

# Tax Reform and Tax Compliance Behaviour of Companies in Nigeria

Okeke, Clement Ejiofor and Saluadeen, Yinka Mashood

University of Abuja, Nigeria

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## Tax Reform and Tax Compliance Behavior of Companies in Nigeria

Yinka Mashood Salaudeen, Okeke Clement Ejiofor Department of Accounting, University of Abuja, Abuja, Nigeria Email: Yinka.saluadeen@uniabuja.edu.ng, clemokeke@gmail.com

#### Abstract

This paper evaluates the 2007 Company Income Tax (CIT) Reform with respect to improving the tax compliance behaviour of companies in Nigeria. Data for total annual company income tax paid and the total GDP for the respective years of the study were extracted from National Bureau of Statistics records. The study covers a period of twenty years (ten years, 1997-2006 before and ten years, 2008-2017 after the reform). The Wilcoxon Rank Sum Test was used as analysis tool. The study finds companies to be more complaint after the reform than before. The study recommends further reforms in terms of increase in the level of incentives to companies to enhance tax compliance.

Keywords: Compliance Behaviour, Tax Reform, Political Support, Fiscal Contract Enforcement

# **INTRODUCTION**

Different countries of the world have continued to devise ways of effectively reforming and strengthening their tax systems to increase tax income generations. In Nigeria, tax reform is dated back to the 20<sup>th</sup> Century when some reforms were initiated in the Northern part of Nigeria. In this paper, we shall be looking at the Company Income Tax (CIT) reform that took place in 2007 which has changed the landscape of company income tax generation and administration in Nigeria. This new era brought about a remarkable development in both the institutional and legal processes of administrating company tax in Nigeria, as it instituted modernization in the tax system which had never been attempted in Nigeria tax history.

The 2007 CIT reform cut across organizational changes in legislation, funding, taxpayer education, taxpayer registration, dispute resolution mechanism, automation of key processes, refund mechanism, human capacity building, and several other areas. The outcome of which has resulted in the inclusive reform of the Federal Inland Revenue Service (FIRS), tax administration and policies in general in Nigeria. Thus, there is need for a concerted study into tax administration in Nigeria.

Before the Company Income Tax reform of 2007, different tax study groups were set up in Nigeria with the main trust of finding the solution to the improvement of tax compliance in Nigeria's tax system. The study groups submitted valuable reports that culminated into what we have today. Such groups include the Professor Dotun Philips led "Study Group" set up in 2002 and a subsequent Mr. Seyi Bickerseth led "Working Group" set up in 2004 to review the report of the "Study Group".

Achieving an acceptable level of tax compliance is a challenge facing both developed and developing countries. Tax compliance signifies the presence of taxpayers' willingness/readiness to report tax liabilities to the relevant authorities as required by applicable tax laws, regulations, and court decisions (Jackson & Milliron, 1986). Simply put, it involves the full and accurate income declaration, filing and payment of accurate tax liability at the right time by tax payers in accordance with the applicable tax regulations.

In past years, countries (advanced and developing economies) have directed resources towards effective legislative tax reforms, taxpayer education, and the development of new technologies to aid in developing effective tax systems and to boost incomes generated from the tax. However, in most cases, these countries (such as Nigeria) often face major challenging issues in the administration of taxes as a result of frequent changes in the tax laws and policies. Several pieces of literature have alluded to the fact that the Corporate Income Tax reform of 2007 and its resultant gains have changed Nigeria's corporate tax earnings for good (Odusola, 2006; Azubuike, 2009; Ogbonna & Ebimobowei, 2011).

Another major issue with tax practice is the problem of Non-Compliance by taxpayers. The Organisation for Economic Co-operation and Development(OECD) in its 2008 annual report encouraged discussion and further research into the topic of measuring tax compliance especially compliance in the large corporate taxpayer sector. This shows that there is a need to examine the interactions between the enactment of corporate tax laws and policies and their linkages to tax compliance.

The studies on the effectiveness of corporate tax reforms using compliance as a measure are few, limited in scope, and no review of the effect of past company income tax reforms in Nigeria using tax compliance rate as a yardstick has been conducted. Therefore, it is in line with this insight that this study is conducted to provide empirical evidence on 2007 Companies Income Tax Reform and Tax Compliance Behavior of Companies in Nigeria

This research study will provide answers the following research questions:

- 1. What are the changes in the 2007 CIT reform?
- 2. What is the rate of compliance with tax laws and policy before the 2007 CIT reform?
- 3. What is the rate of compliance with tax laws and policy after the 2007 CIT reform?
- 4. Did the reform achieve its major objectives of improving compliance?

