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**Article**

## Assessing SMEs tax non-compliance behaviour in Sub-Saharan Africa (SSA): An insight from Nigeria

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## ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

# Assessing SMEs tax non-compliance behaviour in Sub-Saharan Africa (SSA): An insight from Nigeria

Olusegun Vincent<sup>1\*</sup>

**Abstract:** The existing studies on determinants of small and medium enterprises (SMEs) tax compliance behaviour in Sub-Saharan Africa have been criticised on account of limited study scope which compromises generalisation and poor theorisation that have little or no support for the research questions of such studies. The current study is rooted in behavioural economics theory and elicits information from 392 participants from all geopolitical zones of Nigeria using paper-and-pencil survey instruments. The study's findings reveal that tax system complexity, tax deterrence sanction, tax non-compliance opportunity, tax information and tax attitude and perception are important determinants of tax compliance behaviour, while tax rate and tax compliance cost may not necessarily exert significant influence. The overall conclusion from the study reveals that certain economic and behavioural factors are effective in either encouraging or discouraging tax compliance behaviour. The study also reveals tax information to be one of the most significant drivers of tax compliance; however, little or nothing is known of this construct in the existing literature. The theoretical and policy implications of the study are discussed and suggestions for future studies are offered.

**Subjects:** Economic Psychology; Finance; Business Management and Accounting

**Keywords:** tax non-compliance behaviour; behavioural economics perspective; tax evasion; tax morale; SMEs

### ABOUT THE AUTHOR

**Olusegun Vincent** is a senior faculty in the School of Management & Social Sciences at Pan-Atlantic University in Nigeria. Before becoming an academic, he worked as a chartered accountant at Ernst & Young and a number of other high-profile financial institutions. He was formerly the Director of Economic Intelligence Unit in Lagos State, Nigeria, and currently a renowned tax expert, accounting and finance practitioner. He holds a PhD from Brunel University (with specialisation in sustainability, strategy, and governance). His research interests include corporate finance, sustainability, strategy, corporate governance and taxation. He consults regularly for multinational companies and has published in leading management journals.

### PUBLIC INTEREST STATEMENT

Nigeria has a growing informal sector and SMEs that account for about 80% of the nation's activities but at a disproportionate level to tax compliance and collection. The nation's tax-to-GDP ratio of 5% trails far below 34.1% and 20% in Organisation for Economic Cooperation and Development (OECD) and emerging markets, respectively. This study unravels the determinants of tax non-compliance amongst SMEs in Nigeria and these include complex tax system structure, lack of adequate punitive measures, existing opportunities for non-compliance, poor tax information, and taxpayer perception of the government inequity and unfairness in spending of the tax revenue. The study suggests practical strategies and policy direction for reducing tax non-compliance in Nigeria.

## 1. Introduction

The study seeks to unravel factors responsible for tax non-compliance behaviour in small and medium enterprises (SMEs) in Nigeria; the most populated Sub-Saharan Africa (SSA) country. The research is grounded theoretically in behavioural economics models, which are more realistic assumptions of taxpayers' behaviour (Hashimzade et al., 2012). The previous studies of Nigerian SMEs' tax compliance behaviour suffer from flaws, which include difficulties in measuring tax compliance, limited study scope and poor theorisation (Alabede et al., 2011, 2011; Atawodi & Ojeka, 2012; Fagbemi et al., 2010; Mansor & Gurama, 2016; Otusanya, 2011). Otusanya (2011) evaluated strategies multinational companies employed to evade taxation in Nigeria without insight into SME tax non-compliance behaviour. Some other studies are deficient in context and scope considering narrowly evaluated single component of economic deterrence theory in geographical locations that account for less than 5% of SMEs in Nigeria (Atawodi & Ojeka, 2012; Mansor & Gurama, 2016). Alabede et al. (2011) descriptively explored the determinants of tax compliance behaviour in Nigeria without empirical depth and focus on the SMEs. Aladejebi (2018) published a study on tax compliance by focusing on SMEs resident in Lagos and used the simple mean score to determine the extent of SMEs compliance to payment of certain classes of taxes. The study lacks rigour and deviated from known methods of measuring tax compliance and evasion. Fagbemi et al. (2010) explored the ethics of tax evasion without situating the hypotheses within any of the extant theory.

However, we acknowledge the importance of previous studies and make conscious attempts to bridge the gaps. The current study makes a number of novel contributions to literature and knowledge. First, the current research overcomes the limitation in theorisation by rooting the study in behavioural economics theory which allows the researcher to test hypotheses across economic and behavioural determinants of tax compliance behaviour. This is a major departure from most existing studies which were asymmetrically executed either in the direction of behavioural or economic determinants of tax compliance and in some cases without any theoretical background. Second, unlike previous studies that chose limited research sites (in terms of geographical coverage and sample size), the current study surveys SMEs across all the six geopolitical zones that make up Nigeria (South-West, South-South, South-East, North-Central, North-West and North-East) with the assistance of the country's largest umbrella body for SMEs called Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). To date, studies on SMEs tax compliance behaviour that cut across the entire country and pooling such a large sample size are very rare. More importantly, tax non-compliance behaviour is measured by a modified survey of self-reported attitudes towards tax non-compliance using a hypothetical tax scenario. This is to mitigate the likely social desirability bias towards the sensitive questions in the study questionnaire.

The study findings suggest certain economic, social and behavioural factors impeding tax compliance in Nigeria include tax complexity, tax non-compliance opportunity, tax deterrence and punitive factors, tax attitude and perception, and tax information. The study has valuable contributions that can help reshape the tax policy of the country, reduce tax leakages, enhance tax compliance and shore up the nation's non-oil revenue as explained under the study conclusion section. The findings also support behavioural economics theory that is often referenced as the theoretical framework for studies in tax morale, tax evasion and tax compliance behaviour (Musimenta, 2020; Nurkholis et al. 2020; Christensen et al., 1994; Wartick, M. & Mark, 1992; Elffers et al., 1992; Lewis, 1982; Warneryd & Walerud, 1982; Yitzhaki, 1974; Allingham & Sandmo, 1972). The study will be of immense contribution to literature, more so, most contributions so far from Nigeria are fraught with methodological and generalisation shortcomings, hence, the importance of this study.

## 2. Background

SMEs in Nigeria accounts for 96% of business enterprises and 84% of employment opportunities with a total number of about 17.4 million (IMF, 2018; PwC, 2019). They account for over 50% of the industrial employment, 90% of the manufacturing sector, in terms of the number of enterprises

and dominance in agriculture (IMF, 2018). One of the most important roles attributable to SMEs is the ability to generate employment for a great majority of people (A. T. Lawal et al., 2020). In the recent past, various government restructuring programmes have made many Nigerians lose their jobs in both the private and public sectors due to downsizing, mergers and acquisitions and consolidations, especially that of the banking sector, but SMEs sub-sectors often provide veritable employment alternatives (A. T. Lawal et al., 2020). Although, most jobs provided by SMEs are low paying, they enable families to survive, educate their children and, in some cases, move out of poverty (A. T. Lawal et al., 2020).

