



Effect of Indirect Tax on Economic Growth in Nigeria

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Abstract: This study sought to determine how indirect taxes, such as the value-added tax and customs and excise duties, affected economic expansion. In this study, the exploratory and ex-post facto designs were both used. Given the length of time the data was collected, the research population spans a 10-year period (2009–2018). The 10 years are used as the sample size using the consensus sampling technique. The secondary data were gathered from the CBN statistical bulletin database, and the research employed the ordinary least squares method. Indirect taxes have a substantial impact on economic growth in Nigeria, according to the results of the hypothesis testing; hence it is advised that the government establish policies to increase revenue collection through indirect taxes as a key source of revenue generation in Nigeria.

Keywords: Excise Duties, Value Added Taxes, Indirect Taxes, Economic Growth

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Introduction

Over time, the Nigerian government has struggled to amass sufficient resources (revenues) to offer its citizens security, infrastructure, and other services. Nigeria has only relied on its oil reserves to cover its societal needs in order to fulfill these governmental commitments. The revenue for government spending has been on a downward trend as a result of the recent drop in oil prices and what appears to be a global economic crisis. According to Afuberoh and Okoye (2016), the recent sharp downturn in oil prices has resulted in a reduction in the amount of money available for distribution to the federal, state, and local governments. Accordingly, Okonjo-Iweala (2012) claims

that Nigeria's economy will collapse if the country doesn't diversify its economy away from its reliance on oil. The economy's boom-and-bust character is a result of this excessive reliance on oil money. Therefore, overdependence on oil as a sole or primary source of income has hurt Nigeria as a developing nation and has not been good for long-term economic progress. Nigeria's government and populace are concerned about the necessity to diversify the economy as a result of the high disadvantage caused by oil market price swings. Considering the looming revenue generating difficulties brought on by an over reliance on oil revenue that is volatile in price in order to increase revenue, it is necessary to investigate tax revenue from indirect tax sources, in particular, Value Added Tax, Excise, and Customs Duties. Since indirect taxes are less likely to be evaded or avoided, they are more reliable and predictable. According to Nmesirionye and Onuche (2019), there has to be a paradigm shift in how tax income is collected, with a focus on indirect taxes like Value Added Tax and Customs and Excise levies that are simpler to collect and less likely to be evaded. According to Ekwueme (2016), the government must have a variety of revenue streams to increase the country's revenue base through effective administration of sustainable fiscal policies. According to the Organization for Economic Co-operation and Development (2019), examples of nations that have affected their economic development through tax income include, among others, Canada, the United States, the Netherlands, and the United Kingdom. In order to support the demand for increased Japanese income for economic growth, the Economic Survey of Japan 2008 on Tax and Economic Growth supports maintaining the amount of direct tax revenue and boosting indirect tax revenue by raising the consumption tax rate above 5%. The Japanese cabinet raised their sales tax from 8% to 10% on October 1st. The cabinet office said on February 17, 2020, that Japan's Gross Domestic Product (GDP) decreased by 6.3% annually from October to December of 2019. The reason for this declining Japanese economy was an increased the consumption tax from 8% to 10%. In the past, it decreased by 7.2% in 2014 as a result of an increase from 5% to 8% in April 2014. The financial crisis was brought on by the increase in the internal consumption tax rate, which the Japanese people found unpopular (Akinmoto, 2020). So, in order to protect the Japanese financial system from this contraction, the 5% tax rate needs to be maintained because it is beneficial to the Japanese economy. According to Nwokodi (2020), the Finance Act of 2020 was passed after the Finance Bill was overturned in January 2020. It examined and changed a number of tax laws. All of these are focused toward increasing government sales. The sculptures examined consist of the Income Tax Act for Businesses, the Value Added Tax Act, the Customs and Excise Tariffs Act, the Petroleum Income Tax Act, the Capital Gains Tax Act, the Stamp Duty Act, and the Petroleum Income Tax Act. The

recognition may be based on indirect tax reviews (Value Added Tax Act 2020). Section four of the VAT Act, as revised, proposes an increase within the price imposed tax owed by customers from 5% to 7.5%. Furthermore, Nwokodi believes that the VAT charge increase will result in an increase in government sales in Nigeria, will aggravate the situation of small scale agencies and inspire developing businesses due to the difficulty of evasion, and will discourage overseas traders and global transactions. This upward evaluation will leave humans beings in an intense hardship. The ramifications of an increase in the Value Added Tax charge include that it can trigger inflationary tendencies and generate administrative complexity (shola et al, 2020). As a result, while indirect taxes are geared closer to sales growth to reinforce monetary increase, it has a terrible effect on tax payers, that is, residents in Nigeria, as a result of the Finance Act 2020, which stipulated a 7.5% increase in VAT (Indirect Tax). Indirect taxes, even if regressive, may increase monetary growth in Nigeria because they are covered within the costs of commodities, causing the taxpayer to pay the oblique taxes on the purchase of the commodity and without understanding the precise amount paid as tax with its attendant conveniences.

