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# TAX REVENUE AND NIGERIAN ECONOMIC DEVELOPMENT (1994-2021)

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## ABSTRACT

Motivated by the rising budget deficit in Nigeria and the need for reinforced revenue sources in Nigeria, the study examined the implication of tax revenue on economic development in Nigeria over the period of 1994-2021. The study employed the human development index as measures of economic development and considered personal income tax, company income tax and value-added taxas tax revenue sources and inflation as mediating variable. Secondary data was employed from the annual report and repository of the Central Bank of Nigeria, the federal inland revenue services online report. The employed data analysis techniques in the study are the Stationarity, Autoregressive Distributive Lag, the stepwise, and the Granger Causality tests. The study observed mixed stationarity at level and first difference. In the long run, it was observed that only the immediate past value of personal income tax revenue per capita and company income tax revenue per capita had a valuable influence on the economic development. Inflation rate was observed to positively and significantly moderate the relationship between tax revenue and economic development in Nigeria. The study therefore concludes that that tax revenue has a selective effect on economic development in Nigeria. and recommended among others that; There should be a more effective supervision of the tax revenue by the tax regulatory authorities.

## KEYWORDS

Tax Revenue, Economic development, Personal income tax, Company income tax, Value Added tax, Human development Index, Inflation.

## Introduction

Economic development entails providing avenue where majority participate in the decision making as regards the improvement of their welfare. (Agbigbe, 2016). This is to say that the whole essence of modern national economic inputs is to enhance human wellbeing. Economic development is an improvement in well-being of low-income earners, reduction in illiteracy level, mass poverty reduction, diseases control and early death control, the quantum of goods and services that undelaying the structure of production in an economy, restructuring of economy in a better way that will produce employment to the majority of working class not to the few privileged (Li & Lin, 2023).

There is no single definition of economic development that captures all its dynamics nature; however, most scholars and writers follow the lord Kelvin's who assert that, one can only know much about a certain phenomenon until it can be measured in a certain way (Rahman, 2022). So, economic development can be measure through variety of ways which includes but not limited to; income distribution, level of in-put and out-put in an economy, goods and services produced, level of poverty reductions, employment rate, morality rate, literacy level, comfortable measuring economic development using human development index (HDI), which is a combined measure of the quality of the health of the people, education and per capital income is preferred as a more concise and measurable fundamental human welfare package that is directly or indirectly linked to other human capital oriented indices like poverty rate, employment, production capacity etc (Nguyen & Darsono, 2022). For instance, survival in life (life expectancy) is more or less a basic instinct for every being. This justifies the saying that health is wealth. Per capital income (the amount of money in your pocket) "money answered all things", it can be used to have access to other sources of livelihood; education on the other hand, has a multiplier effect that can enable an individual to overcome other huddles of live and attain any level in life (Peterson & Bair, 2022).

Tax is a compulsory levy imposed by government on the income of its citizen in order to ensure more even distribution of resources and economic development. The reason for taxation is no longer for imposition of tax only by government but it is also an avenue for wealth redistribution and readjustment in an economy. (Ojo, 2008). Tax revenue is a sources of government income through which infrastructural facilities are financed for in-put and out-put sustainability in an economy. The essential economic services include not only provision of infrastructural facilities and social services (Nwinee& Tobira 2012).Tax revenue involve extracting money from income of citizens by public authority-government, for public purposes. (Ogondele,1991), (Soyodeand Kola, 2006). It is worthy to note thatmeeting societal needs requires huge sum and as such is beyond individual or group of people hence the need for government tax. The tax revenue proceeds are used by government to render or provide or discharge its duties to its citizens through provision of pubic goods which will enhance the wellbeing of the teaming population, infra structure that will poster economic development, defence against external aggression, regulation of trade and business to ensure social and economic maintenance (Azubike, &Adame 2008; Francisca, 2022).

A system of tax avails itself as a veritable tool that mobilizes a nation's internal resources and it lends itself to creating an environment that is conducive for the promotion of economic growth (Ayuba, 2014). Therefore, taxation plays a major role in assisting a country to meet its needs and promote self-reliance. The need for tax payments has been a phenomenon of global significance as it affects every economy irrespective of national differences (Oboh & Isa, 2012).

Even though tax revenue is expected to be a main stay of Nigeria revenue, evidence shows that tax revenue in Nigeria has not been what it is supposed to be in terms of contribution to economic development (Babatunde et al., 2017). Studies also shows that for so many years the contribution or proportion of tax revenue to the total government revenue is not that significant because the bulk of the government income was derived or generated from oil which are used for economic development purposes. For instance, oil revenue account for over 80% of total government revenue leaving non-oil with less than 20%. Tax revenue in 1972 percentage of contribution to government revenue was 45.6%, similarly in 1974 tax revenue contribution to total government was 17.9% as against 82.1% of oil revenue. However, after the crash of oil price in later part of 1970s the oil revenue contribution dropped to 61.8% in 1978 while tax revenue was 38.2%. From 1984 the oil revenue contribution to government total revenue continue to rise with some exception in some recent years. But in sharp contrast, tax revenue contribution for the past five years was 24% to the total government revenue, however, with the recent reform carried out by Federal Inland Revenue Service (FIRS) from 2007 till date tax revenue witnessed tremendous increase to the extent of contributing about 60% to the total government spending in 2017 though even at that tax revenue has not meet the expectation of emerging economy like that of Nigeria (Ashiedu& et al., 2022). Thus, this current study is designed to examine the impact of tax revenue on economic development of Nigeria, using personal income tax, company income tax and value Added tax as indicators to captures tax revenue and Human development index (HDI) as indicator to capture economic development considering time period that spanned from year 1994 to 2021, the study also considered the mediating effect of inflation on the impact of tax revenue on economic development of Nigeria,

## The Objective of the study

The objectives of this study were to;

1. Examine the relationship between personal income tax and Human development Index.
2. Determine the extent to which Company Income Tax relates to Human development Index.
3. Ascertain the relationship between Value added Tax and Human development index.
4. Examine how inflation rate moderates the relationship between tax revenue and economic development in Nigeria.

## Research Questions

The research Questions developed to guide this study were;

1. What is the relationship between personal income tax and Human development Index?
2. To what extent does Company Income Tax relate to Human development Index?
3. What is the relationship between Value added tax and human development index?
4. Does inflation rate moderate the relationship between tax revenue and economic development in Nigeria?

## Hypotheses Testing

The following null hypotheses are hereby stated in line with the objective of this study:

**$H0_1$**: There is no significant relationship between personal income tax and Human development Index.

**$H0_2$**: There is no significant relationship between Company Income tax relates to Human development Index.

**$H0_3$**: There is no significant relationship between value added tax and Human development index.

**$H0_4$:**Inflation rate does not moderate the relationship between tax revenue and economic development in Nigeria.

## Literature Review

### Conceptual Review

### Tax System

Tax systems are different avenue or means through with government impose tax on individuals, groups of people, businesses or organization. there are several tax systems operational in Nigeria, however, for the interest of the current study, only three important ones were considered and they include, personal income tax, company tax and value added tax, brief explanation of the tax systems are presented as thus.

