

---

**AN ASSESSMENT OF THE CASUAL RELATIONSHIP BETWEEN ECONOMIC GROWTH AND INDIRECT TAXES IN NIGERIA**

**Joseph Ugochukwu Madugba**

Department of Accounting, College of Management Sciences, Michael Okpara University of Agriculture Umudike Umuahia Nigeria.

**Ikechukwu Innocent Okpe**

Department of Accounting, Faculty of Management Sciences, Enugu State University of Science and Technology, Enugu Nigeria.

**Amah Kalu Ogbonnaya**

Department of Accounting, College of Management Sciences, Michael Okpara University of Agriculture Umudike Umuahia Nigeria.

---

**ABSTRACT:** *The study examines the causal relationship between economic growth and indirect taxes in Nigeria. Ex-post facto research design was employed and time series data were sourced from Central Bank Nigeria (CBN) statistical bulletin of various years 1994-2014. Multiple regression inferential statistics was used for data analysis. The result reveals that VAT has a positive significance effect on GDP. This is because the computed t-statistic of 3.142 is greater than the critical value table value of 2.120. The result of the second hypothesis also showed that the computed t- statistic of 4.557 is greater than the critical table value of 2.120 thus, proving that CED actually has a positive significance effect on GDP. The study conclude and that VAT and CED as indirect taxes contributes to economic growth in Nigeria, hence government should intensify effort to ensure immediate response of payment by the general public as flow of fund will encourage faster economic growth.*

**KEYWORDS:** Economic growth, Value Added Tax, Custom and Excise duties, Gross Domestic product.

---

## **INTRODUCTION**

Taxes are imposed on individual, groups, business or corporate bodies and properties by constituted authorities for funds used by the government in the maintenance of peace, security, economic growth and development and social engineering among others for the benefit if citizens. Madugba, Ekwe and Mgbokwo (2015) opined tax is a compulsory levy, imposed on income, profit and properties of both individuals and corperate bodies by the government for the sole administration of that government which has no compensatory benefits. Bhartia (2009) asserts that tax is a payable by an economic unit to the government without any corresponding entitlement to receive a definite and direct quid pro quo from the government. From the biblical point of view, taxation is as old as man recorded in the Gospel of Luke 19:2-8 where a chief tax collector after receiving Christ into his life vowed to reimburse excess collected from people.

From economic history, taxation is a crucial instrument for financing the public sector as it is used to raise revenue, regulate the production and consumption of goods and services, curb adverse economic conditions, protect infant industries and of course reduce income inequality among others. Taxation is the transfer of financial resources from the private sector to the government

sector and the private sectors expects the government to utilize these transferred financial resource to cater for the social, political and economic welfare.

Tosun and Abizadeh (2005) as cited in Chigbu, Akujobi and Appah (2012) outlined ways taxation can influence economic growth to include (1) Inducement of investment rate through such taxes as cooperate taxes and personal income, capital gained taxes. (2) Taxes can slow down growth in labour supply by distorting labour leisure choice in favour of leisure. (3) Tax policy can affect productivity growth through its discouraging effect and development expenditures. Appah (2010) linked economic growth to labour and capital as factors of production. Suffice to say that taxation instrument fiscal policy is an essential determinant of changes in national income especially in developing countries like ours. When tax rate on imported products are increased, it will definitely affect the quantity of such products that can be produced locally and the multiplier effect on employment and national growth.

Furthermore, when taxes are efficiently and effectively administered, there will be increase in government revenue and the citizens anticipate that such revenue will be employed by the government in the provision of amenities as to enhance their standard of living. However, unqualified inadequate tax personnel and fraudulent activities of tax collectors poses a greater challenge to revenue generation as these tax collectors forge receipts thereby diverting government revenue into their pockets. Also the inability of government to reciprocate to the sacrifice of tax payment by the citizens has induce the tax payer employing the loop holes in tax laws in invading and avoiding hence the continuous reduction in revenue generation through taxation. Tax invasion and avoidance is a serious limitation to revenue mobilization effort to the public sector in Nigeria. The problem of tax evasion contradictions in development planning process in the past and the distortion in various macroeconomic aggregates in Nigeria (depreciating exchange rate, high unemployment level and high inflationary rate) over year which worsen the poverty problems and living conditions of Nigerians, have generally hardened the attitude of tax payers to taxes. Nzotta (2007) as cited in Rotimi, Uduma and Aderemi (2013).

