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TAX LEAKAGES AND TAX REVENUE: EVIDENCE FROM RIVERS STATE INTERNAL REVENUE SERVICE PORT HARCOURT (2009 – 2018)

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K E Y W O R D S

Tax avoidance, Tax evasion and Revenue generation.

A B S T R A C T

This study evaluate "Tax Leakages and Tax Revenue; Evidence from Rivers State Internal Revenue Service Port Harcourt (2009-2018) was carried out using time series data from Rivers State Board of Internal Revenue. Descriptive research design was adopted for the study. While regression was used for data analysis further subjected to E-views. The result of the findings revealed a positive relationship between tax leakages and revenue and significantly related with tax revenue of company income tax. The leakage also has effect on the company income tax. The tax avoidance and evasion has no significant relationship with tax revenue of company income tax. The study concludes that the policy implication was to reduce tax leakages. However, tax evasion and avoidance was significantly related to tax revenue of company income tax. Therefore, recommend among others, that government should promote high rate of tax compliance to fight against tax leakages and tax evasion for economic benefit of Rivers State; should review the tax system, to implement strict and severe penalties on tax evaders. Also, that expert be engaged in tax matters 9audit) to be able to detect non-compliant and leakages in the system. Tax payers need to be given incentives as motivation for payments of taxes.

Introduction

The essence of tax and revenue generation by government is to advance the welfare of citizens of a nation with focus on promoting economic growth and development through the provision of development activities. Economic and social objective of the state is to put in place on effective tax system which should be relevant to the economic growth of a nation (Kiabel, 2009). Kiabel (2009) added that this proposition has a truth in it, since it is useless to have a tax system which cannot be levied and collected efficiently. Tax leakages refer to losses of revenue through the multitude of loopholes that riddle the financial system.

The main function of a tax system is to increase revenue sufficiently to fund essential expenditures on goods and services provided by the government; and tax remains one of the best instrument to increase the public sector's performance potential and the repayment of public debt, as reported by Okoye and Raymond, (2014). However, one of the biggest problems in Nigerian tax system is the threat in the form of tax evasion. Tax evasion is the active means by which tax payers seek to reduce or totally eliminate their rights, fiscal obligation under the provisions of the tax law Igbasan (2017) Alm and Martinez (2001). Sikka and Hampton (2005) stated that tax evasion was one of the main social problems preventing developing countries and the erosion of social protection in developed economies and this has led to increasing attention from policy makers, western countries, international agencies and academics. Azubike (2009) a tax system is a real tool that mobilizes a country's domestic resources and creates an environment conducive to promoting economic growth. As a result, taxation plays an important role in helping a country to meet its needs and promote self-sufficiency. The tax is the transfer of resources from the private sector to the public sector. The first argument is the function of a sufficient lifting of tax revenues to find essential expenditure provided by the goods and services of a tax, and remains one of the best performance drivers and strengthen the potential of the public sector (Okoye & Raymond, 2014). The Rivers State Board of Internal Revenue Service was formed in 1993 under the board of Internal Revenue Law 1993 (No.3). It is a government agency entrusted to assess, collect and account for all taxes, fees and levies in Rivers State, Nigeria. It is involved in the formation of tax policy as well as the supervision of revenue collection due to the state. Reynoids (1963) as cited in Adedeji and Oboh (2012) suggested that tax as a principal source of government revenue, and it requires strict and close monitoring to achieve maximum compliance. The aims was to investigate the effect of tax leakages and tax revenue, ascertain company's income tax avoidance on the revenue and evaluate the relationship between tax leakages and revenue generation from company income tax. The bane of the operation of the Rivers State Board of Internal Revenue is associated with various tax leakages and mismanagement of tax revenue (Eboziegbe, 2007). Although, However, if Nigeria must attain its ambition of becoming one of the most rapidly developing economy of the world by 2020, an efficient and robust tax system is a must (Salami, 2011).

Statement of the Problem

Although the tax system in the state has undergone several reforms geared toward enhancing tax collection, increasing revenue generation and eliminating leakages with minimal enforcement cost, some of the major setback faced by the state tax administration includes, lack of voluntary compliance, inefficiency of the tax administrations, low educational level of the population, the structure of the countries tax system, inflation, corruption in public office and lack of accountability among others. It has been a major impediment to revenue generation in the state, where tax evasion and avoidance are now prevalent (Ezeola and Ogamba, 2010). Some of the major tax reforms put in place by the government in addressing the problems of tax administration, lack of accountability, low data base, illiteracy on the part of the tax payers etc. are among issues confronting the generation of tax revenue. However, none of these researches focus on the dimensions of tax leakages as introduced by the present researcher. Revenue generated through tax is a major source of government revenue all over the world. A critical challenge of tax administration in the 21st century is how to advance the frontiers of professionalism, accountability and awareness of the general public on the imperatives and benefits of taxation in our society (Odusola, 2006). Hence, several measures to stop tax leakages haven been put in place in the state board of internal revenue, which include e-payment, automation of the service for easy assessment and tax identification number.