**Personal income tax**; This is a levy imposed by the government of a country on its citizens, individual or entities known as the taxpayers. The levy imposed on the taxpayers is such that it varies with the level of income or profits of the taxpayers. Taxes imposed on the personal income of an individual taxpayer are termed "Personal Income Tax". Thus, personal income tax signifies taxes imposed on the personal income of the individual. These taxes are imposed on the income of the individual on a basis of 'Pay as You Earn" (PAYE) and the individual taxpayer must be an employed person and expected to file returns on a yearly basis. 2.4 (Jacob, 2022).

**Company Income tax** This tax system is established by the Companies Income Tax Act (CITA) CAP C21 2004 LFN for both resident and non-resident companies in Nigeria. All companies in Nigeria are liable to pay companies Income Tax on their global profits accruing in, brought into, derived from or received in Nigeria. However, the Companies Income Tax Act (CITA) defines company in a broader sense. It defines a company as any company or corporation (other than corporation sole) established by or under any law in force in Nigeria or elsewhere. The tax rate applied to small companies is 20% on the taxable profit instead of the 30% of a normal trade or business.

**Value Added Tax VAT;**This tax system is established by the Value Added Tax Act Cap VI, 2004 LFN. This Act replaced the Sales Tax in operation under the Federal Government legislated decree No. 7 of 1986. The Value Added Tax is a special type of indirect tax in which a sum of money is levied at each stage of production and distribution of a product or service. VAT refers to the tax on the value added. The value added of a firm is the difference between a firm's sales and its purchases of inputs from other firms. In other words, it is the amount of value a firm contributes to a goods or service by applying its own factors of production namely land, labor, capital and entrepreneurial ability. In Nigeria VAT is charged at a flat rate of 5% on selected items of goods and services. Though, exemption is granted in respect of medical and pharmaceutical products, basic food items.

### Economic Development

The concept of EconomicDevelopment can be said to be an improvement in wellbeing of low-income earners, reduction in illiteracy level, mass poverty reduction, diseases control and early death control, the quantum of goods and services that undelaying the structure of production in an economy, restructuring of economy in a better way that will produce employment to the majority of working class not to the few privileged, economic development also provide an avenue where majority participate in the decision making about the improvement of their welfare.

Modern development scholars tend to emphasis on human oriented development indices and it is premised on the fact that any development that does not address the issue of human capital is not complete. Some economic historians including United Nations, World Bank and Ake, (2010) have argued that certain preconditions, such as substantial advancements in human capital must be present

for a developing country such as Nigeria to effectively generate or recoup sustainable economic benefits. They argue therefore that the national policies should be guided not only by improvement in GDP but also a broader measure of development using the HDI and other human capital variables.

**Human Development Index (HDI);** This is a tool or a statistical composite developed by United Nations in order to rank and measure nations level of economic and social development. This index is determined by life expectancy, education and literacy level, and per capita income which are the indicators used to ranks nations, it is possible with this index to monitor changes in development level over a period of time and to equally compare the level of such development among the nations. For example, a nation which scores a high HDI is when the life span is higher, education and literacy level is higher, and GDP per capita is also higher. HDI was introduced to place emphasis on individual more especially on their desire to realize better standard of living through job satisfaction. One important goal of developing human development index is to stimulate public economic policy. (World Bank,2017).

So, the Human Development Index (HDI) of the United Nations Development Programme (UNDP) was devised in the early 1990s to measure the level of human deprivation and development. The HDI ranges between 0 and 1. An HDI of less than 0.5 implies a low level of human development while 0.5 < HDI < 0.8 implies medium level of development. An HDI > 0.8 implies a high level of development. Out of the 174 member countries, Nigeria ranked 137 on the HDI scale. This implies that life expectancy was low, with about a third of the population not enjoying health services, two-thirds of the population not having access to safe water and sanitation and 47.5% of the population being educational illiterates. (World Bank,2017).

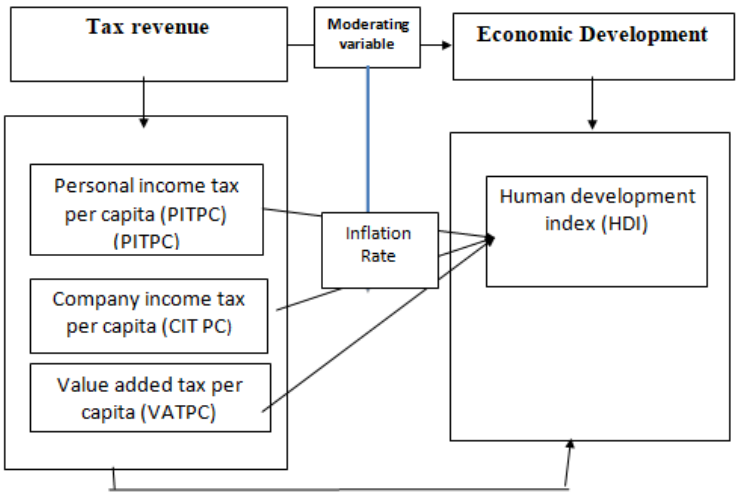


**Figure 1 Conceptualized Framework of Tax Revenue and Economic development in Nigeria**

## Theoretical Framework

This study was anchored on the theory of benefit

**Theory of Taxation.** This theory stated that the state should levy taxes on citizens according to the benefit awarded to them. The more benefits an individual derives from the activities of the state, the more he should pay to the government, then those who required more of government services that is the poor ones will not be able to benefit more due to the very little tax payment and those who are not in dear need that is the rich people will benefit more due to tax payments and with this there will

not be even distribution of economic development. The benefits theory would indicate that a citizens should be able to enjoy personal tax benefits to the level of his/ her tax contribution to the state.
Though the benefits theory of taxation undergoes serious critics from several scholars. First, it is practically impossible to be implemented precisely due to the difficulty in ascertaining the amount of government benefits derived or to be derived by every individual, benefit such as security, military protection, usage of Roads, educational centres and so on received by each resident and non-resident taxpayer. Second, the benefits theory does not into cognisance the essences of taxation which is to collect from those with surplus and provide the basic to the deficit sector of the society. In real domestic context, states generally do not align government benefits upon recipients‟ payment of taxes. Indeed, taxpayers enjoying the largest government benefits may be those that are in dare need which might not be the ones paying highest tax. Thirdly, if the state tries to establish certain relationship between the benefits conferred and the benefits enjoyed, it will not be intended with the basic principle of the taxation. Tax as early defined as a compulsory contribution by citizens to the public authorities in order to discharge their obligations in the provisions of social wellbeing of the society. There is no direct quid pro quo in the case of tax. Fourth, states incurred expenditures for the benefit of general public therefore it is not possible to determine the benefit enjoyed by a particular person in a society every year. If this theory is to be applied, then the poor will have to pay the heaviest taxes, because they benefit more from the services of the state which negate the principles of taxation of justice, equity, convenience and ability.

