

**DETERMINANTS OF TAX COMPLIANCE AMONG SMALL AND  
MEDIUM ENTERPRISES IN NAIROBI COUNTY, KENYA**

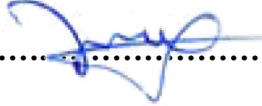
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## DECLARATION

This research project is my original work and has not been submitted for the award of a degree in any other university.

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## **LIST OF ABBREVIATIONS**

GDP – Gross Domestic Product

GoK- Government of Kenya

KRA – Kenya Revenue Authority

OECD – Organization for European Countries for Development

SMEs – Small and Medium Enterprises

VAT – Value Added Tax



## ABSTRACT

Tax compliance among Small and Medium Enterprises is critical in assuring the government's ability to increase tax income in order to manage the country's development plans. However, such enterprises in Kenya have over the years demonstrated low compliance rates. Currently, the seventh Kenya Revenue Authority corporate plan report indicated that compliance rate is 59% which is below the target rate of 65%. Therefore, this study sought to assess the determinants of tax compliance among small and medium enterprises in Nairobi County, Kenya. Basing on the theory of Planned Behavior, Deterrence Theory and Tax Moral Theory, the study interrogated the influence of Tax Education, Legal Enforcement Measures, Tax Audits and Tax Compliance Cost on tax compliance among the Small and Medium Enterprises based in Nairobi County. Based on a descriptive research design, the study focused on the 43,432 enterprises based in Nairobi County across the 17 sub counties where the proprietors of these businesses were the respondents. Through Fisher formula, a sample size of 96 was obtained. After clustering, the sample size in each Sub-County was sampled through random sampling procedure where the SMEs were sampled randomly until the required number in each Sub County was obtained. The data collection instrument adopted was a questionnaire issued to the owners who are the tax payers. The data collected was analysed through descriptive statistics, correlation as well as binary logit regression model. It was established that tax education significantly increases the odds of tax compliance among SMEs by 4.591 times (Odds Ratio = 4.591; Sig < 0.05); legal enforcement measures significantly increase the odds of tax compliance among SMEs by 5.496 times (Odds Ratio = 5.496; Sig < 0.05). In regard to tax audits, the results showed that an increase in tax audits increases the odds of tax compliance among SMEs by 1.444 times (Odds Ratio = 1.444; Sig > 0.05) though insignificantly. On the contrary, an increase in tax compliance costs significantly decreases the odds of tax compliance among SMEs by 0.208 times (Odds Ratio = 0.208; Sig < 0.05). Given its importance on enhancing tax compliance, the study recommends KRA to increase adoption of tax education practices, that is, tax clinics, seminars, media campaigns and social media campaigns. There is also a need to increase legal enforcement measures such as departure prohibition orders, agency notices, revocation of licences and prosecutions as well as arrests so as to increase tax compliance among SMEs. The study also recommends a need to increase the rate of tax audits practices such as examination of tax reports, confirmation of tax returns filed and audit of related transactions which are currently being conducted to a low extent by KRA. This can lead to a significant impact on tax compliance among SMEs. Given that an increase in tax compliance costs is associated with a significant decrease in tax compliance among SMEs, the study recommends KRA to consider revising the tax filing procedures to be even simpler so as to reduce the costs involved in it.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background to the Study

Tax compliance among Small and Medium Enterprises (SMEs) in Kenya according to Wawire (2011) is vital in ensuring that the government can enhance its tax revenue in order to manage its rising economic and financial needs as well as budget constraints which can threaten the sustainability and growth of the economy. However, various factors have been established to affect tax compliance among SMEs such as tax education (Newman *et al.* 2018), legal enforcement measures (Batrancea *et al.* 2019), audit probability, sanctions and penalties (Pham, Truong & Tran, 2020) as well as tax rates and tax compliance costs (Okpeyo, Musah & Gakpeto, 2019). Additionally, Damayanti, Subekti and Baridwan (2015) argued that some of the determinants of tax compliance are tax payer's attitude towards tax compliance, their behavioural intention as well as perceptions towards the government.

Theories such as the theory of Planned Behaviour, Tax Moral Theory as well as Deterrence Theory and have been advanced to explain the factors which determine tax compliance across fields. The theory of Planned behaviour propounded by Ajzen (1991) posits that three elements that is a behavioural belief, normative belief such as a person's faith in the expectations of others as well as personal belief psyche a person's behaviour according to the theory. In regard to this study, the theory places the determinants of tax compliance alongside three main factors, that is tax payers' attitude towards tax compliance, their behavioural intention as well as perceptions towards the government.

In regard to Deterrence theory, noncompliance is treated as a rational individual decision based on the likelihood of detection, conviction, and punishment levels. The core idea is that people choose to engage in activities that maximize their rewards while minimizing their costs. The theory is relevant to this study demonstrating that people may not pay taxes motivated by the behaviour of tax payers to maximize their rewards while minimizing their costs by linking tax compliance to factors such as compliance costs, tax rates, ease of using

technology as well as fines and sanctions. The Tax Moral Theory established in the 1960s by the "Cologne school of tax psychology," on the other hand stipulates that a person's inner thoughts, ethics, religion and the environment they operate in inspires them to comply to tax payment. In relevance to this study, the theory demonstrates that tax evasion is a motivated behaviour encouraged by a person's inner thought. Additionally, tax payers are motivated to pay taxes depending on the environment they are in and whether the environment motivates them to pay taxes. Some of these factors can be inclined to religious beliefs and government support.

At the moment, Kenya experiences low tax compliance rates among SMEs. The Seventh KRA corporate plan report (2020) indicated that compliance rate has been below the 65% target recording 59% (2016 and 2017) and 65% in the year 2018. In addition, tax compliance gaps are wide at 45% for VAT and 17.6% for corporate income tax as at the year 2018. To achieve its tax revenue targets, there is a need for KRA to bridge this low tax compliance gap.

### **1.1.1 Determinants of Tax Compliance**

The determinants being interrogated in this study can either be economic or non-economic for instance tax rates, the cost of compliance, penalties and audits being the economic ones. The other group could include non-economic factors such as tax education and corporate characteristics, which are divided into mental and institutional elements (Batrancea et al. 2019). Tax audits guarantee that taxpayers fill out their tax forms completely because any irregularities discovered during audits may result in penalties. High tax rates, on the other hand, discourage the tax payers from paying their taxes (Zandi & Elwahi, 2016).

When it comes to penalties, it's been stated that making citizens pay greater fines for avoiding charges prevents them from doing so in the future. Furthermore, the high cost of compliance deters taxpayers from complying with the law (Loo et al. 2012). Provision of tax education regarding people's tax obligations has been found to be a motivator for compliance. Tax compliance is also influenced by firm characteristics such as size and experience.

Wawire (2011) argued that larger businesses are more likely than smaller businesses to comply with their tax obligations since their prominence renders it difficult to avoid. Bigger firms may also reap certain tax benefits, which will encourage them to meet their tax commitments (Okpeyo et al. 2019). Some of the measures of the determinants of tax compliance based on previous empirical evidence are the rates, fines, awareness, costs of complying, firm characteristics as well as incentives have all previously been assessed as factors of tax compliance (Batrancea et al. 2019). This study focused on tax education, legal enforcement measures, tax audits and tax compliance costs.

### **1.1.2 Tax Compliance**

Mahestyanti *et al.* (2018) define tax compliance as the extent to which business organizations (taxpayers) adhere to a jurisdiction's tax regulations. Tax compliance, according to Tilahun (2019) is the ability and willingness of the tax payer to comply to the existing tax rules, register as a tax payer as well as to file the correct figures and timely make its payments. In this study, it can be defined as the willing tax obligations without force to make the payment, filling and reporting.

Dlamini (2017) argued that tax compliance continuous to face increasing challenges. Tax compliance among SMEs has been established to be low across the Sub Saharan Africa (Okpeyo et al. 2019; Dlamini, 2017). Therefore, it is important to find out some of the contributing factors with an aim of suggesting policy recommendations for improvement. Various measures of tax compliance have been advanced.