Having considered all of these abnormalities and passive gap in literature, the researcher is inspired to investigate tax leakages and its effect on tax revenue evidence from Rivers State Board of Internal Revenue period under review (2009 – 2018).

Scope of the Study

The study focus the dimension of tax leakages, which is companies' income tax and revenue within this period; 2009 – 2018.

The other tax area of tax policy and administration will remain silent in this study as they are out of the scope of this study.

Significance of the Study

The study would be of benefit to tax practitioner who are charged with the mandate of making sure that payers of revenue are not careless in redeeming their revenue. It would aid in understanding the reason that makes revenue less than expected. The result of this study would help to improve the knowledge of the reason behind revenue payers, avoiding revenue payment.

It will equally shed light on the causal link between tax revenue leakages and other revenue sources available. The reasons for this is to systematically advance the frontiers of knowledge in the area of revenue generation.

Review of Related Literature

Conceptual Review

Tax serves several purposes and is vital for the country's economic progress, sustenance and development. While the tax money is utilised for fulfilling various projects, it is expedient that the money be accounted for and utilize judiciously. The Organisation for Economic Co-operation and Development (OECD) working definition of a tax is a compulsory unrequited payment to the government.

Tax leakage refers to losses of revenue through the multitude of loopholes that riddle the financial system. For example, if a country hikes a particular tax, then people will scramble to shuffle round their assets and income in order to avoid it. Or they may simply move them offshore, meaning Government revenue will leak away. It is an outflow of capital or income from a circular flow of income model. Also, as losses of revenue through the multitude of loopholes that riddle the financial system. It occurs when income is removed by taxes, saving and income Hariharan (2009) cited in Murphy (2011). The factor responsible for the practices of Tax leakages in Rivers State as well as Nigeria as a whole are quite enormous. For instance a hike in particular tax will make tax payer scramble to shuffle round their assets and income in order to avoid it or payers may simply move their asset generating revenue to area of tax haven. According to Kiabel & Nwokah (2009), corruption is the most alarming factor that promote practices of tax leakages in Nigeria. Other factor that is responsible to tax leakage according to Onyewuchi & Njemanze (2016) include mismanagement of tax fund, illiteracy level of tax payers, low standard of living, leakages happens when business tried to evade and avoid paying tax on taxable income or choose to take money out of the closed circle etc.

Tax Evasion and Tax Avoidance

The concept of tax evasion and avoidance usually being referred to as "Twin devils" (Kiabel and Nwokah, 2009) have been extensively discussed by quite a number of tax experts and academic scholars. According to Soyode and Kajola (2006), tax evasion is defined as a deliberate and willful practice of not disclosing full taxable income in order to pay less tax. It is a deliberate violation of tax laws and it is evident in situations where tax liability is fraudulently reduced or false claims are filled on the revenue tax form (Farayola, 1987; Ayua, 1999; Soyode and Kajola, 2006). On the other hand, Kay (1980) opined that tax avoidance takes place when facts of the transaction are admitted but they have been arranged or presented in such a way that the resulting tax treatment differs from that intended by the relevant legislation. In essence, tax evasion is illegal while tax avoidance is not illegal under the ambience of the law (Soyode and Kajola, 2006). Sikka and Hampton (2005) stated that tax evasion is one of the major social problems inhibiting development in developing countries and eroding the existing welfare state in developed economies in the world, and this has led to a growing attention among policy makers, western countries, international agencies and scholars. As observed by Sosanya (1981), tax evasion has become the favorite crime of Nigerians, so popular that it makes armed robbery seem like minority interest. And despite government efforts, the problem of tax evasion and avoidance still persists (Alabi, 2001). Also, Eboziegbe (2007) noted that this unlawful practice of tax evasion remains a serious threat to revenue generation efforts of government. According to Nwachukwu (2006) tax evasion is the general term for efforts by individuals, firms, trusts and other entities to evade taxes by illegal means. Tax evasion usually entails taxpayers deliberately misrepresenting or concealing the true state of their affairs to the tax authorities to reduce their tax liability. It also includes, in particular, dishonest tax reporting such as declaring less income. The Nigeria tax system has undergone significant change overtimes. Despite these improvements, in tax laws are they far from solving problems associated with tax leakages and tax revenue. Government in history place emphasis on how to raise revenue and increased revenue in order to fund government activities and programmes. The success of any government depends largely on the availability and sources of fund. Thus; literature to this study in tax leakages and tax revenue; evidence from Rivers State Internal Revenue Service covering the period 2009-2013. This is considered under the following sub-heading; conceptual framework, theoretical literature, empirical evidence and evidence and evaluation of literature reviewed.