Statement of the Problem

The argument concerning the impact of oblique taxes on monetary increase in Nigeria remains raging due to divergent outcomes primarily based totally on numerous empirical research via way of means of researchers. Many empirical research display disaggregated and conflicting locating when it comes to the effect of oblique taxes on monetary increase in Nigeria. Bakare(2013), Indirect taxes have a favorable impact on economic growth in Nigeria, according to studies by Aruwa & Onwuchekwa (2014) and Izedonmi et al (2014). However, Emeh (2012), Anyiwe & Umoru (2013), and Akhor & Ekundayo (2016) demonstrate the detrimental effects of indirect taxes on Nigeria's economic growth. This study is motivated and aims to advance studies on the actual impact of indirect taxes on economic growth in Nigeria in light of the contradictory findings regarding their impact on that country's economic growth. Due to these factors, the study used the GDP as the dependent variable and the VAT and CED as the independent variables. Policymakers in Nigeria will be informed based on the results. The proxies used in this research have been applied in various related studies. The population of the study is 10 years and data are chosen from the CBN statistical bulletin. The study period is 2009 - 2018.

Study's Objectives

The following study goals have been specified:

1. to evaluate the impact of the value added tax on Nigeria's economic expansion.
2. To look into how Customs and Excise Duties affect economic expansion.

Research Prompts/Questions

1. How much does Nigeria's value-added tax impact economic expansion?
2. How much of an impact do customs and excise duties have on Nigeria's economic development?

Propositions/Hypotheses

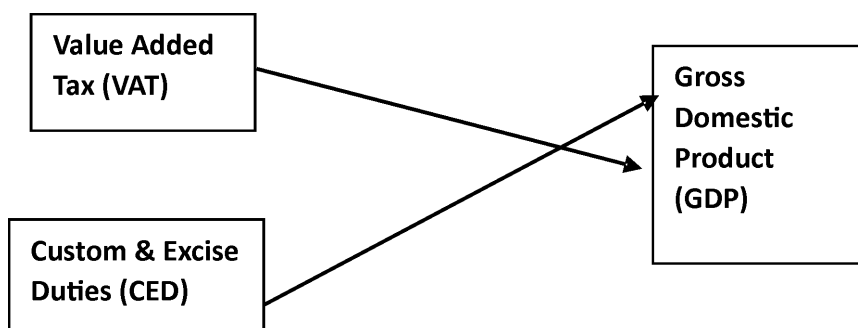
The following are the research hypotheses in null form:

H01: The amount of Value Added Tax collected in Nigeria has no appreciable impact on economic expansion.

H02: In Nigeria, the growth of the economy is not significantly impacted by customs and excise duties.

Review of Related Literature

Conceptual Framework



Indirect tax aspects and overview

An indirect tax is a type of tax that is collected by one party in the supply chain (often a producer or retailer) and paid to the government, but it is also included in the price of the good or service that is purchased by the consumer (Julia, 2019). Indirect taxes are those that can be transferred to another firm or are typically levied against a producer or supplier who then transfers the tax to the customer, according to the Corporate Finance Institute (2015). The analysis found the following categories of indirect taxes.

Excise Duties: This is a typical instance of indirect taxation in which a manufacturer purchases raw material for the company's manufacturing needs, but on such raw materials, pays indirect excise duty (Corporate Finance Institute, 2015). The manufacturer ultimately transfers the tax burden to the consumer by charging a greater price for the produced items. To put it another way, excise duty is an indirect tax, which means that the final consumer is not responsible for paying the tax to the government but rather covers the cost by purchasing the product at a higher price (Corporate Finance Institute, 2015). Excise duty's high cost tries to deter people from using or wasting products that are bad for their health or the environment. Alcohol, cigarettes, and a few energy goods are examples of these commodities (Corporate Finance Institute, 2015). The primary categories of products are as follows: excise duty in the United Kingdom: Alcohol, which includes wine, beer, cider, and spirits. Cigarettes, cigars, rolling tobacco, and chewing tobacco, among other tobacco products. Bingo, the National Lottery, video games, and online gambling games are all examples of modern gambling activities. iv. Fuels made of hydrocarbons, such as light, heavy, bio, and road fuels. Payment of various taxes, such as excise duty, is required when importing goods into the United Kingdom. Excise tax, customs tax, and VAT are all included in the price of imported taxable goods. Check if excise duty is included in the price when buying alcohol, tobacco goods, or any other product from a vendor in another member state of the European Union to prevent having your purchases seized by customs.

Customs Tax: Importers of goods also frequently pay this kind of tax. Here, the importer pays a customs fee when bringing the items into the nation, which raises the cost of the imported goods. The consumer pays the tax as well. The benefit of this kind of indirect tax is that it encourages domestic manufacturing of goods and discourages importation, which promotes economic growth. Most imports are subject to customs duties from the federal government; however in 1986 and 1995, these duties were greatly decreased. The average import tariff is 12% and ranges from 5% to 35%. Additionally, a 7% port fee and a 7.5% value-added tax (VAT) are applied to all imports.

