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I. Title page
II. Abstract (150-250 words)
III. Keywords (3-5)
IV. Introduction
V. Literature Review
VI. Methodology
VII. Results and Discussion
VIII. Conclusion and Recommendations
IX. References (APA 7th Edition)
X. Appendices (if necessary)
XI. Author Biographies (optional)

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DETERMINANTS OF VOLUNTARY TAX COMPLIANCE AMONG SMALL AND MEDIUM SCALE ENTERPRISE (SMEs) IN THE AGRICULTURAL SECTOR OF NASARAWA STATE

Ajayi Tiamiyu Oyekunle

ABSTRACT

The study examined the determinants of Voluntary Tax Compliance Among Informal Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State. The study employs survey research design, and the population is limited to only 504 active SMEs in Agricultural sector of Nasarawa State, which comprises of 1,008 respondents. However, a sample size of 286 respondents were selected using Taro Yamane, (1967) formula. A simple random sampling technique was employed in selecting the SMEs used for the study. A close-ended questionnaire with a Cronbach alpha value of 72% was utilized in collection of data from CEO/managers of the sampled SMEs, of which 224 questionnaires were retrieved while panel multiple regression technique was used for the analysis. The study revealed that tax knowledge, tax audit, tax rate Tand tax penalty exert positive significant effect on tax compliance while tax system complexity and perception of tax fairness exhibit negative but significant effect on tax compliance of sampled SMEs in Nasarawa State. The study thus recommends among others that, government should simplify and streamline tax laws and regulations to enhance the understandability and accessibility for taxpayers as this increases the level of tax compliance. The study also recommends that, government should endeavor to develop specialized and targeted educational programs that focus on the unique needs and challenges faced by SMEs in understanding and fulfilling their tax obligations.

Keywords: Tax compliance, Tax system complexity, Tax knowledge, Tax audit, Tax rate, and Tax fairness.

1.1 Introduction

The revitalization and sustainability of the contemporary economy hinge significantly on the pivotal role played by micro small and medium-scale enterprises (SMEs). These entities not only create significant employment opportunities but also function as crucial engines of innovation for the global economy. In developing countries, SMEs account for the majority of businesses and are important contributors to job creation and global economic development. They represent about 90% of businesses and more than 50% of employment in Africa. Their compliance level has enabled them to contribute up to 40% of National income (GDP) in emerging economies. These numbers are significantly higher when informal SMEs are included. In emerging markets, most formal jobs are generated by SMEs, which create 7 out of 10 jobs (World Bank, 2020).

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 (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).

Taxes are essential instruments used for the efficient and long-term functioning of the government; it is also used for the creation and redistribution of social welfare. Thus, taxes are fundamental to the existence of governments, since tax revenues help to finance the bulk of services such as education, welfare, public safety, infrastructure and other basic public services of government. Therefore, government will always try to put in place policies that will help to improve tax compliance; since improved tax compliance amplifies the revenues available for supporting public services without increasing the current tax burden on compliant taxpayers (Bird, 2019).

In Nigeria, dwindling in non-oil revenue has also contributed to setback in aggregate revenue generation as the contributory quota of tax revenue to the Gross Domestic Product of the country is discouraging (Oghuma, 2018; Ayuba, et al., 2018). In the light of the foregoing, the tax-to-GDP ratio in Nigeria increased by 1.1% from 5.5% in 2020 to 6.7% in 2021, which was lower than the average of the 33 African countries in 2023 (15.6%) by 8.9% points. However, the Revenue Statistics in Africa 2023 publication has remained unchanged over the same period. Yet, the highest tax-to-GDP ratio reported in Nigeria since 2000 was 9.7% in 2011, with the lowest being 5.3% in 2016 (Revenue Statistics in Africa 2023). To this end, Giulia et al., (2014) and Ahlerup et al., (2015) posited that the governments of developing countries, especially sub- Saharan Africa countries collect much lower proportions of their GDPs of tax revenue which is less than average (16%) even if they have high capacity to raise tax revenue to promote their economic development.

According to the Small and Medium Scale Enterprises Development Agency of Nigeria (SMEDAN), 80% of SMEs die before they are five years. One of the factors attributed to this high mortality rate is tax related matters. These tax-related matters include multiple taxation, high tax rates and penalties (Adebisi & Gbegi, 2013). Lack of knowledge of the transaction dynamics of SMEs, payment for accumulated taxes of up to 6 years, adverse publicity leading to loss of customers as a result of government tax officials sealing companies. Studies have revealed that more than 50% potential tax revenue remains uncollected in most developing countries (Amanamah, 2016).