## Empirical Review

Awa and Ibeanu, (2018) ascertain the influence of tax revenue on economic development of Nigeria. Their specific objectives were to determine the influence of petroleum profit tax, company income tax and value added tax on economic development proxy by human development index (HDI). Annual time series data, from CBN and FIRS from 1997 to 2018 was used. The study used regression analysis. The result showed that petroleum profit tax and company income tax have significant effect on economic development while value added tax does not significantly influence economic development. They recommended that tax policy makers such as federal inland revenue services and other tax regulatory bodies should strengthen their regulation on tax compliance mostly on tax that are direct based to curb tax evasion and tax avoidance by tax payers, adopt strategies to improve system of tax administration, by training and re- training of tax administrators through seminars and conferences to be abreast of modern trend in tax administration in order to generate more income for development.

Okeke, Mbonu, Ndubuisi, (2018)ascertain the relationship between tax revenue and economic development in Nigeria during the period 1994 -2016. Data were obtained from the Central Bank of Nigeria, Office of the Federal Inland Revenue Service and Annual Abstract of statistics of the National Bureau of Statistics. This study was based on time series data. The Augmented Dickey Fuller test, Multiple linear regression, Multi collinearity test, Granger Causality test, Johansen cointegration test and Error correction model was employed in the analysis of the data. The findings of this study showed that tax revenue has a statistically significant relationship with infant mortality, labour force and gross fixed capital formation in Nigeria at 5% level of significance respectively. It was recommended among others that since tax revenue has been proven to contribute to economic development in Nigeria, Government needs to increase its allocation to the priority sectors of the economy such as agriculture and industry in order improve on the welfare of the citizenry.

Ofoegbu, Akwu, and Oliver (2016) examined the effect of tax revenue on the economic development of Nigerian, and to ascertain whether there is any difference in using HDI and GDP in establishing the

relationship. The approach adopted in this study was that of using annual time series data for the period 2005 to 2014 to estimate a linear model of tax revenue and human development index using ordinary least square (OLS) regression technique. Findings show a positive and significant relationship between tax revenue and economic development. The result also reveals that measuring the effect of tax revenue on economic development using HDI gives lower relationship than measuring the relationship with GDP thus suggesting that using gross domestic product (GDP) gives a painted picture of the relationship between tax revenue and economic development in Nigeria. The researcher, therefore, conclude that tax revenue can be an instrument of economic development in Nigeria. Development of any tax policy on tax revenue for economic development should better be based on human development index rather than GDP. This study provides a useful insight for the government, stakeholders and policy makers into the importance of tax revenue for economic development as a result; income derived from tax should be judiciously used to encourage citizens to continue to pay tax.

Ibanichuka, Akani and Okebujo (2016) investigate the effect of tax revenue on the Economic development in Nigeria over the period of 1995-2014. The data were analysed using Multiple Regression Analyses in line with the research objectives of the study. The findings reveal that revenues collected by the federal government through CIT, VAT and CED have a positive relationship with Human Development Index. Based on the findings, it was concluded as follows: That revenues collected by the federal government through company income tax, value added tax, customs and excise duties help to improve the human development index of Nigeria

Riti, Gubak, and Madina (2016), examines the influence of the tax revenue growth on economic development in Nigeria, placing emphasis on the period starting from 1981 to 2013. The study employs the Auto-regressive Distributed Lag (ARDL) and VECM Granger causality model to estimate the short run and the long run parameters as well as the direction of causation of the variables. Results show that growth of the tax revenues significantly influences economic development in Nigeria.

Okezie and Azubike (2016), evaluate the contribution of tax revenue to government revenue and economic development in Nigeria over the period of 1980 to 2014. The study utilizes Ordinary Least Squares Regression. Findings show a positive and significant contribution of tax revenue to economic growth and positive but slightly insignificant contribution to government revenue.

Ofiegbu and Akwu (2016) examine the effect of tax revenue on the economic development of Nigerian, and to ascertain whether there is any difference in using HDI and GDP in establishing the relationship. The approach adopted in this study was that of using annual time series data for the period 2005 to 2014 to estimate a linear model of tax revenue and human development index using ordinary least square (OLS) regression technique. Findings show a positively and significantly relationship between tax revenue and economic development. The result also reveals that measuring the effect of tax revenue on economic development using HDI gives lower relationship than measuring the relationship with GDP thus suggesting that using gross domestic product (GDP) gives a painted picture of the relationship between tax revenue and economic development in Nigeria.

## Methodology

**Research Design:** Research design is a term used to describe a number of decisions which need to be taken regarding the collection of data before ever the data are collected. The research design chosen for this work is quasi-experiment design which is a design that test causal hypothesis.

**Method of Data Collection:** The data for this study will be collected mainly from the secondary sources. These sources include; National Bureau of Statistics, Central Bank of Nigeria Bulletins, FIRS gauge publications World Bank Group, United Nations, Transparency International, textbooks; articles, journals and the internet for the period of 1990 to 2021. Note that, the United Nations/World Bank data on human development index which was conceptualized in 1990 only capture the period of 2002 and above. So, the researcher used the same formula approved by UN in computing the values for the missing years (1990-2001).

**Operational Measures of the Variables:** At this juncture, it is important to show how the variables under study are to be measured in form of the operational use and have quantitative values of them. As such, the dependent and independent variable shall be stated with their expected relationship. That is the relationship between the dependent variable which is the economy development of Nigeria (proxy by Human development Index HDI and Gross Domestic product per capita GDPPC) and the independent variable whose dimensions are personal income tax, company income tax, petroleum profit tax, value added tax, education tax and custom and excise duties.

### Measure dependent variables and independent variable

Dependent Variable (Economic development Captured with Human Development Index (HDI)

This is a tool or a statistical composite developed by united nations in order to rank and measure nations level of economic and social development. This index is determined by life expectancy, education and literacy level, and per capita income which are the indicators used to ranks nations it is possible with this index to monitor changes in development level over a period of time and to equally compare the level of such development among the nations.

Example a nation which scores a high HDI is when the life span is higher, education and literacy level is higher, HDI was introduced to place emphasis on individual more especially on their desire to realize better standard of living through job satisfaction. One important goal of developing human development index is to stimulate public economic policy. In summary HDI measures the basic achievement levels in fundamental dimensions of human development.

On the apiriori. HDI=PITPC, CITPC, VATPC>0

### Independent variables (Tax revenue captured with PITPV, CITPC and VATPC)

#### 1. Personal Income Tax Revenue per capita (PITPC)

Personal Income Tax per capita is the total tax collected from individuals and enterprises is imposed on different sources of income like employment, trade, labour, pensions, interest and dividends divided by the total population. The benchmark we use refers to the Top Marginal Tax Rate for individuals. Revenues from the Personal Income Tax Rate are an important source of income for the government of Nigeria. The Personal Income Tax Rate in Nigeria stands at 24 percent from 2011 until 2016, reaching an all-time high of 24.00 percent in 2012 and a record low of 24.00 percent in 2012. (CBN, 2017).