Value Added Tax: According to Ashabi (2014), value added tax is a tax on the supply of goods and services that is ultimately paid by the end user but is gathered at each level of the production and distribution chain. Value added tax, according to Jones, Nmesirionye, and Onuche (2019), is a consumption tax (payment) imposed on the rise in value of products and services during their production or supply. Additionally, it is an indirect tax based on the overall consumption patterns of the populace. It is a spending tax that the final consumer of the products and services is required to pay. This form of tax has a multi-stage collection mechanism, indicating that VAT is

typically paid and collected by the buyer and seller (supply) at each stage of production or operation processing. All distributors, producers, importers, and suppliers of goods and services must register for VAT in Nigeria because the Federal Inland Revenue Service (FIRS) is responsible for administering the tax. Since it was raised from 5% to 7.5%, the standard VAT rate is currently 7.5%.

Economic Growth: According to Okoye, Omidia, and Salami (2015), economic growth is the long-term, sustained increase in per capita national output or net national product. That is, economic expansion is a shifting of the frontier of productive possibility outward. Economic growth is also the rise in a nation's productive capability, as determined by comparing the gross domestic product from one year to the preceding. (B2B Dictionary). In conclusion, increased capital stock, technical advancements, and rising levels of literacy within a country all contribute to economic progress. Different phenomena and indicators, such as market capitalization, Gross Domestic Product (GDP), Gross National Product (GNP), and per capita income, can be used to track economic progress.

Taxes and Economic Growth: Taxes are largely collected to increase an economy's capacity for revenue, which is typically more important for developing nations. Customs and Excise Duties (CED), Value Added Tax, and other indirect taxes are collected in Nigeria to increase the amount of money available to the government. Tremendously, these taxes have impacted on economic growth of the country

Theoretical Framework

The theory of solvency: This is the most common and widely accepted principle of fairness and fairness in taxation. Citizens of a country must contribute taxes to the government according to their ability to pay. The tax provision reinforces this theory and emphasizes the ability of the contributor to the general impulses of the state to make such a contribution when and in the manner that best suits him. Taxes are levied without consideration (Chigbu et al, 2012). The taxes to be paid by the citizens must be such that those who pay these taxes are able and able to pay them. Also, people with higher incomes pay higher taxes while those with lower incomes pay lower taxes. This study is consistent with this theory because taxes are paid based on the taxpayer's ability to pay for the goods and services that the taxpayer uses and registers respectively. VAT and CED are levied on goods and services and are paid according to the solvency (income) of the consumer as customs duties are also paid according to the ability of the importer to pay for the goods imported by the importer according to his business capital/income.

Empirical Evaluation

Through the use of a lagged autoregressive distribution and the standard growth function, Scarlet (2011) examines the connection between indirect taxes and long-term economic growth. The study covers the period from 1990 to 2010. According to the study, there is a long-term, favorable correlation between indirect tax revenue and economic growth. Using panel data on direct and indirect taxes, Aamir, Butt, Hassain, Khan, Nasir, and Qayyum (2011) examined the connection between indirect taxes and economic development. The study spans the years 2000 to 2009. According to research, indirect taxes have a statistically significant positive impact on overall revenue as well as economic growth more generally. In a 2013 study, Ajala, Aworemi, and Onalapo examined how the VAT affected Nigeria's ability to generate money. They employed stepwise regression methods to assess their data. Results demonstrated that the VAT has a statistically significant impact on Nigeria's income generation. Using the ordinary least square regression method, Bakare (2013) examined the relationship between Nigeria's output growth and the VAT. His research revealed a strong correlation between VAT and rising output. He added that the VAT has the potential to help diversify revenue streams, thereby generating funding for economic development and progress. The impact of non-oil tax revenue on economic growth in Nigeria from 1993 to 2012 was examined by Ayuba (2014) using the ordinary least square regression on data from the CBN's 2012 statistical bulletin. The results indicated a positive relationship and impact of non-oil revenue on Nigeria's economic growth. In their 2014 study, Aruwa and Onwuchekwa looked at how Nigeria's VAT policy affected economic expansion. To test the hypothesis put forward, the ordinary least squares method was used. The findings demonstrated that VAT significantly contributes to the government's overall tax income and also contributes to Nigeria's economic growth. In their 2014 study, Izedonmi and Okunbor objectively looked at how the VAT affected Nigeria's economy. A time series of data covering the years 1994 to 2010 was employed, including data on Real GDP, VAT revenue, Total tax revenue, and Total Federal Government revenue. A huge 92% difference in GDP was attributed, according to the report, to VAT revenue. Data spanning the years 1981 to 2014 were gathered by Ibadin and Oladipupo (2015) to investigate the effect of VAT on economic growth. . For unit root testing of the data, the Augmented Dickey-Fuller test was used in the study. The research revealed a significant and favorable association between VAT and real gross domestic product. Therefore, VAT significantly affects Nigeria's economic expansion. Apelogun, Ojoye, Omidia, and Salami (2015) used simple and multiple linear regression analysis of the least square methodology on the exogenous variables, petroleum profit tax, comparing income tax, customs and excise duties, and value added tax, as well as the endogenous

