# PERCEIVED DETERMINANTS OF TAX COMPLIANCE AMONG SMALL AND MEDIUM SCALE ENTERPRISES IN NAIROBI SOUTH TAX REGION, KENYA. THE MODERATING ROLE OF INSTITUTIONAL QUALITY

BY

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# A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS AND ECONOMICS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER IN TAX AND CUSTOMS (TAX ADMINISTRATION OPTION)

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### DECLARATION

### **Declaration by Candidate**

This research project is my original work and has not been presented for the award of a degree in any other University. No part of this project may be reproduced without the prior written permission of the author and/or Moi University.

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#### DEDICATION

I dedicate this research project to the Almighty God, the source of all wisdom and guidance, whose divine grace has illuminated my path throughout this scholarly endeavor. To my father Charles Ongeri Obure and my mother Joyce Kemunto Nyaata, whose unwavering love and encouragement have been my pillars of strength, I express profound gratitude. To my brothers Brian Obure Ongeri, Eugene Asanya Ongeri and sister Helma Moraa Ongeri, your support and understanding have been invaluable on this journey. I extend a heartfelt dedication to my dear friend Peter Mwai, whose steadfast assistance and encouragement have been instrumental in the completion of this work. This achievement is a reflection of the collective love and support I have received from my family and friends, for which I am truly grateful.

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#### ABSTRACT

Despite the importance of tax revenue, poor tax compliance among small and mediumsized businesses remains a persistent issue for countries around the world. Studies have revealed an association between perceived tax determinants and tax compliance behaviours; however, the findings are inconsistent and inconclusive. A strand of literature further argues that institutional quality has an impact on individuals' and corporate entities' tax compliance. Therefore, this study sought to examine whether institutional quality moderates the relationship between perceived tax determinants and tax compliance among small and medium-sized enterprises in Nairobi South. Specifically, the study examined the effect of perceived tax complexity, perceived tax deterrence and sanctions, perceived psychological cost perceived tax law and fairness on tax compliance among small and medium-sized enterprises in Nairobi South. The study further determined whether institutional quality moderated the relationship between perceived tax complexity, perceived tax deterrence and sanctions, perceived psychological cost perceived tax law and fairness and tax compliance among small and medium-sized enterprises in Nairobi South. The study was grounded on the fiscal psychology theory, the theory of planned behaviour and the institutional theory. The study adopted both the cross-sectional and explanatory research design. Data was gathered from 325 SMEs out of a possible 370 using a close ended questionnaires with a 1-5 Likert scale to gauge respondents' agreement with statements related to tax compliance, perceived tax deterrence and sanctions, perceived tax law and fairness, perceived psychological cost, and institutional quality. The study's findings revealed that Perceived tax complexity ( $\beta = 0.137$ ,  $\rho < 0.05$ ), perceived tax deterrence and sanctions ( $\beta$ = 0.161,  $\rho$ <0.05), and perceived psychological cost ( $\beta$ = 0.120,  $\rho$ <0.05), perceived tax law fairness ( $\beta$ = 0.201,  $\rho$ <0.05) had a positive and significant effect on tax compliance among small and medium-sized enterprises in Nairobi South. Further, the findings revealed that institutional quality had an enhancing moderation effect on perceived tax complexity ( $\beta = 0.664$ ,  $\rho < 0.05$ ), perceived tax deterrence ( $\beta = 0.694$ ,  $\rho < 0.05$ ), while perceived psychological cost ( $\beta = -0.796$ ,  $\rho < 0.05$ ) and perceived tax law fairness ( $\beta$ = -0.524,  $\rho$ <0.05) had a buffering moderation effect on tax compliance. These findings highlight the important interconnection between taxpayers' institutional factors in explaining tax compliance behaviours. In light of these findings, the study offered targeted recommendations for policy and practice. Policymakers are urged to emphasize the transparency and fairness of tax systems, develop strategies to reduce psychological costs associated with compliance, and consider comprehensive institutional improvements to bolster compliance. These insights provide a foundation for refining strategies to foster voluntary tax compliance among SMEs, contributing to sustainable revenue generation and economic growth. Similar study could employ longitudinal research designs that would unravel the causal dynamics underlying the relationships identified, offering insights into the evolution of compliance behaviour over time. Future studies could also consider other jurisdictions as well as other potential moderators.

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## ABBREVIATION AND ACRONYMS

ANOVA:	Analysis of Variance
CSR:	Corporate Social Responsibilities
EU:	European Union
GDP:	Gross Domestic Product
GoK:	Government of Kenya
IQ:	Institutional quality
KRA:	Kenya Revenue Authority
MSMEs:	Micro Small and Medium Enterprises
NACOSTI:	National Commission of Science Technology and Innovation
NCC:	Nairobi City Council
OECD:	Organization for Economic Co-operation and Development
PLS:	Partial Least Square
PPC:	Perceived psychological cost
PTC:	Perceived tax complexity
PTDS:	Perceived tax deterrence
PTL:	Perceived tax law
SEM:	Structural Equation Modelling
SMEs:	Small Medium Enterprises
SPSS:	Statistical Package for the Social Sciences
ТРВ:	Theory of Planned Behavior
UNECA:	United Nations Economic Commission for Africa
USD:	United States Dollar
VAT:	Value-Added Tax

#### **OPERATIONAL DEFINITION OF TERMS**

- **Institutional Quality:** This refers to a broad concept that captures law, individual taxpayer's rights and high-quality government regulation and services with regards to tax compliance (Levchenko, 2007).
- Small Medium Enterprises: These are firms that have a labor force of between 50-100 employees in their total operations (Anggadwita & Mustafid, (2014).
- Tax Audits:Processes carried out by tax authorities to assess whether a<br/>taxpayer has paid the accurate sum of taxes. (Advani,<br/>Elming & Shaw, 2018).
- Tax Complexity:Taxpayer's perception on the presence of complexity in the<br/>Kenyan tax system among SMEs or complexity inherent in<br/>the different regulations of the tax code. This will be<br/>measured in terms of tax return, additional taxes and varying<br/>groups of taxpayers (Zwick, 2021).
- **Tax compliance costs:** Encompass all the expenses incurred by businesses and individuals to adhere to tax regulations, excluding the actual tax payments. Meeting tax requirements involves incurring substantive costs, which may include purchasing specialized software for filing tax returns and handling tax administrative expenses (Musimenta, 2020).

- Tax compliance:Pertains to following the administrative guidelines for timely<br/>filing and payment of taxes, which involves meeting<br/>reporting requirements, procedural rules, and regulations.<br/>This includes timely submission of tax returns, accurate<br/>reporting of all income, claiming appropriate deductions,<br/>and ensuring on-time payment of all taxes owed (Gangl &<br/>Torgler, 2020).
- Tax Deterrence Sanctions: This refers to sanction variables namely: audit likelihood, detection likelihood and penalty severity. This will be measured in terms of respondents' perceptions on the chances of their businesses being audited, discrepancies being identified during compulsory tax audit and the severity of penalty (Raskolnikov, 2019).
- Tax evasion:Denotes the unlawful and deliberate actions employed by<br/>individuals to decrease their legally required tax liabilities.<br/>The study employs a similar definition (Kemme, Parikh &<br/>Steigner, 2020).
- **Tax Fines and Penalties:** Pertain to monetary charges imposed, typically by a government authority, as a punitive measure for a crime or violation. The study uses a similar interpretation (Mustapha *et al.*, 2021).
- Tax incentives:Indicate a provision within the tax regulations intended to<br/>stimulate or motivate specific behaviors. The study employs<br/>a matching interpretation (Ghazinoory & Hashemi, 2021).

- Tax Law Fairness:This refers to the perception about corporate tax system in<br/>Kenya and opinions differ from person to person; however,<br/>in just how to reach tax fairness. The solutions are varied,<br/>but most fall under three broad systems of taxation. This will<br/>be measured in terms of perception of business owners'<br/>moral obligations, fairness and amount of taxes paid over the<br/>years (Alshira'h & Abdul-Jabbar, 2019).
- **Tax Psychological Costs:** Pertain to the degree of stress and anxiety induced by the income tax system (Bowles, 2019).
- Tax Rates:Indicate the percentage at which an individual or business is<br/>taxed on their income. Additionally, it pertains to the tax<br/>percentage applied to goods and services (Parchet, 2019).

#### **CHAPTER ONE**

#### INTRODUCTION

#### **1.0 Introduction**

This chapter discusses the background of the study, statement of the problem, objectives of the study, research hypothesis, significance of the study and scope of the study.

#### 1.1 Background to the Study

Tax administrators play a pivotal role in all countries by enhancing tax compliance, which in turn reduces both the tax gap and compliance gap (Mascagni, Mengistu & Woldeyes, 2021). Governments worldwide rely heavily on tax-generated finances to fulfill their financial obligations and cover public expenditures; hence, the issue of tax compliance has existed for as long as taxes themselves (Hassan, Naeem & Gulzar, 2021). Taxes constitute the primary source of public revenue, and as such, they represent mandatory unrequited payments to the government. "Mandatory" implies that taxpayers have an obligation to pay taxes, while "unrequited" signifies that the benefits provided by the government to taxpayers are not directly proportional to the amount of tax paid by them (Onoja, 2021).

Despite the significance of tax revenue, low tax compliance continues to be a persistent concern for economies worldwide, particularly among small and medium enterprises, which play a vital role in economic growth (Alstads, Johannesen & Zucman, 2019). It is essential to recognize that the challenge of tax compliance is a long-standing issue, as paying taxes is generally not a favored activity (Ofori-Abebrese, Baidoo & Olesu, 2021). This study focuses on tax compliance because tax compliance among small businesses in Nairobi is vital due to the significant role these enterprises play in the local economy. As key contributors to employment and GDP, their tax compliance

directly impacts the Kenyan government's revenue generation capabilities. Moreover, these businesses often constitute a major part of the city's informal economy; hence, assessing their tax behavior helps gauge the size and economic impact of the informal sector. Additionally, insights into the hurdles these businesses face in fulfilling their tax obligations can illuminate areas of tax policy and administration that require reform.

According to Jeppesen (2021), tax revenue is the main resource for funding public expenditures in developed, developing, and underdeveloped countries worldwide. However, the actual amount of revenue a government can generate through taxes for its expenditure programs relies on the willingness of taxpayers to comply with the tax laws of the country. In developing countries, several challenges arise, such as ineffective administration, inadequate tax collection, inequitable tax structures lacking horizontal and vertical considerations, and issues related to government and economic stability (Hassan *et al.*, 2021). Decisions about tax evasion are heavily influenced by individual taxpayers' personal judgment, shaped by factors like tax knowledge, personal financial constraints, and awareness of penalties and offenses, which significantly impact taxpayers' compliance attitude (Etim, Umoffong & Bassey, 2020). Various research has demonstrated the role of tax knowledge in influencing compliance behavior.

Considering the significance of tax revenue for a nation, the primary objective of every tax authority in a country is to ensure efficient and professional tax collection to support the government's fiscal policy. The implementation of a tax policy is crucial to its success, and the administrative component plays a pivotal role, just like the tax policy and its design (Etim *et al.*, 2020). The issue of tax non-compliance poses a major challenge for most governments, especially in developing countries like Ghana, which requires attention.

The challenges affecting tax compliance appear to be similar across jurisdictions, as tax authorities constantly face the task of convincing taxpayers to adhere to the country's taxation laws (Adhikara, Maslichah & Basyir, 2022). Research and policymakers generally agree that SMEs often fail to comply with their tax obligations, although it is also true that some do comply with the tax laws (Hollenbach & Moreira, 2022). Among the entities in the informal sector, which constitute part of the SMEs taxpayers who comply with tax laws, their compliance is influenced by various reasons or factors. The key question, therefore, is what factors drive these entities to voluntarily fulfill their tax obligations.

Tax non-compliance encompasses a range of manifestations, including but not limited to instances such as the failure to submit tax returns within prescribed deadlines or the inaccurate declaration of taxes owed (Vincent, 2021). This issue poses a substantial hurdle to effective tax administration and impedes the achievement of optimal tax revenue (KRA, 2020). Tax noncompliance encompasses illicit activities undertaken by taxpayers, whether intentionally or inadvertently, with the aim of evading obligations to tax authorities (Sahu, 2021). Such conduct may also encompass the overstating of expenses to curtail tax liabilities. The consequence of tax noncompliance is a reduction in government revenue (KRA, 2021), as demonstrated in investigated cases implicating multinational corporations for their manipulation of records and understatement of profits. Divergent perspectives argue that compliance can be as intricate as non-compliance itself, with taxpayers facing various choices for both adherence and non-adherence; moreover, it is contended that tax noncompliance does not invariably involve deliberate decision-making (Deloitte, 2020). A multitude of tax transgressions exists, including instances of neglecting tax filing and payment responsibilities,

falsifying tax information, and overt tax evasion. The imposition of tax penalties and interest charges serves as a mechanism to dissuade such intentional defiance.

SMEs play a pivotal role in propelling economic advancement and stand as vital contributors to numerous global economies, particularly in developing and emerging nations (Sekgota & Mamaile, 2021). The establishment, operation, growth, and progress of SMEs are influenced by an array of internal and external factors. Developed countries accord prominence to SMEs within their economic strategies, implementing tailored macroeconomic policies like targeted fiscal incentives, tax exemptions, and specialized taxation structures. These measures directly impact cost efficiency, liquidity enhancement, and the bolstering of SME competitiveness (Salehi *et al.*, 2019). Within Kenya, SMEs play a pivotal role in generating employment opportunities for local communities (Kenya National Bureau of Statistics, 2019), and the government has identified the advancement of SMEs as a strategic imperative (GoK, 2020). Despite the pivotal role that these enterprises assume within their nations and regions, they grapple with a multitude of challenges, one of the most significant and resource-intensive being the fulfillment of tax obligations (KRA, 2020).

There are numerous factors that affect tax compliance, which can be broadly grouped as perceived factors, institutional factors and economic factors. According to Abd *et al.*, (2019), perceived elements play a pivotal role in shaping tax compliance behavior, with significant aspects encompassing the perception of governmental accountability, which falls under categories like social norms, public expenditure, perceived equity of the tax system, and ethical considerations. Furthermore, within the realm of psychological influences, taxpayers' disposition emerges as a pivotal factor that significantly shapes their tax compliance conduct. Numerous economic investigations and analyses have underscored that the adherence to tax obligations is contingent upon individual choices encompassing both tax payment and evasion decisions (Salehi *et al.*, 2019; Abd *et al.*, 2019).

Institutional factors encompass the established traditional principles set by the government and its tax agencies to enhance the tax administration system within a nation. These factors hold substantial influence over taxpayers' decisions regarding tax payment compliance (Alabede, 2014). Augustine (2020) contends that certain developing countries struggle to generate the necessary tax revenue due to a range of institutional challenges rooted in corruption and political instability. Lien (2015) as well as Syadullah and Wibowo (2015) further assert that many developing nations experience revenue losses in taxes due to bribery and corruption. This revenue deficit is sustained through taxpayers engaging in dishonest or unethical behavior that contradicts the universally accepted regulations, norms, and standards set by governing authorities.

Institutional quality plays a moderating role by shaping the environment within which SMEs operate (Deng & Zhang, 2018). Effective institutions, characterized by transparent and consistent enforcement of tax regulations, can enhance the perceived legitimacy of the tax system (Alm & Martinez-Vazquez, 2003). A robust governance framework reduces corruption and ensures that tax revenues are utilized for public goods, fostering trust in the system. In an environment where institutional quality is high, SMEs may view tax compliance positively due to the assurance of fair treatment and the perceived effectiveness of regulatory bodies. Clear and consistent enforcement, coupled with accessible information on tax regulations, can alleviate the complexity challenge. Furthermore, a favorable institutional environment can mitigate the impact of high tax rates by ensuring that the tax revenue is utilized efficiently for public service. Despite the potential positive influence of institutional quality, challenges may persist,

such as bureaucratic inefficiencies or inconsistencies in enforcement (Martinangeli *et al.*, 2023). SMEs might still perceive barriers to compliance, even in the presence of a strong institutional framework. Identifying and addressing these challenges becomes crucial for optimizing the positive moderating effects of institutional qualities (Sidek & Abdulraqeeb, 2022).

Numerous research endeavors have delved into the examination of tax compliance behavior, revealing that perceived elements hold the utmost significance in influencing this behavior (Jayawardane, 2015; Bani-Khalid *et al.*, 2022; Bergquist *et al.*, 2022). The assessment of governmental accountability can be classified into components such as adherence to social norms, allocation of public funds, perceived equity within the tax system, and ethical considerations. Broadly speaking, individuals' tax attitudes are shaped by their perceptions of the utilization of collected funds, and correspondingly, their awareness (Kirchler *et al.*, 2018). Furthermore, moral, personal, social, and national norms, coupled with attitudes, constitute pivotal factors that impact compliance.

Additional dimensions of perceived factors influencing the extent of tax compliance encompass the perception of tax complexity, which emerges from the growing intricacy of tax regulations. Tax complexity manifests in various manners, encompassing computational intricacies, the intricacies of forms (American Institute of Certified Public Accountants, 2019), compliance intricacies, rule intricacies (Carnes & Cuccia, 2001), procedural intricacies (Cox & Eger, 2006), and a deficiency in readability (Saw & Sawyer, 2020). The intricacy of the tax landscape compels taxpayers to engage the services of tax professionals to navigate their tax-related matters. The persistence of avoidance and evasion hampers the government's endeavors to collect essential tax revenues (Purnamasari & Sudaryo, 2018). Such practices thwart the government's efforts to amass much-needed tax revenues. Oftentimes, taxpayers obscure aggressive deductions, credits, and losses by mingling them with legitimate deductions of the same nature. To address this, tax authorities may institute new penalties equivalent to a fraction of the legitimate deduction reported on the same line of a tax return that contains the illegitimate one; this is referred to as tax deterrence sanctions (Purnamasari & Sudaryo, 2018).

Furthermore, the implementation of a tax system or a specific tax entails a wide range of costs, including efficiency, administrative, and compliance costs. Taxpayers also bear psychological costs, which encompass mental and emotional tolls such as anxiety and stress that arise when dealing with tax-related matters (Lopes & Martins, 2013). While these costs do not manifest as direct monetary expenses, they are challenging to quantify and must still be taken into account. Additionally, the notion of fairness in taxation is perceived as relatively low among entrepreneurs, often associating taxes with bureaucratic processes and constraints on their autonomy (Kirchler *et al*, 2014).

In tandem with perceived factors, the quality of institutions plays a pivotal role in explaining variations in tax compliance among different countries. One of the seminal papers exploring institutional effects is that of Alm, *et al.*, (2019), which asserts that institutional uncertainty significantly impacts tax compliance. Experimental evidence from this study suggests that simpler institutional tax procedures lead to greater compliance among individuals. The selection of independent variables for this study was guided by the theory of planned behavior.

On a global scale, researchers have identified six significant factors that impact tax compliance among Vietnamese Micro and Small Enterprises (MSEs). These factors encompass business-related attributes, the nature of accounting practices within the organization, familiarity with tax obligations, tax policies, attitudes towards tax

compliance, and the likelihood of undergoing a tax audit (Nguyen, 2022). Notably, the foremost influential factor has been recognized as the characteristics of accounting practices, followed by tax policy, the likelihood of tax audit impact on taxpayer compliance, awareness of tax obligations, business attributes, and views on tax compliance. In the context of Malaysia, it has been demonstrated that economic factors like the likelihood of audit, government expenditures, penalty rates, and an individual's personal financial situation stand as the primary influential variables that shape the tax compliance behavior of individual taxpayers (Abu Bakar *et al.*, 2021). In Germany, it's mandatory for all potential taxpayers to be registered with the tax administration authorities. Individuals are assigned a nationwide identification number, while companies and other entities are required to inform the relevant tax office and municipalities about any changes in their status as taxpayers within the country (Ermasova, Haumann & Burke, 2021).

Within the regional context, Ghana has implemented the self-assessment policy, enabling taxpayers to independently calculate their own tax obligations and make voluntary payments (Sari, 2021). This governmental approach shifts the responsibility onto individual taxpayers, thereby circumventing the expenses associated with determining the tax liabilities of each taxpayer and collecting them (Sari, 2021). Nonetheless, a drawback of this policy lies in the potential increase of non-voluntary compliance with tax obligations, particularly in cases of low enforcement levels. Additionally, the Ghanaian tax administration has imposed an additional burden on businesses in terms of intricate tax law reporting requirements (Malik *et al.*, 2021). Consequently, this has led to elevated costs for entities and individuals endeavoring to adhere to tax laws, ultimately diminishing the tax compliance rate among Small and Medium Enterprises (SMEs). In Tanzania, there are multiple filing requirements; these requirements contribute greatly to non-compliance (Duve & Schutte, 2021). In the case of employment taxes, an employer is required to file three different employment tax related returns. Chindengwike and Kira (2022) Tanzania losses more than USD 151 million each year due to tax evasion and other irregularities.

In Kenya, adhering to tax regulations presents difficulties for both individuals with limited education and those who are educated (KRA, 2019). Consequently, tax compliance remains notably limited among Small and Medium Enterprises (SMEs) that mainly operate within the informal sector (Mathenge, 2021). Brown (2017) further corroborated that the possibility of uneven tax treatment due to structural factors in the Organization for Economic Co-operation and Development (OECD) tax treaty categorizes Kenya as a low-income nation facing challenges in achieving efficient and effective tax administration with low compliance rates. Tax compliance requirement is one of the essential tools for promoting business formalization that becomes advantageous when scaling up business operations (Muhika *et al.*, 2017).

Small and Medium Enterprises (SMEs) in Kenya encounter significant obstacles when it comes to taxation. The level of tax compliance within the SME sector is inversely linked to inadequate business record maintenance, limited sales turnover, shifts in business ownership structure, business transitions, and inconsistent business operations (Mathenge, 2021). A considerable portion of SME owners lacks familiarity with tax procedures and the calculations associated with transactional activities. It emerged that for SMEs to improve their tax compliance, the stakeholders need the necessary knowledge and skills (Gitaru, 2017). Tax compliance by SMEs in Nairobi is positively influenced by increased sensitization. Among the SMEs in Nakuru Town, online tax services offered convenience and ease in tax compliance (Omondi & Theuri, 2019). However, the study recommended higher computer literacy levels so as to capitalize on the online tax services and to make communication with the tax authorities faster and easier.

