6.461638	21660.49	921.6837	5.026
Std. Dev.	164.5288	18693.83	36693.2	347.1028
Skewness	0.319993	0.085911	0.814394	0.661867
Kurtosis	1.569255	1.430548	2.227376	2.296062
Jarque-Bera	2.763693	2.80429	3.656138	2.528778
Probability	0.251114	0.246069	0.160724	0.282412
Sum	5179.284	1226494	962942.3	9890.406
Sum Sq. Dev.	703813.3	9.09E+09	3.50E+10	3132490
Observations	27	27	27	27

Source: Authors Computation using Eviews 10.

From the results obtained in the table above, it can be observed that the mean of the variables within the 27 period under consideration are given as 191.8253, 45425.7, 35664.53, 366.3113 for PIT, RGDP, THCE and VAT respectively.

The median, which can also be said to be the middle value for PIT (Personal Income Tax) was 117.855. Real Gross Domestic Product (RGDP) showed a median value of 43,385.88, while Total household consumption expenditure (THCE) has a median value of 22,945.53. Lastly, the median for Value Added Tax (VAT) in Nigeria showed a value of 249.47.

The maximum value of Personal Income Tax observed over the period of study was 498.7598, while 71387.83 was the highest amount for Real GDP. Over the period, Total Household Consumption Expenditure peaked at 108638.3, while Value Added Tax peaked at 1179.33. Conversely, the minimum level for Personal Income Tax in Nigeria within the period covered by this research was 6.461638, while RGDP showed a minimum of 21,660.49. The least Total household consumption expenditure was observed to be 921.6837, while the least value for Value added Tax stood at 5.026.

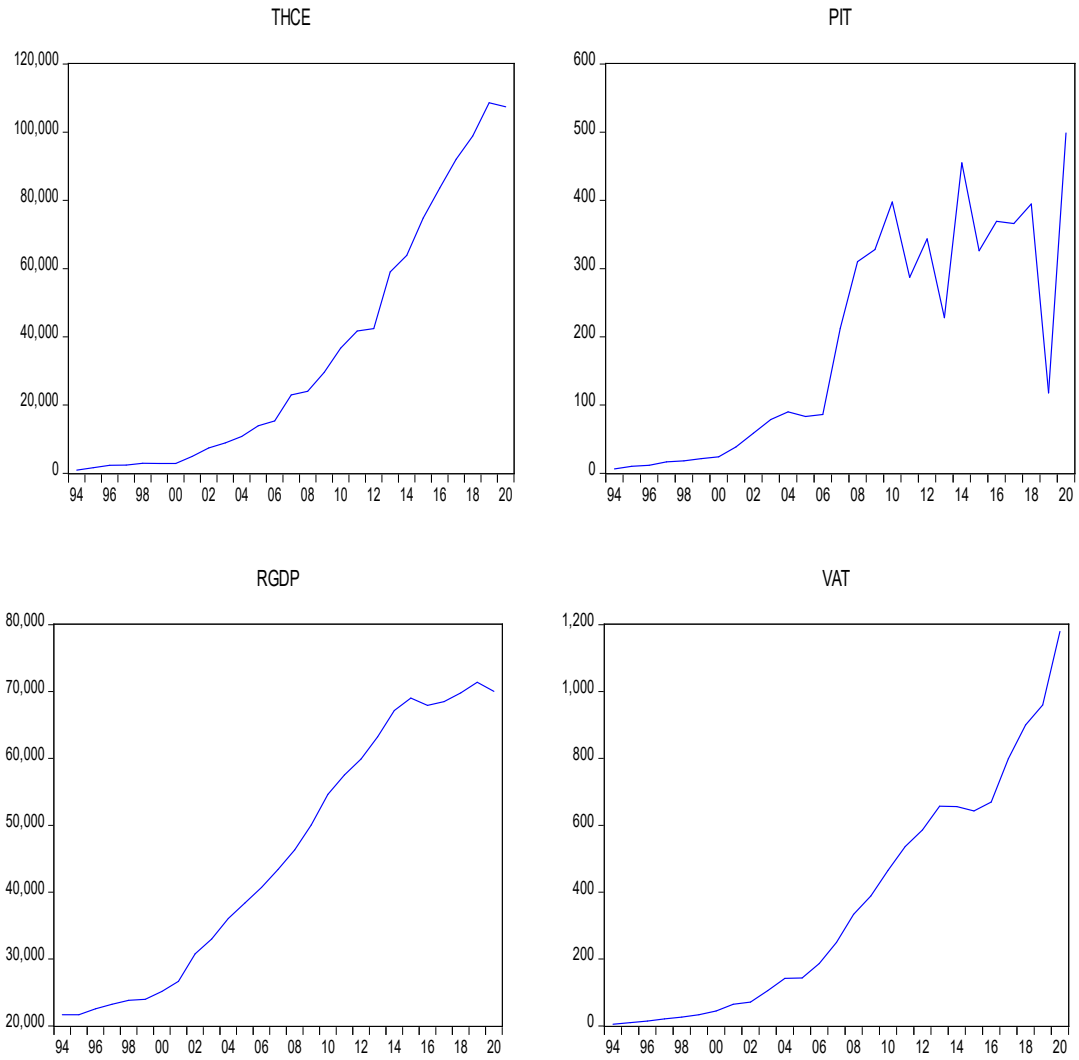
The standard deviation which is the deviation from the sample mean of each variable are given as 164.5288, 18693.83, 36693.2 347.1028 for PIT, RGDP, THCE, VAT respectively. All the variables are observed to be positively skewed.