In contrast to the contributions of SMEs to the national GDP, the same SMEs account for the increasing level of tax evasion in Nigeria (Aladejebi, 2018). There are untapped goldmines in uncollected taxes from activities of small and medium enterprises (SMEs) considering huge contributions of SMEs to Gross Domestic Product (GDP) of the continent and abysmal level of tax collection from same. Nigeria has a huge tax base (due to its growing GDP over years) but at a disproportionate level to its tax compliance and collection. For emphasis, a weak tax net (tax collection propensity) will never take advantage of any economic growth. This will only engender a disparate tax-to-GDP ratio as it is in Nigeria where the tax-to-GDP ratio is 5%, trailing far below 34.1% and 20% in Organisation for Economic Cooperation and Development (OECD) and emerging markets, respectively (Amaeshi et al., 2020; World Bank, 2015). It is logical to interpret increasing GDP to mean increased tax base and ultimately increased propensity for revenue generation. However, the benefits of the enlarged tax base may elude the country considering its abysmal tax compliance and collection status (Oana, 2018).

It is more important now than ever to gauge the understanding of SMEs' tax obligation and how this translates to their tax non-compliance tendency. This aspect of SME obligation is still under-researched and not until satisfactory answers are found to the factors influencing tax non-compliance behaviour of SMEs in Nigeria, the aspiration of the country to improve the tax-to-GDP ratio will continue to be a delusion (Amaeshi et al., 2020).

### 3. Theoretical literature review

The behavioural economics theory provides the theoretical underpinning for understanding topics such as tax evasion, tax morale and tax compliance behaviour. The theory is a combination of both economic and behavioural factors responsible for tax non-compliance behaviour. The economic approach has its root in expected utility (EU) theory and deterrence theory. The EU theory of individual tax evasion establishes a positive correlation between underreporting opportunity and the actual act (Allingham & Sandmo, 1972; Yitzhaki, 1974). The theory perceives taxpayers as immoral utility maximisers who elect to evade taxes when the estimated gains outweigh the cost of evasion (Allingham & Sandmo, 1972; Sapiei et al., 2014). The deterrence theory focuses on the sanction threat and sanction effect, the punishment or sanction determined by taxpayer compliance behaviour. The more the severity of sanction and probability of detection, the lower the tax non-compliance tendencies (Musimenta, 2020; Sapiei et al., 2014). The economic approach has been expanded to include all factors that put a taxpayer in a position of economic advantage or disadvantage. For this study, the economic factors are grouped into three, including tax system structure, tax non-compliance opportunity and tax compliance cost (TCC).

The behavioural components of the behavioural economics theory assume that individuals have their differing opinion about tax compliance according to their attitudes, culture, peer influence, beliefs, values, ethics, demographic characteristics, norms and roles (Elffers et al., 1992; Lewis, 1982; Oana, 2018; Sebele-Mpofu, 2020; Warneryd & Walerud, 1982). The behavioural aspect of the model considers what Weber et al. (2014) called social effects, which are influenced by the socio-cultural environment of a taxpayer. The socio-cultural factors include prestige, social norms, psychological factors, fairness, and group effect. Beyond the fines, the psychological factors (e.g., shame) associated with tax evasion may discourage a taxpayer from cheating (Weber et al., 2014). The psychological factors arise because people fear being detected or openly shamed (Hashimzade

et al., 2012). (Hashimzade et al., 2012) opined that tax fairness can be classified into two, fairness towards government and fairness towards other taxpayers. In a situation where government renders poor services and poor quality public goods, the taxpayers might see tax payment as unfair. Conversely, if tax payment is not progressive or of unjustifiable difference from one taxpayer to another; the high tax-paying party might perceive the system as unfair.

#### 4. Empirical literature review and hypotheses development

McBarnett (2003) postulated three types of tax compliance behaviour, these are committed compliance, capitulated compliance and creative compliance. The committed compliance sees tax compliance from an ethical prism, the discharge of tax obligations without complaining. Capitulative compliance is a discharge of tax obligation with some level of reluctance under the regulatory influence and creative compliance is an act of tax avoidance through legitimate loopholes, which ultimately reduces tax liability legitimately.

The tax system structure has been found to have a great influence on tax compliance. The tax system structure could be grouped into tax deterrence sanction, tax system complexity and tax rate structure. Wartick, M. and Mark (1992) opined that the tax rate, the probability of detection and the penalty structure are determinants of the monetary cost of tax compliance; these conversely determine tax compliance behaviour (Wartick, M. & Mark, 1992). Several similar empirical studies in different countries subsequently tested hypotheses based on these factors (Chan et al., 2000; Devos, 2008; Hindriks et al., 1999; Musimenta, 2020; Sapiei et al., 2014; Ya'u et al., 2020) and results confirmed the influences of these factors as significant determinants of tax compliance behaviour. Tran-Nam and Evans (2014) defined tax complexity from different perspectives. To a tax professional, it refers to the time it takes to carry out tax planning, give tax advice and prepare tax returns. A lawyer considers complexity as difficulty in reading, interpreting and application while a taxpayer views it from difficulty in understanding. In general, tax complexity may be procedural complexity, computational complexity, low level of readability, compliance complexity, form complexity and rule complexity (Pau et al., 2007; Saad, 2014; Saw & Sawyer, 2010). The complexity in a tax system primarily arises from a lack of understanding by laypersons that constitute the bulky of the taxpayers (Kirchler, 2007; Musimenta, 2020). A weak tax deterrence sanction breeds corruption. Joulfaian (2009) established a correlation between tax evasion and corruption. Business non-compliance increases with corruption; substituting corruption cost for tax payment might yield positive results because such acts of tax evasion offset expenses or financial loss. Tax non-compliance thrives when inducements or bribes to tax officials are pervasive (Joulfaian, 2009). The previous works that specifically explored the relationship between corrupt tax officials and tax evasion established a positive relationship (Crequeti & Coppier, 2009; Escobari, 2005; Gupta, 2008; Hindriks et al., 1999; Imam & Jacobs, 2007; Sanyal, 2000; Whait et al., 2018). There are divergent opinions on the effect of the tax rate on tax compliance behaviour (Clotfelter, 1983; Jackson & Milliron, 1986; Onu & Oats, 2018). The tax rate is an important variable in determining tax compliance behaviour despite its exact effect remaining elusive (Kirchler, 2007). An increase in tax rates may encourage tax evasion (Witte & Woodbury, 1985), while a reduction in tax rate may not certainly improve tax compliance (Kirchler, 2007; Trivedi et al., 2003). Allingham and Sandmo (1972) attempted to consider independent variables such as actual income, tax rates, penalty and audit rates as determinants of tax (non)compliance using statistical modelling, in conclusion, tax rates were statistically insignificant. Porcano (1988) concluded that the tax rate does not affect tax compliance. Therefore, hypothesis 1 ( $H_1$ ) and sub-hypotheses are formulated as follows:

$H_1$ : Tax system structure influences tax non-compliance behaviour of SMEs

$H_{1a}$ : Tax deterrence and punitive factors influence tax non-compliance behaviour of SMEs

$H_{1b}$ : Tax complexity is correlated to the tax non-compliance behaviour of SMEs.



