

INDIRECT TAX REVENUE AND ECONOMIC DEVELOPMENT IN NIGERIA 1991-2023

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Abstract

This study examined the relationship between indirect tax revenue and economic development in Nigeria over the period 1991–2023. Specifically, the study investigated the effect of value added tax (VAT) efficiency, import tax efficiency, and export tax efficiency on the Human Development Index (HDI) in Nigeria. The study adopted an ex-post facto research design and utilized secondary data obtained from the Central Bank of Nigeria Statistical Bulletin, National Bureau of Statistics, and World Bank database. Descriptive statistics and econometric techniques were employed for data analysis, while Ordinary Least Squares (OLS) multiple regression analysis was used to test the hypotheses. The findings revealed that VAT efficiency, import tax efficiency, and export tax efficiency jointly have a positive relationship with human development index in Nigeria. The result further indicated that increases in indirect tax efficiency contribute to improvements in economic development indicators. The study therefore concludes that indirect tax revenue plays a significant role in promoting economic development in Nigeria. Based on the findings, it was recommended that government should strengthen indirect tax administration, promote export-oriented policies, and ensure effective management and allocation of tax revenue to critical sectors of the economy to enhance sustainable economic development.

Keywords: Indirect Tax Revenue, Economic Development, Value Added Tax (VAT), Human Development Index, Export Tax Efficiency, Import Tax Efficiency.

Introduction

Government revenue is essential for the provision of public goods, infrastructure, and social services that promote economic development. One of the major sources of government revenue is taxation, which represents compulsory payments imposed by the government on individuals, businesses, and institutions. Tax revenue enables governments to finance public expenditure, support economic activities, and improve the welfare of citizens. In Nigeria, taxation plays a vital role in generating funds needed for development, particularly in the face of declining oil revenues and increasing fiscal demands.

Taxes are generally classified into **direct and indirect taxes** based on the incidence of the tax burden. Direct taxes, such as personal income tax and petroleum profit tax, are paid directly by individuals or organizations and cannot be transferred to another party. In contrast, indirect taxes are levied on goods and services and are usually passed on to the final consumer through market prices. Major forms of indirect taxes include **Value Added Tax (VAT), import duties, and export duties**. These taxes are considered important sources of government revenue because they are relatively easier to administer and collect.

In many developed and developing economies, indirect tax revenue contributes significantly to economic development by providing funds for public investment in infrastructure, education, healthcare, and other critical sectors. However, Nigeria's tax system has historically been characterized by heavy dependence on oil revenue, which has limited the contribution of taxation to national development. The volatility of crude oil prices and economic challenges have therefore increased the need to strengthen the tax system, particularly indirect taxation, as a sustainable source of revenue for economic development.

Economic development refers to improvements in the economic and social well-being of citizens, including increased income levels, reduction in poverty, improved education and health outcomes, and overall improvement in the quality of life. One widely used indicator of economic development is the **Human Development Index (HDI)**, which measures development through indicators such as

life expectancy, education, and standard of living. Consequently, government revenue generated from taxes can play a significant role in improving these development indicators when properly managed and allocated.

Despite the potential of indirect tax revenue to stimulate economic development, concerns remain regarding its efficiency and effectiveness in Nigeria. Issues such as tax evasion, poor tax administration, and inadequate utilization of tax revenue have limited its impact on development outcomes. Therefore, it becomes necessary to examine the relationship between indirect tax revenue and economic development in Nigeria. This study specifically investigates the effect of Value Added Tax efficiency, import tax efficiency, and export tax efficiency on the Human Development Index in Nigeria over the period 1991–2023, with the aim of providing empirical evidence on the role of indirect taxation in promoting economic development.

Aim and Objectives of the Study

The aim of the study is to determine indirect tax revenue and economic development in Nigeria from 1991-2020. The specific objectives are to;

1. determine the effect of VAT efficiency on human development index in Nigeria
2. determine the effect of import tax efficiency on human development index in Nigeria
3. determine the effect of export tax efficiency on human development index in Nigeria

Research Questions

1. What is the effect of VAT efficiency on human development index in Nigeria?
2. What is the effect of import tax efficiency on the human development index in Nigeria?
3. What is the effect of export tax efficiency on human development index in Nigeria?