The major objective of this study is to examine 2007 Companies Income Tax Reform and Tax Compliance Behavior of Companies in Nigeria. It further examines the following specific objectives:

- 1. To ascertain the changes in the 2007 CIT reform;
- 2. To ascertain the rate of tax compliance by companies before the 2007 CIT reform;
- 3. To ascertain the rate of tax compliance by companies after 2007 CIT reform
- To establish whether the reform achieved its major objectives of improving compliance. H0: There is no difference between the rate of tax compliance pre and post 2007 CIT reform

H1: There is a difference between the rate of tax compliance pre and post 2007 CIT reform

The study analyzes Nigeria's 2007 Corporate Tax reform policy and determines how it improved tax compliance by the companies in Nigeria. It also serves as a source of information on issues of corporate tax reforms and compliance in Nigeria especially as it dwell on the problems, prospect effectiveness and compliance with the 2007 tax reforms.

Increased compliance naturally translates to increased generation of income tax which are used to pay key stakeholders in the economy. The government relies on tax to embark on the provision of

social amenities and maintenance of the existing ones. Both developed and developing countries need taxes to survive. There is no doubt that tax remains the most significant, predictable and sustainable source of government finance for most countries. Therefore, there is no better time than now to pay deliberate attention to the fundamental problems of tax administration in Nigeria, especially with the increasing awareness of the importance of taxation at the various level of governance. Moreover, eradicating hunger and poverty requires increase in public revenue, thus the need for countries to look inward on tax revenues. This study will therefore be of interest to the governments, government establishment, civil servants, and parastatals among others.

Furthermore, it will be useful to various management of companies, revenue collectors, tax administrators, tax officials, and other users of laws and policy, as it will afford them a general overview of the problems, prospect, effectiveness and tax reforms vis-a-vis tax compliance.

This research would also contribute to the existing tax literature, expanding evidence on the effectiveness of company tax reforms in Nigeria and identify the critical problems confronting the tax system so that appropriate measures could be taken to tackle them. The research will also be beneficial to schools and students engaging in tax related studies as it will serve as study reference.

The limitations of this study include the fact that some of the data for the test of corporate tax compliance (e.g. reported tax base/income, the amount agreed with FIRS, date of assessment notice, etc.) can only be retrieved from the files of relevant companies in the tax office (FIRS office) appear to be classified documents. Third parties/outsiders of any kind are not allowed to go through the files. So, I made use of other measures of tax compliance that can be found in the literature.

This research study focuses on the Company Income Tax Reform of 2007 in Nigeria. It used a twenty-year period, ten years before the reform (1997-2006) and ten years after (2008-2017) in concluding the effectiveness of the reform.

The remaining part of the study is arranged as follows; section two reviews and appraise related literature and provide a theoretical framework of the study. Section three discusses the methodology employed in the study. Section four presents the empirical results of the study. Section five provides the conclusions and recommendations arising from the study.

#### 2.0 LITERATURE REVIEW

#### Tax reform and tax compliance

The sole intention of traditional approach to tax reform in any economy borders around increment of the tax payers compliance. Wilson et al (2019, p. 11) maintain that "the approach mirrors the concept of tax compliance which sees taxpayers as rational economic players who are responsive to the likelihood of an audit, the strength of penalties, and the ease and cost of compliance" This simply points to key determinants such as strengthening enforcement and facilitation by respective tax administrators during tax reforms. This will enhance compliance and increase revenue generation through tax. The model is a simple one and is presented below in fig 2.1 Fig 2.1 Traditional Theory of Change for Reform:

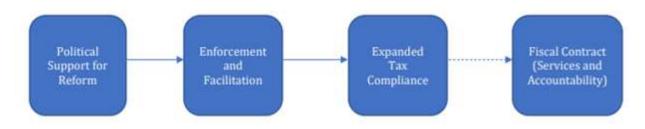


Figure 2.1: "Theory of Change for Innovations in Tax Compliance Source: Wilson P, Anna C, Roel D, Stephen Davenport, and Michael Roscitt, p. 13

Above innovation has really worked very successfully but it has also ignored three key factors Wilson et al, (2019, p. 11). "The approach pays limited attention to quasi-voluntary compliance, political realities and the importance of strengthening fiscal contracts. Evidence suggests that this factors play pivotal role in tax reforms".

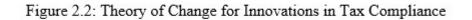
The conceptual framework for this study is therefore focused on addressing this three elements neglected. Theoretical evidence suggest that political factors cannot be separated from reforms and is so critical for any successful reform.

The conceptual framework developed by Wilson et al, (2019) centered on addressing the three broad challenges identified above. They found out that political support is key to increased tax compliance. Other discoveries by the team include the increased emphasis on public administration towards the importance of working politically when initiating tax reforms. The team also noted that "despite the awareness of the need to consider political actors during reforms, many reform programs have not internalized this factor" The frameworks also concluded that "investments in strengthening trust have been relatively ad hoc and low priority, despite research showing their importance to strengthening compliance".