*H<sub>1c</sub>: The higher the tax rate the more likelihood tax non-compliance behaviour of SMEs*

Tax non-compliance opportunities are prospects for tax evasion which sometimes may be created by inequality and lack of means of earning a decent living. Witte and Woodbury (1985) found higher tax compliance behaviour in regions that have low unemployment rates and poverty. From the study of tax return data for small companies, Rice (1992) reported that firms that have profit margins below their industry average revealed higher rates of tax non-compliance than firms with above-average returns. The study, however, suggested that certain individuals with limited resources have a higher tendency to evade tax due to their susceptibility to financial strain. Such companies' need for money in the present outweighs the expected future costs of detection and punishment. Personal financial constraints have been found to positively impact tax non-compliance (Abdul, 2001; Alabede et al., 2011). The financial problems confronting a taxpayer might embolden him to focus more on his financial burden rather than tax liability settlement. Abdul (2001) argued that individuals facing financial problems are more likely to evade tax. Sometimes persons without financial burden may also dodge tax and their level of evasion might be higher than those with a financial problem (Vogel, 1974; Warneryd & Walerud, 1982). Therefore, hypothesis 2 (H<sub>2</sub>) is formulated as follows:

*H<sub>2</sub>: Tax non-compliance opportunities increase the likelihood of tax non-compliance behaviour of SMEs.*

TCCs are expenses incurred by taxpayers arising from their obligations to comply with applicable tax laws. The TCCs refer to the value of resources spent by taxpayers in complying with tax laws (Etzioni, 1986; Sapiei et al., 2014). These costs include external costs (fees paid to external tax professionals), internal costs (value of time spent by staff on tax matters) and incidental costs (telephone and communication, litigation, computer and stationeries). Certain empirical studies found TCC as a likely determinant of tax compliance behaviour (Slemrod, 2004; Tran-Nam, 2003). The level of TCC could be one of the factors affecting the compliance decisions of SMEs. Therefore, hypothesis 3 (H<sub>3</sub>) is proposed as follows:

*H<sub>3</sub>: Increase in tax compliance costs increases the likelihood of tax non-compliance behaviour of SMEs*

The perception of equity or fairness strongly correlates with tax compliance behaviour (Jackson & Milliron, 1986; Sebele-Mpofu, 2020). Spicer and Lundstedt (1976) established a negative correlation between fairness and tax evasion. Spicer and Becker (1980) asserted that tax non-compliance increases when taxpayers perceive fiscal inequity because they feel ill-treated by unfair income redistributions. Etzioni (1986) opined that an unfair tax system has a higher propensity for tax non-compliance than an increased tax rate. The taxpayers are more likely to evade tax anytime they perceive the tax to be unfair, even when the tax rate remains stable. Hite and Roberts (1992) concluded that fairness is significantly correlated to the perception of an enhanced tax system, thereby discouraging tax non-compliance. Wartick, M. and Mark (1992) study on detection probability and tax compliance found tax attitude and perception to greatly influence taxpayer compliance behaviour. The tax attitudinal and perception factors include fairness and equity in the distribution of tax proceeds, trustworthiness and accountability for taxes collected by the government, the peer influence of other taxpayers and the moral obligation of the taxpayer to render complete tax returns (Okoye, 2019; Sapiei et al., 2014; Wartick, M. & Mark, 1992). Torgler (2012) established an association between trust and tax compliance morale. The extent of tax compliance depends on the trust a taxpayer has for the constituted authority or government. Therefore, relationships between taxpayers and their government are crucial in determining tax compliance. There is empirical evidence that citizenry tax compliance depends

on efficient government spending (Ali et al., 2014; Alm et al., 1992b). Individual tax morale is influenced by the magnitude of government spending on public goods, specifically; taxpayers' perception of benefits in return for their tax contribution motivates tax compliance behaviour. Barone and Mocetti (2011) argued that tax compliance improves when there is an efficient allocation of resources by the government. However, if taxpayers notice that the government indulges in wasteful habits; taxpayers might feel disappointed and seek retaliation in the form of tax evasion (Bodea & LeBAS, 2016; Dularif, M. & Rustiarini, 2020). This study extended Fischer's view of attitude and perception by adding more factors that depict the peculiarities of Nigeria's tax environment. We, therefore, propose hypothesis 4 (H4) as follows:

*H<sub>4</sub>: Tax attitudinal and perception factors reduce the likelihood of tax non-compliance behaviour of SMEs.*

Tax information has no mention in both theoretical and empirical literature on tax compliance, tax evasion and tax morale. In recent tax practices in Nigeria, the tax officials strongly believe that tax enlightenment and knowledge are necessary for bringing more individuals and businesses into the tax net. As such, a huge amount of resources is now committed to tax campaigns, tax news and tax information. The influence of tax information on tax non-compliance in Nigeria remains an anecdote requiring an empirical investigation. Therefore, this study provides a good opportunity for testing the anecdotal claim with a view of backing it up with empirical evidence. Therefore, hypothesis 5 (H<sub>5</sub>) is proposed as follows:

*H<sub>5</sub>: Tax information reduces the likelihood of tax non-compliance behaviour of SMEs.*

A study by Rice (1992) concluded that profit performance and public disclosure influence tax compliance, while firm size did not correlate with tax compliance. Joulfaian (2000) posited that firm size, marginal tax rate, audit rate, and income level impact tax compliance behaviour. The time-series analysis of corporate income tax compliance by Kamdar (1997) discovered that profit level and the rate of tax audit positively impact tax compliance. For this study, the variables including size, sector, business age, and amount of tax liabilities will be kept in the study model without further analysis. Future studies will adequately address the variables.

## 5. Research design

### 5.1. Method

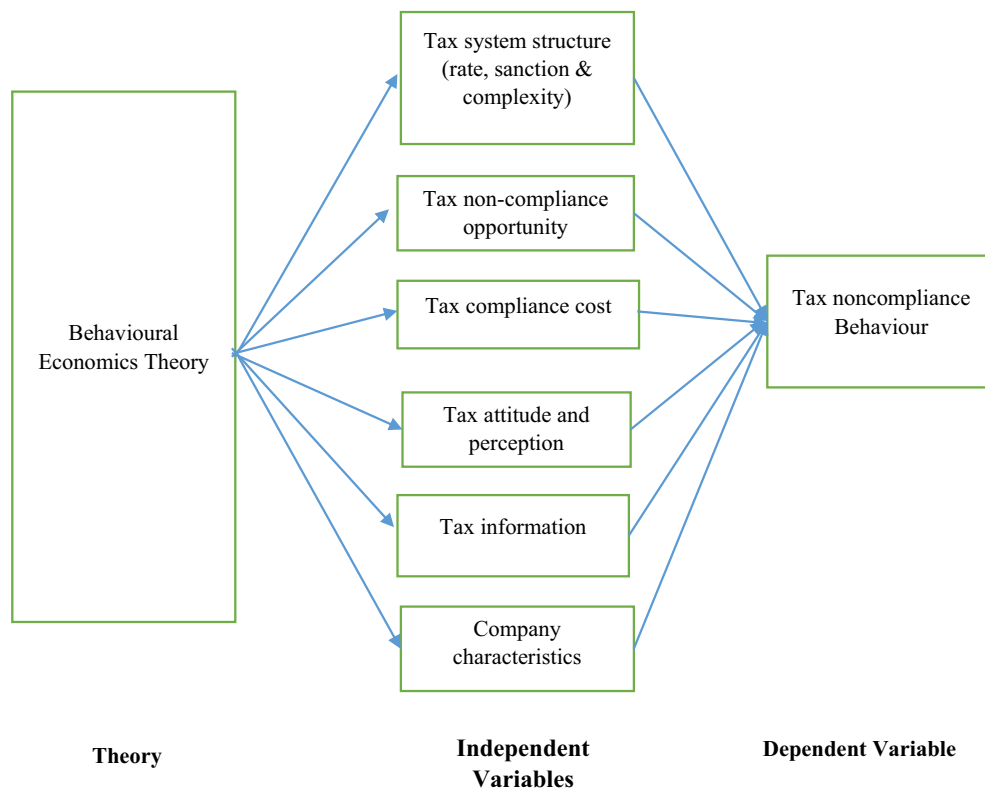
The previous studies have explored four approaches to execute research of this nature. These include surveys (Frey & Torgler, 2007) randomised tax audit (Schneider, 2005) lab experiment (Torgler, 2007; Alm, 2012) and field experiment (Kleven et al. 2011). Considering the nature of the research participants, tax audit and survey may appear applicable. Tax audit is used by tax authorities because of the availability of secondary data generated from the taxpayers' records over years. A tax audit approach is not feasible in the current study given the custody of taxpayers' information and confidentiality with which FIRS treat such information. Therefore, a survey design is found most suitable for the current study.