Tax Compliance is a theory that taxpayers should choose to pay taxes rather than be forced to do so. Under tax compliance, citizens are expected to pay their taxes accurately and on time (Kira, 2017). Voluntary tax obligation increases the government's income levels since most governments rely on taxation to raise money needed to provide services to the public. Tax compliance is important because it is difficult for governments to monitor and audit the tax returns of every individual (Lederman, 2018). The government then assumes that its citizens will act honorably and voluntarily comply with their tax obligations. This defines the concept of voluntary tax compliance because total enforcement is impossible.

Tax compliance involves a range of taxation measures related to the payment, reporting, and filing of taxes (Stam & Verbeeten, 2017). The topic of tax compliance has garnered diverse responses from various sectors regarding its administration. For instance, over the past 15 years, the European Union has formulated long-term growth strategies designed to enhance tax compliance by promoting sustainable development within a knowledge-based economy (Dima *et al.*, 2018). This strategy aims to bolster lasting economic growth while also concentrating on inclusive growth and addressing income inequality through a strategic taxation approach (Lignier *et al.*, 2014).

As outlined by Slemrod (2014), the United States has taken a prominent role in driving efforts to reduce income tax evasion and combat tax avoidance, striving to rectify imbalances in the tax system through policy formulation and implementation. Undoubtedly, achieving high levels of voluntary tax compliance and maintaining a strong compliance record constitutes a central concern for fiscal policymakers across both developing and developed nations (Abdul *et al.*, 2013). Regardless of the structure

and nature of any nation's economy, the fundamental purpose of taxation remains unchallenged – to generate revenue for financing government initiatives.

Despite being labeled as the growth engine in many developing nations, the small and medium-scale sector remains dynamic due to the absence of a concrete regulatory policy to oversee its operations. This lack of regulatory clarity makes taxing this sector challenging, if not near impossible (Antwi *et al.*, 2015). Small and medium enterprises (SMEs) exhibit lower tax compliance compared to larger businesses, and they are deemed the most difficult group to tax within the informal sector (Akinboade, 2015). Numerous SMEs either deliberately evade tax payments or manage to avoid detection by revenue authorities (Antwi *et al.*, 2015). Moreover, a significant number of SMEs fail to willingly register with tax authorities, while those who do often struggle to maintain accurate records, submit timely tax returns, and fulfill tax obligations punctually (Terkper, 2003). Several factors have been hypothesized to influence SMEs' tax compliance (Faridy *et al.*, 2014; Osebe, 2013; Chebusit *et al.*, 2014; Tusubira & Nkote, 2013). Therefore, this study aims to evaluate the determinants of tax compliance among small and medium enterprises in Nairobi South Tax Region, Kenya.

#### **1.1.1 Small and Medium Enterprises**

World over, Small and Medium Enterprises make up the largest proportion of business establishments in all kinds of economies; this implies that SMEs are significant players in capital accumulation and revenue enhancement in an economy (World Bank, 2019). According to United Nations Economic Commission for Africa (UNECA, 2019), African countries lose more than \$50 billion annually to illegal financial outflows, most especially through tax evasion. In Europe, there are approximately 23 million SMEs in the larger European Union, which account for 99 percent of all enterprises. Oricchio *et al.*, (2017) further assert that SMEs are the backbone of the EU economy representing

60 percent of GDP (total value added) and almost 70 percent of the total workforce. In the global scene, tax compliance among SMEs remains poor (Adeyeye & Otusanya, 2015). A universally agreed-upon definition for Small and Medium Enterprises (SMEs) does not exist. Typically, SMEs are characterized using quantitative criteria, encompassing factors like employee count, annual turnover, and the overall financial outcomes documented in financial statements (Berisha & Pula, 2015). The classification of Micro and Small Enterprises hinges on turnover figures. Specifically, micro enterprises exhibit a turnover of Kshs. 500,000 or less, while small enterprises demonstrate a turnover ranging from approximately Kshs. 500,000 to Kshs. 5,000,000. The number of employees further contributes to the classification, with micro enterprises employing fewer than 10 individuals and small enterprises hiring between 10 and 50 employees. Moreover, the definition may also consider asset levels, a determination made by the Cabinet Secretary (KNBS, 2016).

The comprehension of small and medium enterprises (SMEs) has been approached through various methods. However, this notion differs from one nation to another due to its reliance on distinct indicators (Visser, 1997). One indicator is employee count, typically spanning from 10 to 100. The second criterion that delineates an SME is the extent of legal formality, which differentiates it from the informal sector. The third parameter is rooted in limited capital, skills, and influence.

In Kenya, the definition of SMEs is anchored in both employee numbers and total turnover, as dictated by the governing and formal context (MSME's Act 2012). As per the act, SMEs are enterprises employing between ten and fifty workers, generating an annual turnover between 500,000 and 5 million Kenyan shillings. Generally, this sector encompasses manufacturing and trade activities, exerting an impact on the broader economy. To facilitate voluntary compliance and economic growth, an effective tax

policy is imperative. Tax revenue stands as a primary income source for financing development initiatives and delivering public goods and services. Given that Small and Medium Enterprises form part of the economy, they must fulfill their tax obligations, considering their dynamic nature. This is why numerous SMEs persist in informal economy segments, where formalities are lacking, and compliance costs prove burdensome. Those who do comply often do so due to regulatory pressure.

#### 1.1.2 Tax Compliance among SMEs in Kenya

In recent times, the Kenyan government, under the auspices of the Kenya Revenue Authority (KRA), has made substantial endeavors to enhance the efficiency and efficacy of its tax collection mechanism (Mutinda, 2015). However, akin to other emerging economies, the Kenyan tax revenue framework has not yet attained the anticipated level of productivity. Frequently, revenue growth has struggled to keep pace with the fiscal demands imposed by government expenditures. SMEs have the capacity to generate a lot of taxes for the government, but they do not reach the expected compliance threshold. The tax gap between the amounts of taxes SMEs in Kenya generates and what they should is between 33% and 35% (Gitaru, 2017).

This disparity can be attributed to weak enforcement efforts, high tax compliance costs, and poor motivation to pay taxes by the public and relatively unfavorable tax rates (Obongo, 2020). To bridge this gap, the stakeholders should simplify the existing tax procedures since some SMEs find them too complicated. KRA 2018, resorted to building trust through facilitation so as to foster compliance with tax in order to achieve The objective of achieving revenue goals involves implementing a revitalized enforcement strategy and adopting inventive methods to boost collection within sectors exhibiting low tax compliance. Simultaneously, there's an effort to expand taxation within the SME sector. Additionally, SMEs require appropriate knowledge and

expertise to effectively comprehend and construe the tax laws and regulations that pertain to their operations (Gitaru, 2017).

#### 1.1.3 Nairobi South Tax Region

A report by KRA (2022) revealed that SMEs in Nairobi South Tax Region in 2019/2020 financial year KRA missed its tax target by KSh.1,723,344,111 having projected to collect more than KSh.7 billion shillings from the SMEs that financial year, but only managed to collect Sh. 5,276,655,889 representing 75.4% of the target (KRA, 2022). The report also revealed that in the 2020/2021 financial year KRA managed to collect a total of Sh. 8, 915,687,535 from SMEs in Nairobi South Tax Region against a target of KSh23 billion, implying that the tax collector only managed 38.8% of the target (KRA, 2022).

The report further indicated that in the 2021/2022 financial year KRA collected tax totaling to Sh10, 612,841,000 from SMEs in Nairobi South Tax Region against a target of 29 billion Kenya shillings, representing 36.6% of the target (KRA, 2022). It is thus evident from the above failed targets that KRA target realization in terms of tax collection from SMEs in Nairobi South Tax Region has been declining steadily between the year 2019 and the year 2021. This is despite using various initiatives to increase revenue collection.

#### **1.2 Statement of the Problem**

While small and medium scale enterprises (SMEs) form part of the economic backbone of Kenyan economy, research indicates persistent challenges concerning their tax compliance. It is hypothesized that this is largely influenced by perceived factors, including the complexities of tax laws, the perceived fairness and equity of the tax system, and the effectiveness of tax administration (Muya, 2020). Additionally, the trust in government and the perceived benefit of tax compliance have also been highlighted as critical influencing factors (Wanjohi, 2019). KRA reports consistently reveal that a substantial portion of SMEs in Nairobi City neglect their tax obligations, leading to high instances of tax evasion. Notably, the tax gap stood at approximately 35% in 2017 and 33.1% in 2018 (KRA, 2019). A significant number of SMEs in Kenya exhibit partial compliance with prevailing tax regulations, often refraining from voluntary registration (KRA, 2020). Even among those who choose to register, a common issue lies in maintaining proper records, submitting timely tax returns, and promptly clearing tax liabilities (Gitaru, 2017). The declaration of SME taxes witnessed a decline from 20 billion in 2015 to 15 billion in 2019. This occurs despite the stipulation that SMEs engaging in commercial activities with turnovers surpassing 500,000 Kenyan shillings per annum must register for Value-Added Tax (VAT). Meanwhile, those operating below these thresholds are liable for a sales turnover tax equivalent to 3% of their gross sales (Mwangi, 2014).

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steadily between the year 2019 and the year 2021. This is despite using various initiatives to increase revenue collection.

The effectiveness of rental income tax compliance is intricately tied to the quality of institutions within a given jurisdiction. Poor institutional quality, characterized by weak governance structures, corruption, and a lack of transparency, may hinder the intended impact of the tax structure (Wasao, 2014). This clearly shows the need to examine factors that may influence the relationship between perceived determinants of tax compliance among Small and Medium Scale Enterprises in Nairobi South Tax Region, Kenya.

#### **1.3 Research Objectives**

This study was guided by both general objective and specific objectives.

#### **1.3.1 General Objective**

To investigate the perceived determinants of tax compliance among SMEs in Nairobi South Tax Region: moderating role of institutional quality.

#### **1.3.2 Specific Objectives**

This study was guided by the following specific Objectives:

- To establish the influence of perceived tax complexity on tax compliance among
   SMEs in Nairobi South Tax Region.
- To assess the influence of perceived tax deterrence sanctions on tax compliance among SMEs in Nairobi South Tax Region.
- To determine the influence of perceived level of psychological costs on tax compliance among SMEs in Nairobi South Tax Region.
- To evaluate the influence of perceived tax law fairness on tax compliance among SMEs in Nairobi South Tax Region.

- v. To determine the moderating role of institutional quality on the relationship between.
  - Perceived tax complexity and tax compliance among SMEs in Nairobi South Tax Region.
  - b. Perceived tax deterrence sanctions and tax compliance among SMEs in Nairobi South Tax Region.
  - c. Perceived level of psychological costs and tax compliance among SMEs in Nairobi South Tax Region.
  - d. Perceived tax law fairness and tax compliance among SMEs in Nairobi South Tax Region.

#### **1.4 Research Hypotheses**

- Ho1: Perceived tax complexity has no significant influence on tax compliance amongSMEs in Nairobi South Tax Region.
- **H**<sub>02</sub>: Perceived tax deterrence sanctions have no significant influence on tax compliance among SMEs in Nairobi South Tax Region.
- **H**<sub>03</sub>: Perceived level of psychological costs have no significant influence on tax compliance among SMEs in Nairobi South Tax Region.
- H<sub>04</sub>: Perceived tax law fairness has no significant influence on tax compliance amongSMEs in Nairobi South Tax Region.
- Hos: Institutional quality has no moderating role on the relationship between.
  - Perceived tax complexity and tax compliance among SMEs in Nairobi South Tax Region.
  - b. Perceived tax deterrence sanctions and tax compliance among SMEs in Nairobi South Tax Region.

- c. Perceived level of psychological costs and tax compliance among SMEs in Nairobi South Tax Region.
- d. Perceived tax law fairness and tax compliance among SMEs in Nairobi South Tax Region.

#### **1.5 Significance of the Study**

The findings derived from this research hold significance for Kenyan tax authorities, offering them valuable insights to enhance tax compliance among local SMEs and subsequently augment tax revenue. Tax compliance holds pivotal importance on the national scale in Kenya, as it contributes substantial revenue to government projects, while non-compliance could result in budgetary shortfalls. The study's intention is to contribute to the existing knowledge and literature pertaining to the determinants of tax compliance. If verified, the findings from this study may offer a sustainable remedy for non-compliance behavior in Kenya.

Notably, revenue bodies, including the Kenya Revenue Authority, stand to enhance their comprehension of crucial factors affecting revenue collection, particularly by enacting more effective reforms regarding SMEs to bolster revenue performance. This study also bears relevance for tax practitioners and policymakers. Enterprises and individuals navigating the ever-evolving tax systems and regulations may acquire insights into the interplay of factors, potentially fostering a healthier relationship between the government and SME taxpayers.

Moreover, the study's findings may contribute to the expanding body of literature, potentially serving as a resource for scholars within the field. Studying institutional quality may help understand how the overall governance framework influences taxpayer behavior. Insights into institutional quality provide policymakers with strategies to enhance tax compliance through improving governance mechanisms.

#### **1.6 The Scope of the Study**

The study's focused was directed toward SMEs that operate within this specific region. It's important to note that the scope of this research will be confined to SMEs functioning exclusively within the confines of the Nairobi South Tax Region. The emphasis on SMEs is motivated by the fact that some entities within this sector haven't demonstrated complete adherence to the established tax regulations and legislations. To conduct this study, a positivist perspective was adopted, which is a philosophical framework geared towards scrutinizing the proposed relationships, as outlined by Berkeley *et al.* (2009). The research design employed was explanatory in nature, encompassing an exploration of various phenomena and their interconnections. Data was analyzed through descriptive and inferential statistics. The study's predictor variables are perceived: tax compliance, tax law Fairness, tax deterrence sanctions, psychological costs, and the moderating role of institutional quality. The study was conducted between July and August 2023.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.0 Introduction**

This chapter discusses the research concepts, the theoretical and empirical literature related to the research variables and hypothesized relationships. The chapter begins by giving an overview of the key concepts of the study and the theoretical framework. The chapter further look into the existing empirical literature and a conceptual framework provided at the end of the chapter.

#### 2.1 Concept of Tax Compliance

Tax compliance is the decision by a taxpayer to pay taxes timely and accurately and therefore comply with tax laws and regulations. Tax compliance involves a dilemma between an individual and the benefit to the society as a whole (Van Dijke *et al.*, 2019). Although there are external factors such as income and severity of fines that affect compliance, internal variables are just as important (Hofmann *et al.*, 2008). Some of the other factors that influence tax compliance include tax rates, tax compliance costs, government perception, tax morale among others (Kuug, 2016).

Tax Compliance is a theory that taxpayers should choose to pay taxes rather than be forced to do so. Under tax compliance, citizens are expected to pay their taxes accurately and on time (Kira, 2017). Voluntary tax obligation increases the government's income levels since most governments rely on taxation to raise money needed to provide services to the public. Tax compliance is important because it is difficult for governments to monitor and audit the tax returns of every individual (Lederman, 2018). The government then assumes that its citizens will act honorably and voluntarily comply with their tax obligations. This defines the concept of voluntary tax compliance because total enforcement is impossible. To achieve the desired tax compliance levels, a number of strategic efforts can be made to motivate the taxpayers. These efforts include but are not limited to reducing tax compliance costs, increasing tax morale among taxpayers, improving the government reputation with regards to expenditure of public finances and tax justice where all citizens would be required to contribute their fair share based on income levels (Kira, 2017). Governments can also improve compliance by making it easier and more convenient for citizens to fulfill their obligations. It is important to have a framework that takes into account both the power of the taxing authorities to enforce compliance and the trust that the taxpayers have in such authorities to make good use of the taxes they receive (Assfaw & Sebhat, 2019). The framework should contain a dynamic combination of both the tax authority's power and the trust that people have in them so as to allow a responsive approach to increase tax compliance (Batrancea *et al.*, 2019).

Although small and medium enterprises (SMEs) are often hailed as the driving force behind growth in numerous developing nations, the SME sector remains dynamic due to the absence of a robust regulatory policy to oversee its operations. This fluidity poses a challenge when it comes to taxation, rendering the process either complex or challenging (Antwi *et al.*, 2015). SMEs exhibit lower tax compliance rates compared to larger enterprises, presenting them as a particularly difficult group to tax within the informal sector (Akinboade, 2015). Many SMEs intentionally evade tax payments or manage to avoid detection by revenue authorities (Antwi *et al.*, 2015). Furthermore, a significant proportion of SMEs choose not to voluntarily engage with tax authorities, while those who do often struggle to maintain accurate records, meet tax filing deadlines, and fulfill tax obligations promptly (Terkper, 2003). Numerous factors have been postulated to impact tax compliance within SMEs (Faridy *et al.*, 2014; Osebe, 2013; Chebusit *et al.*, 2014; Tusubira & Nkote, 2013). Thus, the primary objective of this study is to evaluate the determinants of tax compliance within small and medium enterprises situated in the Nairobi South Tax Region of Kenya.

### 2.2 Concept of Perceived factors of Tax Compliance

### 2.2.1 Perceived Tax Complexity

The increasing complexity of business operations and the expansion of global markets have given rise to intricate and sophisticated methods of tax evasion (Owusu *et al.*, 2021). In response, tax authorities have introduced more intricate anti-abuse regulations. Paradoxically, the very tax complexity intended to thwart tax fraud, evasion, and tactics for evading tax obligations can often serve as a catalyst for facilitating these same forms of tax noncompliance. This occurs by exploiting the ambiguities and gaps that tax complexity introduces. According to Nandal *et al.* (2021), a cyclic relationship has emerged between tax complexity and tax noncompliance, where each phenomenon frequently contributes to the other. Tax professionals primarily attribute tax complexity to the uncertainty and excessive alterations within tax laws, alongside the substantial burden of compliance (Nandal *et al.*, 2021). Hence, tax complexity can be understood through two dimensions: legislative and compliance aspects.

The perception of tax complexity has been further heightened, particularly due to the implementation of self-assessment systems in many countries (Faizal *et al.*, 2021). These systems shift the responsibility of tax compliance from tax administrations to individual taxpayers. Often, this transition occurs without providing taxpayers with adequate preparation, leading to a heightened sense of tax complexity and its associated challenges in terms of compliance (Evans & Tran-Nam, 2020; McKerchar *et al.*, 2018). Consequently, this shift has altered the dynamics between tax administrations and taxpayers, introducing a new factor into the equation: tax professionals (Erard, 2013).

These professionals encompass tax preparers, practitioners, agents, accountants, consultants, advisors, intermediaries, and certified accountants that taxpayers engage with to meet their tax obligations.

### 2.2.2 Perceived Tax Deterrence Sanctions

The government's efforts to collect essential tax revenues are persistently hindered by avoidance and evasion (Vincent, 2021). From an economic perspective, deterrence analysis suggests that rational taxpayers opt for strategies of avoidance and evasion based on anticipated outcomes rather than nominal penalties. Given the significant variability in the likelihood of detection across different components of a tax return, while nominal penalties disregard the detection probability, the expected penalties for inconspicuous noncompliance are notably low (Sudarno *et al.*, 2021). Merely adjusting existing penalties won't address the issue, as determining what constitutes inconspicuous noncompliance depends on specific returns, making it resistant to the generalization on which current penalties are based.

Furthermore, taxpayers often obscure aggressive deductions, credits, and losses by mingling them with legitimate subtractions of the same category. In response, tax authorities sometimes establish new penalties that correspond to a fraction of the lawful subtraction reported on the same line of a tax return that involves the unauthorized one (Garner, Maxwell, & Lee, 2021). With this penalty mechanism in place, the more difficult it becomes for the government to identify an aggressive transaction, the higher the statutory sanction if the transaction is detected. Consequently, the inefficient incentives for concealing noncompliance are reduced, and the effectiveness of deterrence is enhanced. Tax authorities can discourage evasion by augmenting the frequency of audits or the severity of fines and penalties. Drawing from the conventional economic assessment of punishment, the deterrence model suggests that

tax penalties must be sufficiently stringent for taxpayers to anticipate that the expenses associated with noncompliance surpass the costs linked with compliance (Abuamria, 2019).

### 2.2.3 Perceived Psychological Costs of Tax Compliance

Implementing a tax system or a specific tax incurs a diverse and expansive range of costs, encompassing efficiency, administrative, and compliance costs (Inasius, 2019). As Tan and Braithwaite (2018) have noted, taxpayers bear psychological costs, comprising mental and emotional tolls, anxiety, and stress arising when dealing with tax-related matters. These costs lack a direct monetary representation, rendering them challenging to quantify, yet they warrant consideration (Alm *et al.*, 2020). Individual taxpayers' time costs encompass the hours spent on filling tax returns and gathering and preparing necessary tax data. Assessing time spent on tax-related questions and concerns is particularly intricate. This complexity intensifies when tax assistance, including tax law interpretation, comes from sources other than professionals, like family and friends. Monetary expenses extend to payments made to tax advisors or professionals (Inasius, 2019).

Monetary costs, as outlined by Cain and Montaño (2021), encompass additional general outlays such as telephone expenses, books, equipment, computers, and software. Meanwhile, psychological costs encompass feelings of anxiety, stress, and emotional distress experienced by taxpayers or advisors dealing with tax matters. Sanford (2020) characterized psychological costs as encompassing the anxiety, stress, and frustration brought about by navigating complex legislations. Multiple approaches exist to defining stress (Woellner *et al.*, 2019), one of which examines individual responses or the "strain" experienced. Selye (2016) conceptualized stress as involving three stages: alarm, resistance, and exhaustion.

The stress and anxiety that taxpayers encounter in managing tax affairs can have various triggers (Woellner *et al.*, 2017). First, it might stem from the intricacies of completing tax returns, which escalate as the number of earned income categories/schedules increases, inevitably complicating the tax compliance process. Second, all taxpayers, even those with the highest integrity, face pressure due to the possibility of a tax audit. Third, there could be psychological costs felt by staff within the Inland Revenue Services, influenced by considering their roles as highly intricate and challenging, which they may project onto taxpayers during audit processes (Salé *et al.*, 2021).