According to Kirchler, Hoelzl, & Wahl (2008), "earlier research has distinguished "enforced compliance", which results from the enforcement power of the state, and "voluntary" (or "quasivoluntary") compliance, which is driven by values, social norms, and levels of trust in the fairness, equity, reciprocity, and accountability of tax systems". Previous authors have demonstrated that overall tax compliance will attain their pick when enforcement and trust are at their best. Again, Kirchler, Hoelzl & Wahl developed a new perspective called the "slippery slope" framework which indicates that tax compliance will likely reduce sharply when both enforcement and trust are at their low levels. There is no doubt on the interrelationship between the two. Other researchers have coined the word "quasi-voluntary compliance" to suggest that both trust and voluntary compliance cannot take place in the absence of enforcement. This also implies that enforcement cannot be strong if trust is absent. Moreover, "quasi-voluntary compliance" also became necessary as efforts is being made to make a case for "strengthening accountability" as a useful aspect of tax reform. Presently, many writers are proposing expanded taxation aimed at increasing government accountability through tax payers' awareness to demand results from the relevant administration. When government becomes accountable and tax payers become comfortable, quasi-voluntary compliance is encouraged. The onus of ensuring government reciprocity does not directly lie on the tax authority but some tax reform efforts can improve accountability by providing platforms for engaging with the tax payers. The current discussions around inculcating increased government

accountability, tax payers trust as critical part of tax reform is called "government-focused tax reform"

As aptly described in Alm, (2019, p369), "the most recent literature on tax administration reform has emphasized this new paradigm for tax administration, as a facilitator and a provider of services to taxpayer citizens, and many recent administrative reforms around the world have embraced this new paradigm with great success" What this frame work does is to galvanize enforcement, facilitations and trust. Kirchler, Hoelzl, & Wahl, (2008 p13) noted that a good combination of enforcement, facilitation and trust will bring about an ""enforced compliance but can also (a) encourage "quasi-voluntary compliance"; (b) create conditions conducive to strengthening fiscal contracts; and (c) generate sustained political support for reform". There is no doubt that this will bring about "virtuous circles of reform"". Where investment is made toward building trust, such efforts becomes a driver for future reforms. If tax payers' trust is gained, next level of action is reciprocal public benefits which will further enhance trust and compliance amongst the taxpayers. Wilson et al discussed trust, facilitation and enforcement components of the framework in the figure below:



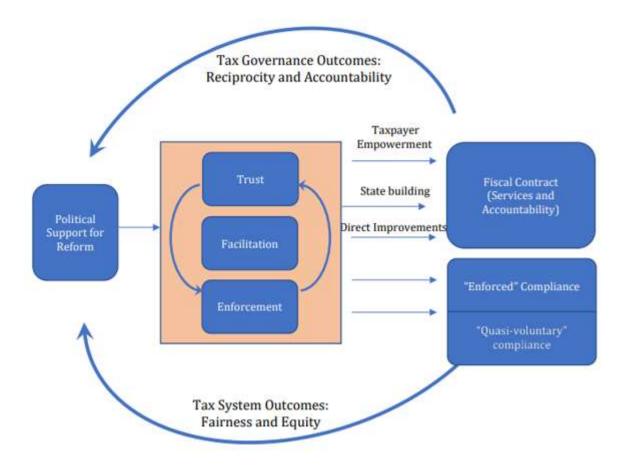


Figure 2.2: "Theory of Change for Innovations in Tax Compliance Source: Wilson P, Anna C, Roel D, Stephen Davenport, and Michael Roscitt, p. 13"

A close look at above diagram shows connections amongst enforcement, facilitation and trust. Wilson et al (2019, p 13) explained that ""greater trust strengthens the effectiveness of enforcement efforts by providing a stronger political and social foundation. In turn, more equitable enforcement, and greater ease of paying taxes, builds trust in the fairness of the tax system. Investing in trust-enhancing reforms can help reinforce improvements in both "enforced" and "quasi-voluntary" compliance"". The idea here is to ensure that the identified key paradigms are carried along in the quest to ensure improved compliance. New studies on tax compliance have indicated concerted efforts towards improvement on enforcement or facilitation. A new aspect of tax reform called "nudge" has also come on board. It explains the strengthening of quasi-voluntary tax compliance through a critical analysis of one's choices as a tax payer and the resultant consequences for the choices made.

All over the world, there is increased debate on how to improve tax compliance. While there is improvement through the past reform efforts which have led to increased revenue mobilization and generation, a call is made to ensure that observed challenges are continually dealt with. Some of the causes of the tax payers' non-compliant postures should be discussed, analyzed and mitigated. There is no gain saying that the level of revenue generation tax across the world is not increasing at the recommended pace.

