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Personal Income Tax and Human Development

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Abstract: This exploration tests the contribution and effect of personal income tax on the economic state of Nigeria for the long-term human development of citizens. This survey is critical since the government's existent revenue base, due to a variety of factors, has to be diversified and expanded. The study used the Ordinary Least Squares (OLS) technique and the integration test from 2010 to 2019 to analyze the federal and state personal income tax contribution to Nigerian human development, as well as to examine the effect, influence, and correlation between the independent variable and its dependent variable. Results show that increasing the contribution of both PITF and PITS by 1% increase the human development of the citizens by 0.42%. According to the study, because personal income tax has demonstrated potential as a source of alternative income, conditions for residents to develop so that taxes from them may be useful and should be set in the long run.

Keywords: Taxation; Social welfare

JEL Classification: E62; I0

1. Introduction

The Federal Inland Revenue Service (FIRS) was incorporated under the Federal Inland Revenue Act, 2017. The power of assessment, collection and reporting to the Government of the Federation for revenues is included in that power. The Joint Tax Board (JTB), establishing the Personal Income tax Act, also exists. It comprises officials from the tax administrations of the federal and state governments. It works as a major unification for all Nigerian tax authorities. The Joint Tax Board's official function is completely consulting. The administration of taxes includes the registration, evaluation, refunds, collection, observation of compliance, enforcement of compliance, sanction, education and awareness of the taxpayer and other activities which can enhance tax efficiency and efficiency (Abiola & Asiweh, 2021). Different tax authorities are responsible for the tax management, depending on the sort of tax to be considered. Taxes are accumulated by the Federal Board of Inland Revenue Department. This body deals with taxes paid by federal capital citizens and with taxes paid by business bodies (Limited Liability Companies) is administered under the Revenue Act. All taxes collected by the Federal Government are accountable to them. The Government collects taxes through the State Inland revenue board; the institution administrates mainly the Personal Income Tax Law; however, some federal states have

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established different income statutes, which it administers. They are responsible for reporting all revenue collected to the State Government. For these activities, the administrative bodies established under the Personal Income tax (PITA) are the State Board of Internal Revenue (SBIR) and the State and Federal Federal Boards of Inland Revenue (FBIR), respectively (Agbetunde, 2010).

The Human Development Index (HDI) was established to highlight the ultimate criteria for judging a country's development, not only economic growth. The Human Development Index is a composite statistical measure of life expectancy, education and per capita income that is utilized to classify countries as four levels of human development (Braha-Vokshi, Rexhepi, Ramadani, Abazi-Alili & Sharif, 2021). The HDI can also be used to examine national political decisions by asking how two countries with the same GNI per capita level can have different outcomes for human development. These disparities may stimulate debates on policy goals for governments.

For the Nigerian government to evolve on the basis of the country's progress, it must finance all activities and prioritize the welfare of its population. It has been reported that Nigeria has become overly reliant on oil revenue, which has had a negative impact on the importance of personal income tax (PIT), which is collected monthly or annually from individuals and partnership businesses. The purpose of this research is to see if the personal income tax makes a valid, reasonable and substantial contribution to the economic development. The Nigerian government has curbed the over-dependence of national growth on the taxes collected on the profit of petroleum industries and did not maintain the personal income tax which has a significant amount recorded each year in each 36 states of the country (Federal Inland Revenue services). Taxation is the most significant source of finances for different countries around the globe, but Nigeria has limited its impact by her inadequate focus on petroleum profit taxes and company income taxes.

The simplified definition of taxation is explained as the burden imposed on workers, enterprises and corporate entities by the nation's government or jurisdiction. In Nigeria, the taxation of an employment, trade, business or partnership is recognized and supervised by the Personal Income Tax Act (PITA). In the investment and development plan of a country, taxation is a significant component. In guarantee that security and social facilities can be supplied and the circumstances for the economic welfare of the people, tax is necessary on an individual or his property by the government. The tax resources are employed by the states to take accountability for various public obligations such as education, health care and elderly pensions, unemployment compensation and transportation. Through taxation, government guarantees that resources are made available for major undertakings in the country, while helping the weak. The taxes role in fostering trade and industry doings and progress is not mostly felt due to its inadequate management (tax organization in the 21st century Nigeria, 2021).