In addition, the Nigerian tax system is often described as complex and cumbersome, with multiple overlapping taxes, frequent amendments to tax laws, and perceived inefficiencies in tax administration. These factors contribute to a low level of tax compliance among SMEs. According to Fagbemi, et al., (2010), the complexity and ambiguity of tax regulations are significant deterrents to tax compliance in Nigeria. Thus, numerous changes in tax laws in Nigeria often overwhelm lay taxpayers, including small entrepreneurs, due to the significant burden they impose. The more complex a tax system is, the higher the compliance cost will be, and finally individual and business change their behavior in response to tax policies (Laffer, et.al., 2011). Erich, et.al (2006) in Saad (2009) claim that tax complexity results negative paradigm towards current tax law and will further increase the unwillingness to fulfill their responsibility as a taxpayer. Additionally, the perceived fairness of the tax system and the general attitude of taxpayers towards tax obligations play crucial roles in compliance behavior (Frey & Torgler, 2007). Therefore, to mitigate the challenge of tax non-compliance, it is necessary to understand factors influencing an individual's decision to comply with tax laws. Also, determinants of tax compliance are broadly related to economic approach and a behavioral approach (Mardhiah et al., 2019).

Previous studies in extant literatures such as Giesi and Bishagazi, (2022); Arkoh, et al., (2023); Nduruchi, et al., (2017); Deyganto, (2018); Tehulu and Dinberu, (2014) with robust findings have been conducted in countries other than Nigeria, however, their findings cannot be generalized in Nigeria SMEs context due to distinction in tax policies and system. Other studies conducted in Nigeria other than Nasarawa state, among others are: Salawu and Salawu, (2023), Determinants of tax compliance of SMEs in Lagos state, which was proxied by tax rate, tax audit, tax fairness, perception of government spending and tax awareness- using the Pearson Correlation Coefficient to test the hypotheses; Adewale, et al., (2022), conducted the determinant of tax compliance in Nigeria using tax system, trust on government, fairness/openness, perception on government spending and government accountability as factors influencing tax compliance; Appah and Godspower, (2023) also examined determinants of tax compliance behaviour and sustainable economic growth among SMEs in Nigeria using tax Penalty, tax fairness, perceived opportunity of tax evasion, tax audit and tax system as factors influencing tax compliance. However, both study used ANOVA to analyze the data collected; Rabiu and Mustafa, (2020), investigate Tax Compliance Determinants in Katsina State (tax rate, level of income, perception on government spending, change in government policies, simplicity of tax system, efficiency of tax authority, perception on equity and peer influence are used as the determinants) using Multinomial Probit Regression; Atawodi and Ojeka, (2012) assessed the determinants of tax compliance in North Central used Ordinary Least Square regression model. However, this study focussed in Agricultural Sector in Nasarawa State. While others look at the entirety of SMEs and other sectors, this study focusses in Agricultural SMEs due to its contribution to National development through tax revenue.

Despite the comprehensive review of empirical research by scholars worldwide, there is a significant lack of empirical studies examining the determinants of tax compliance of SMEs, as well as limited variable combination. This study therefore aims to fill this gap by providing empirical evidence and analysis of how the combined determinants (tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception of tax fairness) influence tax compliance behavior of SMEs operating in Agricultural sector in Nasarawa State. The study also seeks to expand the research scope in this area by addressing the population gaps, focusing on the determinants of voluntary tax compliance among Small and Medium Scale Enterprises (SMEs) in the agricultural sector of Nasarawa State from 2019 to 2023, a period more recent than those examined in previous studies.

However, to examine the determinants of Voluntary Tax Compliance Among Informal Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State with the aims below.

1.2 Objective of the Study

i. examine the effect of tax system complexity on voluntary tax compliance of among Informal Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

ii. examine the effect of tax knowledge on voluntary tax compliance Among Informal Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

iii. determine the effect of tax audit on voluntary tax compliance Among Informal Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

iv. examine the effect of tax rate on voluntary tax compliance Among Informal Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

v. determine the effect of tax penalties on voluntary tax compliance Among Informal Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

1.3 Study Hypotheses

As a result of the study objectives, the following hypotheses are made to be tested:

$H0_1$: Tax system complexity has no significant effect on voluntary tax compliance of Among Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

$H0_2$: Tax knowledge has no significant effect on voluntary tax compliance Among Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

$H0_3$: Tax audit has no significant effect on voluntary tax compliance Among Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

$H0_4$: Tax rate has no significant effect on voluntary tax compliance Among Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

$H0_5$: Tax penalties has no significant effect on voluntary tax compliance Among Small and Medium Scale Enterprises (SMEs) in the Agricultural Sector of Nasarawa State.