#### 2.2.4 Perceived Tax Law Fairness

Numerous studies have examined tax compliance behavior, exposing perceived factors as pivotal determinants. Perceived government accountability can be segmented into social norms, public spending, fairness perception in tax systems, and moral considerations. Taxpayer attitudes are closely linked to their perceived utilization of collected funds, encompassing awareness, moral, personal, social, and national norms (Jayawardane, 2015). Behavioral intentions are also shaped by subjective norms (Johnson, 2017). ). Norms function as behavioral standards across individual, social, and national levels. For instance, on the individual level, norms establish conduct standards, influencing how issues like tax policy and public goods are approached, thereby molding the perceived determinants of tax compliance behavior.

Oladipupo and Obazee (2016) posit that tax knowledge significantly bolsters tax compliance. Hence, the study underscores that elevated tax knowledge correlates with enhanced compliance. Small and medium business proprietors should prioritize advancing their understanding of tax matters to foster mutually beneficial outcomes for governments and taxpayers. The research underscores that tax knowledge holds greater potential for promoting compliance than tax penalties. Consequently, the government should actively expand public awareness regarding taxation matters, incorporating tax education into educational curricula. SME owners should similarly invest in bolstering their tax knowledge and awareness for the collective advantages of the government and the public.

Lacking tax knowledge can contribute to tax noncompliance, and it is essential to recognize that tax awareness alone is not the sole contributor to such noncompliance (Mckerchar & Hansford, 2015). Tax awareness entails understanding the requisites to meet individual obligations, while education encompasses equipping individuals with practical know-how to yield positive outcomes. Tax awareness encompasses knowledge, acknowledgment, respect, and adherence to pertinent tax laws and regulations (Mulian & Shewan, 2011).

The interplay between tax awareness and education mutually reinforces one another. Through education and facilitation, tax knowledge and awareness are nurtured for the shared benefit of the government and the public. This approach may reshape taxpayers' perspectives on tax laws and their implementation. Do *et al.* (2022) uncovered significant direct impacts of two independent variables—attitude toward an e-tax system and adoption of an e-tax system—on the dependent variable, tax compliance. Furthermore, the adoption of an e-tax system partially mediated the relationship between attitude toward an e-tax system and tax compliance, enhancing the influence of attitude on compliance.

### **2.3 Concept of Institutional Quality**

Ariff and Kamarudin (2019) have highlighted a link between increased tax avoidance and heightened forecast dispersion, along with enhanced forecast accuracy. Notably, discernible evidence suggests that the impact of tax evasion on analyst forecast characteristics weakens for firms situated in nations with robust institutional quality. These findings remain robust even after employing two-stage least square regression to address endogeneity and weighted least square regression to address variations in sample size across countries. This study offers policymakers a deeper comprehension of how institutional quality plays a role in mitigating information asymmetry, particularly in the realms of tax and forecasting activities.

Izadkhasti *et al.* (2022) emphasize that increased government efficiency and accountability foster greater public participation in funding governmental expenditures, concurrently diminishing tax evasion and boosting government tax revenues. Furthermore, heightened trade restrictions amplify the clandestine economy, fortify illicit imports and smuggling, subsequently reducing government tax revenues. Additionally, changes in economic sector composition resulting from structural transformation significantly impact the government's capacity to collect taxes and the range of taxes it can impose on the economy. Moreover, the impact of tax evasion, alongside the multiplier effect of tax evasion and GDP growth rate, on the tax revenue-to-GDP ratio lacks substantial significance. Importantly, institutional quality emerges as a pivotal factor in discerning variations in tax compliance among nations.

In a pivotal exploration of institutional effects, Forteza and Noboa (2019) posit that institutional ambiguity significantly influences tax compliance. The experimental evidence presented in their study showed a direct correlation between the simplicity of institutional tax procedures and higher compliance levels among individuals. In more recent empirical inquiries, data derived from Italian municipalities and presented by Barone and Mocetti (2011) revealed that attitudes towards tax payment improve in conjunction with efficient public spending. Furthermore, the research by Torgler and Schneider (2019) which employed panel dataset analysis, revealed that increased tax morale and superior institutional quality together contribute to reducing the size of the shadow economy, often viewed as an indicator of tax compliance.

### 2.4 Theoretical Literature Review

The theoretical framework serves as the foundation for explaining the underlying reasons for the existence of the research problem at hand (Veil *et al.*, 2008). Alan (2008) asserts that theories are constructed with the purpose of elucidating, predicting, and comprehending phenomena, and often, they challenge and extend established knowledge while adhering to crucial foundational assumptions. The theoretical framework should reveal a grasp of pertinent theories and concepts that pertain to the research topic and connect with broader domains of knowledge within the study's scope. The choice of a theory should be based on its suitability, practical application, and explanatory capacity. This framework bridges the researcher with existing knowledge (Orodho, 2003). This study will be grounded in three distinct theories: the Fiscal Psychology Theory, the Mental Accounting Theory, and the Prospect Theory.

# 2.4.1 Fiscal Psychology Theory

The Fiscal Psychology theory, initially formulated by Schmolders in 1959, delves into how taxpayers perceive matters through the lens of self-interest rather than communal well-being. Schmolders concluded that this perspective is not only influenced by fiscal and psychological factors, but also shaped by cultural beliefs, attitudes, and social norms. In essence, the theory highlights the irrationality of human behavior. Consequently, Schmolders proposed that taxpayers evaluate various aspects differently based on their tax mentality. Strumpel (1966) furthered this notion, suggesting that inflexible assessments from tax authorities might reduce compliance, while Kinsey and Grasmick (1993) argue that a positive willingness to cooperate enhances compliance. The interplay of diverse variables within human behavior, combined with awareness and education, can positively impact compliance levels (Schmölders, 1959).

Ferrari and Randisi (2013) asserted that elements like the return on taxes paid influence tax compliance, often leading taxpayers to assess how their contributions benefit the public or are employed by the government. The Theory of Reasoned Action by Ajzen and Fishbein (2004) contended that taxpayer behavior hinges on their intentions, motives, and perceptions of societal opinions. Psychological theories revolve around the ethical and moral integrity of individuals. Evaluating the extent of tax evasion proves challenging, as it entails identifying undetected incidents (Hasseldine & Bebbington, 1991). Two primary approaches have been employed. The macroeconomic approach gauges evasion through tax audit procedures, albeit with no assurance of detecting all instances of evasion (Faa, 2008). The microeconomic approach involves comparing taxpayer statistics with corresponding National Accounts data, assuming these data originate from sources other than tax statistics (Bayar & Frank, 1987).

The Fiscal Psychology Theory underscores the taxpayer's view of the government as a pivotal factor. It highlights how a lack of perceived benefits from tax payments diminishes taxpayer motivation (Hasseldine & Bebbington, 1991). This theory amalgamates economic and psychological facets, offering an alternative explanation for tax compliance (Hasseldine & Bebbington, 1991). It accentuates the significance of government policies fostering positive cooperation between taxpayers and the government (Lewis, 1982). Lewis (1982) posits that individual taxpayers' perceptions play a crucial role in this cooperative relationship.

The Fiscal Psychology Theory provides a deeper comprehension of taxpayer behavior (Mitu, 2018). As such, a psychological approach should guide tax compliance efforts, considering that tax compliance is influenced by intrinsic factors within the taxpayer.

Moreover, within a democratic context, the taxpayer-tax authority relationship can be seen as a psychological contract (Ahmed, 2020). This contract advocates for a balanced partnership between taxpayers and tax officials, hinging on mutual trust and commitment adherence. The Fiscal Psychology Theory highlights the diminishing motivation among taxpayers to pay taxes due to the lack of perceived advantages (Hasseldine & Bebbington, 1991). It merges economic and psychological dimensions, offering a more effective explanation for tax compliance (Bebbington, 1991). However, the theory doesn't address the taxpayer-tax authority relationship in environments where taxpayers are compelled to pay taxes.

Turner (2015) successfully demonstrated that the level of tax compliance is heavily influenced by taxpayer trust in the government, particularly in the context of the tax system. Moreover, Slippery Slope, as outlined by Kirchler *et al.* (2010), posits that compliance hinges on the taxpayer's perception of the government. In this context, the study investigates how taxpayer perception of the government impacts tax compliance. This theory is pertinent to the study as it informs the perceived factors variable.

Fiscal Psychology Theory provides insights into the intricate factors influencing tax compliance by examining various psychological dimensions (Kirchler, 2007). Tax compliance is shaped by individuals' perceptions of fairness in tax laws, as taxpayers are more likely to comply when they perceive the tax system as just and equitable. The psychological costs associated with tax compliance, such as the cognitive effort required to understand complex tax laws or the emotional stress related to tax payments, also play a significant role in individuals' decisions to comply. Furthermore, the theory emphasizes the deterrence effect of sanctions – the fear of penalties or legal consequences acts as a psychological deterrent, discouraging non-compliance (Schmölders, 959). By recognizing tax compliance as a complex interplay of fairness

perceptions, psychological costs, and deterrence sanctions, Fiscal Psychology Theory provides a comprehensive framework for understanding the multifaceted nature of individuals' behaviors within the realm of taxation.

### 2.4.2 Theory of Planned Behavior

The Theory of Planned Behavior (TPB), developed by Ajzen (1985), builds upon his earlier work in collaboration with Martin Fishbein on the Theory of Reasoned Action during the late 1970s. TPB expanded on this foundation by incorporating the concept of perceived behavioral control, accounting for situations where individuals lack complete control over their actions (Conner & Armitage, 1998). TPB is a widely recognized theoretical framework applicable across diverse domains, such as health, consumer behavior, and organizational behavior, aiming to predict and explain human actions (Ajzen, 1991). Central to TPB is the notion that individual behavior stems from behavioral intentions, which are shaped by attitudes, subjective norms, and perceived behavioral control (Conner, 2020).

The initial component of TPB, attitude, signifies an individual's positive or negative assessment of engaging in a specific behavior (Kan & Fabrigar, 2017). It encompasses the person's beliefs regarding the probable outcomes of the behavior and the value attributed to these outcomes (Ajzen, 1991). For example, if someone perceives that performing a particular action will lead to favorable outcomes, they are more likely to exhibit a positive attitude toward the behavior, subsequently increasing the likelihood of participation. Subjective norms, the second element, encapsulate the perceived societal pressure to engage or abstain from the behavior (Al-Swidi *et al.*, 2014). This includes the influence of peers, family, cultural norms, and societal expectations. When an individual senses that significant others endorse the behavior, their intention to act accordingly is typically strengthened (Ajzen, 2005). However, the impact of subjective

norms can vary based on the individual's motivation to comply with these perceived expectations.

The third component, perceived behavioral control, reflects an individual's perception of their ability to perform the behavior, considering facilitators and obstacles (Ajzen, 1991). This concept parallels Bandura's notion of self-efficacy in the Social Cognitive Theory and directly impacts both intention and actual behavior. Notably, TPB asserts that these three constructs - attitude, subjective norms, and perceived behavioral control - effectively predict an individual's intention to engage in a behavior. Given sufficient actual control, individuals are generally expected to carry out their intentions when the opportunity arises (Ajzen, 1991). In recent times, TPB has been extended to include additional factors like moral norms, self-identity, and past behavior (Conner & Armitage, 1998). However, the foundational constructs of TPB remain influential for comprehending and predicting a wide array of human behaviors.

TPB, an influential model in social psychology, can be applied to predict and elucidate human behavior in specific contexts, including tax compliance. TPB posits that behavioral intentions are driven by attitudes towards the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). When examining tax compliance within SMEs in Nairobi South tax region, TPB can facilitate exploration into how attitudes (e.g., perceived equity of the tax system), subjective norms (e.g., societal anticipations), and perceived behavioral control (e.g., perceived intricacy of tax compliance, perceived risk of detection for non-compliance) collectively shape tax compliance intentions and actions.

### 2.4.3 Institutional theory

Institutional theory, a foundational concept in the social sciences, has been developed and enriched by several prominent scholars. Meyer, (2010) and Meyer & Rowan, (1977), with their work on organizational institutionalism, laid the initial groundwork by highlighting how organizations conform to institutional pressures and norms. DiMaggio & Powell, (1983) expanded on this by introducing the concept of "institutional isomorphism," categorizing pressures as coercive, normative, and mimetic. Meyer (2010) further refined the theory by delineating the three pillars of institutions, emphasizing the roles of regulative, normative, and cultural-cognitive elements in shaping behavior.

At its core, institutional theory posits that organizations and individuals are strongly influenced by the institutional environment in which they operate (Zucker, 1987). In the context of tax compliance, institutions encompass the legal, regulatory, and normative structures that shape SMEs' behaviors and perceptions. Institutional theory emphasizes the importance of regulative institutions in shaping tax compliance. The tax laws, regulations, and enforcement mechanisms prevalent in a Region play a significant role in determining SMEs' tax compliance behavior. The clarity and consistency of these regulations, as well as the effectiveness of enforcement, can influence SMEs' perceptions of the risks and benefits associated with tax compliance. Weak or inconsistent regulation may lead to lower compliance as SMEs might perceive tax evasion as a viable option, whereas well-developed regulatory institutions can encourage compliance.

Normative institutions are crucial for understanding the social and cultural factors that affect SMEs' tax compliance (El Baz, e al., 2016). Social norms and local business practices can either promote or hinder tax compliance. Institutional theory suggests that SMEs' perceptions of what is socially acceptable or expected behavior can impact their willingness to comply with tax obligations. Strong normative institutions can create a social pressure for tax compliance, while a culture of tax evasion can deter SMEs from fulfilling their tax duties.

Furthermore, cognitive institutions, such as the quality of information and knowledge dissemination related to taxation, play a vital role. SMEs' understanding of tax regulations and their perceived ease of compliance can be significantly influenced by the accessibility and quality of information provided by institutional bodies. Clear and accessible information can empower SMEs to make informed decisions and, consequently, comply with tax regulations more willingly. The moderating role of institutional quality is central to this theory. High-quality institutions, marked by transparency, efficiency, and reliability in tax collection and enforcement, can positively influence all these institutional dimensions. They can make regulative institutions more effective and enforceable, foster pro-compliance social norms, and provide SMEs with the necessary cognitive resources to understand and adhere to tax regulations. In contrast, low-quality institutions may lead to skepticism and distrust, which can hinder SMEs' tax compliance.

### **2.5 Empirical Literature Review**

## 2.5.1 Perceived Tax Complexity and Tax Compliance

Güzel *et al.* (2019) conducted an investigation into the impact of perceptions of tax justice and trust in the government on tax compliance. The research involved 392 independent accounting professionals in Turkey as participants, and the relationships between tax compliance, tax justice perception, and trust in government were analyzed through correlation, factor, and regression analyses. The study's findings indicated positive and statistically significant connections between trust in the government, tax compliance, and tax justice perception. Trust in the government was found to positively correlate with tax compliance and tax justice perception.

In a separate study, Taing and Chang (2021) explored the determinants of tax compliance intention with a focus on the theory of planned behavior. The study collected survey data from 402 residents of Phnom Penh. The researchers verified the data's validity and reliability using exploratory factor analysis and the Cronbach's alpha test. The hypotheses were then tested through an ordered logistic regression model. The study established that tax morale, tax fairness, and tax complexity significantly influenced citizens' tax compliance intention, whereas power of authority, trust in government, tax information, and tax awareness did not have a statistically significant impact on compliance intention.

Furthermore, Sifuni (2017) undertook research to evaluate small and medium-sized businesses' perceptions in Tanzania regarding factors affecting tax compliance. The study employed a cross-sectional research design and a sample size of 160 taxpayers. Respondents were selected using purposive non-probability and random probability sampling techniques. Data was collected through a semi-structured questionnaire and analyzed using descriptive statistics, the logit model, and the chi2-test. The results highlighted a connection between taxpayer perceptions of tax rates, fines, government service delivery, penalties for noncompliance, and tax compliance. The logistic regression model revealed a 25.50 percent decrease in tax compliance among SMEs. The study recommended incorporating tax education into the primary school curriculum to enhance tax awareness and eliminate misconceptions.

Mat *et al.* (2021) conducted research to explore the relationship between tax knowledge, tax complexity, tax morale, and tax compliance behavior among salaried Malaysians. The study distributed a structured questionnaire to both private and public sector employees throughout Malaysia. Data analysis from 152 completed responses indicated that tax knowledge, complexity, and morale significantly influenced the tax

compliance behavior of the salaried group. Tax morale was found to be a significant factor in influencing tax compliance behavior. Positive attitudes toward justice and trust in the tax system were associated with increased compliance, while negative perceptions and loss of trust in the tax system impacted taxpayer confidence and compliance. The study concluded that tax morale played a crucial role in intrinsic motivation to pay taxes, suggesting that trust in tax payment is rooted in intrinsic motivation beyond mere regulatory compliance.

Yahya *et al.* (2021) investigated taxpayers' perceptions of their tax knowledge and perceived complexity of the income tax system. The study targeted individuals registered in the salaried group according to their identity records with the tax authority. The sample comprised 384 respondents, selected through non-probability sampling and data collected via a structured questionnaire distributed online. Findings revealed that tax knowledge and tax complexity contributed to noncompliance behavior among sole proprietors. The study's insights could benefit revenue agencies in addressing compliance issues and underscored the importance of collaboration between tax authorities and researchers in understanding taxpayer behavior and ensuring successful revenue processes.

A number of studies have been conducted on perceived factors influencing tax compliance. For instance, in Vietnam Pham, Le, Truong and Tran (2020) while seeking to establish the determinants influencing tax compliance found that voluntary tax compliance of Vietnamese firms was directly affected by three factors namely, audit probability, corporate reputation, and business ownership. Since the study findings were in the context of Vietnam and since perceived factors was just one of the sub variables, both contextual and conceptual gaps are evident. Elsewhere, Jayawardane (2015) in a review paper assessed perceived factors affecting tax compliance and found

that taxpayers' attitude had positive significant influence on tax compliance behavior. Other factors were social norms, equity and fairness, perception of political/ government, and accountability towards tax compliance attitude. Since the study was an explanatory in nature and used different variables compared to those of the current study, both methodological and conceptual gaps are presented.

## 2.5.2 Perceived Tax Deterrence Sanctions and Tax Compliance

Alkhatib *et al.* (2018) investigated the influence of deterrence factors on income tax evasion within Palestinian SMEs. Data was collected from 500 SMEs affiliated with the Federation of Palestinian Chambers of Commerce and Industry. The survey employed a proportionate random sampling technique to distribute questionnaires among SME owners/managers. Over a two-month period, 184 usable responses were gathered, resulting in a 37% response rate. A five-point Likert scale assessed variables, ranging from strongly disagree (1) to strongly agree (5). The 15 items assessing tax evasion were adjusted. Partial least squares (PLS) analysis was performed using Smart PLS 3 software. The study revealed a significant negative correlation between the likelihood of detection and income tax evasion. Respondents seemed to react based on the perception that increased audits in the previous year could lead to greater irregularity detection in the current year audit. Moreover, taxpayers weighed the consequences of being audited and penalized against the benefits of compliance.

Gitonga and Memba (2018) conducted a study to identify determinants of tax compliance among Kenyan public transportation Saccos. Using a descriptive research design, the study focused on 40 public transportation Saccos in Kiambu County. Questionnaires gathered data from Sacco officer managers. Descriptive statistics, including mean and frequencies, summarized the collected data. A Binary logit regression model explored the relationship between tax compliance determinants and tax compliance levels. The study established a statistically significant link between tax deterrence sanctions, tax compliance costs, tax knowledge levels, and tax compliance among Kenyan public transportation Saccos. The tax system, however, did not significantly impact compliance. The findings concluded that tax compliance in these Saccos was influenced by tax deterrence sanctions, compliance costs, and knowledge levels.

Rianti and Hidayat (2021) examined the influence of tax knowledge, tax justice, and tax sanctions on compliance among MSME taxpayers in West Bandung District. Using a quantitative causal explanatory approach, data was gathered through questionnaires. The population included 143 registered MSMEs in the district. The study found direct effects of tax knowledge, tax justice, and tax sanctions on tax compliance. The findings indicated significant impacts of tax knowledge, tax justice, and tax sanctions on SME taxpayer compliance. The study recommended further research on tax compliance and suggested policymakers organize outreach activities related to these factors to enhance compliance.

Dularif *et al.* (2019) investigated the effectiveness of deterrence approaches in combatting tax evasion. Employing the meta-analysis method, the study synthesized empirical results into standardized effect sizes. The research found that only the tax rate significantly impacted tax evasion, while audit and penalty had no effect. Cultural and income influences on taxpayer responses indicated that relying solely on audit and penalty for deterrence might not prevent evasion. Considering culture and income disparities, the study suggested setting low tax rates and considering cultural values when designing audits. Tax policy design should also account for income differences across countries.

Manual and Xin (2016) examined the tax compliance behavior of self-employed taxpayers in West Malaysia, focusing on tax knowledge, tax deterrence, and compliance costs. Using simple random sampling, 150 self-employed taxpayers were surveyed online. Multiple regression and Pearson correlation analysis were employed for hypothesis testing. The study revealed that tax deterrence significantly correlated with self-employed taxpayers' compliance behavior, while tax knowledge and compliance costs had no effect. Deterrent measures influenced compliance decisions in West Malaysia, contrasting with the lack of impact from tax knowledge and compliance costs on compliance behavior.

### 2.5.3 Perceived Psychological Costs on Tax Compliance

Tilahun (2019) conducted a study to determine the tax administration of any country, and in-depth knowledge of taxpayer attitude was found to be very relevant. As a representative sample of the taxpayer population, 320 taxable adults were chosen from four (4) Nigerian states. To test the hypotheses, the Chi-square analysis tool was used. As a result, a significant relationship between religious beliefs and willingness to honor tax obligations was discovered. It was also discovered that family pressure has an effect on taxpayers' attitudes, while compliance was demonstrated between tax assessment and Nigerian tax law. Further, the factors that influence taxpayer attitudes span situational and individual dispositions. The study recommended that the government ensure equitable distribution of the nation's wealth to justify tax revenue and that the government provide meaningful social infrastructure to reflect the money paid; additionally, the government was expected to give adequate attention to financing education, eradicating illiteracy, and creating jobs. Furthermore, an ethical component in tax planning has been proposed for further research to emphasize the impact of tax avoidance and tax evasion. Further, the study recommended that the government ensure equitable distribution of the nation's wealth, employment for all taxable adults, and, if possible, project the importance of the citizen by making agents accountable to people in tax jurisdiction.

