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Determinants of Tax Non-compliance Behaviour of Small and Medium Scale Enterprises in Nigeria

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Abstract

The unpredictable nature of crude oil prices in the market requires the government of any economy to develop solid tax bases by generating income from sources especially small and medium enterprises (SMEs) to guarantee revenue that can engender sustainable fiscal policy. This study, therefore, focuses on evaluating and prioritizing the motive toward tax compliance and avoidance among registered SMEs, with at least five years of operational experience, in Lagos, Nigeria. A cross-sectional survey design was adopted with primary data gathered from 382 SME owners/managers derived from the multi-stage sampling technique. Utilizing the Analytical Hierarchy Process (AHP), data gathered were analysed. The results revealed that, out of the six tested, economic criteria and their factors are the most important criteria influencing both tax avoidance and compliance decision. Moreover, to strategically enhance SMEs' tax compliance, government spending, economy, and fiscal policy need to be logically positioned in favour of SME operators.

***Keywords*:** Tax Avoidance, Tax Compliance, AHP, SMEs, Nigeria

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Introduction

When compared to countries such as the United Kingdom, United States, or South Africa, payment of taxes in a developing economy such as Nigeria, is problematic to most stakeholders (government, researchers, and business practitioners). This is due to the relatively weak institutional framework and suspicion over government delivery in developing economies (Babatundeet al., 2017). In the present day, many consider the payment of taxes a burden, rather than an essential responsibility required by law to be paid by every taxable human and business entity (Narotzki, 2016). However, tax is an important economic activity through which governments generate revenues in all parts of the world. It is very important in the funding of government activities and for making government more responsible and responsive to the needs of citizens and vice versa. Tax non-compliance is therefore a major issue every government must tackle to avoid dwindling revenue as well as to improve government's ability in sourcing for loan to aid the effective functioning of the business environment. In Nigeria, Federal Inland Revenue Services (FIRS) and States Inland Revenue services (IRS) are the major tax administrators, both at the Federal and State levels, which have continually experienced considerable improvement in revenues generated between 2015 and 2019 (Organisation for Economic Co-operation and Development, 2022).

However, tax avoidance has been a common practice in both developing and developed countries; it is more prominent in the developing countries (López, 2017). In developing countries, most firms use different means, such as remaining informal, and small, among other general unlawful practices, to evade tax or to engage in fraud related to tax compliance and this has severely impacted the economies of these countries (Galtung, 1995). Therefore, Devos (2013) advocated that government at all levels must reduce tax non-compliance with the right tax law. In Nigeria, for example, the avoidance of tax by most firms is not due to the absence of tax laws. It is rather due to the ineffective or non-implementation of tax laws, due to several reasons. It is these reasons that this study considers.

The issue of not fully complying with legal requirements of tax is a general phenomenon (Hasseldine & Bebbington, 1990), hence, SMEs are not exempted from the practice of partial tax compliance and tax avoidance. This study is centred on SMEs since small firms that are well nurtured in a good business environment are the future large conglomerates (as they expand from small to large/big enterprises) that contribute more to the economy through individual, corporate and other taxes (Atawodi & Ojeka, 2012). Therefore, it is important to obtain inputs about tax policy from stakeholders of businesses that generate a substantial part of the population`s employment, thus reducing poverty as well as fuelling the economy. As more SMEs grow in a business environment, they employ more people and contribute more to the tax net of the nation. Thus, strategies for an effective tax compliance system cannot be overemphasized as it has a direct relationship with government revenue as well as the capacity for infrastructural development of the Nation. Especially, when SME owners are the homegrown bedrock entrepreneurs that engender small investments for fuelling the economy (Aryeetey & Ahene, 2005).

Furthermore, tax avoidance is a major issue in most developing nations and economic development can be hindered by lower revenues (Picur & Riahi-Belkaoui, 2006). As a result, it is important that policymakers and other stakeholders ascertain what influences tax non-compliance decisions by SME owners/managers, so as to use the appropriate research-driven policies for reversing this disturbing trend. As far as researchers are aware, there is no study on the multi-criteria decision analysis application that examines comprehensively all the measures of tax non-compliance criteria (business and investment, institutional and industry, economic, social-psychological, socio-cultural, and political and legal) and their sub-criteria with regards to developing nations in Africa. This study, therefore, intends to explore the implications of the analytical hierarchical process application on tax non-compliance decisions of SME businesses in Lagos, which is one of the biggest economies in Africa. As per the World Bank (2019) that it is easier to do business in Nigeria than to pay taxes. What this means is that more effort needs to be put into making sure that the tax system is simple and effective. This is to encourage SME owners and managers to fully comply with tax payments. In view of this, this study focuses on analytical hierarchy process modelling of the determinants of tax non-compliance behaviour among SMEs in Lagos, Nigeria. The relevant research question is as follows: What are the criteria influencing tax non-compliance behaviour and their level of influence on SMEs in Lagos, Nigeria?

A good solution to this problem could be obtained by application of the AHP method which has a strong mathematical base. AHP method is very flexible because it produces a simple way to find the relationship between the criteria and alternatives. Using six criteria (business and investment, institutional and industry, economic, social-psychological socio-cultural, and political and legal) and relatively large (16) number of alternatives, this method assesses the relevance of the criteria in the real world and determines the interaction between the criteria, in case of complex problems of tax non-compliance among entrepreneurs.

