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Moderating Role of Financial Development on the Relationship Between Tax Revenue and Economic Development of Nigeria

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ABSTRACT: *This study examined the moderating role of financial development on relationship between direct tax revenue and economic development in Nigeria. The specific objectives were to investigate the relationship between personal income tax, company income tax and petroleum profit tax on human development index and per capita income and the moderating effect of financial development on direct taxes and economic development of Nigeria. The study anchored on benefit theory of taxation while correlational and ex-post facto research designs were adopted for the study. The population of the study was direct taxes revenue data and economic development in Nigeria from 1991 to 2020 and secondary data were sourced from Annual statistical bulletin of CBN, Federal Inland Revenue service (FIRS) and National Bureau of Statistics. The secondary data were analysed using univariate, bivariate and multivariate analysis. The result of the multiple regression shows that personal income tax, company income tax and petroleum profit tax positively and significantly influence economic development in Nigeria. Also, financial development positively and significantly moderates the relationship between direct taxes and economic development. Consequently, the study concludes that the level of financial development affects the revenue generation potentials through direct taxes for the economic development of Nigeria. Hence, the study recommends among others that government parastatals, multinationals, conglomerates and companies in the country should not engage any vendor who does not have a TIN number. This will go a long way in reducing tax evasion; taxes should be remitted via an e-payment system or via direct payment to the various tax authorities' accounts.*

KEYWORDS: direct taxes, economic development, financial development, Nigeria

INTRODUCTION

Tax is described as a compulsory levy imposed on the goods, services and incomes of individuals and organizations. Some of the reasons for the introduction and imposition of taxes is to generate revenue by the government for the purpose of financing certain projects which will ensure reliable and functional economic growth and development (Chigbu et al, 2012; Ogbonna & Appah, 2012a; Omeis & Appah, 2020). Omesi and Appah (2021) noted that tax revenue is a powerful tool of economic reform and a major player in every economy of the world for the purpose of stimulating economic growth and development. The whole essence of tax revenue, according to Appah et al (2020), Ogbonna & Appah, (2012b) is to generate revenue to advance the welfare of the people of a nation with focus on promoting economic growth and development of a country through the provision of basic amenities for improved public services via proper administrative system and structures. Tax revenue plays a crucial role in promoting economic activity, growth and development. Omesi and Appah (2020) state that through tax revenue, government ensures that resources are channeled towards key projects in the society, while giving support to the weak and vulnerable people.

The empirical nexus between tax revenue and economic development has been a contentious issue especially in developing countries. The empirical literatures depict different and disaggregated findings. For instance, Neoq-Gaur, (2020), Mnaku,(2020), Osasu and Henry(2019), Kyle(2019), Nasiru, et al (2016), Apere and Durojaiye (2016), Olaoye et al (2019), Gopar et al (2016), indicated positive relationship between tax components and economic growth and development. On the other hand, a negative nexus was reported in the works of Travis, et, al, (2021), Ojong et al (2016), Chigbu and Njoku (2015), and Akhor and Ekundayo (2016). It remains unclear why empirical evidence in developing country like Nigeria often yield conflicting findings. These conflicting conclusions showed that the effect of tax revenue on economic growth and development is not yet resolved. The inconclusive evidence has made the issue of growth and development effect of tax revenue open to further research. The gaps in terms of the period 1996-2020 covered and methodology is also a contributory factor to the disparity in the outcomes of the effect of tax revenue on economic growth and development.

Following the aforementioned gap created by the earlier researchers in the light of mixed views in findings reached by different researchers, this study aims at filling the gaps by introducing a profound and clearer variables and analysis on the effect of tax revenue on economic development in Nigeria. Also, the present study improves on the previous studies by updating the data to 2020. Consequently, this study was set to fill the gap by investigating the moderating effects of financial development on the relationship between tax revenue and economic development with the dimensions of personal income tax, company income tax and petroleum profit tax and measures of economic development as human development index and per capita income. The main aim of the study is to investigate the moderating effects of financial development on the relationship between direct tax revenue and economic development in Nigeria from 1991 to 2020. The specific objectives are to: investigate the relationship between personal income tax and human development index in Nigeria; ascertain the relationship between company income tax and human development index in Nigeria; determine the relationship between petroleum profit tax and human development index in Nigeria; investigate the relationship between personal income tax and per capita income in Nigeria; ascertain the relationship between company income tax and per capita income in Nigeria; determine the relationship between petroleum profit tax and per capita income in Nigeria and ascertain the moderating effect of financial development on direct tax revenue and economic development of Nigeria. Based on the specific objectives, the following are the research questions:

1. What is the relationship between personal income tax and human development index in Nigeria?
2. What is the relationship between company income tax and human development index in Nigeria?
3. What is the relationship between petroleum profit tax and human development index in Nigeria?
4. What is the relationship between personal income tax and per capita income in Nigeria?
5. What is the relationship between company income tax and per capita income in Nigeria?
6. What is the relationship between petroleum profit tax and per capita income in Nigeria?
7. What is the influence of financial development on the relationship between taxes and economic development in Nigeria?

Based on the specific objectives and research questions, the following hypotheses are presented in a null form

HO$_1$ There is no positive and significant relationship between personal income tax and human development index in Nigeria.

HO$_2$ There is no positive and significant relationship between company income tax and human development index in Nigeria.

HO$_3$ There is no positive and significant relationship between petroleum profit tax and human development index in Nigeria.

HO$_4$ There is no positive and significant relationship between personal income tax and per capita income in Nigeria.

HO$_5$ There is no positive and significant relationship between company income tax and per capita income in Nigeria.

HO$_6$ There is no positive and significant relationship between petroleum profit tax and per capita income in Nigeria.

HO7 Financial development does not positively and significantly moderate the relationship between direct tax revenue and economic development in Nigeria.