Furthermore, Jolodar *et al.* (2019) conducted a study to propose a tax compliance model by considering social-perceived factors. The research focused on a population of 2,900 legal entities under Sari tax administration in Iran subject to Value-Added Tax (VAT), with a random stratified sample of 550 legal entities. The study employed Structural Equation Modeling (SEM) to assess construct validity, performing confirmatory factor analysis through Analysis of Moment Structures. The outcomes indicated significant positive relationships between tax fairness, taxpayer attitudes, trust in authorities, tax morale, and tax compliance. Additionally, the study highlighted that tax compliance is significantly influenced by tax morale. The results further emphasized the importance of tax fairness in fostering positive attitudes among taxpayers, enhancing trust in authorities, and strengthening moral obligation.

Similarly, Jolodar *et al.* (2019) explored the influential internal and perceived factors on tax compliance and developed a tax compliance model. The study encompassed a statistical population of 2,900 legal entities subject to Value-Added Tax (VAT) within Iran's Sari tax administration. Employing stratified random sampling, the study included a sample size of 550 legal entities. The findings revealed significant positive impacts of tax fairness, taxpayer attitudes, trust in authorities, and tax morale on tax compliance. Additionally, the study underscored the significant influence of tax morale on tax compliance. The perception of greater procedural fairness correlated with more positive attitudes toward compliance and increased trust in authorities. Notably, taxpayers' perception of the tax burden's fairness improved tax morale and led to more transparent income declarations. The study concluded that prioritizing tax fairness could enhance positive taxpayer attitudes, trust in authorities, and moral obligation.

Mannan (2020) identified determinants impacting individual income taxpayer compliance in Bangladesh. The study targeted individual income taxpayers across fifteen zones in Dhaka. A sample size of 385 self-assessment assessed income taxpayers and 376 general procedure return submitted income taxpayers was surveyed using questionnaires from December 1, 2019, to February 15, 2020. The ordered logistic regression model findings showed positive significant relationships between fairness, tax penalties, taxpayer perception of government spending, and compliance. Additionally, the study examined the interplay of compliance decisions on other compliance choices. It concluded that higher compliance costs correlate negatively with tax compliance, suggesting that increased compliance costs result in reduced compliance levels. The study recommended maintaining tax fairness, optimal penalty levels, allocating tax revenue to public development projects, keeping tax rates low, and minimizing compliance costs to improve taxpayer compliance.

Khalefah *et al.* (2020) conducted research on the costs of tax compliance and their impact on taxpayer behavior, utilizing 231 articles. The inclusion criteria encompassed English-written articles between 2010 and 2020 focusing on tax compliance behavior and its costs. After removing duplicate articles, the number was reduced to 142, which further decreased to 74 during the second screening. The final screening involved a comprehensive review of articles, resulting in 29 relevant to the study. The findings indicated that most of the reviewed studies investigated tax compliance issues among enterprises like SMEs and large corporations. Additionally, the research revealed two types of compliance costs: internal and external, with external costs being more significant. The majority of previous studies were centered on tax compliance among

SMEs and large enterprises, primarily in developed and emerging economies. The reviewed studies generally exhibited large sample sizes and quantitative approaches. Moreover, the impact of tax compliance costs was more pronounced and negative for SMEs compared to larger enterprises.

# 2.5.4 Perceived Tax Law Fairness and Tax Compliance

In Malaysia, Faizal and Palil (2015) conducted a study on fairness and individual tax compliance. The study's data was gathered through fieldwork using questionnaires with a Likert scale to determine statements in a points Likert scale. Questions were adapted from previous research on three dimensions of fairness: procedural fairness, distributive fairness, and retributive fairness. Questions were edited to be appropriate for Malaysian conditions. 400 questionnaires were distributed to academic respondents, and as of the writing of this article, 82 questionnaires had been returned. According to the study, respondents believe that overall fairness may influence tax compliance rates. When this fairness is divided into three types, distributive, procedural, and retributive, only procedural fairness has the potential to increase tax compliance. Furthermore, the study found that the services provided by tax officers are fair and just. Distributive and retributive fairness are positively related to compliance behavior. Tax compliance may increase if people believe the tax system is fair.

According to Abdul and McFie (2020), tax fairness and complexity play a role in tax compliance decisions among Kenyan large and medium-sized business taxpayers. This study's population consisted of Kenyan large and medium-sized business tax payers. The sample size for the study was 250 businesses. The researcher then sought responses from 115 large and 135 medium-sized businesses. In total, 142 questionnaires were completed and returned. The proposed model was developed using the Partial Least

Squares (PLS) method. PLS can handle more descriptor variables robustly while providing higher predictive accuracy and a much lower risk of chance correlation. The model used four endogenous variables (three dimensions of tax fairness and tax compliance behavior) and four exogenous variables (one dimension of perceived behavioral control and three dimensions of complexity), three of which were formative constructs (with a total of 20 items) and four of which were reflective constructs (with a total of 17 items). The study discovered that there are effects of complexity on perceived fairness, with all three dimensions of complexity indicating that a change in any will result in an inverse change in fairness perception. Perceived behavioral control has a negative impact on tax compliance because the more control a taxpayer perceives to have over a tax situation, the lower the compliance change in the level of control behaviors.

Furthermore, a study by Bin-Nashwan *et al.* (2020) delved into the connection between taxpayers' perceptions of income tax system fairness and their compliance behavior in Yemen. The investigation utilized a survey questionnaire administered to 400 individual taxpayers in Hadhramaut, a thriving business region in Yemen. The study unveiled those perceptions of general system fairness, preferred tax rates, interactions with the government, and the degree of self-interest are all significantly linked to income tax compliance. Conversely, special provisions do not influence compliance decisions. These findings underscore that general system fairness, favored tax rates, interactions with the government, and personal self-interest significantly shape taxpayers' compliance decisions, underscoring the pivotal role of these perceptions in compliance behavior. This insight prompts tax authorities and policymakers to consider non-monetary aspects alongside coercive measures. The establishment of an equitable

tax system is likely to be a potent means of bolstering taxpayer compliance, leading to increased tax revenue and reduced administrative costs for tax authorities.

Another study by Ya'u and Saad (2019) explored the role of trust in elucidating voluntary tax compliance in Nigeria. The research took on a cross-sectional approach, involving the distribution of 450 questionnaires to micro-enterprise owners in Jigawa State, Nigeria, with 249 collected responses. Data analysis employed SPSS and PLS techniques, specifically Partial Least Squares (PLS) path modeling, to probe the connections between fairness perceptions and voluntary tax compliance, trust and voluntary tax compliance, as well as the moderating role of trust in the fairness perception-voluntary tax compliance relationship. The findings established significant and positive relationships between fairness perceptions and voluntary tax compliance, as well as trust in authority and voluntary tax compliance. Furthermore, trust moderated the relationship between perceived fairness and voluntary tax compliance. This study's insights can guide the Nigerian government in enhancing voluntary tax compliance among citizens, contributing to the accounting literature's understanding of taxation in Nigeria and the broader field of accounting research.

Niesiobdzka and Koodziej (2020) undertook an inquiry into the impact of procedural fairness, outcome favorability, and outcome fairness on the acceptance of tax authority decisions. A sample of 198 individuals participated in two-factor experimental studies focusing on procedural fairness (fair vs. unfair) and outcome favorability/outcome fairness. Interestingly, the study did not find a procedural fairness effect, with decision acceptance being contingent solely on outcome favorability. Respondents were more likely to accept decisions that personally favored them, even if the procedures leading to those decisions were unfair. The influence of a fair process was only apparent when linked with outcome fairness, leading to higher acceptance of tax decisions originating

from fair procedures, regardless of their consequences. Moreover, the results indicated that the willingness to accept proposed tax law changes was influenced by both procedural and outcome fairness. As anticipated, respondents displayed greater acceptance of changes introduced through fair processes than unfair ones, even when these changes resulted in higher tax burdens. The study's findings highlighted that the potency of procedural fairness in decision acceptance, often observed in legal, social, political, and organizational contexts, does not necessarily extend to the realm of taxation. The impact of outcome favorability was shown to be more prominent than outcome fairness in influencing decision acceptance, suggesting that taxpayers prioritize the final result over procedural fairness in tax matters.

### **2.5.5 Institutional Quality and Tax Compliance**

Yamen *et al.* (2018) explored the influence of the quality of the institutional environment on tax evasion within the European Union (EU) member countries. The researcher employed the size of the shadow economy as a proxy to gauge tax evasion. Utilizing a linear mixed model, the study performed data analysis and disclosed that newly admitted member states exhibit a higher degree of tax evasion compared to longstanding member states. Moreover, the study's examination indicated that tax evasion is on a declining trajectory within the veteran EU member nations, although this decline occurs at a slower pace in the new EU entrants. Additionally, the findings underscored a nuanced relationship between institutional quality and tax evasion across the old and new member states. Furthermore, the investigation identified that while regulatory quality, voice and accountability, corruption control, political stability, and government effectiveness significantly influence tax evasion levels in the established EU members.

In addition, Ariff and Kamarudin (2019) conducted a study to investigate the joint effect of tax avoidance and institutional quality on analyst forecasting. The study made use of a dataset that included 22,690 firm-year observations from 36 countries between 2007 and 2016. The regression models use two measures of analyst forecasts as dependent variables: forecast dispersion and accuracy. According to the findings, high tax avoidance is associated with high forecast dispersion but more accurate forecast. There is evidence that the effect of tax evasion on analyst forecast properties is weakened for firms in countries with high institutional quality. The results are robust even after using two-stage least square regression to address endogeneity and weighted least square regression to overcome sample size differences between countries. The findings support evidence of tax evasion and analyst forecasting, as well as adding to the international accounting literature. This study offers policymakers insights into the role of institutional quality in reducing information asymmetry, with a focus on tax and forecasting activities.

Izadkhasti *et al.* (2022) conducted a study to show the impact of institutional quality and tax evasion on tax system performance in selected Mena countries. MENA countries were sampled using the panel data method from 2002 to 2007. Theoretical principles are used to specify the econometric model, in which the concurrent effects of government efficiency and accountability, as well as tax evasion, on the performance of the tax system in selected Mena countries during the period are examined (2017-2002). According to the study, increasing government efficiency and accountability allows for greater public participation in financing government expenditures and increases government tax revenues while decreasing tax evasion. Increased trade restrictions also increase the underground economy, increase illegal imports and smuggling, and decrease government tax revenues. Furthermore, structural transformation, as a result of changes in the composition of economic sectors, has an impact on the government's ability to collect taxes, as well as the composition and type of taxes it can levy on the economy. Furthermore, the effect of tax evasion, as well as the multiplier effect of tax evasion and GDP growth rate, on the tax revenue-to-GDP ratio is insignificant.

Torgler (2012) delved into the correlation between tax morale and institutional theory. Through a meticulous exploration of an extensive library catalog encompassing over 400 databases, the study highlighted that institutional theory offers a fitting conceptual groundwork for probing tax morale. Remarkably, all the factors previously pinpointed as influencers of tax morale can be categorized within the purview of formal or informal institutions. Notably, trust emerged as a pivotal factor exhibiting a positive association with tax morale across vertical and horizontal dimensions. The outcomes underscored the necessity for a more nuanced comprehension, encompassing not solely the impact of formal and informal institutions, ultimately shaping tax morale. Moreover, the study advocated for governmental recognition that diminished tax morale arises in cases of discord between formal and informal institutions. Consequently, the study underscored the demand for policy measures intended to bridge this discord, rather than perpetuating deterrent approaches.

Soro (2020) conducted a study in Côte d'Ivoire to examined institutional quality and tax revenue. The study data is annual and spans the years 1984 to 2016. The information is derived from the Central Bank of West African States (CBWAS), World Bank Group (WDI), and Political Risk Service databases (PRS). The variable used in the study was tax revenues, as well as total tax revenues relative to GDP. The autoregressive distributed lag model was chosen by the researcher. According to the study's findings,

low-quality institutions and a high share of the informal economy are among the factors explaining Côte d'Ivoire's low tax revenue mobilization. The findings also showed that GDP per capita, official development assistance, the share of GDP devoted to services, income distribution within the population, and population education level all have a positive impact on tax revenues. Trade openness, on the other hand, has a negative impact on tax revenues. Based on these findings, the paper makes several recommendations to help improve Côte d'Ivoire's tax revenues. The findings support the presence of a long-term relationship between the variables. Further, it demonstrated that tax revenues are positively related to GDP per capita. High tax revenues are associated with high GDP per capita levels.

### **2.5.6 Moderating role of Institutional Quality**

Misganaw, Assefa, and Colovic (2022) conducted research in which they investigated the effects of initial informality years on eventual business performance as well as the moderating effect of institutional quality. The research made use of data from the World Bank Enterprises Survey (WBES), which included 116 developing economies between the years of 2006 and 2018. The study also made use of data from the World Bank's World Development Indicators (WDI) as well as the Economic Freedom Database maintained by the Fraser Institute. According to the findings of the study, businesses that begin operations without first obtaining official registration fare better than those who take this step first. This study, on the other hand, discovered a non-monotonic relationship between the two variables, which took the form of an inverted U, in contrast to other research that demonstrated a linear link between the amount of time spent unregistered and subsequent business performance. The study also demonstrated that institutional quality at the national level mitigated that link, such that businesses operating in nations characterized by poorly performing formal institutions profited from remaining unregistered for a longer period of time than enterprises operating in nations with well-functioning formal institutions.

In their study, Amoh *et al.*,(2023) investigated the nexus between tax efforts, tax evasion, and economic development in Ghana, as well as the effect of institutional quality on moderating the linkage. Specifically, they were interested in how the nexus was affected by the country's institutional quality. In the study, the techniques of maximum likelihood (ML) estimation and structural equation modelling (SEM) were employed to analyze a sample of quarterly data from 1996 to 2020. The time period covered by the study was from 1996 to 2020. The testing of the hypotheses finds that both making an attempt to pay taxes and evading them have a detrimental impact on the economic freedom of the world index (EFWI), but that both have a beneficial impact on urbanization. According to the results of a test of the third hypothesis, the quality of the institutions in Ghana has a moderating effect on tax evasion, which in turn has an effect on economic development. The findings imply that the assumption that tax evasion is harmful for an economy or that tax initiatives drive domestic revenue mobilization is based mostly on prima facie evidence. This is because both of these ideas are founded on the idea that tax evasion drives revenue mobilization domestically. Tax initiatives such as tax amnesty could give law-abiding taxpayers the impression that the government is offering an incentive to tax cheats, which could have a negative impact on the taxpayers' willingness to pay their fair share of taxes. One of the pioneering efforts in this area is the introduction of the tax efforts index measure, which will allow researchers to investigate the econometric influence of taxation on economic growth.

A study done by Bokhari *et al.*, (2023) obtained an institutional approach to corruption. Using self-administered survey data collected from 632 Pakistani firms operating in manufacturing and service sectors, they investigated the impact of CSR, institutional quality and law enforcement (IQLE), and internal compliance and ethical management (ICEM) on firm financial performance. CSR refers to corporate social responsibility, while IQLE and ICEM refer to institutional quality and ethical management. According to the findings of their study, IQLE acted in a way that was counterproductive to the beneficial association between corporate social responsibility and business financial performance. In addition to this, they found that ICEM modulated and reinforced the direct association between CSR and financial performance in a positive way. They demonstrated that increasing compliance and ethics management, as well as corporate social responsibility (CSR), has the potential to improve financial performance.

Moreover, a study by Phuong (2015) on the impact of institutional quality on tax revenue in developing countries revealed a significant positive impact of institutional quality on tax compliance. Other studies have also shown that there exists a relationship between institutional quality and tax compliance (Touchton *et al.*, 2019; Arvin *et al.*, 2021; Sebele-Mpofu, 2021).

#### 2.6 Research Gaps

Tax compliance by SMEs on income tax have become increasingly popular worldwide due to globalization, liberalization, economic innovations and an increasingly competitive market climate. Numerous research endeavors have aimed to uncover the determinants influencing tax compliance. An examination of the existing empirical literature reveals a collection of studies that have produced divergent results regarding the link between different factors and voluntary tax compliance. Some studies have established a positive correlation, whereas others have indicated a negative connection, and a portion has found no discernible association whatsoever. Much as a lot of studies have been conducted in developed economies across the world regarding determinants tax compliance, the literature about the same seems to be scanty in developing economies such Kenya. A study by Jayawardane (2015) which analyzed perceived factors affect tax compliance by examining the influence of perceived factors on tax compliance decisions presents contextual, conceptual and methodological gaps since it was conducted in contexts that are totally different from that of Kenya and the method used was different from that of the current study and found that observed variations in tax compliance rates can be attributed to dissimilarities in the equity of tax administration, perceived fiscal reciprocation, and the general disposition toward respective governments. This present research aims to fill these voids by examining the psychological, institutional, and economic elements that impact tax compliance within the context of small and medium-sized enterprises operating in the Nairobi South Tax Region of Kenya.

In spite of the outcomes derived from the aforementioned empirical inquiries, the majority of studies have exclusively adopted either qualitative or quantitative methodologies. Employing solely a quantitative approach in a study might limit the attainment of a comprehensive comprehension and personal viewpoint regarding the determinants of voluntary tax compliance among SMEs. This limitation extends to the generalizability of findings to diverse contexts. Conversely, studies solely employing a qualitative approach encounter limitations in terms of generalizability, although they excel in obtaining a profound insight into the determinants of voluntary tax compliance among SMEs. The present study endeavors to bridge this methodological void by embracing a mixed methods approach that amalgamates both quantitative and qualitative methodologies. By capitalizing on the respective merits of these approaches and mitigating their individual weaknesses, this study seeks to fill the gap. The

quantitative facet offers the advantage of encompassing a substantial number of study participants, whereas the qualitative aspect facilitates an in-depth comprehension of the phenomenon through the illumination of individual participants' personal experiences and viewpoints.

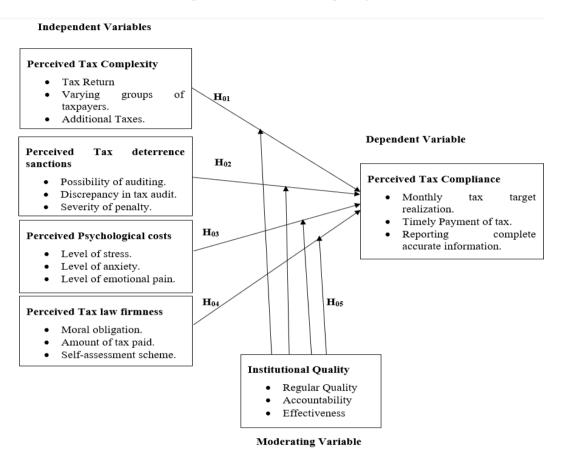
Authors	Торіс	Methodology	Findings	Knowledge Gaps
Güzel et al. (2019)	The effect of the variables of tax justice perception and trust in government on tax compliance: The case of Turkey	The data obtained from this sample were examined using correlation, factor and regression analysis	The study's findings indicated positive and statistically significant connections between trust in the government, tax compliance, and tax justice perception. Trust in the government was found to positively correlate with tax compliance and tax justice perception.	The reviewed study was done in Turkey. However, the current study was done in Kenya in a different period and also employed a different model, that is, hierarchical regression model.
Taing and Chang (2021)	Determinants of tax compliance intention: Focus on the theory of planned behavior.	logistic regression model was conducted to test the hypotheses.	The study established that tax morale, tax fairness, and tax complexity significantly influenced citizens' tax compliance intention, whereas power of authority, trust in government, tax information, and tax awareness did not have a statistically significant impact on compliance intention	The study was among resident in Phnom Penh, Cambodia. The study was done in 2021 and focused on tax compliance intentions. The current study was done in 2023 and investigated perceived determinants of tax compliance among small and medium enterprises.
Mat <i>et al.</i> (2021)	The effects of tax knowledge, tax complexity and tax morale towards tax compliance behavior among salaried group in Malaysia	A structured questionnaire was distributed to the private and government sector employees throughout Malaysia	Tax morale was found to be a significant factor in influencing tax compliance behavior. Positive attitudes toward justice and trust in the tax system were associated with increased compliance, while negative perceptions and loss of trust in the tax system impacted taxpayer confidence and compliance	The study was conducted in Malaysia among private and government sector employees. The study focused on tax complexity knowledge, tax complexity and tax morale. The current study focused on perceived tax compliance among small and medium enterprises.
Yahya <i>et al</i> . (2021)	The Influence of Tax Knowledge and Tax Complexity on Compliance Behavior Among Sole- Proprietors.	The data was collected through Google Form that were distributed to sole proprietors who run the small business activities.	Findings revealed that tax knowledge and tax complexity contributed to noncompliance behavior among sole proprietors. The study's insights could benefit revenue agencies in addressing compliance issues and underscored the importance of collaboration between tax authorities and researchers in understanding taxpayer behavior and ensuring successful revenue processes.	The reviewed study was done among sole proprietors. Analysis was done through the use of google forms in the year 2021. However, the current study was done in Kenya in a different period and also employed a different model, that is, hierarchical regression model.
Gitonga and Memba (2018)	Determinants of tax compliance by public transport savings and credit cooperative societies in Kenya: a case study of Kiambu County	A Binary logit regression model explored the relationship between tax compliance determinants and tax compliance levels	The study established a statistically significant link between tax deterrence sanctions, tax compliance costs, tax knowledge levels, and tax compliance among Kenyan public transportation Saccos. The tax system, however, did not significantly impact	The study was done in Kiambu county and focused on the public transport savings and credit cooperatives. The study used binary logit model. The current study was done in Nairobi South Region in 2018 and employed hierarchical regression model.

Misganaw, Assefa, and Colovic (2022)	Is starting and staying unregistered longer beneficial for firms? The moderating role of institutional quality.	data from the World Bank Enterprises Survey (WBES), which included 116 developing economies between the years of 2006 and 2018.	compliance. The findings concluded that tax compliance in these Saccos was influenced by tax deterrence sanctions, compliance costs, and knowledge levels. According to the findings of the study, businesses that begin operations without first obtaining official registration fare better than those who take this step first. This study, on the other hand, discovered a non-monotonic relationship between the two variables, which took the form of an inverted U, in contrast to other research that demonstrated a linear link between the amount of time spent unregistered and subsequent business performance.	The study was conducted by applying institutional quality as the moderator. The current study however employed different independent variables and a different dependent variable despite using institutional quality as the moderator.
Soro (2020)	Institutional Quality and Tax Revenue in Côte d'Ivoire: Evidence from ARDL Approach	The autoregressive distributed lag model was chosen by the researcher	According to the study's findings, low-quality institutions and a high share of the informal economy are among the factors explaining Côte d'Ivoire's low tax revenue mobilization. The findings also showed that GDP per capita, official development assistance, the share of GDP devoted to services, income distribution within the population, and population education level all have a positive impact on tax revenues	The study was done in Cote dvoire and employed an ARDL model in the year 2020. Data employed was secondary in nature. The current study was done in Kenya and employed primary data and also employed hierarchical regression model.