Research Hypotheses

- Ho₁:** VAT efficiency does not have significant effect on human development index in Nigeria
- Ho₂:** Import tax efficiency does not have significant effect on human development index in Nigeria
- Ho₃:** Export tax efficiency does not have significant effect on human development index in Nigeria.

REVIEW OF RELATED LITERATURE

Conceptual Review

Indirect Tax Revenue

Anyanwu (1993) stated that, tax is more or less compulsory, non-returnable contribution of money used occasionally for goods and services and flows from private individuals, institutions or groups to the government. It may be levied upon wealth or income of a person or body corporate or in form of surcharge on prices. Similarly, Okpe (1998) averred that tax is regarded as a compulsory charge imposed by the public authority (Federal, State and Local Government) for the general purposes of Government. It is also defined as the act of laying a tax or imposing taxes on the subjects of a state by government or on the members of a corporation or company by the proper Authority. It is a levy regularly imposed and regarded as contribution to the general pool from which government expenditure are made.

Gyani (1990) went on to say that tax is a compulsory contribution imposed by the government on citizens in accordance with legislative provisions and paid by them through agents to defray the cost of administration. Also, Famoyin (1990), justified tax as a compulsory contribution imposed upon persons for the general purpose of the government. Once levied, every taxable person must pay tax. He also added that taxes are benefits, but for providing the government with funds necessary for the general administration of the country.

Value-Added Tax (VAT):

VAT is the acronym for valued added tax. This tax which is in other words called consumption tax and is being defined as the amount charged by the government for every goods or services purchased from time to time. This means it can only be paid when there is consumption of goods

or services. VAT is an indirect tax, which is imposed on goods and services at each stage of production, starting from raw materials to final product. VAT is levied on the value additions at different stages of production. It forms part of the price paid for the good or service so consumed. It was introduced in Nigeria in 1993 by the General Ibrahim Babangida administration to replace sales tax which hitherto generated revenue for the state governments.

VAT was designed broadly to be a levy on imported goods, as well as on locally manufactured goods, hotel services, bank transactions etc. It was to be federally-collected and a uniform rate of 5 per cent was fixed on all affected items while VAT proceeds are shared among the three tiers of government at an agreed proportion.

Export Taxes:

These are taxes imposed on goods exported to other countries and are easy to collect as payment is done locally with local currency and is a source of income to the government. This tax may be in the form of discouraging exportation of certain goods.

Import Tax:

This is a tax levied on imported goods for obvious reasons such as tariff to discourage importation and the duty is collected from the importer at the point the goods enter the country. It is a source of government revenue particularly in Less Developed Countries (LDCs).

Economic Development

Economic development is thus a multivariate concept; hence there is no single satisfactory definition of it. Economic development is a process where low income national economies are transformed into modern industrial economies. It involves qualitative and quantitative improvements in a country's economy. Political and social transformations are also included in the concept of economic development in addition to economic changes.

According to Haller (2012), economic development is a process that generates economic and social, quantitative and, particularly, qualitative changes, which causes the national economy to cumulatively and durably increase its real national product. Economic development requires collective action and large-scale, long-horizon investment. Similarly, economic development addresses the fundamental conditions necessary for the micro economic functioning of the economy. It is within the purview of government. Though it is certainly possible to have growth without development in the short or even medium-term, economic development creates the conditions that enable long-run economic growth. Jobs are a main concern of policy: for growth what matters is the number of jobs while for economic development the focus is wages, career advancement opportunities, and working conditions (Feldman & Francis, 2003).

Human Development Index (HDI):

Invented by Lord Meghnad Desai and Nobel Laureate Amartya Sen and launched by Mahbubul-Haq, a leading Pakistani economist. The HDI is a composite index of three social indicators: life expectancy, adult literacy and years of schooling. It also take into account real GDP per capita. Thus the HDI value of a country is calculated by taking three indicators Longevity, Educational attainment and decent standard of living. HDI ignores other indicators of human development such as infant mortality, nutrition etc. and it measures relative rather than absolute human development. Human development index ranges from 0.897 in high human development countries while for low human development countries it is 0.436.