The paper has been organized into five sections. The next section has introduced what the study considers as the areas that encourage or discourage tax compliance and avoidance by using the AHP approach. The section to follow presents a review of related literature on tax avoidance and compliance. The next section reveals the research methodology and gives an insight into what is meant by the multi-criteria decision-making technique, AHP along with the proposed conceptual framework. Then, the results of this study are discussed, and finally, the discussion is summed up with an emphasis on policy implications.

Literature Review

The Concepts of Tax Avoidance and Compliance

Tax compliance exists when individuals or business entities abide by the obligation of what is due to the regulatory authority (government). That is, paying the appropriate amount due to the government on time, without any reservation. It is the accurate reporting of income and claiming of expenses in accordance with stipulated tax laws (Inasius, 2019). Thus, with respect to previous studies on tax compliance, identified watch words for describing tax compliance are obedience, ability, and willingness (Inasius, 2019; Bandara & Weerasooriya, 2019). Braithwaite, (2009) explains that differences occur between what is paid and what ought to be paid due to excessive or understated revenues, deductions, and expenditures by taxpayers. These non-compliance practices are common among SME owners/managers, and this may be the reason why the Organisation for Economic Co-operation and Development (2004) labelled SMEs as high risk in terms of compliance with the tax system.

The debate on the universal definition of tax avoidance is ongoing, as it is viewed from different perspectives, depending on the stakeholder being affected (Oduro et al., 2018; Tehulu & Dinberu, 2014). Any activity of a business owner which aims at reducing the tax burden, especially for the benefit of such a business is regarded as avoidance. Such activities, according to Mughal (2012), include lobbying, which at times may be in the form of collusion between tax officials and taxpayers, lack of trust placed in the tax system, and disbelief or show of negative attitudes towards payment of tax, in order to benefit from tax reductions. According to Ahmed and Kedir (2015), the need to fully understand the motives for negative attitudes exhibited by some business owners and managers towards tax payment cannot be overemphasized, as it remains unclear in spite of the harmful effects caused by its presence for the socio-economic development of any nation.

Therefore, such understanding or full information, which may be country-specific, is important for formulating cutting-edge strategies toward engendering positive attitudes of taxpayers toward development, and thereby reducing tax non-compliance. This is because, a direct link exists between government revenue and expenditure, especially for scaling up development in the society (Engida & Baisa, 2014).

Furthermore, other reasons identified in the literature as affecting tax compliance are the taxpayers' perception of government spending as well as the fairness in the tax system (Fagbemi, & Abogun, 2013). If the citizens or business owners are of the view that the government is not spending tax revenue wisely or at least to the benefit of the society such as the promotion of a conducive environment for businesses to strive and excel, it may be difficult to expect/enforce rational decision-makers (taxpayers/business owners/managers) to comply optimally to tax payment. Rather, business managers might intensify efforts at benefiting significantly through tax avoidance since the business is operating in a nation with weak institutional measures.

Empirical Review

According to Inasius (2019), there are two main approaches to understanding determinants of compliance: behaviour and economics. The economic approach emphasizes the concept of economic rationality, while the behavioural approach is based on concepts from disciplines such as sociology and psychology. Dwianika and Biasini (2019) posited that the tax compliance behaviours of SMEs can be defined in terms of isomorphism formed by institutional pressures and expectations. According to this institutional theory, SME tax enforcement is influenced by general societal norms as well as the behaviour of other businesses in similar situations. Furthermore, Hoa et al. (2019) theorized that tax penalties, perceptions of offenses, and knowledge about taxes have an impact on compliance. They argued that tax compliance will increase when penalties are involved to handle increased non-compliance. Similarly, taxpayers' knowledge and conceptions regarding taxation will form the basis for assessment, awareness of fairness and willingness, and capacity to comply with tax regulations. Tehulu and Dinberu (2014) revealed that probability of being audited, perception of government spending, perception of equity and fairness of the tax system, penalties, financial constraint, changes on current government policies, and referral group are also important determinants of tax compliance behaviour. Bandara and Weerasooriya (2019) in their study concluded that a positive relationship exists between tax information, the attitude of taxpayers, legal framework, cost of tax compliance, and level of tax compliance.

In his study, Deyganto (2018) indicated that demographic factors such as age, gender and education on tax compliance have long been researched by different scholars. The findings on the impacts of these factors on tax compliance vary along with different studies. Nurwanah et al. (2018) explained that decisions regarding either to avoid or not to avoid taxes are heavily reliant on taxpayers' personal judgment. Inasius (2019) opined that personal factors such as tax knowledge, personal financial constraints, and awareness about penalties and offenses are therefore likely to have a significant impact on taxpayers' compliance attitude. Dwianika and Biasini (2019) posited that there is a social bond between the members of the community, and this bond determines their level of tax compliance. Social factors include perceptions of justice and fairness, shifts in existing government policy, and referent classes.

According to Deyganto (2018), the effect of the tax rate on tax compliance is mixed. Chan et al. (2008) explained that compliance increases with (perceptions of) the availability of public goods and services, i.e., tax benefits. Chan et al. (2008) then grouped tax rates, tax audits, tax benefits, and perceptions of government spending as economic factors that determine the level of tax compliance. Deyganto (2018) suggested that the role played by institutional factors of the tax authority, simplicity of tax system and probability of detection also play vital roles in compliance decisions. Nurwanah et al. (2018) added that weak enforcement of direct tax rules, as well as tax agent corruption, are also determinants of tax compliance. Ritsatos (2014) examined tax avoidance and compliance from a neo-classical and classical paradigm to behavioural economics. A wide array of factors influencing tax avoidance and tax compliance were found, such as level of income, tax morale, trust in organization and perceived fairness of tax system. Tilahun (2018) researched on economic and social factors of voluntary tax compliance in Bahir Dar city. It was revealed that fairness of tax system had a significant effect on tax compliance. Oduro et al. (2018) examined the determinants of tax avoidance in developing economies, using Ghana as a case study. It was revealed that increase in tax rates, audit probability and corruption level of tax officials lead to an increase in tax avoidance.