variable Real Gross Domestic Product to examine the impact of taxation on the growth of the Nigerian economy between 1976 and 2006. The outcome demonstrated that exogenous variables significantly influenced the expansion of the Nigerian economy. Akhor and Ekundayo (2016), in their study on the impact of indirect tax revenue on economic growth in Nigeria, using the value added tax revenue, customs and excise duty revenue as independent variables and real gross domestic product as dependent variable, covered a period from 1993 to 2013. The study used secondary data from CBN statistical bulletin while adopting the descriptive statistics, correlation, unit root test, co-integration test and error correction model for regression. The study showed a negative and significant impact on RGDP, while CED had a negative and weakly significant impact on RGDP. He recommended bridging of all loopholes in the tax administration for tax revenue to contribute immensely to the development of the economy. Using the revenue from value-added tax, customs, and excise duty as independent variables and real gross domestic product as the dependent variable, Akhor and Ekundayo (2016) examined the relationship between indirect tax revenue and economic growth in Nigeria over the years 1993 to 2013. The study adopted the descriptive statistics, correlation, unit root test, co-integration test, and regression error correction model while using secondary data from the CBN statistical bulletin. In contrast to CED, which had a negative and weakly significant influence on RGDP, the study revealed a negative and substantial impact on RGDP. He advocated closing all tax administration loopholes so that tax revenue can make a significant contribution to the growth of the economy. In Pakistan, the empirical relationship between indirect taxation and economic growth was examined by Nisar and Shahzad (2018). From 1974 to 2010, the study used annual time series data. Testing the stationarity of the variables was done using the Phillip Person and ADF unit root tests. To examine the long-term relationships among variables, Auto Regression Distributed Lag (ARDL) bounds testing was used. The result demonstrated that indirect taxes had a negative and considerable effect on economic growth in the long run, and a significant coefficient in the near run. Recommendation is consequently made for a reduction in indirect taxes and increase in the direct taxes for economic growth to be increased. Using time series data from 1994 to 2012, ones, Nmesirionye, and Nwawuru (2018) examined the impact of value added tax on Nigeria's economic growth. The study used an ex post facto methodology and retrieved data from the statistics bulletins of multiple central banks in Nigeria, including real gross domestic product and value added tax. It used the data analysis method known as the Engle Granger General Error Correlation Model (ECM). The study concluded that value added tax significantly affects Nigeria's economic growth since it demonstrated a negative significant association between

GDP and both long run and short run equilibrium conditions. In their 2019 study, Adanma, Ebieri, Elejo, Jones, Josephine, Nmesisonye, Onuche, Victor, and Sarah look at the effects of indirect taxes on Nigeria's economic performance from 1994 to 2017. Real Gross Domestic Product was the dependent variable in the study, whereas Value Added Tax, Customs and Excise taxes were employed as independent variables. Utilizing an ex post facto research design, secondary data from the National Bureau of Statistics and the Statistical Bulletin of the Central Bank of Nigeria were utilised. While a conventional least squares-based multiple regression technique was employed to ascertain the correlation between variables, the enhanced Dicky-Fuller test was adopted to test the stationery of data. Multiple regression technique was used to determine the correlation between variables. The result shows a positive and significant relationship between VAT and RGDP of Nigeria: Customs and Excise duties have positive and insignificant impact on Real GDP of Nigeria within the covered periods.

Methodology

Study design

This study will apply ex post facto research design. Similar studies on indirect taxes such as "Evaluating the long-run equilibrium relationship between tax revenue and economic growth in Nigeria by Ibanichuka, Ihendinihu and Jones (2014)", "Indirect taxes and economic growth" Ilaboya and Mgbame (2012)", and "Indirect Taxes and Economic Growth: An Empirical Analysis of Pakistan by Maqbool, Nisar and Shaphzad (2018)" applied this research model.

Data Source: The dataset used to examine the relationship between indirect taxes and economic growth was obtained from the Central Bank of Nigeria Statistical Bulletin database. 3.3 Sample size and sampling technique: The sample size for the study was 10 samples and the sampling technique applied a judgmental sampling technique during the sampling process for the study.

Data collection tools: Data for this study were collected using a data collection panel; because the work is based on secondary data. Data were collected using a data collection table imported into the Microsoft Excel package and uploaded to EVIEWS or SPSS (statistical package for the social sciences) for analysis. 3.5 Data analysis techniques

This study applied the following technique to data analysis:

(ii) **Pearson's correlation coefficient:** This calculates the degree of linear correlation between X and Y, two variables. (For example, dependency, the domestic product's raw value and independent variables, the value-added tax, and the excise and customs

taxes). According to the Cauchy-Schwarz inequality, it falls between +1 and -1. The total linear correlation is expressed as 1, the total linear correlation as -1, and the total linear correlation as 0.