The connections between Nigeria's economic development and growth and personal income tax are multidimensional, with difference and sometimes resulting in conflicting results. Most research works have concluded that individual earnings levies have a negative consequence on the growth of the economy at large without stating the contribution it makes to the economy and the development of the citizens within the country's borderlines, as it is said to be collected from the profit of the citizens. Hence there is no significant certainty on how effective personal income taxes are to the development of the economy and its citizens.

2. Literature Review

The Personal Income Tax refers to a direct tax on an individual's, sole owner's, communities and families' income, executors or trustees of undivided property, or any settlement. The tax rate payable depends on the quantity of taxable income that the person is responsible for taxation. Taxable income is the foundation upon which the revenue tax system is built, and it decides how much a person must pay to the government in a given year. A person is allowed to enjoy a Combined Reprieve Stipend of Two Hundred Thousand Naira (N200,000) or 1% of total proceeds, anyone that is greater, and more 20% of overall returns. The Personal Income Tax Act Cap P8 LFN 2004 governs personal income tax (amended). The tax rate ranges from 7% to 24%, determined by the amount of income earned. Individuals are liable to a minimum tax of 1% of gross income if their annual income is below N300,000. Regarding their residents, the tax is managed by the FCT/States Internal Revenue Service (IRS). The FIRS also collect taxes from non-residents, the Armed Forces, the Police, and the Nigerian Foreign Service. Every year, the deadline for submitting tax returns is March 31st. The submission deadline for PAYE remittance is the 10th day of each subsequent month. An firm must file a return of remuneration and tax subtracted from workers in the previous year on or before January 31 of each year. If the individual is guilty of N5000 in fines plus N100 for each day he refuses or lingers six (6) months, or both, he is obliged to file a return. Any firm who misses to file a return would face legal consequences of N500,000 for the corporate entity and N50,000 for the person if convicted.

Rates for the Old Income Band include: The first N30,000 is worth 5%; 10% discount on the next N30,000Next; 15% off N50,000. Next, N50,000 will be discounted by 20%. Above N160,000, a 25% discount is applied. In addition, New Rates and Bands are: The first N300,000 is worth 7%; N300,000 (11%); N300,000 (11%); N300,000 (11%). Following N500,000, 15%; Next, a 19% increase in N500,000; Next, N1,600,000 represents a 21 percent increase. Above N3,200,000, 24 percent.

The Benefit Theory, proposed by Knut Wicksell in 1896 and expanded by Erik Lindahi in 1919, serves as the foundation for this research. According to this view, the government should tax individuals based on the benefit provided to them. The added benefits an individual obtains from the country's activities, the more he ought to pay to the regime. The notion of reward earned supposition of taxation continues to be advantageous to tax executives, lawmakers, and the authorities given the fact that the encouragement of taxpayers' obedience, which will closely resemble the levy proceeds disparity, will rely on government delivery of necessary societal and fiscal substructure to citizens (Amah, Cletus Okey, 2017). The Socio-Political Theory was also shown to be beneficial in this investigation. According to Ogbonna and Appah (2012), this argument supports the introduction of levies for the single-mindedness of funding governmental operations and making available a foundation for distributing the income tax liability among the public. They pushed for a tax system that is not meant to benefit individuals but rather to address the problems of overall societal structure. The general public consist of people, nonetheless much more than the entirety of its separate participants; therefore, the due structure ought to be geared in the direction of the healthiness of the entire humanity, since persons have been the important component of the larger society (Chigbu, Akujuobi & Appah, 2012).

Table 1 depicts the many empirical research evaluated in this paper.

Table 1. Summary of Prior Findings on Personal Income Tax and Economic Growth

No.	AUTHORS	YEAR	TOPIC	FINDINGS	METHODOLOGY	GAPS IN LITERATURE
1.	Olushola, Utibe, Okon &Osang	2020	Nigeria's tax income and economic development (An econometric approach)	Using GDP as an index economy, the results indicated a favorable connection between tax revenue and economic growth.		
2.	Adeyemi & Mieseigha	2019	Nigerian economic development and personal income tax (A Vector Auto-regression Analysis)	It was revealed that personal income tax has significantly hampered the development of Nigeria's economic growth.	Ex-post facto evaluation was used, and as such the conceptual foundation was based on Laffer Curve Theory (LCT).	The time-series analysis was used from 1987 to 2017.
3.	James S.O, Adeyinka A.J & Emmanuel I.O	2019	The Effects of Tax Revenue on Nigerian Economic Growth	It was also shown that there was a poor link between tax revenue and Nigerian economic development; moreover, there was no substantial relationship between tax revenue and GDP in Nigeria.		
4.	Adejare	2017	Evidence from Oyo State on personal income tax and government revenue.	The result shows that in Oyo state, there is a considerable beneficial influence on government income. Personal income tax has a favorable, substantial,		