2.0 Literature Review

The following sections provide conceptual definitions of the variables, methodology adopted and result of the analysis.

2.1 Concept of Voluntary Tax Compliance

Tax compliance refers to the extent to which individuals, businesses, and other entities adhere to the tax laws and regulations set by the government. It involves fulfilling one's legal obligations related to filing accurate tax returns, reporting income, and paying the appropriate amount of taxes in a timely manner. However, Jackson and Milliron cited in Adekoya, et al., (2019) define tax compliance as complying with the provisions of tax laws and regulations on tax payment and meeting tax obligations according to the relevant and applicable laws and regulations, without court or other enforcements. It is the ability to complete tax returns promptly in line with relevant tax laws at the right time. It is based on the system of self-assessment by taxpayers. It is the efforts that taxpayers voluntarily exercise in honoring their tax obligation promptly (Badara, 2012). Tax compliance is the ability to fulfil all tax obligation payments in line with the relevant tax regulations and laws (Thiga & Muturi, 2015).

Voluntary tax compliance refers to the principle where taxpayers voluntarily fulfill their tax obligations without direct enforcement by tax authorities. This involves accurately reporting income, calculating tax liabilities, filing returns on time, and paying the due taxes. The concept is fundamental to the efficient functioning of tax systems and relies on taxpayers' honesty, understanding of tax laws, and willingness to contribute to public finances.

Therefore, for the purpose of this study, tax compliance is the process by which taxpayers voluntarily comply with the relevant tax laws and regulations by taking care of their tax obligations without being required to do so (Zandi & Rabbi, 2015). Thus, it emphasizes on the act of willingly and knowingly fulfilling tax obligations by timely paying taxes in accordance with relevant tax legislation.

2.2 Tax System Complexity

Tax system complexity is a significant factor influencing tax compliance among individuals and businesses. The complexity of a tax system can be defined by the number and intricacy of tax laws, the difficulty of compliance procedures, and the clarity of tax regulations. This complexity often poses substantial challenges to taxpayers, especially small and medium-sized enterprises (SMEs), which may lack the resources to navigate complicated tax environments effectively. Tax laws are often too complex to be understood by a laymen person (Kirchler, 2007). Laffer, et.al., (2011) opined that the more complex a tax system is, the higher the compliance cost will be, and finally individual and business change their behavior in response to tax policies Erich, et.al (2006) in Saad (2009) claim that tax complexity results negative paradigm towards current tax law and will further increase the unwillingness to fulfill their responsibility as a taxpayer.

2.3 Tax Knowledge

Tax knowledge refers to an individual's or entity's understanding of tax laws, regulations, and procedures. It encompasses the awareness and comprehension of various aspects of taxation, including the determination of taxable income, applicable deductions and credits, filing requirements, and the overall obligations imposed by tax authorities. The influence of tax knowledge on compliance behavior has been described in various research. Previous studies have evidenced that tax knowledge has a very close relationship with taxpayers' ability to comply (Singh & Bhupalan, 2001), Ermias (2014); Mesfin (2016) Redae and Sekhon (2016) concluded that tax knowledge have significant impact on tax compliance attitude of the taxpayers.

2.4 Tax Audit

Tax audit is a routine examination of the tax returns, accounts, books, records, documents of a taxpayer by the authority in order to ascertain the level of compliance with the relevant tax laws. Tax Audit entails checking a company's books of accounts and other records to ensure that the prospective tax liability information contained in the financial statements is accurate (Cai et al. (2019). According to Olaoye et al. (2018), effective tax audit significantly impacts the overall tax revenue accruable to the government. It was further established that there was no particular provision under Companies Income Tax Act (CITA) for tax audit until Section 43 Subsection 4 of CITA, 2004 was introduced. In the view of Nurebo et al. (2019), one of the benefits of tax audit is that it fosters and improves tax compliance. Modugu and Anyaduba (2014) discovered that tax audit has a favorable association with company tax compliance in Nigeria, but Olaoye and Ekundayo (2018) discovered that tax compliance is insignificantly affected by tax audit in Nigeria.

2.5 Tax Rate

Another factor that determines taxpayers' compliance is tax rate. It is the percentage at which a tax is levied on an individual's or entity's taxable income, transactions, or other taxable bases. Tax rates are set by governmental authorities, such as federal, state, or local governments, and they vary based on the type of tax and the applicable jurisdiction. It also plays a significant role in shaping tax compliance behavior. According to Mghase, (2015), it is shown that the changes in national tax laws and regulations such as tax rates and electronic tax system positively influence the level of tax compliance. On the other hand, an affordable tax rate enhances voluntary tax compliance among taxpayers (Kipilimba, 2017; Mandari, 2017). Previous studies show that unsystematic arrangement of tax rate increases bias and hence cause corruption and decrease the level of tax compliance in developing countries (Oladipupo &, Obazee, 2016).