Economic Growth/Gross Domestic Product

Economic growth means an increase in the average rate of output produce per person usually measured on a per annum basic. It is also the rate of change in national output or income in a given period. Economic growth is the increase of per capital gross domestic product (GDP) or other measure of aggregate income. It is often measured as the rate of change in real GDP. Economic growth refers only to the quantity of goods and services produced. On the other hand,

gross domestic product is the monetary value of total output of goods and services produced within the geographical boundary of a country within a given period of time usually one year. Godwin (2007) defines economic growth as an increase in real gross domestic product (GDP). Growth is an increase in economic variable, normally persisting over successive periods. The variable concerned may be real or nominal, and may be measured in absolute terms. Economic growth, as defined by Jhingan (2013), is an increase in the production and consumption of goods and services. Economic growth occurs when there is an increase in the multiplied product of population and per capita consumption. Similarly, Akpakpan (2010) sees economic growth as an increase in the actual output of goods and services.

Economic growth is the other measure of aggregate income, typically reported as the annual rate of change in real GDP. Economic growth is primarily driven by improvements in productivity, which involves producing more goods and services with the same inputs of labour.

The term, economic growth is primarily concerned with the long-run. The short-run variation of economic growth is termed the business cycle. The long-run variation is one of the central questions of economics; despite some problems of measurement, an increase in GDP of a country greater than population growth is generally taken as an increase in the standard of living of its inhabitants.

Theoretical Review

Since tax is very crucial to the development of the economy, it becomes imperative to look at the basic theories surrounding taxation as well as economic development. However, this study was anchored on ability to pay theory of tax.

Ability to Pay Theory of Tax

The idea of progressive tax income- that is, that people with the ability to pay more should pay a higher percentage of their income was developed by Adam Smith in the year 1776. Simply put, taxes are paid to the government base on the ability of the citizens. It is the most popular and mostly accepted principle of equitable taxation. People that receives higher income are to pay higher taxes than those who receive lower income under this principle. For example, the capacity to pay tax of individual A is higher than that of individual B, individual A should pay a higher tax than individual B. justice can be attained if taxes are levied on this principle, though it doesn't solve our problem. Practicing this theory actually starts a problem. First problem is the meaning of ability to pay. Secondly" Accountants do not have a consensus on how to quantify an individual's ability to pay tax. This can be observed from the following;

(a) Ownership of property:

Some Accountants argued that ownership of property is a good basis to measure one's ability to pay tax. The concept was not accepted on the basis that if an individual earns more and doesn't spend on acquiring properties, he would avoid paying tax or paying more tax. Whereas an individual who acquires more properties pays more tax. It becomes unjustifiable when an individual who earns more pays lesser tax because he doesn't acquire properties and the other pays more tax because he acquires properties.

(b) Tax on the basis of expenditure:

The ability to pay tax according to some economists, should be based on the expenditure incurred by an individual i.e. an individual that incurs a greater expenditure should pay higher taxes and the one with lesser expenditure, lesser tax. This opinion is quite unreliable and not fair in all ramification. If we consider expenditure as a yardstick for the ability to pay tax, an individual with a large family and many people depending on him will pay a higher tax than an individual with a smaller family. This creates a greater burden on the former. Hence, it becomes unjustifiable.

(c) Income as the basis:

From accounting view, income should be the yardstick to measure an individual's ability to ability to pay tax. This principle is considered fair and just since an individual with a higher level of income pays a greater tax to the government than an individual with lesser income. Hence, countries in their modern tax system, considers income as the basis of individual's ability to pay tax.

Empirical Review

Tax Revenue and Economic Development

Soro (2020) determined the elasticity and revenue of the Ivorian tax system over the period 1984 to 2016. To do this, it uses the Ordinary Least Squares (OLS) method to estimate the revenue and elasticity. The empirical analysis showed that all the variables were stationary using ADF unit root test. The OLS results showed that short-run tax revenue estimates are statistically greater than one. It was therefore recommended that a viable tax system should be encouraged.

Khadan (2020) determined long-run and short-run tax revenue estimates for a group of 12 Caribbean countries over the period 1991–2017. Using panel regressions of fixed effect analysis, the study found that the long and short-run tax revenue estimates are statistically greater than one. However, the results vary by tax categories: with respect to indirect taxes, which accounts for almost 65 percent of total tax revenues, the revenue of the long-run coefficient is significantly less than 1 (0.35), while for direct taxes it is significantly greater than 1 (1.33). It also found that long-run tax revenue was lower in the post global financial crisis period. With respect to short-run revenue, corporate taxes and trade taxes are the most buoyant, while property taxes were found to be statistically insignificant.