REVIEW OF RELATED LITERATURE

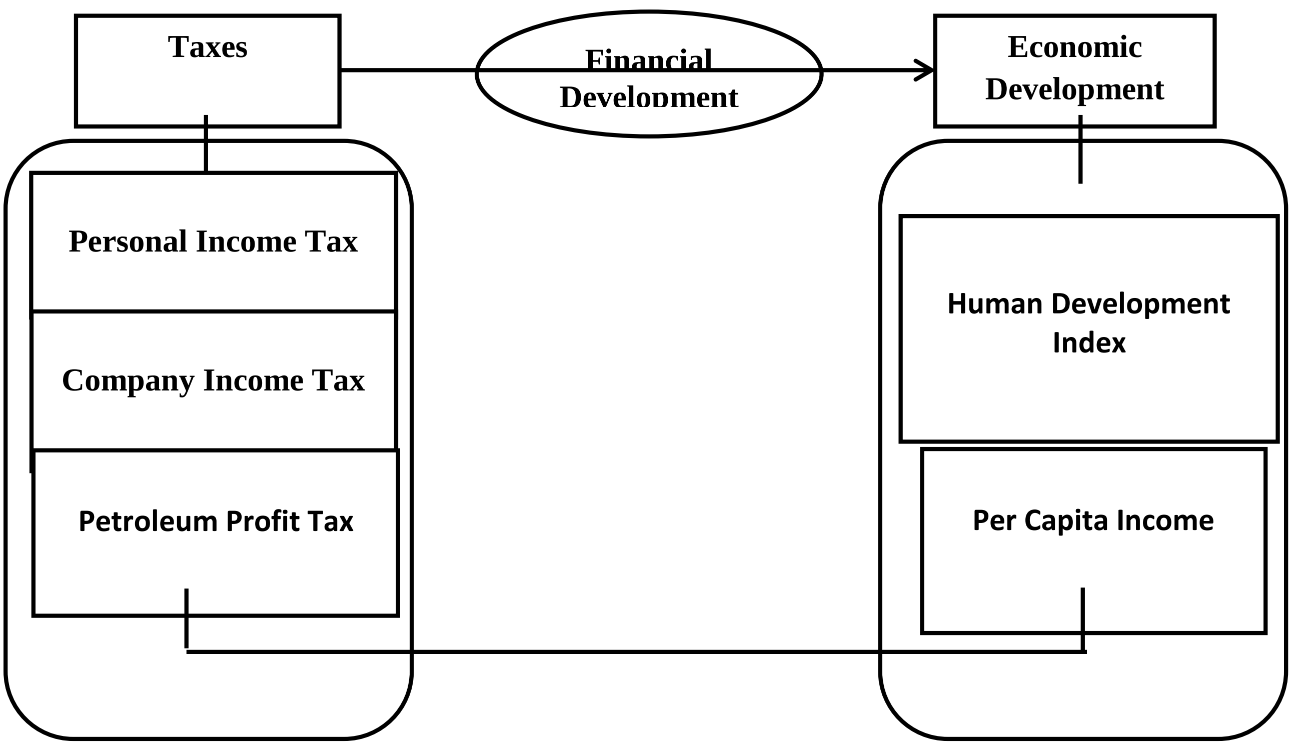

Figure 1.1: Conceptual Framework

Conceptual Review

Concept of Direct Taxes: Tax is an essential contribution made by the inhabitants of any given state to the government or even an alien, subject to the jurisdiction of the government, for reasons of residence or property and this contribution is for the provision of social goods and services for the well-being, economic growth and development of that given society (Appah & Zibaghafa 2018; Appah, 2019). According to Onwuchekwa and Aruwa (2014), tax is a compulsory payment made by all economic units to the government of a given tax jurisdiction from which social services are provided, without necessarily providing an explanation on how the funds generated was spent or equating services with the money collected. Anyanwu (2007) defined tax as compulsory transfer or payment of money (or occasionally of goods and services) from private individuals, institutions or and services) from private individuals, institutions or groups to the government. It may be levied upon wealth or income or in the form of surcharge on price. Taxes can be divided into direct and indirect. The Institute of Chartered Accountants of Nigeria (2006) and the Chartered Institute of Tax revenue of Nigeria (2002) view tax as an enforced contribution of money, enacted pursuant to legislative authority. If there is no valid statute by which it is imposed; a charge is not tax. There are different categories of direct taxes. These include the personal income tax, petroleum profit tax, companies' income tax, educational tax.

Concept of Personal Income Tax: This is a tax that is imposed on different sources of income such as labour, interest, dividends and rent of individuals. According to Manukaji (2018), personal income tax is charged on the income of an individual. Similarly, Ogbonna & Appah (2016) noted that the chargeable income of an individual is the aggregate amount from employment, investment, profit from trade, profession or vocation etc) after deducting all non-taxable incomes and relief granted. Also Omesi and Appah (2021) described personal income tax as a tax on an individual's income which he earned during a given period of time, usually a year. The authors further noted that this type of tax varies with the size and sources of the taxpayer's income and various other features stated by the relevant law. Appah (2019) argued that personal income tax is payable on incomes from sources within and outside Nigeria, but not limited to gains and profit arising from trade, business, profession or vocation, remuneration (*e.g.* salaries, wages, fees, allowances, commissions, bonuses, or benefits premiums), or other perquisites allowed, given or granted by any person to an employee, from an employment from both public and private sectors, dividend, interest or rent, any charge or annuity, gains or profits including any premiums arising from a right granted to any person for the use or occupation of any property and so on.

Concept of Company Income Tax: This is a type of tax that is imposed on companies' profit. According to Ogbonna & Appah (2016), stated that companies' income tax is a form of tax that is imposed on the profit of companies accruing in, derived from, brought into or received in Nigeria in respect of any trade or business, rent, premium, dividends, interest, loyalties and any other source of annual profit excluding profit from companies engaged in petroleum operations. Abomaye-Nimenibo et al (2018) opine that this tax is payable for each year of assessment of the profits of any company at a rate of 30%.The current enabling law that governs the collection of taxes on profits made by companies operating in Nigeria excluding companies engaged in Petroleum exploration activities is Companies Income Tax Act, 1990. This tax is payable for each year of assessment (based on actual year) of the profits of any company at a rate of 30 percent. Chigbu and Njoku (2015) denote that company income tax is a tax on profit made by companies.

Concept of Petroleum Profit Tax: Manukaji (2018); Ogbonna and Appah (2016); Chigbu & Njoku (2015); Ehigiamusoe (2014) noted that petroleum profit tax is a type of tax imposed on companies in Nigeria that are engaged in extraction and transportation of petroleum products. It is particularly related to rents, royalties, margins and profit-sharing elements associated with oil mining, prospecting and exploration leases. This type of tax is imposed to provide revenue for the government, also to serves as an instrument through which the government regulate the number of participants in the petroleum industry and gain control over public assets (Abdul-Rahamoh et al, 2013). It is an instrument for wealth re-distribution between the wealthy and industrialized economics represented by the multinational organizations, who own the technology, expertise and capital needed to develop the industry and the poor and emerging economies from where the petroleum resources are extracted. Chigbu and Njoku (2015) noted that this tax is applicable to upstream operations in the oil sector and the most important tax in Nigeria in-terms of its share of 95% of government revenue and 70% of total foreign exchange earnings. The problem of this type tax is the fluctuations in the international market. Juliana (2018) empirical findings suggested that petroleum profit tax revenue has significant effect on income inequality of economic growth in Nigeria.

Concept of Economic Development: The concept of economic development and economic growth are two separate economic concepts which are often misused for one another. Harelimana (2018) defined to economic development as the process by which Gross National Product (GNP) per capital of a country increases qualitatively and quantitatively over a very long period of time. According to Satope and Akanbi (2014), economic development involves an increase in output together with a change in technical and institutional arrangement involved in production. The authors further argued that economic growth is a subcomponent of economic development because a nation cannot achieve economic development without having achieved economic growth. Mick (2007) noted that economic development is the combination of economic growth and factors, which may bring about general cultural, social, educational, political and economic transformation. Wyngaard (2006) stated that economic development is heterodox, because it is a complex phenomenon that involves a variety of social and economic processes due to the fact that it happens in different ways in different countries and regions of the world. Manuel (2004) disclosed that economic development is the sustained increase in income of all members of society so as to be free from material want. This view relates with Belshaw & Livingstone (2002) that opined economic development as the progress in providing livelihood on a sustainable basis, access to education and basic healthcare for the majority of the population. Malizia & Feser (2000) noted that both economic growth and economic development are complements, because one makes the other possible. They further stated that growth is an increase in output and expands the economy, whereas economic development entails a structural change that must lead to more equal distribution of income and wealth. United Nations Development Programme (1992) disclosed that economic development should at least create a favorable environment for people, individually and collectively, to develop their full potential and to have a reasonable chance of leading a productive and creative life according to their needs and interests. Consequently, this study adopted human development index and per capita income as the dimensions for economic development.