2.6 Tax Penalties

Tax penalty is a punitive measure that the tax law imposes for the act of non-compliance (Oladipupo & Obazee, 2015). Penalty has positive and significant effect on tax compliance decision which indicates that this association between penalty and tax compliance is towards the argument that severe penalties and sanctions use to achieve greater compliance level and curbs future actions of tax evaders. This means that as the severity of penalties increases, the tax compliance level of taxpayers will also increase and vice versa (Manchilot, 2018).

2.7 Perception of Tax Fairness

Fairness perception is generically the equity of the system being perceived just or positively (Latif et al., 2023). Fairness is one of the must have characteristics in tax system. Fairness refers to situation whereby a taxpayer is taxed according to their capability (Lymer & Oats 2009). The fairness of a tax is a relative measure of its ability to judge taxpayers on a similar basis and is used to measure how good the tax system of a country is (Thomas, 2012). Tax fairness has been recognized as one of the attributes of a sound tax system (Wrede, 2014), and it plays a vital role in determining a tax compliance behavior of taxpayers.Tax fairness refers to the principle that a tax system should be equitable, meaning that individuals and businesses should contribute to government revenues in a manner that is just and proportionate to their ability to pay. It encompasses two main concepts:

Horizontal Equity: This principle suggests that taxpayers with similar income or wealth should pay the same amount in taxes. Essentially, people in equivalent financial situations should be treated equally by the tax system.

Vertical Equity: This principle advocates that those with higher income or greater ability to pay should contribute more to the tax system. This often involves progressive tax rates, where the tax rate increases as income increases.

Tax fairness also involves ensuring that tax policies do not disproportionately burden or benefit particular groups, and it is often a key consideration in discussions about tax reform and social justice.

2.8 Empirical Review

Chindengwike and Kira, (2022) examined the effect of the tax rate on taxpayers' voluntary compliance in Tanzania. In addressing this objective, both qualitative and quantitative research approaches were used. A cross-sectional survey research design technique was used. The study employed document review, and survey in collecting both primary data and secondary data. Besides, systematic, unsystematic random sampling and purposive sampling were used as sampling procedures in this study. The study involved a sample size of 99 respondents who are SMEs' taxpayers and ordinary least square was used for the analysis. The findings of the study showed that there is a negative effect of the tax rate on taxpayers' voluntary compliance. Again, the study indicates that the presence of good tax rates improves taxpayers' voluntary compliance, and the tax rates influence taxpayers' voluntary compliance. Lastly, there is statistical significance between tax rates and voluntary taxpayers' compliance in Tanzania. However, the tax systems and policies in Nigeria and Tanzania are likely to differ in terms of structure, rates, and enforcement mechanisms. Therefore, the impact of tax rate on tax compliance may vary based on the unique features of each country's tax regime.

Fauziati, et al., (2016) examined the impact of tax knowledge on tax compliance: Case Study in Kota Padang, Indonesia. The survey research design was used in conducting the investigation. The primary source of data was used and three hundred (300) copies of self- administered questionnaire were distributed. The number of questionnaires completed and returned was two hundred and thirty-seven (237), constituting 79% response rate. The simple linear regression models were used to estimate the relationship between tax knowledge and tax compliance. The t-statistics was used to test the significance of the study variables. It was revealed that; tax knowledge has no impact on tax compliance. However, Nigeria and Indonesia have distinct cultural, social, and economic contexts. Attitudes toward taxes may vary significantly between the two countries. Therefore, findings related to tax knowledge and compliance in Indonesia may not be transferable to Nigeria due to these cultural and socioeconomic differences. Hence, conducting a similar study in Nigeria, considering its unique socio-economic and cultural aspects, would be more appropriate for drawing conclusions relevant to the Nigerian tax landscape.

Hery and Jasman (2019) investigated the effect of perceived tax equity (vertical, horizontal and exchange), normative expectation (social and moral norms) and legal sanctions (detection risk `and penalty magnitude) toward tax compliance intentions in Indonesia while quantitative method was used to obtained primary data. The sample used in this study consisted of 75 individual taxpayers who work as employees. This study was held in Jakarta as the capital city of Indonesia. The result of this study showed that equity perception has a positive and Ssignificant effect towards tax compliance intentions. Moral and Social Norms has a positive and significant effect towards tax compliance intentions.

