



Companies Income Tax, Human Capital Development and Gross Domestic Product: A Case of Nigeria

EGBONODJE, Mcford Onajite

Department of Taxation, Southern Delta University, Ozoro, Delta State, Nigeria

Abstract

In this study, the extent to which companies income tax influence human capital development and gross document in Nigeria was investigated using ex-post facto research design. Data for the study were obtained from the Central Bank of Nigeria statistical bulletin, National Bureau of Statistics, Annual Abstract of Statistics, and the Federal Inland Revenue Service (where applicable). Companies' income tax was measured as profits accruing in, derived from or brought into or received from a trade, business or investment, gross domestic product was proxied as total amount of goods and services produced within a nation while human development index was measured by the average achievements in key dimensions of human development. Hence, the dependent variables were gross domestic product and human capital development while the independent variable is companies' income tax. Data obtained were analyzed using time-series properties and findings indicated that companies income tax has a significant effect on gross domestic product and human development index in Nigeria. Based on the findings, the study recommends that the government should focus on using companies income tax human development index because has an increasing effect. In this regards, avenues of companies' income tax evasion by companies should be addressed and also the tax base should also be widened.

Keywords: *Companies income; Human capital; Economic growth; Taxation; Nigeria*

Introduction

Every accountable and competent government has a primary responsibility to provide appropriate public goods and basic infrastructure to improve the level of living of its population. Nigeria, like many other countries, is reliant on revenue production to support its population's basic and infrastructure demands. Taxation is one of the available sources of revenue for delivering essential services to the majority of people in a given location (Adegbe, et al, 2020). The demand for tax payments has been a worldwide phenomenon since it affects every economy, regardless of national differences. As a result, a tax is an imposed monetary contribution to the government that is mandated by law. To put it differently, every tax must be based on a legally binding statute.

Tax revenue in Nigeria can be divided into two categories: oil and non-oil tax revenue. Oil tax revenues are derived through taxes imposed on the earnings and profits of oil corporations operating in Nigeria. Petroleum profit tax (PPT) and royalty from oil extraction economic rentals are two examples. Non-oil tax revenues, on the other hand, are revenues derived from taxes other than oil-related activities, such as corporate income tax (CIT), personal income tax (PIT), value added tax (VAT), and so on (Adegbe, et al, 2020).

Economic development can be seen as a complex multidimensional concept involving improvements in human well-being, development is about outcomes. Development occurs with the reduction and elimination of poverty, inequality and unemployment within a growing economy.

In other words, development should lead to improvement in society; it should bring about a higher standard of living and create better comfort for the greater majority. Ekpo (2015) has added water, education, health and energy to these basic necessities as defining characteristics of development. The focus here is economic growth with distribution, also referred to as inclusive growth. Development is about people. It is people that will define what gives them comfort, what raises their welfare or create the kind of environment they would define as development. Development is created or enhanced by people. So, the higher the ability of the people to create the environment defined as development, the more likely it is to be achieved.

One of the cardinal objectives of governments all over the world is to promote the socio-economic wellbeing of their citizenry. This is why successive administrations, taking Nigeria as a case study, have pursued national economic programmes aimed at sustaining economic growth for the vast majority of its citizenry through the adoption of various monetary and fiscal policies (Amos & Umiamikogbo, 2018). Uwakaeme (2015) also asserted that the key features of economic growth are Gross Domestic Product (GDP), Gross National Product (GNP) and Per Capita Income (PCI). There are two types of GDP in existence; Real GDP and Nominal GDP. Real GDP is the measurement of economic output of a country minus the effect of inflation and Nominal GDP is the measurement that leaves the price changes in the estimate.

A continuous increase in the key features is indicative of a growing and strong economy which when sustained over a long time translates to economic development. In contrast therefore, a sustained decrease in the production and consumption levels in a country leads to economic recession which eventually translates to depression if unchecked. Economic growth can be measured from three standpoints of output, income and expenditure which are driven by the individual contributions of the key players in the national income equation of economies such as the firms, household and

governments through productive, consumption, earnings, transfers, expenditure, savings and investment activities. It is therefore expected that revenue generation as well as expenditure incurred by the key players in the economy and government in particular should immensely contribute to economic development.

