Impact of Value Added Tax on Economic Growth in Nigeria Evidence from 2009 – 2018

Bingilar Paymaster Frank PhD
Department of Accounting
Faculty of Management Sciences
Niger Delta University, Wilberforce Island, Bayelsa State.
Tel: +2348036620418, e-mail: paymasterfrank@gmail.com

Preye E. G. Angaye PhD
Head, Business Strategy, Century Group, Ibukun House,
Block 105, No 8 Baderinwa Alabi Street, Lekki Phase 1,
Lagos State, Nigeria
Tel: +2348068802248, e-mail: apreke@yahoo.com

Abstract
The study examined the impact of value added Tax on Economic Growth in Nigeria. Particularly, it is an investigation of value added tax variables (input tax and output tax) and their significant Influence on Economic growth in Nigeria. The study adopted a longitudinal research design. Secondary time series panel data were collected for the period 2009 to 2018 from the statistical Bulletin of the Central Bank of Nigeria (CBN). The data were analyzed using coefficient of determination (R^2), t-test, F-test and Durbin Watson statistics. The dependent variable economic growth was proxy with gross domestic products (GDP), which was regressed as a function of input Tax and output Tax (independent variables).Two hypotheses were formulated and tested. The results of the analysis shared that both input tax and output tax have positive and significant impact on economic growth. The result shows that VAT contributes significantly to the total tax revenue of government and by extension the economic growth of Nigeria. VAT revenue growth had consistent increase though it was not that explosive. To boost tax revenue, VAT should be sustained and boosted. Based on the findings, the study recommended that government should block every Value Added Tax revenue leakage, sensitizing the managers of companies operating in Nigeria on the need to remit the VAT revenue collected, proper training of the Federal Inland Revenue staff in charge of VAT revenue collection and finally, putting in place measures to effectively utilize generated VAT revenue for infrastructural and economic development.

Keywords: Value Added Tax, Input Tax, Output Tax, Economic Growth, Gross Domestic Product

1.0 INTRODUCTION
1.1 Background to the Study
Tax is a fundamental source and a pillar of revenue generation in every nation of the world especially in the western world (Azubuike, 2009). A tax system represents one of the most effective means of mobilizing a nation's internal resources and it lends itself to creating an environment conducive for the promotion of economic growth for the three-tiered tax structure between the federal, state and local governments, each of which has different tax jurisdictions (Odusola, 2006; Nzotta, 2007). The need for taxation among others therefore, is to provide a material source of revenue for government in discharging its ever growing obligations and commitments to its citizenry. An efficient tax system ensures the mobilization of the untapped

abundant internal resources and it also stimulates an environment conducive for the promotion of growth of a nation. Therefore, 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 and Oyadonghan, 2011).

Tax is a compulsory payment made by all concerned to the government of a country or state from which essential services are rendered, without necessarily offering an explanation on how the money generated was spent or equating the services with the money collected. Anyanwu (1997) defined tax "as a compulsory levy 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". Value added tax is an indirect tax in which a sum of money is levied at a particular stage in the sale of a product or service. Olatunji (2009) explained that the walk towards VAT system in Nigeria started with acceptance of the recommendation of a study group on indirect taxation in November, 1991. The decision to accept the recommendation was made public in the 1992 budget speech of the Head of State. This resulted in setting up the Modified Value-Added Tax (MVAT) committee on 1st June, 1992 as recommended by the study group. The recommendation of the committee that VAT should be administered by an independent commission was rejected by the government. Tax administration was nonetheless given to Federal Inland Revenue Services, which was already charged with the responsibility of administering most other taxes in Nigeria. The introduction of VAT in Nigeria through Decree 102 of 1993 marks the phasing out of the Sales Tax Decree No. 7 of 1986.

