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# Drivers of tax compliance among individual tax payers in Nairobi County in Kenya

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**DRIVERS OF TAX COMPLIANCE AMONG INDIVIDUAL TAX PAYERS IN NAIROBI  
COUNTY IN KENYA**

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**094872**

**Thesis Submitted to the School of Management and Commerce in Partial Fulfillment of the  
Master of Commerce Degree in Strathmore University**

**June, 2018**

## DECLARATION

I declare that this thesis is my original work and has not been presented to any other university for the award of a degree. Any work done by other people has been duly acknowledged. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

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Waiganjo Kennedy Maina 094872

7<sup>th</sup> June 2018

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## **ABSTRACT**

The aim of this study was to determine the drivers of tax compliance among individual taxpayers in Nairobi County in Kenya. The specific objectives were to analyze the influence of KRA related factors on tax compliance and the influence of Non-KRA factors on tax compliance. The study employed structured questionnaires on a sample of 384 individual tax payers in Nairobi County in Kenya. A response rate of 62.5% was achieved. Descriptive statistics, particularly the use of mean scores and regression analysis were used to analyze the findings of the study. Descriptive analysis revealed that being informed about tax obligations under Kenyan laws, withholding system of taxation, iTax platform of filing returns, penalties and tax audits done by KRA highly influence tax compliance. On the other hand, non-KRA factors comprising of influence of reference groups, services of a tax agent, government action to curb corruption and accountability, highly influence tax compliance. The regression analysis revealed that individual awareness of self- assessment system of taxation in Kenya positively influences tax compliance while being informed of one's tax obligations negatively influences tax compliance. The major limitation of the study was the exclusive use of questionnaires. Future studies should incorporate both interview guides and secondary data to provide robust research outcomes.

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## **DEDICATION**

I humbly dedicate this research thesis to God Almighty my creator, my pillar, my source of knowledge and comprehension. Every challenging work needs self efforts as well as guidance of elders especially those who are close to your heart. I therefore humbly dedicate this work to my sweet and loving Dad, John Waiganjo and Mother, Faith Wangeci. I also dedicate this work to my wife Carol Mwendu for her selflessness, perseverance and support. Finally I dedicate this work to my ever cheerful son Wise Waiganjo, my greatest source of inspiration and hope.

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the study**

This chapter sheds light on tax compliance and its importance to an economy. It outlines the regulatory framework that guides tax administration in Kenya, the problem statement and the research objectives. The scope of the study and its significance also form part of this chapter. The effectiveness of the revenue collecting agency of the government, the transparency of the taxation system in place and the accountability of the expenditure met through taxes ,influence the level of tax compliance in an economy (Nkundabanyanga, Mvura, Nyamuyonjo, Opiso, & Nakabuye, 2017). Difficulty in understanding tax compliance requirements is an important factor in determining tax compliance (Abrie & Doussy, 2006).

In India, the tax environment is seen as complex with a multiplicity of indirect taxes, overburdening litigations and lack of certainty. There are high fiscal deficits in the country that have made it a primary concern for the policy makers to think of ways to increase government revenue (George & Reddy, 2015)

Businesses, in whatever form, size and sector are required by law to comply with all relevant legislations, including taxation. Isa (2014) points out that lack of explicit recognition of the regulatory burden in general and taxation imposed on SME's in particular, are the major factors that affect tax compliance. Isa opined that for tax compliance to be fully embraced, it is important to educate taxpayers about their full tax compliance burden. Fernández-Albertos and Kuo (2018) in their study of income perception and progressive taxation, they found out that individuals had a significant error in placing

themselves correctly in the income distribution levels, consequently affecting how they viewed progressive tax.

The modernization of tax administration with a view to simplify the tax rules, make them taxpayer-friendly and reducing compliance costs, with a particular emphasis on the small business sector and individuals, is among the ten main lessons identified as key in enhancing tax compliance. Tax simplicity improves voluntary tax compliance behavior and also increases tax revenue (Azrina Mohd Yusof, Ming Ling, & Bee Wah, 2014).

Tax compliance has also been found to be a factor dependent on the size of business. A study conducted in Singapore concluded that large companies were able to take advantage of compliance benefits that accrue from hiring external professionals and were more tax compliant compared with the smaller companies (Ariff, 1997). On the other hand, Isa (2014) found that in Malaysia, SMEs had lower levels of tax compliance as the regulation on their tax burden was not explicit. Due to the complexity of a tax system therefore, tax compliance is affected negatively. In bigger corporations where interpretation of tax requirements is determined by experts such as qualified accountants and lawyers, tax compliance is affected positively. In another study, tax compliance and evasion was found to be a global phenomenon in both developed and developing countries. The level of tax evasion and noncompliance on average was more troubling in developing and transition countries than developed countries (Kim, 2008).

Fernández-Albertos and Kuo (2018), in a study carried out in Spain, found individuals to have the opinion that they should be contributing less in taxes than they actually were. Ali, Fjeldstad and Sjursen, (2013) in a study carried out in four countries, Kenya, Tanzania, Uganda, and South Africa found evidence indicating that citizens who were more satisfied with government's

provision of public services were found to have a more positive attitude towards tax compliance in all the four countries. In Kenya specifically, Ali et al. found that tax payers were more likely to be tax compliant if they felt that the government's enforcement mechanism could detect tax evasion. The issue of tax compliance was viewed differently based on how well a taxpayer understood the tax laws, the legality of the business that he engages in and the knowledge of their friend/neighbor or relative tax compliance status. The degree of detection by the revenue collecting agency, fear of prosecution by the Kenya Revenue Authority(KRA) and efforts put in place to ensure that taxes are being used justifiably were factors that largely contributed to tax compliance (Marti, Wanjohi, & Magutu, 2010).

There exists a significant difference in the role and status of government tax compliance auditors compared with the external auditor. The government tax compliance audit is complex (Stephan Hayes & Baker, 2014). Tax compliance internationally has been found to be negatively related to levels of bureaucracy and positively related to successful control of corruption (Picur & Riahi Belkaoui, 2006).

Researchers have studied this area in different jurisdictions and used varying methods of data collection and data analysis. For studies done in America, Kenya, Korea, Indonesia, Sudan, ex-Soviet bloc countries have proven that a higher probability of tax audits leads to enhancement of tax compliance among taxpayers (Ali, Cecil & Knoblett 2001; Alm, Jackson & McKee, 1992; Park and Hyun (2003; Obeid, 2015; Kamil & Nurlis, 2015; Gichuku (2014; Kirchler et. al. 2012). All these studies used secondary data except for (Alm, Jackson & McKee, 1992; Park & Hyun, 2003) that used experimental data and (Obeid, 2015) which used questionnaires to collect data. However, some studies have established that tax audits do not have a significant effect on tax compliance including (Inasius, 2015) which used questionnaires

and (Young, 1994) which used secondary data. Interesting enough, (Gichuku, 2014) established that penalty rates in conjunction with probability of audit have a negative effect on tax compliance.

Due to the inconsistencies in the conclusions of what drives tax compliance, this study examined the important drivers of tax compliance among individual taxpayers in Kenya today. Moreover, limited research studies have amalgamated both economic and non-economic factors in order to clearly explain tax compliance behavior. This study sought to bridge this knowledge gap by looking at both economic, social, psychological and legal factors and how they influence tax compliance among individual taxpayers in Kenya.

