



Impact of Tax Compliance on Standard of Living in Nigeria

Oladele Rotimi¹

Abstract: This study examined the impact of tax compliance on economic development in Nigeria. The motivation for this study was primarily premised on the paucity of theoretical literature on tax compliance and economic development in Nigeria. The specific objective examined if tax compliance impact human capital development and per capital income in Nigeria. In trying to achieve this objective, A quantitative research design has been adopted having been found to be appropriate for the quantitative research model that underpins the study at hand through regression was adopted for the data analysis. The results of the study indicate that the tax compliance have positive impact on economic development in a time series data of Nigeria's Economy during 2003 – 2019. The linearity test revealed that linear relationship exists between tax compliance and standard of living in Nigeria. The research closes the knowledge gap induced by inconclusive evidence on the growth effects of human capital development and per capita income which most often have resulted in situations where results of researches done in developed economies are generalized to developing countries. This study recommends that government should adhere strictly on compulsory tax compliance due to its effect on economic development prospect and its less distortionary nature, and also utilize the positive relationship between tax compliance and human capital development to realize efficient government investment that spurs economic growth

Keywords: Tax Compliance; Human Capital Development; Per Capital Income; Economic Development

JEL Classification: H21

1. Introduction

Tax is a mandatory charge levied on individuals and companies by government which serves as a means of income to undertake particular functions in the state. The relevance of tax payment in the execution of tasks by the government that will benefit the citizens can't be over emphasized. Taxes is the major source of generating income for the government in the execution of public projects and it is for this reason that the government exist (Akintoye & Tashie, 2013). Tax is a required contribution of money to the government for the accomplishment of plans that are legally defined and are authorized by the law of the state. This in simpler terms is that every tax must be based on valid ruling. A tax can never be imposed if it is not based on a valid stature. This income tax is levied on incomes such as dividends, commissions, royalties and rent, salaries, business profits and interest. There is no gainsaying in the fact that taxation yields very substantial revenue to the government and for this

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reason it has a bearing on the Gross Domestic Product (GDP) of which is the standard signal for measuring the economic wellbeing of a nation. The nature and levels of taxes differ according to the economic policies the government adopts. The effective submission Compliance to tax laws typically means the true reporting of the taxable income, appropriate computation of the tax payable, filling of the returns and timely payment of tax liability (Abiola & Moses, 2012). Tax payers notice to the adequate attendance to their interest by the government will increase their willingness to paying their tax promptly. In a developing country like Nigeria where the government is characterized by an indifference attitude to the plights and concern of the citizens, reckless to fiscal policies, corruption, low standard of living and infrastructure decay, the willingness to pay taxes is at a receding level (Alabede, Zaimoh, & Idris, 2011).

Complying to paying taxes is a very big problems for policy makers in developing and transition economic countries like Nigeria. Compliance to high tax is very imperative for efficiency and equity and also for the development of social capital and this is independent of the overall tax take from GDP (Akintoye & Tashie, 2013). Evading taxes is bound up with the instrument of fiscal control that the government attempts in carrying out economic policy unlike activities which are illegal. High tax compliance not only increases the government's revenue, it also helps in the development of the economic. The level at which citizens comply to tax payment tends to be higher when the services provided by the government are viewed as widely desired and the decision behind the provision of these services are transparent and fair. It is boosted when individuals view paying their taxes as a fair fiscal exchange. Then it is rightly so to state that the people's attitude towards tax payment is a very integral part of the tax system. Other factors that might have affect the people's willingness to paying their taxes are multiplicity of taxes, poor tax awareness, tax transparency, ineffective and inefficient tax collection structure and tax accountability (Ogbonna & Ebimobwei, 2012).