From the empirical review, it was noted most of the studies focuses on individual factors (perspectives) that result in tax avoidance and compliance by taking either economic, psychological or social factors as determinants (Ritsatos, 2014; Deyganto, 2018; Dwianika & Biasini, 2019). Others that tried to combine factors combines two of the factors at most, such as economic and social factors (Tilahun, 2014); economic and psychological factors (Inasius, 2019); and economic and political factors (Bandara & Weerasooriya, 2019), without comprehensively combining all the factors for modelling the motivation for tax avoidance or compliance behaviour. The holistic view (business and investment, institutional and industry, economic, social psychological, socio-cultural, and political and legal) to tax non-compliance embraced in this study is necessary to bring about optimal behavioural modelling of managers'/entrepreneurs' decisions that influences the behaviour of taxpayers. Thus, this study intends to fil the existing research gap and to improve the knowledge with regards to simultaneous influence of business and investment, institutional and industry, economic, social-psychological, socio-cultural, and political and legal factors on tax avoidance. This gap is addressed based on an optimization model of multi-criteria decision making using the analytic hierarchy process which can assist in integrating the criteria and alternatives in a hierarchical structure for determining and prioritizing the motivation among major stakeholders of business (SMEs owners/managers) to either comply or avoid tax in their business environment.

Theoretical Literature

Slippery Slope Model

The slippery slope model or framework was introduced by Kirchler et al. (2008) for understanding tax compliance. This framework is a combination of behavioural and economic approaches, stating that tax climate in a society lies between a synergistic climate and an antagonistic climate (Marhiah et al., 2019).

In a synergistic climate, the relationship that exists between the tax authorities and taxpayers takes a service and client form, with the tax authorities providing a translucent and respectful service to the taxpayers (Kirchler et al., 2008). The implication of this is that the public trust towards tax authorities is high, leading to willingness to pay or voluntary compliance. However, in an antagonistic climate, the relationship that exists between the tax authorities and taxpayers takes 'cops and robbers' form. Tax authorities view taxpayers as robbers that try to avoid tax if given a chance, while taxpayers feel prosecuted, and feel the need to hide (Braithwaite, 2003). In this situation, there is a low level of trust, which is likely to build an enforced compliance rather than a voluntary compliance (Mardhia, et al.,2019). The slippery slope framework further suggests that economic factors (such as tax penalties and audit probabilities) and behavioural factors (such as distributive fairness, tax knowledge, attitude and norms) measure power and trust. Trust in tax authorities is believed to be predictors of voluntary compliance and power of tax authorities leads to enforced tax compliance (Mardhiah et al.,2019).

Psychology Theory of Taxation

The theory proposed that the actions of individuals or groups are based on psychological factors (moral and ethical). This means that taxpayers' decisions on whether to comply or not with tax obligation is significantly influenced by some psychological factors, even when the tax authority does not detect noncompliance. It emphasizes that the decision to either comply or avoid taxation is a function of attitude and beliefs in the system. Thus, there is a need for the reorientation of SME owners and managers towards developing positive attitudes to comply effectively on tax payments without the state authority deploying additional resources to enforce compliance. Based on this theory, the government should earn the trust of taxpayers in order to influence voluntary compliance among SMEs. This is by seeing tax payment as a moral right which must be upheld as well as by ensuring fairness in taxes to be paid which can discourage avoidance of tax.

Benefit Theory of Taxation

This theory is based on the assumption of contractual exchange of benefits between the party that receives the tax and the party that is expected to pay taxes. According to Neill (2000), taxes are paid by agents based on public goods and services enjoyed by such agents. Thus, the government is expected to reciprocate the payment of taxes by focusing their spending on the welfare of the individual and businesses that pay taxes. As a result, a direct link exists between state activities and tax liabilities of SMEs. It is expected under this theory that government prioritizes policies that create an enabling business environment for SMEs to thrive, while business owners reciprocate such by being compliant with tax obligation to fuel sustainability of the equitable/mutual benefits. Any of the parties who may fail to dutifully perform its obligation of this exchange results in tax avoidance on the part of business, which leads to revenue dwindling for the government. This directly makes government unresponsive to the needs of the society.

Optimal Tax Theory

The basic component of this theory is that the government likes to obtain a specified amount through taxation. According to Aladejebi (2018), the government must strike a balance between the desire to raise taxes as much as possible and the ability of her citizens to pay them. This is also valid for SMEs, who are under a lot of pressure to comply with the taxes placed upon them. A good tax system, according to Bandara and Weerasooriya (2019), should consider efficiency, transparency, equity, stability, affordability, and flexibility. As a result, the government should avoid increasing tax burden on SMEs, while also ensuring that the welfare of citizens is maximized. To this end, the study is underpinned by the synergistic effects of all reviewed theories. That is, the study will be based on the integration of the varying theoretical beliefs of the reviewed theories with respect to tax non-compliance behaviour. Thus, it starts from the economic and behavioural factors of the slippery slope framework to the provision of enabled business environment and policies by the government agents (benefit theory of taxation). Then, to the affordability of the stated tax by taxpayers (optimal tax theory), and finally with the psychologically perception of taxpayers' which is ingrained on taxpayers' attitude and beliefs in the tax system which informs the conceptualization of the study.