### **1.1.1 Tax compliance and its importance to an economy**

The Organization for Economic Development and Cooperation (OECD, 2016) defines tax as a compulsory payment to the general state without an expectation of proportional benefit arising from the taxes paid. The OECD guideline recognizes levies on incomes and profits, property taxes, payroll taxes and custom duties as taxes that government levies on its citizens. The scope of generating revenue for the government can be widened through increasing consumption and labor taxes (Banerjee, 2014). The government plays a key role in ensuring the economic stability of its country. It uses both fiscal and monetary policies to achieve this objective. The fiscal policies, primarily through tax interventions, have been found to have significant impact on Gross National Product (GNP) of an economy (Darrat, 1986). Tax policies have also been found to be useful interventions that the governments world over can utilize to achieve macroeconomic stabilization when coupled with monetary policies that are not lenient towards inflation (de Jesus & Correia, 2016). Taxes are a means through which the state redistributes wealth hence introducing an element of fairness in society (Bishop & Amiel, 2007). Increase in taxes for

commodities that are viewed harmful to health has been observed to result to reduced consumption of those commodities (Cowie, Glover, & Gentles, 2014). Tax policies can be an effective mechanism to promote investments both internationally and locally (George & Reddy, 2015).

Since tax compliance is one way to measure how well a government is fairing in collecting taxes, this study will shed light on aspects that are likely to make an individual tax compliant. This could subsequently advise the Kenya Revenue Authority on aspects they could focus on to help them collect more taxes efficiently and effectively.

## **1.2 Problem Statement**

Drummond et al., (2012) states that most Sub-Saharan African countries are finding it a priority to increase their domestic revenues. Tax constitutes a significant portion of domestic revenue. However, tax compliance has been cited as a problem facing countries in Sub-Saharan countries. A previous study carried out in Nigeria found that high tax rates and complex filing procedures were the factors that largely contributed to tax non-compliance (Atawodi & Ojeka, 2012). Tax evasion and tax avoidance are important in so far as they affect both the volume and nature of government finances (Cobham, 2005).

The Constitution of Kenya 2010 is the supreme law of the land that governs the imposition and collection of taxes. Article 209 of the constitution empowers the national government to impose income tax, Value added Tax (VAT), customs duties and other duties on import and export of goods and excise tax. The constitution, in article 210, further makes it mandatory for every citizen to pay their taxes regardless of the position they hold in society. The Laws of Kenya Chapter 469 establishes Kenya Revenue Authority as the central body for assessment and collection of revenue and for administration and enforcement of the laws relating to revenue.

Kenya's total revenue significantly increased from KES 651 billion in 2010/2011 to KES 1.1 trillion in 2014/2015 representing a 44% increase in revenue in 5 years (Kenya National Bureau of Statistics, 2018). Despite this increase in revenue collected, over the same period of time, the Kenya Revenue Authority (KRA) has been missing the revenue collection target set by the National Treasury of Kenya. In the 2011/2012 financial year the collections were KSh707.4 billion (FY) resulting to a shortfall of KSh10 billion. Again in the 2013/2014 financial year there was a collection shortfall which was attributed to underperformance of the macro economy. Kenya Revenue Authority (KRA) collected a record Sh1.210 trillion during the 2015/2016 financial which was a 13.2 percent rise from the previous year but still missed the set revenue target of KSh1.2174 trillion. In the just preceding 2016/17 financial year KRA missed the target by KSh 50 billion collecting KSh. 1.365trillion against the set target of KSh 1.415 trillion.

Tax targets are not met. The question is why? There is a high level of non-compliance among individuals. This study addresses the problem. It aims to establish why individuals do not comply. Tax compliance is a multi-faceted measure and theoretically, it can be defined by considering three distinct types of compliance such as payment compliance, filing compliance, and reporting compliance (Brown & Mazur, 2003). OECD (2016) advocates for dividing compliance into categories defining tax compliance. The two categories are administrative compliance and technical compliance where the former refers to complying with administrative rules of lodging and paying otherwise referred to as reporting compliance, procedural compliance or regulatory compliance and the latter refer to complying with technical requirements. Different researchers have come up with varying findings why people comply with tax. When people comply with tax obligations, revenue targets can be achieved. Some researchers have found psychological factors, others have found factors relating to effectiveness of enforcement while others have found legal factors relating to

interpretation and penalties as influential to tax compliance or non-compliance. This study investigated the important factors both administrative and technical that drive tax compliance among individual taxpayers in Kenya.

### **1.3 Research Objective**

The main research objective was to study the drivers of tax compliance among individual taxpayers in Nairobi County in Kenya. Specifically, the study examined the following:

- i) To analyze the influence of KRA related factors that contribute to tax compliance or tax non-compliance; and
- ii) To analyze the influence of non-KRA related factors that contribute to tax compliance or tax non-compliance.

### **1.4 Research questions**

The study sought to answer the following research questions:

- i) What are the significant KRA factors that contribute to tax compliance or tax non-compliance among individual taxpayers in Nairobi County in Kenya?
- ii) What are the significant non-KRA factors that contribute to tax compliance or tax non-compliance among individual taxpayers in Nairobi County in Kenya?

### **1.5 Scope of the Study**

The study examined the drivers of tax compliance among individual taxpayers in Kenya. A sample was drawn from compliant and non-compliant tax payers. As of July 2017, KRA noted that there were taxpayers who had not updated their Personal Identification Numbers (PINs) on the iTax platform( the computerized platform run by the Kenya Revenue Authority) while other taxpayers who were already on *iTax* were either not filing tax returns or those in active businesses were filing nil or no returns at all. The PINS of the taxpayers who had either not

registered on iTax system or complied with filing and/or payment requirements were deactivated on 31<sup>st</sup> August 2017. The study will sought responses from the two groups and analyzed their responses.

## **1.6 Significance of the study**

### **1.6.1 To KRA**

The study will examined the drivers of tax compliance among individual taxpayers in Kenya. Tax authorities can best manage taxpayers who may have inadvertently become involved in such illegal tax planning practices since attempts to coerce and threaten taxpayers into compliance can undermine the legitimacy of the tax office's authority, which in turn can affect taxpayers' subsequent compliance behavior (Murphy, 2005).

### **1.6.2 To taxpayers**

Taxpayers will appreciate the connection between power of tax authorities and need to trust tax authorities to carry out enforced and voluntary compliance. These are dynamics of power and trust (Kirchler, Hoelzl, & Wahl, 2008).

### **1.6.3 To tax agents**

The study examined non-KRA factors that contribute to tax compliance or non-compliance. The availability of tax practitioners undoubtedly reduces many of the informational and computational barriers to tax compliance (Erard, 1993).

### **1.6.4 To academia and researchers**

This study is an academic work which sought to further explore phenomena that has been studied by earlier researchers. It will shed more light on the area of tax compliance and its drivers. As

such it will contribute to the furtherance of knowledge on the area. It will thus be a source of reference for researchers who choose to study the area. It will also give recommendations on areas of further study and thus act as a guide to researchers who seek to explore this topic further.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter will illustrate tax compliance theories that are significant to this study under the theoretical review of tax compliance. In the next subchapter, under the empirical review, various past studies linked to the objectives of this study were reviewed and synthesized. The subsequent subchapter includes a summary of the literature review and the research gap that needs to be bridged. Finally, the last two subchapters consist of the conceptual framework that illustrates the relationship of the variables that were tested and how they were operationalized.

#### **2.2 Theoretical Review of Tax Compliance**

##### **2.2.1 Economic Deterrence Theory**

The economic model of criminal doings was proposed by Becker (1968), the article of Tulkens and Jacquemin (1971) on criminal behavior costs and the optimum provision of public and private expenditure besides other studies that were concerned with the examination of optimal portfolio and insurance guidelines under risk and uncertainty (Arrow, 1970; Mossin, 1968) were the preparatory point in Allingham and Sandmo's model of income tax evasion. The objective of their research was to investigate the taxpayers' propensity towards eluding taxes by under-reporting income and the degree in which taxpayers exhibit this kind of economic behavior.