The issues highlighted above have adverse effect on the willingness to pay tax in Nigeria, with the indirect effects on actual revenue generated from taxation. The consequences of all this are a crippled government that won't be able to implement its growth and objectives in the state. However, tax plays a very huge role in promoting economic growth and development and also economic activity. Through this tax, the government endure that adequate resources are channeled towards necessary schemes in the society and creating help to the weak. The essence of tax may not be felt if wrongly administered. The willingness to paying taxes is as a result of some factors which we have earlier mentioned, remains a key obstruction to effective taxation system in Nigeria. In the ease of tax payment, evidence from the World Bank Doing Business Report 2011 and 2012, show that Nigeria ranked 109 and 138, respectively, out of 183 countries; in Sub-Saharan Africa (SSA), it ranked 27 out of 46 countries. This is a very poor result despite the improvement the government has been making to the tax system in recent years (Abiola & Moses, 2012).

Tax compliance is equivalent to the ration of tax revenue of a government to her Gross Domestic Product and the higher this rate, the higher the level of tax compliance. It is disheartening to notice that that despite all effort made by the various administrations to improve tax compliance, the rate has been infinitesimally or abysmally low. One wonder the likely impact these could have on the economic development. If compliance is poor, tax revenue consequently becomes low and if compliance is very good, tax revenues are higher. The issue of tax compliance has therefore been an issue for ages, and discussions have abounded on its impact on the economic development and growth of any nation. Nigeria, as a developing country, still struggles with tax compliance and there is a prevailing apathy towards the payment of tax. This is largely due to the insincerity of government in

handling revenue, and a poor reflection of tax paid. People argue they don't see the results of their taxes, and therefore shy away from paying taxes. The essence of this paper is to therefore investigate if tax compliance could induce economic development in Nigeria. Therefore, the main emphasis of this research is to explore how much tax compliance in Nigeria had impacted on the country's economic development. Specifically, the study ascertain impact of tax compliance on economic growth; the effect of tax compliance on human capital development and ascertain the influence of tax compliance rate on per capita income (PCI)

2. Literature Review

2.1. Conceptual Framework

2.1.1. Tax Compliance and Economic Growth

Tax is a key aspect in every society of the world. The tax system is a legal avenue for the government to amass more funds for the accomplishment of its pressing obligations. It is one of the most effective means of mobilizing a nation's internal resources and it helps to create a very conducive environment for the growth of the nation's economy. Tax is a compulsory levy imposed on a subject or on his properties and this is done by the government to provide security, social amenities, and create suitable conditions for the wellbeing of the society (Oluyombo & Olayinka, 2018).

The tax system is an opportunity for government to collect additional revenue needed in discharging its pressing obligations. A tax system offers itself as one of the most effective means of mobilizing a nation's internal resources and it lends itself to creating an environment conducive to the promotion of economic growth. Tax is a compulsory levy imposed on a subject or upon his property by the government to provide security, social amenities and create conditions for the economic wellbeing of the society (Abata, 2014). Taxation is the compulsory transfer or payment (or occasionally of goods and services) from private individuals, institutions or groups to the government Tax is imposed to regulate the production of certain goods and services, protection of infant industries, control business and curb inflation, reduce income inequalities etc. The main purpose of purpose of tax is to raise revenue to meet government expenditure and to redistribute wealth and management of the economy. In addition, four key issues need to be understood for taxation to play its functions in the society. First, tax is a compulsory contribution made by the citizens to the government and for the general common use. Secondly, a tax imposes a general obligation on the tax payer. Thirdly, there is a presumption that the contribution to the public revenue made by the tax payer may not be equivalent to the benefits received. Finally, a tax is not imposed on a citizen by the government because it has rendered specific services to him or his family. Thus, it is evident that a good tax structure plays a multiple role in the process of economic development of any nation which Nigeria is not an exception. These roles include: the level of taxation affects the level of public savings and thus the volume of resources available for capital formation; both the level and the structure of taxation affect the level private saving (Akintoye & Dada, Tax Justice, Economic Growth and Development in Sub-Saharan Africa: Evidence from Nigeria, 2013). A system of tax incentives and penalties may be designed to influence the efficiency of resource utilization; the distribution of the tax burdens plays a large part in promoting an equitable distribution of the fruit of economic development; the tax treatment of investment from abroad may affect the volume of capital inflow and rate of reinvestment of earnings there from; and the pattern of taxation on imports relative to that of domestic producers affect the foreign trade balance. It is however argued that the scope of these functions depends, inter alia, on the political and

economic orientation of the people, their needs and aspirations as well as their willingness to pay tax. Thus, the extents to which a government can perform its functions depend largely on the ability to design tax plans and administration as well as the willingness and patriotism of the governed (Ojong, Anthony & Arikpo, 2016).

