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**THE EFFECT OF NON-ECONOMIC TAX PAYER FACTORS ON NON-
COMPLIANCE WITH RENTAL INCOME TAXATION**

HILLARY NALIANYA WAMEYO

**Submitted in partial fulfillment of the requirements for the Master of
Business Administration at Strathmore University**

**Strathmore Business School, Strathmore University
Nairobi, Kenya**

June, 2019

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I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the proposal contains no material previously published or written by another person except where due reference is made in the proposal itself.

Hillary Wameyo Sign..... Date.....

Approval

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ABSTRACT

Tax compliance levels in Kenya have remained low, even after use of sanctions such as penalties; armed monitoring, routine audits, fines and closure of non-compliant taxpayers' businesses. Since the introduction of the rental income tax, the taxes from the sector have not grown proportionately to the growth of the economy despite statistics showing the sector to have recorded high growth. This compelled the government to come up with an incentive for any member of the public who voluntarily gives information leading to collection of additional taxes. This still achieved minimal results. The aim of this study was to determine the effect of prevailing tax payer perception of the tax system on non-compliance with rental income taxation in Kenya, to establish the effect of tax payer understanding of the real estate tax regulation on non-compliance with rental income taxation in Kenya and to assess the effect of social norms on non-compliance with rental income taxation in Kenya. The study adopted cross-sectional descriptive survey in which the target population was the taxpayers who had invested in the real estate sector in Nairobi and earn rental income. Convenience sampling was used to select 68 respondents. Data was collected using questionnaires. The study used both descriptive and inferential statistics to analyse the data. Descriptive statistics was used to show the distribution of the responses. The study used the correlation and regression to show the association and the relationship between the variables. Data was presented in tables and figures. The study established that the perception of the respondents was shaped by the government's inability to provide its citizens with the necessary services such as repair of roads, frequent power outages, water rationing, and poor healthcare services among others. The study further established that the taxpayers' attitude towards paying tax was bad. This had a direct effect on their rental income tax compliance. The study established that most respondents lacked the knowledge of the rental income tax regulation which was blamed on the lack of proper sensitization by the tax authorities. The study found a direct influence of knowledge of rental income tax regulation on the rental income tax compliance. The study also established that culture influenced the behavior of tax paying. However, peer influence had no influence on the behavior of paying tax. The study recommended that government should ensure it delivers services to its citizens so as to change the perception of the taxpayers towards paying of tax. The government and tax authority in particular should intensify its rental income tax sensitization programme with the aim of making people understand the concept of rental income tax and to enhance tax payment compliance. The government needs to educate its people to love their country and emphasize that payment of tax is everyone's obligation and beneficial for the development of the country.

Key words: *Non-compliance, Non-economic factors, Rental Income, Tax*

ACKNOWLEDGEMENT

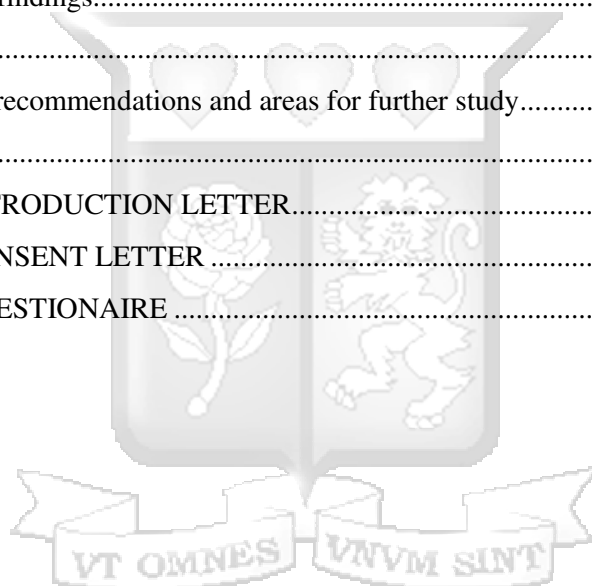
My profound gratitude goes to my supervisor Dr. John Mahasi for his commitment and detailed assessment and guidance of my work. My sincere thanks also goes to my family for their support and encouragement. Finally, I would like to thank God for giving me the ability to write this proposal.



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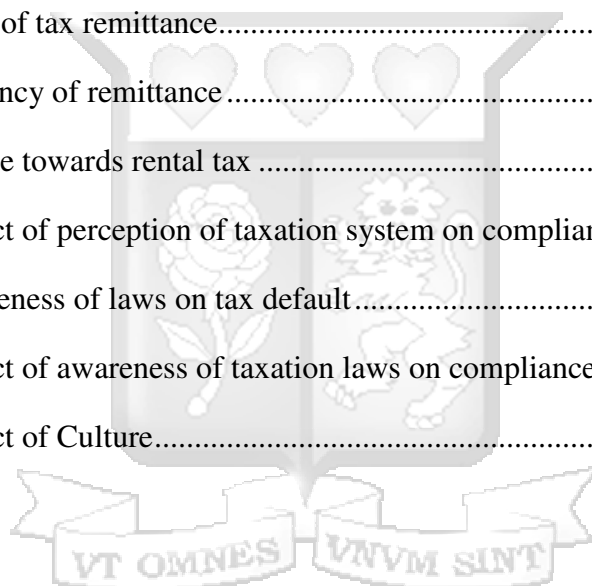
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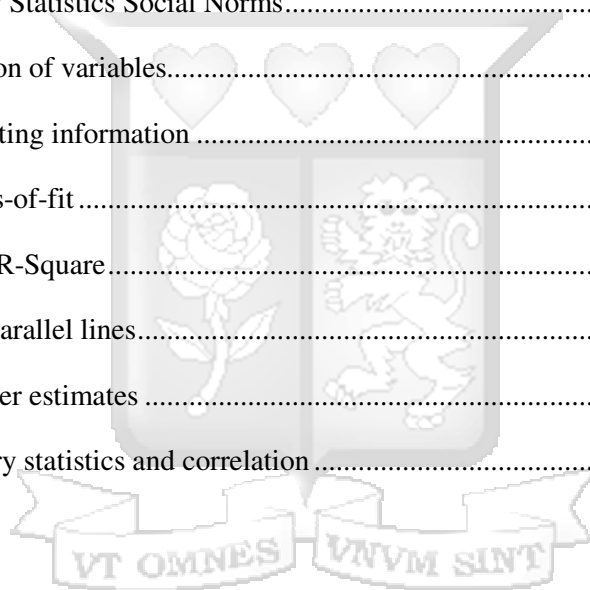
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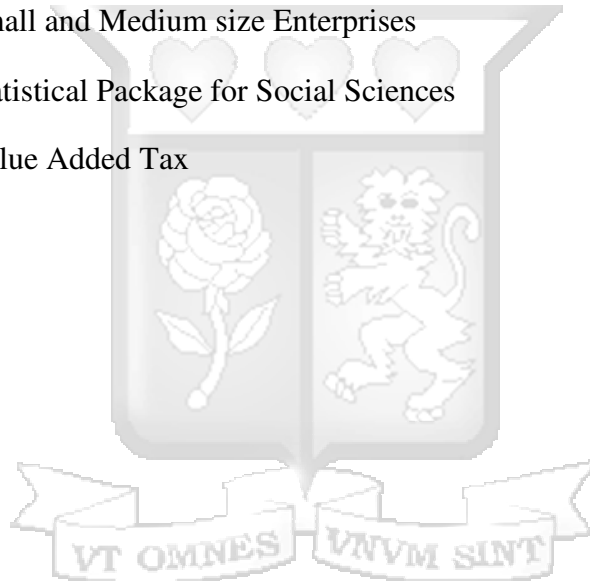
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LIST OF ACRONYMS AND ABBREVIATIONS

AS:	Allingham-Sandmo (AS) Theory
CCN:	City Council of Nairobi
GIZ:	German International Corporation
ITA:	Income Tax Act
KRA:	Kenya Revenue Authority
OECD:	Organization for Economic Co-operation and Development
SAS:	Self-assessment System
SME:	Small and Medium size Enterprises
SPSS:	Statistical Package for Social Sciences
VAT:	Value Added Tax



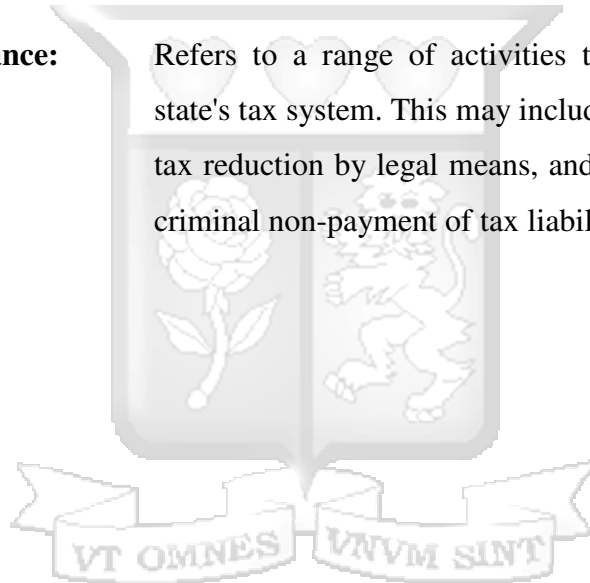
DEFINITION OF OPERATIONAL TERMS

Economic factors: Refers to all the units required in the economic activity of production of goods and services with the effective and efficient utility of resources and fulfill the consumption demand in any market and national economy.

Non-economic factors: Refers to the social and political environment that may not directly affect the level of national income and output.

Rental income: Refers to the amount of money collected by a landlord from a tenant or group of tenants for using a particular space.

Tax non-compliance: Refers to a range of activities that are unfavorable to a state's tax system. This may include tax avoidance, which is tax reduction by legal means, and tax evasion which is the criminal non-payment of tax liabilities.



CHAPTER ONE

INTRODUCTION

The introductory chapter highlights the background of the study, providing the conceptual grounding underpinning the entire study. The chapter contains a brief discussion of key concepts, variables, statements of the problem, the study objectives, and the attendant research questions. Additionally, the chapter discusses significance and scope of the study.

1.1 Background to the study

Taxation remains one of the most important sources of government revenues in both developed and developing economies (Vadde, 2014). The combined consumption of public goods and services like roads, electric power, internet and communication services, water supply, and other infrastructure requires putting some of the income of the society into government hands (Besley & Persson, 2013). Taxation is therefore a provision of policy and it is aimed at influencing the consumption patterns of the people and also regulate the economy through its influence on vital aggregate economic variables such as income, employment, and prices of goods and services (Mawia & Nzomoi, 2013); as such, according to the Allingham-Sandmo (AS) Theory, to meet its obligations, a government must ensure that the policies put in place allow for efficient collection of taxes through deterrence of non-compliance (Allingham & Sandmo, 1972). In doing so, it must sufficiently address all economic and non-economic factors contributing to non-compliance.

The main objective of taxation is to raise income to enable the government to finance development projects that are meant to improve the economy of a given country or the region, particularly so given increased the external pressures on economies as a result of globalization (Garrett & Mitchell, 2001). Government intervention in the provision of such goods and services is therefore, very important and this can be facilitated if the community pays taxes (Ayuba, Saad & Ariffin, 2016). However one of the biggest threats to this method of financing governments is tax avoidance and evasion (Besley & Persson, 2013). Tax non-compliance is a worldwide worry since most countries would like to fund

their recurrent expenditure through mobilization of domestic revenue. Regardless of time and place, the main issue faced by all tax authorities is that it has never been easy to persuade all taxpayers to comply with the regulations of a tax system (Osebe, 2013). However, developing economies are worst affected by this challenge. While Developing countries record relatively higher tax compliance levels (35%), African countries report less than 23% (GIZ, 2010).

Bird (2012), reveals that in most developing countries, more than half of the potential tax revenues tend to remain uncollected. According to Karanja (2014) revenue loss from non-compliance by individual taxpayers, mainly the self-owned businesses were estimated to range from \$93.20 billion to \$95.30 billion. This challenge in collection is attributed to a lack of cause-effect relationship between taxation and development in that the benefits claimed by the government (e.g. by way of improved infrastructure) are rarely evidenced (Garrett & Mitchell, 2001). Budgetary shortfalls and taxation gaps prevail in fiscal plans, resorting to dependence on unsustainable financial sources such as bank loans and multilateral donors. Developing countries therefore need to develop and implement policies that reduce prevailing shortfalls and unhealthy dependence on donor funds. The motivations for compliance are complex and have challenged taxation authorities throughout the world.

In most countries in the world including Kenya, policies pertaining to taxation on income work on a self-assessment basis; this is where taxpayers often need to self-assess and self-report their income and pay taxes “out of their pocket” (Teshale & Mohammedawol, 2013). Since the government anticipates individuals to determine their own tax liabilities and voluntarily pay whatever is due, the government eludes the expensive alternative of determining each taxpayer’s obligation but exploits alternatives to collect it” (Teshale & Mohammedawol, 2013). Nonetheless, one cost of depending so greatly on the voluntary compliance of individual tax payers is that not all individuals voluntarily pay their taxes when due. Bird (2012) approximations is that the overall individual income tax gap, the difference between the actual tax paid voluntarily and timely and what taxpayers ought to pay is less than 50%.

Rental income tax is grouped under direct taxes and is a type of tax which is imposed on the income earned from rental houses (Ayuba, Saad & Ariffin, 2016). It is the tax imposed on the income from rent of buildings. Since any income that is received from renting out a property is by law subject to taxation the owners of the property have to include it in their tax return declarations. This income could be from renting out land or buildings. The business house rental income tax is one of rental income taxes, which is imposed on the house owners who rent out all or part of their house (Jemaiyo & Mutai, 2016). It is charged annually through determining the value by a given rates (Jemaiyo & Mutai, 2016). In Kenya, taxation on rental income by the Kenya Revenue Authority has been in existence since implementation of income tax act of 1973 but no enforcement was in place (Income Tax Act, 1973).

Despite being in existence for more than four decades, the KRA is far from reaching its target with regard to rental income tax. Although there has been significant growth in tax collection by over 300% (2003-2011) the contribution from rental income tax has been very low (KRA, 2013). According to the statistics from the KRA, less than 40 per cent of the landlords and developers had complied with tax requirements (KRA, 2013) despite the Government reinforcing the rental income tax provisions. Majority of landlords have not been complying with the Act due to lack of government mechanisms to identify and bring landlords into the tax net. Most landlords have also been collecting rent by themselves or using unregistered agents making it difficult to trace their income for the purpose of taxation (Kuria, Ngumi & Rugami, 2013).

In the recent past, the Government has introduced measures such as the mapping of all residential areas and establishing a division within the KRA dedicated to collecting rental income tax in order to bring this important sector into the tax bracket. However, such measures have met limited success (Karanja, 2014). The move by the government to tighten the law on taxation on rental income using economic based measures has not achieved the desired results. There was therefore need to investigate the effect of non-economic tax payer factors on non-compliance with rental income taxation.

1.1.1 Factors Influencing Tax Non-Compliance

Tax non-compliance is an area of concern for all government and tax authorities, and it continues to be an important issue that must be addressed. Regardless of time and place, the main issue faced by all tax authorities is that it has never been easy to persuade all taxpayers to comply with the regulations of a tax system. In the tradition of tax compliance research, a number of factors have been considered important for explaining tax compliance both economic and non-economic including the level of actual income, tax rate, tax benefits, tax audit, audit probabilities, fines and penalties. Others are the willingness to pay for public provision, public education, tax morale, tax information among others. According to economic deterrence theory, taxpayer's behavior is influenced by factors such as the tax rate, determining the benefits of evasion, and the probability of detection and penalties for fraud which determine the costs (McKerchar and Evans 2009).

This implies that if detection is likely and penalties are severe, few people will evade taxes. In contrast, under low audit probabilities and low penalties, the expected return to evasion is high. The model then predicts substantial noncompliance. The other school of thought is the non-economic model supported by the fiscal exchange theory and social influence. According to the fiscal exchange theory, the presence of government expenditures may motivate compliance and that governments can increase compliance by providing goods that citizens prefer in a more efficient and accessible manner (Tilly 1992; Moore 2004; 1998). Alm *et al.* (2012) noted that compliance increases with (perceptions of) the availability of public goods and services. Accordingly, the main concern of taxpayers is what they get directly in return for their tax payments in the form of public services (*quid pro quo*). In this perspective, taxation and the provision of public goods and services are interpreted as a contractual relationship between taxpayers and the government (Moore 2004). Individuals may pay taxes because they value the goods provided by the government, recognizing that their payments are necessary both to help finance the goods and services and to get others to contribute (Fjeldstad and Semboja 2001).