The main objective of this study is to examine the causal relationship between economic growth and indirect taxes in Nigeria with the following specific objectives: to examine the relationship between Gross Domestic Product and value added tax and custom duties and also examine the relationship between Total consolidated revenue and added value tax and custom duties in Nigeria.

## LITERATURE REVIEW

### **Conceptual framework:**

Every government is faced with a lot of responsibilities such as provision of social amenities, reduction of income inequality, control of adverse economic conditions, control of production and consumption of goods and services and the principal instrument to effectively and efficiently carry out these functions in taxation. Afberoh and Okoye (2014) opined that taxation is a burden every citizen must bear to sustain his or her government because the government has responsibilities to perform for the benefits of those it governs. Taxation is the most important revenue to the government (Adams, 2011). There are two major types of taxes, that is direct and indirect taxes. The direct tax is as its name implies, is levied or imposed on the income, profits and properties of both individual and cooperate bodies (Okoye, 1998). Examples of direct tax include personal income tax, company's income tax, petroleum profit tax, capital gain tax, education tax etc. Indirect taxes on the other hand are taxes imposed on goods and services rendered which are shifted in part or in full to the final consumer who does not even know when he pays or the exact amount he pays

Okpe (1998). Examples of indirect taxes include Value Added Tax (VAT), custom duties, exercise duties etc. The main focus of this study is on VAT and custom duties as source of revenue to the government.

### **Value Added Tax (VAT)**

The origin of Value added Tax is traceable to a French Economist, Maurice Laure in 1954 originally referred to as “taxe sur la valeur” (Wikipedia.org). He envisioned that a sales tax on goods does not affect the cost of manufacture and distribution but was collected on the price charge to the consumer. VAT was introduced in France in 1954 and accounted for an influential increase of 45% on the state revenue, following the formation of common market in Europe (presently the European Union). It became a *sin-qua-non* requirement for joining the union for all member countries. Ezejule (2011).

In Nigeria, Value Added Tax (VAT) was introduced through decree No 102 LFN of 1993 to replace the sales tax which was in existence. VAT is imposed on goods and services. However, the act exempted goods and service which include medical and pharmaceutical products, products meant for kids, basic food items, commercial vehicles and their parts, books and other educational materials, fertilizer, farming, Agricultural products, farming transportation equipment, veterinary machines, magazines and newspapers. Owolabi and Okwu (2011), Okpe (2003), Ani and Ugbor (2010), Kiabel and Nwikipasi (2009) VAT is imposed on net sales value of non-exempted qualifying goods and service in Nigeria. Okoyeuzu (2013), Ezejiule (2001), Okpe (1998). It is levied on individuals, cooperate group, body cooperate or organization that consumes, buys, procures or import taxable goods and services.

### **VAT Administration in Nigeria.**

Value Added Tax (VAT) is administered in Nigeria by the Federal Inland Revenue Service (FIRS) through the VAT directorate Abuja. The jurisdiction of VAT lies with the federal government of Nigeria and the proceeds from VAT are distributed among the three tiers of government in Nigeria in an approved ratio. Currently, the federal government receives fifteen percent (15%); State government gets fifty percent (50%) while the local government gets thirty-five percent (35%) (Sani, 2011).

### **Value Added Tax and Revenue Generation in Nigeria.**

Revenues generated through VAT have always been so high since its inception (Muhibat, Abdul Azeez and Tope, 2013). The percentage change in the amount generated from VAT from 1995 to 1996 was about 185.9%, and increasing from 20.76 billion in 1995 to 31 billion in 1996. In 1997, the change from military rule to democratic government also witnessed a positive increase in the compliance by the tax payers as the amount generated rose from 36.9 billion in 1998 to 47.11 billion in 1999 accounting for about 27.6% increase.