Many countries look for ways to boost their revenue, this facilitated the birth of value added tax on goods and services. For instance in Africa, VAT has been introduced in Benin Republic, Cote d'Ivore, Guinea, Kenya, Madagascar, Mauritius, Senegal, Togo, Nigeria. Evidence suggests that in these countries VAT has become an important contributor to government revenue (Ajekaiye, 2000; Shalizi and Square, 1988; Adereti, Adesina and Sanni, 2011). Nigeria introduced VAT IN 1993; however, its full implementation began on 1st January, 1994. This has attracted the attention of researchers and academia 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 and Amos, 2011 as cited in Ihendinihu and Onwuchekwa, 2012).

1.2 Statement of the Problem
Several studies have been carried out in the past on the subject; but the review of previous empirical literature revealed a lack of consensus in the research findings of past researchers which indicates the existence of a research gap. The studies of Okafor (2012) and Abiola & Asiweh (2012) argue that value added tax does not significant impact on economic development. These arguments have been countered by researchers in related studies such as Bakare (2013), Okoli & Matthew (2015), Chigbu (2014) and Izedonmi & Okunbor (2015) that value added tax has positive and significantly influence on economic growth. The coverage of these studies seems not have addressed the issue of value added taxes variables (input tax and output tax on goods and services and their significant influence on economic growth which is the crux of the study   The study is design to examine the impact of Value Added Tax (VAT) on economic growth (GDP) as an attempt to fill that gap. The study adopted INPTAX and OUPTAX (Input tax and Output tax respectively) as the independent variables while gross domestic product (GDP) is the dependent variable as proxy for economic growth.

1.3 Objectives of the Study

The broad objective of the study is to examine the impact of value Added tax (VAT) on Economic growth in Nigeria. However, the following are the specific objectives.

1. To ascertain whether input Tax would significantly influence Economic growth in Nigeria.
2. To find out whether output Tax would significantly influence Economic growth in Nigeria.

1.4 Research Questions

In order to achieve the above objectives, the following question were postulated.

1. To what extent does input Tax influence Economic growth in Nigeria.
2. To what extent does output Tax influence Economic growth in Nigeria.

1.5 Research Hypotheses

In order to achieve the objectives of the study, the following hypotheses were stated in the null form and tested.

HO1: Input Tax does not significantly influence Economic growth in Nigeria.

HO2: Output Tax does not significantly influence Economic growth in Nigeria.

1.6 Significance of the Study

This study would enhance proper appreciation of Value Added Tax and its relative influence on Economic growth to the following groups.

Government: it is hoped that the insights to be as aid to the Government of the country, Regulatory bodies like federal inland Revenue well-articulated and optimally beneficial tax policies to the economy.

Researchers: Also, it is hope that this study would add to the body of existing literature Value Added Tax and its influence on Economic growth in a developing country like Nigeria need not be over emphasized. Potential researchers will benefit as some of them may have cause to review this study in the course of their own research**.**

1.7 Scope of the Study

The main objective of this research is to find out the significant of this research is to find out the significant influence of the various value added tax dimensions on Economic growth in Nigeria. However, the scope of study is grouped into three parts.

Content; The conceptual framework was developed revolving around VAT and its impact on economy growth in Nigeria. The theoretical framework and Empirical review were presented. The gap in literature was also identified.

Geographical; The study was carried in Nigeria for the period covering 2009 to 2008.

Unit of Analysis it covers the aggregated. VAT payers from all sectors in Nigeria

1.8 Limitation of the Study

During the course of carrying out this research work, certain inhibiting factors were encountered by the researcher which affected the extent of thoroughness envisaged. Among these factors are; dearth of relevant information, finance on the validity of this thesis since these factors were envisaged and properly built into the structure and procedure of the research work during the planning process

1.9 Definition of Terms

Value Added Tax; It is a multi-stage tax on consumption of goods and services.

Economic Growth; Refers to the increase in the value of goods and services produced by an economy.

Input Tax; it is a consumption tax paid by the final consumer of the goods and services.

Output Tax; it is a consumption tax paid by the final consumer of the goods services.