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Concept of Human Development Index: According to the United Nations Development Programme (UNDP, 2020), the HDI is a widely used indicator of inclusive growth in the literature and this is because it brings in education and health alongside income in constructing an overall measure of well-being or performance for a country. The Human Development Index (HDI) is a statistical measure (composite index) developed by the United Nations to assess inclusive growth which takes into consideration social and economic development. The HDI considers three indicators of human development, namely, life expectancy, education, and per capita income. The HDI serves as a frame of reference for both social and economic development. (UNDP, 2020). The measure is an alternative to the standard metrics of development of countries, which consider only the economic part of a country's development. The HDI provides a better picture of a nation's development because it incorporates primary social and economic factors. Also, the HDI emphasizes the importance of individuals and their ability to unleash their maximum potential. According to the Asian Development Bank (2018), the concept of Human Development Index (HDI) looks beyond GDP to a broader definition of well-being. It provides a composite measure of three dimensions of human development: living a long and healthy life (measured by life expectancy), being educated (measured by adult literacy and enrolment at the primary, secondary and tertiary level) and having a decent standard of living (measured by purchasing power parity, PPP, income).The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long

Concept of Per Capita Income: Per capita income is a universal measure for evaluating the wealth of nations and is used by economists to analyze the prosperity of a country based on its economic growth. Per capita income is the most universal because its components are regularly tracked on a global scale, providing for ease of calculation and usage. At its most basic interpretation, per capita income shows how much economic production value can be attributed to each individual citizen. Alternatively, this translates to a measure of national wealth since GDP market value per person also readily serves as a prosperity measure. Governments can use per capita income to understand how the economy is growing with its population. Per capita income analysis on a national level can provide insights into a country's domestic population influence. Overall, it is important to look at each variable's contribution to understand how an economy is growing or contracting in terms of its people. Global analysis of per capita income helps provide comparable insight on economic prosperity and economic developments across the globe. Both GDP and population are factors in the per capita equation. This means countries with the highest GDP may or may not have the highest per capita GDP. Countries may also see a significant increase in per capita GDP as they become more advanced through technological progressions. Technology can be a revolutionary factor that helps countries increase per capita rankings with a stable population level. The formula to calculate per capita income is a country's gross domestic product (GDP) divided by its population. This calculation reflects a nation's standard of living.

Concept of Financial Development: Financial development is a concept that explains the expansion and enhancements of financial intermediation process through the improvements of the various financial dimensions, competence and firmness of obtaining funds. According to Omodera and Iyoha (2021), financial development is the channel through which tax revenue develops the economy through financial institutions, instruments and markets for investment. Ebi (2018) stated that financial development involves the integration of financial institutions, instruments, markets, and intermediaries to moderate the costs of information, enforcement and transactions for the purpose of accelerating fund mobilization. Bist (2018) argued that financial development stimulates development by growing the rate of capital accumulation. Financial development does stimulate growth in fostering productivity expansion by choosing higher quality entrepreneurs and projects, mobilizing external financing for businesses, providing superior vehicles for spreading the risk of innovative actions and revealing more accurately the possibility of huge profits related with the uncertainty of business innovation. Bist (2018) study of financial development and economic growth of sixteen low income countries indicated that financial development positively and significantly influences economic growth. Pradhan et al (2017) study of financial development using banking sector development, bond market development, stock market development, and insurance sector development on the finance-growth association in ASEAN from 1991– 2011 suggested that banking sector development, stock market development, bond market development, insurance market development positively and significantly influences per capita economic growth in long-run. Herwartz and Walle (2014), study of 73 countries from 1975–2011 revealed that the impact of finance on economic development is mostly stronger in high-income than in low-income countries. The study of Olugbemi, et al (2020) of tax revenue and economic growth in Nigeria suggested a positive relationship between tax revenue and economic growth using gross domestic product as the index for economic growth. Similarly, Yahaya and Yusuf (2019), Ouma (2019) and Agunbiade and Idebi (2020) indicated that tax revenue influences economic growth.

Theoretical Review

Benefit Principle Theory: The study anchored on the benefit theory of taxation initially developed by Knut Wicksell (1896) and Erik Lindahl (1919), two economists of the Stockholm School. Wicksell's near-unanimity formulation of the principle was premised on a just income distribution. The approach was extended in the work of Paul Samuelson, Richard Musgrave, and others. It has also been applied to such subjects as tax progressivity, corporation taxes, and taxes on property or wealth. The unanimity-rule aspect of Wicksell's approach in linking taxes and expenditures is cited as a point of departure for the study of constitutional economics in the work of James Buchanan. This theory of taxation explains that individuals pay taxes for public-goods expenditures on a politically-revealed willingness to pay for benefits received. The principle is sometimes likened to the function of prices in allocating private goods. According Appah (2019), the theory provides that the state should levy taxes on individuals according to the benefit conferred on them. The author further noted that more benefits a person derives from the activities of the state, the more he should pay to the government. However, the theory has been subjected to severe criticism on the following grounds: The assumption that the tax should be paid by an individual in proportion to benefits conferred by the State on that individual is quite unrealistic because the benefits derived cannot be correctly measured in terms of money. Benefit is purely a subjective matter and there is no scientific way to measure the magnitude of benefit and its money value; If benefits accrued to an individual is the basis of taxation, the poor must pay higher taxes because in a welfare State the poor get more benefits than the rich from the expenditure of the Government. This is clearly unjust and as such an unacceptable proposition; It is also very difficult to determine under this theory what proportion of the general benefits accrues to particular individuals. Government is for civilized existence and there is, therefore, no basis for valuing the services which the State renders; Most of the services provided by the State is indivisible and beneficiaries are unidentified. For example, it is not possible to divide the benefits of national defense, etc.; certain benefits accrue only to definite persons and in definite proportion. If this principle is followed, the whole of the benefit, they should return to the State as taxes. For example; pension paid to retired servants, definite and clear enough and therefore, they should offer the whole of their pension as taxes and the equitable distribution of wealth, the main objective of most of the modern Governments, will be defeated if this principle is followed.

The above description makes it amply clear that the benefit principle cannot ensure justice in the distribution of burden of taxes among different sections of the society. The benefit theory is relevant to this study because it tends to discover ways by which tax revenue can support the economic growth and development of any society, hence the theory affects taxpayer's life but it provides more emphasis on political relationship and ability to be objectives.