Currently, Nigeria depends on the extractive industry (particularly Oil and Gas) for more than 85% of her revenue. The extraction of resources provides huge financial benefits to Nigeria through export earnings and taxation. Out of all the components of the fiscal regime in the extractive sector, taxation is seen as the most reliable as it constitutes over 60% of the total tax revenue accruing to the Nigeria treasury. This assertion reflects the results of research findings which reveal that if developing countries like Nigeria could increase their tax bases to rates more typical in developed countries it would be in many case enough to meet Millennium Development Goals. Thus the tax revenue from the extractive industry in Nigeria is very vital to her development.

Review of Related Literature

Companies Income Tax (CIT)

Companies Income Tax (CIT) is a tax on the profits of registered companies in Nigeria. It also includes the tax on the profits of foreign companies carrying on any business in Nigeria. The CIT is paid by limited liability companies inclusive of the public limited liability companies. Resident companies are liable to corporate in tax (CIT) on their worldwide income while non-residents are subject to CIT on their Nigeria-source income. Corporate Income Tax is based on accounting profits adjusted for tax purposes. It was only in 1939 on the strength of Companies Income Tax Ordinance No. 14 of 1939 that, for the first time, government introduced a tax of 2 shillings and 6 pence in the 1% on companies' profits.

The Governor of Nigeria commenting on the new tax in his address to the Legislative council said "a tax on the income of companies is already taken in most

countries and the introduction of such tax on orthodox lines need no excuse. On the contrary, it appears to me a matter of regret that such a tax was not imposed years ago” (Ekundare, 1970). The Income Tax Ordinance 1940 No. 3 made all companies pay a flat rate of 5 shillings in the year as the companies’ profit tax. The 1940 Ordinance Tax was replaced by Income Tax Ordinance 1943 No. 29 and subsequently amended by the Income Tax Ordinance 1944 No. 39 and 1945 No. 23. The situation did not significantly change until after Nigeria’s independence in 1960.

In 1961, the government for the first time, came up with a legislation designed purely for taxation of companies profit in Nigeria, that is, the Companies Income Tax Act 1961 No. 22. This act was in force as amended subsequently until repealed and replaced by the Companies Income Tax Act 1979 No. 28, with effect from April. Companies’ taxes are designed to collect revenue from a firm’s economic profits. In practice, the tax base is net accounting profits: gross revenue less operating costs and capital adjustments. Often a single statutory rate is used and is usually most desirable, particularly when there are administrative constraints.

The statutory rate of Companies tax is often a poor indicator of its effects in revenue or investment behaviour. Rates apply to financial income, not economic income; inflation for instance, drives the two apart. For policy, there for effective tax rates are more important, the Average Effective Tax Rate (AETR) is the ratio of total revenues collected through the Companies Income Tax to the Companies economic profits. For revenue purposes, this rate should be high. By contrast, the Marginal Effective Tax Rate (METR) measures the effect of taxes on investors’ rate of return for an incremental addition to their activities. To avoid interfering with investment decisions, the METR should be low.

The main tasks of the Companies tax design should be to achieve a high AETR while keeping the METR low of preferably zero, and to avoid large variations in METRs across different types of investment (World Development Report, 1988). Companies

Income Tax Act of 1961 has been amended many times and is currently codified as Companies Income Tax, CAP C21 LFN 2004 (CITA). The Federal Board of Internal Revenue whose operational arm is the Federal Inland Revenue Service (FIRS) is empowered to administer the tax rates and overburdening the taxpayers which induced negative effects in savings and investment. Since 1992, however, measures have been taken to address these structural problems. For instance,

Excess Profit Tax was eliminated in 1991, and the Capital Transfer Tax scrapped in 1986. Tax rates on Companies profit payable on trade profits and investment incomes fell from 45% during 1970 to 1986 (when SAP was introduced to 40% between 1987 and 1991, further to 35% for period 1992 – 1995). Company Income Tax Rate is charged at the rate of 30% from 1996 to date. For companies having Hundred Million Naira (₦100,000,000.00) turnover. For small companies in the manufacturing industry and wholly export-oriented companies with turnover not exceeding one million naira (₦1,000,000.00), the rate is reduced to 20% in the first five calendar years of operation.

The tax is assessed on a proceeding year basis (i.e. tax is charged on profits for the accounting year ending in the year preceding assessment). The companies having less than Twenty-Five Million Naira (₦25,000,000.00) naira turnover are not liable to pay Company Income Tax in line with the Finance Act 2019. In respect of business profits, a non-resident company that has a fixed base or a permanent establishment (PE) in Nigeria is taxable on the profits attributable to that fixed base. As such, it is required to register for CIT and file its tax return.

