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Tax payer Education and Tax law Enforcement on Level of tax Revenue Generation in Nigeria

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ABSTRACT

Tax revenue is considered as a necessary imperative for attainment of sustainable growth and development. This requires an environment where both taxpayers and tax officials have appropriate knowledge of their roles and responsibilities. This study aims at establishing empirically the relationship among tax payer education and law enforcement on the level of tax revenue in Nigeria. Ex-post facto research design is employed and considered suitable because it is concerned with analysis of data on past events to explain the behavioural relationship, effect or differences between variables. Data were collected from the central bank of Nigeria statistical bulletin and Federal Inland Revenue service pro mass. The analytical techniques used include stationarity, Johansen co-integration, error correction model and granger causality tests. The findings reveal positive sensitivity of law enforcement and tax revenue also positive and significant relationship with tax revenue. The study concludes that tax payer education and law enforcement relate positively with tax revenue in Nigeria and recommends that there is need to strengthen legal and regulatory frameworks. This includes improving the enforcement of tax laws and ensuring that legal measures serve as reliable collateral for tax revenue. Policymakers should consider initiatives to enhance the capacity and effectiveness of law enforcement agencies in dealing with tax-related matters.

KEYWORDS:

Taxpayer Education, Law Enforcement, Tax Revenue, Tax Law and Nigeria.



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Introduction

Tax is the major revenue source for most developed and developing countries and collecting taxes and fees is a fundamental way for countries to generate public revenues that make it possible to a way for government's' to create fiscal space such as finance investments in human capital, infrastructure, and the provision for services for citizens and businesses. Jubia(2018), taxes are fees levied on individuals or corporations and enforced by a government entity whether local, regional or national in order to finance government activities. In economics, taxes fall on whoever pays the burden of the tax, whether this is the entity being taxed, like a business or the end consumers of the businesses goods a compulsory levy that a government imposes on it citizens to enable it to obtain the required revenue to finance its activities (Alasfour, 2019; Hite &Aasseldine, 2019).

Strikingly, in developing countries regarding to tax collection many researchers indicated that there is low capacity of tax administration to minister compliance among taxpayers and the potential amount of tax revenue has not been collected in on efficient and equitable manner (Chau, Troutman & O'Bryan, 2020; Ayo, 2021). Moreover, according to the International Monetary Fund (IMF) report the domestic tax bases in most African countries are undermined by widespread tax avoidance and evasion (IMF, 2011). Many researchers works agreed that collecting tax revenue and tax administration is a serious problem due to corruption, smuggling and tax evasion and avoidance in many of sub-saharan Africa countries (Cobhan, 2015; Fuest and Riedel, 2019; Agu, 2021). Therefore, to overcome these challenges governments, tax policymakers, economic strategist and researcher should design and implement modern tax administration systems which enable to prevent and protect the above and the coming problems. Due to this fact taxation in developing countries is a challenging topic and has attracted increasing attention to the researchers.

Despite decades of implications of tax compliance education in many countries, still the question of how it relate to tax revenue generation is not fully addressed in academic circles. The empirical literature proffers few studies that examined the relationship of tax compliance education and tax revenue generation (Abudul&Wang'Omta, 2018; Adegboye, Alao-Ownna&Eshareubu, 2018; Andrenalet, Evard& Feinstein, 2018; Chan, Troutman & O'Bryan, 2020; Nwaiwu, 2022). However, the findings of these studies are not consistent and have some limitations which encourage further investigation. See, Eviken&Fullah, 2016; Iite&Hasseldine, 2019) found out that tax compliance education significantly and positively relate to tax revenue generation in Nigeria, Kenya and Bangladesh, Nwaiwu (2021) opined that, despite that reforms undertaken in Nigeria, tax laws do not encourage taxpayers to comply. However, this empirical study did not assess the impact of tax compliance education on tax revenue generation in Nigeria.

Literature also show few empirical studies that the impact of tax compliance on tax revenue generation (James & Alley, 2014, Ahmad &Kedir, 2015; Le, 2016; Mehari, Abdulmgeub&Pashe, 2017; Oyedele, 2019; Tanzi& Zee, 2020). There empirical studies assess tax compliance education in terms of the taxpayer education, taxpayer service on tax revenue only and ignore technology adoption and law enforcement, on tax revenue which are also important variables in assessing tax compliance on tax revenue. However, these studies portray conflicting results, and some studies found that tax compliance improved tax revenue generation (Muhrtalel&Ogundeji, 2013; Feyifimi& Yusuf, 2014) while other empirical studies found that tax compliance failed to improve tax revenue generation (Kirillee, 2007; Liucija, 2013). Moreover, many studies have been conducted in developed countries and ignore many developing countries that also simplified their tax compliance laws. The findings of existing studies can not be applied effectively by developing countries, because of cultural, socio-economic as well as tax system differences. To fill this lacuna, this study explore empirical the relationship between tax compliance expenditure and tax revenue generation in Nigeria.