Empirical Review

S/N	AUTHOR & YEAR	TOPIC	METHODOLOGY	VARIABLE USED	STATISTICAL TOOLS	FINDINGS
1.	Oliver et al (2017)	Effect of Federal Tax resources on infrastructural development of Nigeria	Empirical Analysis	CIT, VAT and PPT	Multiple regression	PPT, CIT AND VAT had positive and Insignificant effect on Infrastructural Development
2.	Ukpabi (2019)	Indirect taxation and economic growth in Nigeria.	Empirical analysis	VAT, Customs and excise duties	Ordinary least square	Negative relationship between indirect tax sources and economic growth
3..	Olugbade & Adegbie (2020)	Personal income tax and infrastructural development in Lagos state (1997 – 2018)	Empirical analysis	PIT	Descriptive statistics	Personal Income Tax has significant effect on infrastructural development
4.	Etim et al (2020)	Petroleum profit and companies' income taxes and economic growth in Nigeria (1980 – 2018).	Empirical analysis	PPT and CIT	Durbin Waston	positively significant association of studied variables
5.	Anyaduba & Aronmwan (2015)	Tax revenues infrastructural development in Nigeria (1980 – 2014)	Empirical analysis	CIT, TET, VAT and PPT	Error correction model	CIT and TET have significant impact on the level of infrastructural development while PPT and VAT have non-significant impact
6.	Lyndon & Paymaster (2016)	Petroleum profit tax, personal income tax and economic growth in Nigeria (2005- 2014	Empirical analysis	PPT, PIT and GDP	Multiple regression	PPT and CIT have significantly positive relationship with economic growth
7.	Osho et al (2018)	Impact of company income tax on gross domestic products in Nigeria (1993-2017).	Empirical analysis	CIT and GDP	Ordinary least square	CIT revenue has a positive and significant effect on gross domestic products in Nigeria
8.	Dibia & Onwuchekwa (2019)	Taxation and the economic growth of Nigeria (1981 – 2016)	Empirical analysis	CIT, PPT and RGDP	Spearman Correlation	PPT, CIT show positive and significant effect on the RGDP in Nigeria

9.	Okwara & Amori (2017)	Impact of tax revenue on the economic growth in Nigeria (1994- 2015)	Empirical analysis	VAT and GDP	Ordinary least square	value added tax has a negative relationship and statistically insignificant
10.	Onakoya, et al (2017)	Impact of taxation on economic growth in Africa (2004 – 2013)	Empirical	TR and GDP	Hausman test	tax revenue is positively related to GDP and promotes Economic Growth in Africa
11.	Inyiama, et al. (2017)	Effect of the Federal Government of Nigeria's tax resources on infrastructural development of Nigeria	Empirical	PPT, CIT, VAT and INFR	Multiple linear regression	tax revenue resources (PPT, CIT and VAT) had a positive and insignificant effect on Infrastructural Development in Nigeria
12.	Kyissima, et al (2017)	Government expenditure and Economic growth in Tanzania (1996- 2014)	Empirical analysis	GOVEX and GDP	Multiple linear regression	no significant relationship between government expenditures and economic growth
13.	Justina et al (2019)	Impact of company income tax on infrastructural development in Nigeria (1981 – 2017)	Empirical	CIT and INFR	Ordinary least square	CIT is positive and statistically significant at 5% level to infrastructure
14.	Iduh et al (2019)	Impact of company income tax on economic growth in Nigeria	Empirical analysis	CIT and GDP	Multiple linear regression	company income tax has significant influence over economic growth in Nigeria
15.	Uzoka, & Chiedu (2018)	Effect of tax revenue on economic growth of Nigeria (1997 -2016)	Empirical analysis	RGDP, PPT, VAT CIT and CED	Unit root test	CGT and EDT have no significant effect on economic growth while PPT, CIT, VAT and CED have significant effect on the economic growth in Nigeria

16.	John & Dickson (2020)	The impact of tax revenue on economic growth (1984-2018)	Empirical analysis	NGDP, RGDP, PPT and VAT	Error correction model	PPT impact positively, while VAT had a negative influence on GDP
17.	Omesi, et al (2020)	Non-oil revenue and economic development of Nigeria	Empirical analysis	VAT and RGDP	Correlation	Positive impact in short and long run
18.	Awa & Ibeanu (2020)	Tax revenue and economic development of the Nigerian economy (2003 – 2017)	Empirical analysis	PPT, VAT,CED,CIT, PIT, RGDP and HDI	Autoregressive distributed lag technique	Negative impact on RGDP and HDI
19.	Uket et al (2020)	Impact of tax revenue on economic development of Nigeria (1994 – 2018)	Empirical analysis	CIT, PPT, VAT and GDP	Ordinary least square	No significant impact on GDP
20	Ayeni & Afolabi (2020)	the dynamic relationship between tax revenue, infrastructural development and economic growth in Nigeria (1981- 2018)	Empirical	TR and IFRD	Vector auto regression	Tax revenue influence economic growth and infrastructural development
21.	Harelimana (2018)	The role of taxation on resilient economy and development of Rwanda	Empirical	TAX and RGDP		Significant relationship between tax and economic development
22.	Durusu-Çiftçi, et al (2018)	Impact of taxation on economic development of 30 OECD countries	Empirical	CIT and GDP	Co integration	Significant impact on the steady state level of GDP per-capita
23.	Thom (2018)	Impact of tax incentive on economic development	Empirical	CIT and RGDP		Sales and tax wavier has no effect on wages

Source: Authors Compilation (2022)

METHODOLOGY

Methodology: This study on the moderating role of inflation on the relationship between direct taxes and economic development of Nigeria used ex post facto and correlational research designs. The data for the study was collected from the Federal Inland Revenue Service (FIRS), Central Bank of Nigeria (CBN), and National Bureau of Statistics (NBS) of various publications ranging from 1991 to 2020. The data obtained from secondary sources were analysed using univariate, bivariate and multivariate analysis. The model from prior studies after modification as follows:
Economic Development = (Taxes) --- (1)
The taxes variables included in this present study are personal income tax (PIT), Company income tax (CIT) and Petroleum profit tax (PPT).

Since economic development is represented in this study by two proxies of human development index (HDI) and per capital income (PCI) we recast equation (1) by decomposing it as

HDI = f(PIT, CIT, PPT) --- (2a)

PCI = f(PIT, CIT, PPT) --- (2b)

Therefore, in their respective empirical form, equation (2a) and (2b) are restated into the basic time series model as

$HDI = \beta_0 + \beta_1 PIT + \beta_2 CIT + \beta_3 PPT + e$ -- (3a)

$PCI = \beta 0 + \beta_1 PIT + \beta_2 CIT + \beta_3 PPT + e$ -- (3b)

Where

HDI = Human Development Index
PCI = Per Capita Income
PIT = Personal income tax
CIT = Company income tax
PPT = Petroleum profit tax
β_0 = Coefficient`
e = Standard error

To evaluate the effect of moderating, the interacting terms were formulated by multiplying the moderator to each of the original independent variables as

$HDI = \beta_0 + \beta_1 PIT + \beta_2 CIT + \beta_3 PPT + \beta_4 FND + \beta_5 PIT * FND + \beta 6 CIT * FND + \beta 7 PPT * FND + e$ -- (4a)

$PCI = \beta_0 + \beta_1 PIT + \beta_2 CIT + \beta_3 PPT + \beta_4 FND + \beta_5 PIT * FND + \beta 6 CIT * FND + \beta 7 PPT * FND + e$ -- (4b)