Causes of Tax Evasion in Nigeria

Tax evasion according to Angahar and Alfred (2012) is an outright dishonest action whereby the taxpayer endeavours to reduce his tax liability through the use of illegal means. Tax evasion is accomplished by deliberate act of omission or commission which constitutes criminal acts under the tax laws. These acts include: failure to pay tax e.g. withholding tax, failure to submit returns, omission of items from returns, claiming relief (in Personal Income Tax), for example, of children that do not exist, understating income, documenting fictitious transactions, overstating expenses, failure to answer queries (Fagbani, Uadiale and Noah, 2010). However, different factors have been identified to be responsible for the practice of tax evasion in Nigeria. Although, the causes of tax evasion are universal, as they are applicable in any country that tax is imposed, some are peculiar to different areas (Uadiale, et al., 2010). In Nigeria some of these causes as identified by Onuigbo (1986) cited in Sani (2005) include: inequitable distribution of amenities, misuse or mismanagement of tax revenue, remoteness of taxpayers from the government, absence of spirit of civic responsibility. Other factors include; lack of tax education and enlightenment, corruption in public office and lack of accountability among others, inadequate accounting records maintained by traders, mistaken belief on the part of some illiterate taxpayers that only wages and salaries represent taxable income.

Effects of Tax Evasion and Avoidance

Tax evasion and avoidance indubitably have adversely affected government revenue generation and the economy as a whole. However despite the government efforts to curb the practices of tax leakages in Nigeria, the problem of tax evasion and avoidance still persists (Alabi, 2001). There is no doubt that revenue due any government will be reduced by the unpatriotic act of tax evaders. Also, tax avoidance generates investment distortion in the form of the purchase of assets exempted from tax or undervalued for tax purposes. And as observed by Asada (2005), the taxpayer indulges in evasion by resorting to various practices. These practices erode moral values and build up inflationary pressures. Also, the government will not have sufficient funds in executing its plans and agenda for the nation (Eboziegbe, 2007) since taxation is one of the major sources of government funds and which is being paralyzed by the menace of tax leakages in the form of tax evasion and avoidance. Also, tax evasion is one of the major social problems inhibiting development in developing countries and eroding the existing welfare state in developed economies in the world. (Rivers State Nigeria not an exception of the ill of tax leakages.

Tax Revenue

Tax revenue is a major source of fund for any government and the availability of fund is a very crucial aspect of running a state. Although several options according to Soyode and Kajola (2006) are available to governments for raising fund, tax revenue remains the principal source. Hassan (2001) defined revenue as tools, taxes, royalties, fines, rents, confiscations, royalties and other government revenue from all sources owned by the legislature, including borrowed resources. Under subsection 160 (9) of the 1989 Federal Constitution and subsections 5 and 162 (10) of the 1999 Constitution, income means any income accrued or derived from the government, or any property belonging to a government, any interest loans and dividends relating to shares or interests held by the government, a company or statutory body, fortuitous sources from a specific environment, permissive sources of normal operations and statutory sources recognized by the Nigerian Constitution. To generate revenue successfully, revenue control is implemented to ensure timely collection of government revenue and to ensure that the amount owed is actually collected as follows, while ensuring that the revenues generated go to the government coffers (Alao & Alao, 2013).

Theoretical Review

Risk management Theory

The Organization for Economic Cooperation and Development (OECD, 2012), developed the risk management approach to tax administration. The European Commission's (2006), described risk management as taking deliberate action to improve the odds of good outcomes and reducing odds of bad outcomes. Risk managements evolve from the concept of uncertainty and possibility of loss occasioned by the degree of vulnerability, magnitude and frequency. It focuses on why tax payers behave in a particular way. An understanding of the reasoning behind a planned behaviour will enable tax authorities to choose the best strategy to treat such behaviour.

Furthermore, Risk management will equally mitigate occurrence of poor performance on the part of tax authorities, a porous, corrupt and inefficient system will automatically lead to deluge of non-compliance resulting in revenue loss.

Most of these theories however, focus on the tax payers as the author and finisher of low tax revenue income, without paying due attention to the performance and administrative capabilities of tax administrators to encourage voluntary compliance and discourage non- compliance. Therefore this study builds on the responsive regulation to proffer solutions to inefficient tax administration that result into abysmal low tax revenue income. This study is cursory evaluation of the value of efficient and effective tax administrative system in generating greater revenue from tax sources.