Specifically, the contribution of personal income tax remained marginal and comparatively low in Nigeria's tax revenue. At the state levels, where the major source of internal revenue is expected to be individuals and enterprises income tax, its contribution to the total revenue of these levels dropped

from 20.18 and 7.7% in 1999 to 12.4 and 1.6% in 2008, respectively (CBN, 2008). The PIT tax payer is payable to both the Federal Inland Service and the state Board of Internal Revenue depending on the sector in which the tax payer is employed. The tax is regulated by personal Income Tax Act 2011 as amended.

Based on this on the above, personal income tax is expected to be a positive function of Human development Index Thus on the apiriori: HDI/PITPC = >0

### 2. Company income Tax Revenue per capita (CITPC)

Company income tax per capita is the Tax payable for each year of assessment of the profits of any company operating in Nigeria a rate of 30% and divided by the total population of a given geographical area during a particular period. The Company income tax laws provides for the taxation of corporate bodies. If a company is incorporated, it is treated as a legal entity separate from its owners or shareholders, Nigerian companies are taxed on their worldwide income while foreign companies are taxed only in terms of their profit. The Education Tax Act provides that all incorporated companies pay 2% of their assessable profit into an Education Tax Fund.

All companies in Nigeria are liable to pay companies Income Tax on their global profits accruing in, brought into, derived from or received in Nigeria. The Companies Income Tax Act (CITA) defines a company as: "any company or corporation (other than sole corporation) established by or under any law in force in Nigeria or elsewhere". Non-Nigerian companies are foreign companies as defined by section 54 of the Companies and Allied Matter Act as “any companies or corporation established by or under the law in force in any territory or country outside Nigeria” This means such company is not incorporated under the Companies and Allied Matters Act. 3. Dividend, interest or royalties due to non-Nigerian companies which are assessed at 10% (withholding tax rate) on the net is payable to the respective companies.

Like the personal income tax, on the apiriori, company income tax is expected to be a positive function of Human development index Thus, on the apiriori: HDI/CITPC = >0

### 3. Value Added Tax Revenue per capita (VATPC)

This is the total tax revenue derived from consumption of good and services (VAT) divided by the total population of a given geographical area during a particular period usually one year. It is a consumption tax levied at each stage of the consumption chain, and is borne by the final consumer. It requires a taxable person upon registering with the Federal Inland Revenue Services to charge and collect VAT at a flat rate of 5% of all invoiced amounts of taxable goods and services. (Ariyo, 1998).

Adereti (2011) explained that evidence so far supports the view that VAT revenue is already a significant source of revenue in Nigeria. For example, actual VAT revenue for 1994 was N8.189 billion, which is 36.5% higher than the projected N6 billion for the year. Similarly, actual VAT revenue for 1995 was N21 billion compared with the projected N12 billion. In terms of contributions to total federally collected revenue, VAT accounted for about 4.06 % in 1994 and 5.93% in 1995. As much as N404.5 billion was collected on VAT (5.1% of total revenue) in 2008. Every person, whether resident in Nigeria or non-resident in Nigeria, who sells goods or renders services in Nigeria under the VAT Act (as amended) is obligated to register for VAT within six months of its commencement of business in Nigeria. Registration is with the Federal Inland Revenue Services (FIRS).Thus, on the apiriori: HDIPC/VATPC = >0

## Data Analysis Technique

The modelwas estimated using the Ordinary Least Square (OLS) techniques. Regression analysis is a statistical tool which helps to predict one variable from the other variable on the basis of assumed nature of the relationship between the variables. The following statistic would be analyzed in solving the problem under study.

## Model Specification

The functional form of the model is given as in a multiple equation model as follows:

$HDI_t = f(PITC_t, CITPC_t, VATPC_{tt})$…….(i)

Where:

HDI = Human development index

PITPC = Personal income tax revenue per capita

CITPC = Company income tax revenue per capita

VATPC = Value Added Tax revenue per capita

In econometrics, the above equation 1 is not sufficient in specification due to the absence of the Constant Parameter and error term. Therefore, we introduce the Constant Parameter and error terms as follows:

$HDI_t = \alpha_0 + \alpha_1 PITC_t + \alpha_2 CITPC_t + \alpha 3 VATPCt + \ldots + \alpha_7 HDI_{t-x} + \alpha_8 PITC_{t-x} + \alpha_9 CITPC_{t-x} + \alpha_{11} VATPC_{t-x} + \alpha_{14} INF_{t-x} + \mu_t$ (iii)

Where:

The variables remain as explained above

α = Constant Parameter

$\alpha, \alpha_2, \alpha_3, \alpha_4 \alpha_5 \alpha_6$= Estimation parameters

μ = Error terms

Apriori$\alpha_1 > 0, \alpha_2 > 0, \alpha_3 > 0, \alpha_4 > 0, \alpha_5 > 0, \alpha_6 > 0$

## Methods of Data Analysis

To understand the nature and type of relationship between employed variables, the study employs the descriptive statistics, Stepwise Autoregression evaluation, ARDL Bound's Test, ARDL Long run/Error Correction Estimations, and Granger Causality Test.

## Results and Discussions

### Descriptive statistics results

The employed variables all have unique and peculiar trends. A direct analysis without the observation of this trend would limit the nature of the conclusion and generalization made by the study. In light of this, the study employs descriptive statics of employed variables as presented as follows;

**Table 1: Descriptive Statistics of Human development index (HDI), Personal income tax revenue per capita (PITPC), Company income tax revenue per capita (CITPC), Value added tax revenue per capita (VATPC), and Inflation rate (INF) in Nigeria over the period of 1994 to 2021.**

| | HDI | PITC | CITPC | VATPC | INF |
|---|---|---|---|---|---|
| **Mean** | 0.486214 | 2658.570 | 4583.195 | 1.377714 | 15.86821 |
| **Median** | 0.486500 | 1501.290 | 1828.741 | 1.151700 | 11.99000 |
| **Maximum** | 0.554000 | 5763.078 | 48133.04 | 4.596600 | 76.80000 |
| **Minimum** | 0.384000 | 30.77000 | 116.5100 | 0.047700 | 0.200000 |
| **Std. Dev.** | 0.043346 | 2523.420 | 9602.263 | 1.190046 | 14.70797 |
| **Skewness** | -0.504669 | 0.228572 | 3.751104 | 0.753055 | 3.141540 |
| **Kurtosis** | 2.791445 | 1.169507 | 16.80452 | 2.976316 | 12.72453 |
| **Jarque-Bera** | 1.239301 | 4.152967 | 287.9893 | 2.647084 | 156.3842 |
| **Probability** | 0.538132 | 0.125370 | 0.000000 | 0.266191 | 0.000000 |
| **Sum** | 13.61400 | 74439.95 | 128329.5 | 38.57600 | 444.3100 |
| **Sum Sq. Dev.** | 0.050729 | 1.72E+08 | 2.49E+09 | 38.23763 | 5840.761 |
| **Observations** | 28 | 28 | 28 | 28 | 28 |