				and considerable influence on government revenue.		
5.	Confidence Joel Ihenyen, Ebipanipre Gabriel Mieseigha	2014	Taxation as a Tool for Economic Growth (The Nigerian Perspective).	The empirical findings show that the predicted relationship between corporate income tax, value added tax, and economic development does exist in the Nigerian setting.		
6.	Olugbemi Kolawole Olushlola & Bassey Utibe Oliver	2020	Nigeria's Tax Revenue and Economic Growth (An Econometric Approach)	Using GDP as a measuring index to evaluate economic growth, the results indicated a positive link that existed between tax revenue and economic growth.	To determine the elements that contribute to tax revenue on economic growth in Nigeria, an exploratory approach was used.	For this investigation, a multiple regression model was used.
7.	Hannes Baumann	2019	The perception of corruption index and the political economy of distant governance	According to the report, the great majority were either created for corporate clients or based on polls of power brokers.	The analytical framework developed by Rose and Miller was employed.	This study was carried out in a separate nation.

8.	Adebayo, A. O., Ayo-Yusuf, O. A., Mohammed, S., Ugochukwu, C.	2021	Framework for Personal Income Tax Enlightenment	The PIT framework and model website both contribute to PIT enlightenment and government openness.	A plan for design and creative research was implemented.	This study concentrated exclusively on the usage of PIT websites to inform citizens, rather than the contribution it makes.
9.	Uche Lucy Onyekwelu & Uche Boniface Ugwuanyi	2014	Evaluating the Personal Income Tax Amendment Act of 2011: Its Impact on Revenue Mobilization	The data demonstrate that the increase in the rate influenced the income production of tax payers, and therefore the retroactive nature of our tax laws is a genuine disadvantage, resulting in double taxation all through the appraisal and collection of taxes.	The questionnaire data was examined using the chi-square statistical technique.	Because of the usage of primary data as a structured questionnaire, data sources may be altered, whilst secondary data were gathered from appropriate textbooks, academic journals, and the internet.
10.	Aminu Umaru, Anono Abdulrahman Zubairu	2018	The Impact of Inflation on Nigerian Economic Growth and Development (An Empirical Analysis)	According to the conclusions of this study, inflation has a beneficial influence on economic growth through boosting productivity and production levels, as well as the expansion of aggregate output.	The Augmented Dickey-Fuller approach was used to test the unit root feature of the series, as well as the Granger causality test of causation between GDP and inflation.	The issue of taxes was overlooked.

11.	James Abiola, Moses Asiweh	2012	The Impact of Tax Administration on Government Revenue in an Emerging Economy – A Nigerian Classic Example	Among other things, the study discovered that boosting tax income is a result of an important governance technique, which is ultimately the result of tax administration.	The questionnaire results were analyzed using descriptive statistics.	The judgments were based on primary data rather than available information.
12.	Philip Omoke	2010	Nigerian Inflation and Economic Growth	According to the findings, there is no co-integration link between inflation and economic growth in Nigeria.	The co-integration and Granger causality tests were used in this investigation.	This study did not investigate the relationship between the two factors, and tax was not included.
13.	Onakoya, Adegbemi Babatunde & Afintinni, Oluwatobi Ibukun	2016	Nigerian Taxation and Economic Growth	The findings revealed that in Nigeria, there was a long run (but no short run) link between taxes and economic development.	Descriptive statistics, trend analysis, and stationary testing with the Augmented Dickey Fuller (ADF) test were carried out.	Only PPT and CIT generated a positive influence on the time series. The reasons were not given.
14.	Miftahu Idris, Rosni Bakar	2017	A Conceptual Approach to the Relationship Between Inflation and Economic Growth in Nigeria	As a result, this analysis indicates that Nigeria's present inflationary tendency is having a detrimental impact on the composition of long-term growth and development.	The study used a descriptive approach and graphics to demonstrate the inflationary trend and GDP growth.	