Wilson et al (2019) succinctly stressed the connections between the two forms of compliance as follows: "the need to make trust-building – and the strengthening of quasi-voluntary compliance – a central consideration in every aspect of reform, going beyond nudges to ensure sustained and durable change". They went further to explain that "focus on trust likewise brings the construction of stronger fiscal contracts explicitly inside the model" They also pointed out that existing "research has made clear that trust-building measures are also likely to lead to broader improvements in the quality of governance. Trust-building can contribute to governance in three ways" The team confirmed that when tax payers have increased trust in the tax administration, coupled with enhanced environment for fairness, justice and accountability, the economic benefits will be enormous. They have also concluded that this forms a part of reform design, Secondly, Wilson et al opined that trust building through transparency, consultation and increased attention on direct taxes, constructive engagements with tax payers etc. will give the tax payers greater confidence which will translate to increased tax compliance and tax revenue for the society.

Finally, this study agrees with past researchers on the need to ensure a good mix of enforcement, facilitation and trust towards the improvement of tax compliance. Tax payers' propensity to comply with tax laws increases or decreases proportionately to the tax administrators mix of the three identified items- enforcement, facilitation and trust. They are required to be carried along together. Any attempt to sideline one aspect and move with the rest will usually bring inefficient tax compliance level.

#### **Company Income Tax Reform in Nigeria**

The principal Act governing the taxation of companies in Nigeria is the Companies Income Tax Act first promulgated in 1961. The Companies Income Act 1961 has been amended (reformed) several times to help it touch with various changes in the economic, social and political environment.

The first major reform took place in 1978. A Task Force on tax administration was set up by the Federal Government and headed by Alhaji Shehu Musa. The body was saddled with the responsibility of examining available tax revenue and the Nigerian tax structure at the time. The terms of reference of the Task Force also included assessment of the effectiveness of how the existing federal and state taxes were administered. The team was to provide workable solutions on how to make the tax systems more efficient.

The thrust of the reforms includes the introduction of the Withholding Tax Regime, the imposition of ten (10) percent special levies on banks' excess profits, and the imposition of 2.5 percent turnover tax on building and construction companies.

These recommendations were accepted by the Federal Military Government and incorporated into Companies' Income Tax decree No. 28 of 1979. It is in operation to date together with later amendments, now known as Companies Income Tax Act CAP. 60 L.F.N. 1990 ACT CAP. C21 L.F.N. 2004

The 2002 Study Group on tax reform was setup to review the different tax systems primarily for identified inefficiencies in tax administration. The core roles of this group include "review all aspects of the Nigerian tax system and recommend improvements therein" For example "(1) Review all tax legislations in Nigeria and recommend necessary amendments;" (2) "Review all assessments and collection procedures including payment procedures, objection and appeal procedures, and Court proceedings and recommend appropriate improvements;" (3) "Consider and recommend the possibility of the grant of operational and financial autonomy to the Revenue Authorities" and (4) "Review and recommend the jurisdiction and scope of Tax Authorities at the Federal, States and Local Government levels."

At the end of the group's intensive studies, they recommended a total overhaul of the Nigeria tax system through a sustainable reform of the existing tax laws. The group recommended the upgrading of the Federal Inland Revenue Service to a parastatal status. This recommendation was approved and the Service became autonomous of the civil service in human resources management and the funding strategy of Federal Inland Revenue Service became better. For example, the Service is allowed to utilize 4% of total non-oil collections for its administration and needs. As a follow-up to the report, government approved the processes for harmonizing various tax penalties and also the elimination of double and multiple taxes in Nigeria.

The Study Group reports recommended among other things the following: ""(1) Issuance of smart tax identity cards for all taxpayers; (2) To make a profit before being exposed to companies' income tax in any assessment year"".

By early January 2004(precisely January 12), a new 'private sector-driven' group was set up to primarily review the issues rising from submissions of the 2003 Study Group's report.

Some of the outstanding issues discussed were the making of a draft National Tax Policy, tax incentives and administration generally.

## 2007 Tax Reform Agenda

The highlights of the 2007 reform agenda amongst others include: "(1) making the Federal Inland Revenue Service autonomous concerning funding, procurement, recruitment, and remuneration". "(2) Reviewing the organizational structure of the FIRS and ensuring the computerization of its operation". "(3) Increase in tax compliance. "(4) Abolition of levies imposed by regulatory bodies which constituted incidence of double taxation"

In an effort to achieve these. The reform provided for the following changes in the Companies Income Tax Law: (1) Exemption for tax profit of any company established "within an Export Processing Zone or free trade zone" provided that 100% production of such company is for export.

(2) Further allows donations of capital nature made to a University, Tertiary Institutions or Research Bodies meant for Research and Development (R&D) purpose as tax deductible. The nature of such donations notwithstanding as it could be either capital or revenue however, such must not exceed 15% of the company's total profit or 25% of computed tax for the same relevant tax year. (3) A Company that is yet to commence business after at least six months of incorporation shall for each year pay a levy of N20, 000.00 for the first year, and N25, 000.00 for every subsequent year before a tax clearance certificate can be issued. (4) To enforce promptness in filing of annual returns, the penalty for late filing was increased from N5, 000.00 to N25, 000.00 at the first instance and N1, 000.00 to N5, 000.00 for each subsequent month of default. (5) The 2007 reform further created an avenue for tax refunds in respect of overpayment of tax due within 90days to the settlement of such over payment.