According to the social influence model, compliance behavior and attitudes towards the tax system is thought to be affected by the behavior and social norms of an individual's reference group (Snively 1990). It is reasonable to assume that human behavior in the area of taxation is influenced by social interactions much in the same way as other forms of behavior (ibid). Compliance behavior and attitudes towards the tax system may therefore be affected by the behavior of an individual's reference group such as relatives, neighbors and friends. Therefore, if a taxpayer knows many people in groups important to him who evade taxes, his/her commitment to comply will be weaker. On the other hand, social relationships may also help deter individuals from engaging in evasion in fear of the social sanctions imposed once discovered and revealed publicly.

In Kenya, there are many challenges that influence tax compliance (Karanja, 2014). Key is the structure of the economy such as the ratio of the formal versus informal economy. Other impediments include: repeal of tax holidays, high dispersion of tariff rates, poor response of taxpayers to tax reforms, weak capacity to process large volumes of returns and refunds for zero-rated transactions, lack of awareness of the taxes by the citizens, and the perceived complexity of the tax regime (Machogu, 2015; Waithera, 2016). In addition, Kenya's tax system is burdensome in terms of time taken to prepare and submit tax returns (Karingi, Wanjala, Nyamunga, Okello, Pambah, and Nyakang, 2005). The wanton mismanagement of the public funds and corruption has made most Kenyans feel less obliged to pay taxes (Thananga, Wanyoike & Wagoki, 2013). While these factors are a pointer to the tax non-compliance in Kenya, the rental income sector provides a relatively new challenge to the taxpayer, as the problem of non-compliance seems to be far from economic factors. The study therefore seeks to establish the effect of non-economic tax payer factors on non-compliance with rental income taxation in Kenya.

1.1.2 Rental Income in Kenya

In Kenya, rental income currently is taxable under Section 3(2)(a)(iii) of the Income Tax Act (ITA), Cap 470 Laws of Kenya. Landlords are expected to prepare a rent schedule for the leased property evidencing: the number of properties; rent received per property; and gross rent received and all expenses incurred on each property (Income Tax Act,

1976). Such expenses must be wholly and exclusively incurred in the production of the rental income and must be supported. Tax is then computed on a net basis at the rate of 30%. Notwithstanding these requirements, the KRA has not collected the anticipated revenue from the growing real estate sector (Karanja, 2014). The KRA (2012) revealed that less than 40% of the landlords and developers had complied with tax requirements and government went into reinforce the rental income tax provision.

In the recent past, the Government has introduced measures such as the mapping of all residential areas and establishing a division within the KRA dedicated to collecting rental income in order to bring this important sector into the tax bracket (KRA, 2013). However, such measures have met with limited success (Karanja, 2014). In 2012, for example, the KRA issued a public notice to all income earners and related players in the sector including developers and landlords to come forward and voluntarily make their correct declarations and pay the relevant taxes (KRA, 2013). In the Budget speech of 2012/2013, the Finance Minister instructed KRA to intensify revenue collection in this sector (Musau, 2015). There was therefore a need to assess the level of tax consciousness, review factors causing non-compliance and capture the expectations of the taxpaying public with a view to formulating strategies aimed at enhancing tax collection in this sector. In light of the challenge in administration and collection of rental income, the KRA has revisited its process for collecting taxes from rent particularly from the largely untapped low-end segment of the market (KRA, 2013). To this end, the Finance Bill 2015 proposes new measures which the Government hopes will boost the revenues earned from this sector. Under the Finance Bill 2015, landlords earning an annual gross rental income of ten million shillings or less will be required to pay residential rental income tax at a reduced flat rate of 10% on the gross rental income (The Finance Act, 2015).

1.2 Statement of the Problem

Tax non-compliance levels in Kenya have remained high, even after enforcement of sanctions such as penalties, routine audits, fines and closure of non-compliant taxpayers' businesses. The introduction of self-assessment by KRA in 1992 that required tax payers

to register, keep records, file returns and make correct payments taxes voluntarily assessed have yielded minimal results (Karanja, 2014). Since then the taxes from rental income have not grown proportionately to the growth of the economy despite statistics showing the sector to have recorded high growth (KRA, 2013). This compelled the government to come up with an incentive scheme for any member of public who voluntarily gives information leading to collection of additional taxes (KRA, 2011). Employees were also required to file self-assessment returns and give details of their landlords for the purpose enhancing voluntarily compliance (KRA, 2013). This approach to taxation has however not been yielding. A noteworthy observation is that the approach does not take into account non-economic factors that contribute to non-compliance, a factor identified by scholars to be of pivotal importance in the drive for higher taxes (Abrie & Doussy, 2006; Cummings, Martinez-Vazquez, McKee & Torgler, 2006; Ali, Fjeldstad, & Sjursen, 2014; Oberholzer, 2007).

In a study assessing reasons for non-compliance with security provisions in information systems, Hwang, Kim D., Kim T., and Kim.S (2017) observe that security system anxiety, peer non-compliance, and work impediments significantly negatively affect compliance with security regulations. The study thus highlights the pivotal influence of peers in non-compliance in that despite potency of security threats, individuals remain susceptible to the tendency to copy the actions of their peers. Langevoor (2018), in a study of behavioural ethics, further observes that non-compliance is often associated with decreased possibility of punishment in that defaulters often make a positive assessment of their habit as there is a low risk of negative consequence.

Several studies have been done in Kenya to assess tax non-compliance levels. For instance, Onyancha (2015) did a study on the effect of tax reforms on the compliance of Small and Medium size Enterprises in Kisumu where he found that the tax system affected tax compliance by SME's. Another study by Nyaga (2014) looked at the tax non-compliance, enforcement and tax payer services in Kenya among the self-employed individuals. He found that audit and penalties have a positive relationship with tax compliance. A study by Ali, Fjeldstad and Sjursen (2013) was on the factors affecting tax non-compliance attitude in Africa with focus on Kenya, Tanzania, Uganda and South

Africa. The results showed that increase in the perception of difficulty of evading taxes is found to increase the likelihood of tax compliant attitude in Kenya and South Africa. Karanja (2014) looked at the factors affecting voluntary tax compliance on rental income among Nairobi landlords. He found that the taxpayers' attitude towards taxation, perception of misuse by politicians financial obligations and income levels strongly influenced tax-non compliance. Another study was by Waithira (2016) on the determinants of residential rental income tax compliance by property owners in Thika Town. There therefore appears to be a conflict in findings in that whereas enforcement by way of deterring avoidance is deemed effective in Kenya, the approach is also viewed as ineffective in the event that the tax-collecting body is deemed incompetent in effecting national development. This study seeks to lend to the discourse by showing the impact of non-economic factors on non-compliance. This study differs from previous studies in that it focuses specifically on rental-house owners – an area never previously studied as a population. Secondly, this study was on the factors affecting tax compliance. None of the researchers looked at the effect of non-economic factors exclusively hence a knowledge gap. This study, having noted the gaps, therefore seeks to assess the effect of non-economic taxpayer factors on non-compliance with rental income taxation by rental income earners in Kenya's real estate sector.

1.3 Objective of the Study

The general objective of the study was to establish the effect of non-economic taxpayer factors on non-compliance with rental income taxation by rental income earners in Kenya's real estate sector.

1.3.1 Specific Objectives

The following were the specific objectives of the study:

1. To determine the effect of tax payer perception of tax system on non-compliance with rental income taxation in Kenya
2. To establish the effect of tax payer understanding of the real estate tax regulation on non-compliance with rental income taxation in Kenya

3. To assess the effect of social norms on non-compliance with rental income taxation in Kenya

1.4 Research Questions

1. What is the effect of tax payer perception of tax system on non-compliance with rental income taxation in Kenya?
2. What is the effect of tax payer understanding of the real estate tax regulation on non-compliance with rental income taxation in Kenya?
3. How have social norms affected non-compliance with rental income taxation in Kenya?

1.5 Significance of the Study

Rental income tax is a function of existing legal policy framework and as such, this study is of significance to the policy makers comprising the government, parliament and KRA as they would gain understanding of the effect of non-economic tax payer factors on non-compliance with the rental income taxation. They will therefore make informed policies and institute regulations based on the findings of the study aimed at enhancing the performance rental income tax in Kenya.

The study further offers benefit to academicians as it isolates the influence of non-economic factors specifically on non-compliance among rental-home owners in Nairobi. These findings can then be used to assess possible impact of government intervention approaches in dealing with low compliance among rental-home owners in the County. To other researchers the survey is a basis for further research, more so, when seeking to research on enhancing revenue collection through other systems that either supplement or substitute the self-assessment system.

The study will enlighten the tax paying individuals and entities as they will gain understanding as to the non-economic factors affecting rental income tax non-compliance.

1.6 Scope of the Study

The study focused on the effect of the non-economic tax payer factors on tax non-compliance with rental income taxation in the real estate sector in Nairobi County. Despite the various economic measures put in place by the government, the rental income tax revenue has remained low hence the need to investigate the effect of the non-economic factors. The study focused on the effects of tax payers' perception on the tax system, their knowledge of the rental income tax, the effect social norms. The study was conducted between the periods of April and May 2018.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature pertaining to the effect of tax payers' attitude, ignorance of the tax laws, fairness of the tax system and the social norms on tax non-compliance. The chapter further presents the conceptual framework of the study. The chapter is divided into the sections – theoretical framework, empirical review, summary and research gap, conceptual framework, and operationalization of variables. The variables under assessment will thus be defined, discussed and operationalized in this chapter.

2.2 Theoretical Framework

This study will be anchored on two theories, the Social Influence Theory and the Allingham-Sandmo (AS) Theory. The theories have been used to explain compliance behavior of tax payers.

2.2.1 Social Influences Theory

This theory affirms that, tax compliance by citizens is specifically influenced by their individual behavior and social norms. The theory assumes that individual behavior in taxation is basically influenced by social interactions like other forms of behavior (Ali *et al.*, 2013). The theory follows that an individual is most likely to comply with tax requirements if he believes members of his reference groups also comply, just as he is also likely not to comply if he believes that members of his referent group do not comply (Walsh, 2012). The effect of peer-influence on perception is confirmed in multidisciplinary studies; Hwang et al. (2017) for instance observe that among the factors affecting non-compliance in assessment of security systems is the behavior of peers as pertains to security procedures. Langevoort (2018) in a study of behavioral ethics further confirms that the social orientation of individuals lends itself to influence by peers even through the individual may inherent view the resulting actions as malevolent.

Social influence literature has found distinct forms of social influences that affect the impact of social interactions. Various theories of social influence, such as the social power theory (French & Raven, 1959) and the reference group framework (Bearden & Etzel, 1982), identify these types and suggest ways of assessing how and why such influences affect individual behavior. What these distinct theories have broadly in common is the ability to divide social influences into two categories, the informative and the normative (Kaplan, 1989), as Deutsch and Gerard (1955) originally proposed.

Informational influence refers to the acceptance of information received from a social source as evidence about reality and is therefore based more on facts and arguments (Deutsch & Gerard, 1955). Such an influence operates through the process of internalization, which occurs if it serves a problem-solving purpose or is agreeable to the consumer (Kelman, 1961). Normative social influence, in turn, implies conformation with the expectations of a social source (Deutsch & Gerard, 1955) and is responsive to that source's preferences and values (Kaplan, 1989). This influence operates through identification or compliance with the source (Kelman, 1961). Identification is associated with satisfying and self-defining relationships with the social source. Compliance, in turn, occurs because an individual hopes to attract a favorable reaction from the social source (Kelman, 1961).

The social influence theory presupposes that individual behavior in taxation is basically influenced by social interactions like other forms of behavior (Bello & Danjuma, 2014). The theory also presupposes that the fear of social stigmatization as one of the possible deterrent factor to tax compliance (Kirchler, 2007), and that existence of the social norms effect on compliance behavior. The relevance of this theory to the ongoing study therefor is that property owners are likely to be influenced by social groups, family members, friends and other property owners to comply on payment of residential rental income tax.

2.2.2 The Allingham-Sandmo (AS) Theory

The Allingham-Sandmo (AS) theory is also known as the deterrence theory emanated from the seminal work of Allingham and Sandmo (1972). This theory affirms that the behavior of a taxpayer is usually influenced by the factors which determine the benefits and cost of tax evasion (Allingham & Sandmo, 1972). Allingham and Sandmo work extends Gary Becker's work on the economics of crime and compliance to taxation using modern risk theory. Their 1972 publication serves as a cornerstone in this area, leading to a large number of scholarly contributions either commenting or expanding on their essay. Like previous research in crime, Allingham and Sandmo build their analysis around the individual, this time the taxpayer, who becomes the potential criminal.

Their model explores the decision to evade taxes at the moment when the taxpayer is filling in her tax return. The issue of non-compliance is presented as a portfolio allocation problem in which the taxpayer must decide what portion of her income to allocate to various activities, some of which are legal (income declared on the tax return), while others are illegal (income not declared). Specifically, the model examines the way non-compliance decisions relate to how the taxpayer perceives that her economic opportunities and well-being are affected by enforcement measures, such as audit probability and the severity of sanctions, as well as by the Tax Code more generally, including applicable tax rates.

This theory is of importance to the study as it provides insight into the relationship between the benefit and costs resulting from non-compliance as a function of personal gain. Although primarily addressing economic incentives for non-compliance, it provides a rubric to understand the psychological gains – e.g. conformance with one's peers – and how these motivate or mitigate non-compliance.

2.3 Empirical review

The analysis of tax non-compliance, which is only centered on economic factors, limits the decision-making process to the self-indulgent motives (Niesiobedzka, 2014). Many studies have however been conducted to assess the role of non-economic factors

(Alabede, Ariffin, & Idris, 2011). The factors discussed in this study are perception of the taxation system, taxpayer understanding of the taxation system and the influence of social norms. These are subsequently discussed and supported by literature.

2.3.1 Tax Payers Perception of the Tax System

Arbie (2006) in a study focusing on SMEs in South Africa identified the problem of low-tax compliance as function, not of the reluctance to pay taxes but as a results of the multiplicity in taxes and the inconveniencing compliance requirements. The implication of the finding therefore is that government approaches towards curtailing tax evasion should be more centred around streamlining the taxation system and allowing for easy compliance as opposed to issuance of penalties for non-compliance. In relation to the current study, it is evident that the perception of hurdles to payment and rigorous compliance requirements may be the significant factors contributing to non-compliance.

The interaction between the tax collector and the taxpayer plays a key role in influencing perceptions that shape tax behaviour. OECD (2010) warns that the revenue body must be cautious when using controlling and supportive approaches to influence behaviour. If a revenue body's approach is perceived as very controlling, it can cause taxpayers to feel distrusted. Research implies that when taxpayers feel distrusted, they may adopt the same attitude towards the revenue body, and this may reduce compliance. Instead, a revenue body should send a clear signal to the general public that non-compliant behaviour is seen by society as wrong. By suggesting that society views this behaviour as wrong, existing personal norms are reinforced.

The extent which the tax payers perceive a tax system to be fair influences their attitude to pay their taxes (Alm, et al., 2011). Alabede et al. (2011) postulated that, a tax payer whose motive is to demonstrate his beliefs in a system will evaluate the fairness of the systems with objectivity whereas the taxpayer whose attitude is motivated by what benefit to derive from the system may label the tax system fair only if he is benefiting from it. Also, Richardson (2006 cited in Ruhoma, 2015) indicated that perceived fairness of tax system is significantly related to tax non-compliance. In understanding the

influence of attitude and tax compliance, Palil, and Mustapha, (2011) examined two different groups of students from marketing and law disciplines. They suggest that tax attitude is important in determining tax compliance behavior and this tax attitude is influenced by the specific tax knowledge that the students possess.

Their findings are aligned with Braithwaite, Reinhart & Smart (2009) who suggests that attitudes to tax compliance become better with the increase in tax knowledge. Apart from individual tax payers' perception about the fairness of the tax system, its complexity or otherwise influences the compliance of tax payers. The Internal Revenue Act 2000 of Ghana (Act 592) as amended stated in section 1 (i) that "a person who has a chargeable income shall pay subject to this Act, for each year of assessment income tax as calculated in accordance with this Act"(Ghana, 2000). As a civic duty, the expectation is that citizens may comply with the Act, but that is not the case with some citizens (Alabede et al., 2011). Terkper (2007) advanced the reason that tax payers demonstrate various degrees of compliance owing to factors such as lack of understanding of the tax laws; improper book keeping and apathy towards government.

Cummings, Martinez-Vazquez, McKee, and Torgler (2006) provide a laboratory-controlled experiment on factors determining motivation to pay taxes. The authors highlight enforcement of regulations, though a noteworthy approach to increasing taxes, does not serve to explain the rate of compliance. The researchers focus on two countries – South Africa and Zimbabwe – where respondents are sourced from the public and required to provide responses relating to compliance rates and their general attitude toward the government as pertains to taxation. The study indicates that perception of fairness of the taxation system, the perceived fiscal exchange and the overall attitude toward the government served as significant predictors of compliance. The implication therefore is that non-economic factors may be more defining of compliance or non-compliance than economic factors.