The kurtosis co-efficient of Personal Income Tax in Nigeria was observed to be 1.569255 showing a Platykurtic distribution. Real gross domestic product and Total Household Consumption Expenditure also exhibited a Platykurtic distribution with its kurtosis coefficient 1.430548, 2.227376 respectively. Value added tax in Nigeria also had a Platykurtic distribution with a coefficient of 2.296062. This implies that majority of their value lies below the sample mean.

The Jarque-Bera statistic which measures the degree of normality of a distribution showed that all the values are normally distributed with the coefficient 2.763693, 2.80429, 3.656138, 2.528778 for PIT, RGDP, THCE and VAT respectively.

5.2 Trend Analysis of the Variables

A trend is the overall direction of a variable of interest over time. It is the most consistent element of a distribution across time. The graphical trend of the respective variables used in this research work is given below.



Source: Author's Ccomputation using Eviews 10.

5.3 Correlation Analysis

Correlation is a statistical measure or coefficient which indicates the direction and magnitude of the relationship existing between two or more variables of interest. The analysis of Correlation is an important statistical toot that measures magnitude

and direction of the relationship between two or more variables. Correlation analysis is a useful tool for pre-test analysis, however it does not show causality. The correlation among the relevant variables used in this research work is given in the table 5.1b below.

Table 5.1b: Correlation Matrix

	RGDP	**THCE**	**VAT**	**PIT**
RGDP	1.00000			
THCE	0.93712	1.00000		
VAT	0.95523	0.97707	1.00000	
PIT	0.87569	0.76712	0.83504	1

Source: Author's Computation using Eviews10.

From the table 5.1b above, for model 1 the correlation matrix indicates that value added tax and personal income tax, all have a strong positive relationship with real gross domestic product. This indicates that as these variables increases, RGDP also increase and vice versa.

For model 2 the correlation matrix indicates that value added tax has a strong positive relationship with Total Household Consumption expenditure. This indicates as VAT increases, Total household consumption expenditure also increases.

5.4 Empirical Analysis

5.4.1 Unit Root Test

The Unit Root test is an econometric technique used to indicate whether or not a given variable is stationary over time. The interest in stationarity emanates from the fact it enables generalization into future time periods for which the data is not available. This implies that a non-stationary series cannot be used for prediction because each given data set of a variable becomes a particular episode of that variable and as such they all exhibit different behaviours and statistical properties. The ADF test compares the ADF statistic with the t-values, the decision rule is that if the ADF statistic is greater than the t-values, it implies stationarity, if otherwise, it means that the series is not stationary.