(i) R Squared: This statistical tool illustrates the connection between X and Y. Its range of values is +1 to -1. This suggests that when R² has a positive 1, an increase in X leads to an increase in Y. 0 denotes a lack of relationship between X and Y, while negative 1 (-1) suggests that a rise in X results in a reduction in Y. The link between dependents and dependents is tested using this value. Unrelated factors (Wright, 1921).

(iii) R-squared adjusted: The dependent variable's change is tested using adjusted R². It shows the proportion of variance that may be accounted for by the sole independent variable that has a significant impact on the dependent variable (Henri, 1961).

(iv) The F-statistic: Is a result generated from an ANOVA test or regression analysis to assess whether the means of two populations are significantly different, i.e., the F-statistic test reveals the same level of significance. Null hypothesis is rejected if the calculated F value in a test is larger than F statistic (Richard, 2007).

(v) Durbin Watson: The population lag (prediction error) from a regression analysis is measured using this test to determine how much it auto correlates. It is evident that when d=2, there is no autocorrelation. D may be any number between 0 and 4. It is necessary for Durbin Watson's statistic, which denotes the existence of a positive chain correlation, to be substantially less than 2, to exist. There may be cause for concern if it decreases below 1.0. If $d > 2$ (Durbin), the correlation between consecutive mistake words is negative. (Durbin & Watson, 1950).

Diagnostic Test

(a) Heteroscedasticity Test: Heteroscedasticity test determines the variability between variables. Presence of heteroscedasticity invalidates statistical test of significance; assuming that the modelling errors are uncorrelated and uniform (Gujarati & Porter, 2009).

(b) Ramsey Stability Test: This is a general specification test for the linear regression model. Ramsey stability test is a test to establish whether non-linear combinations of the fitted values help explain the response variable of the null- hypothesis. The rule is to reject all Y coefficients that are zero to avoid model misspecification (Ramsey, 1968).

(c) Normality Test: This test uses the mean and the standard deviation to test if the sample distribution is normal. If the test is significant, the distribution is non-normal. If the p-value is greater than 0.05, it indicates that data is normally distributed (George et al, 1988).

(d) *Auto correlation*: Compares two time series across successive intervals in order to determine how similar they are. Similar to how two different time series correlate with one another. Autocorrelation lies between 1 and -1. A complete positive correlation, or autocorrelation of 1, is when one time series boosts the other. A reduction in one time series causes a corresponding increase in the other, while a negative 1 denotes a negative connection.

These tests will be carried out to gather pertinent information for this study's sound decision-making.

Model parameters

The study examines the impact of indirect taxes on economic growth in Nigeria. To do this, two variables were identified in the study; that is the dependent variable and the independent variable. The independent variables are VAT and CED, figures generated in Nigeria from the Central Bank of Nigeria Statistical Bulletin database. On the other hand, the dependent or response variable is economic growth (EG) represented by the GDP of Nigeria. The following model used by Akor & Ekundayo (2016) was used in a study and is specified as follows:

$$\text{GDP} = f(\text{VAT}, \text{CED}) \quad (1)$$

$$\text{GDP}_t = \beta_0 + \beta_1 \text{VAT}_t + \beta_2 \text{CED}_t + \mu \quad (2)$$

Where:

GDP = Gross Domestic Product

VAT = Value Added Tax

CED = Customs and Excise Duty

μ = Stochastic Variable

β = Beta Coefficient

Trial Hypothesis

This test was performed to find the association between the dependent and independent variables throughout the time period that was specified. T-statistics will be used in this study's hypothesis testing. The T-statistic measures how each independent variable affects the dependent variable, and the correlation coefficient (r) shows how they are related to one another. The 5% level of significance. The variable has no significance to the dependent variable if the significance level is less than 5% ($t > 0.05$), and if it is larger than 5% ($t > 0.05$), the variable has no relevance to the dependent variable. (Gujarati & Porter, 2009)

Data Presentation, Analysis and Findings

Stability Test Table 1

Ramsey Reset Test			
Equation: Untitled			
Specification: GDP_₦ Billions VAT_₦ Billions			
CED_₦ Billions			
Omitted Variables: Squares of Fitted Values			
	Value	df	Probability
t-statistic	0.199304	6	0.8486
F-statistic	0.039722	(1, 6)	0.8486
Likelihood ratio	0.065985	1	0.7973

Researcher's Computation, 2020

The Ramsey Reset is used to check the stability of the data set and see if the created linear regression model contains any significant nonlinear correlations. If the p-value is less than 0.05 level of significance, the null hypothesis is to be rejected as the decision rule. According to the data in Table 1, the model's p-value of 0.84860.05 indicates that the model has linear associations at the 5% level of significance and that the study's data set is stable.