In regard to Malik and Younus (2019) tax compliance includes tax payer's preparedness to be registered for tax reasons as well as immediately alerting tax authorities of their status as a tax payer. On the contrary, Kuug (2016) argued that a score can be used to measure tax compliance or its level considering reconciliation of receipts, book keeping as well as orderly recording of expenses and income. However, Wawire (2011) measures tax compliance as payment, filing and reporting. This study measured tax compliance as payment, filing, costs and reporting.

### **1.1.3 Relationship between Tax Compliance and its Determinants**

Various tax compliance determinants interrogated in this study have different implications on tax compliances among SMEs. Tax audits according to Mirera (2011) can enhance tax compliance since it encourages taxpayers to comply voluntarily, resulting in increased income. Additionally, the fact that there are random tax audits makes the tax payers to provide accurate information as well as aid in the implementation of improvements to eliminate evasion and enhance tax compliance. In regard to legal enforcement measures, Lederman (2018) demonstrated that it can have both negative and positive impact. In an adversarial context, legal enforcement actions might be regarded as retaliation against activity that hurts the community. On the contrary, legal enforcement measures can encourage tax compliance because of the associated high costs.

In regard to the link between tax education and tax compliance, Saudi, Sinaga and Roespinoedji (2018) argued that tax knowledge is required to raise public understanding, particularly explaining the existing tax laws, importance of paying it, its contribution to development and its government expenditure. More significantly, when the current and future taxpayers are informed about the potential contributions they might make to the country's development through seminars, dialogue sessions, or a collaboration with the Ministry of Education, it enhances tax compliance among SMEs.

### **1.1.4 Small and Medium Enterprises in Nairobi County, Kenya**

SMEs, as mentioned in Kenya's Vision 2030, are critical to the country's economic growth. Small and medium-sized businesses (SMEs) are recognized as the economic pillar for achieving Vision 2030 due to their contribution to employment and GDP. In addition, SMEs are responsible for tax collection and remittance (Akinboade, 2015). As a result, they play a significant role in the tax system of any country.

SMEs, on the other hand, have higher probabilities of defaulting compared to other categories of tax payers (Walsh, 2013). OECD (2004) documented that this category is a high-risk group with a high default rate. In many circumstances, proving non-compliance is impossible. Non-compliance among the SMEs stands at about 50% as indicated by the

Kenya Revenue Authority (Okello, 2014) and its costly to conduct audits in tax in this group. Increasing small business voluntary compliance is thus a valuable endeavour.

## **1.2 Research Problem**

Tax compliance among SMEs is critical in assuring the government's ability to increase tax income in order to manage the country's development plans (Wawire, 2011). However, low tax compliance rates among SMEs have motivated a focus on various determining factors. This is mainly because various determinants have different effects on tax compliance. While tax audits and education are lauded to enhance tax compliance (Mirera, 2017), legal enforcement measures can either encourage retaliation or tax compliance (Lederman, 2018).

Kenyan SMEs have over the years demonstrated low compliance rates in Kenya (Keraro, 2017). Currently, the seventh KRA corporate plan report (2020) indicated that compliance rate is 59% which is below the target rate of 65%. Most of them don't willingly register unless forced. Additionally, they mostly don't comply to the existing tax laws while also not keeping records for easy tax audits (KRA 7<sup>th</sup> Corporate Plan, 2020).

Given its prominence, studies have interrogated the effect of various determinants on tax compliance across the globe. Some of the reviewed studies, that is Pham, Truong and Tran (2020) (Vietnamese SMEs), Inasius (2019) (Indonesia), Nurwanah et al. (2018) (Indonesia), Okpeyo, Musah and Gakpeto (2019) (Ghana) and Dibie and Dibie (2020) (Nigeria) interrogated the determinants of tax compliance among SMEs. However, they presented a contextual research gap. This is because the contextual environment of business operation in the countries is not same as that of Kenya hence the compliance rates varies. As a result, the findings cannot be generalised to Kenya.

In the local context, studies have focused on the study theme. However, some of the studies have not necessarily focused on similar variables as this study. There has been a deviation from the objectives and variables under study. For instance, even though Nduruchi and Namusonge (2017) and Zachary, Kariuki and Mwangi (2017) interrogated determinants of

tax compliance among SMEs in Kenya, they focused on tax compliance costs as the main determining factor. This study however, focuses on a different set of variables, that is tax education, legal enforcement measures and tax audits in order to fill this conceptual research gap. Given these research gaps and the research problem, the study sought to answer the main research question, what factors determine tax compliance among SMEs in Nairobi County, Kenya?

### **1.3 Research Objective**

The study sought to assess the determinants of tax compliance among small and medium enterprises in Nairobi County, Kenya

### **1.4 Value of the Study**

This study aimed to provide policy recommendations that form a basis for improvement by the tax authority in Kenya, KRA. Through the assessment, the importance of various factors, as indicated under the objectives, were assessed in line with their effect on tax compliance and through that, KRA can seek to improve tax compliance.

The tax payers, SMEs in this case can also benefit from the study findings. They can be able to understand the importance of tax compliance and what antecedents determine their compliance. Through this study, SMEs can gain an insight into the factors that influence their compliance and thus work towards abating them.

The study also contributes to theory and academics on the study theme. Specifically, the study fills some of the existing research gaps on the topic and opens up an avenue for further interrogation. Through recommendations for further study, future research can widen the study scope on the theme.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The segment highlights the prose researched in order to encapsulate the study's themes and provide a foundation for the investigation. As a result, the chapter focused on the study's driving theories, prior empirical investigations, and current advancements in the field. The chapter concluded with a summary of the study's main points.

### **2.2 Theoretic Review**

This study was borrowed from other scholars who developed a number of theories which have been used to expounded in tax compliance scenarios.

#### **2.2.1 Theory of Planned Behavior**

The theory was propounded by Ajzen (1991). Three elements encourage a person's behaviour according to the theory. Firstly, is a behavioural belief, which is a result evaluation. A varied attitude toward a given conduct will be formed through confidence and evaluation of results. The second is what is known as normative belief which can be termed as the faith in others like tax official. The third factor is control belief, whereby people believe in things that encourage their behaviours as well as their views of how strongly these two factors influence their conduct. Control belief gives rise to a sense of behavioural control.

According to the theory of planned behaviour, someone would design their intention to follow the rule by considering attitudes, subjective norms, and control perceived conduct (Ajzen, 1991). In terms of tax compliance, the theory demonstrates that attitudes towards tax compliance, subjective norms, perceptual behaviour, and taxpayer perceptions of the government are all important determinants complying with tax responsibilities (Damayanti et al. 2015).



In line with this study, the theory placed the determinants of tax compliance alongside three main factors, that is tax payers' attitude towards tax compliance, their behavioural intention as well as perceptions towards the government. The theory was thus relevant in explaining the determinants of tax compliance alongside these factors.

### **2.2.2 Deterrence Theory**

Becker's renowned article on crime and punishment sparked a modern renaissance of economic research of crime in 1968. While Becker highlighted tax evasion as a possible application for his general model, the study was done by Allingham and Sandmo (1972). Noncompliance is treated as a rational individual decision based on the likelihood of detection, conviction, and punishment levels in this approach. In a criminal justice literature, Scott and Grasmick (1981) proposed the deterrence hypothesis. As a result, "non-compliance" was implicitly defined as illegal tax evasion, and the framework for investigation was provided by deterrence theory.

The core idea behind the theory is that people choose to engage in activities that maximize their rewards while minimizing their costs (Nagin, Cullen & Jonson, 2018). The act will not be undertaken if the risks are high enough and the expenses are high enough to outweigh the benefits. Many sorts of criminal conduct, including tax evasion, have been studied using deterrence theory as a foundation.