Tanchev and Todorov (2019) analyzed tax buoyancies and economic growth in Bulgaria from the first quarter of 1999 to the second quarter of 2017. The revenue measures the response of tax revenue to changes in economic growth. The study employed Fully Modified Least Squares (FMOLS) and autoregressive distributed lag model (ARDL). The study aims to show which type of revenues (from direct or from indirect taxes) is more important for Bulgaria's state budget. It is shown that the buoyancies of aggregate tax revenue, personal income tax and social security contributions significantly differ from one another in the long-run. The buoyancies of the value-added tax and the corporate tax are above one in the long run. In the short-run the revenue of the aggregate tax revenues, the corporate tax, the income tax and the social security contributions are different from one. The short-run revenue of VAT exceeds one, hence dynamics of VAT revenues is sustainable. The collectability of the aggregate tax revenue, personal income tax and social security contributions has increased neither in the long run nor in the short run.

Barrack and Olukuru (2016) used error correction model to estimate in a comparative study the revenue of income tax, value-added tax, import tax, excise tax and total tax revenue in using annual data from 1972 to 2014 for Kenya and South Africa. The results suggested that the tax systems for both countries are dynamic in the long and short term with an average speed of adjustment between the long term and short-term estimates. Also, Keho (2013) determined the revenue of the UEMOA countries by calculating the revenue of individual taxes in each of the member countries of this economic space over the period 1996-2008. The results showed that the overall tax system is not dynamic in Côte d'Ivoire. And, the poor performance of indirect taxes negatively affects the overall performance of the tax system. On the other hand, the small fluctuations in trade and indirect taxes are attributable to the low tax elasticities at the base, which indicates that, despite the increase in imports and GDP, import taxes are not collected accordingly.

Omondi et al (2014) determined the effects of tax reforms on revenue and elasticity of the tax System in Kenya from 1963–2010. The ECM result showed that, there is evidence of a long-run

positive relationship between the revenue of aggregate revenue and economic growth in Kenya. Another study by Timsina (2010) used error correction model to study tax elasticity and revenue in the economy of Nepal from 1975-2005. He demonstrated that, there is a long-run buoyancies of aggregate tax revenues, VAT, personal income tax and import taxes.

METHODOLOGY

Research Design

Ex-post facto research design was used in analyzing the various data collected. This is because; the study is quantitative in nature and thus demanded the use of time series variables to determine the relationship between the economic variables under consideration.

Population of the Study

The study is macro in nature, therefore the population of the study comprised the population of the Nigerian economy. Furthermore, given that the population covers the whole of information on subject matter in Nigeria, the population correspond to time frame is from the period of 1994 to 2023.

Sample Size

Is the same as the study population.

Sources of Data Collection

The sources of data for the study were through secondary source, particularly CBN Statistical bulletin, National Bureau of Statistics and World Bank data base. The data contained part A and B. Part A is independent variables, which measured tax revenue, and these include; export tax efficiency, value added tax efficiency (VAT) and import tax efficiency. While, the second part (part B) is the dependent variables which measured economic development. ; Human Development Index.

Method of Data Analysis

This study adopted both descriptive and econometrics techniques. While the descriptive statistics described the nature of the variable vis-à-vis average, median and standard deviation, the econometrics method of Ordinary Least Square multiple regression analysis the relationship between two or more variables.

Model Specification

The model that established the relationship between the dependent and the independent variables will be stated below:

$$\text{HDI} = f(\text{VAT}, \text{ITE}, \text{XTE}) \quad (3.1a)$$

$$\text{HDI} = f(\text{VAT}, \text{ITR}, \text{XTE}) \quad (3.1b)$$

$$\text{HDI} = f(\text{VAT}, \text{ITE}, \text{XTE}) \quad (3.1c)$$

The linear form of the model is stated thus;

$$\text{HDI} = \alpha_0 + \alpha_1\text{VAT} + \alpha_2\text{ITE} + \alpha_3\text{ITR} + U \quad (3.2c)$$

In order to put the variables on the same scale, the logarithm form of the three models equation were presented as follows;

$$\text{LogHDI} = \alpha_0 + \alpha_1\text{LogVAT} + \alpha_2\text{LogITE} + \alpha_3\text{LogXTE} + U \quad (3.3c)$$

Where;

HDI = Human Development Index

VAT= Value added tax efficiency (VAT Revenue/GDP)

ITE = Import tax efficiency (Import Tax/GDP)