2.0 REVIEW OF RELATED LITERATURE
2.1 Conceptual Framework
2.1.1 Tax Revenue and Value Added Tax in Nigeria

Value added tax is on consumption goods and services made by the consumer or persons, government agencies and business organizations but the taxes realized bit based on value added by farmer manufacturer, wholesaler and retailer until consumer finally consumes the goods or services and pays the whole tax on it. VAT is multi-stage tax on consumption of goods and services. The creators of value make the advance payment (input tax) and are refunded by the consumer (output tax). The incidence of VAT like other consumption taxes such as import duties, export taxes, sales tax, are borne by consumers. They are difficult to evade and tax the wealthier sector of the society effectively. VAT can also be defined as a tax on spending consumption levied at every stage of a transaction, but eventually borne by the final consumer of such goods and services. It is levied at the rate of 5 percent.

Tax is a compulsory payment made by all concerned to the government of a country or state from which essential services are rendered, without necessarily offering an explanation on how the money generated was spent or equating the services with the money collected. Anyanwu (1997) defined tax "as a compulsory levy 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". Value added tax is an indirect tax in which a sum of money is levied at a particular stage in the sale of a product or service. Olatunji (2009) explained that the walk towards VAT system in Nigeria started with acceptance of the recommendation of a study group on indirect taxation in November, 1991. The decision to accept the recommendation was made public in the 1992 budget speech of the Head of State. This resulted in setting up the Modified Value-Added Tax (MVAT) committee on 1st June, 1992 as recommended by the study group. The recommendation of the committee that VAT should be administered by an independent commission was rejected by the government. Tax administration was nonetheless given to Federal Inland Revenue Services, which was already charged with the responsibility of administering most other taxes in Nigeria. The introduction of VAT in Nigeria through Decree 102 of 1993 marks the phasing out of the Sales Tax Decree No. 7 of 1986.

2.1.2 Economic Growth

Economic growth has been major concern of nations whether developed or developing around the world. Economic development and Economic growth have been used interchangeably over the years; despite the slight difference between the two concepts. According to Organisation for Co-operation and Development (OECD), economic development is a deliberate policy intervention aimed at enhancing the economic and social well-being of people, while, economic growth is a phenomenon of an active market productivity resulting in increase in Gross Domestic Product (GDP). OECD (2014) defines Gross Domestic Product (GDP) as an aggregate measure of production equal to the sum of the gross values of all resident, institutional units engaged in production (plus any taxes and minus any subsidies, on products not included in the value of their outputs). GDP is usually used as a proxy for economic development and economic growth.

Scholars have offered definitions of economic growth in line with the OECD's definition. Lipsey (1986) defines economic growth as increase in a nation's total output over a long period

of time. Al-Faki (2006) defines economic growth as the increase in the value of goods and services produced by an economy. Todaro and Smith (2011) measure economic growth as increase in per capita income of a nation. Where this measure is not easily available, the attainment of a standard of living by the citizenry of any nation equivalent to that of industrialized countries can be used to ascertain economic growth. In the same vein, Osamwonyi (2005) defines economic growth as the rate of expansion of the national income or total volume of production of goods and services of a country. Nations have achieved economic growth and development through implementation of tax policies such as Value Added Tax.

2.1.3 Value Added Tax and Economic Growth

Value Added Tax and economic growth have been examined empirically in both developed and developing countries by several studies. A study carried out by Unegbu and Iretin (2011) found that VAT has significant impact on economic development. Similarly, studies have shown that VAT has positive effect on nation's economic growth and development like provision of infrastructural services, health services and education (Owolabi and Okwu, 2011). Teera (2003) study on the assessment of the feasibility of raising tax revenues through VAT in Uganda relative to 18 other Sub-Saharan countries noted that VAT contributes greatly to the overall tax collection and the nation's economic growth in those countries.