The remainder of this paper is organized as follows. Section II literature review pertaining to tax compliance and tax revenue generation section III the research procedure and methodology section iv presents the results and discussion of the econometric investigation. Section v concluding remarks, recommendation, limitation and suggestion for further studies

Review of Related Literature

Conceptual Framework

Tax Revenue Generation

Tax revenue is one of the major sources of revenue to government and for financing the government expenditures in term of programmes and infrastructural developments. Alaaray, Mohammed and Bastaman (2018), countries depend on revenue generated from taxes to fund and support government expenditures as highlighted in the annual budget. In both developed and developing economy, taxes are seen as a major sources of revenue and ranked high in developed countries like France, Norway, Untied Kingdom (UK), United State of Americans, Weden and others (Ofurum, Amaefule, Okonya and Amaefule, 2018). In a developed economy such as USA, report according to organization for Economic Cooperation and Development (OECD), 2017) stipulated that taxes accounted for 50 percent of all government revenues for the past decade while Ofurumetal., (2018), reported that in line with the USA revenue budget for 2018, taxes accounted for higher percentage of the revenue generated by the USA government as highlighted in the 2018 annual budget performance.

According to OECD (2017), taxes are essentials for nation's sustainable development and this can be achieved in many ways. Tax revenue reduces a country's dependence on foreign aids, a transparent tax system ensures transparency and accountability in government, which leads to nations building while a good tax system will drive inflow of foreign investment and trade relationship. A good tax system is a means for capacity building, economic management and social welfare that will enhance good relationship between the citizens and government (Chude&Chude, 2015; Eiya, Ilaboya& Okoye, 2016; Beale &Wyalt, 2017; Nwaiwu, 2022). Besides, due to the downturn in the economic worldwide, government in various countries are strategizing and putting machinery in place to reduce tax evasion increase taxpayers compliance (Jimenez &Iyer, 2016)

The term revenue generation all over the world of which Nigeria is not exempted is derived from tax and non-tax source. Dada, Adeboyo and Ogunmakin (2017), Nwaiwu and Ironkwe (2021) stated that revenue is a general term that encompasses all monetary receipts accrued both from the tax and non-taxes such as fees, fines, sale of government properties, grants and contributions etc as these constitute the live wire of any government. Meanwhile, Opoku (2015) defined tax as the compulsory levying on the public by the government through the relevant tax authorities having tax jurisdiction to exercise power to collect tax, to defray the cost of their activities. Olatunji Olaleye and Adesina (2021) defines tax “ as a system of imposing a compulsory levy on all incomes, goods, services, and properties of individuals, partnerships, trustees, executors and companies by the government. Tax is a certain percentage of money that you must pay to the government according to your income, property, goods which are used to cater for public service/demand and perform other social responsibilities, which, there is no direct return to the taxpayers for obliged other than the general benefit (Tilahun, 2018). Therefore, taxation is a compulsory level or transfer of resources from the private sector to the public sector or and levied based on the criterion and without reference to specific benefits to execute the nation's economic and social objectives (Dada, etal., 2017; Olaoye&Ekumdayo, 2019)

It is expected that the performance of any government in providing social amenities will improve with increase in tax compliance of the citizens. In developing countries all over the world, tax compliance has become a major challenge facing government and tax administrators as this affects revenue

performance and government incapability to performance and provide the essential development projects and programmes as expected by the citizenry (Alaaray, etal, 2018).

Nwaiwuand Ironkwe (2021), noted that tax non-compliance is a form of tax cheating by which the tax payer cheats and this should be a critical concern to government and other relevant stakeholders due to government's inefficiency and ineffectiveness in the discharge of electioneering promises. Despite the various measures and tax reform taken by the government and relevant stakeholders in Nigeria to enhance tax compliance, tax non-compliance still posed serious challenge to revenue generation which hinders management and efficient administration of the nation (Beal &Wayatt, 2017; Kira, 2017). In Nigeria, some researchers had expressed various factors responsible for tax payers compliance behaviour. Some of the relevant studies that had been conducted in the past in respect of tax compliance were public government quality with moderating variable of financial condition and risks performance.

Personal Income Tax

The issue of tax non-compliance cuts across all economies of the world. From developed economies with organized financial markets such as United kingdom, France, Germany, United State of America, Span, Italy, Japan down to developing (emerging) markets such as the Russia, India, Brazil, South Africa to other less developed (Frontier) markets such as Ethiopa, Ghana, Togo, Zimbabwe, Cameroun and Nigeria amongst other where financial activity is relatively low (Muhrtolal&Ogundeji, 2013; Dasilva, Gnerreiro& Flores, 2019). Tax compliance is the degree to which a tax payer complies with the tax rules of is country (Ahmed &Kedir, 2015). The payment of tax is an obligatory duty for all citizens as their civic responsibility, which they are expected to comply willingly with, but that is not the case with same citizens. The understanding of the factors that influence taxpayers' decision to comply with relevant tax laws is essential to the relevant tax authorities (Feyitimi& Yusuf, 2014). Tax compliance is described as the process of accomplishing the tax payers civic responsibility for tax payment and filing of tax returns including the provision of the required documents and the necessary explanations as required by the tax authority in a timely meaner (Onyedele, 2019).