XTE= Export tax efficiency (Export Tax/GDP)

U = Error Term

t = Time Frame

$\beta_0, \theta_0, \alpha_0$ and b_0 = Intercept parameters

$\beta_1, \beta_3, \theta_1, \theta_3, \alpha_1, \alpha_3, b_1, b_3$, = slope parameters

Log = Logarithm to base ten

DATA PRESENTATION, ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

Data Presentation:

Human development index (HDI), and as the dependent variable to measure economic development. While, value added tax efficiency (VAT), import tax efficiency (ITE) and export tax efficiency (XTE) served as measures of the independent variable. See Table 4.1 for detailed. The unit of measurement of per capital income, VAT efficiency, imports and exports efficiency is in billion Naira. While, HDI is in unit scale.

Data Analysis and Results

Demographic Analysis

This analysis helped to show the trends related to population or observation and as well analyses analyze the nature and characteristic of the variable used for the analysis. The analysis focused mainly on descriptive statistics.

Table 4.2 Descriptive Statistics of the Variables

| Measurement | HDI | VAT | ITE | XTE |
|--------------|-----------|----------|-----------|-----------|
| Mean | 0.476185 | 7.013337 | 5.142521 | 0.311135 |
| Std. Dev. | 0.047367 | 5.367665 | 1.958255 | 0.148991 |
| Skewness | -0.672664 | 0.852103 | -1.139257 | -0.124720 |
| Kurtosis | 2.975286 | 3.555699 | 3.064090 | 1.460152 |
| Jarque-Bera | 2.036834 | 3.614761 | 5.845197 | 2.737520 |
| Probability | 0.361166 | 0.164083 | 0.053794 | 0.254422 |
| Sum | 12.85700 | 189.3601 | 138.8481 | 8.400650 |
| Sum Sq. Dev. | 0.058334 | 749.1075 | 99.70385 | 0.577156 |
| Observations | 26 | 26 | 26 | 26 |

Note HDI= Human development index, VAT=Value added tax efficiency, ITE= Import tax efficiency and XTE=Export tax efficiency.

Source Researcher's Computation from (E- View- Version 12)

The descriptive statistics reported in Table 4.2 indicated that human development index (HDI) has an approximate mean of 0.4762 with the corresponding standard deviation of 0.0474. Also, value added tax efficiency (VAT), has an approximate mean of ₦7billion with the corresponding standard deviation of ₦5billion. Import tax efficiency (ITE), has an approximate mean of ₦5billion with the corresponding standard deviation of ₦2billion. Similarly, exports tax efficiency (XTE), has an approximate mean of ₦0.3111billion with the corresponding standard deviation of ₦0.1489billion. Thus, it can be infer from the analysis that the standard deviation of all the variables except tax policy were not higher than their respective means. Therefore, standard deviation of the variables converged around their respective mean.

Meanwhile, the skewness test showed that while only VAT efficiency is positively skewed. While, the remaining variables (HDI, ITE and XTE) all have negative slope, Moreover, based on the analysis of the kurtosis; HDI, and XTE are platykurtic relative to normal, since the approximate values for kurtosis which are; 1.394375, 2.036834 and 1.460152 respectively, were less than 3. This suggested that the variables have short and thin tails, and their central peaks are lower and broader. Meanwhile, VAT and ITE all have leptokurtic distributions relative to normal, since the approximate values for kurtosis are more than 3. This indicated a flatter than normal distribution and the variables have large tails. That is, their central peaks are higher and sharper. However, the probability of Jarque-Bera statistics suggested that the null hypotheses of normal distribution for all the variables except tax policy were accepted at 5% level. Therefore, it was concluded from the statistical properties of the time series that, the variables were not normally distributed, may have resulted from the problem of unit root. This necessitated stability via ADF unit root test.

Multivariate Analysis

Multivariate analysis was carried out to analyze the relationship between two or more variables. Thus, the analysis involves a dependent variable and multiple independent variables. This section presented and discussed the multiple regression result in relation to the objectives and hypotheses of the study.

Discussion of Ordinary Least Square Multiple Regression Result for HDI Model

This section analyzed and discusses the regression result in line with the objectives and hypotheses of the study in order to validate economic assumptions.