Kilimvi and Adepehin, (2023) examined the impact of tax audit and tax investigation on tax compliance of businesses using Lagos State as a case study. Quantitative research methodology was used as predestined by the purpose of this research. Secondary data were reviewed for the analysis. Descriptive statistics was employed for the data analysis, and ordinary least squares method was employed to provide answers to the research questions and test the hypotheses. Additionally, inter-relational impact of tax audit and tax investigation on tax compliance on businesses was examined using Pearson's correlation coefficient. A deductive research design was chosen. The findings showed that the degree of tax compliance of businesses in Lagos State has a positive correlated to tax audit and tax investigation.

Mebratu, (2016) examined the impact of tax audit on tax compliance in Ethiopia, at federal level by using secondary macro data. To analyze the data the partial coefficient regression statistical analysis method was employed. The Pearson correlation and bivariate regression result shows, there is a strong association between probability of audit detection and the level of tax compliance. The regression result also reveals that there is a strong association between the number of audited files and the level of tax compliance. Pearson Correlation and partial regression coefficient result shows that the there is a strong association between probability of audit detection and the number of audited files with the level of tax compliance. The partial coefficient regression result shows that the joint effect of probability of audit detection and number of audited files highly improves the level of taxpayer's compliance over the individual effect. However, the study focuses more on Ethiopia tax system and due to differences in tax system, the findings of Mebatu, (2016) in reference to tax audit cannot be used for decision making purposes in Nigeria. Hence, engaging in comparable research in Nigeria, while considering the distinctive tax system, cultural variables, and institutional framework, would be more suitable for deriving conclusions that are pertinent to the Nigerian tax landscape.

Musimenta, (2020) examined the relationship between knowledge requirements, complexity of the tax system and tax compliance in Uganda while exploring the indirect effects of compliance costs. The research design was cross sectional and correlational using VAT registered withholding agents. This study results suggest that knowledge requirements do not have a significant relationship with compliance costs and tax complexity has a direct and indirect impact (through compliance costs) on tax compliance. In addition, the result also shows the indirect effect of compliance costs in establishing the basis for understanding taxpayers' compliance. However, Nigeria and Uganda have distinct cultural, social, and economic contexts. Tax regulations may vary significantly between the two countries. Therefore, findings related to tax system complexity and compliance in Uganda may not be transferable to Nigeria due to these cultural and socioeconomic differences. Hence, conducting a similar study in Nigeria, considering its unique socio-economic and cultural aspects, would be more appropriate for drawing conclusions relevant to the Nigerian tax landscape.

Oghuma, (2018) examined the influence of tax audit and penalty on tax compliance paradigm of companies' income taxpayers in Nigeria. The population for the study comprised all registered corporate taxpayers in Nigeria. A total of one hundred and fifty (150) corporate taxpayers whose tax files are domiciled in Edo State were selected for this study. The selection of the sample size was based on stratified random sampling method. To evaluate the strength of the measures used, Ordinary Least Square (OLS) regression was used for model estimation through Econometric Views (EViews) software. Findings revealed that tax audit and tax penalty have positive and significant relationships with tax compliance. It is recommended that effective tax compliance can be achieved by increasing the frequency of tax audit and by strengthening tax penalty to serve as deterrent mechanism against noncompliance.

Oladipupo and Obazee (2016) investigated the impacts of taxpayers' knowledge and penalties on tax compliance amongst small and medium enterprises in Nigeria using a survey research design. The data obtained from the questionnaire were analyzed using the Ordinary Least Square regression method. The results showed that tax knowledge had a positive significant impact on tax compliance while tax penalty had an insignificant positive impact on tax compliance. Thus, the study shows that tax knowledge has a higher tendency to promote tax compliance than a tax penalty. Government should therefore do everything possible to increase public knowledge on tax matters and tax education should be always included in school curricula. Small and medium-scale business owners should also seek to advance their tax knowledge and awareness for the mutual benefit of the governments and taxpayers.

Rabiu and Mustafa, (2020) evaluated tax compliance determinants using data generated from agro-allied industries in some selected local government areas of Katsina state, Nigeria. As such, primary source of data was employed through the use of structured questionnaire to collect relevant information from all the 133 Agro-allied industries in the study area and multinomial probit model was adopted for estimation. Basically, the findings from this study indicate that tax rate, level of income, perception on government spending, change in government policy, simplicity of tax system and efficiency of the tax authority are significant determinants of tax compliance among agro-allied industries in the study area, whereas perception on equity and peer influence are insignificant determinants. However, Katsina state and Nasarawa state are distinct regions with variations in economic activities, industries, and socio-economic conditions. Factors influencing tax compliance in Katsina may not necessarily align with those in Nasarawa due to regional disparities. Hence, there's need to extent the frontier of knowledge for reliable decision making in Nasarawa State.