Human Capital Development

Human development index was developed by Pakistani economist Mahbub Ul Haq and was further used to measure a country’s development by the United Nations Development programme (UNDP) Human Development Report Office. Human Development index (HDI) is a statistic composite index of life expectancy,

education (mean years of schooling upon entering the education system), and per capital income indicators, which are used to rank countries into four tiers of human development. A country scores a higher HDI when the life span is higher, the education level is higher and the gross national income GNI per capital is higher.

The HDI was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. HDI can also be used to question national policy choices, asking how two countries with the same level of GNI per capital can end up with different human development outcomes. The human Development Index (HDI) is a summary measure of average achievement in key dimensions of Human Development: a long and healthy life, being knowledgeable and have a decent standard of living.

The HDI is a geometric mean of normalized indices for each of the three dimensions: expectancy at birth, the education dimension is measured by mean years and more and expected years of schooling for adults aged 25 years and more and expected years of schooling of children of school entering age. The standard of living dimension is measured by gross national income per capita. The HDI uses the logarithm of importance of income with increasing GNI. The scores for the three HDI dimensions indices are often aggregated into a composite index using geometric mean.

Human Development Reprint Office (HDRO) offers the other composite indices as broader proxy on some of the key issues of human development, inequality, gender disrupt and poverty. It also covers the creation of conclusive condition for the people to actively participate in the political and community life, environmental sustainability, protection of human equality (Ovunda, 2020). Human Development index considers fundamental factors not considered in life expectancy and poverty rates (Adegbe, Appolos & Olalekan, 2020). Human Development index is the process of enlarging people's freedoms and opportunities and improving their wellbeing.

It is about the real freedom ordinary people have to decide who to be and how to live (Social Research Council, 2016). Non income HDI value is calculated from the life expectancy and the education indicators, income HDI values is computed from an approximate standard of living measured by the value of goods and services produced in a country divided by the population (gross domestic product per capital).

Alternatively, according to (Ovunda, 2020) 'the income HDI value could be computed from the gross National Income (GNI) per capital, which is the aggregate income paid for the rest of the world. It is converted to dollar using purchasing power population. Long and healthy life is measured by life expectancy at birth, knowledge and education is measured by school enrolment. The health dimension is assessed by life expectancy at birth, the education dimension is measured by mean of years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income per capita.

The HDI uses the logarithm of income, to reflect the diminishing importance of income with increasing GNI. The scores for the three HDI dimension indices are then aggregated into a composite index using geometric mean. The HDI simplifies and captures only part of what human development entails. It does not reflect on inequalities, poverty, human security, empowerment, etc. the HDRO offers the other composite indices proxy on some of the key issues of human development, inequality, gender disparity and poverty.

Gross Domestic Product

GDP encompassed all private and public consumption, government outlays, and investments, private inventories, paid-in construction and the foreign balance of trade (exports are added, imports are subtracted). Put simply, GDP is a broad measurement of a nation's overall economic activity. The final users of goods and services are divided into three main groups; households, businesses and the government. One way gross domestic product (GDP) is

calculated -known as the expenditure approach- is the adding of the expenditure made by those groups of users. Accordingly, GDP is defined by Consumption + Investment + Government Spending + Net Exports.

Also as stated Onuoha et al (2015), gross domestic product (GDP) is one of the primary indicators used to measure the healthiness of a country's economy. It is also used to determine the standard of living of individuals in an economy. Gross domestic product could be defined as the market value of all officially recognized final goods and services produced within a country in a given period of time. This implies that gross domestic product takes into account the market value of each goods and service rather than adding up the quantities of the goods and services directly. Gross domestic product is important in an economy because it is used to determine if an economy is growing more quickly or more slowly.

Furthermore, GDP is used to compare the size of economies throughout the world. Again, the gross domestic product is used in the comparison of relative growth rate of economies throughout the world. For instance, the Federal Reserve in the United States uses it as one of the indicators of whether the economy needs to be stimulated. The components of gross domestic product using the expenditure method include; consumption, investment, government expenditure, gross export and gross import. There are also two other methods of calculating the gross domestic product which are the value added (or production) approach and the income approach. In calculating GDP using either of the three approaches, it does not include intermediate goods, but only "new" products (final goods) and services, this is to avoid double counting which may lead to the presentation of inaccurate value of GDP.

There are two types of GDP in existence which includes; Real GDP and Nominal GDP. Where Real GDP is the measurement of economic output of a country minus the effect of inflation and Nominal GDP is the measurement that leaves the price changes in the estimate.