Table 4.1 Analysis and Discussion of Regression Result for the Estimated Human Development Index Model

| Dependent Variable Human Development Index (HDI) | | | | |
|--|--------------|--------------------|-------------|--------------------|
| Variables | Coefficients | t-statistics | Probability | Critical value @5% |
| Constant (C) | 0.402536 | 17.46089 | 0.0000 | 0.0500 |
| VAT | 0.001817 | 0.817477 | 0.4220 | 0.0500 |
| ITE | 0.007425 | 1.291262 | 0.2094 | 0.0500 |
| XTE | 0.154941 | 1.761926 | 0.0914 | 0.0500 |
| R-Squared | 0.5571 | f-statistics | 4.2597 | |
| Durbin Watson | 1.4558 | Prob (f-statistic) | 0.0156 | |

Note HDI= Human development index, VAT=Value added tax efficiency, ITE= Import tax efficiency and XTE=Export tax efficiency.

Source Researcher's Computation from (E- View- Version 12)

The results of the estimated model as presented in Table 4.6 showed that the R-squared (R^2) value which measure the goodness of fit of the estimated model is 0.5571. Thus, the variation in human development index brought about by VAT efficiency, import tax efficiency and export tax efficiency is about 56%. This showed that the model is a good fit. The Durbin Watson (DW) which measures the level of serial correlation in an estimated model has the value of 1.4558. This value is not too far from the DW bench mark of 2.0. Thus, serial autocorrelation is not a serious problem in the estimated HDI model. Thus, the estimated model is valid for policy formulation. In like manner, the f-statistics which measures the overall significant of the independent variables in the model showed that, the three independent variables are significant in explaining the HDI in the Nigerian economy. This is because, the probability of (f-statistic) of 0.0152 < 0.0500 critical value at 5% level of significance. .

Meanwhile, the results in Table 4.6 showed that, the coefficient of Value Added Tax efficiency (VAT) has positive but insignificant relationship with HDI. The positive sign conform to accounting/economic theory which posited positive link between the two variables. Thus, a unit increase in VAT efficiency will causes a corresponding increase in HDI by 0.1817%. The result conforms to the finding of Moses, Chikewelu and Amahalu (2018) who determined tax revenue and economic development in Nigeria and demonstrated that tax revenue in the form of VAT has positive relationship with health status; a component of HDI.

Similarly, the results in Table 4.6 showed that, the coefficient of export tax efficiency (XTE) has positive but insignificant relationship with HDI. The positive sign conform to accounting/economic theory. Thus, a unit increase in export tax efficiency will causes a corresponding increase in HDI by 15.49% in Nigeria during the period of study.

The coefficient of import tax efficiency (ITE) has positive but insignificant relationship with human development index (HDI) in Nigeria during the period of study. This means that, a unit increase in import tax efficiency will increase HDI by 0.7425%. The positive value of import is not in

tandem with accounting/economic theory which posited negative link between the two variables. This result is a true reflection of the Nigerian economy that is characterized with excessive importation of secondary products which does not improve the development of the Nigerian economy.

Bivariate Analysis

This is a form of quantitative analysis that involves the analysis of two variables for the purpose of determining the relationship between them. Bivariate analysis can be helpful in testing simple hypotheses in a study. Here in the study, the hypotheses were tested in relation to f-statistic.

Hypothesis One, Two and Three

There is no significant relationship between indirect tax revenue (measure by VAT efficiency, imports and exports efficiency) and human development index (HDI) in Nigeria. The estimated results in Table 4.6 showed that, the probability (f-statistic) for the three independent variables is lower than, the probability value at 5%. ($0.0156 < 0.0500$) Thus, the alternative hypothesis which states that, there is a significant relationship between indirect tax revenue and human development index (HDI) in Nigeria was accepted. This implies that, the combination of VAT efficiency, imports and exports efficiencies will significantly help to improve human development index in Nigeria during the period of review.

Summary of Findings

The estimated ordinary least square (OLS) multiple regression result showed that, indirect tax revenue measured by value added tax efficiency, import tax efficiency and export tax efficiency jointly impacted on human development index in Nigeria during the period of study. In like manner, all the three independent variables (value added tax efficiency, import tax efficiency and export tax efficiency) were positively related with human development index in Nigeria during the period of study.

Discussion of Findings

This section discusses the findings of the study based on the OLS result to know whether or not the stated objectives/hypotheses were achieved.