Furthermore, by attempting to explain how tax compliance policy affects the rate of economic growth in a (discrete-time) overlapping generations model with identical individuals who possess logarithmic utility, where tax financed public goods are productive and completely rival, it is discovered that the effect was generally ambiguous and depends on the importance of public inputs in the production process, because (if compliance is not perfect) stricter enforcement increases compliance, leading to two effects in opposite directions. On the one hand, a fall in private saving may cause disposable income to fall and whereas a rise of public inputs leads to higher investment (Olaoye, Asaolu & Adewoye, 2009).

2.1.2. Tax Compliance and Human Capital Development

Recent research suggests that human capital is the most important component of national wealth. Another emerging line of research shows that human capital accumulation could be the crucial factor in economic growth and development. Thus, it is quite surprising that the effect of taxation on human capital has not been thoroughly researched or quantified. Although valuable insight has been provided by several studies that address tax questions about incidence, welfare, and growth in models with endogenous human capital, insufficient attention has been paid to the logically prior question. Taxation affects investment in human capital in several ways; thus, this result requires some elaboration. Several researches have demonstrated a positive influence on human capital from taxation of income from physical capital (Trostel, 1993). Income taxation reduces the net rate of return on physical capital, which makes human capital a relatively better investment. Taxation on physical capital encourages a substitution to human capital. The principal input in producing human capital is time; hence the primary cost of investing in human capital is forgone wages. Income taxation reduces the net wage, which is then both the return on and the primary cost of human capital investment. Thus, taxation of wage income reduces the return and cost by the same proportion, and the rate of return on investment in human capital is unaffected. In other words, labor income taxation was shown to have no effect on human capital because its cost is effectively tax deductible. This is the reason why most earlier studies suggested a minimal effect of taxation on human capital. Time is not the only input in human capital production, however; and unlike the time cost, the cost of most goods and services used in producing human capital (such as tuition) is not reduced by taxation. In other words, most goods invested in human capital are not effectively tax deductible. Thus, taxation reduces only part of the cost of investing in human capital; the total cost is reduced less than the return, and human capital accumulation is discouraged (Trostel, 1993).

2.1.3. Tax Compliance and Per Capita Income (PCI)

According to John Maynard Keynes, a nation's economy needs injection of funding in order to improve liquidity of its economic activities. Such injection can come from the government (in the form of government expenditures), private or corporate parties (in the form of private investments), and individuals (in the form of tax paid from their disposable income). Within this macroeconomic context, the tax an individual pay can activate a multiplier effect on the collective economic activities. However, it should be noted that Keynes' argument above fails to see the comparison between the society's tax compliance and their disposable income. The better the society's attitude towards tax, the

higher tax revenues, the wider the multiplier effect, and the better public welfare. Though, it should be noted further that tax policy in developing countries is highly affected by its national economic structure. As an implication, tax revenues in developing countries are mostly maintained by economic activities that are based on the traditional sector. Other sectors of economic activities (informal sectors) are still beyond the formal tax scope structure (Ihenyen & Mieseigha, 2014).

Some deductions have been drawn from a number of preceding experiential studies on the relation between tax compliance, state budget expenditures, and public welfare. Embaye's study in 2007 examines factors that regulate the number of expenditures in South Africa from 1960 to 2002. Using the Error Correction Model, the study accomplishes that national expenditures in South Africa are affected meaningfully by the amount of tax revenues, people's level of income, macroeconomic factors, and political dynamic forces. To add with the already established point, Embaye's research also finds the occurrence of tax-evading actions in the form of subversive economy in South Africa. Murphy's study in 2004 examines how the subject of trust affects tax submission level. Directed in Australia by means of the Structural Equation Model (SEM), the study achieves that the issue of trust plays a decisive part in inspiring tax compliance among tax subjects. It is significant to sustain trust between the government and tax subjects. When the government concludes to show a truthful attitude to the public, then they will believe its motive in collecting tax. If this is attained, tax subject will most likely not be discouraged to pay tax voluntarily (Nwakanma & Nnamdi, 2013).