Given the fact that the performance evaluation of the tax administration or authorities has received lesser attention over the years, this study therefore examines the efficiency and effectiveness of tax authorities and to what extent total tax compliance and payments can boost the revenue accruable to the Federal Republic of Nigeria.

Responsive Regulation Theory

Responsive regulation theory in modem tax administration connotes the establishment and implementation of regulatory framework capable of influencing the whole body of tax community's commitment to voluntary tax payment through respectful treatment, identifying non-compliant behaviour, reforming faulty processes and fairly but firmly directing disapproval of non-compliant behaviour while recognizing the limitations and peculiarity of individual firm or organization. Paying taxes is contestable in terms of the amount, method of collection, modalities of enforcement and how well it serves the general public interest (Braithwaite, 2007). Responsive regulation entails responsive measures put in place by tax administrators capable of responding to various needs of those they regulate with a view to removing impediments to paying their taxes as at when due. (Braithwaite 2003). The reasoning is that democratic governments do not need coercion for tax community to buy-in the policies and regulatory provisions of tax administration. According to Braithwaite (2003), responsive regulation requires five critical elements for its effective implementation, these are:

i. Influencing the flow of events
ii. Systematic, fairly directed and fully explained disapproval
iii. Respectful treatment of regulations, assist in filling information gaps and attentive to dissenting opinions or arguments
iv. Fair and firm implementation of sanctions as necessary
v. Strategies that will escalate in intensity proportionately to the absence of genuine efforts by regulates to comply with established rules and regulations

Basically Responsive theory focuses on the reasons for non- compliance with a view to eliminate them and entrench a culture of tax compliance. It is a process that seeks to anticipate resistance or limitations to compliant behaviors and develop tools and strategies to overcome them. It clearly and purposefully engages tax payers to eliminate impediments to rendering their obligations and arouse a consciousness and directs them towards a sense of duty and commitment to pay their taxes. The psychology of responsive regulation practice recognizes impediments to full tax compliance and evolves strategies and tools to overcome them while deliberate noncompliance is isolated and firmly discouraged. The compliance model shown below was adopted by Australian tax authorities in 1998 with tremendous impressive result. The model proactively identifies obstacles and develops strategies to mitigate its impact. The Braitwaite model of 2003 to depict the mood or Attitude of regulates is given as: Therefore Responsive Regulation theory was adopted in this research because of its numerous advantages and its capability in boosting the tax yield of the federal Government of Nigeria. It is a robust and dynamic model of administrative tool developed to respond administrative, technical and technological attitude of the individual tax payer with a view to entrench a culture of self-compliant behavior with a sense of commitment in revenue management.

Revenue negligence is a lawful usage of the revenue period to the benefit of the taxable individual in order to lower the cost of revenue which is remittable through the confers of the law. On the contrary, revenue dodging is a collective concept for the inability to remit revenue through fraudulent manner (Sharma & Dang, 2011) cited in Mohammed & Mohammed (2012). It's viewed too together as revenue escape and revenue dodging were related to shaded budget (Shineider & Enste, 2000) cited in Faseun (2001) stated that the cover bargain that individuals lack evidence of their sure revenue and profitable tax income which might had been by means of legal doings involving hitter and financial deeds to be able to escape revenue remittance. Social authorities had frowned over both acts said previously for some period through organizations and individuals that have proceeds which can be remitted as revenue to the government, applied revenue neglect as a way to eliminate revenue payment intentionally through the adoption of illegal method with the aid of revenue workers to ignore total revenue payments (Mohammed and Mohammed, 2012).

Revenue escape had been explained by Kiabel (2002) as the following: revenue remitters having fore information upon what the rules settle in order not to be found guilty, put their trade in a way to avoid revenue payment completely or incompletely. The idea does not bridge the rules of the land to avoid the remittance of revenue. Revenue escape is denoted as strongly apprehended in the circumstance of which includes Pullman Motor Ayrshire facility & Ritchin M. David versus tax collection boss at the time President Clyde Lord opined that; nobody is compelled in the state to negotiate his/her lawful relationship to their trade otherwise asset in order to help internal tax collection introduces highest applicable rack into their business. Therefore, it is certain that revenue escape is lawful or not unlawful as a result of the uncertainty applying revenue rules to restrict their revenue remittance expenses with the same set of rules.