RESULTS AND DISCUSSIONS

Univariate Analysis

Table 2: Descriptive statistics of variables

	HDI	PCI	PIT	CIT	PPT	FND
Mean	10.41200	11.35667	9.129000	8.802333	9.592333	1.249667
Median	10.35000	11.43000	9.565000	8.720000	9.670000	1.145000
Maximum	10.74000	12.06000	9.950000	9.820000	9.880000	1.860000
Minimum	10.28000	10.45000	7.170000	8.090000	9.070000	0.730000
Std. Dev.	0.137399	0.442908	0.941010	0.461763	0.258172	0.359266
Skewness	1.103838	-0.481919	-1.295954	0.625055	-0.735638	0.415285
Kurtosis	2.852877	2.262821	3.134060	2.720587	2.114707	1.810693
Jarque-Bera	6.119346	1.840521	8.419951	2.051060	3.685498	2.630375
Probability	0.046903	0.398415	0.014847	0.358606	0.158381	0.268424
Sum	312.3600	340.7000	273.8700	264.0700	287.7700	37.49000
Sum Sq. Dev.	0.547480	5.688867	25.67947	6.183537	1.932937	3.743097
Observations	30	30	30	30	30	30

Source E- view output (2022)

The study conducted the descriptive statistics of the relevant variables used in the study. Table 2 illustrates vividly these statistics. It shows the total number of observations, mean, median, maximum, minimum, standard deviation, skewness, kurtosis and Jarque-Bera. The dependent variables which are real gross domestic product and infrastructural development show the minimum values of 10.28 and 10.45 and the maximum of dependent variables revealed values of 10.74 and 12.06. The mean values of the dependent variables are 10.41 and 11.35 while the standard deviation values are 0.1374 and 0.4429. This implies that there was high fluctuation in real gross domestic product and infrastructural development for the years under study. It can be observed from Table 2 that all the variables have positive average values (means). The minimal deviation of the variables from their means as shown by the standard deviation gives indication of growth rate (fluctuation) of these variables over the period. It can be observed also that personal income tax, petroleum profit tax and per capita income show signs of negative skewness while human development index, company income tax and financial development show signs of positive skewness.

Diagnostic and Specification Tests

Performing linear regressions could not automatically give reliable results on the variables understudy. To bring out reliable outcomes, it was imperative for the researchers to ensure that, some basic assumptions of the *Classical Linear Regression Model* (CLRM) were met. The basic assumptions that were considered comprised of (1) linearity in parameters, (2) homoscedasticity of the error terms, (3) no perfect multi-collinearity between the explanatory variables, (4) no autocorrelation of the error terms, (5) correct specification of the regression model, and (6) normality of residuals. Table 3 provides a summary of the various assumptions, the tests conducted and their corresponding outcomes, as well as corrective mechanisms undertaken in case of any violations.

Table 3: Summary of Diagnostic and Specification Tests

Assumption	Diagnostic/Specification Test	Result	Counter Measure Taken
No perfect multicollinearity Between the explanatory variables	1. Correlational matrix 2. Variance Inflation Factor (VIF)	Fulfilled	
Normality of residuals	Jarque&Bera (1981) test for data normality	Fulfilled	
Homoscedasticity of the error terms.	Breusch& Pagan (1979)	Fulfilled	Adoption of robust regression estimator according to Huber (1967)/White (1980)

No autocorrelation of the error terms	The Durbin and Watson (1950) test for serial correlation.	violated	Adoption of robust regression estimator according to Huber (1967)/White (1980
Correct specification of the regression model.	Hausman (1978) model specification test	Fulfilled	

Table 4: Correlations analysis

	HDI	PCI	PIT	CIT	PPT	FND
HDI	1	0.7750	0.3488	0.8881	-0.6620	0.4403
PCI	0.7750	1	0.8086	0.5794	-0.4957	0.6739
PIT	0.3488	0.8086	1	0.0446	-0.1184	0.5441
CIT	0.8881	0.5794	0.0446	1	-0.5912	0.3635
PPT	-0.6620	-0.4957	-0.1184	-0.5912	1	0.3319
FND	0.4403	0.6739	0.5441	0.3635	0.3319	1

Source: E-View output (2022)

Table 4 indicated the result Correlation matrix of moderating variable financial development (FND) and independent variables proxies as personal income tax (PIT), company income tax (CIT), and petroleum profit tax (PPT). On the other hand the dependent variables were proxies as human development index (HDI) and per capita income (PCI). The table statistically showed a positive correlation between personal income tax (PIT) and financial development (FND) with positive value of 0.5441 implying that there is a positive correlation and statistically insignificant relationship between personal income tax (PIT) and financial development (FND) in moderating direct taxes. The table also indicated a correlation which showed a very weak association between company income tax (CIT) and financial development (FND) with a negative value of 0.3635 implying that there is a weak correlation and statistically insignificant relationship between company income tax (CIT) and financial development (FND) in moderating direct taxes. The table showed a correlation which indicated a very strong correlation between petroleum profit tax (PPT) and financial development (FND) with a Positive value 0.3319 which implied that there is a strong correlation and statistically significant relationship between petroleum profit tax (PPT) and financial development (FND) in moderating direct taxes. Finally, the table above indicated the correlation matrix values of (0.4403; and 0.0427) of the dependent variables proxies as human development index (HDI) and per capita income (PCI) respectively; which showed a positive correlation. This indicates that direct taxes such as personal income tax (PIT), company income tax (CIT), and petroleum profit tax (PPT) contribute positively to economic development of Nigeria.

Table 5: Moderating Influence of Financial Development on Direct Taxes and HDI.

Dependent Variable: HDI
Method: Least Squares
Date: 06/15/23 Time: 07:55
Sample: 1991 2020
Periods included: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PIT	1.001099	0.459767	2.177405	0.0106
CIT	1.368656	0.677264	2.020860	0.0258
PPT	1.817268	0.841713	2.159011	0.0175
FND	0.514560	0.234221	2.196899	0.0143
PIT*FND	0.628434	0.294922	2.130342	0.0320
CIT*FND	0.652321	0.284068	2.296354	0.0234
PPT*FND	0.876021	0.415544	2.108130	0.0163
C	8.694172	4.286174	2.028422	0.0450

R-squared	0.873707	Mean dependent var	1.980294
Adjusted R-squared	0.831255	S.D. dependent var	1.840204
S.E. of regression	0.755929	Akaike info criterion	2.494710
Sum squared resid	67.99995	Schwarz criterion	3.282724
Log likelihood	-158.5768	Hannan-Quinn criter.	2.814695
F-statistic	20.58132	Durbin-Watson stat	1.880685
Prob(F-statistic)	0.000000		

Source: E-view output (2022)

Table 5 shows the moderating role of financial development on the relationship between direct taxes and human development index (economic development). The R^2 statistic is 0.873707 while the adjusted R^2 statistic is 0.831255. This shows that 87.37.1% of systematic variation in human development index in Nigeria for the period under review is explained by changes in direct taxes. After adjusting the degree of freedom, 83.13% variation in human development index in Nigeria for the period under review was explained by changes in direct taxes, leaving 16.87% unexplained due to the presence of stochastic error term. This suggests that direct taxes influence the level of human development index in Nigeria.