Source. Researcher (2023)

# **2.7 Conceptual Framework**

The conceptual framework in Figure 2.1 shows the relationship between the perceived determinants of tax compliance and the dependent variable tax compliance. The study also determined the moderating role of institutional quality.



**Figure 2.1: Conceptual framework** 

### **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

### **3.0 Introduction**

The chapter outlined the methodology adopted for achieving the study's objectives. This provided a brief description of the research design, population, sampling methods, techniques of collecting data, test reliability and validity, and the analytical procedures to be used. In particular the section discussed the research design, sample size, data collection, data analysis, data presentation and ethical consideration.

## 3.1 Research Design

The research design serves as a framework that facilitates problem-solving for researchers and provides guidance throughout the process of data collection, analysis, and interpretation of observations (Bell & Waters, 2018). This study employed a cross-sectional approach using a explanatory research design to allow the researcher to gather information, summaries, present, and interpret for clarification (Polkinghorne, 2005). In a cross-sectional study, researcher collected data on multiple variables at once, allowing them to compare different population groups at a single point in time and they can examine relationships. The design covers a large field extensively because it involves a question thrown to many people, therefore providing compressive analytical evidence to inform.

# **3.2 Target Population**

As stated by Kombo and Tromp (2006), a population refers to a clearly defined group of individuals, services, components, events, or households that are being studied to derive generalizable conclusions. Cooper and Schindler (2006) note that a population encompasses the complete set of elements for which one intends to draw inferences. Kothari (2004) shares a similar perspective.

#### **3.3 Sample Selection**

Kombo and Tromp (2006) offer a definition of a sample as a finite portion of a statistical population that is studied to gain insights into the entire universe. The study drew conclusions applicable to the larger population by analyzing this sample (Mugenda & Mugenda, 2003; Kothari 2004). The core concept of sampling revolves around the notion that by selecting certain elements from a population, we can make inferences about the complete population. An effective sample should be truly representative of the population, lead to minimal sampling errors, be feasible and cost-effective, and be systematically chosen to ensure results can be applied with reasonable confidence to the universe (Kothari, 2004). In line with (Mugenda & Mugenda, 2003), a sample size signifies an individual within the target population designated to provide data for the research. It refers to the specific number of respondents intended to furnish data for the study. To determine the sample size, this research utilized a simple random sampling technique, employing Taro Yamane's (1967:886) simplified formula.

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

Where:

*n* = sample size,

N = population size.

e = margin error or the level of precision

1 = Constant

Utilizing the given formula, it is presumed that the variability (proportion) stands at 0.5, with a precision level of 5% and a confidence level of 95%. Applying this formula to the total target population of 5,013, the resultant sample size for the study was computed as follows:

$$n = 5013 / \{1 + 5,013 \ (0.05)^2\}$$

$$n = 370$$

Consequently, the study's sample size would consist of 370 Small and Medium Enterprises (SMEs). One proprietor or manager was selected from each SME, resulting in a total of 370 respondents.

# **3.4 Research Instruments**

The research employed questionnaires as the primary data collection method. The choice of using questionnaires was based on their effectiveness in extracting information from respondents and providing a deeper comprehension and analysis of the study's outcomes (Creswell, 2003). Questionnaires were particularly favored due to their capacity to obtain current information and to unveil insights not attainable through alternative data collection techniques (Marshall & Rossman, 2005). This study incorporated a questionnaire comprising both open-ended and closed-ended queries, enabling a comprehensive gathering of insights from participants. The closed-ended questions utilized a 5-point Likert scale, a widely recognized method for scaling responses in survey research (Borg & Gall, 1989).

# 3.5 Pilot Test

To ensure that the collected data adequately addressed the research inquiries, pilot testing was conducted (Saunders *et al.*, 2012). A pilot study was deemed essential for this research endeavor as it played a pivotal role in ensuring the validity and reliability of the research tools and instruments (Reaven *et al.*, 2009). The significance of pilot testing, as highlighted by Newing (2011), cannot be overstated, considering that some questions might be prone to various interpretations, respondents might encounter confusion about the sequence of questions, and certain questions could prove

unproductive in soliciting meaningful information. Cooper and Schindler (2006) concurred, asserting that pilot testing serves the purpose of identifying design and implementation weaknesses and functioning as a proxy for data collection from a probability sample.

Schindler and Cooper (2006) noted that respondents in a pilot test need not be statistically chosen when evaluating the instruments' validity and reliability. In this study, a data collection tool was tested on 10% of the designated sample size to ascertain its relevance and effectiveness. Consequently, a set of thirty-seven questionnaires was employed for pilot testing. The piloting took place at Kamukunji market, where the questionnaire was administered to randomly selected respondents. Notably, the responses collected during the pilot testing were excluded from the final study sample to mitigate response bias.

# **3.5.1 Validity of Instruments**

Validity refers to the accuracy and significance of conclusions drawn from research findings (Golafsheni, 2005). To ensure the accuracy and reliability of the collected field data, it was essential for the researcher to establish the content validity of the research instruments. This study embraced content validity, a descriptive form of evaluation involving discussions with experts such as supervisors and peers to determine if the construct accurately represented the domain (Creswell & Creswell, 2017). Creswell & Creswell (2017) elucidated validity as the extent to which outcomes obtained from testing an instrument truly reflect the reality being studied.

Furthermore, validity pertained to the degree to which a tool accurately measured what it purported to measure (Creswell & Creswell, 2017). It was therefore concerned with the meaningfulness of research elements. Construct validity specifically referred to how

well a concept, idea, or behavior (a construct) was translated or transformed into a functional and operational reality, also known as operationalization. Creswell & Creswell (2017) suggested two approaches for assessing content validity: posing a variety of questions about the tool or assessment, and seeking expert opinions from professionals in the field, particularly supervisors and peers. This study employed Exploratory Factor Analysis (EFA) to assess construct validity, which involved evaluating Bartlett's Sphericity and Kaiser-Meyer-Olkin (KMO) values. The decision criterion included a KMO value exceeding 0.5 and statistical significance of Bartlett's test (p-value less than 0.05) to establish construct adequacy (Williams, Osman & Brown, 2010).

#### 3.5.2 Reliability of Instruments

Reliability, as defined by Mugenda and Mugenda (2003), signifies the extent to which a research instrument consistently produces the same results or data across repeated trials. The pilot study facilitated an assessment of the clarity of questionnaire items, allowing for necessary modifications to be made to improve the quality of the research instrument and enhance its reliability. In evaluating the reliability of questionnaire items, this study employed Cronbach's alpha as a testing tool. As described by Creswell & Creswell (2017), reliability refers to a scenario where administering a questionnaire to a respondent twice would yield comparable results on the second occasion, akin to the outcomes of the initial interview. This served to determine whether the constructs were unambiguous and if various respondents could interpret the questions uniformly.

To achieve this consistency in the test data, the study adhered to a decision criterion, requiring a Cronbach alpha coefficient of 0.7 or higher. Kothari & Gaurav (2014) emphasized that a Cronbach alpha ( $\alpha$ ) value of 0.7 and above indicated the

questionnaire items' reliability, demonstrating that their internal consistency was relatively robust.

The results of the pilot test undertaken by the study is as indicated in Table 3.1.

# Table 3. 1: Reliability Statistics

	Reliability	Statistics
Variable	Cronbach's Alpha	N of Items
Perceived Tax Complexity (PTC)	0.783	5
Perceived Tax Deterrence Sanctions (PTDS)	0.674	5
Perceived Tax Law Fairness (PTLF)	0.708	5
Perceived Psychological Cost (PPC)	0.783	5
Institutional Quality (IQ)	0.627	5
Tax Compliance (TC)	0.785	5

Source: Field data, (2023)

Table 3.1 indicates that only Perceived Tax Deterrence Sanctions (PTDS) and Institutional Quality (IQ) did not have a Cronbach Alpha of more than 0.7. Further analysis indicated that two statements under PTDS – PTDS1 and PTDS5 as well as one statement under IQ – IQ1 did not have internal consistency. PPC 1 did not have internal consistency and therefore both IQ1 and PPC1 were deleted to enhance internal consistency in the research instrument. These statements were amended in the questionnaire, to ensure that they were elaborately and well understood by the respondents.

# **3.6 Data Collection Procedure**

Data collection, as articulated by Leavy (2015), encompasses the methodical and meticulous accumulation of information pertinent to specific research sub-issues. In accordance with the research protocol, the study secured authorization from the university to initiate the research endeavor. Additionally, necessary permissions were

acquired from the National Commission of Science, Technology, and Innovation (NACOSTI). The collection of primary data for this study involved the administration of a questionnaire to the respondents by the researcher.

# **3.7 Variable Measurement**

Table 3. 2: Operationalization Table	Table 3.2	: Opera	tionaliza	tion Table
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			Abbreviations	Studies that have
Variable	Туре	Measurement		used the variable
			PTC	Nandal, Diksha
Perceived		-Tax return		and Jaggarwal
Tax		-Varying groups		(2021);
Complexity	Independent	of taxpayers		Jayawardane
	Variable	-Additional taxes		(2015).
		-Possibility of	PTD	Vincent, O.
		auditing		(2021);
Perceived		-Discrepancy in		Abdolrahimi and
Tax		tax audit		Ahmadi Mousavi
Deterrence	Independent	-Severity of		(2022); Vincent
	Variable	Penalty		(2021).
			PPC	Sudarno, Suyono,
				Yusrizal and
				Regita, (2021);
				Tan &
Perceived		-Level of stress		Braithwaite
Psychological		-Level of anxiety		(2018, June); Cain
Costs	Independent	-Level of		and Montaño
	Variable	emotional pain		(2021),
			PTL	Mas' ud, Abd
				Manaf & Saad,
		-Moral obligation		2019; Oladipupo
		-Amount of tax		and Obazee
Perceived		paid		(2016);
Tax Law	Independent	-Self-assessment		Mckerchar &
	Variable	scheme		Hansford, 2015
		-Timely filing of	PTC	Vincent, O.
		tax returns		(2021);
Perceived		-Timely payment		Abdolrahimi and
Tax		of tax		Ahmadi Mousavi
Compliance	Dependent	-Filing accurate		(2022); Vincent
	Variable	annual Return		(2021).

Source: Source, Researcher (2022)

# **3.8 Data Processing and Presentation**

As delineated by Chatterjee and Hadi (2015), data processing constitutes the translation of responses from an interview guide into a format amenable to manipulation for

statistical purposes. Once the questionnaires yielded the requisite data, a sequence of procedures, including cleansing, sorting, coding, and editing, was undertaken to ensure data integrity, consistency, and readiness for analysis. Statistical Package for Social Sciences software (SPSS version 26.0) facilitated the subsequent analysis, which encompassed both descriptive and inferential techniques. Descriptive analysis delivered succinct overviews of sample data, incorporating measures such as mean, standard deviation, frequencies, and percentages. To investigate the relationship between dependent and independent variables, a multiple linear regression analysis was executed. Additionally, Analysis of Variance (ANOVA) was employed to scrutinize the statistical relevance of the study model in explicating the interplay between independent variables and tax compliance.

Ordinary least squares regression analysis was performed and interpreted to discern the impact of independent variables on the dependent variable, namely, tax compliance. Research queries underwent individual evaluation to ascertain the influence of distinct independent variables on tax compliance. The ANOVA F-statistic gauged the research queries' hypothesis that repressor coefficients for each variable equaled zero. A comprehensive appraisal to establish the collective impact of all independent variables was conducted, combining them for analysis. Subsequently, the ANOVA and F-Statistic were deployed to assess the research queries asserting that the regressor coefficients of all independent variables dependent variables jointly equated to zero. The significance levels adhered to a 95% confidence interval, with significance discerned at an alpha level of 0.05 (p < 0.05), as stipulated by Churchill and Iacobucci (2002).

#### **3.8.1 Model Specification**

The study used hierarchical multiple linear regression model to link the independent variables, the moderator and the dependent variable. Following Baron and Kenny (1986).The following regression models were used.

Model 1. Testing the effect of the independent variables on tax compliance.

$$TC = \beta_0 + \beta_1 PTC + \beta_2 PTDS + \beta_3 PTLF + \beta_4 PPC + \varepsilon$$

Model 2 Testing the effect of the moderator on tax compliance.

$$TC = \beta_0 + \beta_1 PTC + \beta_2 PTDS + \beta_3 PTLF + \beta_4 PPC + \beta_5 IQ + \varepsilon$$

Model 3. Introducing the first interaction term between PTC and IQ

$$TC = \beta_0 + \beta_1 PTC + \beta_2 PTDS + \beta_3 PTLF + \beta_4 PPC + \beta_5 IQ + \beta_6 PTC * IQ + \varepsilon$$

Model 4. Introducing the second interaction term between PTDS and IQ.

$$TC = \beta_0 + \beta_1 PTC + \beta_2 PTDS + \beta_3 PTLF + \beta_4 PPC + \beta_5 IQ + \beta_6 PTC * IQ + \beta_7 PTDS * IQ + \varepsilon$$

Model 5. Introducing the third interaction term between PTL and IQ

$$TC = \beta_0 + \beta_1 PTC + \beta_2 PTDS + \beta_3 PTLF + \beta_4 PPC + \beta_5 IQ + \beta_6 PTC * IQ + \beta_7 PTDS * IQ + \beta_8 PTLF * IQ + \varepsilon$$

Model 6. Introducing the fourth interaction term between PPC and IQ

$$TC = \beta_0 + \beta_1 PTC + \beta_2 PTDS + \beta_3 PTLF + \beta_4 PPC + \beta_5 IQ + \beta_6 PTC * IQ + \beta_7 PTDS * IQ + \beta_8 PTLF * IQ + \beta_9 PPC * IQ + \varepsilon$$

Where:

TC is the dependent variable (Tax Compliance)

PTC denotes perceived tax complexity.

PTD denotes perceived tax deterrence sanctions.

PTL is the perceived tax law fairness

PPC is the perceived psychological cost

IQ is the institutional quality

 $\beta_0$  is the constant (Co-efficient of intercept)

 $\beta_1$ ,  $\beta_2$  and  $\beta_3$  are the slopes of the regression equation.

 $\varepsilon$  is the error term

# 3.8.2 Moderating Effect of Institutional Quality on the Relationship between Perceived Determinants and Tax Compliance

Moderation in the context of statistical modeling refers to a situation where the relationship between two variables changes depending on the value of a third variable, known as the moderator variable. The moderator affects the direction and/or strength of the relation between the dependent (outcome) and independent (predictor) variables. According to Baron and Kenny (1986) the conditions for a variable to be considered a moderator are: 1) The moderator variable should be independent, not caused by or causing the independent variable or the dependent variable; 2) the effect of the independent variable on the dependent variable should change based on the value of the moderator. This interaction effect is typically represented by including an interaction term (the product of the independent variable and the moderator) in the regression model; 3) the interaction effect should be statistically significant. This is usually tested by looking at the p-value associated with the interaction term in the regression model.

The moderating variable pertains to a factor capable of enhancing, reducing, nullifying, or otherwise modifying the link between independent and dependent variables. It can also influence the direction of the relationship between said variables. In this study, the moderating variable under consideration is institutional quality. To scrutinize the moderation effect, the approach outlined by Baron and Kenny (1986) was employed. Consequently, analysis of the moderating impact of institutional quality followed a structured hierarchical regression approach shown in the model specification. Specifically, the first step aimed at examining the effect of the independent variable, followed by assessing the effect of the moderator before entering the interaction terms in a stepwise manner.

#### 3.8.3 Regression assumptions

#### 3.8.3.1 Linearity Test

Linearity occurs when the dependent variable is linearly related to the independent variables. This is to mean, a decrease in the independent variable results to a decrease in the dependent variable and vice versa or an increase in the independent variable leads to a decrease in the dependent variable and vice versa. The study used scatter-plots to test whether the relationship between the dependent variable and independent variable is linear or not. In addition, the study utilized regression lines that help observe the trend in the data of a given scatter plot. The linearity assumption was met when the data points followed and were tightly clustered around the linear regression line. Besides, a positive linear relationship was established when the regression line had a positive slope.

#### 3.8.3.2 Normality Test

Normality has been postulated as a critical assumption that must be satisfied in order to conduct multivariate analysis (Hair et al, 2006). Regression analysis assumes that data

follows a normal distribution. To test for normality, the study utilized the normal probability plot (P-P plot). The normal P-P plot was used to check if the data exhibits the standard normal distribution. According to Jones (2022), indication of presence of normality in a data set is confirmed when majority of the data points are distributed along the normal PP line. Consequently, the normality assumption for the study was met when the plotted data points fell along the normal PP line thus concluding that the data is normally distributed.

# 3.8.3.3 Multi-collinearity Test

High correlation between two or more independent variables is known to constitute multi-collinearity, which when present negatively affects the regression parameter estimation. The study adopted the Variance Inflation Factor (VIF) and the tolerance level to check for presence of multi-collinearity. For VIF, a threshold of between 1 and 10 was applied. Thus, a VIF value of less than 1 or greater than 10 indicated presence of multi-collinearity. On the other hand, a tolerance level greater than 0.10 was recommended.

#### **3.9 Ethical Consideration**

Ethical considerations encompass the moral principles that researchers must uphold throughout every phase of the research process. Given that research involves human subjects, the researcher bears the responsibility of safeguarding participants, cultivating trust, and preventing any unethical behavior to uphold the integrity of the research. Bordens and Abbott (2008) emphasize the importance of obtaining official authorization from relevant institutions prior to conducting research to ensure compliance with regulations. Ahead of commencing data collection, the researcher secured all requisite documents, including an introductory letter from the School of Business and the Kenya School of Revenue Administration, along with a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI). The researcher also assured respondents of strict confidentiality throughout the process. Furthermore, adhering to the guidelines of the American Psychological Association (APA), proper in-text citations and references were meticulously maintained, and plagiarism checks were conducted at every phase of the proposal to uphold intellectual property and copyright standards. Upon concluding the study, the researcher disseminated the results through publication in reputable and trustworthy journals, facilitating open access to the broader knowledge domain.

#### **CHAPTER FOUR**

#### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

#### **4.0 Introduction**

This chapter presents the findings of the primary data that was collected through the use of questionnaires. The data collected was then cleaned, coded and entered into the Statistical Package for Social Sciences (SPSS) version 22.0 in preparation for analysis. The analysis was then conducted through testing for reliability of instruments, descriptive analysis, performing diagnostic tests, correlation and regression analysis, investigating the moderating effects, hypothesis testing and discussing the key findings. The study findings were presented using tables as well as figures.

#### **4.1 Response Rate**

The response rate refers to the proportion of individuals or entities that provide valid and usable responses to a survey or research study out of the total number of individuals or entities who were contacted and invited to participate. In other words, it represents the percentage of participants who engage in research by completing the survey or questionnaire (Baruch, 1999). It is an important metric in research, especially in surveybased studies, as it reflects the willingness of participants to contribute their input. A higher response rate is generally desired because it indicates a more representative sample and enhances the reliability and validity of the study's findings (Mugenda & Mugenda, 2003). However, achieving a high response rate can be challenging, as various factors can influence whether individuals decide to participate.

In this study a total of 370 respondents were targeted by the study, from which the researcher was able to get responses from 325 study participants. This represented a response rate of 87.8% which according to Mugenda and Mugenda (2003) it was a good

representation that would bring out appropriate reliability and validity of the responses from the study findings.

#### 4.2 Descriptive Statistics

It is a set of numerical and graphical techniques that is used to summarize and present the key characteristics and patterns within a dataset. These statistics aim to provide a clear and concise overview of the data's central tendencies (such as mean, median, and mode), variability (including measures like range, variance, and standard deviation), and distribution shape. The study through use of methods like histograms, scatter plots, and summary tables; descriptive statistics help researchers and analysts gain insights into the data's overall structure, identify outliers, and communicate important features, facilitating a deeper understanding of the dataset without delving into complex statistical modeling.

# 4.2.1 Perceived Tax Complexity (PTC)

In regard to perceived tax complexity, respondents were required to assess the extent to which they agreed or disagreed with 5 statements in a scale of 1-5 where 5 represented a situation where the respondents highly agreed with the statement, while 1 represented a situation where the respondent highly disagreed with the statement. The statements were named PTC1 to PTC5.

Tab	le 4	. 1:	F	requencie	s P	ercei	ived	Tay	x C	Comp	lexi	ty
-----	------	------	---	-----------	-----	-------	------	-----	-----	------	------	----

	Statistics								
		PTC1	PTC2	PTC3	PTC4	PTC5			
Ν	Valid	325	325	325	325	325			
	Missing	0	0	0	0	0			
Mea	an	3.82	3.72	3.90	3.97	4.00			
Mo	de	4	4	4 <sup>a</sup>	4	4			
Std.	. Deviation	1.169	.962	1.049	.944	.964			

a. Multiple modes exist. The smallest value is shown **Source: Field data (2023)** 

The mode for all the statements were 4 that indicates that majority of the respondents agreed with each of the statements. However, a higher variation was recorded in statement 1 (PTC1) and third statement (PTC3). They recorded a standard deviation from the mean of 1.17 and 1.05 respectively.

PTC1 stated that "I am capable of efficiently and accurately completing and fulfilling my tax returns as necessary" Despite the fact most respondents agreed that they were capable and efficiently able to file tax returns, there was a significant number that disagreed and were neutral which pushed the mean down to 3.82. PTC3 on the other hand stated that "I understand that submitting taxes in a timely manner is important to prevent incurring additional penalties or fines". Most respondents agreed but with a high variation of 1.05 and a mean of 3.9. It showed that despite the fact there were a majority of the respondents who agreed with the responses, there was quite a number of respondents who either disagreed or were neutral of the statement.