### **Features of Good Value Added Tax System.**

According to Messre and Norregard (1989), the benchmark which form the basis for appraising a VAT system in order to determine its good over other taxes are:

**NEUTRALITY:** The interference of VAT with the choices made by both producers and consumers is minimal. This implies that the economic distortion resulting from changing relative prices compared to the pre-tax situation must minimize.

**FAIRNESS:** VAT is accompanied by appropriate change in other taxes or in social transfer system to alleviate or neutralize negative distributional consequences.

**PRICESTABILITY:** VAT does not lead to sustained inflationary pressure either at the time of introduction or in the long run.

**REVENUE ASPECT:** VAT supplies the government with good amount of tax revenue and reduces the possibility of tax evasion and avoidance.

**ADMINISTRATION AND COMPLIANCE COST:** VAT minimizes or reduces government administrative and compliance cost, this is because much machinery is not needed for its administration.

#### **Merits of Value Added Tax over Other Types/Forms of Taxes.**

- **NEURALITY:** This implies a situation where a tax has no influence on the behaviour of both the consumers and the producers. A tax that has a neutral effect will obviously have a non-distortionary effect, hence VAT has only one rate and the broadest possible base and this potential makes it better than any other type of tax since it minimizes tax induced distortions.
- **LARGE REVENUE EARNER:** VAT is a reliable, valuable and large potential source of revenue for the government. It contributes 12-30 percent of revenue in most countries representing about 5-10 percent of (GNP) Gross National Product (Messre and Nlorregard, 1989).
- **EFFICIENCY:** VAT has eliminated the inefficient distortionary or badly administered taxes, such as taxes on capital goods, export or imports that reduces the tax base, as well as those that involves a cumbersome (and sometimes corrupt) administration. This is due to the fact that as countries develop, they tend to move from a simple tax system, which applies taxes to only a few items and is easy to administer to a more complex efficient system with broader, more neutral tax base (Ezejulue, 2001).
- **BROADBASE:** VAT is a higher yielding source of revenue because it has inherent potentiality of having the broadest basin tax history as a consumption tax. It acts across all consumables goods and services rather than sales tax which it repealed (Ezejulue, 2001).

#### **Custom and excise duties.**

This is a form of indirect tax paid by an individual and commercial entity that is involved in importation and exportation of goods and services. Custom duties are classified into export and import duties. While import duties are taxes levied on goods imported into the country from other country, export duties are levied on goods sent out to other country. The value of taxation duties is based on CIF (Cost, Insurance and Freight) which implies that the import duty and tax payable are calculated on the complete shipping value, which includes the cost of the imported goods, the cost of freight and the cost of insurance. In addition to duty, imports are subjected to sales tax and other tax specific to certain commodities such as excise, duty sugar levy, rice levy, cigarette levy and automotive levy.

Duty rate in Nigeria vary from 0% to 35% with the average duty rate at 16.96%. Some products can be imported free of duty e.g. books.

Sales tax is levied on imports at a standard rate of 5% on the sum of the CIF value, duty and excise and other taxes of applicable. Excise is charged on some products at rates between 5% and 30% on the sum value of the CIF value and duty. Sugar levy is charged at rates between 10% and 20% on the sum of CIF value and duty. Rice levy is charged at the rate of 20% in the sum of the CIF value and duty. Cigarette levy is charged at rates between 50% and 100% on the sum of the CIF value and duty. Automotive levy is charged at rates between 10% and 20% on the sum of the CIF value and duty.