The F – statistic, 20.58132 with a zero-probability value showed that the model satisfies the overall goodness-of-fit statistical test. It implies direct taxes inclusive of the moderator variable of financial development are able to predict human development index in Nigeria. The Durbin-Watson statistic of 1.880685 indicate the non – existence of serial autocorrelation in the model. The individual coefficients show different levels of significances, giving rise to rejection of the

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null hypotheses. The result shows a positive and significant (0.0106 < 0.05) relationship between personal income tax and human development index (economic development); positive and significant (0.0258 < 0.05) relationship between company income tax and human development index (economic development); positive and significant (0.0175 < 0.05) relationship between petroleum profit tax and human development index (economic development) and positive and significant (0.0143 < 0.05) relationship between financial development and human development index (economic development). The results further revealed that financial development moderates the relationship between direct taxes and human development index (0.0320 < 0.05; 0.0234 < 0.05 and 0.0163 < 0.05)**.** The findings indicate that the level of financial development in any economy improves the relationship between direct taxes and economic development.

Table 6: Moderating Influence of Financial Development on Direct Taxes and PCI.

Dependent Variable: PCI
Method: Least Squares
Date: 06/15/23 Time: 08:24
Sample: 1991 2020
Periods included: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PIT	1.281099	0.587326	2.181240	0.0165
CIT	1.462435	0.685679	2.132827	0.0254
PPT	1.765428	0.817413	2.159774	0.0263
FND	0.804326	0.392156	2.051036	0.0231
PIT*FND	0.628434	0.294922	2.130342	0.0312
CIT*FND	0.652321	0.284068	2.296354	0.0246
PPT*FND	0.876021	0.415544	2.108130	0.0138
C	6.632672	3.286174	2.018356	0.0450

R-squared	0.677283	Mean dependent var	1.980294
Adjusted R-squared	0.631538	S.D. dependent var	1.840204
S.E. of regression	0.755929	Akaike info criterion	2.494710
Sum squared resid	67.99995	Schwarz criterion	3.282724
Log likelihood	-158.5768	Hannan-Quinn criter.	2.814695
F-statistic	20.58132	Durbin-Watson stat	2.352835
Prob(F-statistic)	0.000000		

Source: E-view output (2022)

Table 6 shows the moderating role of financial development on the relationship between direct taxes and per capita income (economic development). The R^2 statistic is 0.677283 while the adjusted R^2 statistic is 0.631538. This shows that 67.73% of systematic variation in per capita income in Nigeria for the period under review is explained by changes in direct taxes. After adjusting the degree of freedom, 63.15% variation in per capita income in Nigeria for the period under review was explained by changes in direct taxes, leaving 36.75% unexplained due to the presence of stochastic error term. This suggests that direct taxes influence the level of per capita income in Nigeria.

The F – statistic, 20.58132 with a zero-probability value showed that the model satisfies the overall goodness-of-fit statistical test. It implies direct taxes inclusive of the moderator variable of financial development are able to predict human development index in Nigeria. The Durbin-Watson statistic of 2.352835 indicate the non – existence of serial autocorrelation in the model. The individual coefficients show different levels of significances, giving rise to rejection of the null hypotheses. The result shows a positive and significant (0.0165 < 0.05) relationship between personal income tax and per capita income (economic development); positive and significant (0.0254 < 0.05) relationship between company income tax and per capita income (economic development); positive and significant (0.0263 < 0.05) relationship between petroleum profit tax and per capita income (economic development) and positive and significant (0.0231 < 0.05) relationship between financial development and per capita income (economic development). The results further revealed that financial development moderates the relationship between direct taxes and per capita income (0.0312 < 0.05; 0.0246 < 0.05 and 0.0138 < 0.05)**.** The findings indicate that the level of financial development in any economy improves the relationship between direct taxes and economic development using per capita income as a proxy.

DISCUSSION OF FINDINGS

Personal Income Tax and Human Development Index: The result from the analysis indicated that personal income tax positively and significantly affects the level of human development index in Nigeria. The findings suggest that the volume of revenue generated by the government thorough personal income tax improves the level of human capital development and over economic development of Nigeria. The findings agree with studies earlier conducted and contradict the study of Kalas, et al (2017); Craig et al (2020) that disclosed that personal income tax has no insignificant influence on economic development.

Company Income Tax and Human Development Index: The result from the analysis indicated that company income tax positively and significantly affects the level of human development index in Nigeria. The results suggest that the volume of revenue generated by the government thorough the taxation of companies in Nigeria expands the level of human capital development and over economic development in Nigeria. This finding is in line with Alhaji and Abiola (2021) Ojong et al (2016); Enofe et al (2014); Tsaurai (2018); Isaac et al (2021), Onakoya, et al (2017); Otu et al (2013); Iduhet al (2019) that corporate taxes generated by the government improves the human capital development of countries through proper management and utilization. However, the finding contradicts Zellner and Ngoie (2015), who reported that tax has a negative and insignificant relationship with economic growth.

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Petroleum Profit Tax and Human Development Index: The result from the analysis indicated that petroleum profit tax positively and significantly affects the level of human development index in Nigeria. The results suggest that the volume of revenue generated by the government thorough the taxation of companies engaged in petroleum exploration in Nigeria increases the level of human capital development and over economic development in Nigeria. This study is in agreement with Ikeokwu and Leyira (2019); Nmesirionye et al. (2019); Raimi (2021) that petroleum profit tax positively and significantly affects the level of human capital development (economic development) of Nigeria. However, the findings contradicts the studies conducted byZellner and Ngoie (2015), and Ramot and Ichihashi (2012), who reported that petroleum profit tax negatively and insignificantly affects economic development.

Personal Income Tax and Per Capita Income: The result from the analysis indicated that personal income tax positively and significantly affects the level of per capita income in Nigeria. The findings indicate that the volume of revenue generated by the government thorough personal income tax improves the level of per capita income and over economic development of Nigeria. The findings of the study are in conformity with Olugbade & Adegbie (2020) that Personal Income Tax has significant effect on economic development. The findings further agrees with oliver et al (2017); Justina et al (2019); Ayeni & Afolabi (2020). Hence, the study concluded that Personal Income Tax has significant effect on economic development in Nigeria.

Company Income Tax and Per Capita Income: The result from the analysis indicated that company income tax positively and significantly affects the level of per capita income in Nigeria. The findings indicate that the volume of revenue generated by the government thorough company income tax improves the level of per capita income and over economic development of Nigeria. The findings of the study are in agreement with Dibia and Onwuchekwa (2019) that indicates that company income tax (CIT) show positively and significantly influence economic development in Nigeria; and also concur with Onakoya, et al (2017); Iduhet al (2019); Ogundana et al (2017); Okwara & Amori, (2017); Okeke et al (2018).

Petroleum Profit Tax and Per Capita Income: The result from the analysis indicated that petroleum profit tax positively and significantly affects the level of per capita income in Nigeria. The results suggest that the volume of revenue generated by the government thorough the taxation of companies engaged in petroleum exploration in Nigeria increases the level of per capita income and over economic development in Nigeria. The findings is consistent with the studies conducted by Onakoya, et al (2017); Iduhet al (2019); Ogundana et al (2017); Okwara & Amori, (2017); Okeke et al (2018); Asaolu et al (2018) that petroleum profit tax impact on economic development.