In line with this interrogation, it stipulated that tax compliance is motivated by the behaviour of tax payers to maximize their rewards while minimizing their costs. Only when they feel that the benefits outweigh the costs will they comply. Therefore, the theory linked tax compliance to factors such as compliance costs, tax rates, ease of using technology as well as fines and sanctions. If the costs associated with these factors are high, the tax payers cannot have the incentive to comply.

### **2.2.3 Tax Moral Theory**

The notion of tax morale was first established in the 1960s by the "Cologne school of tax psychology". However, it was until the 90s that it received recognition (Alm & Torgler, 2004). This hypothesis explains why people want to follow the rules and regulations when it comes to tax compliance. According to the view, tax evasion is a motivated behaviour fuelled by a person's inner thoughts. Furthermore, tax payers are motivated to pay taxes based on the environment in which they live; if the environment inspires them to pay taxes, they do so; if it does not, they avoid taxes.

According to the argument, tax payers will pay their taxes if they believe the government is looking out for them and their business. Taxpayers would have the resolve to pay more taxes were they to receive incentives to expand their businesses by the government. Religion and ethics are also factored according to Torgler (2004), with more religious people being more inclined to cooperate and pay taxes. Tax morale, in terms of religion, is an individual's internal influence from religious thought or moral norms that shapes the attitude of tax payers toward tax compliance.

Like the other discussed theories, it significantly related to the study theme by demonstrating that tax evasion is a motivated behaviour encouraged by a person's inner thought. Additionally, tax payers are motivated to pay taxes depending on the environment they are in and whether the environment motivates them to pay taxes. Some of these factors can be inclined to religious beliefs and government support.

### **2.3 Determinants of Tax Compliance among the SMEs**

Tax compliance among SMEs can be determined by various factors such as tax education, legal enforcement measures and tax audits as discussed in this section.

### **2.3.1 Tax Education**

The practice of educating people about the taxation process and helping them appreciate the need of paying taxes is known as taxpayer education. Tax education is critical because it enables citizens to understand and fulfil their tax obligations. As a result, the major goal of taxpayer education is to urge taxpayers to comply voluntarily (Oladipupo & Obazee, 2016).

Hassan, Nawawi and Puteh Salin (2016) contends that the goals of taxpayer education can be broken down into three categories. To begin with, it aids in the dissemination of tax law and compliance knowledge. Furthermore, it plays an important function in influencing taxpayer attitudes and so encouraging voluntary compliance. Finally, it assists more people in meeting their tax duties, resulting in an increase in tax revenue received through taxes.

### **2.3.2 Legal Enforcement Measures**

Legal enforcement measures are judicial or extrajudicial actions taken in connection with the collection of any or all obligations regarding tax, as well as the enforcement of any guarantee in connection with the same (Manual & Xin, 2016). The prominence of legal enforcement practices as a strategy of boosting tax compliance is not widely accepted by scholars who argue that its effectiveness varies (Castro & Scartascini, 2015).

Castro and Scartascini (2015) added that legal enforcement measures such as fines and penalties can be perceived as retaliation against a conduct that affects the community in an antagonistic climate. Lederman (2018) added that legal enforcement measures has a double-edged effect whereby while it can spur compliance, it can also discourage the same especially when the legal enforcement measures are too harsh. The effect of legal enforcement measures on tax compliance is thus conflicting and contradictory across the world which motivates this study.

### **2.3.3 Tax Audits**

Zandi and Elwahi (2016) indicated that tax audits are a means used to ensure conformity to tax laws through random verification of tax figures. In this procedure, the tax authorities verify the figures included on tax return. Tax auditing, furthermore entails the selection of tax returns for auditing based on a set of criteria.

Following that, the taxpayers' underlying books and records are scrutinized to see if they match the tax return that was filed. Through tax audits, governments can stabilize their operations because it ensures that they collect what's required. Additionally, it reduces non-compliance as well as the degree of avoidance (Mirera, 2011).

### **2.3.4 Tax Compliance Cost**

Tax compliance costs are defined by Eichfelder and Hechtner (2018) as the costs faced by the tax payers in the process of trying to comply to their tax obligations. The expense of complying with tax regulations in order to meet one's tax obligations as a business has an impact on compliance. They can be grouped into time, money and extra expenses.

Representative expenses (in-house staff) and external costs are included in the total time spent such as the extra charges for keeping business accounts and books. These consistency expenses include charges that are incurred by an organization but are beyond its management's ability to regulate. According to studies, high compliance costs prevent tax payers from complying with the law (Abdul & Wang'ombe, 2018).

## **2.4 Empirical Review**

Other studies that have focused on a similar issue both internationally and locally were presented in this section. The critique was guided by the empirical review, which lead to the research gaps that spurred this work.

### **2.4.1 Global Studies**

Pham, Truong and Tran (2020) interrogated the determinants influencing tax compliance among Vietnamese SMEs. The study was a mixed methodology one using both qualitative and quantitative techniques. Both content analysis as well as Structural Equation Modelling (SEM) were used to analyse which showed that audit probability, corporate reputation, and firm ownership all have a direct impact on voluntary tax compliance. It was shown that tax compliance is influenced the most by the likelihood of an audit and the severity of consequences.

Inasius (2019) conducted a study to establish the factors influencing SME tax compliance in Indonesia. Six tax compliance indicators are investigated using multiple regressions. The information was gathered from a survey of 328 small business taxpayers performed in Jakarta. Data was collected using a researcher-administered questionnaire survey approach. The study established that referral groups, the likelihood of an audit, tax expertise, and the feeling of equity and fairness all have a major impact on tax compliance, according to the findings. The referral group, in particular, had the greatest impact on SME taxpayers' noncompliance behavior.

Nurwanah et al. (2018) interrogated what determines tax compliance among Indonesian firms. Focusing on tax payers in South Sulawesi province, the study collected primary data and used Partial Least Squares (PLS) to analyze. The findings indicated that subjective norm was a major determine of their compliance level.

In Ghana, Okpeyo, Musah and Gakpeto (2019) sought to ascertain the critical determining factors for tax compliance among Ghanaian SMEs. The study sampled 100 SMEs in Accra to participate in the study. Data was quantitatively and subjectively examined. The study's findings revealed that compliance costs, tax rates, tax audits, and taxpayer morale all had a substantial impact on tax compliance. The study also stated that business unions and groups could aid in increasing voluntary tax compliance among Ghana's small and medium taxpayers.

Dibie and Dibie (2020) investigated the factors that influence tax policy compliance in Nigeria. Knowledge of tax rules and corruption were the two key criteria examined. The research relied on primary data gathered through interviews and questionnaires that included both qualitative and quantitative information. Through content analysis, it was demonstrated that tax awareness was a significant determinant of tax compliance in Nigeria. Additionally, the tax payer's belief that there was corruption discouraged them from paying taxes.

### **2.4.2 Local Studies**

In Kenya's Bingaman County, Nduruchi and Namusonge (2017) investigated the factors that influence tax compliance among small and medium businesses. The expense of tax compliance was the key element evaluated. The study's sample included 170 SMEs from all of Bungoma County's SMEs. Quantitative data was collected using structured questionnaires, and descriptive statistics, correlations, and linear regression analysis were utilized to analyze it. When all other parameters are held constant, the results demonstrate that cost has a negative impact on tax compliance, accounting for 9.6% of the variance in tax compliance by SMEs.

Zachary, Kariuki, and Mwangi (2017) conducted a study in Embu County, Kenya, on the factors of tax compliance among small and medium firms, with an emphasis on tax compliance costs. The study aimed to sample 185 of the 615 registered SMEs in Embu County. Questionnaires were used to collect data for the study, which was then analyzed using descriptive statistics including mean, standard deviation, and answer percentages. The study discovered a substantial negative association between tax compliance expenses and tax compliance by SME's in Embu County.