The attitude of taxpayers is also examined by Chan et al. (2000 cited in Berhane, 2011), comparing US and Hong Kong taxpayers. Their findings suggest that the attitude of

taxpayers is dependent on the degree of moral reasoning that the taxpayers have. For instance, US taxpayers who have higher moral reasoning indicate a more favorable attitude towards tax compliance, compared to a less favorable attitude of Hong Kong taxpayers who indicate lower moral reasoning.

Musau (2015) assessed factors influencing tax compliance among SMEs in Nairobi County. The study picked a sample of 398 respondents and collected data using questionnaires which was analyzed using the binary probit regression model. The study findings revealed that when an individual's perception about difficulties of evading taxes increases, the high likelihood of being tax compliant among SMEs in Nairobi County. The findings also revealed those individuals who are satisfied with what the government is offering as public goods and service from taxes; have enough tax information; trust government officials in handling their taxes; and have the perception that if tax filing procedures are less complex, tax payers are likely to comply with tax payment.

2.3.2 Tax Payers Understanding of the Tax Laws

From the tax administration viewpoint, researchers have concluded that compliance could be influenced by educating taxpayers of their social responsibilities to pay and thus their intention would be to comply (Mohamad Ali, Mustafa, & Asri, 2007). Palil, and Mustapha (2011) claimed that knowledge about tax law is assumed to be important for preferences and attitudes towards taxation. As a behavior problem, tax compliance depends on the cooperation of the public. There are greater gains in assisting compliant taxpayers meet their fiscal obligations rather than spending more resources pursuing the minority of no- compliers. Palil (2010) study indicated that a successful means of reducing tax evasion is to provide more tax knowledge to as many taxpayers as possible in order to improve their tax ethics and perceptions of fairness and equity.

Assisting tax payers by improving the flow and quality of information or educating them (e.g., TV campaigns) into becoming more responsible citizens has the potential to yield greater revenue than if it were spent on enforcement activities. Taxation knowledge is necessary to increase public awareness especially in areas concerning taxation laws, the

role of tax in national development, and especially to explain how and where the money collected is spent by the government (Mohd, 2010). Attitude towards tax compliance can be improved through the enhancement of taxation knowledge. When a taxpayer has a positive attitude towards tax, this will reduce his or her inclination to evade tax payment (Palil, and Mustapha, 2011). Self-assessment system (SAS) requires taxpayers to understand all the laws and regulations that govern taxation. This is necessary because taxpayers will have to calculate themselves the amount of tax they need to pay and make the payment (Kasipillai, 2003). Taxpayers will readily accept any new system introduced, like the SAS, if they have ample knowledge to understand the system.

Thus, education programs organized by the tax authority or other public education institutions are needed to enhance taxpayers' ability to understand Self-assessment system and to increase their confidence in fulfilling their responsibilities as taxpayers (Mohani, 2009). Greater education is directly linked to a likelihood of compliance. Educated taxpayers may be aware of non-compliance opportunities, but their potentially better understanding of the tax system and their higher level of moral development promotes a more favorable taxpayer attitude and therefore greater compliance (Berhane, 2011). Berhane also suggested that those with a higher education level are more likely to have a higher level of moral development and higher level attitudes toward compliance and thus will tend to comply more. One of the measures to increase voluntary compliance is by assuring that taxpayers have a certain level of qualifications, ability and confidence to exercise their tax responsibility (Mohani, 2009). Taxpayers who have attended a tax course would be expected to have better tax knowledge and tax compliance attitude in comparison with taxpayers who have never attended a tax course (Mohd, 2010). Hite and Hasseldine (2007) highlighted that tax authority need to emphasize teaching tax courses because of impact of education on compliance.

Citizens' general understanding of essential tax policy concepts, such as progressive taxation is inadequate (Kirchler, 2007). Relying on evidence from the US & Britain, Steinmo noted that: those who have carefully studied the public's attitudes, perceptions, knowledge of taxes and tax policy, have generally found that citizens are indeed

remarkably misinformed and/or confused. Tax knowledge is an essential element in a voluntary compliance tax system (Kasipillai, 2009), particularly in determining an accurate tax liability (Palil, 2010). More recent studies undertaken in Malaysia (Loo, 2006; Loo & McKerchar, 2008 Loo & McKerchar, 2009) also suggested tax knowledge to be the most influential factor to determine taxpayers' compliance behavior under the self-assessment system. This is empirically established by several other studies (Kasipillai & Jabbar, 2003; Kirchler & Niemirowski, 2006), which documented that possessing tax knowledge would lead to higher compliance rates.

The influence of knowledge on compliance behaviour has been proven in various research (Ali, Mustafa & Asri, 2007). Harris (1989 cited in Laffer, 2014) divided tax knowledge into two aspects, namely, knowledge through common or formal education received as a matter of course and knowledge specifically directed at possible opportunities to evade tax. In the first case, the level of education received by taxpayers is an important factor that contributes to the general understanding about taxation especially regarding the laws and regulations of taxation (Palil, and Mustapha, 2011). Previous studies have evidenced that general tax knowledge has a very close relationship with taxpayers' ability to understand the laws and regulations of taxation, and their ability to comply with them (Singh, 2003). Given evidence that tax knowledge affects understanding of taxpayers, an obvious next that has been raised by previous researchers (Palil, and Mustapha, 2011; Palil, Hamid & Hanafiah, 2013) is whether enhancement of tax knowledge will increase tax compliance.

Mukabi (2014) explored factors influencing turnover tax compliance in the Kenya Revenue Authority domestic taxes department in Nairobi County. The study used a sample of 56 respondents selected via stratified sampling and data collected using questionnaires. The study findings revealed that the perceptions of taxpayers towards the tax system greatly determine the level of compliance for turnover tax. The findings also found that other factors like cost of compliance and complicated systems result into the low levels of compliance. The study also established that increased tax knowledge had a significant effect on perception of tax system.

2.3.3 Social Norms

The concept of norms in tax compliance, according to Kirchler (2007), is difficult to conceptualize since norms could emanate from individual standards (internally from the taxpayer), socially approved standards (from those who close to the taxpayers), or the societal norms which are from the collective or at the national level and translated into the tax law. Subjective norms or important referent others, as defined by Ajzen (1991 cited in Laffer, 2014), are global social pressure from those who close to a person such as family and friends, who could exert influence on a person's ethical decision making because what is considered as ethical is not universally consistent (Westerman et al., 2007).

A review of ethics studies by Fadjar (2012), which regards subjective norm as an organizational factor, suggests that subjective norm is a new area of study in ethics literature and requires further examination. In their synthesis of past studies in tax compliance by Jackson and Milliron (1986 cited in James, Zaimah & Kamil, 2011), and later in an updated work by Richardson and Sawyer (2001), subjective norms in the form of peer influence are regarded as an important tax compliance factor. Similarly, the Fischer Model used by Fischer et al. (1992 cited in Fadjar 2012) also acknowledges the importance of subjective norms (peer influence) in explaining the tax compliance behavior of taxpayers. In their study on respondents from Germany, Italy and Japan, Westerman et al. (2007) suggest that peers indicate stronger influence in a person's ethical decision making compared to national culture.

It is argued that culture influences both values and ethics. It is also contended that different cultures embrace different values and behavior (Joseph, 2008). Therefore, it is important to understand the influence of culture since cross-border trades are common scenarios in modern business. A number of studies have attempted to examine the influence of culture in the accounting field. In a study by Gendron et al. (2006), it is suggested that professional Chartered Accountants in the French-speaking province of Quebec in Canada, display a higher professional commitment compared to Chartered Accountants in English-speaking provinces in Canada (Alberta, British Columbia, and

Nova Scotia). The finding supports the proposition that culture influences the ethical behavior of professional accountants.

Oberholzer (2017) in a study of taxation in South Africa, highlights a threefold classification of government attitude towards tax payers as – criminalized evaders, evader-forgiving, group-norm leveraging. The first approach seeks to find and criminalize evaders and imparts heavy non-compliance fees whereas the second issues amnesties to encourage willing issuance of taxes. The final approach involves the leveraging of social norms e.g. through shaming evaders so as to maximize compliance. This highlighted classification is of pivotal importance, particularly so in light of the far-reaching effects of tax payers’ attitudes; in the event that taxpayers feel disgruntled as a result of ineffective provision of social amenities, for instance, a government applying a criminalization approach to taxation risks aggravating the situation thereby increasing both non-compliance and risking social unrest.

Karanja (2014) examined factors affecting voluntarily tax compliance in Kenya by landlords in Nairobi County. The study adopted a descriptive research design and a sample of 45 respondents was selected and questionnaire used for data collection. The findings of the study established that attitude and perception that politicians misuse taxes, financial and family obligation had strong positive responses. The study findings also revealed that social norms and respondent’s income levels strongly influenced tax non-compliance level among the Kenyan taxpayers on rental income. The study concluded that attitude factors, high tax rate, unfair tax system, social norms, gender and education level factors are significant and play a great role towards the compliance or non-compliance of Kenyan taxpayers.

2.4 Summary of the Literature Review and Identification of Gaps

The reviewed literature has highlighted the relationship between the independent and the dependent variable. For instance, Palil and Mustapha (2011) found that tax attitude was an important determinant of the tax compliance. Secondly, Terkper (2007) noted that lack of understanding of the tax laws influenced the tax payers’ tax compliance. Also Ruhoma

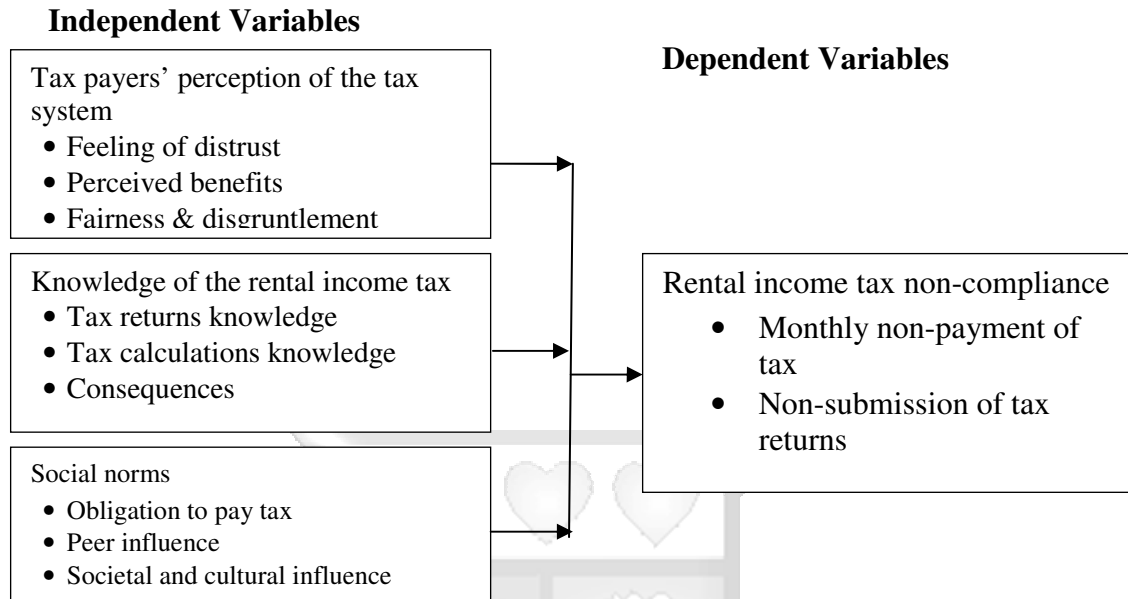
(2015) noted that tax compliance was driven by the psychological tax contract between the citizens and the tax authorities. These studies were however done in the developed countries of Europe and America whose economic setup may not be the same as in the developing countries and Kenya in particular. Secondly, these studies were based on the tax non-compliance in general, and none was done on the rental income tax, hence a knowledge gap.

Locally, studies by Musau (2015) studied the factors influencing tax compliance among Small and Medium Size Enterprises (SMEs). In another study, Karanja (2014) looked at factors affecting voluntary tax compliance on rental income by Nairobi Landlords. The current study is dissimilar from the two in that they were focused on factors affecting tax compliance and not non-compliance. Secondly, both studies looked at the general factors affecting tax compliance both economic and non-economic, the current study specifically looks at non-economic factors affecting tax non-compliance.

2.5 Conceptual Framework

The study seeks to investigate the effect of non-economic tax payer factors on rental income tax non-compliance in Kenya. The independent variables will be non-economic factors while the dependent variable will be residential rental income tax non-compliance. The conceptual framework provided below therefore serves to show the relationship between the variables considered in the study.

Figure 2.1 Conceptual framework.



The conceptual framework highlights the constructs to be assessed for each variable and how they are related.

2.6 Operationalization of variables

Tax-payer's perception will be assessed through questions assessing the individual's attitude towards the collecting body or the government in question (Cummings et al., 2016). Taxpayer's knowledge will be based on the legal requirements with regard to rental-home ownership taxation as stipulated in the law (Finance Act, 2015). Social norms will be operationalized through questions assessing the influence of society on the individual with regard to paying taxes (Ali et al., 2013) whereas the dependent variable, will be assessed through assessing the extent to which individuals remit taxes. All questions will be assessed through five-point Likert Scales. Table 2.1 provides a summary of the manner in which the variables are operationalized.

Table 2.1 Operationalization of variables

	Variable	Definition	Measurement	Source
Dependent Variable	Tax non-compliance	A citizen's general unwillingness to pay requisite taxes	Likert Scale	Musau (2015)
Independent Variables	Perception	The attitude towards payment of taxes as a function fairness of the taxation system	Likert Scale	(Alm, et al., 2011)
	Knowledge	Awareness of the provision of taxation laws in the bid to fulfill one's social responsibility	Likert Scale	(Mohamad Ali, Mustafa, & Asri, 2007)
	Social Norms	Global social pressure from those who close to a person	Likert Scale	(Westerman et al., 2007).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology that was employed in this study in addressing the objectives prior set forth. The chapter therefore contains a discussion on the research design, stipulates the target population and sampling approach, and species the research instruments to be used. Contained herein also is a discussion on validity and reliability measures taken, and the data analysis methods employed in addressing the research objectives. The ethical considerations considered in collecting data are also highlighted.

3.2 Research design and philosophy

A research design constitutes the blue print for the collection, measurement, and analysis of data. Cooper and Schindler (2008) define research design as the plan and structure of investigation conceived so as to obtain answers to research questions. According to Kothari (2004), research design is a master plan that specifies methods and procedures for collecting and analyzing the needed information. According to Chandan, Singh and Khana (2010), a research design is a general strategy for attaining information required to address a research problem. The study adopted a quantitative research design to allow for the making of objective inferences as achieved through use of quantitative inferential analysis techniques. This approach further allowed for the curtailing of subjectivity in inference making – a requirement of a positivism research philosophy (Kothari, 2004). The constructs under study, though abstracted, were measured for magnitude using Likert scales and the relationships emanating assessed through quantitative means.

A positivism philosophy was adopted for the study in that the researcher collected data from the isolated respondents and made objective judgement of the outcome of the evaluation of the forthcoming data (Morehouse & Maykut, 2002). The resulting inferences from the study were therefore considered justifiable as all claims made in the findings are discussed in light of the analysis output and prior literature.

3.3 Population

A population is the entire gathering of elements about which extrapolations are made (Cooper and Schindler, 2011) or is a group of variables that is being studied (Chandan et al., 2011). The population in this study was taxpayers who have invested in the real estate sector in Nairobi and earn rental income. The respondents were landlords to specific properties within Nairobi County. According to the City County of Nairobi, (2016) there were 6,378 privately owned rental houses registered with the CCN; the total number of landlords was thus set at 6,378; respondents were sampled from this population.