The theory supports the notion that taxpayers are moral utility maximizers who are guided by economic objects such as profit maximization and the risk of detection (Atawodi & Ojeka, 2012). In this theory, a rational individual considers the benefit of non-compliance by assessing the risky paybacks of successful cheating (unreported income hence unpaid taxes) compared to the risk prospect of being discovered (through tax audits) and disciplined (through penalties) (Alm & Torgler, 2011).

According to this theory, tax compliance can be enhanced through tax audits in order to detect non-compliance and tough penalties for those individuals who fail to comply with tax obligations (Atawodi & Ojeka, 2012). Compliance depends on enforcement, whereby disclosed income increases when either the possibility of detection or penalty rates increases (Alm, 2013; Gichuku, 2014; Fjeldstad, Schulz-Herzenberg & Sjursen, 2012; Mutai & Jemaiyo, 2016).

Some studies have revealed that taxpayers still engage in tax evasion despite the use of audits and penalty rates to curb non-compliance (Slemrod, 2007; Rethi, 2012). Moreover some studies have proved that there are individuals who would never evade tax even when the possibility of detection is nil (Sour, 2004).

In the case of Scandinavia and United States of America, empirical data showed that taxpayers pay more tax than the expected amount when the degrees of penalties, risk aversion and auditing are at the peak (Fjeldstad, Schulz-Herzenberg & Sjursen, 2012). Consequently, based on these empirical reviews it has been established that an individual being a rational utility maximizing decision-maker must not always act as moral utility maximizer. Due to this, other theories have been developed to explain the problem of factors that determine tax compliance.

The theory is significant to this study because it sought to examine the KRA related factors that influence tax compliance among individual taxpayers in Kenya based on the two factors that

define it namely; penalties and tax audits and the non-KRA factor namely; risk of detection. The KRA factors that were tested based on this theory comprise of: Tax audits (Whether tax audits carried out by the KRA have a positive influence on tax compliance status) and Penalty rates (Whether penalties and/or interests charged by KRA can positively influence tax compliance behavior). It also sought to determine the influence of non-KRA related factor that influences tax compliance among individual taxpayers. This is risk of detection (Whether tax compliance status is informed by the risk of detection by the Kenya Revenue authority that the taxpayer exposes himself to, with regards to the cost of being detected and the benefits of not being detected).

### **2.2.2 Behavioral Model of Tax Compliance**

This theoretical model was founded on the grounds of sociological and psychological determinants that do not view taxpayers as egocentric utility maximizers which was the main theoretical argument of economic deterrence model (Batrancea<sup>1</sup> et al., 2012). This limitation of the economic deterrence model paved the way for development of behavioral models of tax compliance (Batrancea<sup>1</sup> et al., 2012). The behavioral model views individuals as motivated to pay their taxes based on varying beliefs, norms, perceptions, attitudes, cultural backgrounds and social characteristics (Mumford, 2001; Wenzel, 2005a; Wenzel, 2005b).

When individuals and social groups perceive that tax authorities are compassionate and they work for the common good of the citizens, then they are more likely to pay taxes (Kirchler, Hoelzl & Wahl, 2008). Therefore when a 'service and client' atmosphere is created between the government and the taxpayers, it will consequently increase taxpayers trust in the government and willingness to pay taxes (Batrancea<sup>1</sup> et al., 2012). When individuals engage in deeds of tax evasion, their actions might bring feelings of anxiety, negative self-image or guilt (Sour, 2004). This argument is in line with the revelations of Taylor (2001), who noticed that the (internal) fear

of guilt, besides the risk of social stigmatization have more deterrent influence than the external factors such as the risk of detection and punishment.

Furthermore it has been established that the decision of an individual to comply or fail to comply to pay taxes is influenced by social groups like friends, relatives, workmates or family members (Walsh, 2012; Franzoni, 1999; Ali, et al., 2013; OECD, 2010). This means that if a friend or a relative of a particular individual always complies to pay taxes then the individual will be influenced to pay taxes too, but if his/her social groups fails to comply to pay taxes for one reason or another then the individual will also be influenced not to comply to pay taxes.

The theory is significant to this study because it sought to examine the KRA related factors that affect tax compliance among individual taxpayers in Nairobi County in Kenya based on the following factors relevant to it which include; Withholding tax systems and i-Tax platform, Self-assessment system, Voluntary declarations and influence by reference groups. The non-KRA related factors studied based on this theoretical model comprise of; Tax compliance status being a choice between being tax compliant or non-compliant; Services of a tax agent; Knowledge of tax compliance status of a friend and/or a relative; The amount of taxes one is legally obliged to pay.

### **2.3 Empirical Review**

This subchapter synthesized the previous reviews that have been conducted in relation to the objectives of this study. It looked at the similarities that these past studies have in common, the limitations and inconsistencies established based on the different methodological approaches applied in different countries. Consequently it led to the determination of a research gap to be bridged.

### **2.3.1 The Influence of KRA Related Factors on Tax Compliance**

Empirical studies conducted in America, Kenya, Korea, Indonesia, Sudan, ex-Soviet bloc countries have established that a higher probability of tax audits leads to improvement of tax compliance among taxpayers (Ali, Cecil & Knoblett 2001; Alm, Jackson & McKee, 1992; Park and Hyun (2003; Obeid, 2015; Kamil & Nurlis, 2015; Gichuku (2014; Kirchler et. al. 2012). All these studies used secondary data except for (Alm, Jackson & McKee, 1992; Park & Hyun, 2003) that used experimental data and (Obeid, 2015) which used questionnaires to collect data. However, some studies have established that tax audits do not have a significant effect on tax compliance including (Inasius, 2015) which used questionnaires and (Young, 1994) which used secondary data. Interesting enough, (Gichuku, 2014) established that penalty rates in conjunction with probability of audit have a negative effect on tax compliance. This is because infliction of audits and penalties as enforcement measures could be very ruthless to individuals thus making them to be tax non-compliant.

Research studies done in different countries have also revealed that the rate of tax compliance increases when penalties and fines are effectively imposed on people who evade taxes, hence depicting a positive relationship (Ali, Cecil & Knoblett, 2001; Alm, Jackson and McKee, 1992; Obeid, 2015; Kamil & Nurlis, 2015; Park and Hyun, 2003; Gichuku, 2014; Sekhon & Redae, 2016). These studies used secondary data except for (Alm, Jackson & McKee, 1992; Park & Hyun, 2003) that used experimental data and (Obeid, 2015; Kamil & Nurlis, 2015; Sekhon & Redae, 2016) that used questionnaires to collect data. Conversely, a study conducted in Korea that used experimental data showed that penalties have a greater influence on tax compliance when compared to tax audits because the tax payers are free riders (Park & Hyun, 2003). On the other hand some studies have shown that penalties actually have no influence on tax compliance (Webley et al, 1991; Pommerehne & Weck-Hannemann, 1996).

### **2.3.2 The Influence of Non-KRA Related Factors on Tax Compliance**

Research investigations conducted have shown that lack of transparency in government institutions and lack of benefits to the general public from tax revenues collected are among the main reasons why taxpayers fail to comply with their tax obligations (Obeid, 2015; Vihanto 2003; Palil, 2010; Alm, 1999). Moreover, it has also been revealed that tax payers will be willing enough to pay taxes when they are satisfied with the public goods or benefits that the government is providing based on the tax revenue (Alm, Jackson & McKee, 1992; Svallfors, 2013; Fjeldstad, Schulz-Herzenberg & Sjursen, 2012).