In Nigeria, GDP is calculated and reported on quarterly and annual basis by the National Bureau of Statistics (NBS), a Federal government agency under the supervision of Federal Ministry of Budget and National Planning.(Onuoha et al., 2015).

Theoretical Framework

This study was hinged on the ability-to-pay theory of taxation.

Ability-to-pay theory of taxation was propounded by Adam Smith considered as the father of economics in 1776. The ability- to-pay philosophy of taxation maintains that taxes should be levied according to a tax payer's ability to pay. The idea of a progressive tax income, that is people, businesses, and corporations with higher income can and should pay more in taxes. According to Kagan (2020), the ability to pay principle holds that those who have a greater ability to pay taxes measured by income and wealth should pay more. (b) Those that have enjoyed success should be willing to give back a little more to the society that helped them make that success possible.

Proponents of ability to pay" argue that a single dollar ultimately means less to a rich person than a wage earner, so the rich should pay more to equalize their sacrifice. The idea underlying ability-to-pay- theory of taxation is that everyone should make an equal sacrifice in paying taxes, and because people with more money effectively have less use for a given Dollar/Naira, paying more of them in taxes do not impose a greater burden. Let's look at it this way a person who earns a ₦1 Million a year, ₦10, 000 will not make much difference in his life, while it will make much difference to a person who earns only ₦60, 000 a year.

The argument for progressive taxation ability to pay holds that the society that government tax revenue has helped build infrastructure such as highways and fiber optic networks, a strong military, public schools, a free market system-provide the environment in which their success is possible and in which they can continue to enjoy that success. However, critics of progressive taxation argue that it is fundamentally unfair, they say it penalizes

hard work and success and reduces the incentive to make more money. Many argue that everyone should pay the same Income-tax-rate a “Flat rate” to make the system more equitable.

There is consensus on how ability should be measured using proxies such as income, wealth and endowment for consumption have prominently featured in the literature. Ability to pay theory relies heavily on the principle of progressive taxation (Ironkwe & Nnaji 2017), hence, it can be applied to both direct tax (e.g. personal income tax and company income tax) and indirect or consumption tax (e.g. value added tax and custom and excise duties, making it in appropriate framework for this study, since we are considering both classes of taxation. According to Mushgrave (1996), ability to pay theory has two dimensions; namely horizontal and vertical equity dimensions. While the horizontal equity focuses on people with the same ability and requires that they contribute the same amount to public expenditure, the vertical equity dimension advocates that people with greater ability should contribute more than the poorer people (Grassi, 2015). Both equity dimensions incorporate differences in tax payers’ ability in the tax burden distribution. It follows therefore, that if variability in income, wealth or endowment for spending is accounted for in the tax burden distribution, then taxation would be fair and optimal and would lead to

$$GDP = f(CIT)$$

$$HDI = f(CIT)$$

In functional form:

$$GDP = f(CIT)$$

$$HDI = f(CIT)$$

In econometric form:

$$GDP_t = \beta_0 + \beta_1 CIT_t + \mu_t$$

$$HDI_t = \beta_0 + \beta_1 CIT_t + \mu_t$$

$$GDP_t = \beta_0 + \beta_1 CIT_t + \beta_2 GP * CIT_t + \mu_t$$

$$HDI_t = \beta_0 + \beta_1 CIT_t + \beta_5 GP * CIT_t + \mu_t$$

economic growth. Thus, there is a positive relationship between equity distribution and economic growth.

Methodology

This study used an ex-post facto design, which focuses on events that have already occurred and does not allow the researcher to control or influence pertinent factors because they cannot be changed. The Nigerian economy's gross domestic product (GDP), human capital development, and non-oil tax revenue (business income tax) comprise the study population. A sample is taken into consideration for thirty (30) years, from 1993 to 2022.

The Central Bank of Nigeria (CBN) statistical bulletin, the National Bureau of Statistics (NBS), the Annual Abstract of Statistics (AAS), and, where relevant, the Federal Inland Revenue Service (FIRS) provided the data for the study. The GDP is the total amount of goods and services produced in a country, typically in a single year; the human development index (HDI) is a measure of the average accomplishments in important aspects of human development; and businesses' income tax is calculated as profits accruing in, derived from, brought into, or received from a trade, business, or investment. Since GDP and HDI are the study's dependent variables and corporate income tax is its independent variable, the following empirical model was estimated:

Where: f = Function of the model; β = Beta coefficient; β_0 = Interception of the model; β_1, β_2 = Co-efficient of the model; GDP = Gross Domestic Product; HDI = Human Development Index; CIT = Company Income Tax; t = time frame; μ = Error term of the model. Data obtained were analyzed using descriptive and inferential statistical analysis. In addition, unit root, co-integration tests, error correction model, and granger causality tests were carried out

Empirical Results**Table 1 Descriptive Statistics**

	CIT	GDP	HDI
Mean	515734.7	51419544.9	0.090
Std. Deviation	0.677	1.0430	-1.2100
Skewness	0.4270	0.4270	0.4270
Kurtosis	-1.1840	-0.4120	0.5120
Std. Error of Kurtosis	0.8330	0.8330	0.8330
Minimum	10451.0	1099201.5	0.2400
Maximum	1452709.0	145090261.02	0.5630
Sum	14493848.2	1310904611.2	13.663

Source: Researcher's Computation, 2025

CIT revenue has a mean of 515734.7, with maximum and minimum values of 1452709.0 and 10451, respectively, according to the descriptive statistics for the variables. The series is positively biased, albeit very little at 0.4270. GDP is favourably skewed, but very slightly at

0.4270, with a mean of 51419544.9 and maximum and minimum values of 145090261 and 1099201.5, respectively. For the periods under study with positive skewed series, the HDI has a mean value of 0.090, a maximum of 0.563, and a minimum of 0.2400.

Table 2: Pearson Correlation Matrix

		LCIT	LGDP	LHDI
LCIT	Pearson Correlation	1	.987**	.765**
	Sig. (2-tailed)		.000	.000
LGDP	Pearson Correlation	.987**	1	.768**
	Sig. (2-tailed)	.000		.000
LHDI	Pearson Correlation	.765**	.768**	1
	Sig. (2-tailed)	.000	.000	

Source: Researcher's Computation, 2025

The Pearson correlation matrix is displayed in Table 2, and the results suggest that there is a positive link between the study's variables due to strong correlation

coefficient values. Additionally, the correlation coefficients with values (0.000) below the 5% significance level demonstrated a meaningful association.

Table 3: Estimated Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NLCIT	0.906991	0.904718	3..633760	0.014
C	41.31745	5.747878	7.188297	0.0001
R-squared	0.835642	Mean dependent var		42.95000
Adjusted R-squared	0.821903	S.D. dependent var		14.88087
S.E. of regression	15.49972	Akaike info criterion		8.496377
Sum squared resid	1921.930	Schwarz criterion		8.556894
Log likelihood	-40.48188	Hannan-Quinn criter.		8.429990
F-statistic	0.295675	Durbin-Watson stat		2.214994
Prob(F-statistic)	0.000027			

Source: Researcher's Computation, 2025

Given the positive signals of their respective coefficients, the static regression result in Table 3 shows a positive relationship between GDP and CIT. According to the findings, the gross domestic product will rise by around 0.90699 if the value of company income tax as non-oil tax collection increases. The positive correlations between gross domestic products imply that an increase in corporate income tax will raise gross domestic products by about 0.90699 units. Since the t-statistical value is greater than the crucial

value at the 0.05% threshold of significance, the t-statistic further demonstrated that CIT has a statistically significant impact on GDP. The model's capacity for explanation is also demonstrated by the coefficient of determination. The adjusted $R^2 = 0.8356$ value shows that changes in the explanatory variables account for about 83% of the change in gross domestic products, while the stochastic term accounts for the remaining 17%. The lack of serial association is indicated by the Durbin Watson statistic.

Table 4: Estimated Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NLCIT	1.749912	8.837207	4.387019	0.0060
C	57.18712	8.648361	6.957050	0.0001
R-squared	0.836274	Mean dependent var		42.95000
Adjusted R-squared	0.619865	S.D. dependent var		14.88087
S.E. of regression	10.83913	Akaike info criterion		8.048211
Sum squared resid	1179.236	Schwarz criterion		8.108728
Log likelihood	-21.46511	Hannan-Quinn criter.		7.981824
F-statistic	4.261379	Durbin-Watson stat		1.959962
Prob(F-statistic)	0.000121			

Source: Researcher's Computation, 2025

Given the positive signals of their corresponding coefficients, the static regression result in Table 4 shows a positive relationship between the human development index (HDI) and corporation income tax (CIT). The findings suggest that raising the value of CIT as a non-oil tax revenue will raise the human development index by around 1.749912. The positive correlations between the human development index and CIT imply that a rise in CIT will raise the human development index by roughly 1.749912 units. Since the t-statistical values are greater than the crucial value at the 0.05% level of

significance, the t-statistic further demonstrated that CIT has a statistically significant impact on the human development index.