2.2. Theoretical Framework

2.2.1. Optimal Theory of Taxation

The concept of optimal taxation can be regarded as a formula for curtailing the costs of taxation. The costs on which this literature focuses are, as already noted, the efficiency costs of a one-sided tax system. But the more direct costs of administration and submission play little or no role in the analyses, and the theories of tax evasion. So far, the possible gains from using the perceptions of the tax evasion literature in the study of optimal taxation have not been fully exploited, although for some parts of taxation the evasion viewpoint is apparently highly relevant. This is true, at least to some extent, with respect to the degree of progressivity of the personal income tax, and even more so with respect to the border between company taxation and personal taxation and the degree of differentiation of the indirect tax system. The literature on tax evasion could be a means to bring issues of tax administration into the attention of the hypothetical literature on tax design (Akintoye & Tashie, 2013). The normal theory of optimal taxation postulates that a tax system should be selected to exploit a social welfare function subject to a set of limitations. The social welfare function is built on the utilities of individuals in the societies, and this is evident on its general analyses; this paper makes use of a social welfare function that is a nonlinear purpose of individuals utilities. Nonlinearity permits for a communal planner who favors, for example, more equal circulations of utility. To lessen the problematic situations fronting the revenue gathering, it is frequently presumed that everybody in the social order has the same likings over, say, consumption and relaxation. Sometimes this similarity supposition is taken one step further by assuming the economy is populated by completely identical individuals. It is vital to select the tax system that make the most of the illustrative consumer's welfare, aware of the fact that consumer will respond to whatever inducements the tax system provides (Abiola & Moses, 2012).

The Agency Theory

In the Agency Theory a votive relationship that is between two that is the principal and the agent so as to engage in some service. This includes allotting some policymaking authority to the agent by the principal. Also, an agent is someone employed for the main aim of bringing his principal into a contractual relationship with a third party. In a case like this, the agent doesn't make the contact on his behalf. The legal policy which applies is *qui facit per alium facit per se* (he who does something through another does it himself) (Ojong, Anthony & Arikpo, 2016). Agency Theory is focused at the individual giving the agency connection. This is where the one-person system work and then speaks to another party who does the responsibility on behalf of the principal. This individual is lawful to accomplish legal acts within his capability and will not work on his direction and not for himself but for the principal. A rising opinion in the contemporary literature recognized however that the two parties are strange fellows. An Insurance Dealer is an agent paid to be working to buy and sell on behalf of another. However, in carrying out his role, he owes a duty to his principal. The degree at which he cares is expected to vary; an advanced level of care is expected to be served to a specialized broker than from an insurance agent not working fully. According to the American and English law, the liability of a principle wrongdoings in the ordinary course of his employment is contingent upon the presence of a master servant relationship. The master is vicariously accountable for his servant convoluted conduct committed within the course of employment. There are situations where an agency connection arises when an individual group called principal employs someone called an agent to achieve some deal, where the principal give decision making power to the agent. This kind of relationship includes those between manager and stock holders and also between debt holder stockholders. Agency Theory is a model regarding the relationship between an agent of the principal (company's managers) and a principal (shareholder). It supplemented that Agency Theory is a very theoretical term which fundamentally includes the costs of deciding conflicts between the agents and the principals and bring into line the welfares of the two groups (Abata, 2014).