Empirical Review

Related topics have been researched in this area, but notable amongst them is Okoye, Amahalu and Obi (2019) examined the effect of tax leakages on economic development of Nigeria during the period 2008 – 2017. Specifically, it investigated how tax evasion and avoidance influence economic development measured by gross domestic product per capita, infant mortality and life expectancy. In pursuit of the objectives of this study, three hypotheses were formulated and tested using secondary data obtained from the Central Bank of Nigeria, Federal Inland Revenue Service, World Bank Statistical Bulletins and National Bureau of Statistical. This study is based on time series data. The Augmented Dickey Fuller was used to test the time series data for stationarity, ordinary least square regression was employed in the analysis of the data. The findings of this study confirmed that tax leakage has a significant negative effect on economic development in Nigeria. Recommends among others that government should judiciously make use of tax proceeds to provide basic amenities for the citizens and improve the rate of tax compliance among tax payers.

Many of the empirical studies reviewed dealt largely on effect of tax revenue using petroleum profit tax (PPT), company income tax (CIT) and custom and excise duties as measures against Gross Domestic Product (GDP) in Nigeria and not inculcating Value added tax (VAT) which is a main aspect affecting the tax administration in Nigeria. The crux of this study is to investigate the effect of tax leakages on tax revenue in Rivers State between 2009 to 2018, company income tax (CIT), as it dimension.

Folayari and Adeniyi (2018) examined the effect of tax evasion on government revenue generation in Oyo state. With a structured questionnaire and a sample of one hundred and sixty – five (165) respondent selected randomly across the state and with secondary data from National Bureau of Statistic (NBS), office of budget and economic planning and internal revenue office data from 2011 – 2016. Data collected were analysed using descriptive and inferential statistic tool with the aid of statistical package for social science (SPSS) window 23. Their result reviewed that tax evasion has adverse effect on government revenue generation in Oyo state which results in loss of revenue. They recommended that government should embark on massive public enlightenment campaign and adequate utilization of tax revenue on public goods to discourage tax evasion and reduction in tax rate.

Propoola, Jimoh and Oladipo (2017) investigated the tax revenue and Nigeria economic growth for period of three decades, using time data from 1986 to 2015. The methodology used was Ordinary Least Square (OLS) with the aid of statistical package for social science (SPSS) version 23. The result show that oil and non-oil tax revenue were positive and strongly correlated with real gross domestic product (RGDP). The result also showed that; there was significant difference between the effect of oil and non-oil tax revenue. Recommend that tax revenue is the power of economic development therefore, government should improve in tax revenue generation for economic growth to thrive.

Fatoki (2014) carried out a research on tax evasion and tax avoidance, a critical issue in Nigeria economic development. A survey research design was adopted and responses were obtained through the use of structured questionnaire administered to 150 Nigerias, out of which are tax payer and tax evader. Findings from the analysis using statistics techniques reveal that tax evasion and avoidance have adversely affected economic growth and development in Nigeria, and also, that lack of good governance and unpatriotic act of tax payer, is the basis for which tax evasion and tax avoidance activities is perpetrated. The study therefore recommends that the government should embrace and promote good governance so as to encourage voluntary compliance of tax liability by the tax payers.

Adedeji and Oboh, (2012) on empirical analysis of tax leakages and economic growth in Nigeria. The study used Kendall's W-test and chi-square. The test statistic reveal that tax evasion and avoidance have adversely affected economic growth and development in Nigeria, and also, that lack of good governance is the basis for which tax leakages activities is perpetrated. Therefore, recommends that government should embrace and promote good governance so as to encourage voluntary compliance of tax liability by the citizenry.

Ramot and Ichihashi (2012) used panel data from 65 countries during the period 1970 to 2006 to examine the effects of tax structure on economic growth and income inequality and discovered that company income tax (CIT) rates have a negative impact both on economic growth and income inequality. They also discovered that personal income tax rate does not significantly affect economic growth and income inequality. The authors therefore recommended the need to develop a modest design into the tax system because countries which are able to mobilize tax resources through broad-based tax structures with efficient administration and enforcement will be likely to enjoy faster growth rates than countries with lower efficiency. Also, the government should focus to reduce tax evasion, which is believed happen in the highest income group that could distort the horizontal and vertical equity in redistributing the income. Finally, very high earners or the highest income group should be subject to high and rising marginal tax rates, especially in the statutory top corporate tax rate.

Mohsen and Yazdan (2011) investigate the effect of tax evasion and tax revenue on economic stabilities in OECD countries. The main purpose of this study is to examine the effect of tax evasion and government tax revenues on economic stability. OECD countries data from 1990 – 2013 is used and panel approach is applied to the results. In the first step, using monetary approach, an index for tax evasion for OECD countries is estimated.

In the second step, the effects of tax evasion and tax revenues on economic stability are studied. The results show that tax evasion and income tax rate has a U shape relationship. That is, as tax rate increase the probability of tax evasion would also increase. Also, it is found that tax evasion lead to economic instability and more tax revenue will be beneficial to a better economic condition.