Methodology

The focus of the study is to empirically understand and prioritize the motive towards tax compliance and avoidance among registered small and medium scale enterprises in Lagos, Nigeria. The SMEs considered are those with a life span of at least five years. The Analytic Hierarchy Process (AHP) has been used to analyse the SMEs selected. Thus, with a population of 11,663 SME's (SMEDAN [Small Medium Enterprises Development Association of Nigeria], 2013), the study employed cross-sectional survey research design to access first-hand information from entrepreneurs/small business owners on the motivations to either comply or evade tax systems.

In view of this, Taro Yamane (1967)'s statistical formula was used to determine appropriate sample size, while a proportional sample was employed to ensure an appropriate mix of both small and medium enterprises in the proportion to the study population. From the population size of N (11663) and the level of precision of e (0.05), the sample calculated (n) is as follows:

$$n = \frac{N}{(1 + N(e)^2)}$$

$$n = \frac{11663}{(1 + 11663(0.05)^2)} = 386$$

In this current study, the successful Australian Taxation Office (ATO) model was adopted, which was based on Braithwaite`s ideas of "motivational posture". It is based on the motivating factors to the taxpayer in order for them to comply willingly and to promote the culture of tax compliance based on the mutual benefits towards stakeholders (Braithwaite, 2003). This model promotes strategies of free and sustainable compliance for the development of the society, rather than enforcement which has not been working optimally, especially with SMEs. The ATO model consists of important parameters for assessing the motivation of taxpayers' behaviour towards tax compliance. These include parameters/influencing factors related to Business, Industry, Sociological, Economic, and Psychological (BISEP) which reflect different attitudes and situations taxpayers face (Morris & Lonsdale, 2004). The BISEP adaptation used in this study for the AHP model and pairwise comparison is presented in Table 1 and Figure 1.

Table 1: Measures of Tax Compliance and Their Dimensions

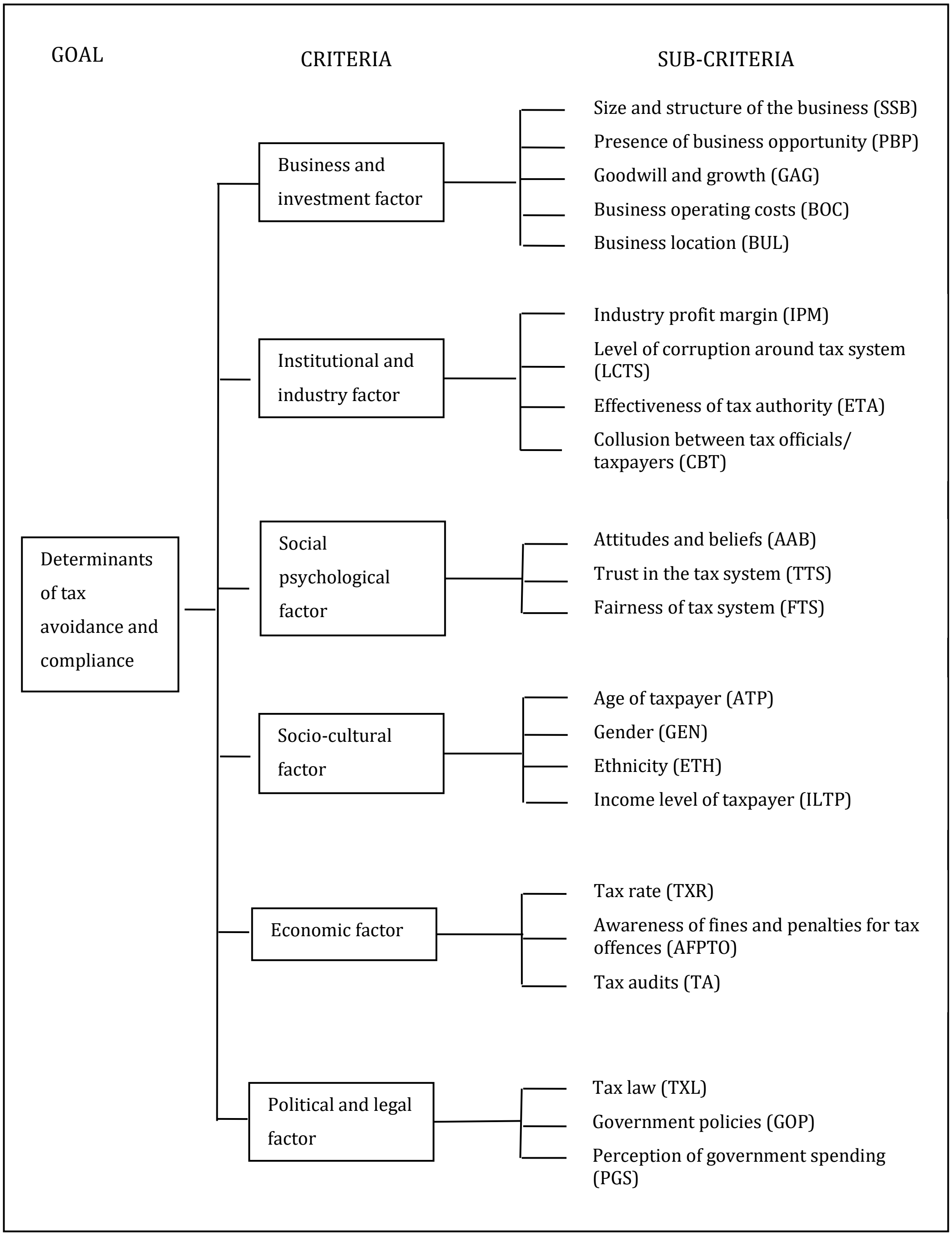
Code	Criteria	Code	Sub-criteria	Sources (Authors)
P1	Business and Investment Factor	C1	Size and structure of the business	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
		C2	Business opportunities	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
		C3	Goodwill and growth	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
		C4	Business operating cost	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
		C5	Business location	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
P2	Institutional and Industry Factor	C6	Collusion tax official and taxpayer	*Oduro et al. (2018)*
		C7	Level of corruption in tax system	*Oduro et al. (2018)*
		C8	Effectiveness of tax authority	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
		C9	Industry profit margins	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
P3	Social Psychological Factor	C10	Attitudes and Beliefs	Bătrâncea *et al. (2012), Manaye (2018)*
		C11	Fairness of tax system	Bătrâncea *et al. (2012), Manaye (2018)*
		C12	Trust in the system	Bătrâncea *et al. (2012), Manaye (2018)*