Kirchler (2007) defines tax compliance as the ability of a taxpayer to report the actual income, claim deductions and pay the correct account of tax due to the tax officials at the appropriate time. The assurance of a high level of tax compliance is the heart of tax collection process advocated by the tax authorities. Some tax payers voluntarily comply with personal income tax laws while others do not comply. The effect of those that are not complying undermines equity and efficiency of the tax system by increasing the administrative costs (expenditure) and by unfairly shifting the tax burden on those who comply(Liucija, 2013). Tehulu and Dinbern (2014) defined tax non-compliance as "failure to comply with tax laws and report incorrect income, the act of claiming incorrect deductions and exemptions and/or paying incorrect amount of tax beyond the stipulated time frame. Tax non-compliance is socially destructive as it can reduce revenue, distorts labour market and the weakens the economic stability of a country thereby enhancing perception of cheating and fraud (Ahmed &Kedir, 2015, Dasilva, Guerreiro& Flores, 2019). Reducing non-compliance can be effective if the reasons for non-compliance by taxpayers are investigated, detected and addressed.

Adebisi and Gbegi (2013) andAlasfour (2019), defined personal income tax as " a compulsory levy on employment income and any other income received by individuals. Individuals here are those in paid employment and those in self-employment. The current law guiding the taxation of personal income in Nigeria is the personal income tax (Amendment) Act 2011. PIT is a levy charged on the income of individuals. Taxable person are required to file the returns of statutory income earned with the relevant tax authority where they are resident in the prescribed form from which they will be assessed

(government assessment) or the individual carries out the assessment on himself taking cognizance of his reliefs, computes the amount expected to be paid as tax based on the current rate, and goes ahead to make payments i.e self-assessment compliance is not just about filing returns and paying the tax, rather it is about filing the right returns and paying the right amount of tax, which was honestly disclosed and accurately computed.

Personal Income tax (PIT) is a tax that is imposed on individuals who are either in employment or are running their own small business under a business name or partnership (Samuel, 2021). Collection of personal income tax is a federal and states responsibility, this tax is generally collected by state governments from their respective states, irrespective of whom they are working with whether federal, state, local government, or private sector workers. The federal inland revenue service, however, also collect, personal income tax from resident of Abuja as well as what may be described as highly mobile federal workers – staff of the ministry of foreign affairs, non-residents, expatriate workers resident in Nigeria, police officers and military officers.

Tax Payer Education

The effort by tax authorities and the state in general to educate taxpayers is among the commonly applied initiatives meant to enhance delivery of services to the taxpayers. It believed that making service delivery better is crucial to promote voluntary compliance to tax requirements. Absence of willingness to comply with tax obligations induces income authorities to employ expensive and punitive approaches to enforce tax (Fjeldstad& Ranker, 2018). Therefore, education for taxpayers is a vital instrument formulated to make it possible and easy for the taxpayers to significantly comprehend the rules and regulations of taxation and processes. It concerns with training of specialized components within the income departments, provision of education, counselling and supporting of the tax paying agents. This is carried out through various forms of media that may include newspapers, televised programs, radio programs, websites, workshops, and customer care desks to help fundamentally distribute crucial information to the taxpayers (Siti, Normala& Sheik, 2017).

The influence of knowledge on compliance behaviors has been assessed in various researches. Knowledge as one of the factors in compliance is related to the taxpayers' ability to understand taxation laws, and their willingness to comply. The aspect of knowledge that relates to compliance is the general understanding about taxation regulations and information pertaining to the opportunity to evade tax (Kasipillai, Norhani& Noor, 2018). Taxation knowledge is necessary to increase public awareness especially in areas concerning taxation laws, the role of tax in national development, and especially to explain how and where the money collected is spent by the government (Mohd, 2019). Attitude towards tax compliance can be improved through the enhancement of taxation knowledge. When a taxpayer has a positive attitude towards tax, this will reduce his or her inclination to evade tax payment (Eriksen &Fallan, 2016). Self assessment system (SAS) requires taxpayers to understand all the laws and regulations that govern taxation. This is necessary because taxpayers will have to calculate themselves the amount of tax they need to pay and make the payment (Kasipillai, 2018).

Taxpayers will readily accept any new system introduced, like the SAS, if they have ample knowledge to understand the system. Thus, education programs organized by the tax authority or other public education institutions are needed to enhance taxpayers' ability to understand Self assessment system and to increase their confidence in fulfilling their responsibilities as taxpayers (Mohani, 2021).

Greater education is directly linked to a likelihood of compliance. Educated taxpayers may be aware of non compliance opportunities, but their potentially better understanding of the tax system and their

higher level of moral development promotes a more favorable taxpayer attitude and therefore greater compliance (Chan et. al. 2020). Chan et al., (2020) also suggested that those with a higher education level are more likely to have a higher level of moral development and higher level attitudes toward compliance and thus will tend to comply more. One of the measures to increase voluntary compliance is by assuring that taxpayers have a certain level of qualifications, ability and confidence to exercise their tax responsibility (Mohani, 2021). Taxpayers who have attended a tax course would be expected to have better tax knowledge and tax compliance attitude in comparison with taxpayers who have never attended a tax course (Mohad, 2020). Further, the study highlighted that tax authority need to emphasize teaching tax courses because of impact of education on compliance.