# **4.2.2 Perceived Tax Deterrence and Sanctions (PTDS)**

The study had five statements that assessed the extent to which the respondents agreed or disagreed with statements towards this regard. Table 4.4 indicates that statements PTDS3, PTDS4 and PTDS5 had mode of 4 that implies that the respondent agreed with these statements. However, majority of the respondents disagreed with PTDS1 as it had a mode of 2 and PTDS3 had a mode of 3.

**Table 4. 2: Frequency Table on PTDS** 

	Statistics									
		PTDS1	PTDS2	PTDS3	PTDS4	PTDS5				
Ν	Valid	325	325	325	325	325				
	Missing	0	0	0	0	0				
Mea	n	2.93	3.06	3.62	3.56	3.52				
Mod	e	2	3	4	4	4				
Std.	Deviation	1.246	1.214	1.104	1.057	1.159				
n	<b>T</b> <sup>1</sup> 1 1 1	(2022)								

Source: Field data (2023)

PTDS2 stated that "I am confident that tax auditors effectively communicate audit standards and procedures." Most respondents therefore disagreed that most auditors effectively communicated audit standards and procedures. PTDS2 on the other hand stated that "I believe the fear of tax audits and potential prosecution serves as a strong motivator for businesses to ensure compliance with tax obligations." Most respondents were neutral on these as the mode was 3 as indicated in table 4.4.

#### 4.2.3 Perceived Tax Law Fairness (PTLF)

The other variable that was assessed was perceived tax law fairness. It sought to determine how the respondents perceived tax laws to be fair. There were five statements and the respondents were required to determine the extent to which they agreed or disagreed with each of the statement at the scale of 5.

_	Statistics									
		PTLF1	PTLF2	PTLF3	PTLF4	PTLF5				
]	N Valid	325	325	325	325	325				
	Missing	0	0	0	0	0				
]	Mean	2.62	2.71	2.99	3.21	3.38				
]	Mode	2	2	3	4	3				
	Std. Deviation	1.240	1.164	1.195	1.143	1.190				

C4 - 4 - 4 - - -

 Table 4. 3: PTLF Frequency Table

# Source: Field data (2023)

Table 4.5 indicates that most of the respondents disagreed or were undecided with the statements on perceived tax law fairness. Most respondents only agreed with {TLF4 that had a mode of 4 which stated that "I am convinced that the tax legislations are structured in a balanced way, accommodating the diverse nature of businesses." It is the only fairness indicator that the respondents agreed was followed. The respondents, however, disagreed or were undecided in regard to other statements in regard to perceived tax law fairness.

# 4.2.4 Perceived Psychological Cost (PPC)

The perceived psychological cost was determined by assessing the extent to which respondents agreed with 4 responses in regard to perceived psychological cost. Table 4.6 summarizes the findings in regard to the mode mean and standard deviation for each of the 4 statements.

<b>Table 4.4</b>	<b>PPC Freq</b>	uency Table
------------------	-----------------	-------------

			Statis	tics	
		PPC2	PPC3	PPC4	PPC5
Ν	Valid	325	325	325	325
	Missing	0	0	0	0
Mea	an	3.08	3.32	3.46	3.38
Mo	de	4	4	4	4
Std.	Deviation	1.169	1.153	1.187	1.171
Som	reas Fiald day	to (2023)			

Source: Field data (2023)

Table 4.6 indicates that the mode for all the statement was 4 and therefore majority of the respondents in all the statements agreed with the statements on perceived psychological cost. High standard deviation from the mean indicates that the variation from one respondent to the other is high which makes the mean for most of the statements to be at 3 or thereabouts.

# 4.2.5 Institutional Quality (IQ)

There were 4 statements that were used to assess institutional quality where each of the statements was also rated in a scale of 5 with 5 being strongly agree and 1 being strongly disagree.

		Statistics		
	IQ2	IQ3	IQ4	IQ5
Mean	3.09	3.38	3.36	3.50
Mode	3	3	3	4
Std. Deviation	1.111	.970	1.098	1.099

 Table 4. 5: IQ Frequency Table

Source: Field data (2023)

Most statements had an average of 3 that indicate that the majority of the respondents were undecided on the statements in regard to institutional quality. However IQ5 had a mode of 4 indicating that most respondents agreed with this statement. The statement indicates "I firmly believe that the degree of tax compliance hinges on the extent of voice and accountability."

# 4.2.6 Tax Compliance (TC)

There were 5 statements that sought to determine tax compliance among SMEs in Nairobi South. Table 4.8 indicates the results observed in the study.

# Table 4. 6: IQ Frequency Table

		S	tatistics		
	TC1	TC2	TC3	TC4	TC5
N Valid	325	325	325	325	325
Missing	0	0	0	0	0
Mean	2.98	3.11	3.36	3.57	3.59
Mode	2	3	4	4	4
Std. Deviation	1.176	1.067	1.047	1.006	.992

## Source: Field data (2023)

Three statements (TC3, TC4 and TC5) had a mode of 4 indicating that majority of the respondents agreed with the statements in regard to tax compliance. However, the mode for TC1 was 3 indicating that most respondents disagreed with this statement which stated, "I believe that that most of the business in this region adheres to tax obligations and makes accurate disclosures in tax reports." Most respondents were undecided in regard to TC3 as it had a mode of 3. However, majority of the responses indicated that there was increased tax compliance among SMEs in Nairobi South in Kenya.

### **4.2.7 Overall Descriptives**

The effective study variables were used to undertake further analysis in the study. Summation for each statements that make each variable was undertaken for all the variables. The resultant variables were used in undertaking inferential statistics that was conducted in this study. The overall descriptives therefore is summarized in table 4.9.

The table provides descriptive statistics for six variables: Perceived Tax Compliance (PTC), Perceived Tax Deterrence and Sanctions (PTDS), Perceived Tax Law Fairness (PTLF), Perceived Psychological Cost (PPC), Institutional Quality (IQ), and Tax Compliance (TC). Each variable is described in terms of the number of observations (N), the minimum and maximum values, the mean (average), the standard deviation (a measure of variability), skewness (a measure of asymmetry in the data distribution), and kurtosis (a measure of the data's peakness or flatness).

 Table 4. 7: Overall Descriptive Statistics

			Des	scriptive St	atistics				
					Std.				
	Ν	Minimum	Maximum	Mean	Deviation	Skewn	ess	Kurto	sis
							Std.		Std.
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Error	Statistic	Error
PTC	325	5	25	19.40	3.744	835	.135	1.281	.270
PTDS	325	5	25	16.69	3.830	431	.135	.030	.270
PTLF	325	5	23	14.92	4.059	098	.135	739	.270
PPC	325	6	20	13.23	3.342	337	.135	169	.270
IQ	325	7	20	13.33	3.040	248	.135	541	.270
TC	325	8	25	16.61	3.506	047	.135	427	.270
Valid N	225								
(listwise)	325								

# Source: Field data (2023)

For example, PTC has 325 valid observations, with a minimum value of 5, a maximum value of 25, a mean of 19.40, and a standard deviation of 3.744. The negative skewness (-0.835) suggests that the data is slightly skewed to the left, meaning that the distribution may have a longer tail on the left side. The kurtosis value of 1.281 indicates that the data distribution is leptokurtic, meaning it has heavier tails and a sharper peak compared to a normal distribution.

Similarly, the table provides similar descriptive statistics for the other five variables, allowing researchers to understand the central tendency, variability, and distribution

characteristics of each variable in the dataset. These statistics are crucial for making inferences and assessing the properties of the data in statistical analyses.

#### 4.3 Reliability and Validity

The reliability as well as the validity of the questionnaire that was deployed in the study was undertaken by the use of Cronbach Alpha. Cronbach's Alpha, a widely used statistic in the field of psychometrics, serves as a tool for measuring the internal consistency or reliability of a set of items within a questionnaire. Typically ranging from 0 to 1, with higher values indicating greater internal consistency, a rule of thumb suggests that an Alpha value of 0.70 or higher is generally considered acceptable for research and practical purposes, signifying that the items in the assessment instrument are reliably measuring the same underlying construct. However, the specific context and goals of the study, as well as the nature of the items, can influence the appropriate threshold for determining the acceptable level of internal consistency (Connelly, 2011). Table 4.1 below revealed the test results and it was evident that all the six constructs had met the recommended KMO and Bartlett's threshold of 0.5.

Item	Cronbach's Alpha	KMO	N of Items
Perceived Tax Complexity (PTC)	.785	.836	5
Perceived Tax Deterrence Sanctions (PTDS)	.768	.698	5
Perceived Tax Law Fairness (PTLF)	.716	.714	5
Perceived Psychological Cost (PPC)	.769	.705	4
Institutional Quality (IQ)	.761	.742	4
Tax Compliance (TC)	.719	.707	5

Table 4.	8:	Reliability	<b>Statistics</b>
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Source: Field data (2023)

The Cronbach's Alpha for the study variables according to table 4.1 indicates that the scale is above 0.7 and therefore there is high reliability and internal consistency in the data collected for all the study variables.

#### **4.4 Inferential Statistics**

The study undertook both correlation and regression analysis to undertake inferential statistics. Inferential statistics is the branch of statistical analysis that involves drawing conclusions or making predictions about a larger population based on a sample of data. By utilizing probability theory and statistical techniques, inferential statistics enable researchers and analysts to infer insights and relationships beyond the observed sample, helping to assess hypotheses, determine the significance of observed differences or associations, and estimate parameters of interest. Common methods include hypothesis testing, confidence intervals, and regression analysis, all of which allow for generalizing findings from a subset of data to a broader population.

The researcher before undertaking regression analysis on the data undertook diagnostic tests that were applied in the study to determine whether the data collected by the researcher conformed to the various assumptions that were made by regression analysis and which compliance would prevent the researcher from undertaking spurious regressions, The tests considered in this study included normality tests, linearity test, multicollinearity test and autocorrelation test.

# **4.4.1 Normality Test**

Normality test was undertaken to determine whether data collected was normally distributed or not. The study used Shapiro-Wilk test to determine the normality of the study variables.

			Tests of	f Normality		
	Kolmog	orov-Smirno	v <sup>a</sup>		Shapiro-Wilk	
	Statistic	Df	Sig.	Statistic	df	Sig.
PTC	.124	325	.000	.943	325	.000
PTDS	.081	325	.000	.977	325	.000
PTLF	.084	325	.000	.980	325	.000
PPC	.104	325	.000	.969	325	.000
IQ	.102	325	.000	.971	325	.000
TC	.074	325	.000	.986	325	.004

#### Table 4. 9: Normality Test Table

Source: Field data (2023)

The p-value of all the variables under Shapiro Wilk test are below 0.05 that indicates that the null hypothesis is rejected and therefore concludes that all the study variables are not normally distributed. In this case the data is treated by standardizing the data before undertaking regression analysis.

# 4.4.2 Linearity Test

Undertaking regression analysis assumes that data could be made into linear function and therefore the data collected has the tendency or the ability to be linearly represented. The test is undertaken by undertaking linear plots that shows whether the data can be expressed as a linear function. Similarly, the test could be made by use of Normal Q-Q plot to determine whether the plots follow the diagonal line.

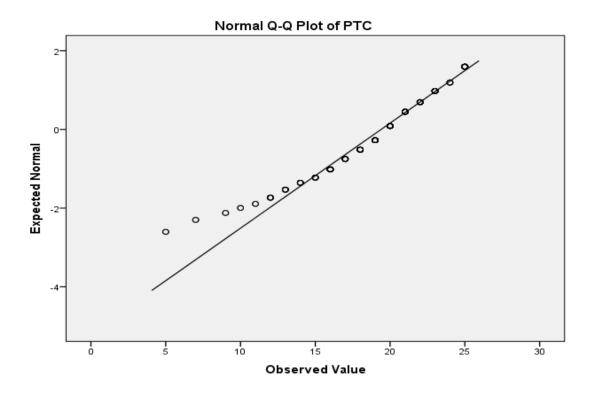


Figure 4.1: Graph Showing Normal Q-Q Plot

Figure 4.1 indicates that the plots follow the diagonal line and therefore the data has linear tendencies.

#### 4.4.3 Multi-Collinearity Test

The test aums at assessing the degree of interdependence or correlation among predictor variables within a regression model. This test helps identify situations where two or more independent variables are highly correlated, which can pose challenges in interpreting the individual effects of these variables on the dependent variable. By calculating various metrics, such as the Variance Inflation Factor (VIF), tolerance, or condition indices, multicollinearity tests provide insights into the potential problem of multicollinearity. Addressing or mitigating multicollinearity is important for ensuring the stability and reliability of regression coefficients and their interpretations in statistical analyses. The rule of thumb is that VIF values above 10 indicates presence of multicollinearity problems.

	Collinearity Statistics					
Model	Tolerance	VIF				
1 (Constant)						
PTC	.840	1.190				
PTDS	.853	1.173				
PTLF	.930	1.075				
PPC	.946	1.057				
IQ	.884	1.131				

 Table 4. 10: Multi-Collinearity Test

Source: Field data (2023)

All the variables in table 4.10 had VIF of below 10 that indicates that there is no problem of multi-collinearity among the independent variables of the study.

# 4.5 Correlation Analysis

# Table 4. 11: Correlations Table

Spearman's	TC	TC 1.000	PTC	PTDS	PTLF	PPC
rho	РТС	.132*	1.000			
	PTDS	.013	.162**	1.000		
	PTLF	.246**	.112*	.039	1.000	
	PPC	.133*	005	.049	.040	1.000

\*. Correlation is significant at the 0.05 level (2-tailed).

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

# Source: Field data (2023)

Correlation analysis determines the extent to which a variable is related to another in a range of 0-1 where 0 indicates that there is no correlation while 1 is perfect correlation. Values closer to 0 indicate weak correlation while values closer to 1 indicate strong correlation. A positive correlation increases with the increase with the other variable.

The study was interested in the correlation between the independent variables and the dependent variable. The correlation between tax compliance and the independent

variables is weak but positive. However, all the variables have significant correlation with the dependent variable apart from PTDS that have very weak correlation that is not significant. It indicates that there is no correlation between perceived tax deterrence and sanctions on tax compliance. The other variables have positive significant correlation against tax compliance.

# 4.6 Regression Analysis

The regression model 3.1 was used to determine perceived tax determinants on tax compliance of SMEs in Nairobi South.

# **4.6.1** Testing the direct hypotheses

The study began by examining the effect of the control variables on the outcome variable. The regression results,

# Table 4. 12: Model Summary

Mode		R		
1	R	Square	Adjusted R Square	Std. Error of the Estimate
1	.424 <sup>a</sup>	.180	.169	.1275986886

a. Predictors: (Constant), PPC, PTC, PTL, PTDS

# Source: Field data, (2023)

R square is used to determine the extent the predictor variable explain the change in the outcome variable. The regression model explains 18% of the changes in tax compliance. The low explanatory power is an indicator that there may be more determinants of tax compliance not captured in this study.

# Table 4. 13: ANOVA Statistics

	Sum of		Mean		
Model	Squares	Df	Square	F	Sig.
1 Regression	1.144	4	.286	17.569	.000 <sup>b</sup>
Residual	5.226	320	.016		
Total	6.371	324			

**ANOVA**<sup>a</sup>

a. Dependent Variable: TC

b. Predictors: (Constant), PPC, PTC, PTLF, PTDS

Source: Field data, (2023)

Table 4.13 indicates that the p-value is less than 0.05 and therefore the null hypothesis is rejected. It therefore shows that there is significant effect of perceived tax determinants on tax compliance.

The individual impact of each independent variables is expressed in the table of coefficient table 4.14.

 Table 4. 14: Coefficients Table

			Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
(Constant)	.253	.051		4.967	.000
PTC	.137	.046	.159	2.978	.003
PTDS	.161	.048	.177	3.335	.001
PTLF	.201	.045	.233	4.484	.000
PPC	.120	.042	.144	2.822	.005

Dependent Variable: TC

# Source: Field data, (2023)

Table 4.14 indicates that all the independent variables have p-values less than 0.05 except PTDS. It shows that increasing perceived tax and deterrence sanctions would not have significant impact on tax compliance. However, perceived tax compliance, perceived tax laws fairness and perceived psychological cost had positive significant impact on tax compliance. Increasing each of this independent variable would lead to increase in tax compliance. The study had four direct hypotheses that were tested as follows:

The first hypotheses stated that:  $H_{01}$ : perceived tax complexity has no significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya.

The findings of the study revealed that perceived tax complexity had a positive and significant influence on tax compliance ( $\beta$ = 0.137,  $\rho$ <0.05). Therefore, H<sub>01</sub> was rejected and the study concluded that perceived tax complexity significantly influences tax compliance among SMEs in Nairobi South Tax Region. These findings agree with previous studies that found a positive association between perceived tax complexity and compliance behaviours (Güzel *et al.*, 2019; Taing & Chang, 2021; Sifuni, 2017; Yahya *et al.*, 2021). Conversely, some studies reported no association between perceived tax system fairness and tax compliance (Vogel 1974; Porcano 1988, Antonides & Robben, 1995).

The second hypothesis stated that :  $H_{02}$ : perceived tax deterrence sanctions have no significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The regression results demonstrated that perceived tax deterrence sanctions had a positive and significant influence on tax compliance ( $\beta$ = 0.161,  $\rho$ <0.05). Consequently, H<sub>02</sub> was rejected and the study concluded that perceived tax deterrence sanctions significantly affects tax compliance among SMEs in Nairobi South Tax Region. The results are consistent with those of earlier studies (Gitonga & Memba, 2018; Rianti & Hidayat, 2021; Dularif *et al.*, 2019; Manual & Xin, 2016).

The third hypothesis stated that:  $H_{03}$ :perceived level of psychological costs have no significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The findings presented in table 4.15 demonstrated that perceived level of psychological costs had a positive and significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax

Region, Kenya ( $\beta$ = 0.201,  $\rho$ <0.05). Consequently, H<sub>03</sub> was rejected and the study concluded that perceived tax deterrence sanctions significantly affects tax compliance among SMEs in Nairobi South Tax Region. These results are supported by earlier studies on psychological determinants of tax compliance among individuals (Sigala, Burgoyne &Webley, 1999; Wenzel, 2005; Fehr, Fischbacher, &Gächter, 2002).

The behavioral standards on a personal, social reference group, and collective level are discussed in normative literature (Kirchler, 2007). High Tax ethics and willingness to comply typically correspond with standards of behavior like compassion, norm-dependency, or religious views, under Personal norms. Social norms are patterns of behavior that are viewed in a similar way by others (Alm *et al.*, 1999). If the reference group indicates that the tax payer's non-compliance behavior is acceptable, the level of non-compliance will decline.

The interaction between taxpayers and the government, as well as tax law, embody the societal norms and integrated cultural standards. Compliance could be attained with the help of the tax payers' and the authorities' mutual understanding.

The fourth hypothesis of the study stated that:  $H_{04}$ : Perceived tax law fairness has no significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The findings presented in table 4.14 revealed that Perceived tax law fairness had a positive and significant influence on tax compliance among small medium scale enterprises in Nairobi South Tax Region, Kenya ( $\beta$ = 0.120,  $\rho$ <0.05). Hence, H<sub>04</sub> was rejected and the conclusion was that perceived tax law fairness significantly influences tax compliance.

Contemporary work examines tax fairness in a number of areas, including horizontal fairness, vertical fairness, exchange fairness, administrative fairness, retributive justice,

and personal fairness. A decent tax system must be created using a suitable set of principles, such as equity, fairness, and certainty. Tax compliance is likely to decline if an individual's tax burden is higher than that of comparable other people. Individual taxpayers are concerned about the fairness of their outcomes and want to be treated according to their abilities, needs, and efforts.

# **4.6.2** Testing the effect of the moderating variable

After testing the effect of the independent variables, the study further examined the effect of the moderator on the outcome variable as suggested by Baron and Kenny (1986). The results presented in table 4.18 confirmed that institutional quality and a positive and significant effect on tax compliance *among small and medium scale enterprises in Nairobi South Tax Region, Kenya*( $\beta$ = 0. 157,  $\rho$ <0.05).

Tax evasion behaviour may be significantly influenced by a nation's institutional quality. For instance, if a person thinks the system is effective, he or she may decide to follow tax laws because they are fair, effective, and trustworthy. Taxpayers, especially those who pay high tax rates, should naturally be interested in how their money is being used by the government. There have been relatively few studies on the connection between precise government spending and tax compliance, particularly with regard to tax evasion.

A person's attitude toward their own tax evasion (tax ethics) as well as their attitude toward the tax evasion of others is crucial, according to Roberts, Hite, and Bradley (1994). Furthermore, it has been observed that people tend to avoid paying taxes and make attempts to do so if they believe that the government is spending money on something that they believe is superfluous or unhelpful to the development of the nation. Perceptions of the taxpayer may play a role in influencing their compliance behaviour. In conclusion, the government should responsibly use tax dollars because differing degrees of compliance are influenced by how the money is spent. Furthermore, persons that are more educated have a better understanding of the purpose of governmental programs and the meaning of tax obligations (Schmölders, 1960; Song & Yarbrough, 1978; Spicer & Lundstedt, 1976).

# Table 4. 15: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.459ª	.210	.198	.12537240843

a. Predictors: (Constant), IQ, PTLF, PPC, PTDS, PTC

# Source: Field data, (2023)

R square is used to determine the co-efficient of determination which indicates the extent to which the model can be used to predict the changes in the dependent variable. The regression model is weak since it only explains 7% of the changes in tax compliance. It indicates that majority of the factors that affect tax compliance were not captured in the model as the model could only explain 7%.

# **Table 4. 16: ANOVA Statistics**

	ANOVA								
		Sum of		Mean					
Mo	odel	Squares	Df	Square	F	Sig.			
1	Regression	1.341	5	.268	17.059	.000 <sup>b</sup>			
	Residual	5.030	319	.016					
	Total	6.371	324						

ANOVA<sup>a</sup>

a. Dependent Variable: TC

b. Predictors: (Constant), IQ, PTLF, PPC, PTDS, PTC

Source: Field data, (2023)

		0	dardized ficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.197	.053		3.747	.000
	PTC	.114	.046	.133	2.493	.013
	PTDS	.136	.048	.149	2.829	.005
	PTLF	.200	.044	.232	4.547	.000
	PPC	.102	.042	.123	2.440	.015
	IQ	.157	.044	.183	3.536	.000

Dependent Variable: TC

# Source: Field data (2023)

# 4.6.3 Testing for the moderating effect of institutional quality

Determining moderation effect of institutional quality requires introducing interactive terms for each of the independent variables and determining whether the interactive term has significant effect on tax compliance. The interactive term is obtained by multiplying each of the independent variable with the institutional quality. Table 4.15 indicates the coefficients of all the independent variables including the interactive terms.