In testing the influence of the focal constructs that emanated from the behavioural economics theory on tax non-compliance, we commence by building a conceptual framework (Figure 1).

The conceptual framework depicts the relationship between the tax non-compliance behaviour—TNcB (dependent variable) and the independent variables, including tax system structure (comprising tax system complexity—TComplex, tax rate structure—TRate, and tax deterrence sanctions—TDeter), tax attitude and perception (TANP), tax non-compliance opportunity (TNcOp), TCC, tax



**Figure 1. Conceptual framework for determinants of fiscal evasion behaviour.**



information (TInf) and company characteristics made up of business sector (BSector), business size (BSize), business age (BAge) and business tax liabilities (BTaxLiab) Therefore, the study’s mathematical model is expressed thus:

$$TNcB_{itj} = \alpha + \beta_1 TRate_{itj} + \beta_2 TComplx_{itj} + \beta_3 TDeter_{itj} + \beta_4 TNcOp_{itj} + \beta_5 TCC_{itj} + \beta_6 TANP_{itj} + \beta_7 TInf_{itj} + \beta_8 BSize_{itj} + \beta_8 BSector_{itj} + \beta_9 BAge_{itj} + \beta_{10} BTaxLiab_{itj} + \mu$$

The variables have been described in [Table 1](#) below

The current study modifies Fischer’s model of tax compliance. Wartick, M. and Mark (1992) categorised the determinant of tax compliance into four-group constructs, including tax system structure (tax rate, penalty and probability of detection, tax system complexity); non-compliance opportunity (income level, income sources and occupation); attitude and perception (fairness, ethics, and peer influence); and demographic factors (age, gender and education). The current study adapts Fischer’s model with two important adjustments, the first modification is the consideration of other potent determinants of tax compliance picked from the empirical literature review. These determinants have been used to expand the number of factors under each of the four constructs propounded by Wartick, M. and Mark (1992). The second modification is by the introduction of two new constructs arising from empirical literature and peculiarities of the Nigerian tax environment. The inclusion of TCCs (made up of internal, external, and incidental TCCs) had been justified in the existing literature on tax compliance behaviour (Pope, 1993; Sapiei et al., 2014; Tran-Nam, 2003), while tax information has little or no support in the literature, but there are anecdotal accounts of its influence on tax collection in Nigeria. Therefore, the inclusion of tax information in the study model is considered one of the strengths of this study.

**Table 1. Description of variables**

Variable	Full meaning	Definition	Source of measurement
<b>Dependent variable</b>			
TNcB	Tax Non-compliance Behaviour	Absence of commitment to tax obligation or outright tax evasion	Sapiei et al., 2014; McBarnett, 2003; Chan et al., 2000
<b>Independent Variable</b>			
TRate	Tax rate	It is the applicable rate used to determine tax liability. It is one of the monetary cost of tax compliance.	Sapiei et al., 2014; Christensen et al., 1994; Wartick, M. & Mark, 1992
TComplex	Tax system complexity	Difficulty in the understanding of a tax system.	Musimenta, 2020; Kirchler, 2007; Wartick, M. & Mark, 1992
TDeter	Tax deterrence sanction	This is the degree of severity of sanctions for tax non-compliance and evasion	Sapiei et al., 2014; Christensen & Hite, 1997, Wartick, M. & Mark, 1992
TAnP	Tax attitude and perception	This is the taxpayer's perception of fairness, equity and accountability in the spending of tax proceeds by the government	Torgler et al. 2003; Joulfaian, 2009; Alm & Gomez, 2008; Christensen et al., 1994
TNcOp	Tax non-compliance opportunity	These are excuses for tax non-compliance as a result of adverse conditions like underemployment, lack of means of livelihood, and poverty.	Witte & Woodbury, 1985; Rice, 1992; Wartick, M. & Mark, 1992, Abdul, 2001
TCC	Tax compliance costs	These are expenses incurred by taxpayers arising from their obligations to comply with applicable tax laws	Sapiei et al., 2014; Tran-Nam, 2003; Tran-Nam et al 2000
TInf	Tax information	The extent of taxpayer's clarity, enlightenment and knowledge about the tax system	Scale constructed by the author
<b>Control Variables</b>			
BSize	Business size	This is measured by business turnover	Sapiei et al., 2014
BSector	Business sector	This is a nominal variable with a different label for nine sectors	Musimenta, 2020; Sapiei et al., 2014
BAge	Business age	This is the year of existence of each company represented by a respondent	Musimenta, 2020; Sapiei et al., 2014
BTaxLiab	Business tax liabilities	This is the actual tax liabilities paid by companies and grouped into five ranges	Sapiei et al., 2014
$\mu$	Random error	Econometric assumption	

Source: Author

For the sake of simplicity and scope limitation, the current study will not elaborate on the company characteristics. However, the company characteristics variables will be kept in the study model because they offer the opportunity to unpack the *black box* and provide a more robust understanding of the nature of the relationship between the dependent and independent variables (Gujarati & Porter, 2009; Okereke et al., 2018).

### **5.2. Population and sample frame**

The total population of SMEs in Nigeria is estimated at 17.4 million (IMF, 2018; PwC, 2019), constituting 96% of business enterprises in Nigeria. The criteria for classifying an enterprise as an SME vary significantly from one entity to another. The common denominators used to classify businesses include the business capital, business turnover or revenue and number of persons in employment. The Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) defined a small business as an enterprise that employs 10–49 persons and has capital in the region of N5million to N50million (excluding land and building), while the medium enterprises are those that employ between 50 and 199 employees and have a capital range of N50million to N500million (excluding land and buildings). For this study, SMEDAN's definition of SME is adopted to define the study population, while a sample was drawn from the SMEs that are properly incorporated under Corporate Affairs Commission (CAC) as "Limited Liability" companies. This is to ensure that SMEs captured in this study are those that render yearly tax returns to FIRS. This criterion is important to ensure that the study samples are taxpayers that have basic corporate structures.

SMEDAN has a membership base of 37,067,416 (Micro: 36,994,578, Small: 68,168, and Medium: 4,670) nationwide. The study's respondents sampling was facilitated through the SMEDAN membership database, from which companies that have email contact details and at the same time are limited liability companies were extracted. The research instrument was web based and sent to 3,568 small and medium companies, and a response rate of 11% was recorded, which translates to 392 completed questionnaires from the participating companies. A set of questionnaires was administered to each company from whom the questionnaire was filled by any CEOs, finance manager, accountant or tax managers who have knowledge and experience in handling tax matters of their respective companies. Table 2 below provides corporate characteristics of the sample:

### **5.3. Description of the research instrument and measuring scales**

The current study elicits information using a paper-and-pencil survey instrument which contains eight sections as stated in Table 3 below. The sections A to G of the questionnaire measure independent variables whose responses were measured using a 5-point Likert-type scale with responses ranging from "very likely to very unlikely," "very severe to not very severe," "strongly agree to strongly disagree," "much more fair to much less fair," "very severe to not very severe," "very easy to not very easy." Section "H" measures the dependent variable—tax non-compliance behaviour. All the scales except the tax information scale (Section G) were adapted from different sources. The tax information is the only newly developed scale because of its purported importance in the Nigerian tax system and anecdotal claim of its efficacy in tax collection in Nigeria.