Benefit Received Theory

This is a theory of income tax equality that articulates that people should pay taxes based on the benefits received from the government. This theory was formulated by Erik Lindahl of Sweden in 1919. According to this theory, the state should charge taxes on individuals only on how much benefits have been conferred on them. For example, if the funds for road construction and maintenance were gotten from gasoline taxes and highway tolls entirely, this would be in line with the benefit received theory. Those who make use of the highway more would pay more of these taxes, while those that don't use it or just walk by on the road will not pay at all. This theory has been disapproved in that if the state upholds a certain link between the benefits conferred and the benefits derived, it will be against the basic value of taxation, it could lead to tax injustices. This is because the poor will pay a bigger amount of tax because they benefit more from the services of the state this is unworkable or in part unacceptable and if this happens, it will be against the principal of justice. Most of the expenditure acquired by the state is for general benefit of its citizens, and it seems very impossible for them to estimate the benefits enjoyed by individuals every year making this theory difficult to be applied. Tax is a compulsory contribution made to the public establishments to meet the expenses of the state and delivery of general benefit, therefore if the state sustains a link between benefits conferred and benefit derived, this will not conform to the basic principles of taxation, of which there is no *quid pro quo* in the case of taxation. This concept has been related with free rider complications because some people might claim they want little or no the services being offered.

Cunning types might assets that the goods harmed them and then try to get tax credits. This problem arises because most public goods are non-exclusive and non-rival (Ogbonna & Ebimobowei, 2012).

Empirical Review

Several studies have examined taxation as a tool of economic growth in different parts of the world with diverse methods. The result of the inquiries however, shows level of affiliation in the results. The tax improvement in Nigeria is fronted by the Federal Inland Revenue service which is working to attaining greater revenue collection, intended and willing compliance and breaking the long piercing fear between tax collectors and taxpayers. For instance, in a study by Wambai & Hanga (2013) on taxation and social development in Nigeria: tackling Kano's hidden economy, they found that the attitude of the government on taxation need to change and recommends a tax system that concentrate on establishing simplicity, predictability, and neutrality. Knack & Keefer (2012) considered economic progress and tax charges in OECD countries from 1980 to 1999; their study discloses that economic growth measured by GDP per capital has important effect on tax mix of GDP per capita. The study verified a deterioration in shares of payroll, goods and services and encouraging growth from personal and property taxes.

Kiabel & Nwokah (2009) examined taxation as a fiscal policy apparatus for income redeployment among Lagos state civil servants using spearman's rank correlation coefficient, the study instituted a constructive relationship between the use of tax as a fiscal policy instrument and income redistribution. In the study on taxation and economic growth of the United State, Engen and Skinner (1996) created a modest outcome on the directive of 0.2 to 0.3 percentage point differences in development rates in answer to major tax reform. Their results propose that such minor effect together can have large influence on the standards of living. Nwakanma & Nnamdi (2013) discovered value added tax and economic growth in Nigeria, their result found no causality existing between GDP and VAT revenue, and a positive and significant correlation between VAT revenue and GDP. Sani (2005) intentional direct or indirect tax instruments for redistribution: short-run versus long-run, the findings disclose that in a long-run context individual reply to tax incentives through the occupational margin, which is in contrast to a short-run situation where individuals cannot pull out of their occupations and can only fine-tune themselves into the labour supply on the job (Alabede, Zaimoh & Idris, 2011) studied tax revenue and economic development in Nigeria using the three stage least square estimation technique, this research found that tax revenue rouse economic growth through infrastructural growth, it pinpoint the ways through which tax revenue have effects on economic growth in Nigeria and also that infrastructure development and foreign direct investment will not cause any dependent effect on growth but just letting the infrastructural development and foreign direct investment to respond to the increase in output.

(Fischer, Wartick & Mark, 1992)assessed the effect of the Canadian provincial governments' tax rates on economic growth with the use which covered a period between 1977 to 2006; the study initiated that higher provincial statutory corporate income tax rate is associated with lower private investment and slower economic growth. Their experimental results had it that a 1 percent point cut in the corporate tax rate can be said to be a 0.1-0.2 percentage point increase in the annual growth rate. Their results specify that sales tax increases provincial investment and growth when switched from a retail sales tax to a harmonized sales tax with federal value-added.