Table 2

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.318872	Prob. F(2,5)	0.7407
Obs*R-squared	1.131203	Prob. Chi-Square(2)	0.5680

Researcher's Computation, 2020.

The Breusch-Godfrey serial correlation LM Test is used to confirm serial correlation. The null hypothesis assumes that serial correlation does not exist. If the p-value is less

than 0.05 level of significance, the null hypothesis is to be rejected as the decision rule. According to the data in Table 2, the model's p-value is 0.74070.05, indicating that it is not serially accurate at the 5% level of significance.

Multi-collinearity Test- Table 3

Variance Inflation Factors			
Sample: 2009 2018			
Included observations: 10			
	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
VAT_N_BILLIONS	760.5595	181.3212	9.324864
CED_N_BILLIONS	1431.380	141.1914	9.324864
C	52770003	20.26987	NA

Researcher's Computation, 2020

To determine whether there is any connectivity between the independent variables employed in this study, a multi-collinearity test is performed. Multi-collinearity is considered to occur when the Variance Inflationary Factor (VIF) is above 10, whereas a VIF of less than 10 indicates that there is no interaction between the explanatory variables. Due to the VIF of 9.310, the result on Table 3 indicates that multi-collinearity was absent in this investigation.

Heteroscedasticity Test- Table 4

Heteroscedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.177047	Prob. F(2,7)	0.3625
Obs*R-squared	2.516646	Prob. Chi-Square(2)	0.2841
Scaled explained SS	1.217792	Prob. Chi-Square(2)	0.5440

Researcher's Computation, 2020.

The presence of heteroscedasticity in a linear regression analysis shows that the ordinary least square (OLS) model coefficients are skewed. This happens when the model's or the errors' variance is not constant across all observations. The alternative theory is that the residuals are heteroscedastic, while the null hypothesis is that they are homoscedastic. If the p-value is less than 0.05 level of significance, the null hypothesis is to be rejected as the decision rule. Table 4's results show that the model's p-value is 0.36250.05, indicating that it does have homoscedasticity at the 5% level of significance.

Descriptive Statistics- Table 5

	<i>GDP_₦_BIL LIONS</i>	<i>VAT_₦_BILLIONS</i>	<i>CED_₦_BILLIONS</i>
Mean	83983.70	767.2926	489.7314
Median	84568.09	784.6623	492.1055
Maximum	127762.5	1097.644	705.0560
Minimum	44285.56	467.7000	297.4770
Std. Dev.	26417.79	188.3222	137.2747
Skewness	0.112122	0.222849	0.051955
Kurtosis	2.029005	2.477702	1.894533
Jarque-Bera	0.413798	0.196434	0.513689
Probability	0.813102	0.906452	0.773489
Sum	839837.0	7672.926	4897.314
Sum Sq. Dev.	6.28E+09	319187.2	169599.2
Observations	10	10	10

Source: Researcher's Computation, 2020

The statistical relevance of the model is described in Table 5. The model's normal distribution is checked. The model's normality is tested using the Jarque-Bera (JB) statistics. The model's normal distribution is the null hypothesis. If the p-value is less than 0.05 level of significance, the null hypothesis is to be rejected as the decision rule. The study adopts the null hypothesis that the model is normally distributed because the p-values of JB for all the variables are greater than 0.05. All of the variables included in this study are moderately and positively skewed, according to the skewness, and normal distribution is supported by the kurtosis. The standard deviation ensures that the data are evenly distributed and all cluster around the mean. spread of the data.

Series: Residuals	
Sample 2009- 2018 Observations 10	
Mean	1.23e-11
Median	-129.6157
Maximum	8858.779
Minimum	-7604.321
Std. Dev.	4523.996
Skewness	0.341610
Kurtosis	2.998660
Jarque-Bera	0.194497
Probability	0.907331

Figure 1: Histogram Normality

The histogram normality is a further confirmation of the normality of the distribution using Jarque-Bera which has a p-value of $0.91 > 0.05$.