Some studies have presented that corruption in government bodies has deterrence effect on tax compliance since taxpayers feel that their money is wasted (Baum et al., 2017; Thornton, 2008; Hwang, 2002). On the other hand, some studies have also showed that corruption has no effect at all on tax compliance (Sen-Gupta, 2007; Imam & Jacobs, 2014). Past research investigations in different countries have also revealed that taxpayers with the highest level of tax compliance have governments with low levels of tolerance on corruption and low bureaucracy (Torgler & Schneider, 2007; Picur & Riahi-Belkaoui, 2006).

With regards to influence of reference groups, recent research investigations have shown that increased reliance on reference groups negatively influence tax compliance (Alon & Hageman, 2012; Inasius, 2015). This contradicts other studies like Hasseldine et al. (1994) and Clotfelter, (1983) which established that reference groups like families and friends improve the level of tax compliance among taxpayers.

In respect to tax rates or the amount of taxes paid, previous research inquiries conducted have revealed that high levels of tax rates that lead to huge amounts of taxes to be paid discourage taxpayers from paying taxes (Ali, Cecil and Knoblett, 2001; Alm, Jackson and McKee, 1992;

Inasius, 2015; Obeid, 2015). The findings of the study agreed with Atawodi and Ojeka (2012) who conducted a similar study in Nigeria, the research outcomes revealed that high tax rates and complex filing procedures were factors that led to non-compliance. Interestingly, an experimental study carried out by Alm, Sanchez & de Juan (1995) showed that tax rates have a positive influence on tax compliance. On the other hand a survey study conducted by Porcano (1988) and an experimental study conducted by Baldry (1987) established that tax rates have no significant influence on the tax compliance of an individual.

### **2.3.3 Research Studies on Tax Compliance done in Kenya**

Most of the studies conducted in Kenya have basically focused on organizational bodies and informal sector except for Gichuku (2014) whose study focused on self-employed individuals; it solely relied on secondary data which established that tax audits and penalties have a positive influence on tax compliance. Jemaiyo & Mutai (2016) analyzed the determinants of tax compliance and the influence on the level of tax compliance in the real estate sector in Eldoret. It established that tax audits, penalties and tax compliance costs positively influences tax compliance. Naibei and Siringi (2011) assessed the impact of Electronic Tax Registers on Value Added Tax compliance on private firms in Kisumu County. It was revealed that effective and regular use of Electronic Tax Registers has a significant positive impact on Value Added Tax. On the other hand Njeru, Kariuki and Mwangi (2017), who sought to establish determinants of tax compliance by Small and Medium Enterprises in Embu County in Kenya with a focus on tax compliance costs, established that tax compliance costs have a significant negative relationship with tax compliance.

In the informal sector, (Gitonga, Kyalo, & Maina, 2015) conducted a study to determine the effect of tax rates on tax compliance in the Kenyan informal sector with specific reference to

Nyeri town. The study utilized a cross-sectional survey which targeted 715 informal businesses in Nyeri town. The study revealed that tax rates have a significant relationship with tax compliance.

## **2.4 Research Gap**

It is very clear from the above theoretical and empirical literature reviews that studies on why people are tax compliant or non-compliant is still uncertain. The impact of tax drivers such as audits, reference groups, penalties, tax rates and the government's efforts on corruption and tax revenue expenditure have produced conflicting results. Even though the research inquiries on tax compliance have implemented a mix of experimental designs, empirical data and to some extent surveys, they have not yet explained the variation in research findings. Hence the research gap that needs to be addressed in the influence of tax compliance factors on tax compliance among individual taxpayers in Kenya.

Limited research has incorporated both economic and non-economic factors in order to clearly explain tax compliance behavior. This study sought to bridge this knowledge gap by looking at both economic, social, psychological and legal factors and how they influence tax compliance among individual taxpayers in Kenya. The study used a survey method to collect primary data.

A synthesis of these past research reviews of studies conducted in Kenya reveal that limited research has been conducted on individual taxpayers to reveal their perceptions with regards to the factors that determine their tax compliance behavior. Hence this study also sought to bridge this knowledge gap.

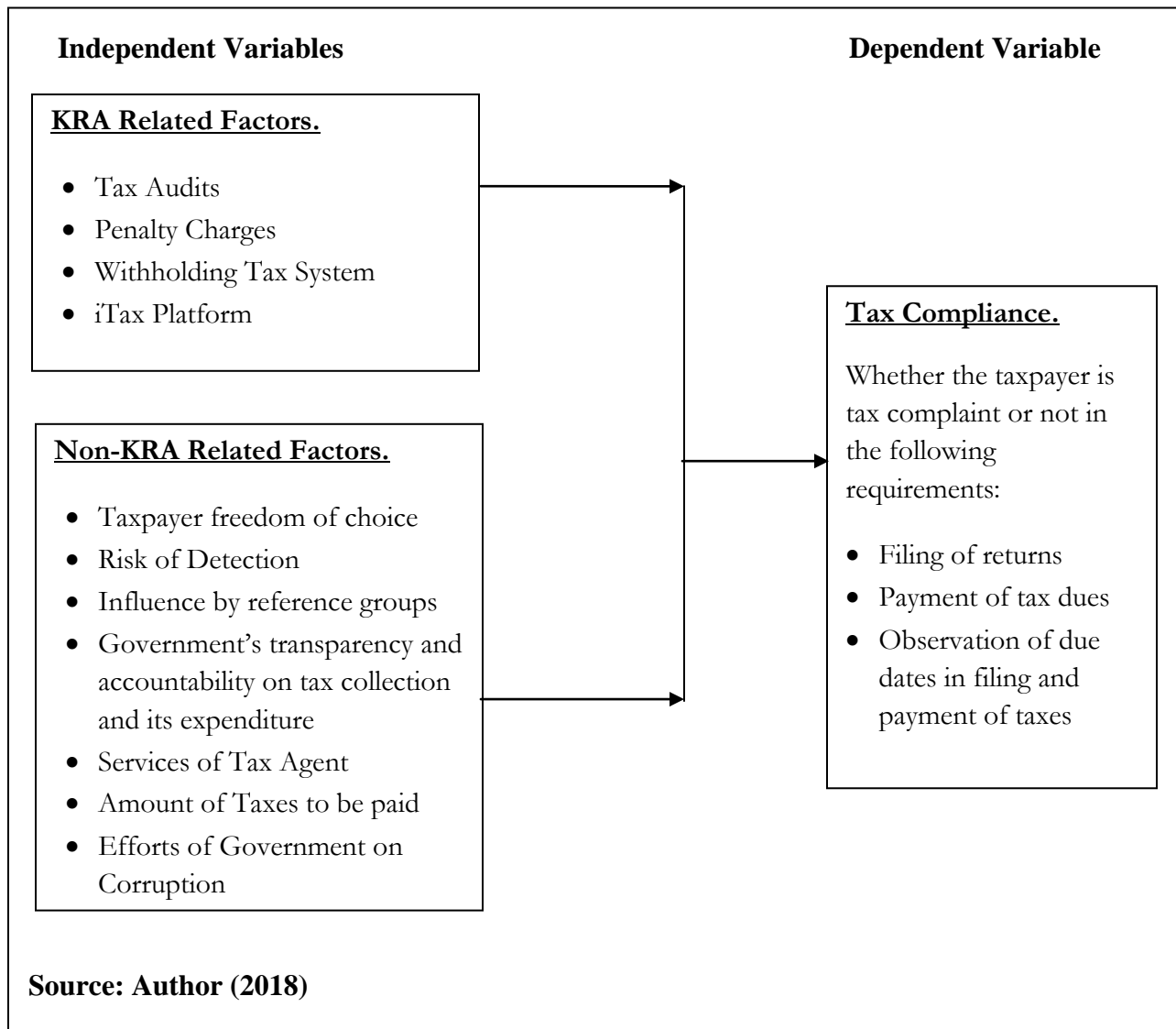
## **2.5 Conceptual Framework**

A conceptual framework is a structure or system of theories, concepts, assumptions or beliefs that informs the objectives of the research study (Maxwell, 2005). It also involves the synthesis

of the prevailing views in the literature with regards to a given state of affairs, both theoretical and from empirical findings (Imenda, 2014).