3.4 Sample Size and Sampling Techniques

Mukumu (2016) in an exposition on housing income taxation trends in Kenya reports that as of 2016, the tax compliance rate was about 20%. The expected proportion of response is therefore anticipated to be reflective of the compliance estimate in that 80% of the respondents would be non-compliant whereas 20% would be compliant. However, in calculating the sample size for the study, the expected proportion of response was retained at 0.5 to allow for maximum sample size at the chosen confidence level of 90% (Daniel, 1987). The lower confidence level in calculation of the sample size was chosen following difficulty in reaching potential respondents. Hardy and Bryman (2009) justifies the consideration of a lower confidence level in social studies given that the researcher accepts lower confidence levels hence claims lower accuracy of findings.

$$\frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N} \right)}$$

z = z-score = 1.65

p = proportion = 0.5

e = Margin of error (percentage in decimal form) = 0.1

N = population size = 6,378

Source: (Daniel, 1987)

The sample size is therefore calculated as:

$$\frac{(((1.65*1.65) * ((0.8*(0.2)))) / ((0.1*0.1)))}{1} + \frac{(((1.65*1.65) * ((0.8*(0.2))))}{(0.1*0.1*6,378))}$$

$$= 68.0625 / 1.010671449$$

$$\text{Sample size} = 67.34384363$$

The sample size required at a confidence level of 90% is therefore 68 respondents. The study employed convenience sampling approach particularly owing to the low response rate experienced in the pilot study conducted to refine the questionnaires. Etikan, Musa, & Alkassim (2016) highlight that convenience sampling – a non-probability sampling approach – is useful in the event of practical challenges in collection of data. Most notably, for this study, the challenge of non-response from the population – a factor attributed to the tax implications of the study – necessitated convenience sampling. To address the challenge of bias in response associated with convenience sampling (Etikan, Musa, & Alkassim, 2016), a research assistant was consulted to aid in the collection process so as to prevent the bias that would result from single-sourced responses and to expedite the data collection process.

3.5 Research Instrument

Data was collected using questionnaires. Questionnaires were preferred in this study because they can be used to reach a larger number of respondents within a very short time. According to Mugenda and Mugenda (2003), questionnaires are commonly used to

obtain important information about a population under study. Further, questionnaires allow a researcher to compare respondents even individually since the respondents are given the same questions. Questionnaires also ensure the quality of data collected as they are standardized. Since the study is an aggregation of the level of rental income tax non-compliance rather than personal identification, it was considered suitable to employ survey form (Kim *et al.*, 2006).

The questionnaire was divided into two main sections; the first section contained demographic information including the respondents' gender, age and highest level of education. The second section was sub-divided into four sub-sections with each sub-section seeking information aimed at addressing each of the objectives of the study. Part One sought to understand the level of compliance of the tax payer; Part Two gathered data on the tax payer's perception of the rental income tax compliance; Part Three assessed respondents' understanding of the rental income taxation system; Part Four, the final section, assessed the respondents' opinion on social norms and their influence on the rental income tax non-compliance. A 5-point Likert scale was used to indicate the extent of agreement or disagreement on each statement. The key used was as follows: 1 to 5, where 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and, 5 = strongly agree.

3.6 Validity of Research Instruments

A research instrument is said to be valid if it measures what it is supposed to measure (Borg & Gall, 2003). Content validity was used to test the validity of data. According to Borg and Gall (2003), content validity refers to the extent to which a measure represents all facets of a given social construct. A pilot study was run with five respondents who were personal contacts of the researcher; this was done to judge the understandability of the questions used. Feedback from the pilot study indicated that although the questions were well understood to address the variables they addressed, there was a need for more succinctly framed questions – this concern was addressed in the final questionnaire. The draft questionnaire was given to a selected person knowledgeable in research to ascertain the items suitability in obtaining information according to research objectives of the study. The supervisor was the selected expert for purposes of content validation. This

process of discussion and revision assisted in illuminating any potential problems of the research instrument and provide a basis for design or structural changes.

3.7 Reliability of Research Instruments

Reliability of instruments concerns the degree to which a particular instrument gives similar results over a number of repeated trials (Mugenda & Mugenda, 2003). The researcher pre-tested each set of the questionnaires on a pilot sample of landlords who did not form part of the actual study. Pre-testing was done in order to refine and ascertain the reliability of the research instruments and to inform on response rate. The reliability of the scales used was tested using Cronbach's Alpha coefficient. Cronbach's Alpha is a measure of internal consistency – how closely related a set of items are as a group. The findings of the reliability test are presented in Table 3.1. The study presented a Cronbach Alpha coefficient of 0.812 which is higher than the recommended 0.7 (Mugenda & Mugenda, 2003). The instruments were therefore deemed reliable.

Table 3.1: Cronbach's Alpha Reliability Test

	Cronbach's Alpha	No of Items
Rental income tax compliance	0.780	7
Attitude of tax payers	0.890	6
Tax payers' knowledge	0.857	5
Social norms	0.721	7
Overall = 0.812		

3.8 Data Analysis

The data collected was edited for accuracy, consistency and completeness and then coded before entering into the computer software Statistical Package for Social Sciences (SPSS) for analysis. Both descriptive analysis and inferential statistics were employed to analyse the data in the present research. The descriptive approach was used to portray the characteristics of a variable (Chua, 2013). All three objectives of the study were assessed

through descriptive and inferential approaches. The three objectives were - To determine the effect of tax payer perception of tax system on non-compliance with rental income taxation in Kenya; To establish the effect of tax payer understanding of the real estate tax regulation in Kenya; and to assess the effect of social norms on non-compliance with rental income taxation in Kenya. The researcher could not solely rely on descriptive statistics for generalization and inference-making on the population under study hence the need for inferential statistics.

Two inferential statistics approaches were utilized to address the objectives; these were Spearman's rank correlation and ordinal logistic regression. Spearman's correlation coefficient rho was chosen over the Pearson coefficient owing to the ordinal data collected in the study; Myer's and Sirois (2006) observe that the former is preferable for analysis of ordinal data as it assesses monotonic rather than linear relationships between data – a fitting characteristic for data collected through Likert scales. The ordinal logistic regression approach (Log odds) was likewise chosen over the traditional linear correlation analysis approach given the ordinal nature of the data. Modug and Anyaduba, (2014) apply the approach in assessing tax compliance in Nigeria. The extent of non-compliance was measured on a five-point Likert scale hence indicating that an ordinal regression was best fitting for the analysis. Given that the research approach was centered on the non-parametric spearman's correlation, it was not necessary to prove the normality of the underlying data as it was likely unattainable for ordinal data.

The ordinal logistic regression further does not adhere to the prerequisites for standard logistic regression - particularly regarding linearity, normality, homoscedasticity, and measurement level- therefore no pre-test were done on the data (Harrel, 2015). Modell fitting and Goodness of Fit test were however conducted on the generated regression models so as to assess the interpretability of the resulting associations; these are presented in the subsequent section with the discussion of the outlined objectives for with the specific analysis approaches were assigned. Whereas the linear regression approach estimates relationships between the variables based on corresponding coefficients, logistic ordinal regression provides log odds estimators, based on a reference group, as

indicators of the relationship between the dependent and independent variables in question (Harrell, 2015). The ordinal logistic regression model is presented below:

$$Y_i = p_i + \text{Error}$$

$$\text{Log} [P_i/(1-p_i)] = a_i + b_1x_1 + b_2x_2 + b_3x_3 + \text{Error}$$

P_i – Probability of outcome

A_1 = intercept of outcomes

e.g. P_1 = (small extent)

P_2 = (small extent and moderate)

b_1 = Taxpayer perception coefficient

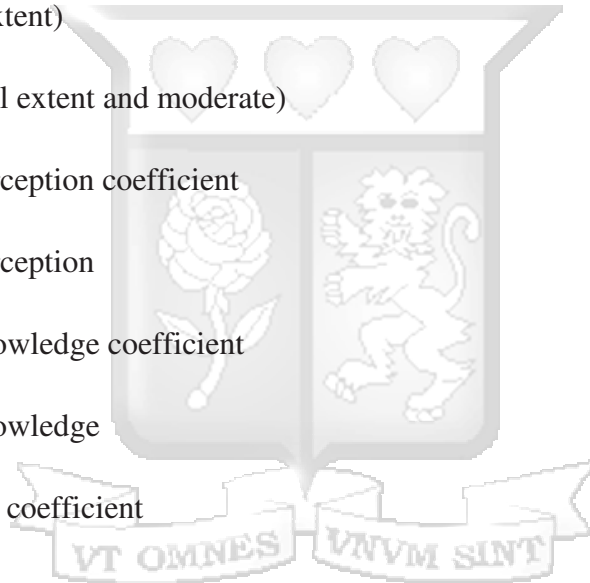
x_1 = Taxpayer perception

b_2 = Taxpayer knowledge coefficient

x_2 = Taxpayer knowledge

b_3 = Social norms coefficient

x_3 = Social norms



The probability (p_i) for each outcome is contrasted with that of the reference outcome to provide the log odds ratio used as the estimator value.

3.9 Ethical Issues in Consideration

Consent to interview participants and collect data was sought from the selected respondents. Furthermore, an introductory purpose letter accompanied the questionnaire. All subjects chosen for the study were given a letter of informed consent, which was

signed for participation in the study (appendix 2). The signed and returned letter of consent signifies the subject's agreement to participate in the study. Each participating subject was kept anonymous to the public, and all information retrieved from the subjects was kept confidential.



CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1 Introduction

This chapter provides results from the analysis of data collected in the bid to address the objectives of the study. This chapter details the profiles of the respondents involved in the study and presents summary responses of the questions assessing respondents' non-compliance with tax regulations, perceptions of the taxation system, understanding of the same, and perceptions of the influence of social norms on tax non-compliance.

Spearman's rank correlation analysis and ordinal logistic regression were utilized to present an inferential understanding of the relationship between the dependent variable – tax non-compliance – and the independent variables – perception of the taxation system, understanding of the taxation system, and social norms. The findings resulting from the analyses are depicted herein.

4.2 Respondents' Profile

This section provides insight into the characteristics of the respondents involved in the study. In particular, the section sheds light on the respondents' gender profile, age, education, duration as rental-home owners, and tax filing status.

4.2.1 Response rate

A total of 58 responses were collected putting the response rate at 85%. The high levels of non-response were attributed to the fear of tax implications of the study given that respondents were required to indicate average earnings from their rented-out homes. It was therefore surmised that there was a general sense of possible negative consequences following response to the questionnaire – a factor that both limited responses and increased the possibility of falsified responses. All respondents were however informed of the confidential nature of the study. Additionally, the houses under consideration were predominantly owned by the upper-middle class – a population typically inaccessible for data collection.

4.2.2 Gender of respondents

The summary of responses, as depicted in figure 4.1, indicated that majority respondents were female (32). This female-majority proportion was also observed in Karanja's (2014) study. The implication of the finding, therefore, is that the views inferred from the collected data were more representative of the female than the male perspective. The male population was however sufficiently represented with a proportion of 44.8% (26 respondents). According to Karanja (2014) gender presents as a significant shaping factor in determining tax non-compliance hence the influence of gender in this study is tethered to the female perspective.

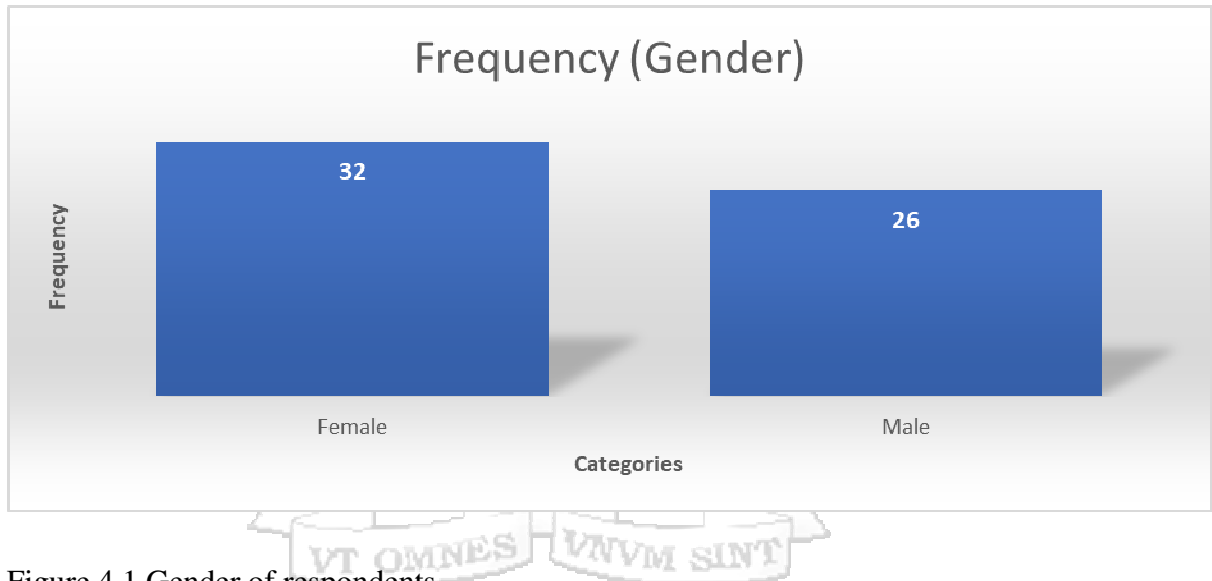


Figure 4.1 Gender of respondents

4.2.3 Age of respondents

Most respondents (37) indicated that they were in the age bracket 40-49 (figure 4.2). The second category, by frequency was that of persons between the age of 20 and 39 with the least populous category being that of persons over the age of 50.

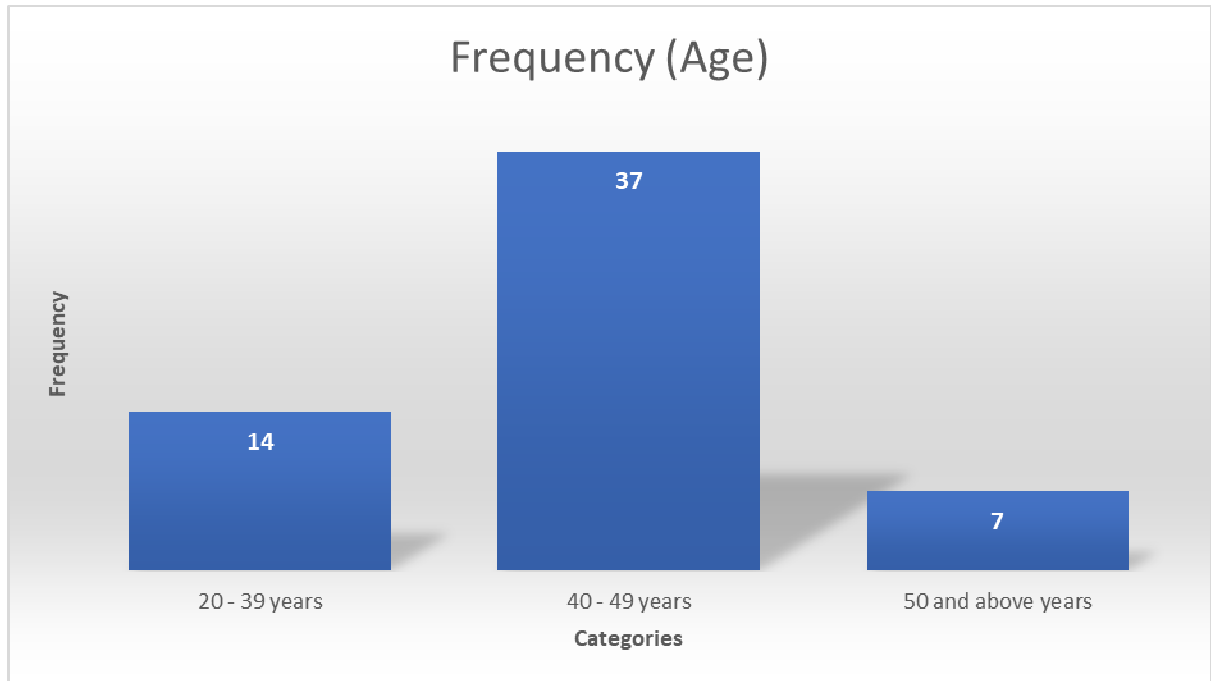


Figure 4.2 Age of respondents

The implication of this finding is that the views and inferences resulting from this research are mainly representative of middle-aged respondents and therefore shed light on the behavior of this age group with regard to tax non-compliance. As with gender of respondents, the findings on age were consistent with those posited by Karanja (2014) who reported the middle-aged group to be the most represented demographic sub-group.

4.2.4 Education of respondents

Most respondents in the study were Master's-degree-holders; the number of respondents per category are highlighted in figure 4.3. The finding therefore point to an association between higher education and rental house ownership. The influence of education as a non-economic factor shaping tax-compliance behavior is well established in literature – Berhane (2011) posits that those with a higher level of education are more likely to adhere to taxation requirements whereas Mohani (2009) points to educational qualification as a factor enhancing tax compliance. The role of education is however viewed as going beyond the personal education of the individual in that, as observed by

Hite and Hasseldine (2007) and (Alabede, Ariffin, & Idris, 2011), the government should take on a proactive role in ensuring that citizens are educated on tax legislation.