From the tax administration viewpoint, researchers have concluded that compliance could be influenced by educating taxpayers of their social responsibilities to pay and thus their intention would be to comply. As a behavior problem, tax compliance depends on the cooperation of the public. There are greater gains in assisting compliant taxpayers meet their fiscal obligations rather than spending more resources pursuing the minority of no-compliers. Assisting tax payers by improving the flow and quality of information or education them (e.g., TV campaigns) in to becoming more responsible citizens has the potential to yield greater revenue than if it were spent on enforcement activities. A theoretical economic model introduced by Allingham and Sandmo (2019) has clearly indicated that penalties as well as audit probability have an impact on tax compliance. The higher the penalty and the potential audit probability the greater discouragement for potential tax evasion.

Change theory is commonly applied to explain change of taxpayer behaviour, this believes that in the unlikely event that challenge relating to attitude prevails, there exist be adaptable elements contributing to the challenge. Examples of the adaptable elements include awareness, beliefs, intents, relational support, administrative and other environmental circumstances. The model believes that education is essential to facilitate change in the adaptable elements, and education for a taxpayer is meant to particularly to improve this attitude. This is achieved by changing the attitude of a taxpayer by influencing the manner in which he or she arrives at decision making (Gardiner, 2021). Education is believed to have a substantial progressive effect on the behavioural change of an individual. Ideally, a number of studies conducted with special emphasis to tax compliance, as pointed out in the empirical literature have put more emphasis on strategies aimed to achieve change of the taxpayer attitude in order to become more compliant with tax management regulations and procedures. Strategies including audits, preventive actions of penalties and fines together with implementation of quality service delivery mechanisms and greatly enhance tax revenues. A handful of studies have put more effort on how tax compliance behaviour is affected by one individual factor holding constant other influencing factors. The results from such studies indicate that there is a significant positive relationship between taxpayer education and the level of tax compliance (Kassipillai, 2018). Taxpayer education provides the necessary tax knowledge to comply with the tax matter and change the perceptions and attitudes towards tax compliance by creating more positive attitudes.

Various researchers have assessed the influence of knowledge on compliance behaviour. The aspect of education being a major factor substantially related to tax compliance influences the taxpayer's capability to perfectly comprehend laws governing the processes and procedures of taxation, and their willingness to comply. The concept of knowledge that greatly concerns itself with adherence to tax requirements is the overall awareness of the taxation rules and any know-how regarding the possibility of loopholes that can permit tax evasion (Kasipillai, Norhani& Noor, 2018). The know-how on Taxation is essential to boost the general public consciousness particularly in aspects that are concerned with rules and regulations for taxation, the core function of tax in the development of a country, and specifically to describe the mode and structure of expenditure of the revenue raised by

the government (Mohd, 2020). Advancement in the levels of tax education has the possibility of accelerating the change of taxpayer attitude and makes it easier and convenient for adherence to the regulations. If the general feeling of a tax paying agent towards compliance is positive, inclination to non-conformance drastically falls to the minimum. (Eriksen & Fallan, 2016). Self-assessment system (SAS) demands that taxpayers have an understanding of all the rules and procedures that control the management of the taxation system. This will be indispensable to the taxpayers because it will enable them to individually determine their tax liability and make necessary arrangements to pay with the highest degree of convenience. (Kasipillai, 2003).

Potential taxpayers will be ready to accommodate new systems that are brought on board, such as the SAS, only when they have adequate information that will facilitate their understanding of the system. Therefore, training modalities developed by the tax agency or any other public institutions of learning are required to promote the ability of the taxpayer to have an understanding of self-assessment systems and to boost their trust in performing their obligations as taxpayers (Mohani, 2021).

Tax Law Enforcement

Enforcement in administration of taxes plays crucial role in enhancing tax compliance. Enforcement task involves the use of myriad of tools in ensuring tax compliance. The essence of enforcement is to ensure strict adherence to various tax compliance ranging from timely filing, accurate filing, to payment of tax liability s at when due. Primarily, enforcement is not for tax defaulters alone who falls in their tax responsibilities but to consistent filers to encourage continuous compliance (Ibrahim, 2016).

Tax compliance mechanisms may take various forms depending on tax authorities. In modern day, more than often, compliance tools may include levies, search and seizures of defaulting tax payers, fines, seeking and obtaining information from third parties like banks and court actions. Tax enforcement ordinarily refers to an act of ensuring that taxpayer comply with tax law or rules. Enforcement with tax administration takes two forms namely; enforcement of tax laws and enforcement of judgment. There is enforcement of tax which is the application of all those relevant laws that will assist the tax authorities in carrying out their duties, not laws necessarily relating to the taxation but are relevant to the enforcement of tax laws.