Code	Criteria	Code	Sub-criteria	Sources (Authors)
P4	Socio-Cultural Factor	C13	Age of taxpayer	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
		C14	Gender	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
		C15	Ethnicity	*Morris and Lonsdale, (2004),* Bătrâncea *et al. (2012)*
		C16	Income level of the taxpayer (SME)	*Oduro et al. (2018)*
P5	Economic Factor	C17	Audit Profitability/Tax Audits	Bătrâncea *et al. (2012) Oduro et al. (2018), Manaye (2018)*
		C18	Awareness of fines and penalties for tax offenses	Bătrâncea *et al. (2012) Oduro et al. (2018), Manaye (2018)*
		C19	Tax rates	Bătrâncea *et al. (2012) Oduro et al. (2018)*
P6	Political and Legal Factor	C20	Tax law	Bătrâncea *et al. (2012)*
		C21	Government Policies	Bătrâncea *et al. (2012)*
		C22	Perception of Government spending	Bătrâncea *et al. (2012), Manaye (2018)*

Figure 1 is the hierarchical model for the pairwise comparison of three levels involving goal, criteria, and sub-criteria (Saaty, 2008). It presents the complex, conflicting, and diverse nature of the problem of modelling taxpayers' compliance behaviour which can best be structured, analysed, and synthesized through the Analytical Hierarchy Process (AHP).

To cater for non-response and improperly filled questionnaire, four hundred and twenty copies of structured pairwise comparison-based questionnaires were administered to selected respondents, as sourced through the Nigerian contacts databases of companies and business directory, Lagos Chamber of Commerce and Industry (LCCI) and Manufacturers Association of Nigeria. The survey-based structured questionnaire was in line with the Saaty's 9-point scale for pair-wise comparisons (see Table 2) which was validated through content and constructs validity by experts in multi-criteria studies, chartered accountants and business practitioners who ensured that questions are framed easily and serves the purposes it is supposed to serve in line with the study objectives.

Figure 1: Hierarchical Model for Determinants of Tax Avoidance and Compliance Among SMES



Sources: Adapted from Morris and Lonsdale (2004); Batrancea et al. (2012); Oduro et al. (2018), Manaye (2018)

Table 2: AHP Pairwise Comparison of Measurement Scale

Criteria	More Important than								Equally Important	Less Important than								Criteria
P1	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	P2
P1	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	P3
P1	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	P4
P1	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	P5
P1	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	P6
P2	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	P3
…	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	…

Analysis, Results and Discussion of Findings

The study focused on assessment of tax avoidance and compliance determinants among SMEs using AHP.AHP is a Multi-Criteria Decision-Making Model that helps in breaking down complicated organisational decision problems into simple hierarchical representation to aid analysis of both rational and irrational data, and quantitative and qualitative data in accordance with their scale of preference to proffer solution to organisational (SME's) business decision problems (Saaty, 2008; Oyatoye et al., 2015; Al-Aomar & Hussain, 2018; Praveen & Jaya, 2020). Therefore, as a decision-making analysis, AHP comprises the following principles: decomposition of decision-making problem; prioritization of decision variables; synthesis of results; and consistency measurement.

Decomposition of the Decision-making Problem

According to Saaty (2008), decision-making problems are firstly decomposed into hierarchies to ease understanding of the decision-making problem. It is a phase where the knowledge tax system is gotten from literature, experts, and other relevant stakeholders through a participatory approach in order to construct a reliable hierarchical model that underpins the study. Thus, the decomposition of decision problem aids model building for decision making. In view of this, the tax avoidance and compliance decision-making problem was framed into a 3-level AHP model (see Figure 1). The first level entails the goal of the decision problem which is the assessment of determinants of tax avoidance and compliance among SME's based on reviewed decision variables which make up the second level (criteria cluster) and the third level (sub-criteria cluster). The decision variables related to tax avoidance (criteria and sub-criteria) were compiled from previous research on determinants of tax avoidance and compliance (see Table 2) through review of literature. The six identified criteria served as the dimensions to examine tax avoidance and compliance, while the twenty-two sub-criteria are decision variables under the dimensions to understand the depth of influence of the criteria on the goal.