The conceptual framework of this study in Figure 2.1 shows the relationship between the independent variable which in this case is the KRA related and non-KRA related factors of tax compliance and the dependent variable which is tax compliance which consists of three operational constructs to be measured as illustrated in the next subchapter.

**Figure 2.1: Influence of KRA Related and Non-KRA Related Factors on Tax Compliance**



## 2.6 Operationalization of Variables Table

Operationalization of variables can be defined as a process of how concepts are measured into tangible components which can be easily quantified and computed for statistical analysis (Saunders et. al., 2015). Operationalization is essential because it visibly and demonstrably explains the objectives of the study so that they can be comprehended easily (Mwangi, 2017). The study assessed eleven independent variables and three constructs for the dependent variable as illustrated in the conceptual framework in subchapter 2.5. Table 2.1 below illustrates how the variables were operationalized and measured.

**Table 2.1: Operationalization of Variables**

<b>Variable (Independent)</b>	<b>Construct</b>	<b>Operational Construct</b>	<b>Measurement</b>	<b>Supporting Literature</b>	<b>Supporting Theory</b>
KRA Related Factors on Tax Compliance	Tax Audits	Whether tax audits have a positive effect on tax compliance	A 5-point Likert Scale of Agreement was used	Ali, Cecil & Knoblett (2001); Kirchler et. al. (2012); (Inasius, (2015); Young (1994); Gichuku (2014)	Economic Deterrence Theory
	Penalty Charges	Whether penalties and /or interests charged by Kenya Revenue Authority have positively influence tax	A 5-point Likert Scale of Agreement was used	Kamil and Nurlis (2015); Ali, Cecil & Knoblett (2001) ; Obeid (2015); (Park & Hyun, 2003); Gichuku (2014)	Economic Deterrence Theory

		compliance behavior			
	Withholding tax system	Whether withholding tax system has contributed positively to tax compliance status	A 5-point Likert Scale of Agreement was used	(Batrancea <sup>1</sup> et al., 2012); Kirchler, Hoelzl and Wahl (2008)	Behavioural Model of Tax Compliance Theory
	ITax platform	Whether the ITax platform of filing returns positively contributes to tax compliance status	A 5-point Likert Scale of Agreement was used	(Batrancea <sup>1</sup> et al., 2012); Kirchler, Hoelzl and Wahl (2008)	Behavioural Model of Tax Compliance Theory
KRA Non-related Factors on Tax Compliance	Taxpayer freedom of choice	Whether tax compliance status is a choice between being tax compliant and being tax non-compliant	A 5-point Likert Scale of Agreement was used	Mumford, (2001); Wenzel (2005a); Wenzel (2005b)	Behavioural Model of Tax Compliance Theory
	Risk of Detection	(i) Whether tax compliance status is informed by the risk of detection by the Kenya Revenue	A 5-point Likert Scale of Agreement was used	Kirchler et. al. (2012); (Inasius, (2015); Atawodi and Ojeka (2012); (Sour, 2004); Fjeldstad, Schulz-	Economic Deterrence Theory

		<p>authority</p> <p>(ii) Whether tax compliance status is informed by the benefits derived by my not being detected by Kenya Revenue Authority</p>		<p>Herzenberg and Sjursen (2012)</p> <p>Mutai and Jemaiyo (2016)</p>	
	Influence by reference groups	Whether the knowledge of the tax compliance status of friends and/or relatives influences tax compliance status	A 5-point Likert Scale of Agreement was used	(Inasius, 2015); Hasseldine et al. (1994); Clotfelter (1983); Walsh (2012); Franzoni (1999); Ali, et al. (2013) OECD (2010)	Behavioural Model of Tax Compliance Theory
	Government's transparency and accountability on tax collection and its expenditure	Whether transparency in expenditure of taxes collected by the government positively influences tax compliance behavior	A 5-point Likert Scale of Agreement was used	Obeid (2015); Fjeldstad, Schulz-Herzenberg and Sjursen (2012)	Fiscal Exchange Theory
	Services of tax agent	Whether the services of a tax agent leads to tax	A 5-point Likert Scale of Agreement	(Kirchler, Hoelzl & Wahl, 2008)	Behavioural Model of Tax Compliance

		compliance	was used		Theory
	Efforts of Government on corruption	Whether efforts put in place by the government to curb corruption in the country influences tax compliance	A 5-point Likert Scale of Agreement was used	Torgler and Schneider (2007); Picur and Riahi-Belkaoui (2006); Baum et al. (2017)	Fiscal Exchange Theory
	Amount of taxes to be paid	Whether the amount of taxes that a person is legally supposed influences tax compliance status positively	A 5-point Likert Scale of Agreement was used	Ali, Cecil and Knoblett (2001); Alm, Jackson and McKee (1992); Inasius (2015); Obeid, 2015	Behavioural Model of Tax Compliance Theory
<b>Dependent variable (Tax Compliance)</b>	Filing returns	Whether individual taxpayers file their returns or not	A 5-point Likert Scale was used (Never, Rarely, Sometimes, Often, Always)	Kirchler et. al. (2012); (Inasius, (2015); Atawodi and Ojeka (2012); (Sour, 2004); Fjeldstad, Schulz-Herzenberg and Sjursen (2012) Mutai and Jemaiyo (2016)	
	Payment of tax dues	Whether individual taxpayers paying their tax dues or not	A 5-point Likert Scale was used (Never, Rarely, Sometimes, Often, Always)	Kirchler et. al. (2012); (Inasius, (2015); Mutai and Jemaiyo (2016)	
	Observation	Whether	A 5-point	Sour (2004);	

	of due dates in filing and payment of taxes	individual taxpayers observe their due dates in filing returns and the payment of tax due	Likert Scale was used (Never, Rarely, Sometimes, Often, Always)	Fjeldstad, Schulz-Herzenberg and Sjursen (2012) Mutai and Jemaiyo (2016)	
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**Source: Author (2018)**

### **2.7 Operationalization of Variables**

In Table 2.1, Tax audits as an independent variable was operationally defined as a question seeking to determine if it has a positive effect on tax compliance or not. The operational construct was measured by a 5 point Likert Scale of “Agreement” (i.e. Strongly Disagree, Disagree, Cannot Tell, Agree and Strongly Agree). The supporting literature of this variable based on previous studies comprise of; Ali, Cecil and Knoblett (2001); Kirchler et. al. (2012); Inasius, (2015); Young (1994) and Gichuku (2014). It is supported by the economic deterrence theory as illustrated in subchapter 2.2.

Penalty charges as an independent variable was operationally defined as a question seeking to determine if penalties and interest charged by the Kenya Revenue Authority have positive influence on tax compliance behavior or not. The operational construct was again measured by a 5 point Likert Scale of “Agreement” (i.e. Strongly Disagree, Disagree, Cannot Tell, Agree and Strongly Agree). The supporting literature for this variable includes; Kamil and Nurlis (2015); Ali, Cecil and Knoblett (2001); Obeid (2015); Park and Hyun (2003) and Gichuku (2014). It is supported by the economic deterrence theory as illustrated in subchapter 2.2.