Table 5.1c: Augmented Dickey-Fuller Test for Unit Root at Level

Variable	ADF Test Statistic	ADF Critical Value			Order of Integration	Remark
		1%	5%	10%		
LnVAT	-5.76372	-3.71146	-2.981038	-2.629906	I(0)	Stationary
LnPIT	-2.18526	-3.72407	-2.986225	-2.632604	I(0)	Not Stationary
LnRGDP	-1.18990	-3.71146	-2.981038	-2.629906	I(0)	Not Stationary
LnTHCE	-1.51984	-3,73785	-2.991878	-2.635542	I(0)	Not Stationary

Source: Author's Computation using Eviews 10.

Table 5.1d: Augmented Dickey-Fuller Test for Unit Root at First Difference

Variable	ADF Test Statistic	ADF Critical Value			Order of Integration	Remark
		1%	5%	10%		
LnTHCE	-4.917297	-3.72407	-2.986225	-2.632604	I(1)	Stationary
LnPIT	-6.841642	-3.72407	-2.986225	-2.632604	I(1)	Stationary
LnRGDP	-2.337648	-3.72407	-2.986225	-2.632604	I(1)	Not Stationary

Source: Author's Computation using Eviews 10.

Table 5.1e: Augmented Dickey-Fuller Test for Unit Root at second Difference

Variable	ADF test Statistic	ADF Critical Value			Order of Integration	Remark
		1%	5%	10%		
LnRGDP	-4.005678	-3.76959	-3.001861	-2.642262	I(2)	Stationary

Source: Author's Computation using Eviews 10.

According to the ADF results in tables 5.1c, 5.1d and 5.1e LNVAT was stationary at level, while LNPIT, LNTHCE were stationary at first difference

whereas LNRGDP was stationary at second difference. Important to keep in mind is that the result exhibits mixed integration.

5.4.2 Co-integration Test

Given that the variables have been made stationary by taking the second difference, we then proceed to test for the possibility of long run relationship among the variables. Thus, variables are said to be co-integrated if they have a long run relationship. For this purpose, the Johansen Co-integration technique is applied. This test makes use of two statistics for the decision rule. These are the Trace statistic and the Max-Eigen Value. For the first, if the Trace statistic is greater than the critical value at the given level of significance it implies that the variables are co-integrated. However, if the Trace statistic is less than the critical value at the given level of significance, we conclude that the variables are not co-integrated. The same decision rule applies when comparing the Max-Eigen value with the critical values.

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.719643	59.82890	47.85613	0.0025
At most 1	0.508605	28.03664	29.79707	0.0787
At most 2	0.278277	10.27395	15.49471	0.2602
At most 3	0.081345	2.121103	3.841466	0.1453

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.719643	31.79226	27.58434	0.0135
At most 1	0.508605	17.76270	21.13162	0.1390
At most 2	0.278277	8.152845	14.26460	0.3634
At most 3	0.081345	2.121103	3.841466	0.1453

Max-eigenvalue test indicates 1 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: Author's Computation using Eviews10.

From the result, both the Trace statistic indicated one (1) co-integrating equation, while the Max-Eigen value also indicated one (1) co-integrating equation, this is presented in the table above.

5.4.3 OLS Regression Result

For Model 1: RGDP = F (VAT, PIT)

Variable	Coefficient	Std. Error	t-Stats	Prob.
C	25208.87	1517.096	16.61653	0
VAT	39.85176	5.1884	7.680935	0
PIT	29.29059	10.94585	2.675953	0.0132
R-squared	0.932576	Mean dependent var		45425.7
Adjusted R-squared	0.926958	S.D. dependent var		18693.83
S.E. of regression	5052.258	Akaike info criterion		19.9975
Sum squared resid	6.13E+08	Schwarz criterion		20.14148
Log likelihood	-266.9662	Hannan-Quinn criter.		20.04031
F-statistic	165.9791	Durbin-Watson stat		1.091109
Prob(F-statistic)	0			

Source: Author's Ccomputation using Eviews10.