In Nigeria, VAT is a significant source of revenue. It accounted for about 4.06%, 5.93% and 5.1% of the total revenue in Nigeria in 1994, 1995, and 2008 respectively and has significantly played dominant role in the development of Nigeria's economy since its inception to date (Adereti & Sanni, 2011, Umeora, 2013). Similarly, Ajakaiye (2000) opines that VAT has become an important contributor to total governmental revenues in funding of recurrent expenditure and capital projects. Olaoye (2009) posits that the administration of VAT in Nigeria is channeled toward the objective of enhancing government revenue generation in order to provide for infrastructural development towards stimulating the economy for growth. Similar view of VAT being a significant source of government revenue to stimulate economic growth and development among developed and developing nations were expressed by (Ekeocha, 2010; Owolabi & Okwu, 2011; Unegbu & Iretin 2011).

Michael and Ben (2007) explored the causes and consequences of the spread of value added tax (VAT). A panel study of 143 countries for 25 years were observed. The result showed that VAT has a significant but mixed impact. This implies that while some countries would have gained revenue from the adoption of VAT, others would not. Collectively, the adoption of VAT had a long run increase in overall revenue to GDP ratio of about 4.5 percent. However, allowing the impact of VAT to vary with country specifics will shift the effect to become negative though acting in the opposite direction are gains that tend to be greater in higher income and in more open economies. Denis, (2010), investigated the relationship between Value Added TAX (VAT) and Gross Domestic Product (GDP) in Nigeria. The study finds that VAT is not effective as revenue earner; this implies that significant parts of GDP which represent aggregate national income as well as aggregate national expenditure are not collected as tax. In Pakistan, Saeed, Ahmad, and Zaman, (2012) analysed the revenue effect of the value added tax (VAT), in the SAARC region. Panel data of SAARC countries from 1995 to 2010 on various macroeconomic factors were obtained to determine the effect of VAT on revenue ratio. The results indicate prosperous set of determinants of VAT adoption as it proves to be a vital instrument to collect tax and enhance revenue ratio. The result shows that most of the SAARC countries that adopted value added tax have gained a more effective tax instrument to upgrade their GDP to revenue ratio. In the same vein, Zaman, Okasha, and Iqbal, (2012) examined the impact of value added tax in Pakistan's economy, using household survey data to grasp the

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

Smith, Islam, and Moniruzzaman, (2011) attempted to analyse the contribution and performance of VAT in Bangladesh compared to other developing countries. The result showed that the performance of VAT was quite satisfactory in the initial years' afterwards, VAT collection remained stagnant at a certain level. The study found that the stagnation happened as a result of: relatively small number of VAT tax-payers, a general lack of awareness, and a weak monitoring system. Samimi, and Abdolahi, (2011) examined the impact of implementing Value Added.

Tax on Export of goods and services in selected countries. Four different indices for export; export of goods and services, export of goods and services (BOP), export of goods and services (annual % growth), export of goods and services (% of GDP) to investigate the sensitivity to different definitions. Findings of the study based on Mean Difference Statistical Test in a two three-year periods before and after introduction of VAT showed that, in different indices, the impact of VAT on export was positive.

In Luthuanian, Bikas and Rashkauskas (2011) looked at the impact of VAT standard tariff, reduced tariffs and shadow economy on income from this tax. The Lithuanian VAT structure, the dynamics of income from this tax and amendments in the Law on Value Added Tax in terms of narrowing and widening the taxable base according to the theoretical analysis of the sources were analysed using multiple regression, correction and optimization and Co-effectiveness ratio analysis. The analysis revealed that, the amendments in the Law on Value Added Tax in terms of narrowing and widening the taxable base has influenced the amount of income from VAT collected to the budget. Adereti, Sanni, and Adesina (2011) studied contribution of VAT to GDP in Nigeria. Their findings show that VAT revenue to total tax revenue averaged 12.4% which they considered low compared to other African countries such as Ivory Coast, Kenya and Senegal that had 30%. The study also observed a positive and significant correlation between VAT and GDP. McGowans and Billios (1997) studied the growth pattern of VAT in European Union (EU) countries to ascertain whether the implementation of VAT has led to an increase in the overall tax burden using Ordinary Least Square (OLS) and Seemingly Unrelated Regression (SUR). They found that VAT has often been disapproved as it is said to be a money machine for government and a regressive tax. The results however, show that VAT can be put into practice without becoming money machines for government. They submit that EU countries used VAT to substitute a number of indirect taxes and not to boost overall tax burden.