Remali, et al., (2018) examine the determinants of tax compliance in Small and Medium Enterprises (SMEs), focusing on how tax knowledge, tax penalty and tax rate affect tax compliance behaviour of SMEs in Selangor. The determinants that serve as the independent variables are tax knowledge, tax penalty, tax rate and the dependent variable tested is tax compliance. The population of the study covers the SME in Selangor. A total of 105 questionnaires collected and usable for further analysis using descriptive, reliability, normality and correlation analysis. The findings reveal that tax knowledge, tax penalty and tax rate demonstrated the significant relationship towards tax compliance among the SME.

2.9 Theoretical Framework

The deterrence theory of punishment can be traced to the early works of classical philosophers such as Thomas Hobbes (1588–1678), Cesare Beccaria (1738–1794), and Jeremy Bentham (1748–1832). According to Allingham and Sandmo (1972), the economic deterrence model assumes that a variety of factors, including tax rates, the benefits of tax evasion, the likelihood of fraud being detected, and the severity of penalties for doing so can influence taxpayers' behavior. Therefore, rational decisions are made amidst uncertainty, where tax evasion can lead to tax savings or penalties (Fjeldstad et al., 2012). As such, the more likely tax evasion is to be discovered and punished more severely, the fewer people will engage in it.

Research on tax compliance has been based on the "economic deterrence" approach which considers both economic and structural factors in relation to compliance. The economic deterrent theory assumes that taxpayers are moral profit seeking and their actions are motivated by the calculation of costs and the opportunities that come with that. The economic deterrence approach suggests that taxpayers make a cost–benefit analysis when deciding on compliance outcomes and relies on enforcement for compliance to work (Yong, 2006).

3.0 Research Methodology

The study employed a survey research design. This design allows for an in-depth examination of a specific phenomenon and facilitates the generalization of findings from a sample study to a larger population. The chosen methodology aligns with previous research studies, such as those conducted by Charles, et al., (2020), Ahmad and Hijjatulah (2019), Olaoye and Ekundayo (2020), and Aladejebi (2018). The study population is limited to only Eggs Republic Ltd, Alheri Agro Allied Company, Topnotch Agritech, Tadash Agro Ventures, Makurdi Farms, Green Harvest Farms, Danas Agro Enterprises, First Choice Agro Ltd, Bright Futures Farms, Hadejia Farms SMEs in Nasarawa State (SMEDAN, 2023) and the targeted respondents are the CEOs/managers and accountants of each SMEs, thus, total population for the study is 1,008 respondents. However, using Taro Yamane, (1967) formula {n =

4.0 Results and Discussion

Table 4.1 Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviatio
Tax compliance	224	1.0	5.0	2.900	1.0608
Tax system comp	224	1.0	5.00	2.690	1.0191
Tax knowledge	224	1.0	5.0	2.742	1.1237
Tax audit	224	1.0	5.0	2.596	1.1811
Tax rate	224	1.0	5.0	2.356	1.1510
Tax penalty	224	1.0	5.0	2.865	.9938
Valid N (listwise)	224				

Source: SPSS output, 2024

The results indicate that all variables, including tax compliance, tax system complexity, tax knowledge, tax audit, tax rate, and tax penalty, have values ranging from a minimum of 1 to a maximum of 5. This is due to the data being collected using a five-point Likert scale, where respondents rated their opinions on a scale of 1 to 5.

Table 4.2 Correlations Matrix

		Tax Compliance	Tax System Complexity	Tax Knowledge	Tax Audit	Tax Rate	Tax Penalty	Perception of Tax Fairness
Tax Compliance	Pearson Correlation	1	.941**	.656**	.842**	.393**	.862**	.311**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	224	224	224	224	224	224	224
Tax System Complexity	Pearson Correlation	.941**	1	.679**	.841**	.449**	.883**	.189**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.004
	N	224	224	224	224	224	224	224
Tax Knowledge	Pearson Correlation	.656**	.679**	1	.847**	.062	.498**	-.234**
	Sig. (2-tailed)	.000	.000		.000	.359	.000	.000
	N	224	224	224	224	224	224	224
Tax Audit	Pearson Correlation	.842**	.841**	.847**	1	.180**	.722**	-.039
	Sig. (2-tailed)	.000	.000	.000		.007	.000	.565
	N	224	224	224	224	224	224	224
Tax Rate	Pearson Correlation	.393**	.449**	.062	.180**	1	.437**	.230**
	Sig. (2-tailed)	.000	.000	.359	.007		.000	.001
	N	224	224	224	224	224	224	224
Tax Penalty	Pearson Correlation	.862**	.883**	.498**	.722**	.437**	1	.247**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	224	224	224	224	224	224	224
Perception of Tax Fairness	Pearson Correlation	.311**	.189**	-.234**	-.039	.230**	.247**	1
	Sig. (2-tailed)	.000	.004	.000	.565	.001	.000	
	N	224	224	224	224	224	224	224