From the obtained, the R^2 which is the co-efficient of determination showed a value of 0.93, this indicates that approximately 93% of the total variation in Real gross domestic product(RGDP) is accounted for or explained by the variation in the explanatory variables used in this research work. The adjusted co-efficient of determination was observed to 0.92. Indicating that about 92% of the total growth in RGDP between 1994 and 2020 is accounted for by growth in VAT and PIT. The t-

statistics which captures the individual significance of the co-efficient estimates was observed to be 16.61653, 7.680935, 2.675953 respectively for C, VAT, PIT. Applying the rule of thumb which holds that a given co-efficient estimate is statistically significant if its t-statistic is greater or equal to two, it can concluded that the coefficient of VAT, coefficient of PIT and the intercept term are statistically significant at 5% level. The above result is corroborated by the probability values of the probability values (p-values) of the co-efficient which were 0.0000, 0.0000, 0.0132 for C, VAT, PIT respectively.

Moving on to the impact analysis, it was observed that if all the explanatory variables are held constant at zero (0), RGDP will increase by 25208.87 units. We can see that a positive relationship exists between value added tax (VAT) and Real gross domestic product (RGDP) such that a 1% rise in VAT will cause RGDP to rise by about ₦39.85176 This result was however statistically significant at 5% level of significance and in line with apriori expectations.

Lastly, the Co-efficient of Personal Income Tax (PIT) was observed to have a positive relationship with Real gross domestic product (RGDP) such that a 1% rise in PIT will cause RGDP to increase by about ₦29.29059. This result was however statistically significant at 5% level of significance and in line with apriori expectations.

The F-statistic which measures the overall significance of the model showed a value of 165.9791, indicating that the global significance of the model is statistically acceptable at 1% significance level. This is also reflected by the Prob. Value of the F-statistic which stood at 0.00000. The Durbin-Watson statistic of 1.091109 indicates the presence of autocorrelation in the series.

For Model 2: THCE = F (VAT)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2171.5	2251.493	-0.964471	0.344
VAT	103.2893	4.501167	22.94722	0
R-squared	0.954675	Mean dependent var		35664.53
Adjusted R-squared	0.952862	S.D. dependent var		36693.2
S.E. of regression	7966.544	Akaike info criterion		20.87508
Sum squared resid	1.59E+09	Schwarz criterion		20.97106
Log likelihood	-279.8135	Hannan-Quinn criter.		20.90362
F-statistic	526.5749	Durbin-Watson stat		0.655477
Prob(F-statistic)	0			

Source: Author's Computation using Eviews 10.

From the obtained, the R^2 which is the co-efficient of determination showed a value of 0.95, this indicates that approximately 95% of the total variation in Total Household Consumption Expenditure (THCE) is accounted for or explained by the

variation in the explanatory variables used in this research work. The adjusted co-efficient of determination was observed to 0.95. Indicating that about 95% of the total growth in THCE between 1994 and 2020 is accounted for by growth in VAT. The t-statistics which captures the individual significance of the co-efficient estimates was observed to be -0.964471 and 22.94722 respectively for C, VAT. Applying the rule of thumb which holds that a given co-efficient estimate is statistically significant if its t-statistic is greater or equal to two, it can concluded that the coefficient of VAT, is statistically significant at 5% level while the intercept term is not statistically significant at 5% level. The above result is corroborated by the probability values of the probability values (p-values) of the co-efficient which were 0.3440, 0.0000 for C, VAT respectively.

Moving on to the impact analysis, it was observed that if all the explanatory variables are held constant at zero (0), THCE will decrease by -2171.5 units. We can see that a positive relationship exists between Value Added Tax (VAT) and Total Household Consumption Expenditure (THCE) such that a 1% rise in VAT will cause THCE to rise by about ₦103.2893. This result was however statistically significant at 5% level of significance and in line with apriori expectations.

The F-statistic which measures the overall significance of the model showed a value of 526.5749, indicating that the global significance of the model is statistically acceptable at 1% significance level. This is also reflected by the Prob.