In Kisumu County, Kenya, King'Oina (2016) investigated the factors that influence Value Added Tax compliance among construction enterprises. The research looked at all of Kisumu County's registered construction enterprises. Using self-administered questionnaires, the researcher gathered primary data from the construction firms sampled, totalling to 398. The study findings analysed through Statistical Package for Social

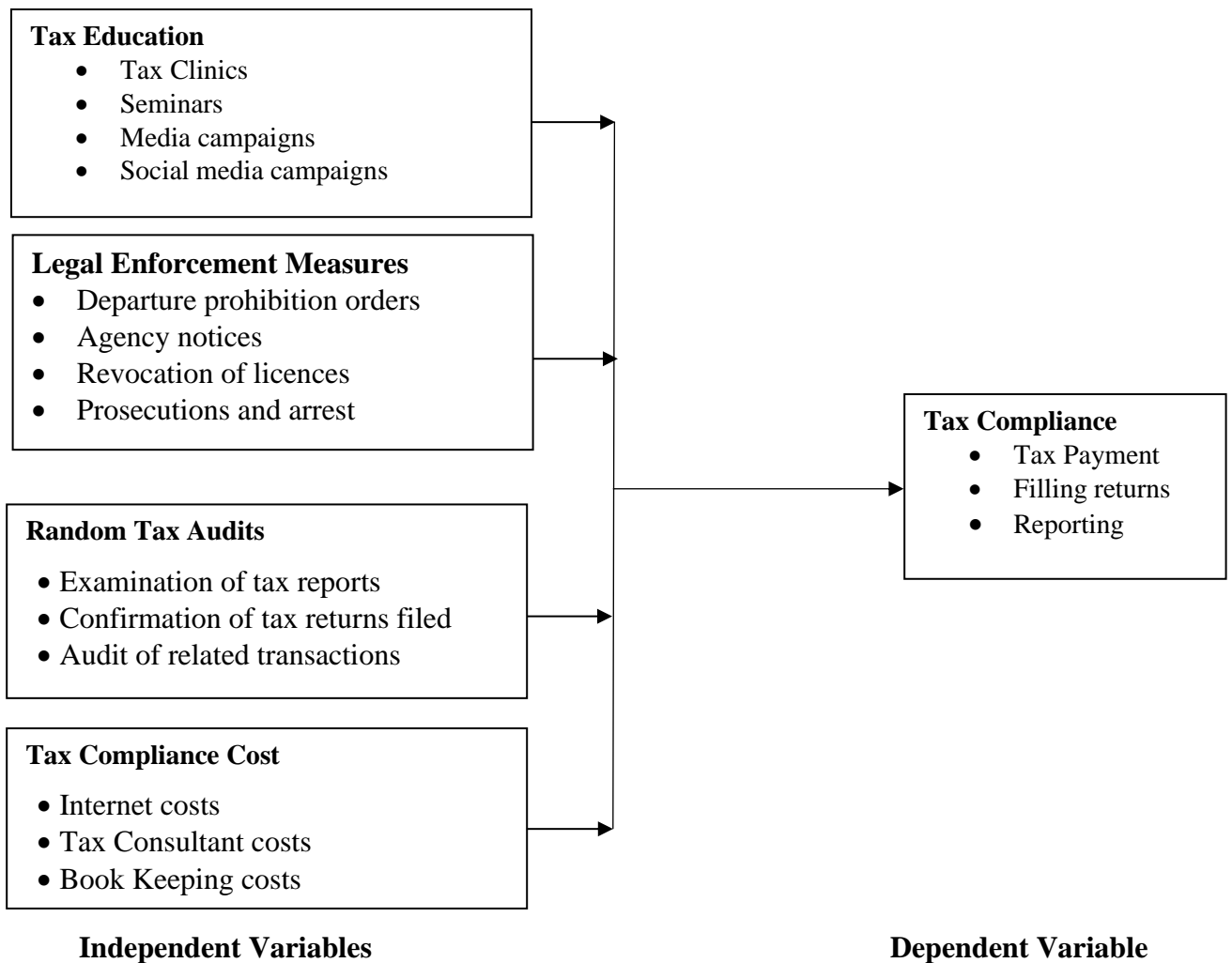
Sciences indicated that tax knowledge and awareness has a considerable impact on tax compliance. Furthermore, higher levels of tax compliance were linked to lower tax compliance costs. It was also shown that appropriate fines and penalties have a crucial impact in increasing tax compliance. Tax compliance is also influenced by taxpayer perceptions and attitudes.

Musau (2015) explored the factors that influence small and medium business tax compliance in Nairobi County, Kenya. The research looked at how detection and fines, tax knowledge and sophisticated filing procedures, tax value, and government trust all affect tax compliance. In Nairobi County, Kenya, a total of 398 SMEs were chosen at random for quantitative data. Using a binary profit regression model, the researchers found that increasing people's perceptions of the difficulty of avoiding taxes improves the likelihood of SMEs in Nairobi County becoming tax compliant. According to the study, people who are satisfied with government service, have enough tax information, trust government officials to handle their taxes, and believe tax filing procedures are less complicated are more likely to be tax compliant.

Korir *et al.* (2015) investigated the factors that influence small taxpayers' tax compliance in Western Kenya. The focus was on equity, the fairness of the tax system, and the cost of compliance. A sample of 370 respondents was obtained using a basic random sampling approach. The data was collected through surveys and evaluated using descriptive statistics and multiple regression analysis. Only tax burden and equity were significant. The other determinants of tax compliance, such as complexity, fairness, cost of compliance, and policy measures, were not significant.

## **2.5 Conceptual Framework**

The conceptual framework in Figure 2.1 showed the relationship between tax education, legal enforcement measures, tax compliance costs and tax audits and the dependent variable of the study, that is tax compliance.



**Figure 1.1 Conceptual Framework**

**Source: Researcher (2021)**

## **2.6 Summary of the Literature Review**

Some of the reviewed studies, that is Pham, Truong and Tran (2020) (Vietnamese SMEs), Inasius (2019) (Indonesia), Nurwanah et al. (2018) (Indonesia), Okpeyo, Musah and Gakpeto (2019) (Ghana) and Dibie and Dibie (2020) (Nigeria) present a contextual research gap. This is because the contextual environment of business operation in the



countries is not same as that of Kenya hence the compliance rates varies. As a result, the findings cannot be generalised to Kenya.

In regard to some of the local studies, there has been a deviation from the objectives and variables under study. Even though Nduruchi and Namusonge (2017) and Zachary, Kariuki and Mwangi (2017) interrogated tax compliance among SMEs, they focused on tax compliance costs. This study however, focused on a different set of variables, that is tax education, legal enforcement measures and tax audits in order to fill this conceptual research gap.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1. Introduction**

The methodology that was employed to attain the research objectives was presented in this chapter. The research design, target population, sample size determination procedure, data collecting and analysis procedures were all covered in this part.

### **3.2 Research Design**

The study adopted a descriptive design. It used multiple units to describe the current situation and problem (Smith, 2015). It was relevant to this research because it supports collection of primary data to describe and answer the research problem.

### **3.3 Population**

According to the Micro Small and Medium Enterprises Authority (MSEA) (2020), the study's target group consisted of 43,432 SMEs which are in Nairobi. The SMEs were sampled across the 17 sub counties in Nairobi County. The proprietors of small and medium businesses were the focus of the research.

### **3.4 Sample Design**

Before stratification, the sample size was established using a formula. To assure inclusion and eliminate bias across strata, the study used clustered systematic sampling for SMEs across the 17 Sub Counties in Nairobi County. Fisher formula, shown, was used to calculate the sample size:

$$n = \frac{Z^2 pq}{\epsilon^2}$$

Where:  $n$  = sample size when the target population is greater than 10,000 (Mugenda & Mugenda, 2009),  $N$  = total number of SMEs in Nairobi County (43,432),  $\varepsilon$  = error term set at 5%,  $Z$  = Z score at 5% level of significance (1.96),  $P$  = desired characteristics in the sample size set at 50% and  $q$  = undesired characteristics set at 50%. Substituting the values gave a sample size of 96 SMEs. The 96 SMEs were clustered into each of the 17 Sub Counties through proportionate sampling procedures as shown in Table 3.1.