The questionnaire was subjected to a pilot survey of 53 respondents for reliability and validity assurances. The pilot survey showed that two items from the initial seven items that make up the tax deterrence sanction (TDeter) Scale have correlation coefficients below the 0.3 benchmark (Leech et al., 2008). These items were later removed from the scale, and as a consequence, Cronbach's alpha improved to 0.797. Also, one item with a correlation coefficient below 0.3 was removed from the tax attitude and perception (TAnP) scale and Cronbach's alpha statistic improved to 0.837. The test of validity reveals that all question items forming the scale of each of the six constructs record factor loading greater than 0.3; suggesting that all question items highly correlated to the constructs. Aside from TCC, the Kaiser-Meyer-Olkin (KMO) statistics were greater than 0.70 thresholds for all the scales; this suggests that there are adequate question items for each scale. The TCC scale was below the threshold because the numbers of question

**Table 2. Summary of corporate characteristics of the sample**

Variable	Value Label	Freq. (%)	Total
Respondent Designation	CEO	22(6)	392(100%)
	Accountant/Finance Manager	324(82)	
	Tax Manager	46(12)	
Business Size	Size 1 = Turnover ≤ N25 M	85(22)	392(100%)
	Size 2 = Turnover = N25 M-N50M	154(39)	
	Size 3 = Turnover = N50M-N75M	121(31)	
	Size 4 = Turnover = N75M-N100M	32(8)	
	Size 5 = Turnover ≥ N100M	0	
Business age	1-5 years	62(16)	392(100%)
	6-10 years	155(40)	
	11-15 years	100(25)	
	16-20 years	49(12)	
	More than 20 years	26(7)	
Business sector	Oil, gas, mining & metal	11(3)	392(100%)
	Manufacturing	31(8)	
	Agriculture and livestock	63(16)	
	Property and Construction	23(6)	
	Transport, trade & services	102(26)	
	Finance & Banking	21(5)	
	Entertainment & hospitality	38(10)	
	Technology & Telecoms	44(11)	
	Educational services	59(15)	
	Tax Professional Services provider	Internal	
External		43(11)	
Internal & External		60(15)	
companies by the geographical spread	North East	16(4)	392(100%)
	North West	22(6)	
	North Central	32(8)	
	South East	69(18)	
	South-South	52(13)	
	South West	201(51)	
Income tax Liability in 2019	Less than N1M	158(40)	392(100%)
	N1M—N5M	138(35)	
	N6M-N10M	49(13)	
	N11 M-N15M	32(8)	
	N15M and above	15(4)	

Source: Author

items under the construct are too few to form a scale but the scale is kept in the model because of its significance in a prior study of this nature.

A further test of validity through Bartlett's statistic of 1% significance shows sampling adequacy and highly correlated question items that measure the same construct (Leech et al., 2008). The statements in the questionnaire were constructed in such a manner that respondents will have to reflect before applying a tick and in certain instances, reverse coding was adopted to reduce respondent biases (Bryman & Bell, 2015). Despite the need to obtain respondents' views as honestly as possible, there is a general assumption of the truthfulness of respondents in a quantitative survey of this nature. The study attained an acceptable benchmark for reliability and validity across the eight measuring scales before the main field study.

## 6. Empirical findings

The descriptive statistics compare the mean, standard deviation and skewness of the study constructs as reported in Table 5 below. The third and fourth rows show mean and standard deviation statistics, respectively. The normality of the data set is measured by skewness on the fifth row and found all the variables have skewness below the recognized threshold of 3 (Gujarati, 2006). There are correlations between certain independent variables but at an acceptable level

**Table 3. Construct measurement scales**

<b>Section A: Tax Deterrence Sanctions</b>			
		Factor Loading	Cronbach's alpha
			0.797
1	If there was a discrepancy in the annual tax return, how likely would that be audited?	0.596	
2	If your company was to be chosen for a compulsory audit, how likely would a discrepancy be identified?	0.492	
3	If discrepancies were discovered during an audit, how severe are the penalties?	0.512	
4	If there was a discrepancy that led to a penalty, it can place criminal charges on the management of the company	0.687	
5	Detection of an act of bribery of tax officials can attract the attention of the Economic and Financial Crimes Commission	0.758	

Source: Adapted from Sapiei, 2014; Christensen & Hite, 1997, Fischer et al 1992;

<b>Section B: Tax system complexity</b>			
		Factor Loading	Cronbach's alpha
1	I consider that the preparation of the company income tax return is difficult.	0.789	0.763
2	Company income tax computation is full of ambiguity	0.687	
3	Complexity in tax law is necessary so that companies are treated fairly.	0.451	
4	Corporate income tax law is relatively simple to understand.	0.426	
5	The tax office provides enough guidelines and procedure for seeking clarity	0.875	

Source: Adapted from Sapiei et al 2014; Christensen et al. 1994; Fischer et al 1992,

<b>Section C: Tax Rate Structure</b>			
		Factor Loading	Cronbach's alpha
1	A 'fair' tax rate should be the same for every company regardless of their size (small, medium or large).	0.689	0.789

(Continued)

<b>Table3. (Continued)</b>			
2	A fair tax rate should be made proportional to the level of business performance	0.528	
3	It is fair that high-profit companies should pay a higher rate of tax than low-profit companies.	0.824	
4	The company income tax rate is high in comparison to SME profit earnings potentials and activities	0.789	
5	The current tax rate paid by SME can impede the sector's growth	0.852	

Source: Adapted from Sapiei et al. 2014; Christensen et al. 1994; Fischer et al 1992

<b>Section D: Tax non-compliance opportunity</b>			
		Factor Loading	Cronbach's alpha
1	I believe that if my company's profit reporting is below the industry average I may not likely pay the correct amount of tax liability	0.699	0.790
2	If my company has a cash flow crisis, tax obligation may not be a priority in that period	0.608	
3	The company's present need for money outweighs the expected future cost of tax non-compliance	0.727	
4	I believe that certain small businesses are easily traceable for tax compliance than the others (e.g. small businesses like microfinance bank regulated by the Central Bank of Nigeria- CBN)	0.545	
5	If the country slides into recession, it is an opportunity to pay a lesser tax than my company should have paid	0.607	

Source: Rice 1992; Fischer et al. 1993, Abdul, 2001

<b>Section E: Tax compliance cost</b>			
		Factor Loading	Cronbach's alpha
1	To successfully render complete tax returns my company requires the services of external consultants	0.557	0.589

(Continued)



2	The length of time necessarily spent by the accounts department for tax purpose is material enough to achieve better business performance	0.523	
3	How significant are other additional non-staff costs in meeting requirements of filing tax returns (e.g. travelling, stationeries and courier service)	0.545	

Source: Adapted from Sapiei 2014; Ritchie et al 1997; Pope, 1993

**Section F: Tax Attitude and Perception**

		Factor Loading	Cronbach's alpha
1	I believe that each company's officers have a moral obligation to report all of their company's income and pay the correct amount of company income tax	0.617	0.837
2	Do you believe that self-assessment made company tax laws more or less fair?	0.777	
3	Do you believe that the tax system is fair to small, medium and large businesses in Nigeria?	0.812	
4	The government uses revenue generated from tax to provide public goods and services	0.825	
5	I believe that judicious use of revenue from taxes implies taxpayer commitment	0.811	
6	The taxpayer is encouraged when tax revenue is spent more on the geopolitical zone where the tax is paid	0.689	
7	I believe that government renders quality services from various taxes collected from companies	0.736	
8	To a large extent, my company believes that the government is trustworthy and accountable for all collections.	0.567	
9	We are committed to paying because other small businesses pay	0.567	