Functional Definition of Variables

Tax Revenue

The functional definition of tax revenue is the actual income realized from taxation. The tax revenues are the income that is gained by governments through taxation. Taxation is the primary source of income for the government. Tax collected from both direct tax and indirect tax is the government revenue. It includes collections from income tax, wealth tax, corporation tax and property tax etc Appah (2010) and Olufemi, Jayeola, Oladele and Naimot (2018).

Tax Leakages

Tax leakages is computed as the difference between budgeted tax revenue and actual tax revenue realize in a year (Hariharan, 2009; Manzon and Plesko 2001; Wilson 2009; Frank et al. 2009; Chen et al. 2010; Chen et al. 2012; Cheng et al. 2012). Tax leakages refer to losses of revenue through the multitude of loopholes that occurs in the financial system.

Tax Evasion and Avoidance

Tax leakages include tax avoidance and tax evasion. Tax avoidance represents a firm's deliberate efforts to reduce its tax liabilities through either legal or illegal means or strategies. Since the boundary between legal and illegal acts is not clear, the legality of a firm's tax position is determined by the authoritative bodies after the fact. Thus, there is no clear ex ante distinction between legal tax avoidance and illegal tax evasion. Tax evasion is fundamentally hard to study because there is no single source of information capturing all of it. Tax authorities rely on random audits to estimate the tax gap, that is, the total amount of unreported income and unpaid taxes (e.g., IRS 2016), and academics have fruitfully used them to gains insights on the determinants of tax evasion (Kleven et al., 2011).

Hanlon and Heitzman (2010) depict the types of tax avoidance behavior on the continuum ranging from a common tax saving strategy of municipal bond investments (legal tax avoidance) up to aggressive tax strategies including tax shelters (illegal tax evasion). Using this model, a firm's tax avoidance strategy can be placed anywhere on the continuum depending upon the degree of aggressiveness the firm pursues in the course of reducing its tax liabilities. In this study we address the two terms, tax avoidance and tax evasion with primary interests in corporate tax evasion strategies known as tax leakages. The model of this study used the lag of tax leakages as a proxy for tax evasion and tax avoidance.

Gap in Literature

Many of the studies dealt largely with the effect of tax revenue using Petroleum Profit Tax (PPT). Company income tax (CIT) and custom and excise duties as against Gross Domestic Product (GDP) in Nigeria and not including value added tax (VAT) which is a main aspect affecting the tax administration in Nigeria. also, a collective of the studies in the area used tax avoidance and tax evasion on revenue which cannot be measured reliably or quantified using academic tools of measurement. The variables of measurement in many of the empirical studies are gear towards Gross revenue or economic development holistically making it wide thereby creating gaps in literature regarding the specific area of tax leakages. The crux of this study is to investigate the effect of tax revenue in Rivers State spanning 2009 to 2018, company income tax (CIT) as its dimension using time series data from state board of internal revenue been the agency saddle with the responsibilities of tax assessment and collection in the state.

Research Design

The study adopted Ex-post facto design because the data obtained through secondary source from the statistical bulletin of the Rivers state Board of internal revenue. Also, this research design was adopted because it has been used in prior studies to investigate the possible cause and effect relationships between tax Leakages and Tax revenue of Rivers state, (for example Okafor, 2012; Success, Success & Ifurueze, 2012; Saheed, Abarshi & Ejide, 2014)

Sampling Procedures and Sampling Techniques

Anyanwu (2000), indicated that a sample is just an element drawn from a target population, which indicates a representation of an entire population. The study made use of the judgmental sampling technique. The Rivers State Board of Internal Revenue service and ministry of Finance have been selected for the purpose of this study. The justification for the choice of these bodies is because they are the custodians of information which includes aggregate tax figures in Nigeria. Hence the researcher deemed it fit to draw from the pool of resources of these organizations and believes that any information which elicits from these is expected to be effective in meeting the objectives of this study.

Data Collection Instrument

The data for this work was collected from secondary sources. Data was garnered on the variables of interest (i.e Taxes, Revenue generated, Tax leakages). Other sources are textbooks, Journals magazines, internet etc. This study used ten (10) years' time series data collected from Rivers State Board of Internal Revenue and in conjunction with ministry of budget and economic planning, Rivers State. Therefore, time series is the period observation of variables that is a function of time. It is applied to data collected over interval of time such as variable of tax revenue, taxes, for the sample of study (2009-2018).