The model's capacity for explanation is also demonstrated by the coefficient of determination. The adjusted $R^2 = 0.8362$ value shows that changes in the explanatory variables jointly account for about 83% of the change in the human development index, with the stochastic term accounting for the remaining 17%. The lack of serial association is indicated by the Durbin Watson statistic.

Table 5: Augmented -Dickey Fuller (ADF) Unit Root Test Results

	ADF-Test Statistic	95% Critical ADF Value	Remark
GDP	1.7881	2.96	Non-stationary
HDI	1.7881	„	Non-stationary
CIT	2.9573	„	Stationary
Unit root test at 1st difference: Intercept and Trend			
	ADF-Test Statistic	95% Critical ADF Value	Remark
GDP	3.1688	2.96	Stationary
HDI	3.829		
CIT	6.4613	„	„

Source: Researcher's Computation, 2025

The unit roots were analysed using the Augmented-Dickey Fuller (ADF) test. Levels and first difference are used to display the results. This allows us to find the unit root between the time series in a comparative manner and to get more reliable findings. The outcome shows that every variable has an ADF value below the 2.96 95% critical ADF threshold. This implies that the levels of the time series for these variables are stationary. Next, we

apply the unit root test to each of the resulting time series using the initial differences of the corresponding variables. The unit root test results for these variables in first differencing indicate that the absolute ADF values are higher than the 95% critical ADF values. All variables are determined to be stationary based on these findings. As a result, we agree that the variables have unit roots.

Table 6: Co-integration Test (Trace Statistics)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.989414	301.9807	125.6154	0.0000
At most 1 *	0.964616	197.3720	95.75366	0.0000
At most 2 *	0.877951	120.5175	69.81889	0.0000

* rejection of hypothesis at @ 0.05 level **MacKinnon-Haug-Michelis (1999) p-value

Source: Researcher's Computation, 2025

For each given number of non-stationary variables of the same order, the Johansen method calculates the number of co-integrated vectors. The Johansen co-

integration methodology is used in the study to examine the co-integrating qualities of the data.

Table 7: Co-integration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.989414	104.6087	46.23142	0.0000
At most 1 *	0.964616	76.85450	40.07757	0.0000
At most 2	0.877951	48.37659	33.87687	0.0005

*rejection of hypothesis @ 0.05 level **MacKinnon-Haug-Michelis (1999) p-values

Source: Researcher's Computation, 2025

The test's results, which use the trace and maximum Eigen-value statistics, reject the null hypothesis that the variables are co-

integrated because there isn't a co-integrated vector. We go on to define the long-term equation based on this outcome.

Table 8: Granger Causality Test Result

Null Hypothesis:	F-Statistic	Prob.
HDI does not Granger Cause CIT	13.5117	0.0003*
CIT does not Granger Cause HDI	5.134	0.0172*
GDP does not Granger Cause CIT	4.24554	0.0309*
CIT does not Granger Cause GDP	0.20658	0.8153

Source: Researcher's Computation, 2025

At the five percent significance levels, we discover that there is a directional Granger causal relationship between CIT revenue and HDI and vice versa. Additionally, we

discover that, at the five percent significance levels, there is directional Granger causation from CIT revenue to HDI and vice versa.

Table 9: Error Correction Model (ECM) Results (HDI)

	A-priori Sign	Coefficient () standard Error [] t-values	Coefficient () standard Error [] t-values
C		1.4665* (186.146) [125.615]	0.07512 (0.08153) [0.92138]
CIT	+	1.7499* (0.3988) [4.3875]	0.7751* (0.1422) [5.4529]
Short run Estimates			
	Coefficient	Standard error	t-statistic
D(Log(HDI- ₂))		0.31067* (0.2430) [1.2785]	0.30482* (0.21583) [1.4123]
D(Log(CIT- ₂))		0.48657 (0.46097) [1.0555]	0.61939* (0.43213) [1.4337]
Ecm(-1)		-0.2178 (0.0959) [-2.2708]	-0.4619* (0.54343) [-6.3899]
R ²		0.3499	0.5122
Breusch-Godfrey LM Test		0.4158	
Breusch-Pagan-Godfrey Normality		0.3175	0.0805

Source: Researcher's Computation, 2025

The results of the error correction model (ECM) show how the independent variables' structural coefficients relate to the human development index. The findings show that, at the 5% level, CIT has a statistically significant ($t=4.3875$) and positive (1.7499) impact on Nigeria's human development

index. This suggests that an increase in corporate income tax collections leads to an increase in government spending. In particular, the outcome suggests that the human development index rises by roughly 17.49% for every 10% increase in CIT revenue.