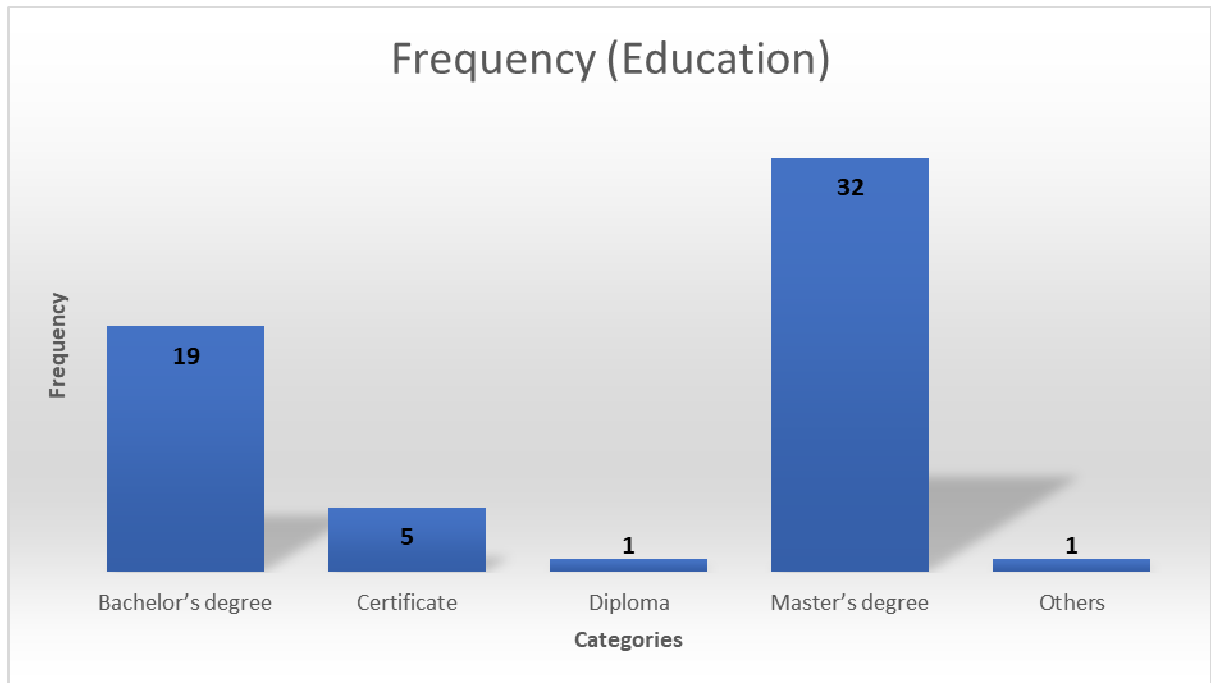


Figure 4.3 Education of respondents

4.2.5 Years of rental earnings

Two categories presented as the modal response groups – 3-5 years and 6-8 years – each with 16 respondents. Figure 4.4 provides a summary of all respondents per group. The results therefore indicate that majority of the respondents had been land owners for less than 10 years. This finding is in keeping with the observation that most individuals were middle-aged (figure 4.2). The implication therefore is that the responses posited in the study reflect the views of middle-aged rental-home owners. Findings from this study, with regard to respondents' profiles, are in keeping with those put forward by Karanja (2014) hence pointing to a dominance of middle-aged rental-home owners in Nairobi County.

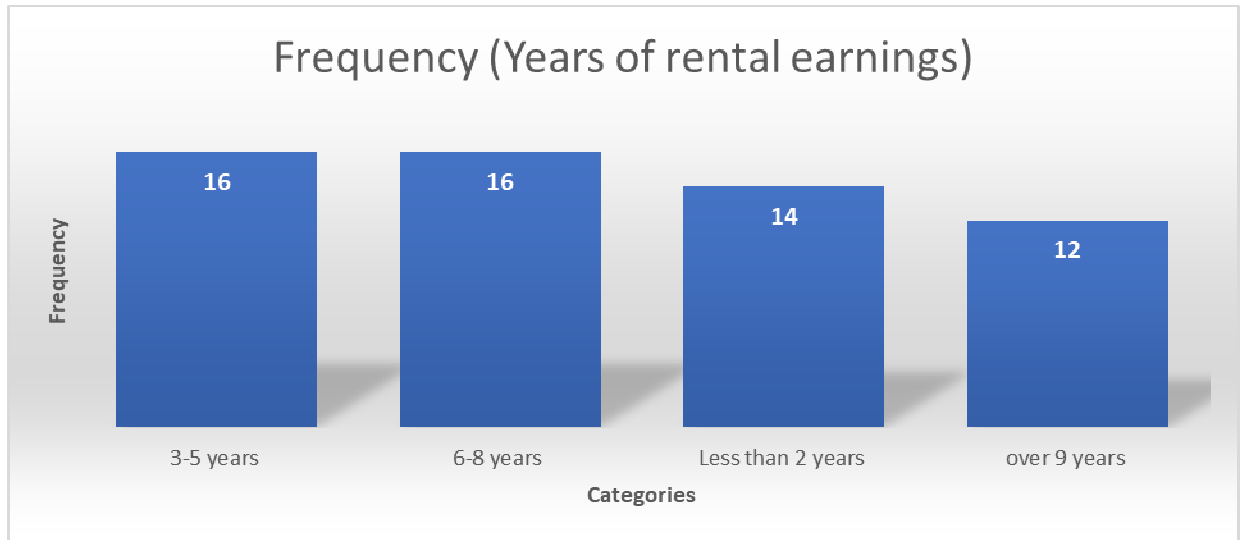


Figure 4.4 Years of rental earnings.

4.2.6 Filing of returns

Respondents were required to indicate their tax compliance behavior by answering 'Yes' or 'No' to the question – do you file your returns? Majority respondents (38) indicated that they did file their returns whereas 20 indicated that they did not (figure 4.5). All respondents were, prior to participation in the study, informed of the confidential nature of the study hence responses indicating compliance were viewed not to have been motivated by legal implications of non-compliance. African countries are reported to show a much lower tax-adherence percentage (23%) in comparison to that observed for other developing countries (35%) (GIZ, 2010). This finding was however disconfirmed in this study as the compliance rate was 68%.

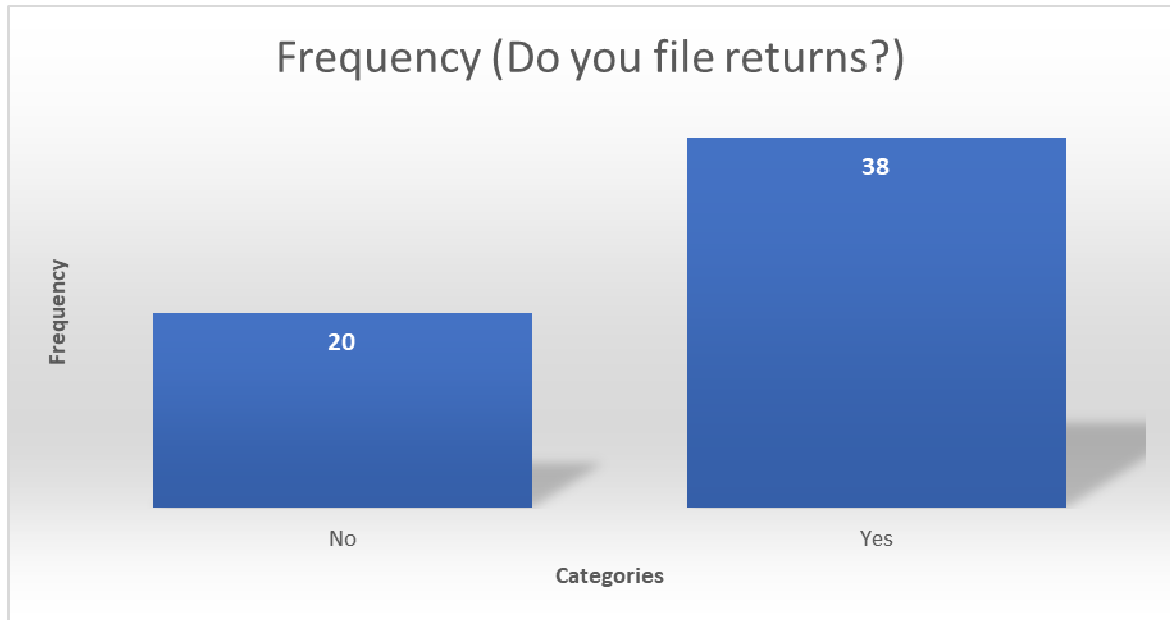


Figure 4.5 Adherence to tax filing requirements

4.2.7 Gross rental income

The mean gross rental income was KES 85,148 with the income distribution skewed to the left as most respondents reported figures lower than the mean (figure 4.6 and table 4.1). The highest recorded figure was KES 437,000 whereas the least was 20,000. The implication of the finding was that the spread of earnings was wide thereby pointing to a broad representation of property owners in the sample; the findings are therefore representative of a wide spectrum of rental houses although the results are biased towards small-rental-home owners.

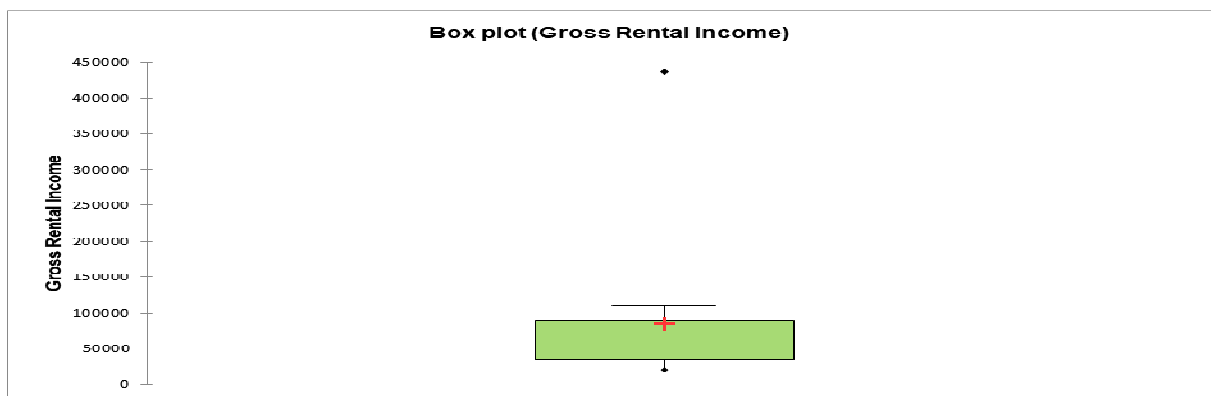


Figure 4.6 Gross rental income boxplot

Source: Research data

Table 4.1 Gross Rental Income

Statistic	Gross Rental Income
Nbr. of observations	58
Minimum	20000.000
Maximum	437000.000
Median	50000.000
Mean	85148.148
Standard deviation (n-1)	100770.505

Source: Research data

4.2.8 Summary of respondents' profile

A compilation of the demographic information collected from the respondents was summarised in table form to provide cross-sectional insight into the respondents of the study. As depicted in table 4.2 and as discussed in the foregoing sections, most respondents were female, most were middle aged, and most had high academic qualifications. Furthermore, most had owned their homes for less than 10 years and contrary to expectations, most were tax compliant – 68% as compared to the anticipated 23% - (Giz, 2010).

Table 4.2 Summary of respondents' profile

Variable\Statistic	Nbr. of observations	Mode	Mode frequency	Categories	Frequency per category	Rel. frequency per category (%)
Gender	58	Female	32	Female	32.000	55.172
				Male	26.000	44.828
Age	58	40 - 49 years	37	20 - 39 years	14.000	24.138
				40 - 49 years	37.000	63.793
				50 and	7.000	12.069

				above years		
Education	58	Master's degree	32	Bachelor's degree	19.000	32.759
				Certificate	5.000	8.621
				Diploma	1.000	1.724
				Master's degree	32.000	55.172
				Others	1.000	1.724
Years of rental earnings	58	6-8 years	16	3-5 years	16.000	27.586
				6-8 years	16.000	27.586
				Less than 2 years	14.000	24.138
				over 9 years	12.000	20.690
Do you file returns?	58	Yes	38	No	20.000	34.483
				Yes	38.000	65.517

Source: Research data

4.3 Descriptive statistics - Tax non-compliance and factors affecting non-compliance

This section presents descriptive statistics on the tax non-compliance behavior of the respondents and the factors that contribute to tax non-compliance. The first sub-section focuses on tax non-compliance as was assessed through different indicators whereas the subsequent sub-sections each focus on the factors – perception of taxation, understanding of taxation laws, and influence of social norms, respectively.

4.3.1 Tax non-compliance

To maintain congruency in assessment of perceptions and opinions, the Likert scale was ordered 1 to 5 with one indicating strongly disagree and five indicating strongly agree. In analysis, the ratings were negated to measure tax non-compliance in that ratings of 1 indicated a strong agreement with sentiments of non-compliance. Table 4.3 provides a summary of the responses for each of the questions assessed. From the summary it emerged that there were extreme views on the various aspects. For the prompts ‘I am aware of the rental income tax policy’ and ‘I file the right amount of tax liability from

rental income’ respondents generally indicated that they were compliant. This finding is in keeping with that indicating a 68% compliance rate among the sample; a percentage that compares favourably with the anticipated 23% that typifies compliance in African countries (Giz, 2010). Responses to all other questions – ‘My rental income tax returns are filed on time’, ‘The rental income tax is fair’, and ‘I am not happy with the way the rental income tax is computed’ – showed a tendency towards non-compliance. This therefore indicates that although the respondents were knowledgeable of the laws, they did not put in place approaches to ensure compliance with the existing laws. This finding therefore confirms Osebe’s (2013) observation that in general, despite government efforts, it is difficult to convince the populace to willingly participate in tax remittance.

Table 4.3 Agreement with statements on rental income

Key

1=Strongly disagree, 2= Disagree, 3 = Neutral, 4 = Agree 5 = Strongly agree

	Variable\Statistic	Nbr. of observations	Mode	Mode frequency	Categories	Frequency per category	Rel. frequency per category (%)
	I am aware of the rental income tax policy	58	1	30	5	11.000	18.966
					3	7.000	12.069
					2	10.000	17.241
					1	30.000	51.724
	My rental income tax returns are filed on time	58	5	19	5	19.000	32.759
					4	9.000	15.517
					3	1.000	1.724
					2	14.000	24.138
					1	15.000	25.862
	I file the right amount of tax liability from rental income	58	1	24	5	19.000	32.759

					4	9.000	15.517
					2	6.000	10.345
					1	24.000	41.379
	The rental income tax is fair	58	5	35	5	35.000	60.345
					4	1.000	1.724
					3	11.000	18.966
					2	8.000	13.793
					1	3.000	5.172
	Am not happy with the way the rental income tax is computed	58	5	25	5	25.000	43.103
					4	5.000	8.621
					3	7.000	12.069
					2	5.000	8.621
					1	16.000	27.586

Further assessment of remittance behaviour was assessed through two questions – one assessing the extent of remittance and the other the regularity of remittance. The findings on both questions are depicted in figure 4.7 and 4.8 respectively. The findings indicate a polarity in opinion in that 14 respondents indicated that they remitted their taxes to a very large extent whereas 25 respondents did not remit taxes. The finding therefor points to mixed motivations in remittance behavior. This divergence in opinion could be attributed to various factors among which are peer group influence (Walsh, 2012), or lack of enforcement of tax penalties (Mohd, 2010; Sandmo, 2005). This finding therefore serves to justify the researcher's decision to investigate the relationship between the tax non-compliance and the three factors – perception of taxation, understanding of tax laws, and influence of social factors – through inferential statistics.; analyses on the same are addressed in section 4.4 which focuses on inferential statistics.