Source: Adapted from Torgler et al. 2010 Joulfaian, 2009; Alm & Gomez, 2008; Christensen et al. 1994; Robert 1994

(Continued)

**Table 3. (Continued)**

<b>Section G: Tax Information</b>			
		Factor Loading	Cronbach's alpha
1	Do you believe that availability of necessary information and guidelines would necessarily aid the payment of taxes?	0.799	0.789
2	How easily assessed is tax information for small businesses?	0.608	
3	How adequate is tax information and guidelines available online?	0.727	
4	The amount of information available is simple enough to render self-assessment returns without the services of an external consultant.	0.764	
5	Do you believe that prior tax knowledge does not affect tax compliance?	0.819	

Source: Author

**Section H: Tax Noncompliance Behaviour (Hypothetical Scenario)**

Please read the following statement and indicate your response by marking the scale that best represents your view

**Scenario 1**

Mr ABC a small company owner is considering not to disclose business cash sales of N2,000,000 when rendering the final year tax return to FIRS. The cash sale ought to be part of the business revenue for the year ended in 2019. However, the owner and his accountant are almost sure that the company would not be scheduled for tax audit and tax authority would not get to detect.

		Factor Loading	Cronbach's alpha
1	If faced with an identical situation, to what extent do you agree with Mr ABC action of not recording the cash sale of N2,000,000 as business sales income	0.769	0.791
2	Is it possible for you to report only part of N2,000,000 as business sales income?	0.778	
3	Are you likely to repeat the same action in 1 and 2 to help reduce tax liabilities and shore up the business cash flow?	0.652	

Please read the following statement and indicate your response by marking the scale that best represents your view

**Scenario 2**

Mr XYZ a small business owner incurred N200,000 on utility bills (electricity and water) for his private residence. In preparing 2019 tax returns to FIRS, he instructed his accountant to include the expenses as if they were incurred by the business. However, such expenses are not allowable, but they are almost certain that the company would not be scheduled for tax audit and tax authority would not get to detect

(Continued)

4	If faced with an identical situation, to what extent do you agree with Mr XYZ's claim of N200,000 as business allowable expenses.	0.796	
5	Is it possible for you to deduct a part of N2,000,000 as business allowable expenses?	0.692	
6	Are you likely to repeat the same action in 4 and 5 to help reduce tax liabilities?	0.647	
Source: Adapted from Sapiei et al. 2014; Chan et al. 2000			

considering inter-correlation between the variables at less than 0.7 and tolerable statistics close to 1. Therefore, the correlation is at an acceptable level and the fear of the existence of multicollinearity is allayed (Gujarati, 2006; Pallant, 2010). The summary of OLS assumption checks on linearity, multicollinearity, normality, heteroscedasticity, and autocorrelation has been presented in Table 4 below

The study was estimated using ordinary least square (OLS) as shown in Table 6 below. The predictor variables explain about 32% of the variability in tax non-compliance behaviour. This shows that the study model as shown in Table 6 below demonstrates good fitness, indicated by  $R^2 = 0.319$ ,  $F(24, 392) = 5.422$ ,  $p < 0.01$ .

In Table 7 Hypothesis 1a ( $H_{1a}$ ) results show that tax deterrence sanction is statistically significant at the 1% level ( $p < 0.01$ ) with the coefficient ( $\beta = -0.369$ ) showing a negative relationship with tax non-compliance behaviour. The significant inverse relationship between tax deterrence

**Table 4. OLS assumption check summary**

Criteria	Approach
Linearity	The test of linearity in the equation was tested with the aid of the F statistic significant at the 1% level.
Multi-collinearity	The collinearity test shows that the tolerance value for all the exogenous variables is greater than 0.1 and less than 1; while the inter-correlation coefficients between the exogenous variables are less than 0.7. This a proof of the absence of multi-collinearity.
Normality	The normality in the equation is tested with the aid of the skewness test, which shows values below 3.
Heteroscedasticity	The Durbin-Watson (DW) statistic with a reported value of 2.219 in the equation is proof of the homoscedastic status of the model. Therefore, the disturbance terms have consistent standard error and covariance (i.e. the regression equation is homoscedastic).
Autocorrelation	The reported Durbin-Watson (DW) statistic value of 2.219 provides a good test of autocorrelation. Meaning that inter-correlation among the observed error term or disturbance terms that may affect the measurement of the interest variables are not correlated.

Source: Author

**Table 5. Means, standard deviation, and inter-correlations for tax non-compliance behaviour (TNcB) and predictor variables (N = 392)**

Variable	TNcB	TRate	TComplex	TDeter	TNcOp	TCC	TAnP	TInK	BSize	BSector	BAge	BTaxLiab
TNcB	1											
TRate	0.231(*)	1										
TComplex	0.451(**)	0.137	1									
TDeter	-0.368(**)	0.346(**)	-0.152	1								
TNcOp	0.218(*)	0.237(*)	0.065	-0.094	1							
TCC	0.137	0.072	0.016	-0.153	0.197	1						
TAnP	-0.312(**)	-0.123	0.118	-0.232(*)	0.072	0.072	1					
TInK	-0.507(**)	0.162	0.081	-0.127	-0.123	-0.123	0.086	1				
BSize	-0.232(*)	0.173	-0.015	0.059	0.192	0.328(**)	-0.063	0.312(**)	1			
BSector	0.173	0.124	0.096	0.131	0.162	0.173	0.152	0.221(*)	0.142	1		
BAge	-0.262(**)	0.093	0.219(*)	0.215(*)	0.104	0.124	0.056	0.036	0.304**	0.041	1	
BTaxLiab	-0.326(**)	0.149	0.038	0.119	0.093	0.093	-0.115	0.348(**)	0.218(*)	0.333(**)	0.053	1
Mean	2.673	3.211	3.731	2.872	3.154	2.302	3.952	4.101	2.775	5	12.5	2.6
Standard Deviation	0.991	1.263	1.299	1.020	1.534	0.923	0.961	1.267	0.961	2.100	4.511	3.211
Skewness	-0.828	-0.674	-1.405	0.389	0.593	1.003	0.122	0.865	-1.622	0.940	1.367	2.019

Notes: \*\* p < 0.01; \*p < 0.05. TNcB = tax non-compliance behaviour; TRate = tax rate; TComplex = tax system complexity; TDeter = tax deterrence sanction; TAnP = tax attitude and perception; TNcOp = tax non-compliance opportunity, TCC = tax compliance cost, TInK = tax information; BSize = business size; BSector = business sector; BAge = business age; BTaxLiab = business tax liabilities

**Table 6. Summary of Ordinary Least Square (OLS) estimation results for determinants of Tax Non-compliance Behaviour (TNcB)**