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS output, 2024

The table 4.2 shows the relationship between dependent variable (tax compliance) and independent variables (tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception on tax fairness). The Pearson correlation coefficient of 1.000 shows that each variable incorporated in the model is perfectly positively correlated with itself. The result shows that all the independent variables i.e. tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception on tax fairness were found to be significantly positively correlated with tax compliance at 1% significance level with P<0.01.

Table 4.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.765 [a]	.779	.724	.13552

a. Predictors: (Constant), Perception of Tax Fairness, Tax Audit, Tax Rate, Tax Penalty, Tax Knowledge, Tax System Complexity

Source: SPSS output, 2024

The R-square (coefficient of determination) of 0. 779 explains that about 78% of the systematic variation in tax compliance are explained by the determinants (tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception of tax fairness) while the remaining 22% represents other variables that could explain tax compliance but were not captured in the study. However, this was moderated by the adjusted R-squared to approximately 72%, thus signifying that other variables outside the explanatory variables influence tax compliance in Nasarawa State.

Table 4.4 ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.224	6	8.871	482.972	.000 [b]
	Residual	3.986	217	.018		
	Total	57.210	223			

a. Dependent Variable: Tax Co mpliance

b. Predictors: (Constant), Perception of Tax Fairness, Tax Audit, Tax Rate, Tax Penalty, Tax Knowledge, Tax System Complexity

Source: SPSS output, 2024

The ANOVA table shows the goodness of fit of the model. The criterion is that if significant value is less than 0.05 and 95% level of confidence, it signifies that the model of the study is fit. Therefore, from the table above, the value of the significant, 0.000 is less than 0.05, hence this implies that the study model is fit

Table 4.5

Coefficients

Model		Unstandardized Coefficients B	Std. Error	Beta	t	Sig.
1	(Constant)	-.322	.392		-.820	.413
	Tax System Complex	-.253	.026	.533	9.553	.000
	Tax Knowledge	.260	.062	.056	1.444	.022
	Tax Audit	.392	.031	.268	5.572	.000
	Tax Rate	.0213	.060	.004	3.523	.000
	Tax Penalty	.413	.041	.118	2.896	.004
	Perception of Tax Fairness	-.284	.065	.203	9.615	.000

a. Dependent Variable: Tax Compliance

Source: SPSS output, 2024

Table 4.5 presents the regression analysis of the explanatory variables (tax system complexity, tax knowledge, tax audit, tax rate, tax penalty and perception of tax fairness) and the explained variable (tax compliance). From the table, it is observed that tax system complexity has a negative significant influence on tax compliance with a coefficient of -0.253, standard error value of 0.026, and a corresponding p-value of 0.000. This implies that a change in tax system complexity decreases the level of tax compliance. i.e. The negative sign in the coefficient value expresses that tax system complexity has an inverse relationship with tax compliance. The higher the complexity, the less tax compliance would be obtained. However, since the p-value of 0.000 is less than 5% level of significance, it then implies that tax system complexity has statistically significant effect on tax compliance by SMEs in Nasarawa State. This finding is consistent with the research result done by Saad (2009) and also Erich et.al (2006) who claimed that complexity in tax law resulted in a negative perception of the tax system and consequently encouraged an unwillingness to comply. The result shows that increase in the level of tax knowledge leads to increase in tax compliance by 26% as indicated by its coefficient value of 0.260 and a p-value of 0.022. However, since the p-value of 0.022 is less than the 5% level of significant, it indicates that the result has significant statistical implication. This finding is consistent with the finding of Oladipupo and Obazee (2016).

Tax audit is also one of the determinants of tax compliance. The result shows that the coefficient value of tax audit is 0.392 with a standard error of 0.031 with a t-statistics of 5.572 and a p-value of 0.000. This result therefore shows that a unit increase in the level of tax audit will lead to a 39.2% increase in the level of tax compliance with statistical significance. This result therefore indicates that when the tax authorities step up their effort in tax audit, SMEs are made to comply more with the tax payment. This finding is aligning with the study of Kilimvi and Adepehin, (2023) and Mebratu, (2016).