Table 1 provides the summary descriptive trends of all the employed study variables, which details are discussed below:

**Human Development Index:** Table 1 human development index mean score of 0.486214 (48.6%) shows that the Nigerian economy is on an average classified as being at the lower ebb of human development which spans between 0.00 to 1.00. A glance at table 4.1 shows Nigeria's human development index reached 0.5 in the year 2010 and grew steadily since then, attaining 0.534 and 0.532 in 2018 and 2019 respectively. On the whole, Nigeria's human development index can only be said to have attained an average level between 2010 and 2021. Nigeria's HDI standard deviation of 0.066005 suggest that the index does not much deviate from the mean value, which is evident from the trend. The negative skewness value of -0.504669 shows a declining trend in the human development index (HDI), as Nigeria's middle class is gradually drifting to the lower class. The kurtosis shows a slow pace of growth based on its coefficient of 1.239301. The trend of the HDI

shows a deviation from normal distribution as its Jarque-Bera significance level of 0.538132 is less than 0.05.

**Personal Income Tax Per Capita (PIT/PC)** as an avenue of non-oil revenue shows a mean value of ₦2658. This shows that on the average, the tax on income remitted to government coffers in Nigeria is usually ₦2658 annually. The Highest ever amount remitted as personal income tax per capita is ₦5763as observed in 2021. The least value of personal income per capita is ₦30 as remitted in 1994. A positive skewness value of 0.229 is observed in terms of the trend of the personal income tax per capita. This shows a progressive increase in the revenue base from this source of revenue. The Kurtosis value of 1.169507 shows a rapid growth/increase in this non-oil revenue source progressively. The Jarque-Bera significance value of 0.125370 is above the 0.05 threshold level and shows the presence of normal distribution. Overall, the Personal income tax per capita has been on the increase overtime.

**Company Income Tax Per Capita (CIT/PC)** as an avenue of non-oil revenue shows a mean value of ₦4583.195. This shows that on the average, the tax on income remitted to government coffers in Nigeria is usually ₦4583.195 annually. The Highest ever amount remitted as Company Income tax per capita is ₦48133.04 as observed in 2013. The least value of Company Income tax per capita is ₦116.51 as remitted in 1994. A positive skewness value of 3.75 is observed in terms of the trend of the Company Income tax per capita. This shows a progressive increase in the revenue base from this source of revenue. The Kurtosis value of 16.8 shows a rapid growth/increase in this non-oil revenue source progressively. The Jarque-Bera significance value of 0.0000 is below the 0.05 threshold level and shows the absence of normal distribution. Overall, the Company Income tax per capita has been on the increase overtime.

**Inflation Rate (INF):** Table 1 above shows that the inflation rate in Nigeria is averaged at 15.87% over the study period. This is a double-digit inflationary level which is formally known as galloping inflation (usually around 10 to 49%). This inflationary trend adds to the human development index significantly and is far above the ideal inflation rate level of 2%. This type of inflation erodes the value of money quickly, which has resulted in Nigerian businesses and employees having a hard time keeping up with the value of goods and services. This also leads foreign investors to avoid the country, therefore depriving it of the needed capital. Majorly, the Nigerian galloping inflation rate is caused by the mismatch of demand and supply of goods and services. Nigeria reported an inflation rate as high as 76.76% in 1994 and had once in 1999 kept a very low inflation rate of 0.22%. The relatively high standard deviation of 17.99 shows poor sustainability and control of the inflation rate of the country over the period of study. The skewness statistics value of 3.141540 shows an internally growing rate of inflation in the country. The Jarque-Bera probability value of 0.0000 shows a non-normal distribution of the inflation rate over the study period.

## Stationarity Test

Due to the identification of some variables that were not normally distributed, the study seeks to determine the internal consistency of data around their respective mean by initiating a stationarity test. The study starts with the evaluating of employed variables stationarity at level as presented below in Table 2;

**Table 2: Summary Compilation of Stationarity Test of Employed Variables at Level (0).**

| Statistics / Variable | ADF t-stat | Test Critical Values | | | Prob | Unit Root | Comment |
|---|---|---|---|---|---|---|---|
| | | 1% Level | 5% Level | 10% Level | | | |
| HDI | -2.773034 | -3.7114 | -2.98103 | -2.629906 | 0.0760 | Present | Not Stationary at Level i.e. 0(0). |
| PITPC | -3.920090 | -3.69987 | -2.97626 | -2.627420 | 0.0059 | Absent | Evidence of Stationarity at level |
| CITPC | -5.043699 | -3.69987 | -2.97626 | -2.627420 | 0.0004 | Absent | Evidence of Stationarity at level |
| VATPC | -3.927815 | -3.6998 | -2.9762 | -2.627420 | 0.0058 | Absent | Evidence of Stationarity at level |
| INF | -5.380317 | -3.69987 | -2.97626 | -2.627420 | 0.0002 | Absent | Evidence of Stationarity at level |

Where: **ADF** - Augmented Dickey Fuller.

**Prob** – Probability Level

Note: All other notations are references to the study variables as highlighted in the Model Specification.

Using the Augmented Dickey-Fuller test as compared with the Test Critical Values at 1%, 5%, and 10%, we can observe that; the human development index (HDI)is not stationary at level. This is as a result of its ADF t-statistics being less on an absolute basis than the absolute values of the test critical values at the 1% and 10% critical values. This, therefore, shows the presence of a unit root in the trend of this variable and the absence of a stationarity trend. This means that the variable does not behave in a consistent way and might lead to unreliable estimation when used at level. While other variables show stationarity tendencies as all their ADF test statistics are greater than the various critical values at 1,5, and 10% significance level on an absolute basis. Due to the nature of observed unit root in HDI, the study proceeds to the stationarity test at first difference.

When variables fail to attain stationarity at level, the differencing of variables helps smoothen the trend of variables. This is superior to the logarithm which cannot manipulate negative values. The study, therefore, presents the stationarity test of employed variable at first difference as follows in Table 3;

**Table 3: Summary Compilation of Stationarity Test of Employed Variables at First Difference i.e. (1).**

| Statistics / Variable | ADF t-stat | Test Critical Values | | | Prob | Unit Root | Comment |
|---|---|---|---|---|---|---|---|
| | | 1% Level | 5% Level | 10% Level | | | |
| HDI | -6.61410 | -3.71145 | -2.98103 | -2.62990 | 0.0000 | Absent | Stationary at First Difference i.e. I(0) |
| PITPC, CITPC, VATPC, INF are observed to be Stationary at Level. | | | | | | | |

Where: **ADF** - Augmented Dickey Fuller.