Effect of Financial Development on Direct taxes and Economic Development: The result from the analysis indicated that financial development positively and significantly moderates the relationship between direct taxes and economic development in Nigeria. The results suggest that the level of financial sector development and intermediation improves the volume of transactions which does affects tax collection and revenue generation in Nigeria. Consequently, the improvement in the volume of tax collection and properly utilization increases the level of economic development in Nigeria.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The study investigated the moderating role of financial development on the relationship between direct taxes and economic development from 1991 to 2020. The study reviewed prior studies on taxes and economic growth and development. The study independent variable direct taxes used personal income tax, company income tax and petroleum profit tax while the dependent variable economic development utilized human capital development and per capita income as dimensions while financial development as the moderator variable. The study anchored on benefit theory and ex post facto and correlational research designs were used. The study used secondary data collected from Federal Inland Revenue Service (FIRS), Central Bank of Nigeria (CBN), and National Bureau of Statistics (NBS) of various publications. The data collected were analysed with univariate, bivariate and multivariate analysis. The analysis of data revealed that direct taxes of company income tax, personal income tax and petroleum profit tax have a strong and positive relationship with economic development measures of human development index and per capita income as a whole. Hence, the study concludes that personal income tax positively and significantly influences economic development (human capital development and per capita income), company income tax positively and significantly affect economic development (human capital development and per capita income), and financial development positively and significantly moderates the relationship between direct tax and economic development of Nigeria. Consequently, the following recommendations were provided:

1. The introduction of the Tax Identification Number (TIN) which is a registration and storage of tax payers‘ data in Nigeria is a welcomed idea but for it to be successful it should be structured in such a way that will make all potential tax payers liable. Citizens and companies should be able to operate bank accounts only if they have TIN numbers. Government parastatals, multinationals, conglomerates and companies in the country should not engage any vendor who does not have a TIN number. This will go a long way in reducing Tax evasion.

2. All taxes should be remitted via an e-payment system or via direct payment to the various tax authorities' accounts. This will enhance and support the cashless economy system introduced recently.

3. Tax Clearance Certificates and other tax documents used in government transactions should be referred back to the relevant revenue authority for authentication.

4. The government should ensure that taxes are accounted for to the public via print and electronic media. The intent of government with such tax should be communicated to the general public. In so doing, a separate body should be set up to inspect and ensure that the funds generated by government through tax at each level of government is properly used and any level of government that fails to utilize such taxes as communicated to the public should be charged to court.

5. Efficient tax policy should be formulated and implemented so that the taxes can continue to generate the needed revenue for the government. Also revenue collecting authorities of the government should be made more effective in their operations of collecting revenue for the government. Ways of collection and remittance of tax revenue should be reviewed so that more revenue can come to government coffers especially that of company income tax.

6. Given the dwindling revenue from petroleum related sources, the government should embark on the strategic pursuit of broadening the economy to enhance economic growth and development.

7. Effort should be channeled towards increasing the revenue from petroleum profit tax so as to serve as alternative revenue sources to support the dwindling oil revenue to sustain economic growth and developmental initiatives of government.

8. The government should improve the financial intermediation process so as to accelerate tax assessment and collection for the achievement of sustainable economic growth and development in Nigeria.

Policy Implications: The implication of our findings is pointing majorly at policy makers, especially the Federal Board of Inland Revenue and the States Board of Internal Revenue as most of our variables shows a positively significant relationship with economic development, meaning that there should be no area in tax collection that should be taken lightly as they have all proven to be a major variable in connection to the development of the economy. One of the main purposes of tax revenue is to raise revenue that the government can use to provide adequate amenities and infrastructure for its citizens as well as enhance growth and development but the case seems to be different in Nigeria as the physical evidences does not show that funds generated from tax revenue are used for this purpose. Our analysis has thrown some light on the impact of direct tax revenue on Nigeria‘s economic development. It is glaring that the Nigerian total tax revenue generated has a significant impact on the economy in general.

Further Research: The analysis of the relationship between direct taxes and economic development has opened door for further studies and the direction by which the research could go. The study focused on dimensions of personal income tax, company income tax and petroleum profit tax, however further studies could focus on relationship between indirect taxes and economic development using other moderating variables such as financial development, government policy, tax rate. Similarly while this current study focused on real gross domestic product and infrastructural development as dimensions of economic development. Thus further research should focus on infrastructure development and gross domestic product growth rate.

References

Abdul-Rahamoh, O.A., Taiwo, F.H. & Adejare, A.T. (2013). The Analysis of the Effect of Petroleum Profit Tax on Nigerian Economy. *Asian Journal of Humanities and Social Sciences (AJHSS)* 1(1), 1-16.

Abomaye-Nimenibo, W.A.S.; Eyo, M.J. & Friday, H.C. (2018). An empirical analysis of tax revenue and economic growth in Nigeria from 1980 – 2015. *Global Journal of Human Social Science*, 18(3), 7 – 40.

Aguolu, O. (2004). *Taxation and tax management in Nigeria.* 3rd Edition, Meridan Associates.

Akhor, S. O., & Ekundayo, O. U. (2016). The impact of indirect tax revenue on economic growth: The Nigeria Experience. *Igbinedion University Journal of Accounting*, *2*(3), 62 - 87.

Andrew, H.T. (2017). The quiet costs of taxation: Cash taxes, none-cash bases. Virginal Levy and Research Paper 15.

Anyaduba, J. O. & Aronmwan, E. J. (2015). Taxes and infrastructural development in Nigeria. *Nigerian Journal of Banking, Finance and Entrepreneurship Management, 1, 14 – 28.*

Anyanwu, J.C. (2003). *Nigerian public finance.* Joanne Educational Publishers.

Appah, E. (2023). Tax education, fairness and penalty on voluntary compliance behaviour of micro, small and medium enterprises in Bayelsa State, Nigeria, *African Journal of Social Sciences and Humanities Research, 6(1)*, 123 – 149.

Appah, E. & Duoduo, G. (2023). Tax determinants and sustainable economic growth of MSMEs in South-South, Nigeria. *European Journal of Accounting, Auditing and Finance Research* 11(4), 15 - 46.

Appah, E. (2019). *Principles & Practice of Nigerian Taxation.* Vinson Printing and Publishing House.

Appah, E. & Iweias, S. S. (2023). Taxes and income inequality in Nigeria, *African Journal of Economics and Sustainable Development,* 6(1), 100 – 128.

Appah, E. & Zibaghafa, S. (2018). *Anatomy of Public Sector Finance & Accounting.* Vinson Printing and Publishing House.

Asaolu T. O., Olabisi J., Sakiru O. A. & Alebiosu O. N. (2018). Tax revenue and economic growth in Nigeria. *Scholedge International Journal of Management & Development, 5(7), 72.*

Awa, F. N. & Ibeanu, R. I. (2020). Impact of tax revenue on economic development in Nigeria (1997- 2018). *European Journal of Accounting, Auditing and Finance Research.8 (7), 18-32.*

Ayeni, O. D. & Afolabi, O. J. (2020). Tax revenue, infrastructural development and economic growth In Nigeria, MPRA Paper 99464, University Library of Munich, Germany, revised 2020.

Bist, J.P. (2018). Financial development and economic growth: Evidence from a panel of 16 African and non-African low-income countries, *Cogent Economics & Finance, 6:1,* 1449780, DOI: 10.1080/23322039.2018.1449780

CITN (Chartered Institute of Taxation of Nigeria), 2002 CITN Nigerian tax guide statutes Lagos; the chartered institute of taxation of Nigeria.