**Import Duty Payment**

Every importer pays an administrative charge of 1% of FOB value of all imports based on the exchange rate on the approved e-form m. All imports are assessed for duty at the CIF value of the goods using the rate of exchange on the approved e-form m. It is the duty of the importers' bank through which the e-form m was processed to collect the amount of import duty assessed. The import duty payment is restricted to the bank that opened the e-form m in line with the existing regulation. However, for non e-form in transactions, payment can be made at any preferred authorised bank. The designated bank with match printed assessment notice with electronically received assessment notice for the SAP. If the information tallies, the bank will receive payment and issued signed bank receipt. The bank then sends an e-confirmation message to NCS acknowledging receipt of duty and taxes in respect of the SGD. The designated bank shall continue to electronically transfer all payment to the respective account with CBN.

**Theoretical review****Benefit received theory**

This theory is of the opinion that tax payment should initiate an exchange relationship between tax payers and the government. In the sense that while the government provide certain goods and services to members of the society, the members of the society bears the cost of these supplies to the extent of benefit received. Bhartia,( 2009) Anyafo, (1996) are in support of the benefit received theory, and VAT as consumption tax is paid by each citizen base on level of consumption for goods and services hence, this theory will be adopted in this study.

**Cost of service theory:**

This theory asserts that semi-commercial relationship exist between the state and tax payers. According to the theorist, the state give up basic protective and welfare functions to cover the cost of the services, this theory is homogenous with benefits received theory and will also be use in this study.

**Empirical review**

In 2013, okoyeuzu investigated Value Added Tax Remittance: Observation from developing country. The challenge of the study was to evaluate the performance of VAT as revenue earner in Nigeria and to access revenue generated from VAT since its inception to know if it has been on the increase or decrease. The study covered a period of 7 years from 2005-2011. The researcher utilized survey research design and the data analysis was sourced from federal Inland Revenue service chat. The study find out that VAT revenue has been on the decrease for the period of study and recommends that the Nigerian government should make adequate provision for retrieving the proceeds of VAT from companies and other agents of collection. Muhibat, Abdul azeez and Tope (2013) carried out an investigation on empirical Evaluation of the Contributions of Value Added Tax to total Revenue Generation and gross Domestic Product in Nigeria. The purpose of the study was to examine the impact of VAT on revenue generation and GDP. The study covered the period 1994-2010 and ordinary least square regression was employed for data and the result showed that VAT significantly impact on GDP. Basila (2010) carried out a study on investigating the relationship between VAT and GDP in Nigeria. The challenge of the study was to find out the relationship between VAT and GDP in Nigeria. The period of study was 1994- 2008. Secondary data gotten from CBN Statistical Bulletin was analyzed with Pearson's product moment correction of coefficient. The result reviewed that VAT is not effective .As revenue earner and the study recommends that maintenance of the status quo.

From the above empirical studies, there is no study that has covered a period of nineteen years like this study and accounted for the current state of VAT revenue in Nigeria. So, this study contributes to existing literature and brings the contributions of VAT to economic development to present.

## RESEARCH METHODOLOGY

This study will adopt the ex-post-facto research design as used by Azubike and Madugba (2015). The method of analysis used in this study is the ordinary least square (OLS) technique. It is a statistical technique used for fitting a regression line (that is choosing or estimating the structural parameters) to sample some observations in such a way as to minimize the sum of square of the deviations of the actual observations from the line. As one of the commonly used methods in estimating relationships in econometrics models and its use in a wide range of economic relationships, has provided fairly satisfactory results. Multiple regressions is one of the OLS methods. Regression is multiple when the value of the dependent variable is estimated on the basis of two independent variables. It offers explanation between an explained variable and two or more explanatory variables.

The data for the study is mainly secondary data collected from central bank of Nigeria statistical bulletin of various years. The data series in this study for analysis include: Gross Domestic product (GDP), Value added Tax (VAT), Custom and Excise Duties (CED).