<b>Explanatory variables</b>	<b>Coefficient</b>	<b>t-ratio</b>	
(Constant)	4.826	3.777	**
TRate	0.092	1.123	
TComplx	0.406	2.597	*
TDeter	-0.369	-3.356	**
TNcOp	0.618	2.221	*
TCC	0.190	1.323	
TAnP	-0.351	-3.631	**
TInf	-0.211	-3.996	**
BAge	-0.039	-3.823	**
BTaxLiab	-0.201	-1.753	*
BSize:			
Size 1 = Turnover ≤ N25M	0.512	1.312	
Size 2 = Turnover = N25M-N50M	0.018	1.001	
Size 3 = Turnover = N50M-N75M	-0.126	-0.069	
Size 4 = Turnover = N75M-N100M	-0.201	-2.033	*
Size 5 = Turnover ≥ N100M	-0.069	-2.899	**
BSector:			
Oil, gas, mining & metal			
Manufacturing	-0.529	-1.569	
Agriculture and Livestock	0.091	1.501	
Finance and Banking	-0.426	-1.896	*
Transport, Aviation & Commerce	-0.241	-1.509	
Entertainment & hospitality	0.259	0.107	
Technology and Telecommunication	-0.269	-0.942	
Educational services	0.120	0.960	
Others	0.357	1.007	
R <sup>2</sup>	0.319		
Adjusted R <sup>2</sup>	0.304		
F-statistics	5.421	**	
DW-statistics	2.219		
N	392		
p-value	**		

Notes: \*\*p < 0.01, \*p < 0.05; TNcB = tax non-compliance behaviour; TRate = tax rate; TComplx = tax system complexity; TDeter = tax deterrence sanction; TAnP = tax attitude and perception; TNcOp = tax non-compliance opportunity; TCC = tax compliance cost; TInf = tax information; BSize = business size; BSector = business sector; BAge = business age; BTaxLiab = business tax liability

**Table 7. Summary of hypotheses tested**

Construct		Hypotheses	Outcome
Tax System Structure	H <sub>1a</sub> :	Tax deterrence and punitive factors influence the tax noncompliance behaviour of SMEs.	Accepted
	H <sub>1b</sub> :	Tax complexity is correlated to the tax noncompliance behaviour of SMEs.	Accepted
	H <sub>1c</sub> :	The higher the tax rate the more likelihood tax noncompliance behaviour of SMEs.	Rejected
Tax Non-compliance Opportunity	H <sub>2</sub> :	Tax noncompliance opportunities increase the likelihood of tax noncompliance behaviour of SMEs	Accepted
Tax Compliance Cost	H <sub>3</sub> :	An increase in tax compliance costs increase the likelihood of tax noncompliance behaviour of SMEs	Rejected
Tax Attitude and Perception	H <sub>4</sub> :	Tax attitudinal and perception factors reduce the likelihood of tax noncompliance behaviour of SMEs.	Accepted
Tax Information	H <sub>5</sub> :	Tax information reduces the likelihood of tax noncompliance behaviour of SMEs.	Accepted

Source: Author

and tax non-compliance behaviour suggests that an increase in deterrence factors, such as tax audit, the detection likelihood and severe penalties could lower tax non-compliance behaviour (i.e. the greater the tax deterrence sanction, the lower the tax non-compliance behaviour). The results support the extant theory that the probability of detection and penalty structure constitute deterrence to tax evasion (Chan et al., 2000; Hindriks et al., 1999; Wartick, M. & Mark, 1992)

Hypothesis 1b (H<sub>1b</sub>) results depict that tax system complexity is statistically significant at the 5% level ( $p < 0.05$ ) with the coefficient ( $\beta = 0.406$ ) showing a positive relationship with tax non-compliance behaviour. The results show that higher complexity surrounding tax law, difficulties in income tax return preparation, ambiguity and clarity problems are bound to increase tax non-compliance behaviour (the greater the tax system complexity the more likely tax non-compliance behaviour). There is a similarity between the views expressed in the extant literature and the current study results (Kirchler, 2007; Musimenta, 2020; Sapiei et al., 2014; Wartick, M. & Mark, 1992)

Hypothesis 1c (H<sub>1c</sub>) results show that tax rate is statistically insignificant considering a p-value greater than 10% level ( $p > 0.10$ ) with an insignificant coefficient ( $\beta = 0.092$ ) showing a positive relationship. The coefficient has the right sign but statistically insignificant to influence tax non-compliance behaviour. A priori expectation is that a higher tax rate would increase tax non-compliance behaviour; therefore, H<sub>1c</sub> is rejected. There is a divergent view on the exact effect of an increase or decrease in the tax rate on tax compliance (Clotfelter, 1983; Jackson & Milliron, 1986; Onu &



Oats, 2018). Kirchlner (2007) opined that tax rate is an important variable in determining tax compliance but its exact effect remains inconclusive.

Hypothesis 2 ( $H_2$ ) results indicate that tax non-compliance opportunities are statistically significant at the 5% level ( $p < 0.05$ ) with the coefficient ( $\beta = 0.618$ ) indicating a significant positive relationship with tax non-compliance behaviour. The tax non-compliance opportunity may appear in the form of financial constraints, poor cash flow position, income inequalities, nature of business and economic condition. Therefore, the more prevalent tax non-compliance opportunities in a system, the greater the tax non-compliance behaviour of SMEs. The extant literature unequivocally concluded that tax non-compliance opportunities in the form of poor profit margin, limited resources, financial burden, lack of decent means of livelihood, high unemployment rate and poverty are recipes for tax non-compliance (Abdul, 2001; Rice, 1992; Vogel, 1974; Witte & Woodbury, 1985)

Hypothesis 3 ( $H_3$ ) was not supported as the findings indicate an insignificant relationship between TCC and tax non-compliance behaviour. The TCC is statistically insignificant at the p-value greater than 10% level ( $p > 0.10$ ) with a coefficient ( $\beta = 0.190$ ) showing a positive relationship. In the literature, TCC includes external costs (fees paid to external tax professionals), internal costs (value of time spent by staff on tax matters) and incidental costs (telephone and communication, litigation, computer and stationeries) necessarily incurred towards the rendering of tax returns to the tax authorities. A priori expectation is that higher TCC would encourage tax non-compliance behaviour. The previous studies established that lower compliance costs encouraged tax compliance but the current study showed the right sign at an insignificant level (Etzioni, 1986; Sapiei et al., 2014)

Hypothesis 4 ( $H_4$ ) depicts that tax attitude and perception factors significantly influence the tax non-compliance behaviour of SMEs in Nigeria. The tax attitude and perception factors are statistically significant at the 1% level ( $p < 0.01$ ) with the coefficient ( $\beta = -0.351$ ) showing a significant negative association with the tax non-compliance behaviour. The findings indicate that the moral stance of the respective taxpayers, the perceived fairness and equity on the part of government and the extent to which taxpayers trust the government influence tax (non)compliance behaviour. The results fall in line with our expectation that a good tax attitude exhibited by the taxpayers and a perception of fairness would lower the tax non-compliance tendencies. The results are also compatible with the existing literature that established a strong link between perception of equity or fairness and increased tax compliance (Spicer & Lundstedt, 1976; Spicer & Becker, 1980; Hite & Robert, 1991).

Hypothesis 5 ( $H_5$ ) indicates that information availability, ease of access to information, information adequacy, information simplicity and tax knowledge significantly influence tax non-compliance behaviour. The results show that tax information is statistically significant at the 1% level ( $p < 0.01$ ) with the coefficient ( $\beta = -0.211$ ) showing a significant negative relationship with tax non-compliance behaviour. The more the tax information, the lower the likelihood of tax non-compliance behaviour. This result is novel and significant because existing literature is yet to directly dwell on the impact of tax information on tax compliance behaviour.