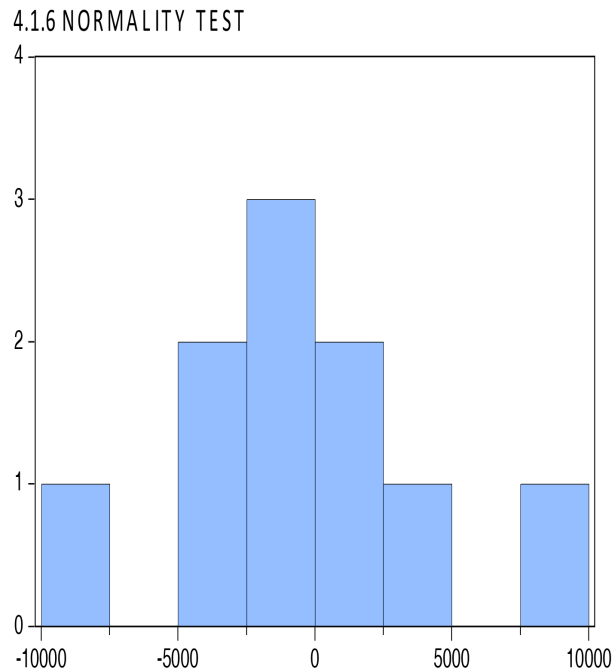


Figure 1: Histogram Normality

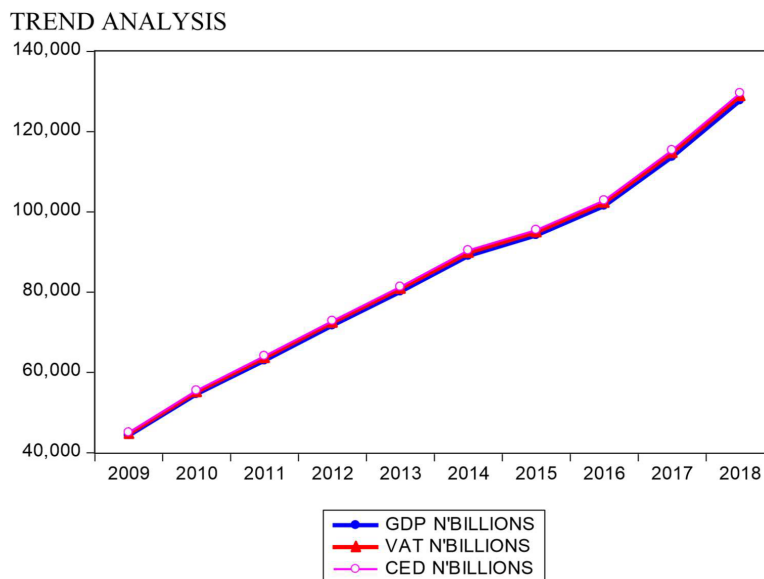


Figure 2: Trend Of Data from 2009-2018

The trend of data from 2009 to 2018 provides evidence that indirect taxes have the potentials to improve the economy of Nigeria. The VAT and CED are all rising with the GDP in figure 2 above, which implies that if more efforts and innovations are put in place, indirect taxes will aid national growth and development.

Regression Result- Table 6

Dependent Variable: GDP ₦ BILLIONS				
Method: Least Squares				
Sample: 2009 - 2018				
Included observations: 10				
<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
VAT ₦ BILLIONS	74.40963	27.57824	2.698128	0.0307
CED ₦ BILLIONS	90.21154	37.83358	2.384431	0.0486
C	-17289.68	7264.296	-2.380090	0.0489
R-squared	0.970987	Mean dependent var		83983.70
Adjusted R-squared	0.962697	S.D. dependent var		26417.79
S.E. of regression	5102.324	Akaike info criterion		20.15611
Sum squared resid	1.82E+08	Schwarz criterion		20.24688
Log likelihood	-97.78053	Hannan-Quinn criter.		20.05652
F-statistic	117.1339	Durbin-Watson stat		2.191750
Prob(F-statistic)	0.000004			

Source: Researcher's Computation, 2020

The results of this study's regression are shown in Table 6. First off, the correlation p-value of 98.5%, which is the square root of the R-squared, shows a very strong and positive association between the dependent and independent variables. Additionally, there is a significant R-square, which shows the coefficient of determination. The square value of 97% implies that the variables VAT and CED are responsible for 97% of the fluctuation in GDP, while other factors not included in the model are responsible for the remaining 3%. There is no autocorrelation, as indicated by the Durbin-Watson value of 2. 117.1339 is the F-statistic, while 0.0000.05 is the p-value. The result provides evidence that the model is statistically significant and suitable for the study. In addition, it is obvious that the independent variables (VAT&CED) employed in this study jointly impact positively on GDP.

Test of Hypothesis

In this study, the testing of the null hypotheses initially postulated is done with t-statistics which gives result on the individual influence of each of the independent variable on the dependent variable.

$H0_1$: *There is no significant association between value added tax and economic growth*

Regression Result- Table 7

Dependent Variable: GDP ₦ BILLIONS				
Method: Least Squares				
Sample: 2009 - 2018				
Included observations: 10				
<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
VAT ₦ BILLIONS	74.40963	27.57824	2.698128	0.0307
CED ₦ BILLIONS	90.21154	37.83358	2.384431	0.0486
C	-17289.68	7264.296	-2.380090	0.0489
R-squared	0.970987	Mean dependent var		83983.70
Adjusted R-squared	0.962697	S.D. dependent var		26417.79
S.E. of regression	5102.324	Akaike info criterion		20.15611
Sum squared resid	1.82E+08	Schwarz criterion		20.24688
Log likelihood	-97.78053	Hannan-Quinn criter.		20.05652
F-statistic	117.1339	Durbin-Watson stat		2.191750
Prob(F-statistic)	0.000004			