(Nwaiwu, 2022). Enforcement of judgment on the other hand represent already decided court case against defaulted tax payment (Macharia, 2014). In Nigeria tax system, tax administration may not be efficient without tax enforcement because of the sharp practices among larger percentage of taxpayer.

Marziana, Mohamad, Narkhazimah and Mohmad (2020) affirmed tax compliance is the level at which a taxpayer complies or default the tax rules of their country. One of the primary objectives of an effective tax administration in any country is to attain the degree tax compliance best capable of reducing tax gap while maximizing tax revenue to top most Roth, Schaltz and Witte (2019) reiterated that compliance with reporting requirement signified that the taxpayer filed all required tax returns timely and that the returns correctly report tax liability in line with the internal revenue code, tax laws and possibility court decisions if any, applicable at the time the return is filed. This demarcates clearly the line between tax compliance and non-compliance.

A taxpayer may unintentionally fail to adhere to tax rules while filing his tax form/returns, or better still deliberately decided to pervade tax rule to suppress his tax liabilities even right from the onset. The outcomes are the same whether an honest or dishonest mistake is made. Underreporting or over reporting may result. Theory submitted that tax evasion is the deliberate act of non compliance with

the tax law with the aim of reducing tax liability. Better still, failure to comply with tax reporting requirements could be as a result of mistakes, negligence, and misinformation or misunderstanding, or all.

Credible enforcement is an integral part of any compliance strategy as it acts not only to deter tax evasion but also to remind taxpayers that the tax collector is working to sustain a fair system of tax by making it possible for every taxpayer to honor their tax liabilities fairly. Efficient tax management often starts with the requirements that are in practice. The law signifies and shapes the structure of the situation or circumstances within which a tax authority works and it is from this environment that we determine the uncertainties related to tax compliance that have a close link with the management of the tax law. The fundamental task for any effective revenue collection body is to manage the law in such a way as to ensure that overall community trust in their administration is sustained.

It is recommended that the state pursues alternative measures in its quest to improve on the level of tax efficiency and effectiveness (Alm et al., 2020). Therefore, the administration of coercive measures such as fines and other non-compliance costs should be encouraged to minimize further delayed payment of the tax liabilities. It therefore follows that tax audits by tax management agencies should be considered necessary and compulsory, specifically when non-compliance is detected or suspected to have been committed by the tax paying entity be ignorantly or intentionally. The concept non-compliance has always been emphasized by the policy changes geared to punish, such as the regular tax audits and percentage fines.

From the perspective of tax management, compliance may largely be determined or enhanced by enlightening taxpayers and other stakeholders that it is their public duty to pay tax and consequently, their intentions to comply will greatly be boosted. Being a behavioral initiative, compliance to tax liabilities and the associated regulations, relies to a greater extent the overall support of the general public. Greater benefits are reaped when compliant taxpayers are assisted and enabled to achieve their fiscal obligations instead of an authority spending extra resources to pursue a smaller proportion of the population that fail either voluntarily or involuntarily to comply. By helping tax payers through improved flow and quality of information or educating them (e.g., TV campaigns) as a way of making them become more accountable citizens has the ability to trigger greater yields in terms of revenue than if it were spent on enforcement activities.

Allingham and Sandmo (2012) developed a theoretical economic model that essentially proposes that fines, penalties as well as fraud detection possibilities always have a direct influence on taxpayer compliance. It is believed by this model that the greater and punitive the penalty is and the greater the possibility to detect fraud, the higher the level of discouragement to tax evasion behaviors. When heavy costs are imposed on any detected attempt to evade tax, it becomes more expensive for the errant taxpayers and has a greater impact of deterring them from any future attempts of evasion. Empirically, the preventive impact of penalties and fines could not always be supported. The manifestation of this situation is the fact that the negative effects witnessed are weaker than expected and some studies even assert that increased penalties may have disagreeable impact and may lead to greater incidences and preference by taxpayers to evade tax.

(Kirchler et al., 2017). Alm et al., (2020) in their findings and submissions support the position that costs of tax avoidance greatly affect tax compliance although the experienced impact was nearly insignificant. However, Friedland et al., (2018) proposes that tax compliance is highly influenced by the severity of associated costs such as fines and penalties than as opposed to detection possibilities. The most extreme penalties will have no effect, if it is common knowledge that audits virtually do not

occur. The increasing tax avoidance and tax resistance due to an increase of fines puts into question how fines should be assessed to be effective. On the one hand fines should be high enough to decrease the expected value of tax evasion and to assure its deterrent effect on tax payers. On the other hand, if fines are too high, the tax system would be perceived as unjust and unfair and taxpayers would use any possibility to legally avoid taxes.