The result shows that the coefficient of tax rate is 0.213 with a standard error value of 0.060, a t-statistics value of 3.523 and a p-value of 0.000. The result therefore implies that a unit increase in the rate of tax will lead to a 21.3% increase in the level of compliance by SMEs. The result does not depict the apriori expectation that when the rate of tax increase, compliance should decrease. The result therefore suggested that increase in tax rate is often followed by serious monitoring by tax authorities to ensure compliance by the taxpayers. Also, when the burden of the increase in tax rate is shifted to the taxpayer of an elastic good, the businesses do not bear the burden directly therefore can easily comply by remitting the applicable tax to the appropriate tax authority. The finding is contrary to the finding in the works of Chindengwike and Kira, (2022).

The result also shows that tax penalty has coefficient of 0.413 with a standard error value of 0.041, a t-statistics value of 2.896 and a corresponding p-value of 0.004. This implies that a unit increase in the level of tax penalty imposed by the appropriate tax authorities will lead to a 41.3% increase in the level of tax compliance. Therefore, since the p-value of 0.004 is less than 5% level of significance, it then implies that tax penalty has statistically significant effect on tax compliance by SMEs in Nasarawa State. The result implies that taxpayers want to avoid tax penalties therefore they will rather comply than pay heavy penalty. The study finding is in consistence with the work of Oghuma, (2018) and Ahmed (2013) that one way of ensuring tax compliance is to punish tax defaulters which serves as a deterrent against subsequent tax default.

Perception of tax fairness exert a negative but significant effect on tax compliance with a coefficient of -0.284, standard error of 0.065, t-statistics of 9.615 and a probability value of 0.000. This implies that an increase level of perception of tax fairness by the SMEs will reduces the level of tax compliance by 28%. However, since the p-value of 0.000 is less than the 5% level of significant, it indicates that the result has significant statistical implication. Therefore, the finding of the study is contrary with the finding of Hery and Jasman (2019)

5.0 Conclusion and Recommendations

The study concludes that tax system complexity has a negative and significant effect to voluntary tax compliance behavior of SMEs in Agricultural sector of Nasarawa State. This condition indicates that the higher complexity a tax regulation has, the more reluctant the taxpayers would pay their income taxes. It is not only about how complex the words are contained in tax regulations brochures and tax return, but also the complex step to calculate the actual income tax itself.

The study also concludes that high level of tax knowledge leads to increase in tax compliance.
For tax audit, it positively determines tax compliance. This therefore indicates that when the tax authorities step up their effort in tax audit SMEs are made to comply more with the tax payment.

The result showed that increase in tax rate leads to increased tax compliance. It is concluded that increase in tax rate is often followed by serious monitoring by tax authorities to ensure compliance by the taxpayers. It is therefore concluded that increased tax rate leads to more tax compliance because in the aftermath of rate increases there is usually a strong monitoring to ensure compliance.

It was found that tax penalties positively affect tax compliance. The result implies that taxpayers want to avoid tax penalties therefore will rather comply than pay heavy penalty. It is therefore concluded that whenever the tax authorities employ tax penalties against tax defaulters it will lead to increased tax compliance.

Both tax authority and taxpayers accept that fairness in tax system is one of the determinants factors that affect tax compliance. Thus, the study concludes that perception of tax fairness has a negative effect on SMEs tax compliance.

Considering the findings and the conclusions arrived at in this study, the following recommendations are made:

Government should simplify and streamline tax laws and regulations to enhance the understandability and accessibility for taxpayers. This could include reducing the number of forms, minimizing the volume of required documentation, and clarifying any ambiguous language.

Government should endeavor to develop specialized and targeted educational programs that focus on the unique needs and challenges faced by SMEs in understanding and fulfilling their tax obligations as well as creating an environment conducive to continuous learning and improvement by providing tailored and accessible resources.

Continuing regular tax audits is also recommended as it sends a strong signal to taxpayers about the seriousness of the authority regarding tax compliance. This approach conveys that any default or concealment will not go unnoticed.

Given the observed positive and significant impact of the tax rate on tax compliance, it is imperative for Tax Authorities or Policy Makers to prioritize effective monitoring of tax rate implementation and enforcement. This strategic approach is essential to attain the highest possible level of compliance.

Tax penalties have been identified as a mechanism to boost compliance levels. However, it is advisable for Tax Authorities to utilize penalties for ensuring compliance only after exhausting all diplomatic avenues for issue resolution. Clear communication of tax penalties for each tax default is crucial, ensuring transparency and awareness among taxpayers. The enforcement process should be straightforward, efficient, and cost-effective for the authority.

To address concerns related to perception of tax fairness, it is imperative for the government to ensure an equitable distribution of the tax burden across different segments of the business community. This measure aims to foster a sense of fairness and equality in the tax landscape, promoting a more supportive and just environment for all tax payers.

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