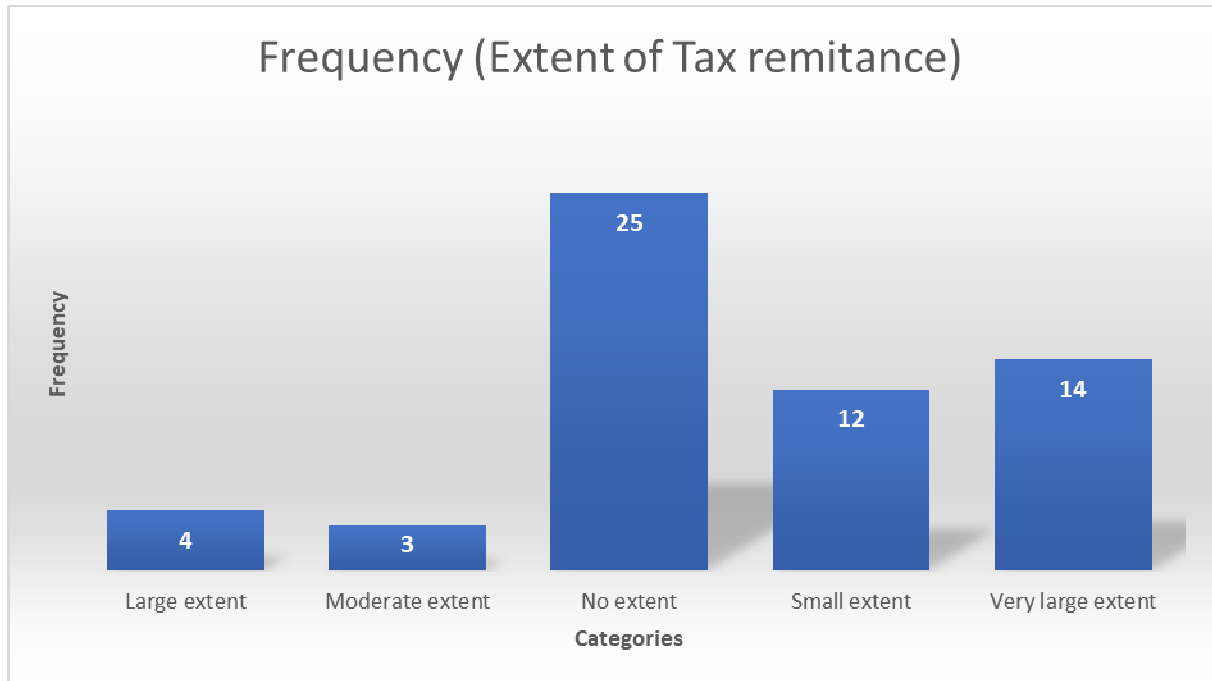


Figure 4.7 Extent of tax remittance

Results assessing the regularity of remittance differed from those expected in that the 68% compliance rate observed in section 4.2.5 was contradicted by the finding indicating that 55% remitted payments to a small or moderate extent. This dip in compliance points to inconsistency in responses between the two questions. This may be an indication of the influence of the sensitive nature of the data in that respondents, despite express assurance of the confidentiality of the data, may have been worried about the legal implications of their responses.

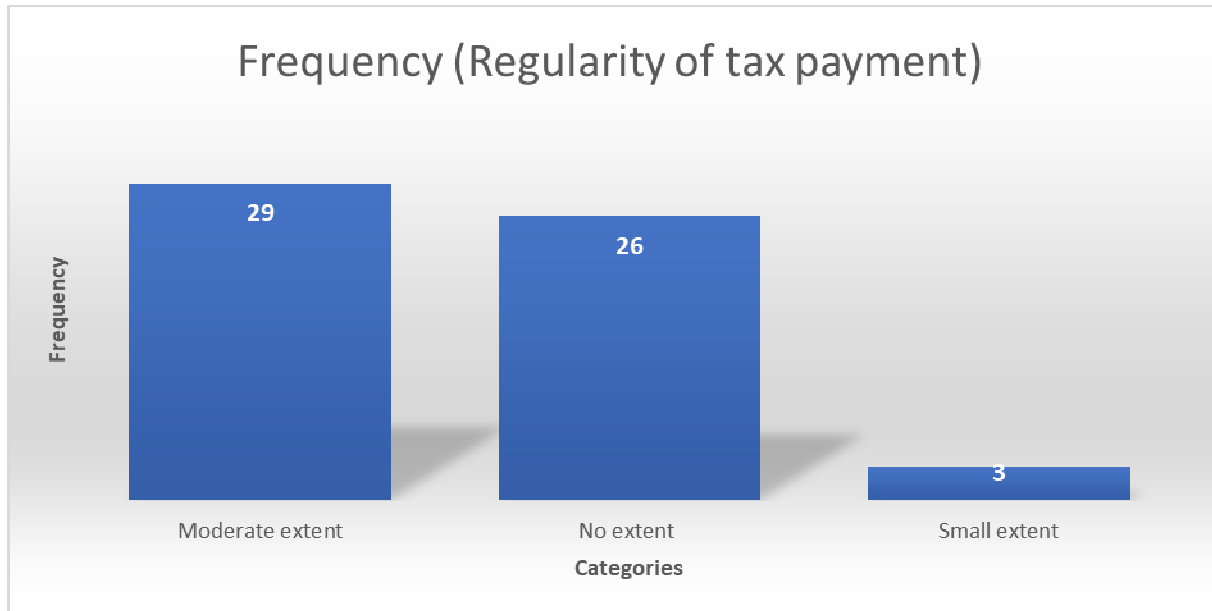


Figure 4.8 Frequency of remittance

4.3.2 Perception of the taxation system

This section provides a summary of the descriptive analysis of questions assessing respondents' opinions on their attitude and perception of rental tax. The first question queried the respondents' on their general attitude to rental tax. The results are depicted, in summary, in figure 4.9. The findings indicate that the general attitude towards tax was poor (20 respondents) or very poor (18 respondents). Palil and Mustapha (2011) observe that a negative attitude towards taxation serves as a motivator of non-compliance with tax-remittance requirements. This view is further supported by the Organisation for Economic Co-operation and Development (2010). The findings in this paper in light of those posited by the aforementioned authors therefore point to a possible positive relationship between tax non-compliance and perception of the taxation system; this association is investigated through inferential statistics in sub-section 4.4.

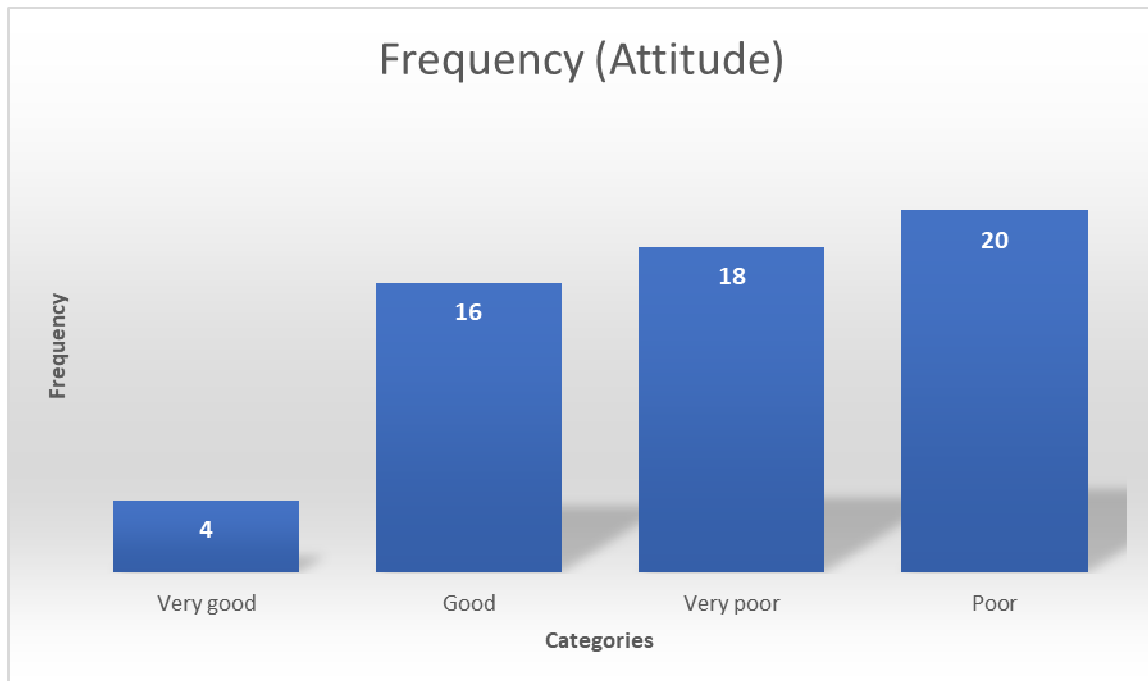


Figure 4.9 Attitude towards rental tax

The general responses to questions put forward to assess the general perception of taxation, indicated an extreme in opinion. The modal response to four of the questions – ‘KRA implements the rental income taxation fairly’, ‘Mutual trust between KRA and landlords’, and ‘Government put taxpayers’ money into good use’ – was 1 indicating the respondents strongly disagreed with the views put forward. Furthermore, the responses to four of the questions – ‘The KRA exercises excessive control on taxation’, ‘Government does not help to lay infrastructure hence no need to pay rental income tax’, ‘Kenyan tax laws are punitive to hardworking citizens’ and ‘Tax system only targets poor and the middle-income earners’ – indicated ratings of 1. The general consensus, therefore, was that there was a negative perception of the taxation system. Braithwaite, Reinhart & Smart (2009) point to negative perception of taxation systems, along with complexity of the same, as major deterrents to tax compliance. The implication of this finding is that a positive association exists between negative perception of taxation and non-compliance. This possible association, indicated by findings in this section, is tested in sub-section 4.4.

Table 4.4 Perception of rental income

Key

1=Strongly disagree, 2= Disagree, 3 = Neutral, 4 = Agree 5 = Strongly agree

	Variable\Statistic	Nbr. of observations	Mode	Mode frequency	Categories	Frequency per category	Rel. frequency per category (%)
	The KRA implements the rental income taxation fairly	58	1	20	1	20	34.483
					2	18	31.034
					3	16	27.586
					4	4	6.897
	The KRA exercising excessive control on taxation	58	5	29	1	4	6.897
					2	2	3.448
					3	14	24.138
					4	9	15.517
					5	29	50.000
	Mutual trust between KRA and landlords	58	1	35	1	35	60.345
					2	16	27.586
					3	7	12.069
	Government put taxpayers money into good use	58	1	56	1	56	96.552
					3	2	3.448
	Government does not help to lay infrastructure hence no need to pay rental income tax	58	5	24	1	15	25.862
					2	9	15.517
					4	10	17.241

					5	24	41.379
	Kenyan tax laws are punitive to hardworking citizens	58	5	43	1	2	3.448
					2	7	12.069
					3	2	3.448
					4	4	6.897
					5	43	74.138
	Tax system only targets poor and the middle	58	5	29	1	11	18.966
					3	16	27.586
					4	2	3.448
					5	29	50.000

In assessing the impact of perception of compliance with tax regulation, it emerged that most respondents viewed the factor as affecting compliance to a large or very large extent (40 respondents). This finding is therefore in keeping with that by Palil (2010) who posits that ensuring fairness of the taxation system is an important way to ensure improved tax compliance. Figure 4.10 provides a summary of response on perceived impact of the perception of the taxation system on compliance.

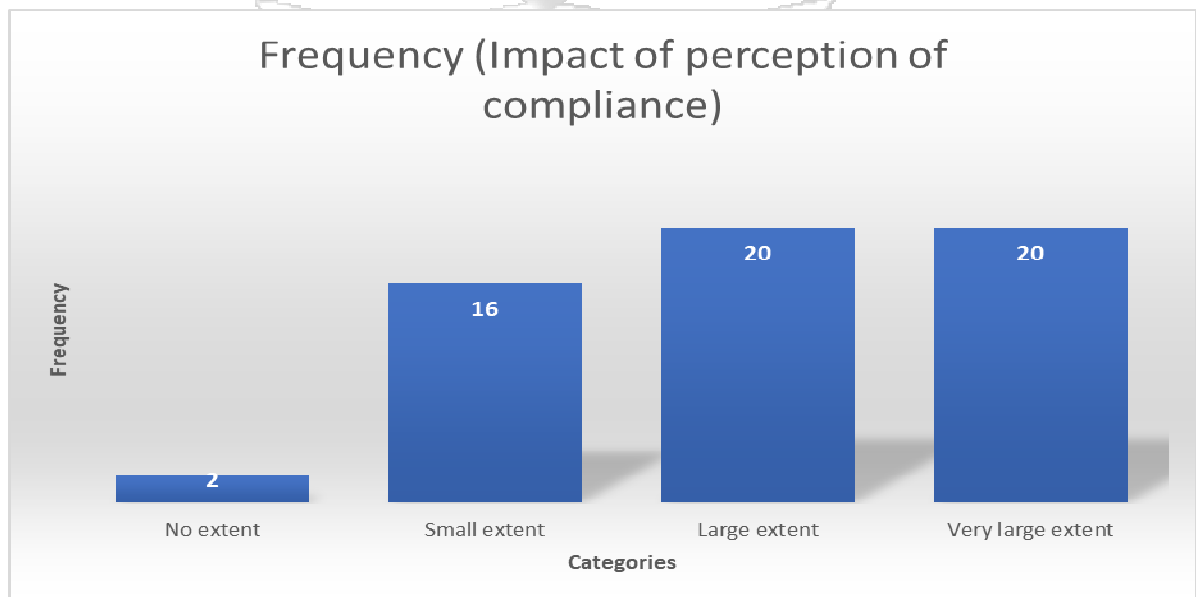


Figure 4.10 Impact of perception of taxation system on compliance

4.3.3 Understanding of rental income tax regulations

This sub-section focuses on the understanding of rental tax regulations. As observed in figure 4.11, most respondents indicated that they were aware of regulations pertaining to tax regulations. This finding is consistent with that indicating that most of the respondents were highly educated (section 4.2.3) and were therefore likely to appreciate the need for acquaintance with tax laws that directly affected them. The importance of awareness of taxation laws is established in literature with Mohd, (2010) and Mohani (2009) highlighting the importance of the same in ensuring tax compliance. The findings from this section therefore indicate that there should be a tendency towards compliance with rental tax regulation; this assumption is further supported by the finding indicating that 68% (section 4.2.5) of respondents were compliant and that indicating a compliance rate of 55% (section 4.3.1).

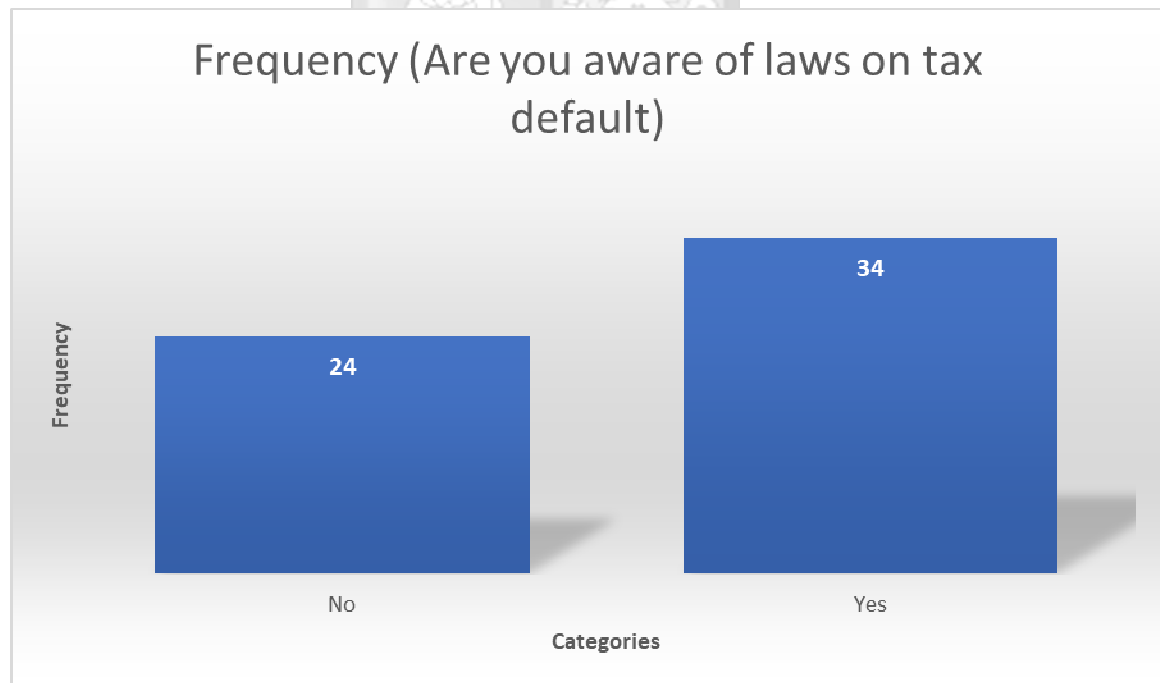


Figure 4.11 Awareness of laws on tax default

However, despite the awareness of tax laws and the reported high compliance rates, respondents indicated that and understanding of tax laws did not necessarily directly translate into compliance; this is because 36 respondents indicated that the knowledge

was of little or moderate effect on compliance. This finding therefore points to other determinant factors as intervening between knowledge of taxation laws and compliance; and example of such intervening factors would be perception of taxation systems and social norms. The effect of all these factors is assessed in section 4.4 of this chapter. Figure 4.12 provides a summary of the responses assessing the impact of awareness of taxation laws on compliance.