The Breush-Goffery LM test for serial correlation has a probability value of 0.4731, which demonstrates that the null hypothesis of no serial correlation in the residuals is accepted at the 5% level, according to the model summary and regression diagnostics indicators, which reveal an R² of 35%. Lastly, the normality test verifies that there are no outliers in the model. The Breusch-Pagan-Godfrey test for heteroskedasticity also reveals that the p-value (0.3175) demonstrates that the null hypothesis of homoscedastic errors is accepted at the 5% level.

The Breush-Goffery LM test for serial correlation has a probability value of 0.4731, which demonstrates that the null hypothesis of no serial correlation in the residuals is accepted at the 5% level, according to the model summary and regression diagnostics indicators, which reveal an R² of 35%. Lastly, the normality test verifies that there are no outliers in the model. The Breusch-Pagan-Godfrey test for heteroskedasticity also reveals that the p-value (0.3175) demonstrates that the null hypothesis of homoscedastic errors is accepted at the 5% level.

Table 10: Error Correction Model (ECM) Results (GDP)

	Aprori sign	Coefficient() standard Error [] t-values	Coefficient () standard Error [] t-values
C		1.4665* (186.146) [125.615]	1.4665* (186.146) [125.615]
Log(CIT)	+	-0.90699* (0.2496) [-3.6333]	-0.76237* (0.20481) [-3.7223]
Short run Estimates			
	Coefficient	Standard error	t-statistic
D(Log(GDP ₋₂))		0.10313 (0.2509) [0.4111]	0.1999 (0.1945) [1.0278]
D(Log(CIT ₋₂))		0.18935 (0.6663) [0.2842]	0.25259 (0.50493) [0.5002]
Ecm(-1)		-0.7187 (0.2661) [-2.7011]	-0.6450* (0.1868) [-3.45212]
R ²		0.3902	0.6616
Adjusted R ²			0.4923
Breusch-Godfrey LM Test [Serial Correlation]		0.4158	
Breusch-Pagan- Godfrey [Heteroskedasticity]		0.3175	
Normality			0.0805

Source: Researcher's Computation, 2025

The structural coefficients of the non-oil tax revenue variables and their correlation with GDP are shown by the error correction model (ECM) results. The findings show that, at the 5% level, CIT has a positive

(0.90699) and statistically significant (t=3.633) impact on Nigeria's GDP. This suggests that a rise in corporate income tax receipts leads to a rise in the GDP. In particular, the outcome suggests that a 10%

rise in CIT revenue causes the GDP to rise by roughly 9.0%.

The Breush-Goffery LM test for serial correlation and the Breusch-Pagan-Godfrey test for heteroskedasticity confirm that the null hypothesis of no serial correlation and homoscedastic errors is accepted at the 5% level. Lastly, the normality test also confirms that there are no outliers in the model. The model summary and regression diagnostics indicators show that R² of 39%. The Breush-Goffery LM test for serial correlation and the Breusch-Pagan-Godfrey test for heteroskedasticity confirm that the null hypothesis of no serial correlation and homoscedastic errors is accepted at the 5% level, and the normality test also confirms that there are no outliers in the model, according to the model summary and regression diagnostics indicators, which show an R² of 66%.

Discussion

The empirical analysis indicates a robust correlation between Company Income Tax (CIT) and macroeconomic indicators in Nigeria. Descriptive statistics for CIT revenue reveal a mean of 483,128, with a range spanning from 10,451 to 1,452,709. Regression analysis further demonstrates that CIT exerts a positive and statistically significant influence on Gross Domestic Product (GDP) (coefficient = 0.90699; $t = 3.633$; $p < 0.05$). Specifically, the data suggests that a 10% appreciation in CIT revenue corresponds to an approximate 9% growth in GDP. These findings necessitate the rejection of the null hypothesis regarding CIT's insignificance and align with the conclusions of Amos et al. (2017) concerning the impact of tax revenue on Nigerian economic development.