Loizides & George (2005) build measures on normal and minimal wage assess rates by relapsing charge income on GDP, and they summed the measures in a development relapse, they identify no

factually noteworthy relationship between charges and financial development. In their finding, assess rates appear to have a negative effect on the development rate, in spite of the fact that with minimal assess rate having negative impact on the level of action. In any case, opposite to this discovery;

Simanjuntak & Mukhlis (2011) developed a comparable charge measures and included a sham incline to permit changes in assess rates over time, they found charge rates as having negative and measurable importance on development. Their paper would, in the long run, affirm a negative relationship between minimal assess rates and financial development, and normal assess charges to have critical effect on financial development and advancement. Schneider (2018) in his paper, does charge structure influence financial development? He analyzes the impacts of income unbiased assess structure and changes on the long-run level of pay per capita utilizing board information for 17 OECD nations over the period 1970-2004. The consider did not get compelling prove in favor of utilization charges over wage charges or individual wage charges over corporate charges. The strong result shows up to be that move in assess income towards property charges are related with the next level of wage per capita within the long run.

Murphy (2003) studied the effect of charge arrangement on financial development within the states inside the system of an endogenous development show. They applied the relapse examination to appraise the effect of assess on financial development within the state from 1964 to 2004. They found a critical negative affect of higher minimal assess rate on financial development. This investigation be that as it may, underscores the significance of controlling the effects of tax on the economy.

Generally, as narrated through reviewed literature, majority of the available empirical evidence were centered generally on tax administration and its impact on economic wellbeing, few of the literature mediated on tax compliance and revenue generation with the focus on developed countries and employee productivity which appear to be one sided. However, to the best of the researcher's knowledge, it appears that no researches have been conducted to ascertain if tax compliance could induce economic development in Nigeria mediating on how much tax compliance in Nigeria had impacted on the country's economic development by ascertain impact of tax compliance on economic growth, how tax compliance influence human capital development and ascertain the influence of tax compliance rate on per capita income (PCI)

3. Research and Methods

A quantitative research design has been adopted having been found to be appropriate for the quantitative research model that underpins the study at hand. The secondary data were sourced from the *Statistical Bulletin of CBN* and the *National Bureau of Statistics* (2020). This covers 2003 to 2019. A regression analysis was adopted to analyze the data so collected, Moreover, the panel regression is a veritable for re-occurring observation of the same variable for several times or periods (Pesaran, Shin & Smith, 2000).

Tax compliance components proxy as logged revenue and as independent variable, while the dependent variables are Human Development Index (HDI), Per capital Income (*PCI*) and Growth rate (*Gtr*) were represented as variables of development. Furthermore, to ensure the reliability of the result; tests for robustness were carried out which include panel regression analysis and all the assumptions surrounding regression were taken into cognizance.

Models Specification

The following regression models were developed. The broad objective was formulated as follow;

$$\text{Taxcmp.} = f(\text{Hdi}, \text{Pci}, \text{Gtr}) \quad 1$$

Where:

Taxcmp. = Tax Compliance

Hdi = Human Development Index.

Pci = Annual Per Capital Income

Gtr = Annual Growth rate

$$\text{Taxcmp.} = \beta_0 + \beta_1\text{Hdit} + \beta_2\text{Pcit} + \beta_3\text{Gtrit} + et \quad 2$$

4. Analysis and Results

4.1. Analysis of Assumptions

4.1.1. Normality Test

Table 4.1 test the validity of the assumption of linear regression that residuals are normally distributed. The p-value for Kolmogorov-Smirnov Z which exceeds 0.05 significant level for GROWTH, PCI and HDI shows the residuals are normally distributed and as such, linear regression assumption is normal distribution is held.