15.	Uket Ewa, Wasiu A. Adesola, Etim Essien	2020	The Effect of Tax Revenue on Nigerian Economic Development	The research found that tax payers are apathetic about paying their taxes, and that there are revenue leakages as a result of corruption and administrative inefficiencies on the part of the tax authorities.	The study used the Ordinary Least Squares statistical technique using SPSS 20.0.	The personal income tax was included in the study's assessment of tax income.
16.	Omodero, Okafor & Nmesirionye	2021	Personal Income Tax Revenue and Nigeria's Aggregate Earnings	According to the empirical data, PIT has a considerable beneficial effect on the gross national income. The moderator factors (corruption and inflation) used are insignificant and cannot explain the fluctuations in gross national incomes.	The study used secondary data from 2011-2020	The data includes personal income tax revenue, corruption, gross national income and inflation.

3. Methodology

This study evaluates the personal income tax' contribution to Nigeria's human development. Secondary sources such as the Central Bank of Nigeria and the Federal Inland Revenue Service (FIRS) were used for data collection. The study took ten years from 2010 to 2019 into consideration. In order to test data using the Ordinary Least Square (OLS) approach, a multiple regression method was used. For this research, the research design used is descriptive, as it aims to evaluate, study and analyze the relationships and effects of current data. The descriptive study seeks to identify a population, situation or phenomena correctly and systematically. They can answer what, where, when and how, but not why. A descriptive research project might explore one or more variables through a wide variety of research approaches. A wide range of studies concerning the personal income tax of the aggregated states examines the population derived for this study in the 36 countries of Nigeria.

The data sources include: the annual statistical bulletin of the Central Bank of Nigeria (CBN), tax statistics and reports from the Federal Inland Revenue Service (FIRS), United Nations Development

Programme (UNDP) – human development data and OECD. In order to analyze data acquired from fieldwork, a descriptive analysis will be performed. In the Statistical Package for Social Sciences (SPSS, for analysis) and E-views 10, the data collected from secondary sources were reported. In order to identify the relationship and effect between the variables and to what extent they exist, a statistical program will be utilized to do regression analysis. HDI is mainly used to analyze the economic development impact as a measuring instrument. Nevertheless, the human development index is the metric chosen for this research because it measures the standard of living widely acceptable worldwide and grows the country's economy. The independent variables for the implementation of this study are set as follows: the annual personal income tax received by the country was calculated by Federal personal income tax; the national personal income tax was measured by the annual tax received by the states, and the tax paid by daily/monthly was measured by the annual PAYE payable by the citizens.

Human Development Index (HDI) has been select as the human growth variable. In contrast, Federal Personal Revenue Tax (PITF), State Personal Revenue Tax (PITS) and payable as a result of this research are selected independent variables as the (PAYE).

The following functions for the analysis of the contribution by taxpayers to the Government of personal income taxes and the obstacles that tend to reduce the value derived from raising the country's human development index:

HDI= f(PITF,PITS)

Log= HDI= f(logPITF, logPITS)

The following testable model is derived from the addressed function above:

$HDI_t = a_0 + \beta_1 PITF_t + \beta_2 PITS_t + \mathcal{E}_{t1}$

Where:

HDI_t = Human Development Index for the period of 10 years;

$PITF_t$ = Personal Income Tax for Federal Level for the period of 10 years;

$PITS_t$ = Personal Income Tax for the State Level for the period of 10 years;

α_0 = is constant term

β_1,β_2 = are the coefficients of the parameter estimates;

$\mathcal{E}_{t1}$ = is the error term.

4. Data Analysis and Explanation

This focuses on the model's variables' movement and direction over time. Variables may exhibit stable or changing trends depending on the nature of the time series. The graphical trend analysis will show whether the variables increased, declined, or remained constant from 2010Q1 to 2019Q4. The graph displays the progression of the variables HDI, PITF, and PITS.