The withholding tax system as an independent variable was operationally defined as a question seeking to determine if the withholding tax system has contributed positively to tax compliance

status of an individual or not. The operational construct was measured by using the same 5 point Likert Scale of “Agreement”. The supporting literature for this variable based on previous studies includes Batrancea<sup>1</sup> et al. (2012) and Kirchler, Hoelzl and Wahl (2008). It is supported by the behavioral model of tax compliance as illustrated in subchapter 2.2.

iTax platform as an independent variable was operationally defined as a question seeking to determine if the iTax electronic platform of filing returns positively contributes to tax compliance by an individual or not. The operational construct was measured by a 5 point Likert Scale of “Agreement”. The supporting literature for this variable based on previous studies includes; Batrancea<sup>1</sup> et al., (2012); Kirchler, Hoelzl and Wahl (2008). The variable is supported by the behavioral model of tax compliance as shown in subchapter 2.2.

The freedom of choice of the taxpayer as an independent variable was operationally defined as a question seeking to determine if tax compliance status is an individual’s choice between being tax compliant or being tax non-compliant. The operational construct was measured by the same 5 point Likert Scale of “Agreement”. The supporting literature for this variable based on past empirical studies includes; Mumford, (2001); Wenzel (2005a) and Wenzel (2005b). The variable is supported by the behavioral model of tax compliance as shown in subchapter 2.2.

Risk of Detection as an independent variable was operationally defined as a question seeking to determine if tax compliance status is informed by the risk of detection by the Kenya Revenue authority or not and if tax compliance status is informed by the benefits derived by an individual not being detected by Kenya Revenue Authority. The operational constructs was measured by a 5 point Likert Scale of “Agreement”. The supporting literature for this variable based on past empirical studies includes; Kirchler et. al. (2012); Atawodi and Ojeka (2012); Fjeldstad, Schulz-

Herzenberg and Sjursen (2012); Mutai and Jemaiyo (2016); Sour (2004) and Inasius, (2015). The variable is supported by the economic deterrence theory as depicted in subchapter 2.2.

Influence by reference groups as an independent variable was operationally defined as a question seeking to determine if tax compliance status of friends and/or relatives influences tax compliance status of an individual. The operational constructs was measured by the same 5 point Likert Scale of “Agreement”. The supporting literature for this variable based on past empirical studies includes; Inasius, (2015); Hasseldine et al. (1994); Clotfelter (1983); Walsh (2012); Franzoni (1999); Ali, et al. (2013) and OECD (2010). The variable is supported by the behavioral model of tax compliance theory as shown in subchapter 2.2.

The national government’s transparency and accountability on tax collection and its expenditure as an independent variable was operationally defined as a question seeking to determine if transparency in expenditure of taxes collected by the government positively influences tax compliance behavior. The operational constructs was measured by using a 5 point Likert Scale of “Agreement”. The supporting literature for this variable based on past empirical studies includes; Obeid (2015); Fjeldstad, Schulz-Herzenberg and Sjursen (2012); Vihanto (2003); Palil (2010) and Alm (1999). The variable is supported by the behavioral model of tax compliance theory as shown in subchapter 2.2.

The services of tax agent as an independent variable was operationally defined as a question seeking to determine if the services of a tax agent leads to tax compliance or not. The operational constructs was measured by using a 5 point Likert Scale of “Agreement”. The supporting literature for this variable is Kirchler, Hoelzl and Wahl (2008). The variable is supported by the behavioral model of tax compliance theory as shown in subchapter 2.2.

Efforts of the national government on corruption as an independent variable was operationally defined as a question seeking to determine if efforts put in place by the national government to curb corruption in the country influences tax compliance. The operational construct was measured using the same 5 point Likert Scale of “Agreement”. The supporting literature for this variable include: Torgler and Schneider (2007); Picur and Riahi-Belkaoui (2006) and Baum et al. (2017). The variable is supported by the behavioral model of tax compliance as shown in subchapter 2.2.

The amount of taxes to be paid as an independent variable was operationally defined as a question seeking to determine if the amount of taxes that an individual is legally supposed influences tax compliance status positively or not. The operational construct was measured by a 5 point Likert Scale of “Agreement”. The supporting literature for this variable includes; Ali, Cecil and Knoblett (2001); Alm, Jackson and McKee (1992); Inasius (2015) and Obeid, (2015). The variable is supported by the behavioral model of tax compliance.

Tax compliance as a dependent variable was operationally defined as questions seeking to establish; whether individual taxpayers file their returns or not, whether individual taxpayers paying their tax dues or not and whether individual taxpayers observe their due dates in filing returns and the payment of tax due. The operational constructs were measured using a 5-point Likert scale, within a continuum of “Never, Rarely, Sometimes, Often and Always”.

## **2.8 Chapter summary**

The chapter discussed about tax compliance theories relevant to this study. They comprised of economic deterrence theory and behavioral model of tax compliance. The chapter went ahead to also discuss about past reviews in relation to the specific objectives of the study. The chapter showed the similarities of the findings and conflicting research outcomes of these past studies.

Based on the analysis of the past reviews it was established that the findings in regard to why people are tax compliant or non-compliant still remained uncertain. Furthermore, limited research incorporated both economic and non-economic factors to clearly explain tax compliance behavior. The theoretical and empirical reviews assisted the researcher to conceive a conceptual framework illustrating the influence of KRA related and non-KRA related factors on tax compliance. Furthermore it assisted the researcher on how he was going to operationalize the variables.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter expounds more on the methods and procedures that were employed in this research. It comprises of the research design, population and sampling, data collection, data analysis and ethical considerations in the study.

#### **3.2 Research philosophy**

The research adopted positivism research philosophy. In positivism paradigm, the nature of reality is objective and independent of social actors (Sarantakos, 2005; Wahyuni, 2012). Only observable phenomena can provide credible data and facts, moreover the researcher is independent of the data and maintains objective stance (Saunders et al. 2009; Guba & Lincoln, 2005; Hallebone & Priest, 2009). This is because this study sought to assess the views of taxpayers and what makes them comply or fail to comply with the existing laws of taxation in Kenya. These views made the basis of the findings of this study. The questions in the

questionnaire were based on variables found to have been studied by different researchers in different tax jurisdictions. The questionnaire had open ended questions so as not to guide the responses of the respondents to a particular outcome.

### **3.3 Research Design**

The study adopted a correlational research design. This is because correlational research shows the association between a variable and another variable or a variable and other variables. The research sought to establish whether tax compliance (dependent variable) is influenced by KRA dependent factors (independent variable 1) and/or Non- KRA dependent factors (independent variable 2). The research was mainly qualitative because it assessed the opinions of tax payers and their reasons for tax compliance or lack of compliance. It was also quantitative since these opinions were categorized on Likert-scales with a range of one to five, where 1 represented strong disagreement and 5 represented strong agreement. The degree of convergence or variation of opinion formed the basis of the findings.

### **3.4 Population and Sampling**

Population refers to the total number of items from where information is desired (Kothari, 2004). The number of registered users on the iTax platform in Nairobi stood at 1.6 million as at June 2015 (Kenya National Bureau of Statistics, 2015). In this study the population was all the individual taxpayers registered on iTax in Nairobi County. If one seeks to do a study and to collect data from the whole population, the exercise would be called a census. However, due to implications such as time and financial constraints, most studies select a small proportion of the population to represent the whole. This is called sampling. Kothari (2004), states that it is possible for a sample frame to mirror a population if some thresholds are followed. In this study,

individual taxpayers in Nairobi County were sampled and their responses were used to form a general opinion on all the individual taxpayers in Nairobi County.