Value Added Tax Efficiency and Human Development Index in Nigeria from 1991-2020: The coefficient of Value Added Tax efficiency has positive but insignificant relationship with HDI. Thus, an increase in VAT efficiency will causes a corresponding increase in HDI by 0.1817%. The result conforms to the finding of Moses, Chikewelu and Amahalu (2018) who determined tax revenue and economic development in Nigeria and demonstrated that tax revenue in the form of VAT has positive relationship with health status; a component of HDI.

Exports Tax Efficiency and Human Development Index in Nigeria from 1991-2020

The finding showed that, exports tax efficiency has positive relationship with human development index (HDI). Therefore an increase in exports tax efficiency will causes a corresponding increase in human development index in Nigeria during the period of study. The finding corroborates the empirical work of Obayori and Omekwe (2020), who averred that indirect tax in the forms of export and imports duties have direct link with economic development indicators such as GDP, and HDI.

Imports Tax Efficiency and Human Development Index in Nigeria from 1991-2020

The ordinary least square multiple regression result depicted that, import tax efficiency has positive but insignificant relationship with human development index (HDI) in Nigeria during the period of study. This means that, a unit increase in import tax efficiency will increase HDI by 0.7425%. The positive value of import is not in tandem with accounting/economic theory which

posited negative link between the two variables. This result is a true reflection of the Nigerian economy that is characterized with excessive importation of secondary products which does not improve the development of the Nigerian economy. The remote effect of excess import over exports is evidence in low production in the domestic industries which resulted to low employment rate. This in turn will lead to low standard of living and low literacy level and poor quality of life. The finding is in line with the scholarship of Okeke et al (2018), who averred that, there is a positive relationship between tax revenue and economic growth.

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND CONTRIBUTION TO SCHOLARSHIP

Summary

This study determined indirect tax revenue and economic development from 1991 – 2023. The specific objectives of the study were to; determine the effect of VAT efficiency on human development index in Nigeria; determine the effect of import tax efficiency on poverty index in Nigeria; determine the effect of import tax efficiency on human development index in Nigeria; and determine the effect of VAT efficiency on human development index in Nigeria. Secondary data human development index, VAT efficiency, imports and exports tax efficiencies were sourced from CBN statistical bulletin and World Bank data base. The collected data were analyzed with the techniques of stationarity test (ADF unit root test) and ordinary least squares (OLS) multiple regression analysis. The empirical result showed that;

(III) Indirect tax revenue measured by value added tax efficiency, import tax efficiency and export tax efficiency jointly impacted on human development index in Nigeria during the period of study. In like manner, all the three independent variables (value added tax efficiency, import tax efficiency and export tax efficiency) were positively related with human development index in Nigeria during the period of study.

Conclusions

This work empirically determined indirect tax revenue and economic development in Nigeria from 1991 – 2023. This was done against the background that the revenue of indirect tax such as VAT, exports and import duties has the potential to increase the revenue base of government and make funds available for developmental purposes through accelerated economic growth, improved human development index. Based on the empirical results, it was concluded that indirect tax revenue in terms of value added tax efficiency, import tax efficiency and export tax efficiency significantly impacted on economic development in Nigeria during the period under review. The implications of the finding is that the Nigerian government can boost economic growth and development through realizing that revenues should focus on boosting revenue from indirect tax sources.

Recommendations

Based on the findings of this work, the following policy recommendations are suggested: -

(i) The analysis showed that, indirect tax revenue impacted on economic development; thus, government should formulate and implement export policy measures towards exporting goods that are growth and development drivers, particularly, refined goods in the area the nation has comparative advantage in order to make the domestic production viable and compete with the industrialized economy of the world.

(ii) Given the fact that, the empirical result showed that, indirect tax revenue is positively with economic development in terms of HDI and per capita income, in Nigeria, government should coordinate the ministry in charge of tax revenue (FIRS) so that more revenue generated will be well -managed and channel to the critical sectors of the economy in the absence of systemic corruption in order to enhance growth and development of the Nigerian economy.

(iii) Given the fact that the empirical result showed that indirect tax revenue in the forms of VAT

efficiency, exports and import tax did not individually impacted on economic development, in the term so poverty reduction during the period under review, therefore, government should identify administrative loopholes that drains the revenue from VAT, imports and export duties so that, they can significantly impact on economic development in terms of achieving good standard of living, good education and quality health status and as well environment devoid of insecurity.

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