## 2.2 Theoretical Review

The behavioral model of tax compliance was developed around sociological and psychological features. Taxpayers are considered not being selfish but are reacting to the certain disposition of tax managers and applicable policies. This model is explained by some scholars in a diagram called the 'slippery slope' framework. Tax payer's trust in tax administration is defined as "the general opinion of individuals and social groups that the tax authorities are benevolent and work beneficially for the common good while the power of tax authorities is classified as 'taxpayers' perception of the potential of tax officers to detect illegal tax evasion and to punish tax evasion" Kirchler, Hoelzl, and Wahl, 2008, (p. 212). The two levels (Trust and Power) can bring about an increase in tax compliance but the rate is different. For instance, trust brings about voluntary compliance while enforced compliance ensures increased compliance. The below table describes the relationship between trust and enforcement vis-a-vis tax compliance.

Fig 2.3: The 'slippery slope' framework designed by Kirchler, Hoelzl, and Wahl.

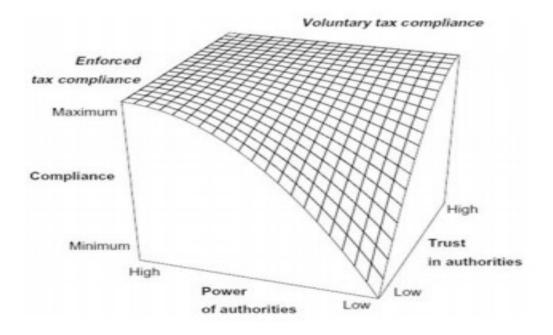


Figure 2.3: The 'slippery slope' framework Source: Kirchler, Hoelzl and Wahl, 2008, p. 212

By interpretation, Fig 2.3 shows that as trust in power of relevant authority gets low, taxpayers tend to increase their propensity to evade tax payment. A quick consequence is a compliance getting to the lowest level. Moreover, when relevant authority's power moves upwards through the left corner of the model even with lower trust, compliance will still rise since taxpayers will be deterred due to the consequences attached to evasion. This implies that the increased power of relevant authorities will guaranty increased compliance. A movement along the upper side of the trust dimension even with reduced power, increased tax compliance is sustained. This is possible because the taxpayers have confidence in the trust in authority. Where the trust of taxpayers is maintained, the resultant effect is voluntary compliance. It is very clear that at the point when there is a high level of trust and power the maximum tax compliance is achieved. The summary here is that authorities' behavior towards taxpayers goes a long way to determining taxpayers' compliance levels. Previous writers have argued that the best relationship between the authority and the taxpayer will be better if it moves from 'cops and robbers' mentality to 'service and client' This position is clear as taxpayers will tend to avoid evading tax payment if they believe that the authority will approach them as partners in the course of tax administration.

#### 2.3 Review of Related Studies

Marcelo (2003) compared the effects of tax reform on tax compliance in Argentina and Chile. The study constructed three different "comparative indexes of tax compliance", it proposed a comprehensive approach, which included political, economic and sociological explanations to address the different behavior of taxpayers in each country". The study concluded that "Chile was able to enhance better tax compliance because it had implemented a permanent, stable and rational policy that allowed for the development of an effective tax administration - a process never fully accomplished in Argentina". The study also confirmed that in "Chile, a moderately efficient tax agency was capable of fostering an image of being able to effectively detect tax non-compliance,

and enhanced a sustained voluntary compliance behavior in the long term. Argentina failed precisely in its attempt to generate solid voluntary compliance because, in the long run, a successful tax reform requires a strong and an efficient state".

Sohee and Taekyoon(2018) conducted "a comparative analysis of the effect of tax administration reform on tax performance and quasi-voluntary compliance in Tanzania and Uganda". Sohee and Taekoon (2018) did a critical comparison of varying degrees of quasi-voluntary compliance (QVC) between Tanzania and Uganda to examine how tax administration reform in each country led to those different outcomes". The data used included "Tax revenue as a percentage of GDP, 1991–2010 for both countries. The study revealed that "Tanzania's tax administration effectively changed the strategic and normative factors that enhance quasi-voluntary compliance, whereas Uganda's tax reforms have been stuck in a muddle". The study also concluded that "high tax performance from competent and fair tax administration improves taxpayers' willingness to comply voluntarily". The work of Sohee and Taekoon was fantastic and recommended. However, it is failed to show how a single tax reform in a country can be reviewed vis-a-vis its immediate effect on tax payers' compliance behavior. This is what this study has been able to achieve as the study on the 2007 companies income tax reform and tax compliance behavior of companies in Nigeria has shown that 2007 CIT reform improved corporate tax compliance in Nigeria.