**Prob** – Probability Level.

Table 3 shows that the Human development index (HDI) attained stationarity and lacked unit root. This can be observed as the test statistics values of -6.61410 is observed to be greater than the absolute value of the test critical values at the 1, 5, and 10% level. This, therefore, shows that our employed variables have a reliable trend that would enable the further analysis to be free from spurious or unreliable outputs. In light of the observation of stationarity at level and first difference, the study would proceed to undertake the Lag length selection criteria and the Autoregressive Distributive Lag Length estimate

## Lag Order Selection Criteria

To undertake the ARDL test, the study employs the Lag Order Selection Criteria. This criterion selects the best lag length with the help of various valid criteria.

## Model: Human Development Index (HDI)

**Table 4: Output of Lag Order Selection Criteria for HDI Model.**

VAR Lag Order Selection Criteria

Endogenous variables: HDIPITPCCITPCVATPCINF

Exogenous variables: C

Date: 01/02/23 Time: 21:51

Sample: 1994 2021

Included observations: 28

| Lag | LogL | LR | FPE | AIC | SC | HQ |
|---|---|---|---|---|---|---|
| 0 | -1175.147 | NA | 4.64e+29 | 91.01133 | 91.39844* | 91.12280 |
| 1 | -1139.626 | 46.45081* | 5.26e+30* | 93.20201* | 96.68597 | 94.20526* |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | -984.3297 | 107.5129 | 2.87e+28 | 86.17921 | 92.76002 | 88.07424 |

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

Table 4 above shows that all available criteria such as the LR, FPE, AIC, and HQ point to the sufficiency and adequacy of the first lag. Only the SC shows the suitability of no lag in the model. This, therefore, shows that all employed subsequent tests will be evaluated using the first lag (1) as the maximum possible lag.

## Auto Regressive Distributive Lag

In view of the presence of small sample size of the study and the stationarity test at both level I(0), and first differencing I(1), the study proceeds to Auto Regressive Distributive Lag (ARDL) test estimation as presented below in Table 5.

## Model: Human Development Index

**Table 5: Auto Regressive Distributive Lag (ARDL) Test Estimation Output (Short-run) for HDI Model.**

Dependent Variable: HDI

Method: ARDL

Date: 01/02/23 Time: 21:53

Sample (adjusted): 1995 2021

Included observations: 27 after adjustments

Maximum dependent lags: 1 (Automatic selection)

Model selection method: Akaike info criterion (AIC)

Dynamic regressors (1 lag, automatic): PITPCCITPCVATPCINF

Fixed regressors: C

Number of models evalulated: 128

Selected Model: ARDL(1, 1, 1, 0, 0, 0, 1, 0)

| Variable | Coefficient | Std. Error | t-Statistic | Prob.* |
|---|---|---|---|---|
| HDI (-1) | 0.142361 | 0.209735 | 0.678767 | 0.5076 |
| PITPC | 0.043828 | 0.133841 | 0.327464 | 0.7478 |
| PITPC (-1) | 0.152655 | 0.109535 | 1.393668 | 0.1837 |
| CITPC | 0.083691 | 0.039206 | 2.134630 | 0.0497 |
| CITPC(-1) | 0.047207 | 0.039897 | 1.183222 | 0.2551 |
| VATPC | 0.036707 | 0.021940 | 1.673049 | 0.1150 |
| INF | 0.050961 | 0.047228 | 1.079057 | 0.2976 |
| C | 30.35791 | 10.36119 | 2.929964 | 0.0103 |

| | | | |
|---|---|---|---|
| R-squared | 0.610519 | Mean dependent var | 34.77331 |
| Adjusted R-squared | 0.524900 | S.D. dependent var | 15.95196 |
| S.E. of regression | 13.10684 | Akaike info criterion | 8.285247 |
| Sum squared resid | 2576.838 | Schwarz criterion | 8.861175 |
| Log likelihood | -99.85084 | Hannan-Quinn criter. | 8.456501 |
| F-statistic | 9.137529 | Durbin-Watson stat | 2.123483 |
| Prob(F-statistic) | 0.000897 | | |

*Note: p-values and any subsequent tests do not account for model selection.

Starting with the Coefficient of Determination ($R^2$), the observed value of 0.610619 shows that, all employed institutional funding jointly accounts for approximately 61.05% of variations in the human development index, while the remaining 38.95% can be attributed to other factors (White noise/error term) not directly captured in the model.The large error terms value of 38.95% despite the large model shows a large possibility of non-tax revenue sources activities in the country. But the 38.95% error terms will be attributed to the operations of the non-tax revenue sources.The F-statistics which attempts to determine the universal utility of the model can be seen to shows a coefficient value of 9.137529, at a probability level of 0.000897. The probability level of 0.000897 is less than the 0.05 (5%) significance level and therefore shows that the model is suitable for the subsequent long-run test.The Durbin Watson shows a value of 2.12 and therefore shows the presence of negative serial correlation which is acceptable. A negative serial correlation indicates that value changes between the current variable and its immediate past values are likely to move in the opposite direction as the value changes between past and current values which limits the possibility of having biases in results for unreliable estimates and erroneous hypothesis testing.In the short run, it can be seen that; all employed institutional funding dimensions show a positive coefficient in light of our apriori except

for the Custom and excise duty per capita. All variables show no valuable influence on the human development index (HDI). Given the suitable short-run ARDL, the study proceeds to the Bounds Test.

## ARDL Bounds Test

To determine the presence of a significant long run relationship between employed variables, the study employs the ARDL Bounds test, which is presented in table 4.6 below;

## Model – Human Development Index

**Table 6: ARDL Long Run Form and Bounds Test – Model 1**

ARDL Long Run Form and Bounds Test

Dependent Variable: D(HDI)

| F-Bounds Test | | Null Hypothesis: No levels relationship | | |
|---|---|---|---|---|
| Test Statistic | Value | Signif. | I(0) | I(1) |
| | | | Asymptotic: n=1000 | |
| F-statistic | 8.664880 | 10% | 1.92 | 2.89 |
| K | 7 | 5% | 2.17 | 3.21 |
| | | 2.5% | 2.43 | 3.51 |
| | | 1% | 2.73 | 3.9 |
| | | | Finite Sample: n=35 | |
| Actual Sample Size | 27 | | | |
| | | 10% | 2.196 | 3.37 |
| | | 5% | 2.597 | 3.907 |
| | | 1% | 3.599 | 5.23 |
| | | | Finite Sample: n=25 | |
| | | 10% | 2.277 | 3.498 |
| | | 5% | 2.73 | 4.163 |

| | | |
|---|---|---|
| 1% | 3.864 | 5.694 |

The above table shows that the F-statistics value of 8.664880 is above all finite sample values at the 1%, 5%, and 10% level for both variables at I(0) and I(1) i.e. variables integrated at level and variables integrated at first difference. In light of this finding, the study proceeds to the ARDL long run form, which includes a stepwise regression.