Data Analysis Techniques

The data analysis techniques involve the mathematical and statistical formation used in analyzing the outcome of the research hypothesis and data. The statistical method used for the analysis of data in this research study is ordinary least squares (OLS) estimation techniques. Econometrically too, we explored the unit root test to gauge the level of stationary of the variables of interest. We also employed the granger causality test to establish the variable that is causing the other.

Model Specification

This study specifies a functional relationship between tax leakages and tax revenue.

The functional form of the model is presented such as:

Tax Revenue = F (Tax leakages).

Where the dependent variable is Tax revenue and the independent variables is Tax leakages.

The econometric form of the model is expressed as followed:

$\ln TR_t = \beta_0 + \beta_1 \ln TL_t + InTL_{t-1} + \varepsilon_i$ (1)

Where:

In Tt_i = log of tax revenue at period t

$InTL_t$ = Log of tax Leakages at period t

$InTL_t(-1)$ = Log of tax evasion and avoidance at period t

β0 = Constant term (Intercept)

β = Coefficient of parameters

εt = Error term (Stochastic Term)

Data Presentation and Analysis

This session details the analysis of the data, the presentation of the result as well as the discussion of the outcomes of the analysis. Also, the primary objective of this study was to empirically investigate the effect of tax leakages and tax revenue in Rivers State of Nigeria.

Table 1: Log Data of Tax Revenue

Years	InTR	InTL
2009	23.69	24.52
2010	24.12	24.57
2011	24.11	24.25
2012	24.08	23.70
2013	24.37	23.79
2014	24.38	24.42
2015	25.04	26.18
2016	24.89	24.33
2017	24.85	25.02
2018	25.16	24.41

Source: E-view 9 output

Analysis of Data

Table 2: Augmented Dickey-Fuller Unit Root Test

Source: Eviews 9 Computation Output

Variables	ADF Statistics	5% Critical Value	Prob. Value	Order of Integration	Recommendation
TR	-4.319369	-3.320969	0.0138	1(1)	Stationarity
TL	-3.959433	-3.320969	0.0218	1(1)	Stationarity

The study used Augmented Dickey-Fuller test to check for stationarity of the variables. The decision rule is that the ADF test statistic value must be greater than the Mackinnon critical value at 5% (in absolute value). Table 3 showed that all the variables were stationary at their first difference, indicating that they are all integrated of order one i.e. 1(1). This is in confinement with other researches that economic variables are at their level or at their first difference. Since all the variables have their respective ADF statistic greater than the Mackinnon critical value at 5%. As evidenced from the unit root test, the variables would have a long run relationship. That is, they are co integrated in the long run.

Descriptive Statistics

Table 3: Descriptive Statistics

	TR	TL
Mean	24.46900	24.51900
Median	24.37500	24.41500
Maximum	25.16000	26.18000
Minimum	23.69000	23.70000
Std. Dev.	0.489046	0.694781
Skewness	0.024021	1.307177
Kurtosis	1.747244	4.457713
Jarque-Bera	0.654877	3.733240
Probability	0.720768	0.154645
Sum	244.6900	245.1900
Sum Sq. Dev.	2.152490	4.344490
Observations	10	10

Table 4 presents the results of the descriptive statistics of variables. The analysis of the means is generally high and significant in the model. The null hypothesis of normal distribution, the Jarque-Bera statistic was normally distributed because the reported probability was greater than 5 percent and indicates that we reject the null hypothesis of no normal distribution at 5 percent level of significant.

Table 4: Pearson correlation matrix

	TR	TL
TR	1	0.4781
TEV	0.7854	0.9163
TL	0.4781	1

Source: Eview 9 output

The result of the Pearson correlation matrix analysis indicates a positive relationship between TR and TL (0.7854).

Table 5: Generalized Method of Moments Results

Dependent Variable: INTR
Method: Generalized Method of Moments
Date: 07/05/21 Time: 18:15
Sample (adjusted): 2010 2018
Included observations: 9 after adjustments

Linear estimation with 1 weight update
Estimation weighting matrix: HAC (Bartlett kernel, Newey-West fixed
bandwidth = 3.0000)
Standard errors & covariance computed using estimation weighting matrix
Instrument specification: INTL(-1) INTL
Constant added to instrument list

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INTR(-1)	0.809455	0.101154	8.002171	0.0002
INTL	0.235531	0.060987	3.861973	0.0083
INTL(-1)	-0.039290	0.075097	-0.523184	0.6196

R-squared	0.822369	Mean dependent var	24.55556
Adjusted R-squared	0.763158	S.D. dependent var	0.429858
S.E. of regression	0.209196	Sum squared resid	0.262578
Durbin-Watson stat	2.612579	J-statistic	6.49E-41
Instrument rank	3		

Source: Eview 9 output

Table 6 reports the regression results from Equation (1). All the specifications pass the Hansen-J statistics test for Over-Identifying Restrictions, confirming that the instruments can be considered valid. The results show that the J-statistics are statistically insignificant at least at five percent level.