2.2 Theoretical Framework
This study is anchored on the optimal taxation theory. The theory of optimal taxation states that a tax system that is chosen should maximize a social welfare function subject to a set of constraints (Mankiw and Weinzierl, 2009). Slemrod (1990) opines that the optimal tax theory involves the designing and implementing of a tax structure that enhances efficiency and reduces misrepresentation in the market under certain economic constraints. This involves giving due

attention to individuals' utility and minimizing the distortions caused by taxation towards optimizing the tax benefits. It therefore implies that the optimal taxation theory considers individual preferences and the efficiency in tax collections to give the best productivity of taxes collected. The goal of optimal taxation theory is to reduce if not total elimination of inefficiency as much as possible and to enhance government revenue. This is because taxation is perceived to distort the behavior of tax payers especially on consumption in a situation where there are options between two mutually exclusive investments having the same risk profile and returns but different tax rates. A rational investor will choose the investment that offers a tax advantage at the expense of the better benefits the foregone alternative may offer toward economic growth.

2.3 Review of Empirical Studies

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

Another study by Owolabi and Okwu (2011) empirically evaluated the contribution of VAT to the development of Lagos State economy. Development aspects considered included infrastructural development, environmental management, education sector development, youth and social development, agricultural sector development, health sector development and transportation sector development. The findings revealed that VAT revenue contributed positively to the development of the respective sectors. However, the positive contribution was statistically significant only in agricultural sector development.

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

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

The study by Njoku (2015) examined the impact of indirect taxes on economic growth of Nigeria, utilizing time series data spanning a thirty-four year period, from 1981 to 2014. The

data collected from secondary sources, were analyzed and tested for stationarity, using the Augmented Dickey-Fuller test. The Value Added Tax (VAT), Petroleum Profit Tax (PPT) and Custom and Excise Duties (CED), were stationary at second difference while the Real Gross Domestic Product (RGDP) was stationary at level. Consequently, the study utilized the Error Correction Model to evaluate the impact of VAT, PPT and CED on the RGDP. The findings revealed that VAT and PPT exert a positive and significant relationship on the RGDP. It was also revealed that CED of two period lags has a positive relationship with RGDP and VAT of two-period lags showing a negative but significant relationship with RGDP.

Izedonmi and Okunbor (2014) empirically investigated the contribution of VAT to the development of the Nigerian economy. Time series data were used on the Gross Domestic Product (GDP), VAT Revenue, Total Tax Revenue and Total (Federal Government) Revenue from 1994 to 2010. The data were analyzed using the econometric methodology of multiple regression technique. Their findings showed that VAT Revenue accounted for 92% significant variations in Nigeria's GDP. It revealed a positive but insignificant correlation between VAT Revenue and GDP.

Bakare (2013) investigated the impact of VAT on output growth in Nigeria. The study used the ordinary least square (OLS) regression technique. It was found that a positive and significant relationship exist between VAT and output growth in Nigeria. The results of the findings from this work also showed that the past values of VAT could be used to predict the future behaviour of output growth in Nigeria. The main conclusion of the study was that Value Added Tax has the potential to assist in the diversification of revenue sources, thereby providing enough funds for economic growth and development and reducing over dependence on oil for revenue.

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

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

Chigbu (2014) examined the impact of value added tax on the economic growth of Nigeria. The author used relevant secondary data from for the period 1994-2012. The data collected were analysed with relevant econometric tests of Breusch-Godfrey Serial Correlation LM, White Heteroskedasticity, Ramsey RESET, JarqueBera, Johansen Co-integration, and Granger Causality. The findings revealed a long run equilibrium relationship between economic growth and VAT. It was also found that VAT does granger cause gross domestic product of Nigeria. The paper concluded, on the basis of the findings that VAT is one of the most important components of indirect taxes that affects economic growth in Nigeria.