Prioritization of Decision Variables

Here, the establishment of priorities among the decision variables at each hierarchical level is actualized. Thus, with the aid of survey based structured AHP formatted questionnaire (see Table 2), pairwise comparison of decision variables based on expert opinions are generated. For example, if a respondent identifies that the economic factor is strongly more important than socio-cultural factor, it will be rated "5" and the latter as "1/5". The other tax avoidance and compliance criteria and sub-criteria would be prioritized in the same manner. With respect to group decision-making, the geometric mean approach was utilized to combine the individual pairwise comparison judgments and to obtain the aggregated pairwise matrix (see Table 3 as an example) for all the respondents.

Table 3: Pairwise Comparison of Tax Avoidance and Compliance Dimension

Criteria	P1	P2	P3	P4	P5	P6
P1	1.0000	1.9128	1.2886	1.8426	0.4413	0.6869
P2	0.5228	1.0000	1.0484	0.7130	0.4055	0.3522
P3	0.7760	0.9538	1.0000	1.3251	0.7198	0.3003
P4	0.5427	1.4025	0.7547	1.0000	0.6311	1.1729
P5	2.2658	2.4660	1.3893	1.5846	1.0000	1.2656
P6	1.4559	2.8393	3.3301	0.8526	0.7901	1.0000
Column Sum	6.5632	10.5744	8.8111	7.3179	3.9879	4.7778

Synthesis of Results

Afterward, the process of compiling and weighing priorities to actualize the relative weight at various level of the model is conducted. Here, the normalization of the pairwise comparison matrix through division of cell value by its respective column sum is done. Then, the row sum of each normalized cell value is generated and divided by the number of decision variables within the matrix. This leads to the priority eigen value that is, respective criteria weight (see Table 4).

Consistency Measurement

According to Saaty, (1996), the depth of consistency of expert opinions are processed using the consistency index. Thus, it was computed as follows:

$$C.I = \frac{Lambda\,\max - n}{n-1} \qquad (1)$$

where, the Lambda max is the maximum eigen value (see Table 5) and n is the total number of decision variables

Table 4: Normalization of Pairwise Comparison of Tax Avoidance and Compliance Dimension

Criteria	P1	P2	P3	P4	P5	P6	TOTAL	WEIGHT
P1	0.1524	0.1809	0.1462	0.2518	0.1107	0.1438	0.9857	0.1643
P2	0.0797	0.0946	0.1190	0.0974	0.1017	0.0737	0.5660	0.0943
P3	0.1182	0.0902	0.1135	0.1811	0.1805	0.0629	0.7464	0.1244
P4	0.0827	0.1326	0.0856	0.1367	0.1583	0.2455	0.8413	0.1402
P5	0.3452	0.2332	0.1577	0.2165	0.2508	0.2649	1.4683	0.2447
P6	0.2218	0.2685	0.3779	0.1165	0.1981	0.2093	1.3922	0.2320
COLUMNSUM	1	1	1	1	1	1		

Table 5: Computation of Lambda Max of the Criteria with respect to Goal

Criteria	P1	P2	P3	P4	P5	P6
Weight	0.1643	0.0943	0.1244	0.1402	0.2447	0.2320
Column sum	6.5632	10.5744	8.8111	7.3179	3.9879	4.7778
Lambda max	{(0.1643*6.5632) + (0.0943*10.5744) + (0.1244*8.8111) + (0.1402*7.3179) + (0.2447*3.9879) + (0.2320*4.7778)}					
	{1.0783 + 0.9976 + 1.0960 + 1.0262 + 0.9759 + 1.1086} = 6.2819					

$$C.I = \frac{6.2819-6}{5} = 0.0564$$

However, in order to verify the derived Consistency Index, Saaty (2008) proposed a consistency ratio which is derived by dividing the consistence index by a fixed index value allotted based on the number of criteria called Random Index Value (see Table 6). Thus, the lesser the resultant ratio is to 10% and at most 11%, the more consistent the respondents' decisions.

Table 6: Random Index

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
R.I	0	0	0.58	0.90	1.12	1.25	1.32	1.41	1.45	1.49	1.54	1.48	1.56	1.58	1.59

$$C.R = \frac{C.I}{R.I} \qquad (2)$$

where *C.I* is consistency index and *R.I* is random index;

$$C.R = \frac{0.0564}{1.25} = 0.0451$$

Since the computed value is less than 10%, the matrix is described as consistent (Saaty, 2008). Thus, the decision of the respondents that resulted in the economic dimension having the higher contribution to tax avoidance and compliance is consistent.

These values explain the direct relationship of the criteria to the total results of the goal. For instance, in the economic dimension (P5), relative weight of 24.47% explains that this factor contributes more than average to SME avoidance and compliance to tax payment, which is greater than the additive contribution of social-psychological dimension (P3) (12.44%) and institutional and industry dimension (P2) (9.43%). Followed by political and legal factors (P6) and business and investment factors (P1) at 23.2% and 16.43% respectively.

Following the empirical steps highlighted above, the local and the global weights of sub-criteria within each decision criteria were also undertaken based on the consensus of SME's experts' (business owners) opinion. The combined results are shown in Table 7.