The central limit theorem states that if a sample is from normally distributed data, the mean from samples of such distributions are themselves normally distributed. If the sample size is small, the shape of the distribution will largely depend on the shape of the parent population. However, as the population gets large (more than 30), the shape of the sampling distribution resembles a normal distribution regardless of the shape of the parent population. Thus in this respect, a sample beyond thirty respondents was sufficient.

Other researchers have applied different formulas in determining the ideal sample size. Using Slovin's formula the sample size was estimated as below.

$$n = \frac{N}{1 + NE^2}$$

Where:

n = Sample size

N = Total population

E = margin of error (0.05)

If we were to use the 2015 statistic on iTax enrollment, the ideal sample size was to be:

$$n = 400$$

On the other hand Mugenda and Mugenda (2003) recommend a sample size of no less than 384 for a population exceeding 10,000 with a 95% confidence level. They arrive at this minimum sample using the formula below.

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

Where:

$n$  = Sample size

$Z$  = Normal distribution Z score value 1.96 which corresponds to a 95% confidence level

$p$  = Estimated proportion of the target population (normally the number of respondents to participate in a study is taken to be half of the population which is 50% or 0.5)

$q = 1 - p$

$d$  = margin of error (0.05)

$$n = 384$$

From the above formulas proposed by different researchers, the sample size seems to converge within the neighborhood of 400. For this study, a sample size of 384 was used to represent the target population. The sample was selected using simple random sampling. Registers of taxpayers in Nairobi County which comprises of four tax stations of North of Nairobi, South of Nairobi, East of Nairobi and West of Nairobi were used. From each register which is chronologically arranged based on date of PIN registration, the individual taxpayers were classified by PIN ending digit which takes an alphabetical order (A-Z). A total of 26 clusters were formed for each station. From each cluster 4 taxpayers were randomly selected and called to enquire their willingness to participate in the study. This ensured that all elements of the population had an equal chance of being selected and as such the sample reflected the population.

The 400 who expressed their willingness to participate were given the questionnaires.

### **3.5 Data Collection Methods and Procedure**

This study solely relied on primary data to come up with answers to all the research questions. This is because primary data is more reliable compared to secondary data. This is because data is

retrieved by the researcher from the field unlike secondary data which might be outdated or subject to certain discrepancies (Akrani, 2014).

The data was collected through questionnaires. Section A of the questionnaire contained general information asking respondents about their main occupation, length of service and the annual income or turnover. Section B of the questionnaire was used to assess tax compliance attributes that sought to establish if individual taxpayers file KRA returns, making payments and observing due dates in filing and making payments. A five point Likert scale was used (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always). Section C was used to address the first objective that sought to assess the influence of KRA related factors on tax compliance based on a five point likert scale of (1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree.). Section D was used to address the second objective that sought to assess other factors influencing tax compliance based on a five point Likert scale of (1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree.).

The researcher issued the questionnaires. The researcher used a 'drop off and pick up later method'. This is because this method has been deemed to have a high response rate (Cooper & Schindler, 2006). The method is also effective in reducing the potential non-response bias as it has a high response rate.

### **3.6 Research Quality**

The research quality of the study was determined by examining the reliability and validity of the research instruments used as illustrated in section 3.6.1 and 3.6.2.

#### **3.6.1. Reliability**

Reliability is the point at which a set of variables indicate strong consistency in what they intend to measure (Wei & Nair, 2006). It shows the level of freedom from error that the scale has

(Pallant, 2007). Reliability of the research instrument was measured by using Cronbach's Alpha test on the items in the Likert scale in the questionnaire. The study adopted a benchmark value of 0.7 to assess the reliability of its questionnaire.

George and Mallery (2003) recommended a Cronbach's Alpha value of 0.7 or greater as satisfactory for the reliability test (Waithera, 2015).

### **3.6.2 Validity**

Validity is the measure of accuracy of a particular research instrument (Ogula, 1998). The validity of the questionnaire was evaluated and improved by dispensing them to the respondents targeted for the pilot study. For a pilot study, Mugenda and Mugenda (2003) recommends that the researcher gets information from 10% of the total sample size. In this case, the study used 38 respondents as the reference point for the pilot study carried out by the researcher. Furthermore, primary data was retrieved from a sample that had been randomly chosen and generalizations were made which rightly represent the population with a reduced incidence of bias that could put the validity of the study to question as opined by Kothari (2004).

### **3.7 Data analysis**

The dependent variable (tax compliance) took a dummy variable. Zero indicated non-compliance while one indicated compliance. These values were not discrete as compliance was deemed to be on a continuum where on one extreme it represents full tax compliance where a tax payer files the required tax returns, on or before the due dates and pays the taxes on or before due dates as required by law and on the other extreme end it represented total non-compliance.

KRA related factors that the researcher used to assess tax compliance are: whether the taxpayer feels the tax audits will uncover non-compliance; whether the penalty charges act as a deterrent

to non-compliance; whether the withholding tax system encourages declaration of tax as withheld taxes are evidence of transactions and whether the iTax system being an electronic internet based platform encourages compliance due to ease of use or ease of being discovered in cases of non-compliance.

The non-KRA related factors are: the taxpayer's freedom of choice to comply or failure to comply; whether the taxpayer assesses the risk of detection of non-compliance to be low; the influence by friends and relatives on tax compliance; the perception of government's transparency and accountability on tax collection and expenditure; whether the tax payer uses services of a tax agent; the amount of taxes to be paid and the efforts of the government in fighting corruption.

Measures of dispersion were used to assess how each factor on average affects tax compliance. The mean and standard deviation were used explaining the various outcomes after data analysis.

The data was analyzed using various methods. First, the researcher used measures of central tendency and dispersion. For the measures of central tendency, the researcher used the mean, median and mode so as to establish the average perception of respondents on tax compliance. The researcher then used a logistic regression model. Freedman (2009) proposes this model for a regression where the dependent variable is categorical (takes a dichotomous variable). Both independent variables were derived using factor analysis. The questions in section C and section D of the questionnaire were analyzed using factor analysis and independent variable 1 and variable 2 were derived respectively. Costello and Osborne (2005) recommend that in a study, it is important to retain only the relevant values. As such, the study used factor analysis to derive two independent variables from the twenty one questions.

Since factor analysis uses the shared variance to group correlated factors, it usually yields a constant result. After the variables were derived, the relationship between the dependent variable and the independent variables was established using a regression model which took the form below:

$$TC = a + \beta_1 V_1 + \beta_2 V_2 + \epsilon_t$$

Where:

TC = Tax Compliance

a = Intercept

$V_1$  = KRA Related Factors

$\beta_1$  = Coefficient for KRA Related Factors

$V_2$  = Non-KRA Related Factors

$\beta_2$  = Coefficient for Non- KRA Related Factors

$\epsilon_t$  = Error term

### **3.8 Ethical Considerations**

During the entire course of this research, high levels of ethics and professionalism were upheld. This thesis is original work of the researcher and was not copied from any past study. The researcher has duly acknowledged where he has sourced the information from other research works and has given citations and references to those scholars who have written them.

There was informed consent to all respondents. There was voluntary and willing participation. All the respondents were issued with a university headed introduction letter informing them of

the researcher's identity and the research for which he was collecting the data. As such, no participant was misinformed or gave out information on basis of misrepresentation.

There was confidentiality. The data collected was handled with the highest levels of confidentiality. The information has been used for the sole purpose of academic research. The information was coded so as to protect the identity of the respondent and prevent it from being used by other parties such as tax authorities and government agencies.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND PRESENTATION**

#### **4.1 Introduction**

This research investigation sought to examine the influence of KRA related factors and non-KRA related factors that contribute to tax compliance or tax non-compliance among individual taxpayers in Nairobi County in Kenya. This chapter presents the research outcomes with specific reference to the demographic aspects of the participants, data analysis and the perceptions of the participants based on each specific objective of the research study. Frequencies and percentages were used to analyze the response rate and the demographic information. Descriptive statistics were used to analyze tax compliance attributes and the two specific objectives of the study.