Table 1. One-Sample Kolmogorov-Smirnov Test

| | | TR | GROWTH | PCI | HDI |
|----------------------------------|----------------|-------------|---------|---------|---------|
| N | | 18 | 18 | 18 | 18 |
| Normal Parameters ^{a,b} | Mean | 3408716.67 | .04889 | 2096.61 | .50394 |
| | Std. Deviation | 1482574.229 | .029682 | 643.384 | .028437 |
| Most Extreme Differences | Absolute | .217 | .201 | .148 | .170 |
| | Positive | .140 | .113 | .103 | .109 |
| | Negative | -.217 | -.201 | -.148 | -.170 |
| Kolmogorov-Smirnov Z | | .920 | .855 | .627 | .722 |
| Asymp. Sig. (2-tailed) | | .365 | .458 | .827 | .675 |

a. Test distribution is Normal

b. Calculated from data

4.1.2. Linearity Test

Table 4.2 tests whether the slope of regression line is equal to zero or not equals to zero. The p-value of 0.839 for deviation from linearity less greater than 0.05 significant level implies the slope of regression line is equal to zero. This is an indication that linearity assumption of linear regression is not violated and as such, it is concluded that linear relationship exists between tax compliance and standard of living in Nigeria.

Table 4.2. Linearity Test

| | | Sum of Squares | Df | Mean Square | F | Sig. |
|----------------|--------------------------|--------------------|----|--------------------|-------|------|
| Between Groups | (Combined) | 22219824959166.670 | 9 | 2468869439907.408 | 1.304 | .359 |
| | Linearity | 14926197826587.540 | 1 | 14926197826587.540 | 7.884 | .023 |
| | Deviation from Linearity | 7293627132579.133 | 8 | 911703391572.392 | .482 | .839 |
| Within Groups | | 15146622905833.334 | 8 | 1893327863229.167 | | |
| Total | | 37366447865000.010 | 17 | | | |

Source: Researchers' Computation (2021)

4.1.4. Multicollinearity Test

Table 4.3 tests the presence of multicollinearity problem in the model. The table revealed none existence of multicollinearity problem since VIF value for GROWTH, PCI and HDI were in-between 1-10 which is an accepted region.

Table 4.3. Multicollinearity

| Model | Collinearity Statistics | |
|------------|-------------------------|-------|
| | Tolerance | VIF |
| (Constant) | | |
| GROWTH | .299 | 3.339 |
| PCI | .284 | 3.515 |
| HDI | .146 | 6.844 |

a. Dependent Variable: Tax Compliance

Ho: Tax compliance and living standard in Nigeria

The adjusted square of 0.899 shown in table 4.4 implies that 90% variation in tax compliance is explained by living standard in Nigeria while the remaining 10% are sundry factors affecting tax compliance outside the model formulated for this study.

Table 4.4. Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .948 ^a | .899 | .878 | 518568.561 |

a. Predictors: (Constant), HDI, GROWTH, PCI

Table 4.5 revealed living standard has significant impact on tax compliance in Nigeria since the p-value of 0.000 was less than 0.05 level of significant at 3, 14 degree of freedom. Thus, hypothesis 1 is rejected.

Table 4.5. ANOVA^a

| | Model | Sum of Squares | Df. | Mean Square | F | Sig. |
|---|------------|--------------------|-----|--------------------|--------|-------------------|
| 1 | Regression | 33601660929587.406 | 3 | 11200553643195.803 | 41.651 | .000 ^b |
| | Residual | 3764786935412.593 | 14 | 268913352529.471 | | |
| | Total | 37366447865000.000 | 17 | | | |

a. Dependent Variable: Tax Compliance

b. Predictors: (Constant), HDI, GROWTH, PCI

Table 4.6. Coefficients a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
|-------|-----------------------------|---------------|---------------------------|-------|-------|------|
| | B | Std. Error | Beta | | | |
| | (Constant) | -14559672.546 | 5526852.815 | | | |
| 1 | GROWTH | -5203589.207 | 7742790.791 | -.104 | -.672 | .512 |
| | PCI | 690.737 | 366.514 | .300 | 1.885 | .080 |
| | HDI | 33286564.294 | 11570921.232 | .638 | 2.877 | .012 |

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a. Dependent Variable: Tax Compliance