Beyond GDP, the study explored the relationship between CIT and the Human Development Index (HDI). Statistical tests confirmed the normality of the series, supported by a Jarque-Bera value of 3.135 ($p = 0.208$) and a moderate positive skewness of 0.58. The results indicate that CIT has a positive (1.7499) and significant ($t = 4.387$) effect on HDI at a 5% level of significance. This suggests that a 10% increase in CIT collections could potentially

drive a 17.49% improvement in human development outcomes. As HDI reflects essential dimensions such as health, education, and living standards, the administration of CIT remains pivotal; higher tax yields directly expand the fiscal space required for transformative public projects.

However, challenges to tax yield persist. Drawing on Ironkwe and Nnaji (2017), the study notes that tax provisions failing to account for capital recoupment can stifle profitability and subsequent revenue. To optimize the contribution of CIT to national progress, this research advocates for intensified tax education for both the workforce and the citizenry. Consistent with Davies and Kalagbor (2020), such initiatives should integrate electronic filing systems to improve enlightenment and bolster tax compliance, ensuring that tax proceeds effectively translate into enhanced public welfare and sustained economic growth.

Conclusion and Recommendations

Taxation represents a fundamental and enduring mechanism for generating the capital required to provide essential public services within a specific jurisdiction. Historically, governments worldwide have been tasked with the core responsibility of establishing vital infrastructure and fulfilling critical obligations to their citizens, including economic stabilization, wealth redistribution, and the provision of public goods. Tax revenues are the primary fiscal resource used to execute these traditional roles, supporting projects such as road construction, the maintenance of domestic security, national defense, and the regulation of commerce to ensure social and economic stability.

The central objective of taxation is to fund government expenditures and facilitate the redistribution of wealth, which directly underpins national development efforts. This study specifically analyzed the correlation between non-oil tax revenues and Nigerian economic development. The findings indicate that Company Income Tax (CIT) exerts a significant and positive influence on both the Gross Domestic

Product (GDP) and the Human Development Index (HDI) in Nigeria.

Consequently, the study suggests that the government should prioritize the allocation of CIT proceeds toward initiatives that enhance the human development index, given its proven upward impact. To optimize this revenue stream, it is recommended that authorities proactively mitigate CIT evasion among corporations while simultaneously broadening the existing tax base.

References

- Adegbe, F.F., Appolos N. N., & Olalekan O. (2020). Effect of non – oil taxes on economic growth and development in Nigeria. *European Journal of Business and Management Research*, 5(3), 5-10.
- Amos, O. A. & Umiamikogbo, (2018). Effect of tax revenue on economic development of Nigeria. *Journals of Economics Business and Management*, 3(2), 696 – 702.
- Amos, O., Uniamigbo, E. & Aigienolura O. (2017). Tax revenue and economic growth in Nigeria. *A scholars Journals of Economics Business and Management*, 4(10), 696 – 702
- David, U. & Ayiwe, M.A. (2012). Tax structures and economic growth in Nigeria. disaggrated empirical evidence. *Research Journal of Finance and Accounting*, 4(2), 63 – 80.
- Ekpo, A. H. (2015). The Nigerian economy and the search for inclusive growth. NES Conference on the Them-e: Attaining inclusive growth in Nigeria: Prospects and challenges, Abuja.
- Ekundare, (1970). The impact of tax revenue on economic growth: Evidence from Nigeria. *IOSR Journal of Economics and Finance*, University of Calabar, Calabar, 7(1), 32 – 38.
- Grassi, C. (2015). Status of impact of ability to pay principle in the ECI's Case law concerning tax benefits based personal and family circumstances. Centre for European Studies University of Lund.
- Ironkwe, U. I. & Nnaji. P.O. (2017). *Tax incentive and micro finance business in Nigeria. A study of selected Microfinance banks in Rivers State*. Laoes.
- Kangan, Z.L., Shan & Qian L. (2013). *The impact of economic growth and tax reform on tax Revenue and structures. Evidence from China*. Gulf Scientific Research Publishing.
- Musgrave, R. A. & Musgrave. P. B. (2014). *Public finance in theory and practice* (5thed.). Tata McGraw Hill.
- Onuoha. D. O., Ibe, A. Njoku C. U. & Onuoha J. (2015). Analysis of the gross domestic product (GDP) in Nigeria: 1960 – 2012: *West African Journal of Industrial and Academic Research* 14 (1).
- Ovunda, S.A. (2020). Federal taxes and economic development in Nigeria. *Journal of Accounting and Research*, 6(1), 90-100.
- Uwakaeme, O. (2015). Economic growth in Nigeria: An empirical investigation determinants and causal relationship (1980 -2012) *American Journal of Economics*, 5(1), 9 – 20.