Value of the F-statistic which stood at 0.00000. The Durbin-Watson statistic of 0.655477 indicates the presence of auto-correlation in the series.

5.5 Discussion of Findings

The above presentation gives a detailed empirical investigation of Value added tax revenue and Economic growth in Nigeria. The study covered the period 1994 to 2020. This period was selected due to the availability of data. The variables employed in the work include Real Gross Domestic Period (RGDP), Value Added Tax (VAT), Personal Income Tax (PIT) and Total Household Consumption Expenditure (THCE).

From the result obtained, a positive and significant relationship was found between Value Added Tax and Real Gross Domestic Product. This outcome is in line with the a priori theoretical expectation. An increase in VAT can increase government revenue, which can be used to fund public goods and services that can boost economic growth. Additionally, the increase in VAT can be used to reduce other taxes, such as income tax, which can create an incentive for people to work and invest more, which can boost economic growth. It's also worth noting that an increase in VAT can help to reduce the budget deficit which can have a positive impact on GDP by reducing the uncertainty and risk of fiscal instability.

Moving on, the result obtained showed that a positive relationship exist between Personal income tax and Real gross domestic Product. This finding is in line with the a priori theoretical expectation as well as statistically significant at 5% level.

An increase in personal income tax can be used to fund public goods and services, such as education and infrastructure, which can boost economic growth. Additionally, an increase in personal income tax can be used to reduce the budget deficit, which can have a positive impact on GDP by reducing the uncertainty and risk of fiscal instability. It's worth noting that the overall impact of an increase in personal income tax on GDP will depend on many factors, such as the size of the tax increase, the state of the economy, and the government's spending policies. Also, the increase in personal income tax should be balanced with other policies and tax measures to achieve a sustainable and inclusive economic growth.

Lastly, the analysis conducted showed that a positive relationship exists between Value Added Tax (VAT) revenue and Total Household Consumption Expenditure (THCE). This finding is in line with the a priori theoretical expectation as well as statistically significant at 5% level. An increase in VAT revenue can potentially lead to an increase in total household consumption expenditure. This is because when VAT is increased, the prices of goods and services will also increase, leading to an increase in the overall cost of living for households. As a result, households may need to spend more money on necessary items, which can lead to an increase in total consumption expenditure.

CHAPTER SIX

SUMMARY OF FINDINGS, POLICY IMPLICATIONS, RECOMMENDATIONS AND CONCLUSION

6.1 Summary of Findings

1. A positive and significant relationship was found between Value added tax and Real gross domestic product. This outcome is in line with the a priori theoretical expectation. This supports the argument that an increase in VAT can increase government revenue, which can be used to fund public goods and services that can boost economic growth.
2. A positive relationship also exists between Personal Income Tax and Real Gross Domestic Product. This finding is in line with the a priori theoretical expectation as well as statistically significant at 5% level. An increase in personal income tax can be used to fund public goods and services, such as education and infrastructure, which can boost economic growth.
3. Lastly, the analysis conducted showed that a positive relationship exists between Value Added Tax (VAT) and Total Household Consumption Expenditure (THCE). This finding is in line with the a priori theoretical expectation as well as statistically significant at 5% level.

6.2 Policy Implications

6.2.1 Value Added Tax Revenue on Economic Growth

The policy implications of the effect of VAT revenue on economic performance depends on the specific circumstances and the overall economic environment. Therefore, it's important for policymakers to carefully consider the potential effects of VAT revenue on economic growth and make informed decisions when designing and implementing VAT systems.

1. One policy implication of value added tax on economic growth in Nigeria is that it can reduce the tax burden on labor, which can increase the incentive to work and lead to higher economic growth.
2. Another policy implication of value added tax on economic growth in Nigeria is that it encourages compliance with tax laws, which can improve the overall business environment and promote economic growth.
3. Another policy implication of value added tax on economic growth in Nigeria is that it increases the cost of goods and services, which can lead to inflation and reduce purchasing power, ultimately slowing down economic growth.
4. It also creates administrative and compliance costs, which can be a burden on businesses and can discourage new businesses from starting up.