Ugochukwu & Azuibike (2016) examined the effect of tax policy on Economic Growth in Nigeria. The study used annual time series data of 20 years from 1994-2013. OLS regression analysis was adopted to estimate the relationship between the dependent and independent variables. The findings revealed that tax have a significant effect on the economic growth of Nigeria. It also revealed that the proportion of indirect to total tax have increased over the years.

The study therefore recommended among others that the government tax policy should shift more to indirect tax due to the expansionary and non-distortionary nature.

Ihenyen and Mieseigha (2014) examined taxation as a financial instrument for economic growth in using data obtained from the Central Bank of Nigeria for the period 1980-2013. They used corporate income tax and value-added tax as the independent variable and proxy product (GDP), the dependent variable. The study employed Ordinary Least Square technique (OLS) data, and the results revealed that corporate income tax and value-added tax impacted positively on gross domestic product. They therefore concluded that taxation is `an instrument of economic growth in Nigeria.

In a similar study, Edame and Okoi (2014) examined the impact of taxation of investment and economic development in Nigeria, using data covering the period 1980-2010. They collected data on corporate income tax, personal income tax and gross domestic product (the study variables) from the statistical Bulletin of the CBN and the National Bureau of Statistics. They defined three regression models, investment, Gross domestic product and government expenditure models, and employed multiple regression technique to analysis the study data. The study found that corporate income tax and personal income tax were negatively related to investment, but positively related to government expenditure.

Also, Chude and Chude (2015) investigated the impact of company income tax on the profitability of brewery companies in Nigeria. The study employed the Augmented Dickey Fuller Unit Root test, Johansen Cointegration test and Ordinary Least Squares technique to analyze time series secondary data. The study revealed positive correlation between taxation and profitability.

Ayuba, (2014) investigated the impact of non- tax revenue on economic growth in Nigeria, using secondary data collected from the Statistical Bulletin of the CBN from the period 1993-2012. The study employed ADF Unit Root test, error correlation model and OLS technique to analyze the study data collected on the variables. The results showed that non-oil tax revenue impacted positively on economic growth in Nigeria.

3.0 METHODOLOGY
This section provides the methodology adopted for the study of the impact of value added tax on economic growth in Nigeria. The study adopted a longitudinal research design, using secondary time series panel data for the period 2009-2018. This time period was considered long enough to establish a causality influence between the study variables, whereas, the availability of data relevant for the study was also as justification for determining this time period. Data was collected on the study variables (INPTAX, OUPTAX, GDP) from the statistical Bulletin of CBN. This source of data is considered reliable and dependable.

This study adopted the multiple regression analysis with ordinary Least Square (OLS) econometric techniques for data analysis. The statistics tested for the variables in the regression equation include coefficient of determination (R^2), t-test, F-testy and Durbin Watson (DW) statistics. The statistical package for social sciences (SPSS) windows 20 was the statistical computer software used to run the analysis. Where coefficient of determination (R^2) measure the explanatory power of the independent variables on the dependent variable; student t-test measures the individual significance of the estimated coefficients of the independent variables, F-test tests for the overall statistical significance of the model, which was used to generalize the hypothesis; and the Durbin Watson (DW) statistics tests for the auto correlation of the variables in the regression equation.

3.1 Model Specification
To achieve the objectives of the study and test the hypotheses the following regression model was developed to capture the relationship between VAT and GDP

GDP = f (INPTAX, OUPTAX)   model 1

The above model was translated into a specific regression equation as stated below:

GDP = B_0 + B_1 (INPTAX) + B_2 (OUPTAX) + e   equation 1

Where

GDP = Gros Domestic product, the dependent variable and proxy for economic growth

INPTAX = Input Tax, the 1st independent variable

OUPTAX=Output Tax, the second independent variable

B_0 = is the constant term

B_1, B_2 = are the coefficient of the independent variables

E = is the error term of the equation

4.0 DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

This study examined the impact of Value Added Tax on Economic growth), using multiple regression analysis with the aid of computer software package (SPSS) windows 20. The data so far collected for the study is presented in table 1 below, while the results of the analysis are in table 2.