Consequently, it is worth noting that the results depicted in Table 7 emphasized that respondents prioritized economic factors (0.2447) which are made up of tax rates, tax audit, and awareness of fines and penalties for tax offenses as the most significant determinants towards SME entrepreneurs' avoidance and noncompliance to payment of tax. Thus, it can be said that 24.47% of SME operators' behaviour towards tax avoidance and compliance is based on the present economic factors dictating the gears of the nation's economy. This supports the study by Oduro et al., (2018), on the evaluation of determinants of tax avoidance in Ghana where traditional factors (that is, tax rates, tax audit, and penalties rates) were positively significant in making taxpayers evade tax payment. Moreover, the tax rate and penalty rate, have also been found to be significant as aids to taxpayers' voluntary compliance to taxation (Tilahun, 2018; Hoa et al.,2019). However, irrespective of the level of importance of tax rate reported in the study of Atawodi and Ojeka (2012), the result also revealed that the higher the tax rate the lower the compliance to tax payment by SME's operators in the Northern Province of Nigeria. Furthermore, the result corroborates the argument of Tilahun (2018) that the penalty for tax offenses (which falls under economic criteria in this study) should be reasonable and reflect reality, so as to discourage tax default and to motivate business owners towards payment of tax that is due.

Economic factors are followed by political and legal factors at a 23.2% rate which is 6.24% greater than the mean score of criteria to tax avoidance and compliance. Furthermore, in order to enhance SMEs' motivation for effective tax compliance, the Business and investment consideration as well as the socio-cultural factors needed to be strengthened as they contribute 16.43% and 14.02% respectively to the decision for tax noncompliance decision of the respondent. Thus, they both account for 30.45% of reasons for tax non-compliance behaviour among business owners. While as a group of factors, institutional and industry criteria (P2) and social psychological criteria (P3) are not significantly important to tax avoidance and compliance.

Table 7: Combined Final Combinations of Weights and Priority Vectors of Criteria towards the Assessment of Tax Avoidance and Compliance

Rank	Criteria	Local Weight	Sub-Criteria	Local Weight	Global Weight
1	Economic (ECO)	0.2447	Awareness of fines/penalties for tax offences (AFPTO)	0.4042	0.0989
			Tax rate (TXR)	0.3295	0.0806
			Tax audit (TA)	0.2663	0.0652

Rank	Criteria	Local Weight	Sub-Criteria	Local Weight	Global Weight
2	Political and Legal (PAL)	0.2320	Perception of government spending (PGS)	0.4580	0.1063
			Government Policies (GOP)	0.3175	0.0737
			Tax Law (TXL)	0.2244	0.0521
3	Business and Investment (BAI)	0.1643	Presence of Business Opportunities (PBO)	0.2611	0.0429
			Goodwill and Growth (GAG)	0.2137	0.0351
			Size and structure of the business (SSB)	0.2052	0.0337
			Business Operating costs (BOC)	0.2107	0.0346
			Business Location (BUL)	0.1093	0.0180
4	Socio-Cultural (SOC)	0.1402	Income Level (IL)	0.5467	0.0766
			Age of Tax Payer (ATP)	0.2212	0.0310
			Ethnicity (ETH)	0.1514	0.0212
			Gender (GEN)	0.0807	0.0113
5	Social psychological (SOP)	0.1244	Fairness of Tax System (FTS)	0.4434	0.0552
			Attitudes and Beliefs (AAB)	0.3536	0.0440
			Trust in the Tax System (TTS)	0.2030	0.0253
6	Institutional and Industry (IAI)	0.0943	Effectiveness of Tax Authority (ETA)	0.3571	0.0337
			Collusion between tax officials and payers (CBT)	0.2862	0.0270
			Level of Corruption around Tax system (LCT)	0.1828	0.0172
			Industry Profit margins (IPM)	0.1738	0.0164

Furthermore, observing the results of sub-criteria, on the business and investment dimension, it can be explained that the presence of business opportunities (C2) contributes largely to tax compliance and avoidance at 26.11%, followed by goodwill and growth (C3) and business operating cost (C4) at 21.37% and 21.07% respectively. Thus, irrespective of the business location, the depth of available business opportunities within an economy relatively dictates SMEs compliance and avoidance behaviour to tax payment. The further suggested that SMEs owners are of views that their location is the reasons why people might not pay tax but the level of business opportunities available. The practise by government for businesses transacting with government should present up-to date tax clearance should be strengthened. These results hover around the benefit and sacrifice principle proposed by Neill (2000) which states that the taxes an agent pays should reflect the expected benefit that the individual or the business entity will receive from the mix of goods and services received or to be provided by the government.

Table 8: Ranking of Sub Criteria

Rank	Factors (Sub Criteria)	Code	Global Weights (%)
1	Perception of Government Spending (PGS)	C22	10.63
2	Awareness of fines/penalties for tax offences (AFPTO)	C18	9.89
3	Tax rate (TXR)	C19	8.06
4	Income Level (IL)	C16	7.66
5	Government Policies (GOP)	C21	7.37
6	Tax Audit (TA)	C17	6.52
7	Fairness of Tax System (FTS)	C11	5.52
8	Tax Law (TXL)	C20	5.21
9	Attitudes and Beliefs (AAB)	C10	4.40
10	Presence of Business Opportunities (PBO)	C2	4.29
11	Goodwill and Growth (GAG)	C3	3.51
12	Business Operating costs (BOC)	C4	3.46
13	Size and structure of the business (SSB)	C1	3.37
14	Effectiveness of Tax Authority (ETA)	C8	3.37
15	Age of Taxpayer (ATP)	C13	3.10
16	Collusion between tax officials and payers (CBT)	C6	2.70
17	Trust in the Tax System (TTS)	C12	2.53
18	Ethnicity (ETH)	C15	2.12
19	Business Location (BUL)	C5	1.80