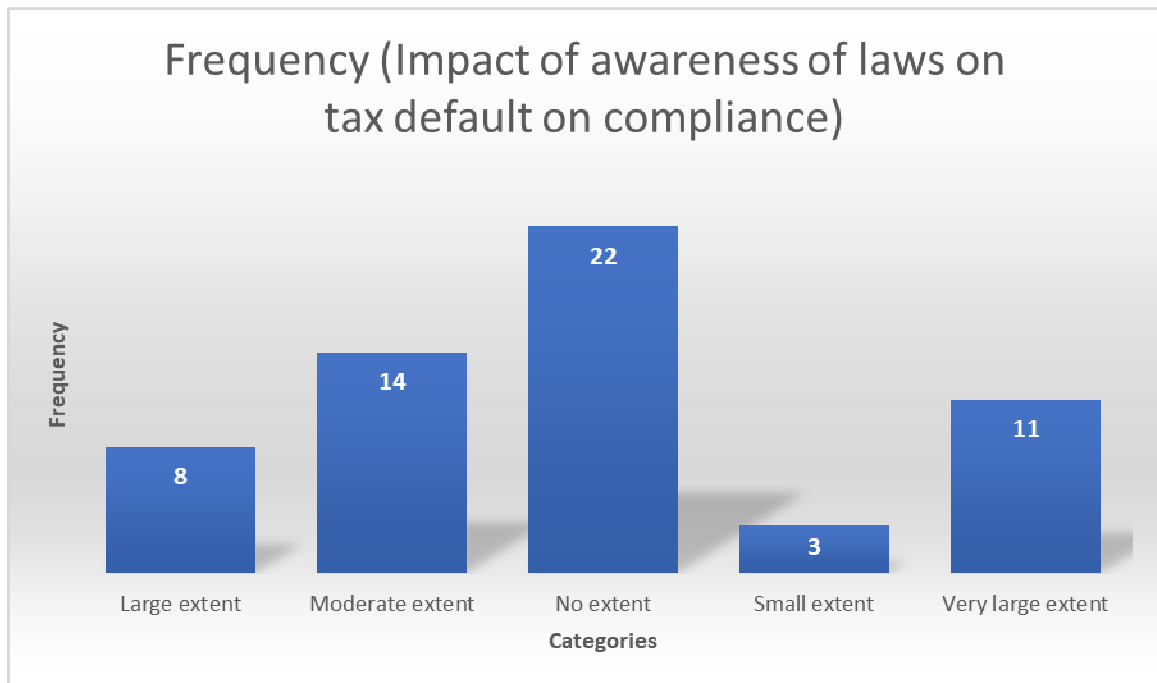


Figure 4.12 Impact of awareness of taxation laws on compliance

In assessing the responses on understanding of taxation regulations, it emerged that, as was the case with perception and taxation behavior, answers tended towards extremes (Table 4.5). However, the pattern of responses for this section varied in that for one question - Understanding of laws guiding payment of rental income tax – the modal response was that indicating that the respondents disagreed with the posited view. The modal response for the question assessing – ‘I understand that rental income is taxable’, ‘knowledge of computing the rental income tax’, and ‘I understand the consequences of tax non-compliance’ – was 5 (strongly agree) therefore pointing to a strong understanding of the taxation system. However, responses on the questions assessing – Attendance of a tax awareness education on taxation of rental income’ and ‘Proficiency of KRA in

educating the public’ – indicated modal ratings of 1 (strongly disagree) thereby pointing, in part, to a lack of awareness of tax regulation. The general observation, however, was that the respondents had an understanding of tax laws. This view is in keeping with that put forward in section 4.3.3. Mohd’s (2010) view on the importance of understanding taxation laws on compliance therefore points to a possible tendency towards compliance in this study hence a negative association between understanding of tax laws and non-compliance. This assumption is tested in section 4.4 of this chapter. Table 4.5 provides a summary of the responses collected on the understanding of tax laws.

Table 4.5 Understanding of tax regulations Summary

Key

1=Strongly disagree, 2= Disagree, 3 = Neutral, 4 = Agree 5 = Strongly agree

Variable\Statistic	Nbr. of observations	Mode	Frequency	Cate gories	Frequency per category	Rel. frequency per category (%)
Understand that rental income is taxable	58	5	43	1	6.000	10.345
				4	9.000	15.517
				5	43.000	74.138
Have attended a tax awareness education on taxation of rental income	58	1	46	1	46.000	79.310
				2	11.000	18.966
				5	1.000	1.724
Have the knowledge of computing the rental income tax	58	5	20	1	18.000	31.034
				2	8.000	13.793
				4	12.000	20.690
				5	20.000	34.483
Have understanding of laws guiding payment of rental income tax	58	2	17	1	15.000	25.862
				2	17.000	29.310
				3	2.000	3.448
				4	8.000	13.793
				5	16.000	27.586
Understand the consequences of tax non-compliance	58	5	33	1	8.000	13.793
				2	3.000	5.172

				3	2.000	3.448
				4	12.000	20.690
				5	33.000	56.897
KRA should have conducted adequate training to all Kenyans before introducing of tax	58	1	43	5	6.000	10.345
				2	9.000	15.517
				1	43.000	74.138

4.3.4 Social Norms

This sub-section highlights the summary of responses on social norms as influencers of tax compliance. The first aspect tested was the impact of culture. As depicted in figure 4.13, most respondents observed that social norms had small or no effect on tax compliance (45 respondents). This therefore indicates that there should be no significant correlation between social norms and tax non-compliance; this is tested in section 4.4 of this chapter.

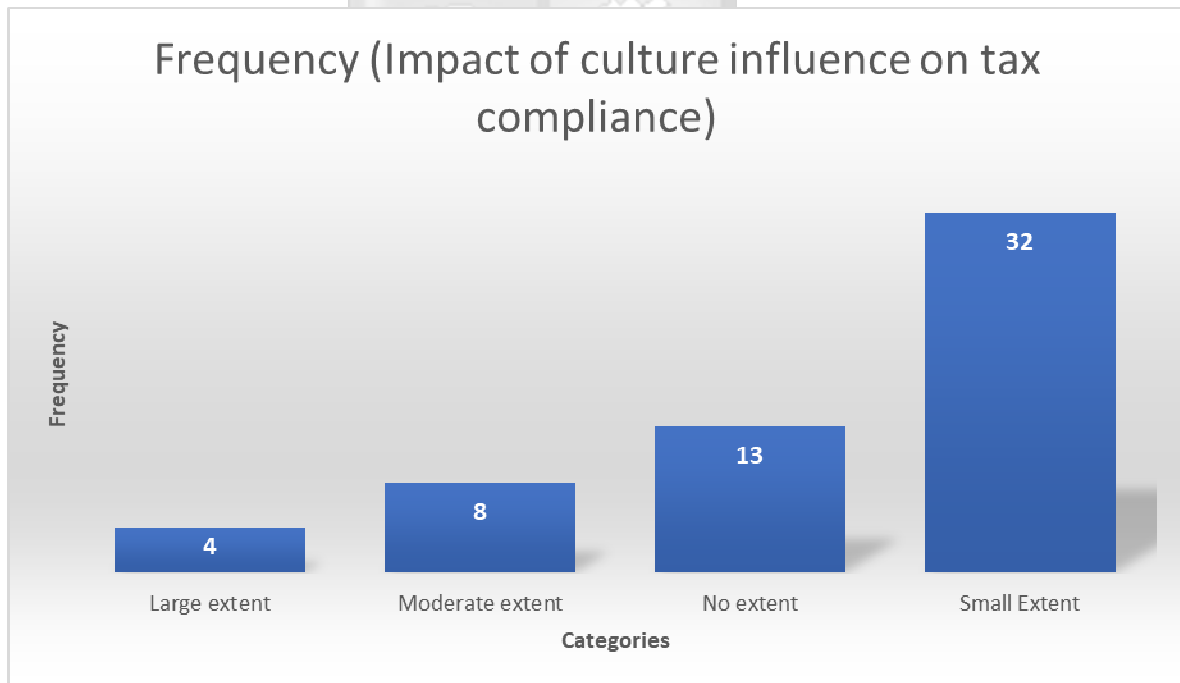


Figure 4.13 Impact of Culture

The influence of social norms was assessed through three main questions. The responses presented for this non-economic factor were however varied from those on tax remittance behavior, perception and understanding in that the modal responses of 2 and 1 were

reported indicating an uncharacteristic spread for the factor (all other three variables presented extremes of 1 and 5 for the various questions). As depicted in table 4.6, respondents on the questions assessing extent of motivation and effect of culture indicated modal ratings of 2 each (disagree) whereas responses on the influence of peer groups indicated a mode of 1 (strongly disagree). The general observation therefore was that social norms were not influential in determining tax remittance behavior. These finding is contrary to that highlighted by Laffer (2014) who acknowledges the impact of social norms on tax non-compliance. The fining is however in keeping with that put forward by Kirchler (2007) who observes that the role of social norms in assessing tax compliance is difficult to decipher as the construct of social norms is ambiguous and difficult to measure objectively.

Table 4.6 Summary Statistics Social Norms

Key

1=Strongly disagree, 2= Disagree, 3 = Neutral, 4 = Agree 5 = Strongly agree

Variable\Statistic	Nbr. of observations	Mode	Mode frequency	Categories	Frequency per category	Rel. frequency per category (%)
Extent feel motivated to pay tax	58	2	28	1	14.000	24.138
				2	28.000	48.276
				3	7.000	12.069
				4	9.000	15.517
Influence of tax paying culture in Kenya	58	2	44	1	12.000	20.690
				2	44.000	75.862
				3	1.000	1.724
				4	1.000	1.724
Extent paying tax culture influenced by peers	58	1	35	1	35.000	60.345
				2	8.000	13.793
				3	15.000	25.862

4.4 Inferential Statistics

This section provides insights on the relationship between the various variables through inferential statistics. The two approaches employed are Spearman's rank correlation and ordinal logistic regression. The findings of these tests as pertains to each of the factors' effect – perception of the taxation system, understanding of the taxation system, and social norms – on tax non-compliance are subsequently discussed.

4.4.1 Spearman's Rank Correlation

The non-parametric relationship between the various variables was assessed through spearman's rank correlation. Each dimension assessed was represented by the median rating of the respective Likert-scale questions set as prompts for variable. The median is chosen as the preferred measure of central tendency when the data are measured in an ordinal scale as was the case in the study (Manikandan, 2011). The various correlations are presented in table 4.7 with the implications for each correlation discussed subsequently in relation to each independent variable's relationship with the dependent variable – tax non-compliance.

Table 4.7 Correlation of variables

Correlations						
			Non-compliance	Perception	Understanding	Social Norms
Spearman's rho	Non-compliance	Correlation Coefficient	1.000	.088	-1.000**	.128
		Sig. (2-tailed)	.	.509	<0.01	.340
		N	58	58	58	58
	Perception	Correlation Coefficient	.088	1.000	-.088	.169
		Sig. (2-tailed)	.509	.	.509	.206
		N	58	58	58	58
	Understanding	Correlation Coefficient	-1.000**	-.088	1.000	-.128
		Sig. (2-tailed)	<0.01	.509	.	.340
		N	58	58	58	58
	Social Norms	Correlation Coefficient	.128	.169	-.128	1.000
		Sig. (2-tailed)	.340	.206	.340	.
		N	58	58	58	58

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

4.4.2 Ordinal Logistic Regression

An ordinal logistic regression was performed on the data to assess the relationship between the variables in the model. The model fitting information depicted in table 4.8, given that the significance value lower than 0.1 indicates that the generated model was fitting to the data and therefore valid for inference of relationships between the variables.

Table 4.8 Model fitting information

Model Fitting Information				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	203.573			
Final	.000	203.573	13	.000
Link function: Logit.				

In assessing the goodness of fit of the generated model, it was observed that the values resulting from the predictive model were statistically significantly different from those generated without the model hence indicating that the model was valid in providing inferences on the relationships between the variables; these results are depicted in table 4.9.

Table 4.9 Goodness-of-fit

Goodness-of-Fit			
	Chi-Square	df	Sig.
Pearson	2.065	183	1.000
Deviance	3.690	183	1.000
Link function: Logit.			

The lowest indicated Pseudo R-square value for the model was 0.970 – Cox and Snell (table 4.10 – hence indicating that the model accounted for up to 97% of the variability in the dependent variable and was therefore statistically satisfactory in assessing relationships between the variables under study.

Table 4.10 Pseudo R-Square

Pseudo R-Square	
Cox and Snell	.970
Nagelkerke	1.000
McFadden	1.000
Link function: Logit.	

The validity of the model was further confirmed through the test of parallel lines which indicate that the null hypothesis indicating that the location parameters are the same across response categories is, to be rejected. The data therefore met the requirements of proportional odds – a necessity for the ordinal regression analysis; these results are presented in table 4.11.

Table 4.11 Test of parallel lines

Test of Parallel Lines ^a				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	.000			
General	.000 ^b	.000	78	1.000
The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.				
a. Link function: Logit.				
b. The log-likelihood value is practically zero. There may be a complete separation in the data. The maximum likelihood estimates do not exist.				

The estimate parameters (log odds) for the independent variables are indicated in table 4.12. The implications of each of these findings are discussed subsequently for each of the independent variable's relationship with the dependent variable – tax non-compliance.

Table 4.12 Parameter estimates

Parameter Estimates								
		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Noncompliance = 1.0]	6.490	25.702	.064	1	.801	-43.885	56.865
	[Noncompliance = 1.5]	13.457	26.027	.267	1	.605	-37.556	64.470
	[Noncompliance = 2.0]	20.187	26.255	.591	1	.442	-31.271	71.645
	[Noncompliance = 2.5]	22.843	26.398	.749	1	.387	-28.895	74.582
	[Noncompliance = 3.0]	33.758	26.840	1.582	1	.208	-18.847	86.363
	[Noncompliance = 4.0]	39.722	27.094	2.149	1	.143	-13.381	92.825
	[Noncompliance = 4.5]	47.145	27.481	2.943	1	.086	-6.716	101.006
Location	[Perception=1]	-7.022E-15	3.905	.000	1	1.000	-7.653	7.653
	[Perception=2]	-7.869E-15	4.291	.000	1	1.000	-8.410	8.410
	[Perception=3]	-1.537E-14	6.023	.000	1	1.000	-11.805	11.805
	[Perception=4]	-6.370E-15	3.869	.000	1	1.000	-7.582	7.582
	[Perception=5]	0 ^a	.	.	0	.	.	.
	[Understanding=1.0]	53.240	15.027	12.552	1	.000	23.787	82.692
	[Understanding=1.5]	43.295	11.708	13.675	1	.000	20.348	66.242
	[Understanding=2.0]	36.801	11.043	11.105	1	.001	15.157	58.444
	[Understanding=3.0]	28.316	10.180	7.737	1	.005	8.364	48.268
	[Understanding=3.5]	21.504	9.857	4.759	1	.029	2.184	40.824
	[Understanding=4.0]	16.829	8.863	3.606	1	.058	-.542	34.201
	[Understanding=4.5]	10.093	8.149	1.534	1	.216	-5.879	26.064
	[Understanding=5.0]	0 ^a	.	.	0	.	.	.
	[Social Norms=1]	8.187E-13	26.896	.000	1	1.000	-52.715	52.715
	[Social Norms=2]	8.185E-13	26.885	.000	1	1.000	-52.693	52.693
	[Social Norms=4]	0 ^a	.	.	0	.	.	.
Link function: Logit.								
a. This parameter is set to zero because it is redundant.								

4.4.3 The effect of tax payer perception of tax system on non-compliance with rental income taxation in Kenya

The correlation between tax non-compliance was assessed through Spearman's Rho as depicted in table 4.7. Results indicate that the two variables had a correlation coefficient of 0.088 and a significance value of 0.509. Given that the significance value was higher than the cut off value 0.1, and that the correlation was very weak, it was inferred that there was no significant correlation between the two variables. Results from the ordinal regression model indicated estimator statistics (depicting log odds) with a decreasing likelihood of high ratings of non-compliance with decreasing ratings of perception of the tax system (Table 4.9). With the rating 5 as the reference category, ratings of 4 through 1 had log odds of -6.370E-15, -7.022E-15, -7.869E-15, and -1.537E-14. This therefore indicated that lower ratings in perception of the tax system were associated with lower scores of tax non-compliance. The finding was counter-intuitive as lower ratings of perception of the tax system should result in higher ratings of non-compliance among respondents. All the estimator variables (log odds) however, were low and presented significance values higher than 0.1 hence indicating that the estimator values were not statistically significant. The finding indicating a lack of a statistically significant relationship as depicted by the two statistics – Spearman's rho and log odds – contradicts that posited by most authors (Atawodi, & Ojeka, 2012; OECD, 2010; Braithwaite, Reinhart & Smart, 2009). Cummings et al (2006) in a study Zimbabwe and South Africa posits the opposite findings indicating that for the two countries, it was more likely for taxpayers to abscond payment of taxes if they had a negative perception of the taxation system. A possible explanation or this observation, therefore, would be that the respondents, perceiving the taxation system as unfair, feared repercussions that may result should they indicate that they were not actively issuing their taxes as required. This finding therefore points to an area for further research.