## 7. Discussions and policy implications

The findings in this study support the dominant theory—behavioural economics theory that is often referenced as the theoretical framework for studies in tax morale, tax evasion and tax compliance behaviour (Allingham & Sandmo, 1972; Christensen et al., 1994; Elffers et al., 1992; Lewis, 1982; Warneryd & Walerud, 1982; Wartick, M. & Mark, 1992; Yitzhaki, 1974). The study of determinants of tax compliance and evasion is still grossly under-researched in SSA. Moreover, most contributions so far from Nigeria are fraught with methodological and generalisation shortcomings, hence the importance of this study.

The study has valuable contributions that can help reshape the tax policy of the country, reduce tax leakages, enhance tax compliance and shore up the nation's non-oil revenue. The country has one of the poorest tax-to-GDP ratios in the world at less than 5%, compared to emerging markets at an average of 25%. There are challenges in bringing companies into the tax net, majorly because of the inability to effectively manage some of the economic, social and behavioural challenges in the tax system.

The national tax laws have many elements of tax deterrence and sanctions but the effectiveness of such in dealing with erring companies has come under criticism. Three major factors affect tax deterrence and sanctions in Nigeria, the first is the fraudulent practices of the tax officials who often trade penalties for bribes and favours from the taxpayers. The more the punitive measure, the more the arbitrage opportunity to collect more bribes by the tax officials. The occurrences where enforcement officers convert stiffer sanctions to illicit financial reward abound in traffic offences, environmental sanitation offences, building plan offences and so on. The second aspect is that certain deterrence laws and policies have become obsolete and ineffectual in discouraging tax non-compliance behaviour. The third and major challenge in the application of tax deterrence policies and sanctions in Nigeria is political interference and influence peddling by the political elites in the country. It is suggested that the tax regulators and other fiscal authorities must find a way to create disincentives for bribe-taking by tax officials, revise the outdated penalties and sanctions and wield the big stick against politicians obstructing the processes and wheel of justice.

The significant positive correlation between tax system complexity and tax evasion behaviour shows that the more complex a tax system, the more likelihood of tax non-compliance behaviour. The tax system complexity takes different forms varying from difficulties in annual tax return computations, ambiguities associated with income tax preparation, the complexities in tax laws and inadequate facilities for clarity whenever taxpayers need assistance. For example, Federal Inland Revenue Services (FIRS) has been undergoing reforms in the last 20 decades but the understanding of the complexities inhibiting tax compliance is missing. FIRS introduced self-assessment for income tax returns in 1992 and made it compulsory for every company in 1998 yet SMEs cannot make use of self-assessment tax returns without the help of a tax expert while the similar procedure is well simplified in other climates. In the United Kingdom, HM Revenue & Customs (HMRC) provide adequate information necessary for filling up the self-assessment return and specifically a help-sheet accompanies every self-assessment form.

The tax non-compliance opportunities encourage tax non-compliance behaviour. Such non-compliance opportunities include cash flow crisis, profit performance below the industry average, poor economic performance, widespread global pandemic and inherent nature of the business may shield such companies away from the attention of tax authorities or reveal the existence of such companies. There are ways tax authority could manage the situations or opportunities that may have emboldened taxpayer non-compliance or defaults. The first is to come to terms that poor operating results and business liquidity challenges may encourage tax non-compliance behaviour. As a result of this, early intervention in form of alternative payment arrangements can be structured in a manner that suits the taxpayers' cash flow. The tax authority can create a special window for tax obligation settlement by instalments. Another alternative window that could discourage non-compliance opportunities is to allow tax settlement via bank guarantee from taxpayers whose current cash flow cannot easily accommodate tax payment. It will be encouraging if tax incentives in the form of tax discount are structured for early and prompt tax settlement.

One of the findings of this study is that tax attitude and perception influence tax non-compliance behaviour. The significant negative correlation between tax attitude and perception and tax non-compliance behaviour is an indication that the more positive the attitude and perception of the taxpayers, the lower the likelihood of tax non-compliance behaviour. The tax attitude and perception entail the taxpayers' perception of the government's fairness, trustworthiness in tax revenue accountability, equitable redistribution of tax revenue across geographical regions in the country

and taxpayers' moral uprightness. The implication of these findings is the need to x-ray the government on how it fairly and equitably renders stewardship of the tax proceeds collected over years. What projects were undertaken using the tax proceeds over years? What is the quality of projects undertaken? Who are the beneficiaries of these projects? The taxpayers need assurances of fairness in the use of tax revenue to discourage tax non-compliance behaviour. Reducing incidences of tax non-compliance behaviour call for greater communication and engagement between the taxpayers (corporate and individuals) and the government. This may be in the form of regular publication of projects executed with taxpayers' fund.

The measure of the influence of tax information on tax non-compliance behaviour is a novel contribution to the literature because this is most likely the first study evaluating such association. The results show that tax information is negatively correlated to tax non-compliance behaviour, suggesting that improved tax information can significantly reduce the incidence of tax non-compliance behaviour. There have been anecdotal claims of the efficacy of tax information but the current study empirically confirms the significance of tax information (information availability, information access, information adequacy, information simplicity and knowledge) as an essential aspect of tax compliance behaviour. The nation's tax authorities have not done well in areas of provision of information and guidelines that could aid tax compliance. The online and paper information purportedly provided to aid tax compliance lack clarity, mostly unavailable and inaccessible (e.g., high instances of internet downtime). The customer service and receptions of FIRS lack competent employees that are capable of providing useful information for tax compliance. The taxpayers' help desk hotlines are inactive, this couple with poor responses to enquiries. These findings imply that tax authorities need to overhaul their tax information strategies for efficient service delivery and fiscal compliance.

Furthermore, findings show that both tax rate and TCC are not significant enough to influence fiscal evasion behaviour. The taxpayers are not sensitive to the tax rate and tax cost of compliance, while other factors discussed above are more germane. This may be that cost of tax compliance might not necessarily constitute a new burden because companies' accountants already consider tax compliance as part of their normal job description at no extra cost. For the tax rate, many entrepreneurs still consider the Nigerian tax rate as competitive when compared to other countries in SSA. Many companies will rather like to see fairness, justice and equity in tax revenue redistribution. Taxpayers need a tax system to be less cumbersome and more tax information for ease of tax compliance rather than a reduced tax rate.

## **8. Conclusion**

The findings in this study enhance the tax compliance literature by establishing the factors encouraging or discouraging tax non-compliance behaviour of SMEs in Nigeria. The study will be of immense benefits to the tax authorities, fiscal managers and policymakers when formulating strategies for improvement of tax compliance, tax collection and tax-GDP ratio in SSA.

The study is not without limitations which provide opportunities for future research. The study relies on the scale provided by Joulfaian (2009) to measure the dependent variable (i.e. tax non-compliance behaviour). The tax non-compliance behaviour was measured from individuals' (accountants, tax managers, CEOs and heads of finance) standpoint to proxy the tax non-compliance behaviour tendencies of companies. The views of the individuals representing the participating companies might not necessarily represent the behaviours of the companies. In addition to this limitation, the hypothetical tax scenarios used depend considerably on the honesty of the respondent but better than using direct response measures that will invariably suffer from measurement errors (Rice, 1992).

Future studies may consider other methodologies for executing studies of this nature. In-depth interviews and focused group discussions with selected CEOs, tax managers and tax regulators may provide more revealing information. Because the focal independent variables in the study of

this nature are prone to problems of multicollinearity, future study would consider the use of partial least square or structural equation model ahead of OLS as data analysis technique. Other measures of tax compliance or evasion not in direction of taking economic advantage as used in this study may be considered.

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