The interaction terms were entered from Model 3 to Model 6. In model 3, the interaction of perceived tax complexity and institutional quality was entered as PTC\*IQ. The overall  $R^2$  is 22.7% which is a 1.7%  $\Delta R^2$ . The beta coefficient is nonzero and statistically significant suggesting the presence of moderation. The interaction term of

perceived tax deterrence sanctions and institutional quality (PTDS\*IQ) is entered in model 4. Going by table below, the overall The overall R<sup>2</sup> is 24.7% which is a 2.0 %  $\Delta$  R<sup>2</sup>. The beta coefficient of the interaction term is significantly positive, inferring the existence of a moderating effect. The third interaction term of perceive psychological cost and institutional quality (PPC \*IQ) is entered in model 5. The interaction term has a statistically negative effect on tax compliance. As show in table 4.15, the overall explanatory power of the model is 28.0% and 4.0%  $\Delta$  R<sup>2</sup>. There results demonstrates the presence of a moderating effect. Finally, the interaction term of perceived tax law fairness and institutional quality (PTLF\*IQ) is entered in model 6. According the regression results the model explain 29.1% variation in tax compliance, while there is a 1.1% change in R<sup>2</sup>. The beta coefficient of the interaction term further confirms moderation. To test the moderating hypotheses, the study used the results of model 6, which comprises of all the predictor variable, the moderator and all the interaction terms as shown in table in the table . The hypotheses were tested and the results interpreted as follows.

 $H_{05a}$ : Institutional quality does not moderate the relationship between perceived tax complexity and tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya.

The findings of the study revealed that the beta coefficient of the interaction term of perceived tax complexity and institutional quality had a positive and significant effect on tax compliance ( $\beta$ = 0.664,  $\rho$ <0.05). Therefore, was rejected and the study concluded that institutional quality moderates the relationship between perceived tax complexity and tax compliance among SMEs in Nairobi South Tax Region. The moderating effect of institutional quality is further shown by the aid of a modgraph figure 4.2. The

modgraph shows that tax compliance is high with high institutional quality and highperceived tax complexity.

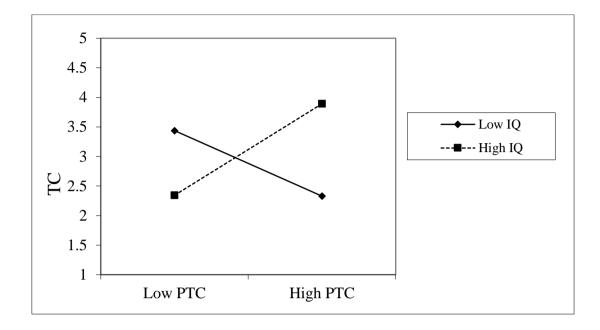


Figure 4.2: Modgraph for institutional quality on PTC and TC

 $H_{05b}$ : Institutional quality does not moderate the relationship between perceived tax deterrence sanctions and tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya.

The findings of the study revealed that interaction term of perceived tax deterrence sanction and institutional quality had a positive and significant effect on tax compliance ( $\beta$ = 0.694,  $\rho$ <0.05). Therefore, H05b was rejected and the study concluded that institutional quality moderates the relationship between perceived tax deterrence sanction and tax compliance among SMEs in Nairobi South Tax Region. The moderating effect of institutional quality is further shown by the aid of a modgraph figure 4.3 The modgraph shows that tax compliance is high institutional quality and high perceived tax deterrence sanctions.

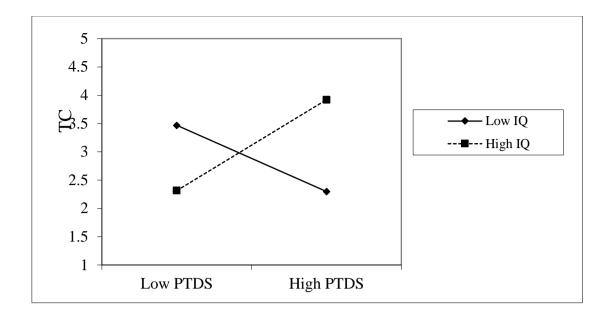


Figure 4.3: Modgraph for institutional quality on PTDC and TC

**H**<sub>05c</sub>: Institutional quality does not moderate the relationship between perceived psychological cost and tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya.

The findings of the study revealed that the interaction term of perceived psychological cost and institutional quality had a negative and significant influence on tax compliance ( $\beta$ = -0.796,  $\rho$ <0.05). Therefore, H<sub>05</sub> was rejected and the study concluded that institutional quality moderated the relationship between perceived psychological cost and tax compliance among SMEs in Nairobi South Tax Region. The moderating effect of institutional quality is further shown by the aid of a modgraph figure 4.4. The modgraph shows that the effect of perceived psychological cost on tax compliance increased with high levels of institutional quality.

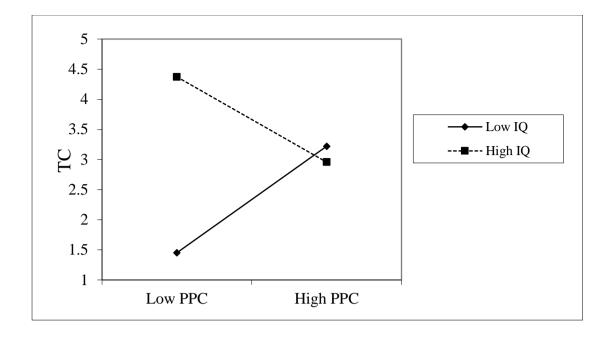


Figure 4.4: Modgraph for institutional quality on PPC and TC

 $H_{05d}$ : Institutional quality does not moderate the relationship between perceived tax law fairness and tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya.

The findings of the study revealed that the interaction term of perceived tax law fairness and institutional quality had a negative and significant influence on tax compliance ( $\beta$ = -0.524,  $\rho$ <0.05). Therefore, H05c was rejected and the study concluded that institutional quality moderated the relationship between perceived tax law fairness and tax compliance among SMEs in Nairobi South Tax Region. The moderating effect of institutional quality is further shown by the aid of a modgraph figure 4.5. The modgraph indicates that the impact of perceived tax law fairness on tax compliance increases with high levels of institutional quality.

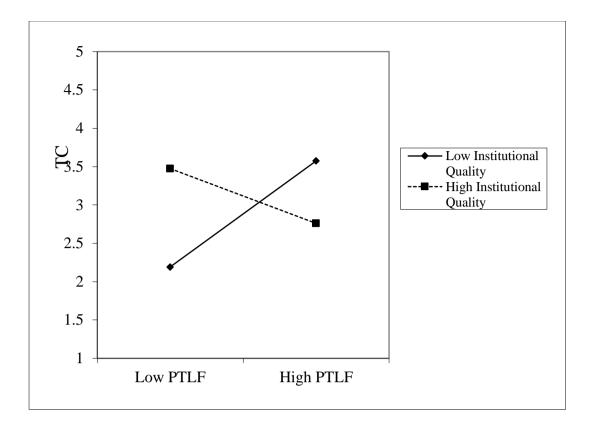


Figure 4.5: Modgraph for institutional quality on PTLF and TC

# 4.6.4 Findings and discussions

The first objective was to determine whether perceived tax complexity has influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The findings agree with previous studies that found a positive association between perceived tax complexity and compliance behaviours (Güzel *et al.*, 2019; Taing & Chang, 2021; Sifuni, 2017; Yahya *et al.* 2021). Conversely, some studies reported no association between perceived tax system fairness and tax compliance (Vogel 1974; Porcano 1988, Antonides & Robben, 1995). When taxpayers find the tax system to be overly complex and confusing, they may become more cautious about their tax obligations. The fear of making mistakes and facing penalties or audits can motivate individuals and businesses to be more diligent in accurately reporting their income and complying with tax laws. This heightened awareness of the potential consequences of non-compliance can lead to a higher level of adherence to tax regulations. Secondly, the perception of complexity can create a sense of fairness in taxation. When taxpayers believe that the tax system is intricate and difficult to navigate, they may feel that everyone faces similar challenges. This perception can foster a sense of collective responsibility, where taxpayers are more inclined to fulfill their obligations because they believe that others are doing the same. In this way, perceived complexity can serve as a social norm that promotes tax compliance, as individuals are more likely to comply with their tax obligations when they perceive that others are also struggling with the complexities of the system. Thus, while tax complexity can be burdensome and frustrating, it can paradoxically promote higher levels of tax compliance by instilling fear of consequences and fostering a sense of fairness and collective responsibility in the taxpaying community

The second objective was determine whether perceived tax deterrence sanctions have influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The results are consistent with those of earlier studies (Gitonga & Memba, 2018; Rianti & Hidayat, 2021; Dularif *et al.*, 2019; Manual & Xin, 2016). SMEs, often constrained by limited resources and risk-averse by nature, are motivated to comply with tax laws when they perceive that rigorous sanctions, such as fines and legal consequences, are in place. This perception encourages SMEs to prioritize tax compliance as a means to avoid these potential negative outcomes. Moreover, it fosters a level playing field in which SMEs are less tempted to engage in tax evasion practices to gain a competitive edge. Maintaining tax compliance enhances their reputation and trustworthiness, crucial in their relationships with customers, suppliers, and stakeholders, ultimately contributing to the long-term success and sustainability of their businesses. Additionally, compliance with tax laws can make SMEs eligible for government support programs and access to financing, further incentivizing them to adhere to tax regulations.

The third objective was determine whether perceived level of psychological costs have significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. These results are supported by earlier studies on psychological determinants of tax compliance among individuals (Sigala, Burgoyne &Webley, 1999; Wenzel, 2005; Fehr, Fischbacher, &Gächter, 2002). When SMEs perceive that the psychological costs associated with non-compliance, such as guilt, anxiety, or fear of punishment, are high, they are more likely to exhibit greater tax compliance. These psychological costs can weigh heavily on SME owners and decision-makers, who often have a more personal connection to their businesses. The fear of negative emotional and mental repercussions, coupled with the desire to maintain a clean conscience, can motivate SMEs to comply with tax regulations to avoid the psychological burden of guilt and anxiety. This internal pressure, driven by the perception of high psychological costs, thus becomes a powerful factor in fostering tax compliance among SMEs.

The fourth objective was determine whether Perceived tax law fairness has significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. When SMEs believe that tax laws are applied fairly and consistently, they are more inclined to view compliance as a moral obligation rather than a burden. This perception of fairness instills trust in the government's tax collection processes and reduces the temptation to evade taxes as a form of protest against perceived injustice. Moreover, when SMEs perceive a just tax system, they are more likely to cooperate willingly, as they feel their contributions are being used for the common good, such as public services and infrastructure improvements. Consequently, the belief in tax law fairness not only promotes tax compliance but also strengthens the social contract between SMEs and the government, ultimately contributing to a more stable and cooperative tax environment.

The fifth objective of was to determine whether Institutional quality moderate the relationship between perceived tax complexity and tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The findings of the study revealed that the beta coefficient of the interaction term of perceived tax complexity and institutional quality had a positive and significant effect on tax compliance ( $\beta$ = 0.694,  $\rho$ <0.05). Taxes are viewed as a cost associated with the government's provision of services. For taxpayers to willingly pay their taxes, trust is institutional and legal systems is critical (Scholz & Lubell, 1998; Frey & Torgler, 2006). Tax revenues and, consequently, government performance decline when public distrust of the government rises. Taxpayers will be more willing to comply with their tax duties if they have high levels of confidence with the institutions of governance. When the government acts in a way that earns the taxpayers' trust, the taxpayers' faith in the government grows, and at the same time, they are more motivated to comply with their tax duties. As a result, there will be a good continuation of the relationship between the government and the taxpayers.

The sixth objective of was to determine whether Institutional quality moderate the relationship between perceived tax deterrence sanctions and tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The findings of the study revealed that interaction term of perceived tax deterrence sanction and institutional quality had a positive and significant effect on tax compliance ( $\beta$ = 0.694,  $\rho$ <0.05). The results are supported by the slippery slope framework, which endeavors to elucidate the rationale behind taxpayers' compliance with tax obligations,

encompassing both deterrence-based and non-deterrence-based mechanisms (Kirchler *et al.*, 2008). The framework posits four assumptions, namely, that tax compliance can be elucidated by: There are four distinct combinations to consider when examining the relationship between power and trust: 1) a situation characterized by high levels of trust and low levels of power; 2) a situation characterized by high levels of power and low levels of trust; 3) a situation characterized by high levels of both power and trust; and 4) the interaction between power and trust, where they moderate each other.

Trust in authority, an indicator of institutional quality, demonstrates the perception held by taxpayers that those in positions of power demonstrate compassion and consistently make judgments that are advantageous to the broader public. It is believed that these authorities consistently prioritize the well-being of ordinary residents. This implies that governing bodies consistently engage in actions that promote effective governance, so liberating society from instances of corruption. However, the concept of power of authorities pertains to the perception held by taxpayers regarding the capacity of tax officers to identify instances of illegal tax noncompliance, mostly through thorough audits aimed at detecting evasion. Additionally, it encompasses the authorities' authority to impose fines on those who engage in tax evasion.

The seventh objective of was to determine whether Institutional quality moderate the relationship between perceived psychological cost and tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The findings of the study revealed that the interaction term of perceived psychological cost and institutional quality had a negative and significant influence on tax compliance ( $\beta$ = -0.796,  $\rho$ <0.05). Tax compliance is influenced by the intricate interplay of taxpayers, the state, and tax authorities (Islam *et al.*, 2020). Based on the psychological-social interaction theory, the relationship between taxpayers and the government is characterized by a contractual

arrangement, wherein taxpayers contribute to the state revenue in return for the provision of state services (Scholz, 2003). The notion of a psychological tax contract, first introduced by Feld and Frey (2007), highlights the need of establishing a fair and balanced obligation between the government and taxpayers. This contract operates on the principle of quid pro quo, wherein one party provides while the other receives. According to the hypothesis, individuals may exhibit a hesitancy to fulfil their tax obligations if they think that their government's expenditures fall short of the taxes they contribute. This idea posits that it is imperative for a government to uphold a superior level of governance in order to meet the expectations and needs of its citizens.

On the contrary, substandard governance quality generates discontent among citizens, and when government spending falls short of their expectations, it results in an increase in tax evasion. Based on the theory of public goods/spending, an increase in government expenditure on the public service sector is posited to enhance both governance quality and socioeconomic conditions (Umar *et al.*, 2019).

The eighth objective of was to determine whether Institutional quality moderate the relationship between perceived tax law fairness and tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The findings of the study revealed that the interaction term of perceived tax law fairness and institutional quality had a negative and significant influence on tax compliance ( $\beta$ = -0.524,  $\rho$ <0.05).

Voluntary tax compliance is contingent upon several key factors, namely equal treatment and the complexity of the tax system, the reliability and effectiveness of government operations, the presence of a robust rule of law, and the absence of corruption. These factors collectively contribute to the overall quality of institutions, hence shaping the perception of voluntary tax compliance as a desirable attribute. According to Tsikas (2017), individuals exhibit a greater sense of duty towards

fulfilling their tax obligations when there is a higher level of institutional quality characterized by trustworthiness. Conversely, in the absence of such trustworthiness, individual taxpayers may be inclined to deny voluntary tax payments. The evaluation of the legitimacy, credibility, and political legitimacy of the state, along with the perceived fairness and efficacy of the state and its institutional framework (including corruption, tax justice, and the implementation of the rule of law (Dickerson, 2014; Everest-Phillips & Sandall, 2009). The opinion of taxpayers regarding the government's utilization of tax funds plays a crucial role in influencing their political inclination to engage in tax-related activities and comply with tax regulations. Additionally, the manner in which the state collects income from its inhabitants has a direct impact on the overall effectiveness of governance.

## 4.6.5 Summary moderation regression results

A summary for the moderation regression results is shown in table 4.5. The results are presented in 6 models as proposed in the model specification.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
TC	Coef.	Coef.	Coef.	Coef.	Coef.	Coef.
CONSTANT	.253(0.051)**	.197(0.053)**	.212(0.052)**	.214(0.052)**	.259(0.052)**	.270(0.052)**
PTC	.137(0.046)**	.114(0.046)**	.131(0.046)**	.113(0.041)**	.109(0.045)**	.110(0.045)**
PTDS	.161(0.048)**	.136(0.048)**	.119(0.048)**	.134(0.048)**	.114(0.047)**	.109(0.047)**
PPC	.120(0.042)**	.102(0.042)**	.099(0.042)**	.103(0.041)**	.168(0.043)**	.088(0.040)**
PTLF	.201(0.045)**	.200(0.044)**	.190(0.044)**	.182(0.043)**	.100(0.040)**	.167(0.042)**
IQ	-	.157(0.044)**	.140(0.045)**	.141(0.044)**	.117(0.044)**	.117(0.043)**
PTC*IQ	-	-	.701(0.267)**	.568(0.268)**	.600(0.263)**	.664(0.263)**
PTDS*IQ	-	-	-	.715(0.247)**	.691(0.242)**	.694(0.241)**
PPC*IQ	-	-	-		896(0.235)**	796(0.238)**
PTLF*IQ	-	-	-			524(0.241)**
$\mathbb{R}^2$	0.180	0.210	0.227	.247	. 0.280	0.291
$\Delta$ -R <sup>2</sup>	-	0.03	0.017	0.020	0.033	0.011
F-value	17.569	17.059	15.622	14.892	15.412	14.387
Prob > F	0.000	0.000	0.000	0.000	0.000	0.000

 Table 4. 17: Summary hierarchical regression results

Source: Field data (2023)

 Table 4. 18: Summary of hypothesis

Hypoth	esis	Beta values	P values	Decision
H0 <sub>1</sub>	Perceived tax complexity has no significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya.	0.137	0.003	Reject
H0 <sub>2</sub>	Perceived tax deterrence sanctions have no significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya.	0.161	0.001	Reject
H0 <sub>3</sub>	Perceived level of psychological costs have no significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya.	0.120	0.005	Reject
H0 <sub>4</sub>	Perceived tax law fairness has no significant influence on tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya.	0.201	0.000	Reject
HO <sub>5a</sub>	Institutional quality has no moderating role on the relationship between Perceived tax complexity and tax compliance among Small and Medium Scale Enterprises in Nairobi South Tax Region, Kenya.	.664	0.012	Reject
HO <sub>5b</sub>	Institutional quality has no moderating role on the relationship between Perceived tax deterrence and tax compliance among Small and Medium Scale Enterprises in Nairobi South Tax Region, Kenya.	.694	0.004	Reject
HO <sub>5c</sub>	Institutional quality has no moderating role on the relationship between perceived level of psychology costs and tax compliance among Small and Medium Scale Enterprises in Nairobi South Tax Region, Kenya.	-0.796	0.001	Reject
HO <sub>5d</sub>	Institutional quality has no moderating role on the relationship between Perceived tax law fairness and tax compliance among Small and Medium Scale Enterprises in Nairobi South Tax Region, Kenya.	-0.524	0.030	Reject

#### **CHAPTER FIVE**

# SUMMARY, CONCLUSION AND STUDY RECOMMENDATIONS 5.0 Introduction

The findings of the study were critical and important not only to tax agents, but also important to enhance policy and streamline practise. This section was therefore critical to ensure that the findings of the study are well summarised, and the conclusions are well drawn from the study. The recommendations are then well stated, while study limitations are highlighted. The areas for further research are then identified.

### 5.1 Summary of the Study

The purpose of the study was to examine the relationship between perceived tax determinants and tax compliance behaviours among small and medium-sized enterprises (SMEs) in Nairobi South Kenya, and whether institutional quality moderated the relationship.

# 5.1.1 Perceived tax complexity and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya

The first objective sought to examine the effect of perceived tax complexity on tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya. The findings of the study revealed a positive and significant relationship ( $\beta$ = 0.137,  $\rho$ <0.05).

# 5.1.2 Perceived tax deterrence, sanctions, and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya

The second objective sought to assess the effect of perceived tax deterrence and sanctions on tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya. The findings of the study revealed a positive and significant relationship. The regression results revealed a positive and statistically significant association between the variable ( $\beta$ = 0.161,  $\rho$ <0.05).

# 5.1.3 Perceived psychological costs complexity and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya

The third objective sought to determine the effect of perceived psychological costs tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya. The findings of the study revealed a positive and significant relationship ( $\beta$ = 0.120,  $\rho$ <0.05).

# 5.1.4 Perceived tax law fairness and tax compliance among small and mediumsized enterprises (SMEs) in Nairobi South Kenya

The fourth objective sought to determine the effect of perceived tax on tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya. The findings of the study revealed a positive and significant relationship ( $\beta$ = 0.201,  $\rho$ <0.05).

#### 5.1.5 The moderating effect of institutional quality

The overall objective of the study was to examine whether institutional quality moderated the relationship between perceived tax complexity, perceived tax deterrence and sanction, perceived tax law fairness, perceived psychological costs and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya. The findings of the study revealed institutional quality had a moderating effect ( $\beta$ = 0.157,  $\rho$ <0.05).

The study also examined whether institutional quality moderated the relationship between perceived tax complexity and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya. The findings of the study revealed institutional quality had a moderating effect on the relationship between perceived tax complexity and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya ( $\beta$ = 0.664,  $\rho$ <0.05).

Additionally, the study was to examine whether institutional quality moderated the relationship between perceived tax deterrence and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya. The findings of the study revealed institutional quality had a moderating effect on the relationship between perceived tax deterrence and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya ( $\beta$ = -0.796,  $\rho$ <0.05).

Moreover, the study was to examine whether institutional quality moderated the relationship between perceived psychological costs and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya. The findings of the study revealed institutional quality had a moderating effect on the relationship between perceived psychological costs and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya ( $\beta$ = -0.524,  $\rho$ <0.05).

The final objective of the study was to examine whether institutional quality moderated the relationship between perceived tax law fairness and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya. The findings of the study revealed institutional quality had a moderating effect on the relationship between perceived tax law fairness and tax compliance among small and medium-sized enterprises (SMEs) in Nairobi South Kenya ( $\beta$ = -0.524,  $\rho$ <0.05).