Arindam, Shanto and Dilip (2003) evaluated the "effects on tax compliance of simple reforms in personnel policy in the Indian income tax administration". The study applied Allingham-Sandmo equations and regression equations. The study looked at the estimates of revenue effects of increased support staff. The results indicate significant compliance gains from expanded staff employment and changes in assignment procedures for staff and taxpayers to different assessment units. The study concentrated on personnel income tax but the current study has reviewed impacts of reforms on corporate tax compliance.

Natrah (2014) examined "taxpayers' views on their level of tax knowledge and perceived complexity of the income tax system" The study further studied the "underlying reasons for non-compliance". Data used for analysis included telephone interviews with thirty participants, and analyzed using thematic analysis. "Results suggest that taxpayers have inadequate technical knowledge and perceive tax system as complex". Tax knowledge and tax complexity are viewed as contributing factors towards non-compliance behavior among taxpayers.

The study supports the views that tax reforms which provided the tax payers with sufficient information and simplified processes will attract increased compliance. This study however relied on interview result without pure empirical analysis of tax compliance tests etc. The study was purely theoretical as opposed to the current study that has applied relevant statistical analysis on the impact of 2007 corporate tax reform on tax payers' compliance behavior.

Grant (2008) studied the relation "between national cultural dimensions and tax evasion". "Based on data from 47 countries, regression analysis results indicated that the higher the level of uncertainty avoidance and the lower the level of individualism, legal enforcement, trust in government, and religiosity, the higher is the level of tax evasion across countries". The study concluded that "Government policymakers" could start assessing "the likelihood of tax evasion from cultural, legal, political, and religious perspectives, and in developing tax reform policies to reduce tax evasion. This study agrees to a large extent with the current work on the need to ensure improved trust in government by the taxpayers if reforms are intended to generate increased compliance. "Nevertheless, this study has been criticized for measuring "tax evasion, trust in government, and religiosity" using country survey ratings. Secondly, "the data for Hofstede's (1980) cultural dimensions" were "drawn from years that are different from those for which data for the dependent variables and other independent variables were collected".

Barbara, Edoardo, Erich and Alfred (2013) in their study, "The Slippery Slope Framework of Tax Compliance postulates that "citizens' compliance depends on the power of the authorities to enforce compliance and/or trust in the authorities and voluntary cooperation". The study "proposed a thorough investigation of the nature of power (coercive versus legitimate) within the theoretical framework of tax compliance to shed light on the ambiguous results and to clarify the complex relation between power and trust". They used "structural equation modeling to test the assumptions of the Slippery Slope Framework by taking into account coercive power and legitimate power on a sample of N = 389 self-employed Italian taxpayers and entrepreneurs." The study found out that "trust is positively related to voluntary tax compliance". "Trust was found to be negatively related to coercive power and positively related to legitimate power". The study failed to look at the need to have a balanced relationship between trust, facilitation and enforcement as discussed in the current study under the Theory of Change for Innovations in Tax Compliance (Fig 2.2)

Ndoricumpa (2021), examined how tax performance is associated with tax reforms and civil conflicts in Burundi. The study concluded that there is no relationship between total tax revenue and tax reforms. The findings cited the prevalence of fiscal corruption and abusive tax exemption as some of the reasons for poor revenue performance even in era of tax reforms, and therefore recommend a rethink in the implementation of tax reforms to improve effectiveness in the tax system. Ndoricumpa's work looked at the impact of reform on compliance which the current study looked. The point to note is that where reform increases compliance, one of the direct benefits should be increased generation of tax income. The cited prevalence of fiscal corruption and abusive tax exemption are simply evidence of the need for improved reforms and better stewardship on the side of the government.

Salaudeen and Atoyebi (2018) examined "the effect of the 2007 reform pertaining to the corporate tax system on the tax burden of listed firms in Nigeria". Data were sourced from financial statements of "86 sampled firms for the period 2003-2011 subdivided into pre-reform (2003-2006) and post reform (2008-2011) sub-periods for the purpose of comparing periods' tax burdens". Their data were further segregated along the Nigerian Stock Exchange industrial sector classifications. The study used the t-test and canonical correlation analysis and the findings show that "the 2007 corporate tax reform has brought minimal tax burden on listed firms, however, sectoral analysis reveals the heterogeneity in the effect of the tax reform as firms within the agricultural and natural resources sectors witnessed increases in tax burden while firms in health and oil and gas sectors were favored with reduced tax burden".

The difference between this study and the work of Salaudeen and Atoyebi (2018) is that this study has looked at the effect of 2007 reform using tax compliance as the yardstick. The main thrust of the reform was to improve tax compliance of corporate bodies hence a measure of the level of compliance was well desired and portrayed in the current study.