The observations above suggest that authority should treat citizens fairly and respectfully, listening to them and providing clear explanations for different actions. Treatment must also be even-handed and consistent: the perception that one group has been dealt with more or less favorably than another will rapidly undermine trust (Siti, Normala, Sheik & Obid, 2017). The perception that authority is trustworthy (or untrustworthy) has also been shown to be a function of whether the agency trusts (or distrusts) those from whom they are demanding cooperation and compliance. If those to be regulated are treated as trustworthy, they will be more likely to repay this respect by voluntary compliance with ethical requirements. A basic conclusion is that the behaviour of the revenue authority should be considered as a part of the overall treatment strategy for influencing taxpayer behaviour. Each encounter with a taxpayer provides an opportunity for the agency to strengthen the loyalty and support of members of the public. Trust is a resource like no other; it is not depleted through use but rather through lack of use.

Empirical Review

Jackson and Fred (2022) studied effect of taxpayer education and law enforcement strategies on the level of tax revenue in Kenya. This empirical study sought to establish the effect of taxpayer education on government tax revenue in Kenya. The study is pegged on the fiscal regulatory compliance theory. Revenue data between 1980-2020 were used in the study. Ordinary least square technique (OLS) were employed to establish the long run effect of expenditure on taxpayer education and law enforcement on government tax revenues. The effect of variables were established through analysis and regression analysis. The results indicated a positive and significant effect of tax enforcement strategy on tax revenue in Kenya. The study concluded that taxpayer education strategy and law enforcement strategy affected tax revenue in a positive and significant way. The study recommended that government should continue providing taxpayer education. Further, the government should continue to up its tax compliance enforcement efforts.

Oluyombo and Olayinka (2022) Study tax compliance and government revenue growth in Nigeria. The study examines the effects of tax compliance on the growth of government revenue in Nigeria with emphasis on federally collected non-oil revenue. Secondary data were sourced from the Federal Inland Revenue Service Management Bulletin. The data were analyzed using ordinary least square regression. The findings revealed that tax compliance have significant effect on boosting tax revenue generation and that tax default can cause significant variation in government revenue. The variables in the model is significant at the 5% critical level and the regression coefficient reveals that 88.8% of the total variation in revenue is accounted for by tax compliance with other variables in the stochastic term accounting for their remaining 11.2%. It is recommended that Federal Inland Revenue service should open more offices across the federation to increase the case of paying taxes, set performance targets for managers of tax offices and sanction for non-performance, improve on leadership accountability at all levels of government and ensure that tax revenue is transparently utilized so that taxpayers can see the benefits accruable from tax payment and take ownership of public infrastructures.

Abata (2022). Investigate the impact of tax revenue using questionnaire administered on one hundred staff of federal Board of Inland Revenue in LagosState to determine the effect of tax evasion on Nigeria economy, the relationship between tax policies and social development, and the effect of incompetent tax officials on Nigeria economy. Chi-square tests were used in analyzing data. The study found that tax avoidance is due to low level of income while failure to pay tax is because people don't feel the impact of doing so. The implementation of government budget is usually not successful in Nigeria because of ineffective tax administrative system, while training and development of tax officials in Nigeria because of ineffective tax administrative system, while training and development of tax officials does not significantly affect the generation of tax revenue in Nigeria. The study recommended that notice of tax returns should be supported with hand bills in local languages such as Yoruba, Hausa, Igbo, and other languages as this will enable illiterates perform their civil responsibilities.

Onafowokam and Olalekan (2022) conducted empirical study on tax compliance and government revenue growth in Nigeria. The study examine the tax compliance on growth of government revenue in Nigeria with emphasis on federally collected non-oil revenue secondary data was sourced from the federal inland revenue service management bulletin. The data were analyzed using ordinary least square regression. The findings revealed that tax compliance have significant effect on boosting tax revenue generation and that tax default can cause significant variation in government revenue. The variables in the model is significant at the 5% critical level and the regression coefficient reveals that 88.8% of the total variation in revenue is accounted for by tax compliance with other variables in the stochastic term accounting for the remaining 11.2%. it is recommended that federal inland revenue service should open more offices across the federation to increase the ease of paying taxes, set performance targets for managers of tax offices and sanction for non-performance, improve on leadership accountability at all levels of government and ensure that tax revenue is transparently utilized so that taxpayers can see the benefits accruable from tax payment and take ownership of public infrastructures.

Operational Measurement of Variable

The technical concepts among the study variables are measure operationally for analytical convenience under this subheading. The study will employ proxies in the literature to measure the criterion variable (tax revenue generation) as personal income tax, companies income tax. These dependent variables depict the adjustments that exist in tax revenue generation due to tax compliance expenditure. It was also employed in some empirical studies (Aladejebi, 2018). Similarly, the explanatory variable (tax compliance expenditure) which is discussed with its dimensions as taxpayer education and tax law enforcement, (Mbilla, Abiire, Atindaara, Ayimpoya, (2020).