After clustering, the sample size in each Sub-County was sampled through random sampling procedure where the SMEs were sampled randomly until the required number in each Sub County was obtained. In case of any non-response, the SMEs were replaced until the target sample size was achieved in each stratum. The target respondents were the SME owners.

**Table 3.1 Sample Size**

| Sub-County       | Population of SMEs | Proportionate Sample | Percentage  |
|------------------|--------------------|----------------------|-------------|
| Starehe          | 5,646              | 12                   | 13%         |
| Kamukunji        | 6,515              | 14                   | 15%         |
| Kasarani         | 2,172              | 5                    | 5%          |
| Roysambu         | 3,475              | 8                    | 8%          |
| Ruaraka          | 1,303              | 3                    | 3%          |
| Makadara         | 1,737              | 4                    | 4%          |
| Embakasi South   | 2,606              | 6                    | 6%          |
| Embakasi North   | 1,737              | 4                    | 4%          |
| Embakasi Central | 1,737              | 4                    | 4%          |
| Embakasi East    | 2,606              | 6                    | 6%          |
| Embakasi West    | 1,303              | 3                    | 3%          |
| Dagorreti North  | 869                | 2                    | 2%          |
| Dagorreti South  | 2,172              | 5                    | 5%          |
| Langata          | 2,172              | 5                    | 5%          |
| Westlands        | 3,040              | 7                    | 7%          |
| Kibra            | 1,737              | 4                    | 4%          |
| Mathare          | 2,606              | 6                    | 6%          |
| <b>Total</b>     | <b>43,432</b>      | <b>96</b>            | <b>100%</b> |

Source: MSEA (2020)

### **3.5 Data Collection**

Questionnaires which are semi-structured with closed-ended questions were adopted. These questionnaires were issued to the SME owners who are the tax payers. The data collected was quantitative as well as qualitative. The researcher with the aid of research assistants collected the data while observing both the ethical values as well as COVID-19 measures. The main data collection process commenced after the questionnaire had been pretested for reliability on 10 randomly sampled SMEs in Kamukunji. The threshold adopted for testing internal consistency through Cronbach Alpha was 0.7.

### **3.6 Data Analysis**

Qualitative was analysed using content analysis where the main themes were established and categorized. Quantitative data was on the other hand analyzed through descriptive statistics and inferential statistics that is correlation and regression. The subsections below discuss diagnostic tests, regression model and statistical tests for the quantitative data.

#### **3.6.1 Diagnostic Tests**

Before running the binary logistic model, diagnostic tests were conducted to ensure that regression assumptions are adhered to before estimation. In this study, the diagnostic tests conducted included test for multicollinearity, link test, Hosmer-Lemeshow (H-L) Test and test for heteroskedasticity. To test for the presence of multicollinearity in the estimated model, Variance Inflation Factor (VIF) will be used. VIF which ranges between 1 and 10 identifies the correlation between regressors and also the strength of that correlation. As a rule of thumb, Multicollinearity is deemed to be present if a variable has a VIF in excess of 10 (Field, 2009). In regard to Link test, it is based on the view that if a model is correctly specified, any additional independent variables cannot be found except by chance.

Link Test creates two new variables, the prediction variable (*hat*) and squared prediction variable (*hatsq*). For a correctly specified model, the prediction variable (*hat*) should be significant while *hatsq* should not. To establish the goodness of fit of the fitted binary

logistic model, Hosmer - Lemeshow (H-L) test was carried out. The test determines whether observed binary responses, conditional on vector of covariates (confounding factors), are consistent with predictions. That is, whether the number of outcomes in the regression indicated the number of observed outcomes in the data. When the predictions in the model fit the data well, then the probability value of H-L is statistically not significant. Breusch Pagan method was also used to test for Heteroskedasticity of the model. The null hypothesis of homoscedasticity is rejected when the P-value is significant (Sig < 0.00).

### 3.6.2 Regression Model

The effect of the predictor on the dependent variable was determined using a binary logit regression model. This regression model was suitable because the dependent variable was measured using a binary variable, that is, having a tax compliance certificate (Yes) or not having it (No) that is to say, (1 or 0). The model was also suitable regardless of whether the independent variables were real, binary or categorical. In this case, the independent variables have been captured using a Likert scale of 1 to 5 hence they are categorical.

The binary logit model was therefore suitable to establish whether the SMEs are tax compliant or not given the 4 factors, that is tax education, legal enforcement measures, tax audits and tax compliance costs. The binary logit model was of the general form:

$$p(y_i = 1 / x_i) = x_i^3 \beta + \mu$$

Where  $\mathbf{p}$  represents the probability odds,  $\mathbf{y}_i$  is a binary variable representing  $\mathbf{1}$  if the SME is tax compliant and  $\mathbf{0}$  otherwise,  $\mathbf{x}_i$  represents the vector of determinants that determine the likelihood of being tax compliant in this case (tax education, legal enforcement measures, tax audits and tax compliance costs),  $\beta$  is a vector of parameters that was estimated, and  $\mu_i$  is the disturbance term, which has a symmetric distribution that is either normal or logistic. Overall, the following binary logit regression model was used:

$$\frac{\Pr(y_i = 0)}{\Pr(y_i = 1)} := \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

**Where:**

$y_i$  – dependent variable defined by  $y = 1$  if the SME is tax compliant and  $y = 0$  otherwise

Where  $Y$  – Tax Compliance;  $X_1$  – Tax Education;  $X_2$  – Legal Enforcement Measures;  $X_3$  – Tax Audits;  $X_4$  – Tax Compliance Costs;  $\epsilon$  – Is the error term and  $\beta$  – Predictor variables coefficients

### **3.6.3 Significance Tests**

To establish the significance, the study tested at 95% level of confidence which is equivalent to 5% level of significance. A relationship will be said to be insignificant if the p-value is greater than 0.05.

## **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION**

### **4.1 Introduction**

In this chapter, there is a presentation of the results, findings and its discussions based on the data collected from the field. Both descriptive and inferential statistics are presented in this section. The findings will guide development of conclusion and recommendations in the next chapter.

### **4.2 Response Rate**

The study targeted a total of 96 SMEs clustered across the 17 Sub Counties in Nairobi County. A total of 96 questionnaires were thus administered out of which 83 were responded to giving a response rate of 86%. This is satisfactory according to Smith (2015) who argued that a response rate above 60% is satisfactory for generalizations.

### **4.3 Data Validity**

To ensure data validity and reliability, the questionnaire was revised by the supervisor to enhance its content validity. In regard to reliability, the questionnaire was pretested for reliability on 10 randomly sampled SMEs in Kamukunji. The collected data was used to establish the internal consistency through Cronbach Alpha at a threshold of 0.7. The results in Table 4.1 indicates that the 4 predictor variables were reliable since their Cronbach Alpha values were greater than 0.7 as recommended by Mugenda and Mugenda (2009). Since the dependent variable was measured using a binary scale, its reliability was not established through this method.

**Table 4.1 Reliability Test Results**

| <b>Variable</b>            | <b>Cronbach Alpha</b> | <b>Number of Items</b> | <b>Decision</b> | <b>Decision</b> |
|----------------------------|-----------------------|------------------------|-----------------|-----------------|
| Tax Education              | 0.784                 | 4                      | > 0.7           | Reliable        |
| Legal Enforcement Measures | 0.789                 | 5                      | > 0.7           | Reliable        |
| Tax Audits                 | 0.850                 | 5                      | > 0.7           | Reliable        |
| Tax Compliance Costs       | 0.777                 | 4                      | > 0.7           | Reliable        |

#### **4.4 Descriptive Statistics**

This section presents descriptive statistics for the data in terms of mean and standard deviations. The mean and standard deviation for the likert scale responses, where 1 = Very Small Extent, 2 = Small Extent, 3 = Moderate Extent, 4 = High Extent and 5 = Very High Extent have been established and presented per variable.