4.4.4 The effect of tax payer understanding of tax system on non-compliance with rental income taxation in Kenya

The correlation coefficient between the two variables was -1 with a significance value lower than 0.01 (Table 4.7). The perfect negative correlation between the two variables

was considered uncharacteristic and therefore the test was re-run using different software (Excel Stat). The findings were however captured similarly with the output presented below.

Table 4.13 Summary statistics and correlation

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Std. deviation
Non-compliance	58	0	58	1.000	5.000	2.647	1.344
Understanding	58	0	58	1.000	5.000	3.353	1.344

Variables	Non-compliance	Understanding
Non-compliance	1	-1.000
Understanding	-1.000	1

Having re-run and confirmed the finding, despite different means of the variables, commensurate inferences were made; it was therefore inferred that there was a strong negative correlation between the two variables. An increase in understanding of the taxation system was therefore associated with a decrease in non-compliance. As was suggested by the correlation model, lower ratings of understanding of the taxation system were associated with high ratings of non-compliance (inverse relationship) as depicted by the estimator values for the variable. With the reference category being the highest ratings, all lower estimators had higher log odds with the highest odds of high ratings on non-compliance being associated with median ratings of 1. The log odds for the scores median scores 1, 1.5, 2, 3, 3.5 and 4 were, 53.240, 43.295, 36.801, 28.316, 21.504, 16.829, 10.093. All log odds estimators, with the exception of the value 4.5 were statistically significant at alpha 0.1. There was therefore a strong relative relationship between understanding of the taxation system and non-compliance. The finding of a strong negative relationship between understanding of the taxation system and non-compliance is consistent with findings by Terkper (2007), Karanja (2014), Mohamad Ali,

Mustafa, and Asri (2007) and Palil and Mustapha (2011). The implication of the congruency in findings from this study and the literature, therefore, is that the government, in the bid to ensure compliance with tax regulations, should promote efforts towards educating the populace on rental tax regulations. In addition, these findings confirm Arbie and Doussy's (2006) observations indicating that a lack of understanding of taxation systems was a prominent indicator of non-compliance as citizens willing to pay their taxes were unable to successfully decipher what was required of them as stipulated by cryptic government requirements. Oberholzer (2007) highlights approaches through which governments address non-compliance; given these findings it is necessary that an evader-forgiving approach be taken even as tax laws are further simplified and advertised so as to ensure increased participation by rental-home owners.

4.4.5 The effect of social norms on non-compliance with rental income taxation in Kenya

As depicted in table 4.7, there was a very weak correlation between social norms and tax non-compliance (0.128). Moreover, the significance value associated with the correlation was higher than the cut off alpha value of 0.1 thereby indicating that the correlation was not statistically significant. The relationship between social norms and tax non-compliance, as was the case with perception of the taxation system, was characterized by very low estimators; furthermore, these estimators all presented significance value higher than 0.1 hence indicating that they were not statistically significant. With the median rating 4 considered the reference category, ratings 2 and 1 were associated with log odds of 8.187E-13 and 8.185E-13 respectively. The positive log odds indicated an increase in odds of non-compliance with decreasing influence of social norms; the effect was however, as indicated by the low estimators, marginal and statistically non-significant. Ali, Fjeldstad and Sjursen (2014) however indicate that a negative perception of the government results in non-compliance. The findings would therefore indicate that the general attitude in the public is negative hence a high level of influence by peers would result in non-compliance. According to Kirchler (2007) the effect of social norms on tax behavior is convoluted owing to the multiplicity of determinants of social norms i.e. personal, societal and national. This study failed to establish a significant relationship

between tax non-compliance and social norms thereby pointing to a need for additional research on the same given findings by such authors as Ali *et al.*, (2013) and Walsh (2012) who posit a significant relationship between the variables.



CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study sought to determine the effect of tax payer perception of tax system on non-compliance with rental income taxation in Kenya, establish the effect of tax payer understanding of the real estate tax regulation in Kenya and to assess the effect of social norms on non-compliance with rental income taxation in Kenya. This chapter provides a summary of the findings, a conclusion and recommendations following findings the established inferences.

5.2 Summary of findings

The findings of the study are outlined according to the objectives set forth; this section is thus subdivided into four sub-sections, one detailing the profile of respondents and tax non-compliance behavior and each of the remaining three pertinent to a specific objective.

5.2.1 Respondents profile and tax non-compliance behavior

The general profile of the respondents queried through this study indicated a bias towards female representation, middle-aged participants, highly educated individuals, with less than 10-years rental-home ownership. Most of the respondents further indicated that they were tax compliant (section 4.2.7). There were varying statistics on the level of rental tax compliance – 68% and 55% as indicated by different questions (section 4.3.1) – the general view however was that respondents were generally less inclined towards non-compliance than the anticipated 77% non-compliance rate reported by GIZ (2010). This relatively high level of compliance could be attributed to the general profile of respondents in that most were highly educated individuals with a reported high understanding of the taxation system.

5.2.2 Effect of perception of the tax system on tax non-compliance

As deduced from the descriptive statistics, the general perception of the taxation system was poor (Section 4.3.2) and this was anticipated to result in high tax non-compliance. This observation is consistent with that put forward by the Organisation for Economic Co-operation and Development (2010). Furthermore, the respondents indicated that the factor – perception – would have a significant effect on tax non-compliance in that it would deter compliance (section 4.3.2). Inferential statistics however indicated that there was no significant correlation or relationship between the variables (section 4.4.3). These therefore points to a disjoint between the perception and behavior of the respondents. This disjoint in findings between results from this study and the general body of literature (exemplified by postulations from such authors as Atawodi, & Ojeka (2012)) indicate need for further research on the population under study.

5.2.3 Effect of understanding of the tax system on tax non-compliance

Despite the finding that most respondents were aware of taxation laws (section 4.3.3) most viewed that factor as inconsequential to non-adherence to rental tax regulation requirements (section 4.3.3). The anticipated finding, given this observation, was that there would be a low correlation and relationship between the two variables. Inferential statistics as depicted in section 4.4.4 however indicated a strong negative correlation and relationship between the two variables. Although this finding was contrary to the expectation of the respondents (as highlighted in section 4.3.3), it was consistent with the literature which points to a negative association between the two variables – tax non-compliance and understanding of the taxation system (Terkper, 2007; Karanja, 2014; Mohamad Ali, Mustafa & Asri, 2007; Palil and Mustapha, 2011).

5.2.4 Effect of social norms on tax non-compliance

Based on the descriptive statistics, the general observation on the effect of social norms on tax compliance was that social norms did not present much thrust in determining tax non-compliance (section 4.3.4). Results from inferential statistic confirmed this observation in that no significant correlation or relationship between the two variables was observed (section 4.4.5). This finding is contrary to that put forward by such authors

as Ali *et al.*, (2013) and Walsh (2012). As with perception of the taxation system, this finding presents a need for further investigation into the reasons behind the departure of findings from those observed in the general body of literature.

5.3 Conclusion

This study set out to address three main objectives – To determine the effect of tax payer perception of tax system on non-compliance with rental income taxation in Kenya; To establish the effect of tax payer understanding of the real estate tax regulation in Kenya; and to assess the effect of social norms on non-compliance with rental income taxation in Kenya.

Following analysis of the collected data, it emerged that only one factor was statistically related to tax non-compliance – understanding of the taxation system. The two other factors, - perception of the taxation system and social norms – did not present statistically valid relationships with the dependent variable. The main implication of the finding, therefore, is that the most efficacious approach to ensure rental tax compliance would be to focus on education and understanding of the taxation system and requirements.

5.4 Limitations, recommendations and areas for further study

The main limitation of the study presented as challenges in accessing respondents. Respondents were generally reluctant to participate in the study despite assurances on the confidentiality of the data. This reluctance may therefore have introduced a bias towards compliance in that most willing respondent participated owing to their adherence to taxation requirements.

As depicted in the conclusion of the study, the main recommendation of the study is that efforts be put in place to enhance understanding of the taxation system as this factor presents a strong negative relationship with tax non-compliance. Efforts towards increased education would therefore serve to increase tax regulation adherence.

As enumerated in the summary of findings, there was a disjoint between literature identified determinants of non-compliance and those posited in the study; as such, there is need for further investigation on the peculiarities of the response population that result in the discrepancy with the general body of knowledge on the subject of study.



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APPENDIX 1: INTRODUCTION LETTER

(Letterhead of Strathmore Business School)

Date

Ref:

(Name of Rental income Earner),

P.O. Box _____

NAIROBI

Dear Sir,

RE: INTRODUCTION LETTER

Mr. Hillary Wameyo is a final year post graduate students of **Strathmore Business School** and is conducting a survey for his research project. Their research is an evaluation of the effect of non economic tax payer factors on tax non-compliance by rental income earners in Kenya .The findings of the research will provide new knowledge that will be useful in understanding tax compliance challenges and may assist in engagement with various stakeholders. Your participation in the study is therefore very important and responses there too will remain confidential.

The survey should take no more than **20 minutes** to complete. Any facilitation and assistance you give in the study will be highly appreciated.

In the event that you have any queries or that you require any independent clarification about this study, please do not hesitate to contact the writer and/or **the Administrator at Strathmore Business School** on **+254 703 034 414**.

Yours faithfully,

*For: **STRATHMORE BUSINESS SCHOOL***

DEAN, SCHOOL OF GRADUATE STUDIES

APPENDIX 2: CONSENT LETTER

CONSENT TO PARTICIPATE IN A QUANTITATIVE STUDY OF THE EFFECT OF NON ECONOMIC TAX PAYER FACTORS ON NON-COMPLIANCE WITH RENTAL INCOME TAXATION

Thank you for agreeing to participate in this study.

Mr. Hillary Wameyo a final year post graduate student of **Strathmore Business School** is conducting a survey for his research project. The research is an evaluation of the effect of non-economic tax payer factors on tax payer non-compliance with rental income taxation in Kenya. The questionnaire presented to you is strictly to provide vital information regarding this research work. Full confidentiality and anonymity of all information given is assured.

Your response is very important as it will help me better understand how non economic factors have influenced tax compliance of rental income earners,

You will be asked to provide some background information about yourself however your identification will remain completely anonymous. Your name will not be tied in any way to the questionnaire. You will not incur any financial participatory costs. Your participation in this study is voluntary and you are free to withdraw at no negative consequence at any time.

In the event that you have any queries or that you require any independent clarification about this study, please do not hesitate to contact **the Administrator at Strathmore Business School** on **+254 703 034 414**. For your record you will receive a signed copy of this consent form. Should you wish to see the results of this study after its completion, please indicate at the bottom of this letter and provide a mailing address.

YOUR SIGNATURE ON THIS CONSENT FORM INDICATES THAT YOU HAVE DECIDED TO TAKE PART IN THIS RESEARCH STUDY AND THAT YOU HAVE READ AND UNDERSTAND THE INFORMATION GIVEN ABOVE AND HAD ISSUES RELATING TO THE STUDY EXPLAINED TO YOU.

Name of Participant _____

Signature of Participant _____

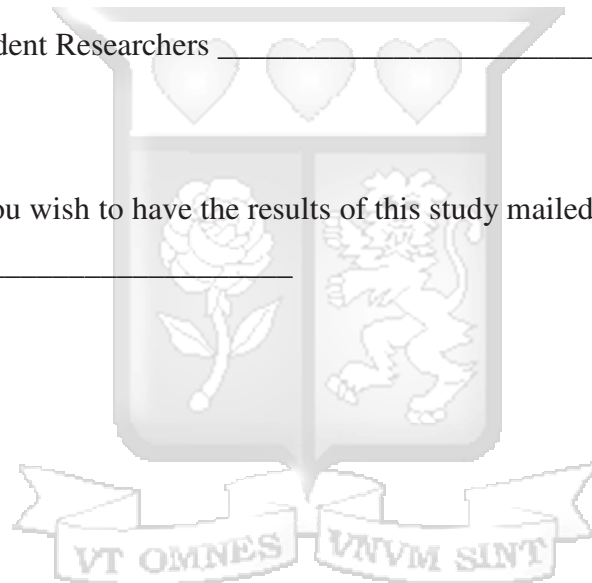
Signature of Witness _____

Date/Time _____

Signature of Faculty Member (Invigilator) _____

Signatures of Student Researchers _____

☐ Check box if you wish to have the results of this study mailed to you. Include a mailing address: _____



APPENDIX 3: QUESTIONNAIRE

The purpose of this questionnaire is to analyse the non-economic taxpayer factors affecting tax compliance of rental income earners in the real estate sector with the aim of formulating policies aimed at enhancing tax collection. All responses/answers provided in this survey will only be used for academic purposes and will be kept confidential

PART 1

A: RESPONDENTS BIODATA

1. Sex: Male ☐ Female ☐

2. Age bracket (choose one)

Below 20 years	20 - 39 years	40 - 49 years	50 and above years
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. What is the highest education attained

Certificate	Diploma	Bachelor's degree	Master's degree	Others
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B: BUSINES BACKGROUND

1. How many years have you earned rental income

Less than 2 years ☐ 3-5 years ☐ 6-8 years ☐ over 9 years ☐

2. Do you file your income tax returns

Yes ☐ No ☐

3. What is your gross rental income per month?.....

PART 2

A: RENTAL INCOME TAX NON COMPLIANCE

4. To what extent do you remit your rental income tax?

No extent [] Small extent [] moderate extent []
Large extent [] Very large extent []

5. To what extent do you agree with the following statements with regard to the rental income tax? Use a scale of 1-5 where 1= strongly disagree, 2=disagree, 3=Not certain, 4=agree and 5=strongly agree.

	1	2	3	4	5
I am aware of the rental income tax policy					
I file my rental income tax returns are filed on time					
I file the right amount of tax liability from rental income					
The rental income tax is fair					
Am not happy with the way the rental income tax is computed					

6. In your opinion, what are some of the reasons for rental income non-compliance by Land-lords?

B: NON-ECONOMIC FACTORS INFLUENCING TAX NON-COMPLIANCE

ATTITUDE OF TAX PAYERS ON TAX

7. How would you describe your paying of rental income tax?

Irregular ☐ Somewhat regular ☐ Regular ☐

8. Explain your answer_____

9. What is your attitude towards paying of tax? Very poor ☐ Poor ☐

Good ☐ Very good ☐

10. To what extent do you agree with the following statements with regard to your perception of the rental income tax on a scale of 1-5 where 1=strongly disagree, 2= disagree, 3 = neutral, 4 = agree and 5 = strongly agree.

	1	2	3	4	5
The KRA implements the rental income taxation fairly					
The KRA is exercising excessive control on taxation					
There is mutual trust between KRA and landlords					
The government has put taxpayers money into good use					
The government does not help to lay infrastructure hence no need to pay rental income tax					
Kenyan tax laws are punitive to hardworking citizens					
The Kenya tax system only targets poor and the middle class who are struggling hence no need to pay rental income tax					

11. To what extent would you say attitude has influenced tax compliance?

No extent ☐ Small extent ☐ moderate extent ☐

Large extent ☐ Very large extent ☐

12. In your opinion, how has attitude affected your tax compliance?

C: TAX PAYERS KNOWLEDGE OF RENTAL INCOME TAXATION

13. Are you aware of the laws on tax default? Yes ☐ No ☐

14. Explain your answer_____

15. State the extent to which you agree with the following statements with regard to knowledge of rental income tax on a scale of 1-5 of 1= strongly disagree and 5 strongly agree

	1	2	3	4	5
I understand that rental income is taxable					
I have attended a tax awareness education on taxation of rental income					
I have the knowledge of computing the rental income tax					
I understanding of the laws guiding payment of rental income tax					
I understand the consequences of tax non-compliance					
KRA should have conducted adequate training to all Kenyans before introducing rental income tax					

16. To what extent would you attribute your tax compliance to awareness of the laws on tax default? No extent ☐ Small extent ☐ moderate extent ☐ Large extent ☐ Very large extent ☐
17. In your opinion, how has ignorance to tax laws influenced your tax compliance?

D: SOCIAL NORMS

18. To what extent do you feel motivated to pay taxes? No extent ☐ Small extent ☐ moderate extent ☐ Large extent ☐ Very large extent ☐

19. Explain your answer_____

20. How would you describe the paying of tax culture in Kenya? Very bad ☐ Bad ☐ Good ☐ Very good ☐

21. To what extent has the culture influenced your tax compliance? No extent ☐ Small extent ☐ moderate extent ☐ Large extent ☐ Very large extent ☐

22. In your opinion, how has social norms influenced your tax compliance?_____