Abdulsalam, Almustapha, El-Maude (2014) studied "the correlation as well as the effect of tax rate on tax compliance in Africa using cross-country data"." The study used all the African countries as population, upon which sample were selected using multi-stage approach". Data was analyzed using SPSS version 19"."The findings showed that there is significant negative correlation between tax rate and tax compliance and tax rate has a negative effect on tax compliance" The study recommended that "African countries whose tax rates are above the average tax rate of 29.1985% should reduce their tax rate to the mean tax rate in order to attract tax compliance". The study did not take into account other aspects of tax reforms as it only concentrated on the tax rate, it also ignored other key components of tax reforms which could guarantee tax compliance even in the face of high tax rate. This has differentiated the study from this current one as we have taken note of the fact that what encourages tax compliance is more than reducing the rate of tax. Tax payers' compliance propensity can increase in the face of high tax rates if trust in the administration is high.

## **3.0 RESEARCH METHODOLOGY**

#### **Research Design**

This study was conducted based on secondary data analysis. In the context of social research, the use of secondary data analysis (Ex post facto) seeks to reveal possible relationships by observing an existing condition and search back in time for plausible contributing factors. The Ex-post Facto method is used when the data are readily available and can be collected.

#### Sources and Methods of Data Collection

The source of data for this study is secondary data. The data for the relevant 20years period were extracted from the Federal Inland Revenue Service (FIRS) reports, data on economic growth was extracted from the Central Bank of Nigeria (CBN) statistical bulletin and National Bureau of Statistics (NBS).

#### Identification and use of variables

In this study, only one variable was identified, which is the rate of corporate income tax compliance in Nigeria over the selected period. The compliance rates for the periods were realized by finding annual company income tax as a percentage of GDP for each year for ten years (1997-2016) pre 2007 CIT reform and ten years (2008-2017 post the reform. This is based on previous research (Abdulsalam, Almustapha, & El-Maude, 2014) and (Sohee & Taekyoon (2018).

#### Method of data Analysis

(a) To achieve the need of the first three objectives of the study, descriptive analysis was used.

(b) The fourth objective was achieved through the use of a **Two-sample Wilcoxon rank-sum test** using Stata Version 14 (StataCorp. College Station, TX, USA). The statistical significance was determined at 5%.

#### Justification for using Wilcoxon rank-sum test

Wilcoxon Rank-Sum Test was used for analyses because it is a non-parametric test. This means there are no assumptions on the form of the underlying distribution of tax compliance ten years before the 2007 reform and tax compliance post the reform. Tax compliance pre-2007 reform is represented with X and that of post-compliance Y. Hence X has a normal distribution, and Y has an entirely different form, yet this test was still valid. Generally speaking, for the Wilcoxon Rank-Sum Test to be valid, the X and Y samples must be independent, and X and Y must be continuous random variables.

## 4.0 FIDINGS AND DISCUSSION

This part will discuss the result following the stated methodology to confirm the effectiveness of 2007 Corporate Tax reform by testing the rate of corporate tax compliance in Nigeria for ten(10) years before the reform(1997-2006) and ten(10) years after the reform(2008-2017). The data were subjected to a **Wilcoxon rank-sum test** to determine the effect of the 2007 reform on the total company income tax generated after the reform as compared to the CIT contributions before the reform.

Table 4.1 Annual Company Income Tax (CIT) and Gross Domestic Products; ten years before CIT Reform of 2007(i.e. 1997-2006) and ten years after (2008-2017).

Tax Years	Total Annual Company Income Tax(N'million)	Total Annual GDP Current Market Price (N'million)	Corporate Tax Compliance(as a % of GDP Market Price	Factor
	(A)	<b>(B)</b>	C=A/B*100%	
1997	26,000.00	4,418,708.75	0.59%	1
1998	33,300.00	4,805,156.41	0.69%	1
1999	46,200.00	5,482,354.32	0.84%	1
2000	51,500.00	7,062,751.07	0.73%	1
2001	68,700.00	8,234,493.68	0.83%	1
2002	89,100.00	11,501,450.40	0.77%	1
2003	114,800.00	13,556,973.69	0.85%	1
2004	130,100.00	18,124,060.02	0.72%	1
2005	140,300.00	23,121,879.00	0.61%	1
2006	244,900.00	30,375,178.72	0.81%	1
2008	420,582.99	39,954,211.89	1.05%	2
2009	600,590.10	43,461,458.62	1.38%	2
2010	666,132.50	54,612,264.18	1.22%	2
2011	715,441.98	63,134,734.88	1.13%	2
2012	846,591.94	72,351,452.21	1.17%	2
2013	998,436.12	81,009,964.62	1.23%	2
2014	1,204,833.78	90,136,984.66	1.34%	2
2015	1,384,546.40	95,177,735.68	1.45%	2
2016	1,019,415.05	102,575,418.03	0.99%	2
2017	1,249,895.64	114,906,663.52	1.09%	2

Table 4.1 above shows that compliance rates ten years before the CIT reform of 2007(1997 to 2006) were all less than 1% each. But after the reform in 2007 the compliance rates increased to 1% and continued to increase in the following years. As can be seen in the table, the lowest compliance rate after the reform (0.99% in 2016) is still higher than the highest rate before the reform which was 0.8% in 1999, 2001-2003, and 2006.