##### **4.4.1 Description of Tax Education**

The results in Table 4.2 indicate that KRA has organized Tax Clinics among SMEs in Nairobi County to a small extent ( $M = 2.00$ ). KRA has also organized seminars among SMEs to a small extent ( $M = 2.02$ ), it has organized social media campaigns to create awareness on tax matters to a small extent ( $M = 1.99$ ) as well as media campaigns to a small extent ( $M = 1.84$ ). Overall, it was demonstrated that tax education among Nairobi-based SMEs has been conducted to a small extent ( $M = 1.96$ ). The opinion of the respondents didn't have wide variations ( $SD = 0.83$ ) to imply that most of the respondents shared related views.

**Table 4.2 Description of Tax Education**

| <b>Statement</b>                        | <b>Mean</b> | <b>Standard Deviation</b> |
|---|-------------|---------------------------|
| Tax Clinics organized by KRA            | 2.00        | 0.86                      |
| Seminars organized by KRA               | 2.02        | 0.83                      |
| Social media campaigns organized by KRA | 1.99        | 0.85                      |
| Media campaigns by KRA                  | 1.84        | 0.80                      |
| <b>Average</b>                          | <b>1.96</b> | <b>0.83</b>               |



#### 4.4.2 Description of Legal Enforcement Measures

The results in Table 4.3 indicate that KRA has used departure prohibition orders among SMEs to a low extent ( $M = 1.93$ ). It has also adopted revocation of licenses as a result of late tax payments among SMEs to a low extent ( $M = 2.11$ ), KRA has also conducted prosecutions related to taxes to a low extent ( $M = 2.07$ ) as well as conducted arrests as a result of tax crimes among SMEs to a low extent ( $M = 1.98$ ). However, it has adopted agency notices to file tax returns among SMEs to a high extent ( $M = 4.10$ ). Overall, it was demonstrated that legal enforcement measures to ensure tax compliance among SMEs has been implemented by KRA to a low extent ( $M = 2.44$ ). The opinion of the respondents didn't have wide variations ( $SD = 0.86$ ) to imply that most of the respondents shared related views.

**Table 4.3 Description of Legal Enforcement Measures**

| <b>Statement</b>  | <b>Mean</b> | <b>Standard Deviation</b> |
|---|-------------|---------------------------|
| Departure prohibition orders from KRA                   | 1.93        | 0.82                      |
| Agency notices to file tax returns                      | 4.10        | 0.84                      |
| Revocation of licenses as a result of late tax payments | 2.11        | 0.86                      |
| Prosecutions related to taxes                           | 2.07        | 0.81                      |
| Arrests as a result of tax crimes                       | 1.98        | 0.83                      |
| <b>Average</b>  | <b>2.44</b> | <b>0.86</b>               |

#### 4.4.3 Description of Tax Audits

The results in Table 4.4 indicate that KRA examines tax reports of SMEs to a low extent ( $M = 1.94$ ), confirms tax return filed against business accounts books of SMEs to a low extent ( $M = 2.01$ ) as well as confirms unreported income to a low extent ( $M = 2.11$ ). It was also established that KRA confirms tax avoidance as well as audits related transactions to a low extent ( $M = 2.17$ ;  $2.01$ ) respectively. Overall, it was demonstrated that tax auditing of SMEs is conducted by KRA to a low extent ( $M = 2.06$ ). The opinion of the respondents didn't have wide variations ( $SD = 0.81$ ) to imply that most of the respondents shared related views.

**Table 4.4 Description of Tax Audits**

| <b>Statement</b>   | <b>Mean</b> | <b>Standard Deviation</b> |
|--|-------------|---------------------------|
| Examination of tax reports by KRA                                | 1.98        | 0.81                      |
| Confirmation of tax return filed against business accounts books | 2.01        | 0.85                      |
| Confirmation of unreported income by KRA officials               | 2.11        | 0.87                      |
| Confirmation of tax avoidance                                    | 2.17        | 0.81                      |
| Audit of related transactions                                    | 2.01        | 0.79                      |
| <b>Average</b>   | <b>2.06</b> | <b>0.81</b>               |

#### **4.4.4 Description of Tax Compliance Costs**

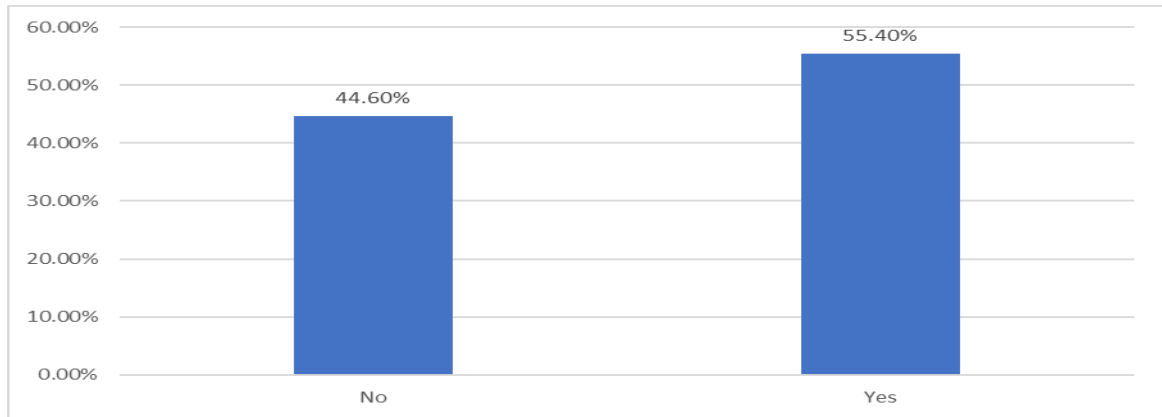
The results in Table 4.5 indicate that SME owners consider the costs for paying a tax consultant as high to a high extent (M = 4.52), consider the internet charges for tax filing to be high to a high extent (M = 4.16), consider the time taken to file tax returns to be long and costly to a high extent (M = 4.00) as well as book keeping costs to be high to a high extent (M = 3.92). Generally, the tax compliance costs were considered to be high to a high extent (M = 4.15). The opinion of the respondents didn't have wide variations (SD = 0.76) to imply that most of the respondents had a small variation in their responses.

**Table 4.5 Description of Tax Compliance Costs**

| <b>Statement</b>                                      | <b>Mean</b> | <b>Standard Deviation</b> |
|---|-------------|---------------------------|
| The costs for paying a tax consultant are high        | 4.52        | 0.50                      |
| The internet charges for tax filing are high          | 4.16        | 0.83                      |
| The time taken to file tax returns is long and costly | 4.00        | 0.87                      |
| The book keeping costs are high                       | 3.92        | 0.84                      |
| <b>Average</b>  | <b>4.15</b> | <b>0.76</b>               |

#### **4.4.5 Description of Tax Compliance**

The study established whether the SME owners had tax compliance certificates. The results in Figure 4.1 indicate that majority of the SMEs, 55.4%, indicated that they have a tax compliance certificate. Equally a significant number of them, 44.6%, didn't have which also demonstrated low tax compliance rate among the SMEs.



**Figure 4.1 Whether the SME owners have a Tax Compliance Certificate**

The frequency of conducting tax compliance practices (Tax Payments, filing returns and Tax Reporting) for the last 3 years was established and summarised in Table 4.6. It was established that on average, SMEs paid taxes on average twice yearly between the year 2018 and 2020 out of the possible 12 times. This was low to imply that there was low tax compliance as earlier indicated. In addition, it was revealed that majority of the SMEs filed returns on average 6 times in the year 2018 and 2019 but 5 times in the year 2020. In a year, SMEs have to file returns monthly. The average number indicated reflects low compliance rate since its way below 12 times. It was also established that they report taxes on average twice a year for the last 3 years which also demonstrates low compliance rate given a maximum number of 12 times.