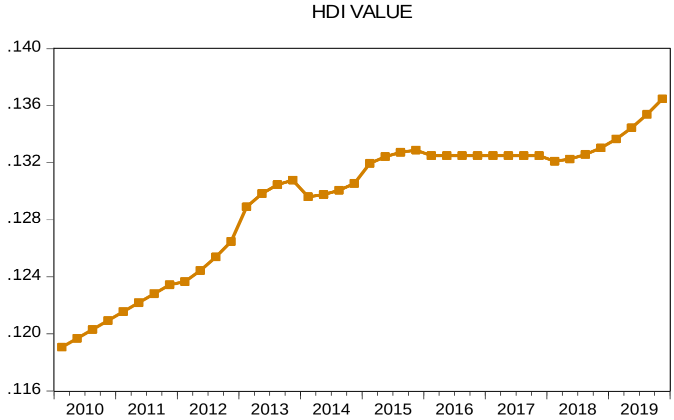


Figure 1. Human Development Index in Nigeria from 2010-2019 (in Percentages)
Source: United Nations Development Programme (UNDP)

Human development index trend is not progressively stable. It increased steadily from 2012 to 2014, but then declined at the quarterly end of the year 2014.

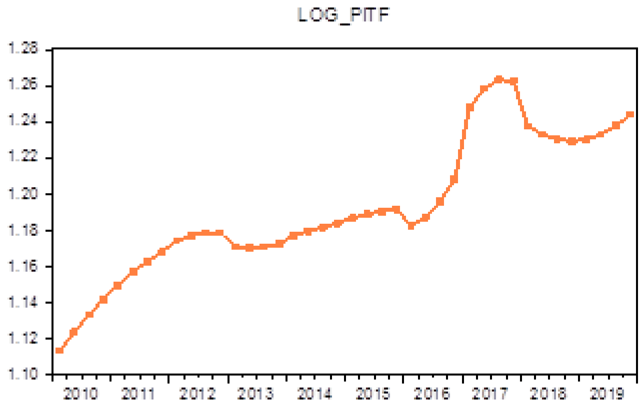


Figure 2. Personal Income Tax at Federal level in Nigeria from 2010-2019 (in Percentages)
Source: Federal Inland Revenue Service (FIRS)

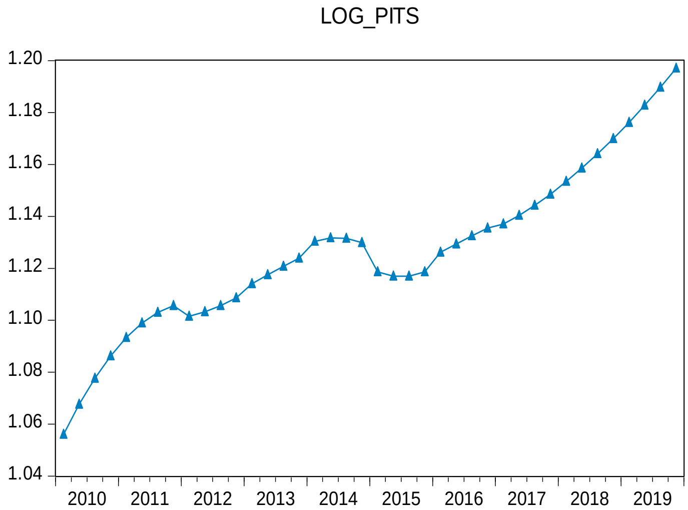


Figure 3. Personal Income Tax at State level in Nigeria from 2010-2019 (in Percentages)
Source: OECD

The information presented below in table 4.1 shows the descriptive statistics for the variables in this research to examine human development of the citizens of the country, Nigeria. The table represents the mean, median, maximum, minimum, standard deviation and observation number of each variable.

Table 2. Descriptive Statistics

	HDI_VALUE	PITF	PITS
Mean	0.517000	62630.91	33419.59
Median	0.525000	55111.49	31657.76
Maximum	0.540000	107682.1	55678.90
Minimum	0.480000	32563.87	19386.10
Std. Dev.	0.020028	23388.60	10385.00
Skewness	-0.790786	0.729942	0.895482
Kurtosis	2.212514	2.400537	3.247796
Jarque-Bera	1.300626	1.037756	1.362065
Probability	0.521882	0.595188	0.506094
Sum	5.170000	626309.1	334195.9
Sum Sq. Dev.	0.003610	4.92E+09	9.71E+08
Observations	10	10	10