Table 1. Aggregated annual values of GDP, INPTAX, and OUPTAX   from 2009-2018 in billions of Nigeria naira

Year	GDP	VAT	
	₦ Billion	INPUT TAX ₦ Billion	OUTPUT TAX ₦ Billion
2009	69,147.00	12,560	17,260
2010	105,222.80	12,822	20,761
2011	139,085.30	13,120	31,000
2012	2,801,972.60	12,991	34,060
2013	2,708430.90	11,934	36,867
2014	3,194,015.00	14,225	47,135
2015	4,552,127.30	14,227	58,469
2016	4,925,086.00	14,566	91,757
2017	6,912,381.30	15,578	108,600
2018	8,487,031.60	15,657	136,400

Source: CBN statistical Bulletin 2019

Table 2. Regression Result
Dependent statistics

	Mean	Std. Deviation	N
GDP	4381155.61	3404239.231	10
INPTA	1064713.80	3323050.263	10
OUPTA	58230.90	40496.101	10

Model summary

Model	R	Rsquare	Adjusted R Square	StD Error of the Estimate	Change statistics					Durbin Watson
					R square	F change	df1	df2	sig F change	
1	.966a	.933	.913	1002833.615	.933	48.356	2	7	.000	2.360

a. Predictors: (constant), OUPTA, INPTA

b. Dependent Variable: GDP

ANOVA[a]

Model	Sum of squares	Df	Mean square	F	Sig
1 Regression	9.726E + 13	2	4.863E+13	48.356	.000[b]
Residual	7.040E+12	7	1.006E+12		
Total	1.043E+14	9			

    a. Dependent variable: GDP
    b. Predictors: (constant), INPTA, OUPTA

Coefficients[a]

Model	Unstandardized		Standardized coefficient			Correlations			Collinearity statistics	
	B	Std. Error	Beta	T	Sig	Zero-order	Partial	Part	Tolerance	VIF
(Constant)	-352756.061	639584.739		-.552	.598					
INPTAX	.906	.106	.884	8.516	.000	.634	.955	.836	.895	1.118
OUPTAX	64.734	8.728	.770	7.417	.000	.483	.942	.728	.895	1.118

    a. Dependent variable: GDP
Source: SPSS windows 20

Interpretation
Table 2 above shows the summary of the regression results, that is the correlation between input Tax, Output Tax and GDP.
Table 2 above shows the summary of the regression result, of value added tax variables and their significant influence on economic growth in Nigeria. From the result, it is now obvious that the value added tax variables would significantly influence economic growth in Nigeria. Also, it was found that all the independent variable significantly and positively influences the dependent variable in the study. The results of the study supports the research findings of Ugochukwu & Azuibike (2016), Okoli & Matthew (2015), Njoku (2015), Onwuchekwa & Aruwa (2014), Izedonmi & Okunbor (2014) and Chigbu (2014).
The explanatory power of the model as informed by $R = 0.966$ (96.6%) and $R^2 = 0.933$ (93.3%) is positively and statistically significant given the high value of the F-test statistic (48.356). the Durbin Watson (DW) value is 2.360 which fall within the region of no auto correlation.
The regression model demonstrates a good fit given that about 91.3% of the variations in the dependent variable (Economic growth) is jointly explained by changes in the observed behavior of input Tax (INPTAX) and output tax (OUPTAX). The relatively high adjusted R-square of 91.3%, shows that the regression model fits the data well. About 8.7% variation in Economic growth can be explained by other unknown variables not captured in the present model. The high significant F-statistic value of 48.356, sig.000 confirms that the high adjusted R-square did not arise by chance.

The test of significant when compared with table value of 1.96 at 5% level of significance and the two independent variables are significant at 5% level.
Specifically, a unit increase or decrease in INPTAX and OUPTAX would lead to an increase or decrease in economic growth with a margin of 0.906 and 64.734 respectively.
The test for auto correlation, the calculated Durbin Watson (DW) is 2.360 falls within the region of no auto correlation (2.360 is greater than the R-square value of 0.933). This implies that there is no auto correlation among the independent variables of the study.