**Table 4.6 Frequency of conducting Tax Compliance Practices**

| <b>Indicator</b>                 | <b>2018</b> | <b>2019</b> | <b>2020</b> |
|----------------------------------|-------------|-------------|-------------|
| Average number of Tax Payments   | 2.10        | 1.96        | 1.94        |
| Average number of Filing returns | 6.40        | 6.65        | 5.43        |
| Average number of Tax Reporting  | 2.20        | 2.23        | 1.92        |

## 4.5 Correlation Analysis

The study adopted a Spearman correlation analysis to determine the relationship between the study variables since the dependent variable, tax compliance, was measured as categorical. The results in Table 4.7 indicated that tax education had a positive and significant association with tax compliance (Spearman Correlation = 0.189; Sig < 0.1). This implies that an increase in tax education is associated with higher tax compliance among SMEs. The results further showed that legal enforcement procedures had a positive and significant association with tax compliance (Spearman Correlation = 0.228; Sig < 0.05). This implies that an increase in legal enforcement procedures is associated with higher tax compliance among SMEs.

On the contrary, the correlation results demonstrated that tax audits had a positive but not significant effect on tax compliance (Spearman Correlation = 0.012; Sig > 0.05). This implies that an increase in tax audits was associated with an insignificant increase in tax compliance among SMEs. However, it was established that tax compliance costs had a negative and significant effect on tax compliance (Spearman Correlation = - 0.213; Sig < 0.1). This implies that an increase in tax compliance costs was associated with a significant decrease in tax compliance among SMEs.

**Table 4.7 Correlation Matrix**

|                |   |                         | Tax Education | Legal Enforcement Measures | Tax Audits | Tax Compliance Costs | Tax Compliance |  |
|----------------|---|-------------------------|---------------|----------------------------|------------|----------------------|----------------|--|
| Spearman's rho | Tax Education   | Correlation Coefficient | 1             |                            |            |                      |                |  |
|                | Legal Enforcement Measures                                  | Correlation Coefficient | -0.083        | 1                          |            |                      |                |  |
|                |   | Sig. (2-tailed)         | 0.453         | .                          |            |                      |                |  |
|                | Tax Audits  | Correlation Coefficient | -0.008        | -0.021                     | 1          |                      |                |  |
|                |   | Sig. (2-tailed)         | 0.944         | 0.848                      | .          |                      |                |  |
|                | Tax Compliance Costs  | Correlation Coefficient | 0.066         | 0.111                      | 0.112      | 1                    |                |  |
|                |   | Sig. (2-tailed)         | 0.555         | 0.319                      | 0.315      | .                    |                |  |
|                | Tax Compliance  | Correlation Coefficient | 0.189*        | .228*                      | 0.012      | -0.213*              | 1              |  |
|                |   | Sig. (2-tailed)         | 0.087         | 0.039                      | 0.912      | 0.053                | .              |  |
|                |   | N                       | 83            | 83                         | 83         | 83                   | 83             |  |
|                | ** Correlation is significant at the 0.05 level (2-tailed). |                         |               |                            |            |                      |                |  |
|                | * Correlation is significant at the 0.1 level (2-tailed).   |                         |               |                            |            |                      |                |  |

## 4.6 Regression Analysis and Hypotheses Testing

To determine the determinants of tax compliance among small and medium enterprises in Nairobi County, Kenya, the study adopted a binary logit regression model. The results are presented in the subsections that follow.

### 4.6.1 Binomial Logistic Regression Model Summary

The model summary results in Table 4.8 indicated that the four predictor variables (tax education, legal enforcement measures, tax audits and tax compliance costs) account for up to 20.2% of the variation in tax compliance among SMEs in Kenya (Nagelkerke R Square = 0.202). This implies that the four factors are important in explaining tax compliance among SMEs and other factors other than the four account for the remaining percentage.

**Table 4.8 Binomial Logistic Regression Model Summary**

| <b>-2 Log likelihood</b>   | <b>Cox &amp; Snell R Square</b> | <b>Nagelkerke R Square</b> |
|--|---------------------------------|----------------------------|
| 100.498  | 0.151                           | 0.202                      |
| Estimation terminated at iteration number 4 because parameter estimates changed by less than .001. |                                 |                            |

#### **4.6.2 Binomial Logistic Regression Model Fitness**

Unlike ANOVA and adjusted R-square in ordinary Least Square, a binary logistic regression model fitness is tested using Hosmer-Lemeshow statistic. In this method, the model is said to be significant if the Sig < 0.05 (Smith, 2015). As indicated in table 4.9, the binary logistic regression model predicting the determinants of tax compliance among small and medium enterprises in Nairobi County, Kenya was a good fit (Sig < 0.05) implying that it was closer to the actual model hence a good predictor.

**Table 4.9 Hosmer-Lemeshow statistic test of Binomial Logistic Regression Model Fitness**

|       | <b>Chi-square</b> | <b>df</b> | <b>Sig.</b> |
|-------|-------------------|-----------|-------------|
| Model | 131.349           | 8         | 0.001       |

#### **4.6.3 Binomial Logistic Regression Model Fitness**

The regression model coefficients were also established as shown in Table 4.10. From the Table, it can be demonstrated that tax education has a positive and significant influence on tax compliance among SMEs ( $\beta > 0$ ). An increase in tax education increases the odds of tax compliance among SMEs by 4.591 times (Odds Ratio = 4.591). It was also established that legal enforcement measures have a positive and significant influence on tax compliance among SMEs ( $\beta > 0$ ). An increase in legal enforcement measures increases the odds of tax compliance among SMEs by 5.496 times (Odds Ratio = 5.496).

In regard to tax audits, the results showed that it had a positive but not significant influence on tax compliance among SMEs ( $\beta > 0$ ). An increase in tax audits increases the odds of tax compliance among SMEs by 1.444 times (Odds Ratio = 1.444). On the contrary, tax compliance costs had a negative but significant influence on tax compliance among SMEs

( $\beta < 0$ ). An increase in tax compliance costs decreases the odds of tax compliance among SMEs by 0.208 times (Odds Ratio = 0.208).

**Table 4.10 Binomial Logistic Regression Model Coefficients**

|   | <b>B</b> | <b>S.E.</b> | <b>Wald</b> | <b>df</b> | <b>Sig.</b> | <b>Exp(B)</b> |
|---|----------|-------------|-------------|-----------|-------------|---------------|
| Tax Education   | 1.524    | 0.662       | 5.3         | 1         | 0.021       | 4.591         |
| Legal Enforcement Measures  | 1.704    | 0.727       | 5.493       | 1         | 0.019       | 5.496         |
| Tax Audits  | 0.367    | 0.633       | 0.336       | 1         | 0.562       | 1.444         |
| Tax Compliance Costs  | -1.572   | 0.674       | 5.444       | 1         | 0.02        | 0.208         |
| Constant  | -1.111   | 3.212       | 0.12        | 1         | 0.729       | 0.329         |
| Variable(s) entered on step 1: Tax Education, Legal Enforcement Measures, Tax Audits, Tax Compliance Costs. |          |             |             |           |             |               |

## 4.7 Discussion of Research Findings

The study findings demonstrated that an increase in tax education is associated with a significant increase in tax compliance among SMEs. This shows the importance of such practices like tax clinics, seminars, media campaigns and social media campaigns in enhancing tax compliance hence a need for KRA to increase its adoption. These findings are consistent with those of a study by Dibie and Dibie (2020) who investigated the factors that influence tax policy compliance in Nigeria and established that tax education and tax awareness were significant determinants of tax compliance in Nigeria.

The study findings also showed that an increase in legal enforcement measures is associated with a significant increase in tax compliance among SMEs. This shows the importance of such practices departure prohibition orders, agency notices, revocation of licences and prosecutions as well as arrests in increasing tax compliance among SMEs. The findings are consistent with those of King'Oina (2016) who investigated the factors that influence Value Added Tax compliance among construction enterprises and showed that appropriate fines and penalties have a crucial impact in increasing tax compliance among SMEs.