Chigbu, E. E. & Njoku, C. O. (2015). Taxation and the Nigerian economy: (1994-2012). *Management Studies and Economic Systems (MSES),* 2 (2), 111-128.

Clement, O. A., Ayobolawole, A. O & Oladimeji, E.O (2019). Tax revenue and economic development in Nigeria. *Advance in Social Sciences Research Journal 6(9), 312- 321.*

Craig, A. O., Adetola, R., & Maminu, K. A. (2020). Tax revenue and capital expenditure in Nigeria. *International Accounting and Taxation Research Group, 132-147.*

Dibia, N. O. & Onwuchekwa J. C. (2019). Taxation and economic growth in Nigeria. *International Accounting and Taxation Research Group, 111-119.*

Ebi, B.O. (2018). Financial sector development and tax revenue in Nigeria. *International Journal of Economics, Commerce and Management, VI(6),* 93 – 109.

Ehigiamusoe, U. K. (2014). The nexus between tax structure and economic growth in Nigeria: A prognosis, *Journal of Economics & Social Studies, 4*(1), 113 – 140.

Etim, O. E., Austine, U. N. & Nsima, J. U. (2020). Petroleum profits tax, company income tax and economic growth in Nigeria 1980–2018. *Journal of Accounting, Finance and Auditing Studies 6(4)164-187.*

Justina, A. O., Muhammadu, A. M. & Uche, J. U. (2019). Company's income tax and infrastructural development in Nigeria. International Accounting and Taxation Research Group, Faculty of Management Sciences, University of Benin, Benin City, Nigeria.

Garba, L. S. (2014). *Tax revenue and economic growth in Nigeria*. (Unpublished master's thesis). Ahmadu Bello University, Zaria, Nigeria.

Harelimana, J. B. (2018). The role of taxation on resilient economy and development of Rwanda. *Journal of finance marketing*, *2*(1), 28–39.

Herwartz, H., & Walle, Y. M. (2014). Determinants of the link between financial and economic development: Evidence from a functional coefficient model. *Economic Modelling, 37*, 417–427. https://doi.org/10.1016/j.econmod.2013.11.029

Institute of Chartered Accountant of Nigeria (2009). Taxation Study Pack, VI Publishers.

Inyiama, O.I., Chinedu, E.A., & Nnenna, C.V. (2017). Relevance of tax revenue resources to infrastructural development of Nigeria. *International Journal of Managerial Studies and Research. 5(10), 74-81.*

Kalu, B. A. (2018) Rural Market and Nigeria economic development in Nigeria 210957712.

Kyle, M. (2018). Investigated tax structures and economic growth: New evidence from the government revenue dataset. *Journal of International Development, 30*(3), 173–205.

Malizia, E. E. & Feser, E. J. (2000). *Understanding Economic Development*, Rutgers.

Manukaji, I.J. (2018). Effect of tax structure on economic growth in Nigeria. *International Journal of Innovative Finance and Economics Research*, 6(1), 1-11.

Mick, M. (2007). How does taxation affect the quality of governance? *Tax Notes International*. 2, 79-98.

Neog, Y. & Gaur, A. K. (2020). Tax structure and economic growth: A study of selected Indian state. *Journal of Economic Structure*, 9(38), 1-12.

Ogbonna, G. N. & Appah, E. (2012). Impact of tax reforms and economic growth of Nigeria: A time series analysis. *Current Research Journal of Social Sciences*, *4*(1), 62-68.

Ogbonna, G. N., & Appah, E. (2016). Effect of tax administration and revenue on economic growth in Nigeria. *Research Journal of Finance and Accounting*, *7*(13), 49 - 58.

Ojong, C. M., Ogar, A, & Arikpo, O. F. (2016). The impact of tax revenue on economic growth: Evidence from Nigeria. *IOSR Journal of Economics and Finance*, 1(1), 32 - 38.

Okafor, R. G. 2012. Tax revenue generation and economic development. *European Journal of Business and Management, 4(19).*

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*.

Okwara, C. C., & Amori, O. M. (2017). Impact of tax revenue on economic growth in Nigeria. *International Journal of Advanced Scientific Research, 2*(2), *90-102*.

Oliver, I. I., Edeh, A. C. & Chukwuani, V. N. (2017). Relevance of tax revenue resources to infrastructural development of Nigeria. *International Journal of Managerial Studies and Research, 5(10), 74-81*.

Olugbade, J. A., & Adegbie F. F. (2020). Personal income tax and infrastructural development in Lagos State, Nigeria. *Journal of Finance and Accounting, 8(6), 276-287.*

Olugemi, K. O., Bassey, U.O., Okon, M.E. & Osang, O.D. (2020). Tax Revenue and Economic Growth in Nigeria, *International Journal of Economic & Business Management*, 6(2), 52-59.

Omesi, I. & Appah, E. (2022a). Electronic taxation system and revenue generation effectiveness in Nigeria: A pre-post analysis, *International Journal of Marketing Management and Accounting Research*, 10(1), 121 – 134.

Omesi, I. & Appah, E. (2022b). Tax enforcement strategies and revenue generation in Nigeria, *International Journal of Innovative Research and Advanced Studies,* 10(1), 92 – 111.

Omesi, I. & Appah, E. (2021)**.** Taxes and income inequality in Nigeria: Cointegration and error correction mechanisms evidence from 1980 – 2018. *Journal of Accounting & Management,* 11(2), 14 - 30. Danubius University of Galati, Romania.

Omesi, I., Ngoke, O. S., & Ordu, P. A. (2020). Non-oil revenue and economic development of Nigeria. *International Journal of Innovation Development and Policy Studies, 8(1),* 91-99.

Omesi, I. & Appah, E. (2020). Tax structure and economic growth in Nigeria: An ARDL evidence from 1980 – 2018. *International Journal of Innovation in Marketing and Accounting Research,* 8 (2), 1 – 15.

Omodera, C.O. & Iyoha, F.O. (2021). Financial development and tax revenue in evolving markets: Evidence from Nigeria. *International Journal of Entrepreneurship, 25(6),* 1 – 10.

Onwuchekwa, J. & Aruwa, S. (2014). Value added tax and economic growth in Nigeria. *European Journal of Accounting, Auditing and Finance Research, 8, 62-69.*

Ouma, D.O. (2019). Revenue effects of tax reforms, economic growth and political environment in Kenya, *African Journal of Economic Review,* VII(1), 136-153.

Pradhan, R. P., Arvin, M. B., Bahmani, S., Hall, J. H., & Norman, N. R. (2017). Finance and growth: Evidence from the ARF countries. *The Quarterly Review of Economics and Finance, 66,* 136–148. https://doi.org/10.1016/j.qref.2017.01.011

Sanni A. U (2007). Tax reform in the capital market: A welcome development. Seminar Paper Ogun State Internal Revenue Service Seminar.

Satope, B.F. & Akanbi, B. (2014). Effect of business on economic development in Nigeria. *E3 Journal of Business Management and Economics, 5(4), 91-96.*

Uket E. E., Wasiu A. A., & Etim N. E (2020). Impact of tax revenue on economic development in Nigeria. *International Business Research, (13) 6, 1-12*

Wyngaard, A.T. (2006). An introduction to economic development in the Western Cape. Department of Economic Development and Tourism. https//www.westerncape.gov.za/text/2006/2/economicdevelopment.pdf