### Model specification:

For the analysis of the casual relationship between economic growth and indirect taxes in Nigeria, an econometric model was specified .Thus,

$$GDP = f(VAT, CED)$$

$$GDP = \beta_0 + \beta_1 VAT + \beta_2 CED + \mu$$

Where

GDP = Gross Domestic Product

VAT = Value Added Tax

CED = Custom Excise Duties

$\mu$  = Statistics Error Term

### Data Presentation and Analysis

**Table 1: Multiple Regression Summary Table**

Variable(s)	Coefficient(s)	T-Statistic	Probability
C	405605.139	21.205	0.000
VAT	0.114	3.142	0.006
CED	0.230	4.557	0.000

**R = 0.953; R<sup>2</sup> = 0.909; F-Statistic = 90.031; Prob. (F-Statistic) = 0.000; DW = 0.697**

Source: Researcher's Computation Using Spss Version 22

The Table above shows the summary results of the multiple regression analysis performed on the research data. From the model summary in the table above, it can be seen that the strength of the relationship (R) between Value Added Tax (VAT), Total Customs and Excise Duties (CED) and Gross Domestic Product (GDP) is a high 95.3%. Furthermore, the coefficient of determination (R<sup>2</sup>) showed a value of 0.909 which indicates that about 90.9% of the variations in Gross Domestic Product can be attributed to VAT and CED.

Furthermore, the coefficient of regression (B) for VAT gave a value of 0.114 which imply that for every unit increase in VAT, GDP is predicted to increase by 0.114 units and vice versa. Additionally, the co-efficient of regression (B) for CED gave a value of 0.230 which imply that for every unit increase in CED, GDP is predicted to increase by 0.230 units and vice versa.

### **Hypothesis One Result**

From Coefficients in the table above, we can reject the null hypothesis that Value Added Tax (VAT) has no Significant Effect on Gross Domestic Product (GDP). This is because the computed t-statistic of 3.142 is greater than the critical table value of 2.120. Thus, we conclude that VAT actually has a Significant effect on GDP.

### **Hypothesis Two Result**

From Coefficients in the table above, we can reject the null hypothesis that Customs and Excise Duties (CED) has no Significant Effect on Gross Domestic Product (GDP). This is because the computed t-statistic of 4.557 is greater than the critical table value of 2.120. Thus, we conclude that CED actually has a Significant effect on GDP.

## **DISCUSSION ON CONCLUSION AND RECOMMENDATION**

The findings of this study showed that there is a positive significant relationship between Gross Domestic Product and Value Added Tax. Custom and excise duty also proved to be statistical significant on Gross Domestic Product GDP.

We therefore conclude that Value Added Tax has a significant relationship with economic growth. This study also finds out that Gross Domestic Product has significant relationship with custom and excise duties.

### **Conclusion**

The main objective of this study is to find out the casual relationship between Economic growth and Indirect taxes in Nigeria. From the analysis, the following conclusions were made.

- There is positive significant between Gross Domestic Product (GDP) and Value Added Tax (Vat).
- That Gross Domestic Product GDP prove to be statistically significant with Custom and Excise Duties
- That data collected from Central Bank of Nigeria CBN statistical bulletin that VAT and CED revenue has been on the increase since its introduction
- Even though VAT and CED revenue has been on the increase, it has not impacted on the economy positively.

### **Recommendation**

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

- Intensive seminars and workshop should be organised to educate individuals, importers, exporters and organisation on the need for prompt payment on VAT and CED
- Adequate provisions should be made by the government for instant retrieving of tax proceeds from both individuals, importers, exporters and organisations
- The government should introduce a system where tax payer should pay their taxes direct into government pause and not through agents.