## ARDL Long Run Form

To examine the nature of relationship between employed variables in the long run, the study presents the ARDL Long run Form in Table 7 as follows;

## Model – Human Development Index (HDI

**Table 7: ARDL Long Run Form and Bounds Test for Model 1**

ARDL Long Run Form

Dependent Variable: D(HDI)

Selected Model: ARDL(1, 1, 1, 0, 0, 0, 1, 0)

Case 2: Restricted Constant and No Trend

Date: 01/02/23 Time: 21:54

Sample: 1994 2021

Included observations: 27

Error Correction Regression

Long Run Form

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 30.35791 | 10.36119 | 2.929964 | 0.0103 |
| HD I(-1) | 0.857639 | 0.209735 | 4.089158 | 0.0010 |
| D(PITPC) | -0.043828 | 0.133841 | -0.327464 | 0.7478 |
| PITPC (-1) | -0.508827 | 0.157460 | -3.231468 | 0.0211 |
| D(CITPC) | 0.083691 | 0.039206 | 2.134630 | 0.0497 |
| CITPC (-1) | 0.130898 | 0.055630 | 2.353008 | 0.0327 |
| VATPC | 0.036707 | 0.021940 | 1.673049 | 0.1150 |
| INF | -0.050961 | 0.047228 | -1.079057 | 0.2976 |

| | | | |
|---|---|---|---|
| Coint(ECM) | -0.303579 | 0.103612 | -2.929964 | 0.0103 |

| | | | |
|---|---|---|---|
| R-squared | 0.615077 | Mean dependent var | 34.76577 |
| Adjusted R-squared | 0.529461 | S.D. dependent var | 15.65381 |
| S.E. of regression | 13.74097 | Akaike info criterion | 8.210204 |
| Sum squared resid | 4531.542 | Schwarz criterion | 8.400519 |
| Log likelihood | -110.9429 | Hannan-Quinn criter. | 8.268386 |
| F-statistic | 9.680138 | Durbin-Watson stat | 2.162895 |
| Prob(F-statistic) | 0.000993 | | |

The Error Correction Coefficient-Coint(ECM) values of -0.303579 at a probability level of 0.0103 shows that disequilibrium between the short and long run can be adjusted backward by 30.36%.The table above shows that all variables show a positive coefficient value in the long run, In terms of the value of influence each variable has on the human development index, it can be seen that the past values of the human development index account for a significant influence on the present values of the human development index.The present value of personal income tax revenue per capita shows a negative but insignificant influence on the human development index. While the immediate past value of the personal income tax revenue per capita has a significant influence on the human development index. Company income tax revenue per capita shows a negative coefficient value and has a significant influence on the human development index.Similarly, the immediate past value of the company income tax revenue per capita mobilized credit shows a negative and significant influence on the human development index. Value-added tax shows a negative but insignificant influence on the human development index.The Inflation rate shows a negative and insignificant influence on the human development index.Overall, only personal income tax goes against the negative apriori of the study.

For the model utility, the coefficient of determination ($R^2$) value of 0.615077 shows that, all employed tax revenues jointly accounts for approximately 61.51% of variations in the human development index in the long-run, while the remaining 38.449% can be attributed to other factors (White noise/error term) not directly captured in the model. This shows strong connotations of other revenue sources affecting development.The F-statistics which attempts to determine the universal utility of the model can be seen to shows a coefficient value of 9.680138 and an accompanying probability value of 0.0009993 993which therefore shows a good and suitable model and universal utility. Finally, the Durbin Watson value of 2.162895 is within an acceptable range.

## Granger Causality Test

To determine how movements and changes in tax revenues affects changes in the level of economic development of the country, the study employs the Granger Causality test as shown in Table 8 below;

## Model – Human Development Index

**Table 8: Pairwise Granger Causality Tests Output**

Pairwise Granger Causality Tests

Date: 01/02/23 Time: 22:43

Sample: 1994 2021

Lags: 2

| Null Hypothesis: | Obs | F-Statistic | Prob. |
|---|---|---|---|
| PITPC does not Granger Cause HDI | 26 | 3.28312 | 0.0575 |
| HDI does Granger Cause PITPC | | 4.08087 | 0.0318 |
| CITPC does not Granger Cause HDI | 26 | 0.77433 | 0.4737 |
| HDI does Granger Cause CITPC | | 4.01420 | 0.0453 |
| VATPC does not Granger Cause HDI | 26 | 2.54750 | 0.1022 |
| HDI does not Granger Cause VATPC | | 1.52398 | 0.2410 |
| INF does not Granger Cause HDI | 26 | 0.59081 | 0.5628 |
| HDI does not Granger Cause INF | | 0.04750 | 0.9537 |

From the above Table 8, no bidirectional or reciprocating stimulus/causality can be seen between employed variables. Although, a unidirectional relationship can be observed to spill from;Human development index (HDI) to Personal income tax revenue per capita (PITPC). This shows that changes in the human development index induce changes in the personal income tax revenue per capita mobilization.Also, a unidirectional relationship can be observed to spill fromHuman development index (HDI) to Company income tax revenue per capita. This shows that changes in the value of the human development index account for changes in the value of Company income tax revenue per capita.

## Hypotheses Testing

To test the study hypothesis, the study employs the ARDL long run test in Table 7. The t-statistics and probability level are used to accept or reject the hypothesis.

**$H_{01}$:** Personal income tax revenue per capita does not significantly influence human development index in Nigeria.

At present value, Personal income tax revenue per capita shows a t-statistics value of -0.327464 which is observed to be less than ±2. The accompanying probability level of 0.7476 is greater than the 0.05 significance level, which shows an insignificant relationship between Personal income tax revenue per

capita at current values and the human development index. At the first lag, Personal income tax revenue per capita can be observed to shows a t-statistics value of -3.231468 which can be seen to be greater than ±2 threshold t-statistics. Its probability level of 0.0211 is less than the 0.05 significance level. In light of this, the study rejects the null hypothesis and accept the alternate hypothesis that Personal income tax revenue per capita significantly influences human development index in Nigeria. This result aligned with the study of Okeke et al., (20180. Ofiegbu and Akwu (2016) and Ofiegbuet al (2016) who in separate studies reported that tax revenue significantly affected HDI

**$H_{02}$:** There is no statistically significant relationship between Company income tax revenue per capita and human development index in Nigeria.