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Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
|-------|-----------------------------|---------------|---------------------------|-------|-------|------|
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Source: Researchers' Computation (2021)

One-Sample Kolmogorov-Smirnov Test

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ANOVA Table

| | Sum of Squares | Df | Mean Square | F | Sig. |
|--------------------------|--------------------|----|--------------------|-------|------|
| (Combined) | 22219824959166.670 | 9 | 2468869439907.408 | 1.304 | .359 |
| Between Groups | | | | | |
| Linearity | 14926197826587.540 | 1 | 14926197826587.540 | 7.884 | .023 |
| Deviation from Linearity | 7293627132579.133 | 8 | 911703391572.392 | .482 | .839 |
| Within Groups | 15146622905833.334 | 8 | 1893327863229.167 | | |
| Total | 37366447865000.010 | 17 | | | |

Source: Researchers' Computation (2021)

Collinearity Statistics

| Model | Collinearity Statistics | |
|------------|-------------------------|-------|
| | Tolerance | VIF |
| (Constant) | | |
| GROWTH | .299 | 3.339 |
| PCI | .284 | 3.515 |
| HDI | .146 | 6.844 |

a. Dependent Variable: Tax Compliance

5. Summary

This study examined the impact of tax compliance on economic development in Nigeria. The motivation for this study was primarily premised on the paucity of theoretical literature on tax compliance and economic development in Nigeria and the inconsistency development of economic in advanced countries around the world. In trying to achieve this objective, A quantitative research design has been adopted having been found to be appropriate for the quantitative research model that underpins the study at hand through regression was adopted for the data analysis. The results of the study indicate that the tax compliance have positive impact on economic development in a time series data of Nigeria's Economy during 2003 – 2019. The linearity test revealed that linear relationship exists between tax compliance and standard of living in Nigeria. The research closes the knowledge gap induced by inconclusive evidence on the growth effects of human capital development and per capita income which most often have resulted in situations where results of researches done in developed economies are generalized to developing countries.

6. Conclusion

The main objective of the study was to find out if tax compliance affects economic development in Nigeria from 2003-2019. Based on the research findings presented and discussed in the preceding chapter (4), we arrived at a number of conclusions:

- The first objective of this study was to determine the effect of tax compliance on human capital development through economic development in Nigeria for the period 2003-2019. Analysis of research results has shown that tax compliance has a positive and significant effect on human capital development in Nigeria. Regression analysis results in Table 4.2, demonstrate this kind of relationship. It shows that the p-value of 0.839 for deviation from linearity less great than 0.05

significant level implies the slope of regression line is equal to zero. Tax compliance would increase human capital development by creating more job opportunity and make funds available for development purposes that will accelerate economic development. From the findings, it can be concluded that tax compliance has a significant positive effect on economic development;

- The second objective of this study was to determine the effect of tax compliance and per capital income through economic development in Nigeria for the period 2003-2019. Analysis of research results has shown that tax compliance has a positive and significant effect on per capital income in Nigeria. Regression analysis results in Table 4.3, demonstrate this kind of relationship. It shows that revealed none existence of multicollinearity problem since VIF value for GROWTH, PCI and HDI were in-between 1-10 which is an accepted region. Tax can potentially raise a great deal of revenue with little distorting effect. This provides a predictable and stable flow of par capita income to finance development objectives that will accelerate economic development. From the findings, it can be concluded that tax compliance has a significant positive effect on economic development in Nigeria.

6.1. Recommendations

The results indicate that tax compliance provide a predictable and stable flow of revenue to finance development objectives that will accelerate economic growth. The government should adhere strictly on compulsory tax compliance due to its effect on economic development prospect and its less distortionary nature, and also utilize the positive relationship between tax compliance and human capital development to realize efficient government investment expenditure that spurs economic growth. The government should re-visit and review some tax policy and regulations that are repugnant to the performance of the tax system, so as to block and discourage the loopholes that are being exploited by taxpayers to either evade or avoid tax payments. Constant review of existing tax laws will keep the act in pace with the economic reality.

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