Theoretical Framework

Fiscal Exchange Theory

The proponents of the fiscal exchange theory assert that the occurrence of expenditures by the government a recipe to encourage greater adherence to tax obligations and that state can enhance voluntary submission by availing amenities that people favor in a highly effective and manageable fashion (Cowell & Gordon 1988; Levi 1988; Tilly 1992; Moore 2004; 1998). Alm et al., (1992) noted that tax compliance rises with (perceptions of) the abundance of goods and services of public interest. Accordingly, taxpayers majorly look at the direct benefit for using their resources to pay tax; this may be through provision of public goods and services (quid pro quo). This model interprets the process of taxation and the provision of goods and services of public interest in the form of a contractual connection that binds the government through its tax management authority and the tax paying agents

(Moore 2004). Citizens of a country and organizations may voluntarily honor their tax obligations because they appreciate the benefits of the amenities availed by the state, they recognize that their tax remittances are significant by either helping to fund provision of public utilities that include goods and services or by motivating other citizens to voluntarily participate in tax payment (Fjeldstad&Semboja, 2001).

The anticipated progressive rewards or incentives are likely to enhance the possibility of voluntary compliance by the taxpayers; this will be with minimal or zero coercion. Irrespective of the fact that a number of taxpayers may not be able to determine the actual benefit of the provisions by the government as rewards for their tax payment commitment, it is possible to be able to argue that taxpayers elicit overall impressions and feelings with respect to their own and others' improved conditions of exchange with their state (Richupan,1987). Therefore, it is significant to have a general assumption that taxpayer attitude towards tax compliance is influenced by his/her fulfillment or failure to achieve fulfillment with regard to his/her conditions of interaction with the state. Finally, when the regime of taxation is seen as being unfair and unjust, fraud may, at least partly, be viewed as a concerted effort by the tax paying agent to alter his conditions or preference to transact with the government. This fiscal exchange principle has attracted great interest as a center of focus and is satisfactorily developed theoretically. Empirical prove necessary to authenticate the theory is, however, unclear (D'Arcy 2011).

In conclusion, this model proposes that, attitudes of the members of any civilization are always influenced by existence of fixed elements that bear their origin from particular environments and stream from a well-established and structured manner. The tendency to fulfill a certain behavior will always depend on the fact that the individual has a purpose towards that behavior (behavioral intention).This intention or objective on its part is dependent upon on three fundamental conditions: the attitude of the individual towards the behavior, subjective values and perceived behavioral control. The three elements too are said to be influenced by behavioral beliefs, normative beliefs and control beliefs. The fiscal exchange model thus, bases its subject matter on the morals, beliefs and ethical inclinations of the taxpayer. Accordingly, this theory asserts that an individual intending to pay taxes may voluntarily comply even when the possibility by the tax authority to detect is low. On the contrast, economic theories put extreme emphasis on enhanced audits and punishments as alternatives to non-compliance, the fiscal exchange models greatly focus in altering tax payer perceptions and attitudes with regard to a tax regime.

Model Specification

This study employed the investigative research process. It will be reinforced with three fundamental models arising from theoretical constructs. This study employed personal income tax as a proxy for government tax revenue collection. Accordingly, the empirical model is formulated in a functional form as follows;

$$PIT_{it} = f (TEDU_{it}, TLE_{it}) \tag{1}$$

For estimation purposes, equations 3.1 is re-written as follows to accommodate the estimation parameters;

$$PIT_t = \alpha_0 + \alpha_1TEDU_t+ \alpha_2TLE_{it} + \mu_t \tag{2}$$

Where:

- TLE_{it} = Tax Law Enforcement 'i' for the period of time 't'
- α_0 = Constant 'i' for the period of time 't'
- $\alpha_1 - \alpha_2$ = Regression in slope 'i' for the period of time 't'
- PIT = Personal Income Tax 'i' for the period of time 't'
- TEDU = Tax Payer Education 'i' for the period of time 't'

Methods of Data Analysis

The data analysis is performed with the aid of descriptive statistics techniques and ordinary least regression analysis to ascertain the relationship between the variables as expressed by the hypotheses. Other diagnostic test were conducted to establish validity, such include descriptive statistics and error correction model.

Results and Discussion

Error Correction Model Estimation for Model 1: Personal income tax (PIT)

The results of error correction estimation for Personal Income Tax (PIT) model one is shown in table 8 below:

Table 1: Results of Error Correction Estimation for Personal income tax (Model 1):

Error Correction Model

Dependent Variable: D(PIT)

Date: 11/01/23Time: 11:59

Sample (adjusted): 1983 2021

Included observations: 39 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	140.2799	12.98535	10.80294	0.0000
D(TEDU)	-2.706120	2.093533	-1.292609	0.2067
D(TEDU-1)	-11.28522	2.396129	-4.709771	0.0001
D(LEMF)	3.374303	11.10025	3.039843	0.0051
D(LEMF-1)	-0.264312	0.182076	-1.451654	0.1586
D(TCAD)	9.157880	4.992558	1.834306	0.0773
D(TCAD-1)	-10.49090	6.225922	-1.685035	0.1039
D(TPSV)	0.307619	1.162791	0.264552	0.7933
D(TPSV-1)	0.385722	1.374768	0.280572	0.7813
D(LPS)	3.858007	0.539441	7.151867	0.0000
D(LPS-1)	2.378865	0.635797	3.741548	0.0009
ECM(-1)	-0.918624	0.094914	-9.678512	0.0000
R-squared	0.860203	Mean dependent var		16962.94