It was also showed that an increase in tax compliance costs is associated with a significant decrease in tax compliance among SMEs. This shows that costs such as internet costs, tax consultant costs and book keeping costs are associated with a significant decrease in tax compliance among SMEs. Such costs, both time and financial, discourage compliance. The findings are consistent with that of a study by Okpeyo, Musah and Gakpeto (2019) which sought to ascertain the critical determining factors for tax compliance among Ghanaian SMEs and established that compliance costs and tax rates all had a substantial impact on tax compliance among Ghana's small and medium taxpayers. Locally, Nduruchi and Namusonge (2017) as well as Zachary, Kariuki, and Mwangi (2017) also demonstrated that costs had a negative impact on tax compliance among SMEs.

In regard to tax audits, it was demonstrated that an increase in tax audits increases tax compliance among SMEs. However, the current KRA tax audits practices, which stands at a low extent, don't significantly influence tax compliance hence a need for improvement. Similarly, a study by Pham, Truong and Tran (2020) which interrogated the determinants influencing tax compliance among Vietnamese SMEs also established that tax compliance is influenced the most by the likelihood of an audit and the severity of consequences. The findings are also consistent with that of a study by Inasius (2019) to establish the factors influencing SME tax compliance in Indonesia which revealed that the likelihood of an audit has a major impact on tax compliance among SMEs.



## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

The chapter gives a summary of the research findings, conclusions as well as the recommendations. The chapter also gives recommendations for future research as well as limitations of the study.

### **5.2 Summary of Findings**

It was established that tax education among Nairobi-based SMEs has been conducted to a small extent. Its influence on tax compliance among SMEs was however positive and significant. It was also demonstrated that legal enforcement measures to ensure tax compliance among SMEs has been implemented by KRA to a low extent. However, it had a positive and significant influence on tax compliance among SMEs.

The study also established that tax auditing of SMEs is conducted by KRA to a low extent hence its influence on tax compliance among the SMEs was established to be insignificant. The study also established that the tax compliance costs were considered to be high to a high extent among the SMEs. This translated to a negative and significant influence on tax compliance of SMEs.

### **5.3 Conclusion**

The study concludes that improving adoption of tax education practices like tax clinics, seminars, media campaigns and social media campaigns can significantly improve tax compliance among SMEs. It can also be concluded that increasing legal enforcement measures such as departure prohibition orders, agency notices, revocation of licences and prosecutions as well as arrests can significantly increase tax compliance among SMEs.

The study also concludes that higher tax compliance costs such as internet costs, tax consultant costs and book keeping leads to low tax compliance among SMEs. Furthermore, an increase in tax audits practices such as examination of tax reports, confirmation of tax returns filed and audit of related transactions can increase tax compliance among SMEs.

## **5.4 Recommendations**

Given its importance on enhancing tax compliance, the study recommends KRA to increase adoption of tax education practices, that is, tax clinics, seminars, media campaigns and social media campaigns. There is also a need to increase legal enforcement measures such as departure prohibition orders, agency notices, revocation of licences and prosecutions as well as arrests so as to increase tax compliance among SMEs.

The study also recommends a need to increase the rate of tax audits practices such as examination of tax reports, confirmation of tax returns filed and audit of related transactions which are currently being conducted to a low extent by KRA. This can lead to a significant impact on tax compliance among SMEs. Given that an increase in tax compliance costs is associated with a significant decrease in tax compliance among SMEs, the study recommends KRA to consider revising the tax filing procedures to be even simpler so as to reduce the costs involved in it.

## **5.5 Limitations of the Study**

The study was conducted in the period when COVID-19 was being experienced. As a result, the data collection process faced challenges especially because most respondents didn't want physical interactions. Given that it was equally hard to use emails to issue the questionnaires to them, the researcher made sure that she observed the COVID-19 protocols such as sanitizing, hand washing, social distancing and wearing masks. Where the respondents were literate, the questionnaires were dropped and then picked up later.

## **5.6 Suggestions for Further Research**

The study adopted quantitative primary data to test its objectives. There is a recommendation to consider using a mixed methodology where secondary data from KRA can also be adopted for comparison purposes. For instance, there is a need to establish how many SMEs have received tax education on a monthly basis, how many times does KRA conduct audits, how many SMEs have faced legal implications and how does it translate to the number of tax returns filed, how much is paid and how often tax is reported. The study also adopted a direct relationship and didn't consider other external factors as moderators of the relationship. Other studies may need to find out whether the external environment, such as COVID-19, affected tax compliance among SMEs given the general theme that it has affected SMEs negatively.

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## Appendix I: Questionnaire

Please give your honest opinion of the following statements. Don't write your name on the questionnaires.

Use a scale of 1 to 5 where:

1 = Very Small Extent

2 = Small Extent

3 = Moderate Extent

4 = High Extent

5 = Very High Extent

### SECTION A: Tax Education

1. To what extent have you participated in the following tax education practices?

| No | Statement                               | 1 | 2 | 3 | 4 | 5 |
|----|---|---|---|---|---|---|
| 1  | Tax Clinics organized by KRA            |   |   |   |   |   |
| 2  | Seminars organized by KRA               |   |   |   |   |   |
| 3  | Social media campaigns organized by KRA |   |   |   |   |   |



| No | Statement              | 1 | 2 | 3 | 4 | 5 |
|----|------------------------|---|---|---|---|---|
| 4  | Media campaigns by KRA |   |   |   |   |   |

2. Explain the extent to which you are aware of the tax compliance requirements at KRA.
- .....

**SECTION B: Legal Enforcement Measures**

3. To what extent have you experienced the following?

| No | Statement   | 1 | 2 | 3 | 4 | 5 |
|----|---|---|---|---|---|---|
| 1  | Departure prohibition orders from KRA                   |   |   |   |   |   |
| 2  | Agency notices to file tax returns                      |   |   |   |   |   |
| 3  | Revocation of licenses as a result of late tax payments |   |   |   |   |   |
| 4  | Prosecutions related to taxes                           |   |   |   |   |   |
| 5  | Arrests as a result of tax crimes                       |   |   |   |   |   |

4. Explain some of the tax legal enforcement measures you are aware of
- .....

**SECTION C: Tax Audits**

5. To what extent have you experienced the following?

| No | Statement                         | 1 | 2 | 3 | 4 | 5 |
|----|-----------------------------------|---|---|---|---|---|
| 1  | Examination of tax reports by KRA |   |   |   |   |   |

| No | Statement  | 1 | 2 | 3 | 4 | 5 |
|----|--|---|---|---|---|---|
| 2  | Confirmation of tax return filed against business accounts books |   |   |   |   |   |
| 3  | Confirmation of unreported income by KRA officials               |   |   |   |   |   |
| 4  | Confirmation of tax avoidance                                    |   |   |   |   |   |
| 5  | Audit of related transactions                                    |   |   |   |   |   |

6. Explain your experience with previous tax audits by KRA

.....

**SECTION D: Tax Compliance Costs**

7. To what extent can you manage the following tax compliance costs?

| No | Statement   | 1 | 2 | 3 | 4 | 5 |
|----|---|---|---|---|---|---|
| 1  | The costs for paying a tax consultant is high         |   |   |   |   |   |
| 2  | The internet charges for tax filing are high          |   |   |   |   |   |
| 3  | The time taken to file tax returns is long and costly |   |   |   |   |   |
| 4  | The book keeping costs are high                       |   |   |   |   |   |

8. How manageable are the costs involved in tax compliance? Explain

.....

**SECTION E: Tax Compliance**

9. Do you have a tax compliance certificate?

- Yes
- No

10. Indicate the frequency of conducting the following tax compliance practices for the last 3 years

| <b>Indicator</b> | <b>2018</b> | <b>2019</b> | <b>2020</b> |
|------------------|-------------|-------------|-------------|
| Tax Payments     |             |             |             |
| Filing returns   |             |             |             |
| Tax Reporting    |             |             |             |

11. What other challenges do you experience in complying with tax requirements?  
Explain

.....

**THE END, THANK YOU**