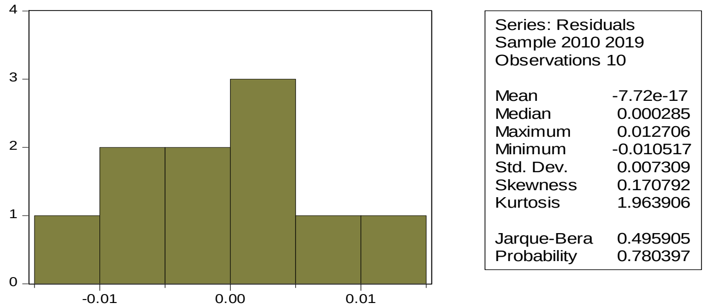


Figure 4. Histogram Normality

In the above table, the descriptive statistics of all operational variables in this research are well presented. The maximum value for the Human Development Index (HDI) was 0.54 with a minimum value of 0.48 approximately. However, the maximum values for Personal Income Tax Federal (PITF) and Personal Income Tax State (PITS) was shown at 107682.1 and 55678.90 respectively and their minimum values were shown at 32563.87 and 19386.10 respectively. The individual standard deviations were shown at 0.020028, 23388.60 and 10385.00 for HDI, PITF and PITS respectively, reveals that the individual observations deviated so much from their respective means of 0.517, 62630.91 and 33419.59 respectively. Also, the skewness estimate was used to reveal how well the variables from the generated sample revenue lean to one side of the distribution. Furthermore, it was observed that only the dependent variable (HDI) was negatively sewed, and this indicates that the probability distribution of the means of the variable has thin tails to the left of the distribution, while the independent variables (PITF and PITS) were positively sewed, and this indicates that the probability distribution of the means of the variable has thin tails to the right of the distribution.

The kurtosis value shown in table 3 above shows the peak or flatness of the distribution in the series shown in this study. The criteria used for this decision is placed at 3, however, values greater than three are referred to as leptokurtic, values less than three are regarded as platykurtic, while values that equate to 3 are called mesokurtic. Table 3 results show that the HDI and PITF variables are platykurtic, while the PITS variable is leptokurtic,with HDI having a kurtosis of 2.213, PITF kurtosis being 2.401 and the kurtosis of PITS being 3.248. Also, the Jarque-Bera statistics test result reveals the normality of the series distribution and the decision criteria is positioned at 0.05, which represents a 5% level of significance. The result presented in the table above all the variables are normally distributed as the probability of their Jarque-bera is higher than 0.05.

It is necessary to evaluate unit root variables to ensure that no one is integrated into order 1, I (1). The test is used to determine whether or not a time series is stable or predictable. In the literature, a number of tests for unit root have been created. However, this study uses the Augmented Dickey-Fuller (ADF) unit root test. Table 4 below reports the unit-roots results, and it is evident that all variables are non - stationary at level I(0) while others are stationary at first difference.

Table 3. Test for Stationarity

	Level			1st Difference			
Series	ADF	CV @ 5 prcent	Remark	ADF	CV @ 5 prcent	Remark	Order of Integration
HDI_VALUE	-1.319034	-2.941145	NS	-3.180251	-2.941145	S	I(1)
LOG_PITF	-1.471666	-2.941145	NS	-3.718584	-2.941145	S	I(1)
LOG_PITS	0.444033	-2.941145	NS	-3.099127	-2.941145	S	I(1)

When testing the variables for stationarity at levels, the ADF t-stat values were lower in absolute terms than the 5% critical value, implying that none of the variables are stationary at level. However, after taking the initial difference of the variables, the result indicated that all non-stationary variables at level became stationary. This is observable when the ADF t-statistic value is also larger in absolute terms than the crucial threshold of 5%, showing that the variables of order 1 are integrated.

Correlation analysis on table 5 is used to show the degree of relationship existing between human development and personal income tax, which is the dependent and independent variable, respectively. To further reveal the direction of the association of the variables in the research, correlation analysis was conducted. To measure the relationship between personal income tax and human development in Nigeria, the Pearson correlation has been presented in the table below.