#### **5.2** Conclusion

This study delved into the intricate realm of perceived tax determinants and their association with tax compliance behaviour within the SME landscape of Nairobi South Kenya. To achieve these objectives, the study utilized a questionnaire-based survey,

gathering responses from 325 out of a possible 370 SMEs, resulting in a response rate that indicated active participation. The findings underscored the significance of individual perceptions in shaping tax compliance decisions among these enterprises. Notably, while all the investigated independent variables—perceived tax complexity (PTC), perceived tax law and fairness (PTLF), perceived psychological cost (PPC), perceived tax deterrence and sanctions (PTDS) positively influenced tax compliance. Furthermore, the results revealed that institutional quality (IQ) moderated the relationship between perceived tax determinants and tax compliance.

This study's implications are multifaceted as they enhance the fairness and transparency of tax laws, while also minimizing psychological costs associated with compliance, fostering a more cooperative compliance environment. Furthermore, the findings prompt a call for attention to the role of institutional quality, suggesting that improving the regulatory and enforcement mechanisms helped to create an environment conducive to voluntary compliance.

#### **5.3 Recommendations**

#### 5.3.1 Theoretical recommendations

Fiscal psychology theory offers valuable theoretical recommendations for understanding the perceived determinants of tax compliance among Small and Medium-sized Enterprises (SMEs) in Nairobi South Tax Region, Kenya, with a specific focus on the moderating role of institutional quality. This theory suggests that individuals and businesses make decisions about tax compliance based on a complex interplay of psychological and economic factors. Fiscal psychology theory implies that the quality of institutions can significantly affect SMEs' perceptions of the determinants of tax compliance. When institutions are strong, transparent, and trustworthy, SMEs may be more likely to perceive the tax system as fair, believe that tax revenues will be used for the common good, and consequently, comply with tax obligations more willingly. Conversely, if institutional quality is weak, SMEs may have lower trust in the tax authorities and be less likely to perceive the tax system as just, potentially resulting in reduced tax compliance.

The Theory of Planned Behavior (TPB) provides valuable insights into understanding the perceived determinants of tax compliance among Small and Medium-sized Enterprises (SMEs) in Nairobi South Tax Region, Kenya, with a specific emphasis on the moderating role of institutional quality. According to TPB, individuals' intentions to comply with tax obligations are influenced by three key factors: their attitudes toward compliance, subjective norms, and perceived behavioral control. SMEs in Nairobi South Tax Region may have attitudes shaped by their perceptions of the fairness of the tax system, beliefs about what significant others expect of them in terms of tax compliance, and the extent to which they feel in control of their tax-paying behavior. High-quality institutions can reduce the administrative burden and uncertainties associated with taxation, thus positively impacting SMEs' intentions and actual compliance.

#### 5.3.2 Managerial recommendations

SMEs in this region should invest in tax education and simplification of compliance procedures. Given that perceived tax complexity can influence compliance, SMEs should offer training to their financial staff or hire tax professionals to navigate the intricacies of the tax system. Additionally, fostering transparency and efficient communication with tax authorities can alleviate the perceived complexity by clarifying tax obligations and procedures. Moreover, the government, in collaboration with business associations, should continue efforts to simplify the tax system, further reducing the complexity factor. Institutional quality plays a crucial role as a moderator

here; strong institutions can ensure that tax simplification efforts are effectively implemented and enforced, enhancing their impact.

Regarding perceived tax deterrence sanctions, SMEs should emphasize the importance of compliance through internal controls and monitoring systems. Implementing robust internal audit processes can help identify and rectify potential non-compliance issues before they escalate. Furthermore, SMEs should maintain accurate and welldocumented financial records, which can serve as a defense against potential sanctions. The role of institutions in this context is paramount. A fair and transparent legal system, reinforced by effective regulatory bodies, can enhance the credibility and efficacy of deterrence sanctions. Therefore, managers should advocate for and support improvements in institutional quality, including the efficiency of the judiciary system and the enforcement of tax regulations. Strong institutions can ensure that deterrence sanctions are applied consistently and fairly, serving as a more potent deterrent to noncompliance among SMEs.

#### **5.3.3** Policy recommendations

First, given the positive impact of PTC on tax compliance behaviour, tax authorities and policymakers should focus on initiatives that enhance SMEs' perception of the fairness and legitimacy of the tax system. Clear communication about the utilization of tax revenues, accessible channels for addressing concerns, and transparent processes to help cultivate a sense of trust and cooperation between SMEs and tax authorities.

Second, concerning perceived tax deterrence and sanctions, policymakers should consider refining their approach to enforcement strategies, ensuring that they strike a balance between deterrence and support. Overly punitive measures might not yield the desired outcomes, whereas a combination of targeted penalties, education, and assistance programs could encourage compliance without unduly burdening SMEs.

Third, to leverage the positive influence of perceived tax law fairness, tax policies should be designed with a focus on transparency, equity, and simplicity. Regular revisions and clarifications of tax laws, along with efforts to minimize ambiguity and perceived discrimination, can foster a favourable perception among SMEs. This, in turn, can contribute to greater voluntary compliance.

Fourth, recognizing the significant impact of PPC on tax compliance, policymakers should implement initiatives that ease the psychological burden associated with complying. Offering user-friendly tax filing platforms, simplifying documentation requirements, and providing educational resources can mitigate the stress and perceived effort associated with fulfilling tax obligations.

Fifth, owing to the moderating effect of institutional quality, policymakers should concentrate on enhancing the broader regulatory and institutional environment. Strengthening governance, reducing bureaucratic hurdles, and improving the responsiveness of public services can create an environment conducive to compliance. Moreover, fostering collaboration between tax authorities and other relevant institutions can streamline compliance processes and contribute to a more supportive business ecosystem

#### **5.4 Study Limitations**

The study was not exempt from certain limitations, which should be acknowledged to interpret the findings in context. For instance, the study's reliance on a cross-sectional survey design restricted the establishment of causality between variables. To mitigate this, the researcher could have employed a longitudinal design, allowing for the observation of changes over time and potentially revealing more nuanced relationships. The study also relied on self-reported data, which might be subject to social desirability bias or inaccuracies due to respondent subjectivity. The researcher however explained that the research was being undertaken for academic purposes and anonymity and data protection would be observed. This encouraged the respondents to accurately provide data without fear of any upheaval. Moreover, the sample size of 325 respondents, while reasonable, might not fully represent the diverse range of SMEs in Nairobi South Kenya. Stratified sampling techniques or efforts to increase the sample size could enhance the generalizability of results. Furthermore, the study focused on a specific geographic region, which could limit the generalizability of findings to other contexts.

Although the 325 sample is sufficient to provide the basis for a thorough analysis. Another limitation is that this study has only sampled individual taxpayers. Thus, caution should be taken when generalizing to other categories of taxpayers, such as corporate taxpayers. In relation to this, it would be interesting if future research would include other groups of taxpayers.

The moderation analysis involving institutional quality (IQ) might not have captured the full complexity of this relationship. More detailed assessments of specific institutional factors and their interplay with perceived tax determinants could provide a richer understanding.

## **5.5 Suggestions for Further Research**

Future research endeavours in the field of perceived tax determinants and tax compliance among SMEs in Nairobi South Kenya could pursue several directions to build upon the current study's findings. Similar study could employ longitudinal research designs that would unravel the causal dynamics underlying the relationships identified, offering insights into the evolution of compliance behaviour over time. Cross-cultural investigations that encompass various regions or countries would elucidate the generalizability of the study's conclusions, accounting for diverse sociocultural and economic contexts.

Delving into qualitative methodologies, future researchers could conduct in-depth interviews or focus groups to capture the nuanced perceptions and experiences that drive tax compliance decisions among SMEs. This qualitative lens would provide a deeper understanding of the underlying motives and barriers, potentially revealing overlooked determinants. Furthermore, the exploration of mediation pathways between perceived tax determinants and compliance behaviour would illuminate the intricate mechanisms at play, enhancing the depth of insight into these relationships.

Lastly, investigating the role of specific institutional factors, such as government support programs or regulatory frameworks, could offer a more nuanced understanding of how external influences, would interact with perceived tax determinants to shape compliance behaviour. These future research avenues collectively hold the promise of refining the comprehension of SMEs' tax compliance decisions, aiding policymakers in devising targeted interventions that promote voluntary compliance while accounting for the complex interplay of factors influencing these behaviours.

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# **APPENDICES**

# **Appendix I: Letter of Introduction**

Dear Sir/Madam,

# RE: <u>REQUEST TO COLLECT DATA FOR ACADEMIC RESEARCH</u> <u>PROJECT</u>

My name is Holyzine Ogake Ongeri a Master's Student at the Kenya School of Revenue Administration currently working on my research project titled "*Psychological factors, institutional quality and tax compliance among Small and Medium Scale Enterprises in Nairobi South Tax Region, Kenya.*" Your participation in this study by responding to the attached questionnaire will be appreciated. All your responses will be treated with utmost confidentiality and the data collected will only be used for academic purposes.

Thank you in advance,

Yours faithfully,

# **Appendix II: Questionnaire**

The researcher is seeking to use this questionnaire to collect data on the psychological, institutional and economic factors influencing tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. The questionnaire is divided into a number of short sections that should take only a few moments of your time to complete. Please respond appropriately in the blanks provided. This is an academic exercise and all information collected from respondents will be treated with strict confidentiality.

# **SECTION A: Perceived Determinants**

# **SECTION A: Perceived Tax Complexity**

	Statement	1	2	3	4	5
1	I am capable of efficiently and accurately completing and fulfilling my tax returns as necessary.					
2	The tax payment for my business varies depending on the annual income I earn.					
3	I understand that submitting taxes in a timely manner is important to prevent incurring additional penalties or fines.					
4	It is my opinion that the intricate nature of the tax system frequently hinders businesses from fully adhering to tax payment obligations.					
5	I possess a comprehensive understanding of the taxation laws and regulations in Kenya.					

# **SECTION B: Perceived Tax Deterrence Sanctions**

Kindly indicate your level of agreement/disagreement with the following statements regarding Perceived Tax Deterrence Sanctions influencing tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. Use a scale of 1-5, where: **1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree**.

	Statement	1	2	3	4	5
1	I am confident that tax auditors effectively communicate audit standards and procedures.					
2	I believe the fear of tax audits and potential prosecution serves as a strong motivator for businesses to ensure compliance with tax obligations.					
3	I am convinced that the likelihood of being detected and the severity of penalties play a significant role in shaping my decision whether to comply or not with tax payment requirements.					
4	I am convinced the presence of high tax rates often acts as a deterrent for businesses to fully comply with tax payment obligations.					
5	I believe the considerable cost of tax compliance coupled with narrow profit margins creates a challenging situation that discourages many businesses from fully adhering to tax payment requirements.					

# **SECTION C: Perceived Tax Law Fairness**

Kindly indicate your level of agreement/disagreement with the following statements regarding Perceived Tax Law Fairness influencing tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. Use a scale of 1-5, where: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree.

	Statement	1	2	3	4	5
1	I hold the belief that the income tax system in the country is fair and just.					
2	In my perspective, the distribution of the income tax burden among taxpayers is fair and equitable.					
3	The notion of utilizing deductible allowances in the computation of net taxable income has sparked debates regarding its fairness and equity.					
4	I hold the belief that the Kenya Revenue Authority (KRA) generally ensures a fair distribution of the income tax burden among businesses.					
5	I believe that my business bear a disproportionate burden of income taxes, paying more than what I consider to be a fair share.					

# **SECTION D: Perceived Psychological Cost**

Kindly indicate your level of agreement/disagreement with the following statements regarding Perceived Psychological Cost influencing tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. Use a scale of 1-5, where: 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree.

	Statement	1	2	3	4	5
1	My attitude towards non-compliance with tax payment is influenced by the challenging financial circumstances and family obligations I face.					
2	My perception towards non-compliance with tax payment is shaped by inclination towards high-risk preferences, which leads businesses to resist fulfilling my tax obligations.					
3	I feel the process of filing tax returns incurs additional expenses for my business entity.					
4	Most businesses lack the motivation to adhere to tax regulations due to the perception that the government and tax authorities employ coercive measures to forcefully extract taxes.					
5	I believe most businesses frequently encounter pressure to fulfill tax obligations and submit tax return.					

# **SECTION E: Institutional Quality**

Kindly indicate your level of agreement/disagreement with the following statements regarding institutional quality influencing tax compliance among small and medium scale enterprises in Nairobi South Tax Region, Kenya. Use a scale of 1-5, where: **1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree**.

	Statement	1	2	3	4	5
1	I strongly believe that the level of control of corruption has a direct impact on tax compliance.					
2	I am convinced that the government has been very effective in enforcing tax compliance.					
3	The undeniable influence of sustained political stability in the country has been instrumental in bolstering tax compliance to a considerable extent.					
4	When it comes to tax compliance, my business adheres to the principles of the rule of law.					
5	I hold a strong belief that tax compliance is directly influenced by the level of voice and accountability.					

# **SECTION F: Tax Compliance**

Kindly indicate your level of agreement with the following statements regarding tax Compliance. Where, 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5=Strongly Agree.

	Statement	1	2	3	4	5
1	It is my belief that the tax authority relies on the monthly report they receive from businesses to achieve their monthly tax target.					
2	I am convinced that businesses in this region consistently demonstrates compliance with all tax policies and ensures timely filing of tax returns.					
3	I believe the tax reports submitted by businesses in this region are consistently comprehensive and precise, encompassing all the necessary tax information.					
4	Since the establishment of my business, I have maintained a record of never engaging in tax evasion or any related illegal activities.					
5	I believe my business is contributing to the expanding roster of tax-compliant businesses in this particular area of the city.					

# **Appendix III: Regression output**

Model Summary									
Adjusted R Std. Error of the									
Model	R	R Square	Square	Estimate					
1	.424ª	.180	.169	.12759893448688					
				6					

a. Predictors: (Constant), PPC, PTC, PTL, PTDS

	ANOVA <sup>a</sup>							
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	1.144	4	.286	17.569	.000 <sup>b</sup>		
	Residual	5.226	320	.016				
	Total	6.371	324					

a. Dependent Variable: TC

b. Predictors: (Constant), PPC, PTC, PTL, PTDS

#### **Coefficients**<sup>a</sup>

				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.253	.051		4.967	.000
	PTC	.137	.046	.159	2.978	.003
	PTDS	.161	.048	.177	3.335	.001
	PTLF	.201	.045	.233	4.484	.000
	PPC	.120	.042	.144	2.822	.005

a. Dependent Variable: TC

## Variables Entered/Removed<sup>a</sup>

		Variables	
Model	Variables Entered	Removed	Method
1	IQ, PTL, PPC,		Enter
	PTDS, PTC <sup>b</sup>		

a. Dependent Variable: TC

b. All requested variables entered.

Model Summary					
			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	
1	.459ª	.210	.198	.12537268474084	
				3	

a. Predictors: (Constant), IQ, PTL, PPC, PTDS, PTC

## **Coefficients**<sup>a</sup>

				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.197	.053		3.747	.000
	PTC	.114	.046	.133	2.493	.013
	PTDS	.136	.048	.149	2.829	.005
	PTLF	.200	.044	.232	4.547	.000
	PPC	.102	.042	.123	2.440	.015
	IQ	.157	.044	.183	3.536	.000

a. Dependent Variable: TC

## Variables Entered/Removed<sup>a</sup>

		Variables	
Model	Variables Entered	Removed	Method
1	PTC*IQ, PTC,		Enter
	PPC, PTLF, IQ,		
	PTDS <sup>b</sup>		

a. Dependent Variable: TC

b. All requested variables entered.

## **Model Summary**

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.477ª	.227	.213	.12423785475013
				8

a. Predictors: (Constant), PTC\*IQ, PTC, PPC, PTLF, IQ, PTDS

	ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	1.447	6	.241	15.622	.000 <sup>b</sup>	
	Residual	4.924	318	.015			
	Total	6.371	324				

ANOVA<sup>a</sup>

a. Dependent Variable: TC

b. Predictors: (Constant), PTC\*IQ, PTC, PPC, PTLF, IQ, PTDS

	Coefficients <sup>a</sup>						
				Standardized			
		Unstandardize	d Coefficients	Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	.212	.052		4.055	.000	
	PTC	.131	.046	.152	2.858	.005	
	PTDS	.119	.048	.131	2.487	.013	
	PTLF	.190	.044	.220	4.331	.000	
	PPC	.099	.042	.119	2.372	.018	
	IQ	.140	.045	.162	3.127	.002	
	PTC*IQ	.701	.267	.133	2.622	.009	

a. Dependent Variable: TC

# Variables Entered/Removed<sup>a</sup>

		Variables	
Model	Variables Entered	Removed	Method
1	PTDS*IQ, IQ,		Enter
	PTLF, PPC,		
	PTC*IQ, PTDS,		
	PTC <sup>b</sup>		

a. Dependent Variable: TC

b. All requested variables entered.

Model Summary					
			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	
1	.497 <sup>a</sup>	.247	.230	.12283040189984	
				1	

a. Predictors: (Constant), PTDS\*IQ, IQ, PTLF, PPC, PTC\*IQ, PTDS, PTC

	ANOVA <sup>a</sup>							
Model		Sum of Squares	Df	Mean Square	F	Sig.		
1	Regression	1.573	7	.225	14.892	.000 <sup>b</sup>		
	Residual	4.798	317	.015				
	Total	6.371	324					

a. Dependent Variable: TC

b. Predictors: (Constant), PTDS\*IQ, IQ, PTL, PPC, PTC\*IQ, PTDS, PTC

	Coefficients <sup>a</sup>						
				Standardized			
		Unstandardize	d Coefficients	Coefficients			
Model		В	Std. Error	Beta	Т	Sig.	
1	(Constant)	.214	.052		4.137	.000	
	PTC	.113	.046	.131	2.471	.014	
	PTDS	.134	.048	.147	2.811	.005	
	PTLF	.182	.043	.211	4.188	.000	
	PPC	.103	.041	.124	2.513	.012	
	IQ	.141	.044	.164	3.194	.002	
	PTC*IQ	.568	.268	.108	2.115	.035	
	PTDS*IQ	.715	.247	.145	2.890	.004	

a. Dependent Variable: TC

# Variables Entered/Removed<sup>a</sup>

		Variables	
Model	Variables Entered	Removed	Method
1	PTLF*IQ,		Enter
	PTDS*IQ, IQ,		
	PTLF, PPC,		
	PTC*IQ, PTDS,		
	PTC <sup>b</sup>		

a. Dependent Variable: TC

b. All requested variables entered.

# Variables Entered/Removed<sup>a</sup>

	Variables	Variables	
Model	Entered	Removed	Method

1	PPC*IQ,	Enter
	PTC*IQ, PPC,	
	PTC, PTDS*IQ,	
	PTL, IQ, PTDS <sup>ь</sup>	

a. Dependent Variable: TC

b. All requested variables entered.

# **Model Summary**

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.529ª	.280	.262	.120286453724
				058

a. Predictors: (Constant), PPC\*IQ, PTC\*IQ, PPC, PTC, PTDS\*IQ, PTL, IQ, PTDS

ANOVAª						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.784	8	.223	15.412	.000 <sup>b</sup>
	Residual	4.587	316	.014		
	Total	6.371	324			

a. Dependent Variable: TC

b. Predictors: (Constant), PPC\*IQ, PTC\*IQ, PPC, PTC, PTDS\*IQ, PTL, IQ, PTDS

				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.259	.052		4.970	.000
	PTC	.109	.045	.127	2.445	.015
	PTDS	.114	.047	.125	2.418	.016
	PTL	.168	.043	.194	3.935	.000
	PPC	.100	.040	.120	2.479	.014
	IQ	.117	.044	.135	2.668	.008
	PTC*IQ	.600	.263	.114	2.283	.023
	PTDS*IQ	.691	.242	.140	2.850	.005
	PPC*IQ	896	.235	188	-3.820	.000

## Variables Entered/Removed<sup>a</sup>

			Variables	
Mod	lel	Variables Entered	Removed	Method
1		PPC*IQ,		Enter
		PTC*IQ, PPC,		
		PTC, PTDS*IQ,		
		PTLF, PTLF*IQ,		
		IQ, PTDS <sup>b</sup>		

a. Dependent Variable: TC

b. All requested variables entered.

# **Model Summary**

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.539ª	.291	.270	.11958429035091
				6

a. Predictors: (Constant), PPC\*IQ, PTC\*IQ, PPC, PTC, PTDS\*IQ, PTLF,

PTLF\*IQ, IQ, PTDS

			Coefficients	ı		
				Standardized		
		Unstandardize	d Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.270	.052		5.196	.000
	PTC	.110	.045	.127	2.465	.014
	PTDS	.109	.047	.119	2.322	.021
	PTLF	.167	.042	.193	3.934	.000
	PPC	.088	.040	.106	2.168	.031
	IQ	.117	.043	.136	2.694	.007
	PTC*IQ	.664	.263	.126	2.523	.012
	PTDS*IQ	.694	.241	.141	2.882	.004
	PTLF*IQ	524	.241	107	-2.176	.030
	PPC*IQ	796	.238	167	-3.345	.001

a. Dependent Variable: TC

## Appendix IV: NACOSTI license

ACOS Commission FOR PEPUBLIC OF SCIENCE, TECHNOLOGY & INNOVATION Ref No: 590619 Date of Issue: 27/September/2023 RESEARCH LICENSE This is to Certify that Miss.. HOLYZINE OGAKE ONGERI of Kenya School of Revenue Administration, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: PERCEIVED DETERMINANTS OF TAX COMPLIANCE AMONG SMALL AND MEDIUM SCALE ENTERPRISES IN NAIROBI SOUTH TAX REGION, KENYA. THE MODERATING ROLE OF INSTITUTIONAL QUALITY. for the period ending : 27/September/2024. License No: NACOSTI/P/23/29812 larito 590619 Applicant Identification Number Director General NATIONAL COMMISSION FOR Commision for SCIENCE, TECHNOLOGY & INNOVATION El Commision for Scienc Verification QR Code for Science, Technology and Innovation -NOTE: This is a computer generated License. To verify the authenticity of this document, a far and Scan the QR Code using QR scanner application. See overleaf for conditions

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