#### Fig 4.1 Line Graph of Corporate Tax Compliance (CIT as a % of GDP)

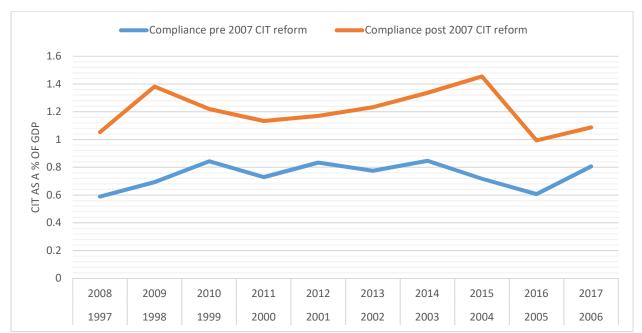


Fig. 4.1 also shows that the highest percentage of company income tax to GDP in Nigeria ten years before the 2007 CIT reform was 0.85%(in 2003) while it rose to 1.1% in 2008 (one year after the reform). The rate of compliance as measured above continued to increase until 2015 when it got to the highest point of 1.5% of the GPD. The line graph shows that after the reform, company income tax generation in Nigeria remained above 1% of the GDP in the subsequent years.

Two-sample Wilcoxon rank-sum test						
status	obs	rank sum	expected			
before	10	55	105			
after	10	155	105			
combined	20	210	210			
unadjusted variar	ice	175.00				
adjustment for t	les	0.00				
adjusted variance	2	175.00				
Ho: taxcom~g(stat	:us==befo	re) = taxcom	~g(status==a			

# Test of Hypothesis Two-sample Wilcoxon rank-sum test

Ho: taxcom~g(status==before) = taxcom~g(status==after) z = -3.780

Prob > |z| = 0.0002

Exact Prob = 0.0000

The two-sided exact p-value of 0.0001 exhibits a statistically significant difference in between rate of tax compliance pre and post 2007 CIT reform

## Interpretation

Based on the analysis in Table 4.2 above, there is statistical significance since the calculated P-value (0.0002) is less than the level of significance of 0.05 of which the hypothesis for this study is tested. Therefore, the null hypothesis which states there is no difference between the rate of tax compliance pre and posts 2007 CIT reform is rejected and the alternative accepted. This, therefore, means that the rate of compliance of corporate tax laws and policy in Nigeria before the 2007 CIT reform was different from the ones after the reform.

## **Discussion of Findings**

In Nigeria, the reform of Company Income Tax in 2007 triggered company income tax revenue as a proportion of GDP to increase (for the first time) to 1%.

From the analysis in Table 4.1 and Fig 4.1, it is obvious that company income tax as a percent of GDP was stood at less than 1%. The rate kept soaring over 1 percent after 2007 as a result of the reform that took place. This is attributed to the increased tax compliance of the corporate bodies. Nigeria generated a much better company income tax revenue in 2015(i.e. 1.45 percent of the GDP). This study reveals that the 2007 Company Income Tax Act reform in Nigeria was effective and contributed to increased corporate tax compliance.

In this study, as noted above, corporate tax as a percentage of the annual GDP at market prices was investigated using STATA Version 14 (StataCorp. College Station, TX, USA). Corporate tax compliance measured the changes in corporate tax revenue following the reforms.

# 5.0 CONCLUSION AND RECOMMENDATION

During the period under study, 2007 CIT reform was the major corporate tax reform in Nigeria, though some tax reforms took place coupled with a few other rule changes by macro-economic goals set out in the budget annually.

The result of the analysis revealed that the rate of corporate tax compliance in Nigeria after the 2007 Company Income Tax reform was higher than the compliance rate before the reform. This supports the thinking that the CIT reform in 2007 brought abought increased Company Income Tax generation to the nation.

This study has established that a nation (e.g. Nigeria) will continue to generate more tax revenues if additional positive tax reforms are carried out.

## Recommendations

Based on the findings and conclusion, the following recommendations are hereby suggested:

The most potent weapon for the government to achieve high tax revenue is, therefore, to develop robust tax reforms and implement fiscal policy measures which encourage voluntary tax compliance.

Government should broaden the tax base by providing the basic infrastructure and enabling an environment for more companies to spring up.

Efficient Tax Administration: The government should improve on tax administration to block possible tax evasion, tax avoidance, and various loopholes in the Tax system.

The government should continue to encourage companies to boost their compliance with tax payment

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