The test of hypothesis 1, the t-statistics value is 8.516 with a significance value below 0.005 (5%) level of significance, we reject the Null hypothesis and accepted the alternative hypothesis, this implies that, input Tax significantly influence economic growth in Nigeria. It means that VAT has a significant influence on Gross Domestic Product (GDP). This also implies that increasing the rate of input tax will have very significant increase on economic growth to the tune of 0.906 unit (90.6%).

For the test of hypothesis 2, the t-statistic value is 7.417 with a significance value of 0.000. Since the significance of the t-value is below 5% (0.005) level of significance, we reject the Null hypothesis and accepted the alternative hypothesis, which states that output tax significantly influences economic growth in Nigeria. This implies that any unit increase or decrease of output tax would lead to increase or decrease of economic growth to the tune of 64.734 units.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION
5.1 Summary of Findings
The study examined the impact of value added Tax on Economic growth in Nigeria. Based on the objectives and hypotheses tested in this study, the major findings of the study are:

1. The value added Tax Variables positively and significantly influence the economic growth in Nigeria. Specifically, the result of the study revealed that there is a positive and significant influence of value added tax on economic growth in Nigeria; and that any increase in value added tax would most likely lead to an increase in the Gross Domestic Products (GDP) of the Nigerian economy.
2. There is positive and significant influence of input Tax on Gross Domestic product in Nigeria. That increasing the rate of input tax would have very significant increase on economic growth to the tune of 90.6%.
3. Adequate enforcement of output tax positively and significantly influence the gross domestic products (GDP) in Nigeria. That is when output tax increase by one unit, gross domestic products is expected to increase by 64.734 units. The R^2 value of 0.933 shows that there is 93.3 percent of positive relationship between output tax and economic growth in Nigeria.

5.2 Conclusion
The nub of the study is the examination of the impact of value added tax on economic growth in Nigeria. It was empirical verified that value added tax variables have positive and significant influence on the gross domestic products (GDP) in Nigeria.

The study concluded that input tax revenue3 would positively and significantly leads to an increase in economic growth in Nigeria. Also, the researchers concluded that there is a positive and significance influence between output tax and economic growth in Nigeria.

Value added tax as a source of revenue to government has significantly enhanced economic growth through its contribution to government revenue for infrastructural development in Nigeria. We therefore conclude that adequate enforcement of value added tax would cushion the effect of the fall in oil revenue and economic development of the country.

5.3 Recommendations
Based on the findings, we recommend as follows:

i. Government should ensure that VAT revenue generated is effectively utilized for the development of the economy clearly visible to tax payers to see and appreciate. This will enhance compliance and reduce tax avoidance and evasion which is common under the present VAT regime.

ii. Government should sensitize the general public on the need for the co-operation of the tax payers in the realization of the objectives of the new tax regime through well organized seminars, workshop, symposia and jingles on television and radio.

iii. The workforce of the Federal Inland Revenue Service (FIRS) the body charged with the collection of VAT in Nigeria should be increased. The capacity of FIRS staff should equally be enhanced in terms of training and re-training for an effective VAT administration.

iv. Government should concentrate more of her expenditure on capital projects and industries that could assist in creating employment and enhancing economic growth.

5.4 Contribution to Knowledge

This study contributes to the literature in several important ways. Firstly, this study provides evidence not only on the non-recognition effect of input tax as revenue component but also the significant influence of input tax on economic growth, when it is effectively implemented in the country.

The study also contributes to the literature on social welfare proposed by the optimal taxation theory (OTT) of productive tax collection by eliminating inefficiency as much as possible and to enhance government revenue via output tax; and effective VAT practices would positively and significantly influence economic growth.

The study also proffers a model showing the relationship of value added tax variables and economic growth in Nigeria in order to guide VAT practices.

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