The tax leakages value is found to be positive and statistically significant. The tax leakages value is used to control for expected future tax leakages and unobservable tax opportunity.

The tax evasion and avoidance value is found to be negative but not statistically significant. The lagged value of tax evasion and tax avoidance is negative and statistically not significant, which indicates a negative and insignificant degree of persistence and therefore the presence of adjustment costs, which show no relationship between current tax revenue and lagged tax revenue.

The Adjusted R^2 of 0.80 i.e. 80 percent indicates a good relationship between tax leakages, tax evasion and tax avoidance and tax revenue; therefore there is goodness of fit in the model.

Durbin-Watson statistics = 2.6 which higher than the traditional benchmark of 2.0 in the model showing the absent of serial correlation.

Summary of Findings,

The study data are secondary in nature and utilizes time series data selected in a space of 2009-2018. The data were presented in tables and analyzed using E-views 9 output software. Also, the empirical results were presented according to the relevant hypothetical answers.

The results of the relationship between tax leakages and tax revenue was positive and significantly related with tax revenue of company income tax indicating the present of tax leakages in the tax system. These leakages have effects on the company income tax. Also the tax avoidance and evasion of has no significant relationship with tax revenues of company income tax.

Conclusion

The research conclusion was drawn from the specific objectives and findings of the tests hypotheses. Tax leakages were positive and significantly related with tax revenue thereby verified the present of tax leakages in the company income tax system. The policy implication was to reduce tax leakages. However, tax evasion and avoidance was not significantly related to tax revenue of company income tax.

Recommendation

Government should promote high rate of tax compliance to fight against tax leakages and tax evasion for the economic benefit of Rivers State it will be advised to review the tax system, to implement strict and severe penalties and very high fines for tax evaders. Moreover, the tax authorities of Rivers State Government need to appoint more experts in tax audit to be able to detect the non-compliant tax payers easily and rapidly. The taxpayers need to be given an incentive and a motive to pay for the taxes. Moreover, the tax evasion can be controlled by private agency along with the government as well.

References

1. Amahalu, N. (2018) Effects of Tax Leakages on Economic Development of Nigeria Available at SSRN: https://ssrn.com/abstract=3704490 or http://dx.doi.org/10.2139/ssrn.3704490
2. Annette Alstadsæter, Niels Johannesen, and Gabriel Zucman (2017) Tax Evasion and Inequality. National bureau of economic research. Working Paper 23772
3. Asaolu, T. O., Olabisi J., Akinbode, S. O., and Alebiosu, O. N. (2018) Tax Revenue and Economic Growth in Nigeria. Scholedge International Journal of Management & Development. 05, (07) Pg 72-85.
4. Aumeerun, B., Jugurnath, B., and Soondrum, H. (2016) Tax evasion: Empirical evidence from sub-Saharan Africa. Journal of Accounting and Taxation 8(7), pp. 70-80, DOI: 10.5897/JAT2016.0225
5. B. Brian Lee; Alfreda Dobiyanski and Susan Minton (2015) Theories and Empirical Proxies for Corporate Tax Avoidance. Journal of Applied Business and Economics 17(3) 1-14

6. Chen, K. & Chu, C. (2005). Internal control versus external manipulation: a model of corporate income tax evasion. RAND Journal of Economics, 36,(1), 151-164.
7. Chen, L.H., Dhaliwal, D.S. & Trombley, M.A. (2012). Consistency of book-tax differences and the information content of earnings. Journal of American Tax Association, 34, (2), 93-116. Cheng, C.S.A., Huang, H.H., Li, Y. & Stanfield, J. (2012). The effect of hedge fund activism on corporate tax avoidance. The Accounting Review, 87, (5), 1493-1526.
8. Chen, S., Chen, X. & Cheng, Q. and T. Shevlin. (2010). Are family firms more tax aggressive than non- family firms? Journal of Financial Economics, 95, 41-61.
9. Hanlon, M. & Heitzman, S. (2010). A review of tax research. Journal of Accounting and Economics, 50, 127-178.
10. Kleven, Henrik Jacobsen, Martin B. Knudsen, Claus Thustrup Kreiner, Sren Pedersen, and Emmanuel Saez. 2011. "Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark," Econometrica , 79(3), 651–692.
11. Manzon, G.B. & Plesko, J.A. (2001). The relation between financial and tax reporting measures of income. Tax Law Review, 55, 739-756.

Wilson, R. (2009). An examination of corporate tax shelter participants. The Accounting Review, 84, (3), 969-999.