Rank	Factors (Sub Criteria)	Code	Global Weights (%)
20	Level of Corruption around Tax system (LCT)	C7	1.72
21	Industry Profit margins (IPM)	C9	1.64
22	Gender (GEN)	C14	1.13

On the institutional and industry dimension, it can be explained that the effectiveness of tax authority contributes largely to tax compliance and avoidance at 35.71%. Thus, the effectiveness of tax authority, how structured, holistic, or shallow are the regulations governing tax remittance within the Nigerian economy relatively dictates SMEs' compliance and avoidance of tax remittance. The effect on tax compliance and avoidance as a result of an effective tax authority is greater than the combined effects of the corruption rate within the tax system and industry profit margins. This strongly suggests that irrespective of the presence and depth of corruption and corrupt practitioners within the tax system, the effectiveness of tax authority (strong institutions) goes a long way at stabilizing and influencing tax compliance. Thus, there is a need for strong institutions at curtailing corrupt practices within tax administration in an economy, instead of focusing on strong individuals which do not give desired results of reversing the trend of tax-noncompliance among business owners/managers or entrepreneurs.

Furthermore, the contribution of the social psychological dimension, depicts an influential gap carved out by fairness of the tax system (C11). At the rate of 44.34% which is two times more influential than trust in the system (C12), and 11.07% more than the average influence of factors, it depicts how significantly this factor of system fairness is positioned in driving SMEs' tax compliance and avoidance. Therefore, Foreign Direct Investment (FDI) in SMEs, 100% direct foreign investment, and high-capacity investment by SMEs within the Nigerian industrial economy, which directly provide proceeds for payment of tax depend largely on how the government in office has stationed its taxation system. As the tax system's fairness towards the businesses in a particular environment increases, the willingness to pay taxes also increases and vice versa.

Moreover, the relative weight of the income level (C16) of 54.67% depicts a sweeping rate of influence over other factors within its decision criteria. At 29.67% rate of influence above mean influence rate of factors explains that an individual, group, or organization's behaviour towards tax payment is largely dependent on its level of income at each respective status. In addition, within the economic dimension, it can be explained that the depth of awareness of fines and penalties for tax offences by taxpayers (C18) contribute largely to tax compliance and avoidance at 40.42% compared to its pairs. Thus, the presence, depth, and enlightenment of disciplinary actions to individuals and organizations help to dictate SMEs' compliance and avoidance of tax remittance. Altogether, it can be detected that amidst the twenty-two sub-criteria, perception of government spending as a factor was ascribed the most significant factor to determining tax avoidance and compliance to taxation among SMEs operators in Lagos, Nigeria. Within the study area, SME owners/managers are of the view that illogical usage of tax revenue (wastages through white Elephant projects) or debt servicing for which the principal loan was never utilized to improve the business environment and ease of doing business operations is a major and important sub-criterion motivating tax non-compliance with the global score of 10.63%. Moreover, within its body of political and legal criteria, it was of high importance compared to its pairs with a local weight of 45.80%. In addition, the first nine sub-criteria depict the importance of both political and legal criteria and economic criteria. Thus, to strategically enhance SMEs towards tax compliance, government spending, economy, and fiscal policy need to be logically positioned in favour of the operators. Moreover, economic criteria, political and legal criteria, and social-psychological criteria need to be properly considered to bring about a higher level of tax compliance among SMEs.

Conclusion and Policy Implications

This study unravelled the motivations for tax non-compliance among entrepreneurs and managers of SMEs. and It also proposed research-driven strategies for reversing an ugly trend that works against the development of any developing economy, since revenue generated from taxes is critical for effective discharge of fiscal responsibility of the government. The study contributes to knowledge by extending extant literature on modelling the behaviour of entrepreneurs through evaluation of the motivations for tax avoidance and compliance using multi-criteria decision-making analysis.

The multi-criteria decision-making tool used, AHP, provided an integrated judgment of different entrepreneurs into a single priority vector for the prioritization of determinants of tax non-compliance behaviour. Thus, any decision taken based on this outcome is the reflection of entrepreneurs' opinions, feelings, attitudes, and value judgment towards instituting an improved tax system that is more acceptable to stakeholders. After the holistic implementation of AHP procedure in this study, these relevant policy implications were made: From the criteria measuring tax avoidance and compliance, economic criteria are positioned most important on both sides of the coin. In addition, to facilitate tax compliance, the need for favourable government spending on business-enabling activities towards SMEs is of high importance.

On the economic sub-criteria, awareness of fines/penalties for tax offenses is of essential priority. Thus, taxpayers need to be enlightened on not just the benefits and development tax payment is going to bring, but emphasis should be on penalties for non-compliance that need to be evenly communicated. Thus, the fine needs to be implemented without being bias to any defaulters. Furthermore, it can be said that to aid sustainable competitive advantage, tax operators need to reengineer their policies, improve fairness of the tax system, and educate taxpayers on fines. In conclusion, to increase the tax net in the economy through SMEs, the government should work on the first eight factors within the global priority strategy analysis as these factors motivate business owners to voluntarily comply with tax obligations.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article.

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