6.2.2 Value Added Tax Revenue on Total Household Consumption Expenditure

The impact of VAT on total household consumption expenditure can be significant, as it increases the overall cost of goods and services for consumers.

1. One of the policy implications of this is that increasing VAT rates can lead to higher inflation, as the prices of goods and services increase. This can be particularly detrimental for lower-income households, as a larger proportion of their budget is spent on necessities such as food and housing.
2. Another policy implication is that increasing VAT rates can lead to a decrease in consumer spending, as households have less disposable income to spend on non-essential goods and services. This can have a negative impact on businesses and the overall economy. On the other hand, reducing VAT rates can boost consumer spending, stimulate economic growth and create jobs.

6.3 Recommendations and Conclusion

In line with the above empirical findings, the following recommendations are made:

1. Governments need to consider these implications when making decisions about VAT rates and structure. A potential solution to mitigate the negative effects of VAT on lower-income households is to implement a progressive

VAT system, where lower rates are applied to basic necessities and higher rates to luxury goods and services.

2. The current VAT system in Nigeria is complex and confusing, which can lead to non-compliance and reduced revenue. Simplifying the system and making it easier for businesses to understand and comply with can increase compliance and boost revenue.

3. Stronger enforcement measures can help to increase compliance and ensure that businesses are paying the correct amount of VAT. This can be achieved through regular audits and inspections, as well as penalties for non-compliance.

4. Providing education and information to the public about how VAT works, how it is calculated, and how it affects them can increase understanding and acceptance of the tax.

5. Making the VAT system simple, transparent and easy to understand can reduce the administrative burden on households and businesses as well as Reviewing the exemptions and special treatment given to certain goods and services, and removing those that are no longer necessary, can help to reduce the overall cost of goods and services for households.

Overall, it is important for the Nigerian government to strike a balance between increasing VAT revenue and protecting economic growth by ensuring that the VAT system is fair, transparent and easy to comply with.

The government needs to consider the needs and concerns of the households when making decisions about VAT policies, and work to ensure that the tax system is fair, transparent, and easy to comply with.

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APPENDIX

DATA

Year	LNVAT	LNPIT	LNTHCE	LNRGDP
1994	5.03	6.461638143	921.6836646	21,676.85
1995	9.82	10.18177305	1637.261542	21,660.49
1996	14.60	11.81947754	2315.635995	22,568.87
1997	20.74	16.83512527	2420.191903	23,231.12
1998	26.38	18.20360602	2931.136229	23,829.76
1999	33.31	21.52600385	2854.3318	23,967.59
2000	44.55	24.14966846	2875.675703	25,169.54
2001	65.01	38.44539287	4962.276554	26,658.62
2002	71.36	58.69561501	7433.701657	30,765.19
2003	105.54	78.73529782	8878.957956	33,004.80
2004	142.19	90.04431433	10780.67316	36,057.74
2005	143.24	83.33584197	13932.64609	38,378.80
2006	186.49	86.02656208	15352.48856	40,703.68
2007	249.47	212.4458782	22945.52604	43,385.88
2008	333.99	310.0878551	24024.76225	46,320.01
2009	388.70	327.8819852	29596.62044	50,042.36
2010	464.67	397.67013	36676.90487	54,612.66
2011	536.23	287.14334	41686.51127	57,511.04
2012	586.24	343.5617868	42394.48232	59,929.89
2013	656.85	227.9186649	59048.10028	63,218.72
2014	655.71	454.9710636	63860.83941	67,152.79
2015	642.92	326.1081565	74785.68641	69,023.93
2016	669.55	369.4278142	83635.1559	67,931.24
2017	798.90	366.1388084	92065.12892	68,490.08
2018	900.03	394.85325	98875.34422	69,799.94
2019	959.56	117.8550337	108638.2506	71,387.83
2020	1,179.33	498.7598267	107412.3347	70,014.37

Source: CBN Statistical Bulletin, 2020.