## REFERENCES

- Afubero, D and Okoye, E (2014) The Impact of taxation on revenue generation in Nigeria. A study of federal capital territory and selected states. *International journal of public administration and management research (UPAMR)* 0012 (2)
- Ani, W. U and Ugbor, R (2010) Companies income tax in Nigeria providence press Nig. Ltd Enugu
- Appah, E.(2010). The relationship between fiscal policy and economic growth in Nigeria (1991-2005) *Int.J. econ, Dev.Res.hrest.*, 1(2):37-47
- Azubuikwe, J. U. B, Madugba, J. U and Okpe, I. I (2015) Impact of corporate board meeting on financial performance: Evidence from Nigeria. *International Journal of Economics and Finance*.
- Bhartia,H.L.(2009) public finance. 13<sup>th</sup> edition, Vikas publishing house PVT, New Dechi.
- Chigbu, EE., Akiyubi, L.E and Appah, E.(2012). An Empirical study on the casualty between economic growth and taxation in Nigeria. *Current research journals of economic theory* 4(2); 29-38 ISSN 2042-485
- Kiabel, B. D and Nwikipabi, N. N (2009) Selected Aspects of Nigerian Taxes. Mgbah Commercial Enterprises Port-Harcourt
- Okpe,I.I(1998).Personal income tax in Nigeria .Chiezugo ventures printer and publishers .Enugu
- Okpe, I. I (2001) Petroleum profit tax in Nigeria. Joebest books. Enugu.
- Okpe, I.I (2003).companies income tax in Nigeria. Joe best books Enugu
- Okoyeuzu, C (2013) Value Added Tax Remittance: observations from developing country. *Global journal of management and business. Research Finance* 13(9). 2249 – 4588, 0975 – 5853.
- Owolabi, S.A. and Okwu, A.T(2011). Empirical evaluation of contribution of value added tax to development of lagos state economy, middle Eastern finance and economics.Turo journal publishing, 9.
- Nzotta,S.M.,(2007)Tax envision problems in Nigeria. A critique Niger account., 40(2):40-43
- Rotimi, O., Uduma, S. A. U and Aderemi, A. A (2013) Revenue generation and engagement of Tax consultants in Lagos State, Nigera. *European Journal of Business and social sciences* 1 (90 25 – 35 [www.ejbss.com/recent.aspx](http://www.ejbss.com/recent.aspx) 2235 - 767x.
- Tosun, M.S. and Abizadeh. S (2015) Economic growth and tax components: an analysis of tax changes in OECD.*April.Econ*; 37:2251.2263.

Table 1: Gross Domestic Product (GDP), Value Added Tax (VAT), Custom &amp; Excise Duties (CED) and Total Consolidated Revenue (TCR)

year	Gross Domestic Product (GDP)	Value Added Tax (VAT)	Custom & Excise Duties (CED)
1994	345283.460	7260.800	82950.000
1995	352646.220	20761.000	37364.000
1996	367218.090	31000.000	55000.000
1997	377830.000	34000.000	63000.000
1998	388468.120	36900.000	57700.000
1999	392107.170	47100.000	87900.000
2000	412332.010	58500.000	101500.000
2001	431783.180	91800.000	170600.000
2002	451785.670	108600.000	181400.000
2003	495007.170	136400.000	195500.000
2004	527576.030	159500.000	217200.000
2005	561931.390	178100.000	232800.000
2006	595821.610	221600.000	177700.000
2007	634251.140	289600.000	241400.000
2008	672202.550	404500.000	1133701.000
2009	718977.330	454943.300	1132923.000
2010	776332.210	648410.900	1147268.000
2011	834000.830	1786254.130	1160029.000
2012	888893.000	1857031.510	1186250.000
2013	890020.000	1865120.000	1190024.000
2014	895253.000	1882120.000	1200100.000

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.953 <sup>a</sup>	.909	.899		62162.34351	.697

**a. Predictors: (Constant), CED, VAT****b. Dependent Variable: GDP****ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	69578531210	2	34789265605	90.031	.000 <sup>b</sup>
	Residual	4.897	18	2.448		
	Total	69554825111		3864156950.		
		.281		627		
		76534013721	20			
		6.178				

**a. Dependent Variable: GDP****b. Predictors: (Constant), CED, VAT**

<b>Coefficients<sup>a</sup></b>						
<b>Model</b>		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
<b>1</b>	(Constant)	405605.139	19127.862		21.205	.000
	VAT	.114	.036	.406	3.142	.006
	CED	.230	.050	.588	4.557	.000

**a. Dependent Variable: GDP**