Table 4. Correlation Matrix for Variables

Sample: 2010Q1 2019Q4
Included observations: 40

Covariance	HDI_VALUE	LOG_PITF	LOG_PITS
HDI_VALUE	2.30E-05		
LOG_PITF	0.000147	0.001421	
LOG_PITS	0.000130	0.001016	0.000969

Correlation	HDI_VALUE	LOG_PITF	LOG_PITS
HDI_VALUE	1.000000		
LOG_PITF	0.811939	1.000000	
LOG_PITS	0.868540	0.865718	1.000000

Source: Authors' Computation, 2021

The statistic rule in general states that if the coefficients of correlation fall from 0 to 0.30 shows a slight relationship; if this drops from 0.30 to 0.60 it is claimed that the correlation is moderate and the correlation between 0.60 and 1.00 is strong. The association between personal income proxies and human development in Nigeria is seen in Table 5. The correlation matrix shows that there is a positive relationship between personal income tax at the federal level (PITF) and Human Development Index (HDI). This positive correlation was supported by a p-value of 0.811939. However, the result of this analysis revealed that state personal income tax was strongly correlated with the Human development index. This could be that state personal income tax within a period has a considerable impact on the social development of the country. This positive correlation was supported by a p-value of 0.868540.

In statistics, normality tests are used to determine if a data set is well described by a normal distribution and how probable it is to be normally distributed for a random variable hidden behind the data set. Robustness relates to the ability of the model to consistently predict capital cost, even if various economic variables affect its input and execution, or if the assumptions of the model are not fully met. This shows above that the independent variables are robust @ 5% significance to the dependent variable. It is used in a linear regression model to test for heteroskedasticity and assumes that the error terms are normally distributed. It analyzes whether the value of the individual variables is affecting the variance of regression mistakes. This study used the Breusch-Pagan-Gogfrey method of heteroskedasticity testing for the dependent and independent variables.

Table 4. Heteroskedasticity test: Breusch-Pagan-Godfrey

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.344627	Prob. F(5,32)	0.8819
Obs*R-squared	1.941668	Prob. Chi-Square(5)	0.8572
Scaled explained SS	6.151425	Prob. Chi-Square(5)	0.2918

Source: Authors' calculation, 2021

Table 5. Regression Result

Dependent Variable: HDI
Sample: 2010 2019
Included observations: 10

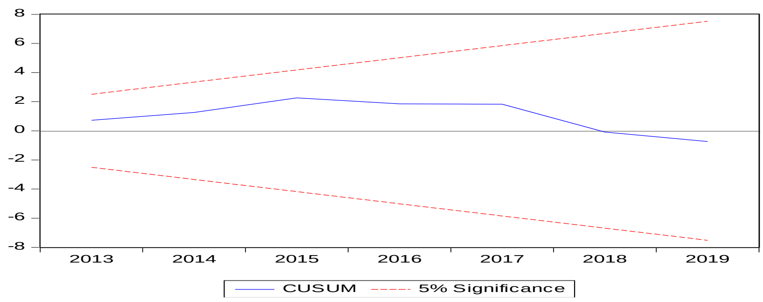
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG_PITF	-0.004199	0.079488	-0.052819	0.9599
LOG_PITS	0.140084	0.068435	2.046959	0.0960***
C	-0.256471	0.165248	-1.552041	0.1814
AR(1)	0.474805	0.465429	1.020145	0.3545
SIGMASQ	3.74E-05	2.85E-05	1.309522	0.2473

R-squared	0.896461	Mean dependent var	0.517000
Adj. R-squared	0.813630	S.D. dependent var	0.020028
S.E. of regression	0.008646	Akaike info criterion	-6.331019
Sum squard resid	0.000374	Schwarz criterion	-6.179727

Log likelihood	36.65510	Hannan-Quinn criter.	-6.496987
F-statistic	10.82278	Durbin-Watson stat	1.758665
Prob (F-statistic)	0.011180		

*** Significant @ 10%

Source: Authors' Computation 2021



The results of the effect on the human development index of federal personal income tax on the multiple regression results are shown in Table 6. The R-squared value identifies the percentage of dependent variability as explained in the regression model by the independent variables. The R-squared is, in principle, 0.896461 from table 6. Therefore, 89.65% of the variability is explained by the independent variables in human development. Furthermore, for the model, the Fisher test shows a significant linear link between the explanatory factors and explains the variables. The hypothesis suggests whether Federal personal income tax and human development have a significant association. In Table 6, federal personal income tax has an unfavourable but insignificant negative influence on human development at a level of 5%. The regression analysis indicates that an increase in federal income tax will promote the country's human development.