Source: Researcher's Computation, 2020

According to table 6's regression results, the VAT t-statistic is 2.6898, and the p-value is 0.03, which is less than 0.05. The implication of this finding is that VAT significantly boosts GDP and promotes economic expansion in Nigeria. As a result, the $H0_1$ is now rejected and the alternative, which asserts that VAT does have a strong association with economic growth in Nigeria, is adopted. The outcomes of (Scarlet, 2011; Aamir et al, 2011; Ebimobowei and Ogbonna, 2012; Anichebe, 2013; Ayala et al 2013; Bakare, 2013; Ayuba, 2014; Aruwa and Onwuchekwa, 2014; Izedonmi and okunbor, 2014; Ibadin and Oladipupo, 2015; Adanma et al, 2019 but conflicts with the study outcome of (Ebiringa and Emeh, 2012; Ilaboya and mgbame, 2012; Anyiwe and Umoru, 2013; Nisar and Shahzad, 2018).

$H0_2$: *There is no material relationship between customs and Excise Duties and economic growth in Nigeria.*

Regression Result- Table 8

Dependent Variable: GDP ₦ BILLIONS				
Method: Least Squares				
Sample: 2009 - 2018				
Included observations: 10				
<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
VAT ₦ BILLIONS	74.40963	27.57824	2.698128	0.0307
CED ₦ BILLIONS	90.21154	37.83358	2.384431	0.0486
C	-17289.68	7264.296	-2.380090	0.0489
R-squared	0.970987	Mean dependent variable		83983.70
Adjusted R-squared	0.962697	S.D. dependent variable		26417.79
S.E. of regression	5102.324	Akaike info criterion		20.15611
Sum squared resid	1.82E+08	Schwarz criterion		20.24688
Log likelihood	-97.78053	Hannan-Qu inn criterion.		20.05652
F-statistic	117.1339	Durbin-Watson stat		2.191750
Prob(F-statistic)	0.000004			

Source: Researcher's Computation, 2020

The regression results are shown in Table 6, where the CED t-Statistic is 2.383 and the p-value is 0.04. The p-value of 0.04 is less significant than the 5% threshold. As a result, the H02 that claims there is no meaningful connection between CED and GDP is rejected, while the counterargument is accepted. This findings is in harmony with the result of (Scarlet,2011; Aamir et al,2011; Ebimobowei and Ogbonna, 2012; Anichebe, 2013; Ayala et al 2013; Bakare, 2013; Ayuba, 2014; Aruwa and Onwuchekwa, 2014; Izedonmi and okunbor, 2014; Ibadin and Oladipupo, 2015; Adanma et al,2019); but disagrees with the findings of (Ebiringa and Emeh,2012; Ilaboya and mgbame,2012; Anyiwe and Umoru, 2013; Nisar and Shahzad, 2018).

Summary, Conclusion and Recommendation

Summary

This research investigates the effect of indirect taxes (VAT, CED) on Nigeria's economic development.(GDP) for ten years (from 2009 to 2018). The Nigerian Central Bank Statistical Bulletin was used as the source of the secondary data used for the analysis and testing of hypotheses. A statistical technique for analysis utilizing the E-view is ordinary least-squares multiple linear regression. In this study, Gross Domestic Product (GDP) is the dependent variable utilized to represent economic growth. VAT and

CED, or customs and excise duty, are the two independent variables employed in this study. The findings indicate that both of the independent variables utilized in this analysis (VAT and CED) have a favorable impact on GDP, as indirect taxes account for 97% of the variation in Nigeria's economic growth.

Conclusion

In conclusion, the study shows how indirect tax policies might stimulate Nigeria's economy. The Nigerian economy is significantly impacted by VAT. Due to the fact that VAT is a consumption-based tax, it considerably boosts governmental income. The VAT rate on consumer products and services was set at 5% prior to the passing of the Finance Law 2020, with the exception of items on the VAT exempt list. Government revenue grew as a result. Thus, economic expansion. However, government revenue will dramatically increase when consumption rises from the current level of 5% to 7.5%, promoting economic expansion. But because of his new VAT rate's impact on inflation, the populace faces an indescribable challenge. According to this study, which examines the period from 2009 to 2018 and covers both customs duty and excise duty (CED) taxes, there is a positive correlation between these two types of taxes and economic development. Given Nigeria's flaws and stumbling blocks, this kind of indirect tax also has a higher input/productivity. Regarding collections, these are thoroughly examined and carefully adhered to. Nigeria's principal source of money to pay for its increasing obligations has been mono-product oil, whose crude oil prices are steadily declining.

Recommendation

Following the findings of this work, the following suggestions are made: We should strictly manage the tax collection process and the use of tax revenues, and promote a good tax system; therefore, tax evasion, evasion, and mismanagement of the tax system must be discouraged; the government should diversify the economy from a single-product economy to a multi-income economy; and finally, taxes should be made a huge source of revenue.

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