Adjusted R-squared	0.830246	S.D. dependent var	17319.52
S.E. of regression	7135.844	Akaike info criterion	20.76051
Sum squared resid	1.43E+09	Schwarz criterion	21.07157
Log likelihood	-356.3088	Hannan-Quinn criter.	20.86789
F-statistic	28.71505	Durbin-Watson stat	1.965226
Prob(F-statistic)	0.000000		

Hypotheses Testing

This section proceeds to evaluate the employed hypotheses of the study. The tests rely on the minimum significance level of 0.05 previously stated as basis for decision. To facilitate hypotheses testing, all the study null and alternate hypotheses are restated for the purpose of clarity and ascertainment of the null/alternate hypotheses to be rejected or accepted on case-by-case basis as follows;

Test of Hypothesis One

H₀₁: Tax payer education does not significantly relate with personal income tax in Nigeria.

H_{A1}: Tax payer education significantly relate with personal income tax in Nigeria.

Using the results of error correction model (ECM) in table 8, it is observed that while the t-value of current year tax payer education is insignificant at 0.2067 level, the t-value for its one-year lagged value is significant at 0.0001 level. This implies that TEDU becomes of significant influence on Personal income tax after one year. In this sense, since the t-value of tax payer education at lag one (TEDU-1) is significant at 0.0001 level, which is higher than the 0.05 stipulated minimum significance level, we therefore reject the null hypothesis and accept the alternate. In the light of this circumstance, we conclude that tax payer education significantly relate to Personal income tax with one year lag as an indicator of government tax revenue collection. This finding is in conformity with Onuoha, Ishola and Godwin (2019), Akintoye and Azubike (2020) who empirically identified that taxpayer education enhanced personal income tax in Nigeria.

Test of Hypothesis Two

H₀₂: There is no statistically valuable relationship that prevails between tax law enforcement and personal income tax in Nigeria.

H_{A2}: There is a statistically valuable relationship that prevails between tax law enforcement and personal income tax in Nigeria.

From Table 1, the error correction estimation shows that law enforcement (LEMF) at current and one year lagged levels display t-value of 3.039843 and -1.451654 with significance levels of 0.0051 and 0.1586 respectively. Since the current year t-value is significant at a higher level than the minimum acceptance level of 0.05, we therefore reject the null hypothesis and accept the alternate for law enforcement as it significantly relates to Personal income tax in terms of its current values. In all, we conclude that there is a statistically valuable relationship which prevails between law enforcement and personal income tax in Nigeria as a government tax revenue collection proxy. The finding lent credence to the standpoint of Edori and Idatoru (2017), Abdullateef (2018) Nwaiwu (2022) who found that tax law enforcement significantly relate to personal income tax in Nigeria.

Conclusion and Recommendations

In conclusion, the results of the three models assessing Personal Income Tax (PIT), provide valuable insights into the complex dynamics of tax revenue generation in Nigeria. The implications of these findings have several practical implications for policymakers, financial institutions, and other stakeholders. The negative sensitivity of Personal Income Tax (PIT) to changes in tax payer education, despite expectations, suggests a need for a more nuanced understanding of how education efforts influence individual tax compliance. On the contrary, the positive and significant influence of tax payer education on personal income tax emphasizes the importance of educational initiatives in promoting corporate tax compliance.

The positive influence of tax law enforcement on PIT indicates that legal measures play a crucial role in providing reliable compliance expenditure for tax revenue. The lack of significant impact on Personal Income Tax (PIT) raises questions about the effectiveness of tax law enforcement measures in influencing this specific tax type. Policymakers should consider the unique characteristics of each tax type and implement targeted strategies to enhance compliance, strengthen legal frameworks, and address challenges in tax administration and payer services. Additionally, continuous monitoring and evaluation of these factors are crucial for adapting tax policies to the evolving economic landscape.

In light of the dynamic nature of tax compliance factors, policymakers should establish mechanisms for continuous monitoring and evaluation. Regular assessments of the effectiveness of implemented policies and the identification of emerging challenges will enable timely adjustments and improvements in tax administration.

From the results of Error Correction estimations for personal income tax (PIT) model 1, it can be observed that after adjusting for short-run distortions, variations in the study's explanatory variables jointly explain 86.02% of variations in Personal income tax (PIT). The ECM has the expected negative sign and its associated F-statistic value of 28.71505 is significant. It confirms a good line of fit. Further, the Durbin-Watson statistic of 1.965226 is within the acceptable range. The absolute value of the ECM is 91.86%. This implies that 91.86% of the disequilibrium in Nigeria's Personal income tax is offset by short-run adjustments in the study's explanatory (predictor) variables yearly. The ECM value of 91.86% is also associated with a probability value of 0.0000, which is statistically significant at the 0.05 level. The results indicate that in the long run, lagged values of tax payer education, current values of law enforcement as well as both the current and lagged values of Taxpayer Education have significant influences on personal income tax (PIT) as a proxy for government tax revenue collection.

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