The result of the effects of state personal income tax on the index of human development is illustrated in Table 6 above. Under the development of the hypothesis, it is posited whether the government's personal income tax and human development are significantly linked. Table 6 shows the favourable and significant influence on human development of personal income tax at the state level at 10%. This implies that as state government personal income tax increases the country's human growth index will improve.

5. Conclusion

The purpose of this study was to look into the relationship between personal income tax and Nigeria's human development advancement. The study looked at how personal income taxes, both federal and state, affect the human development of Nigerian citizens. According to the benefit received theory and other theories discussed in this literature, personal income tax should have a positive relationship with human development. The results of this study, however, reveal that the influence of personal income tax on Nigeria's human development index applies theoretically. In addition, the federal variable personal income tax has not proven to have a good relationship with human growth, which contradicts this idea.

The results of this study revealed a positive relationship and significant correlation between state personal income tax and Nigeria's human development. According to the conclusions of this study, state personal income tax has a favourable impact on the provision of basic human needs and assistance to Nigerian citizens. This study demonstrates that taxes paid by individuals either wage-earners or salary-earners and taxes paid by small enterprises in Nigeria contribute to the improvement of citizens' socioeconomic welfare. This means that citizens receive basic facilities as a result of these levies, allowing them to live comfortably and also having adequate standard of living. This favourable relationship, on the other hand, is consistent with the reports of Adeyemi and Mieseigha (2019) which support the idea that the personal income tax has a favourable relationship with the human development index of Nigeria, using the vector auto-regression analysis.

The research also demonstrated that federal personal income tax imposed on the earnings of corporations result in societal development. Personal income tax at the federal level has an unfavourable and immaterial link with Nigeria's human development index, according to this study. As a result, this study reveals that businesses and individuals should improve their payment of taxes to the federal government since it benefits the country at large, and so improves residents' wellbeing. The positive relationship between federal revenue and social development, on the other hand, has added to the existing body of literature, as previous studies had found a negative relationship between the two factors (& Bassey, 2020).

For the period 2010 to 2019 which was presented quarterly in this study, this study empirically analyzed the impact of personal income tax on human development in Nigeria. Nigeria's social growth is reflected in a rise in the human development index (HDI). The correlation results show that there is an important link between state income tax and the dependent variable social development as measured by HDI. Federal income tax, on the other hand, was found to have a negative relationship with social progress. Furthermore, the results reveal that the empirical model was statistically significant for state personal income tax may be trusted. As a result, the null hypotheses for federal income tax is rejected, whereas the null hypothesis for state income tax is not rejected. As a result, the following is shown:

- Federal personal income tax does not have an impact on the Nigerian Human Development Index.
- State-level personal income tax has a significant effect on the Nigeria's human development index.

The increasing amount from taxes each year should have improved Nigerians' economic well-being and led to a greater quality of living, yet the HDI's current position has not moved significantly throughout the years. Baghebo (2012) highlights in his study on the efficient application of tax money in Nigeria that despite increased tax revenue, high rates of poverty, unemployment, inflation, insecurity, and poor healthcare delivery persist.

The following suggestions are made based on the findings of this study:

1. To ensure long-term economic development, tax revenue must be considerable, efficient, and wisely employed. The government should take care to encourage its citizens to enhance their trust in budgetary responsibility so that citizens' pledges are kept. It should also ensure that the taxation system is very open and that tax proceeds are used honestly to benefit the public.

2. The federal government should carefully manage tax-generated financial resources and reduce municipal waste significantly. The practical application of tax revenue in the management of public welfare concerns will result in the generation of extra tax revenue.

3. It is impossible to levitate the provision of infrastructure that will assure the well-being of the majority of State people. Why would people and businesses be willing to pay taxes if there is no safe drinking water, no motorway links, no modernized healthcare and education system, and people and businesses had to live in constant fear? People must be able to feel the effects of development in order to pay taxes on their own behalf.

This study looked at the impact of personal income tax on Nigeria's human development during a quarterly 10-year period, from 2010 to 2019. Although just two proxies were used to measure personal income tax in this study, there are some other relevant proxies that may be considered beneficial. Also the limitation of unavailable data for the execution of this research might have given a narrow and shallow measurement and the judgment to the execution of this appraisal.

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