At present value, Company income tax revenue per capita shows a t-statistics value of -2.134630 which is observed to be greater than ±2. The accompanying probability level of 0.0497 is less than the 0.05 significance level, which shows a significant relationship between Company income tax revenue per capita at current values and the human development index. At the first lag, Company income tax revenue per capita can be observed to shows a t-statistics value of -2.353008 which can be seen to be greater than ±2 threshold t-statistics. Its probability level of 0.0327 is less than the 0.05 significance level. In light of this, the study rejects the null hypothesis and accept the alternate hypothesis that there is a statistically significant relationship between Company income tax revenue per capita and human development index in Nigeria. This result concurred with outcome of study by Awa and Ibeanu, (2018) who in their study showed that petroleum profit tax and company income tax have significant effect on economic development. And also, the work of Ibanichuka et al (2016) investigate the effect of tax revenue on the Economic development in Nigeria over the period of 1995-2014 and observed that revenues collected by the federal government through CIT, VAT and CED have a positive and significant relationship with Human Development Index

**$H_{o3}$:** There is no significant relationship between Value added tax revenue per capita andhuman development index in Nigeria.

Value added tax revenue per capita which is only observed at current values shows a t-statistics value of -1.673049 which is observed to be less than ±2. Its probability level of 0.1150 is greater than the 0.05 significance level, which shows aninsignificant relationship between Value added tax revenue per capita and the human development index. In view of these findings, the study does not reject the null hypothesis and therefore concludes that there is no significant relationship between Value added tax revenue per capita and human development index in Nigeria. This study disagrees with outcome of work of Ibanichuka et al (2016) who investigate the effect of tax revenue on the Economic development in Nigeria over the period of 1995-2014 and observed that revenues collected by the federal government through CIT, VAT and CED have a positive and significant relationship with Human Development Index

**$H_{04}$:** Inflation rate moderates the relationship between tax revenue and economic development in Nigeria.

Inflation rateis observed to have a positive implication on the model. Without inflation, the relationship between tax revenue and economic development is positive (0.184), while the introduction of inflation rate into the model increases this coefficient to 0.871. This shows that inflation catalyses the relationship between tax revenue and economic development in Nigeria. This moderating effect is significant considering the probability value of 0.0000 < 0.05. The study therefore rejects the null hypothesis and accepts the alternate hypothesis that inflation rate moderates

the relationship between tax revenue and economic development in Nigeria. Therefore, inflation rate shows a positive and significant moderating effect on the relationship between tax revenue and economic development.

## Conclusions

Based on the findings of the study, the study concludes that tax revenue has a selective effect on economic development (human development index) in Nigeria. Partitioning the nature of relationship of tax revenue on economic development, the study observes that; Only Personal income tax revenue per capita credit and Company income tax revenue per capita showed a Demand-following influence on the human development index.

## Recommendations

In light of the observed findings, it is recommended that;There should be a more effective supervision of the tax revenue by the tax regulatory authorities. This would improve the safety and security of the purposes of tax revenue in Nigeria. Personal income tax was negatively significant to the economy. Hence, tax authorities should encourage individuals to pay tax so as to improve the growth of the economy which they will in turn benefit from. Tax holidays or incentives should be given to companies and institutions and individuals who have been compliant to tax payment. This would encourage such institutions to keep paying tax as at when due.

## References


Adereti, S. A., Sanni, M. R., & Adesina, J. A. (2011). Value added tax and economic growth of Nigeria. *European Journal of Humanities and Social Sciences*. 10(1), 456-71.

Agbigbe, P., Akcigit, U., Cage, J., & Kerr, W. R. (2016). Taxation, corruption, and growth. *European Economic Review*, *86*, 24-51.

Ashiedu, I. P., Okafor, T. G., Amahalu, N. N., & Obi, J. C. (2022). Effect of tax revenue on national development of Nigeria. *International Journal of Advanced Academic Research*, *8*(1), 50-64Awa and Ibeanu, (2018)

Ayuba, A.J. (2014). Impact of non-oil revenue on economic growth: the Nigerian perspective. *International Journal of Finance and Accounting. 3*(5), 303-309.

Babatunde A., Ibukun, O. & Oyeyemi, G. (2017). Taxation revenue and economic growth in Africa, *journal of accounting and taxation*, 9(2), 11-22.

Central Bank of Nigeria (2008). Annual reports and statistical bulletin. Engle, R. and Granger, C. (1987). "Co-Integration and Error-Correction: Representation, Estimation and Testing." *Econometrica, 55: p251-76*

Central Bank of Nigeria (2017). *Statistical bulletin*, Golden Jubilee Edition, December, 2013Francisca, 2022

Ibanichuka, E. L., Akani, F. N., &Ikebujo, O. S. (2016). A Time Series Analysis of Effect of Tax Revenue on Economic Development of Nigeria. *International Journal of Innovative Finance and Economics Research*, *4*(3), 16-23.

Jacob, M. (2022). Real effects of corporate taxation: A review. European Accounting Review, 31(1), 269-296.

Li, S., & Lin, S. (2023). Housing property tax, economic growth, and intergenerational welfare: The case of China. *International Review of Economics & Finance*, *83*, 233-251.

Nguyen, H. T., & Darsono, S. N. A. C. (2022). The Impacts of Tax Revenue and Investment on the Economic Growth in Southeast Asian Countries. *Journal of Accounting and Investment*, *23*(1), 128-146.

Nwinee, B. F. & L. L. Torbira (2012), *Public financial management*, University of Port Harcourt Press.

Ofoegbu, G. N., &Akwu, D. O. (2016). Empirical analysis of effect of tax revenue on economic development of Nigeria. *International Journal of Asian Social Science*, *6*(10), 604-613.

Ofoegbu G. N., Akwu, D.O. & Oliver, O. (2013). Empirical analysis of effect of tax revenue on economic development of Nigeria. *International Journal of Asian Social Science.*

Ogundele, A. E.(1999). *Elements of taxation.* Libri Service Lagos.1st Edition:

Ojo, S. (2008). *Fundamental principles of Nigerian tax*, Lagos, Sagribra Tax Publications.

Okeke, M. N., Mbonu, C. M., & Ndubuisi, A. N. (2018). Tax Revenue and Economic Development in Nigeria: A Disaggregated Analysis. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *8*(2), 178-199.

Okezie, S. O., &Azubikem J. U. (2016). Evaluation of the Contribution of Non Oil Revenue to Government Revenue and Economic Growth: Evidence from Nigeria. *Journal of Accounting and Financial Management*. 2(5), 41-51.

Peterson, T., & Bair, Z. (2022). United states tax rates and economic growth. *SAGE Open*, *12*(3), 21582440221114324.

Rahman, M. M. (2022). The effect of taxation on sustainable development goals: evidence from emerging countries. *Heliyon*, *8*(9), e10512.

Riti, J. S., Gubak, H. D., & Madina, D. A. (2016). Growth of Non-Oil Sectors: A Key to Diversification and Economic Performance in Nigeria. *Public Policy and Administration Research.* 6(3), 64-75.

Soyode, L. and S. O. Kajola, (2006).Tax: principles and practice in Nigeria. Study Group on Tax reform (2003). Nigerian Tax Reform in 2003 and Beyond: The Main Report of the Study Group on the Nigerian Tax System. Abuja. 1st Edition:Ibadan, Silicon.