Regression analysis was used to determine the influence of the KRA and Non-KRA factors on tax compliance among individual taxpayers in Nairobi County in Kenya.

#### 4.2 Response Rate

An overall number of 384 questionnaires were distributed to the registered taxpayers in Nairobi County in Kenya. The researcher was able to retrieve 240 questionnaires translating to 62.5% response rate as shown in Table 4.1. According to Fowler (2009) a response rate of 60% and above is considered to be reasonable for the purpose of generalization.

**Table 4.1: Response Rate**

	<b>Frequency</b>	<b>Percentage (%)</b>
Responded	240	62.5
Failed to Respond	144	37.5
<b>Total</b>	<b>384</b>	<b>100</b>

**Source: Author (2018)**

#### 4.3 Reliability Test

The reliability examination of the questionnaire as the study's research instrument was conducted by using Cronbach's Alpha as a pointer of internal consistency. A Cronbach's Alpha coefficient of 0.7 and above was considered by the researcher as a minimum necessity for a questionnaire to be considered internally consistent. The results of the reliability test have been displayed in Table 4.2.

#### 4.2: Reliability Test

	<b>Cronbach's Alpha</b>	<b>No. of Items</b>
Tax Compliance Attributes	0.805	3
KRA related Factors	0.899	10

Influencing Tax Compliance		
Other Factors Influencing Tax Compliance	0.753	11

**Source: Author (2018)**

The outcomes of the reliability evaluation revealed that the questionnaire was internally consistent. This is as shown above by Cronbach's Alpha of 0.805, 0.899 and 0.753. Consequently it showed that the questionnaire was a reliable instrument to establish the tax compliance attribute, KRA related factors influencing tax compliance and non-KRA factors influencing tax compliance.

#### **4.3 Demographic Characteristics**

The demographic features of the respondents were determined with an aim of establishing the accuracy of the research findings. The demographic aspects are presented in Table 4.3.

**Table 4.3: Demographic Characteristics**

		<b>Frequency</b>	<b>Percent (%)</b>
<b>Gender</b>	Male	137	57.08
	Female	103	42.92
<b>Main occupation</b>	Employment	129	53.75
	Business	99	41.25
	Other	12	5
<b>Length of service in occupation</b>	Less than 1 year	3	1.25
	Between 1 to 4 years	40	16.67
	Between 5 to 10 years	84	35
	Between 11 to 15 years	109	45.42
	Over 15 years	4	1.67
<b>Annual level of income/annual turnover</b>	Less 10 Million Kenyan Shillings	142	59.17
	11-50 Million Kenyan Shillings	72	30
	51-100 Million Kenyan Shillings	20	8.33

	101-150 Million Kenyan Shillings	4	1.67
	Over 150 Million Kenyan Shillings	2	0.83

**Source: Author (2018)**

In Table 4.3 above, the study established that 57.08% of the respondents were male while the remaining 42.92% were female. Main occupation; the findings revealed that 53.75% of the participants were employed, while 41.25% operated their own business and finally 5% represented another occupation. This indicates that the majority of taxpayers were from the employment sector. Length of service in occupation; the findings of the study established that 45.42% of the respondents had between 11 to 15 years of service experience which represented the majority, 35% of the respondents had between 5 to 10 years of service experience. This indicated that the responses obtained were based on individuals with a long work experience that makes the general findings of the study to be reliable. Annual level of income/annual turnover; the study revealed that the majority of the respondents 59.17%, earn an average annual income/turnover of less than 10 million Kenyan shillings.

#### **4.4 Tax Compliance Attributes**

The study sought to establish the tax compliance attributes which would be used in the regression analysis to establish the influence of KRA factors and non-KRA factors on tax compliance as a dependent variable. The tax compliance attributes were measured by three aspects, comprising of: if tax payers file their returns; if they make payments of their tax due; if they observe due dates in filing and payment of taxes. The statements were put on a 5-Likert scale where; 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; Always = 5. The results are as displayed in Table 4.4 below.

#### **Table 4.4: Tax Compliance Attributes**

<b>Tax Compliance Attributes</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Rank</b>
<b>Statement</b>			
Do you file your KRA returns?	<b>3.8167</b>	<b>1.13509</b>	<b>1</b>
Do you make payments of your taxes due?	<b>3.6833</b>	<b>1.25083</b>	<b>2</b>
Do you observe due dates in filing and payment of taxes?	<b>3.1583</b>	<b>1.29367</b>	<b>3</b>
<b>Total Mean Score</b>	<b>3.5528</b>	<b>1.2265</b>	

**Source: Author (2018)**

The findings established that a majority of taxpayers do regularly file their KRA returns based on the mean of 3.8167 and standard deviation of 1.13509. Moreover it also established that taxpayers a majority of taxpayers do make their tax payments when due, which was justified by a mean of 3.6833 and a standard deviation of 1.25083. Finally the findings also established that a majority of tax payers, do observe due dates in filing and paying their taxes which was justified by a mean of 3.1583 and a standard deviation of 1.29367. In all tax compliance attributes, the sample means were greater than the expected mean of observations;  $(1+2+3+4+5)/5=3$ .

#### **4.5 Kenya Revenue Authority Related Factors**

The study sought to establish the influence of KRA related factors on tax compliance. To achieve this objective the respondents were asked to indicate on basis of the level of agreement which factors influence tax compliance. The statements were put on a 5 - Likert scale where; 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree. The results are displayed in Table 4.5 below.

**Table 4.5: Descriptive Analysis and Presentation of KRA Related Factors that Influence Tax Compliance**

<b>KRA Related Factors Influencing Tax Compliance</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Rank</b>
<b>Statement</b>			
I am well informed of my tax obligations under the Kenyan laws	<b>4.3000</b>	<b>0.77729</b>	<b>1</b>
The withholding tax system (on VAT, PAYE, Dividends, Interest etc.) has contributed positively to my tax compliance status	<b>4.1625</b>	<b>0.92085</b>	<b>2</b>
I am aware of the withholding tax system where all/part of my taxes due are deducted at the source of my income and paid to KRA	<b>3.7167</b>	<b>1.04448</b>	<b>3</b>
The iTax platform of filing returns and paying taxes has contributed positively to my tax compliance status	<b>3.6458</b>	<b>1.05278</b>	<b>4</b>
The penalties and/ or interests charged by KRA has positively influenced my tax compliance status	<b>3.6375</b>	<b>1.16336</b>	<b>5</b>
The tax audits carried out by the KRA has positively influenced my tax compliance status	<b>3.6208</b>	<b>1.11005</b>	<b>6</b>
I am well informed that tax laws in Kenya provide for charging penalties and/ or interest for non-compliance with the provisions of tax laws	<b>3.6083</b>	<b>1.24622</b>	<b>7</b>
I am aware that KRA carries out tax audits of taxpayers as part of their efforts to improve tax compliance	<b>3.3875</b>	<b>1.20488</b>	<b>8</b>
I am fully aware that the tax system in Kenya is a self-assessment system whereby I file returns and make declarations voluntarily	<b>3.2542</b>	<b>1.39859</b>	<b>9</b>
The self-assessment system of tax collection has contributed positively to my tax compliance status	<b>3.2250</b>	<b>1.22705</b>	<b>10</b>
<b>Total Mean score</b>	<b>3.65583</b>	<b>1.11456</b>	

**Source: Author (2018)**

The findings of the study in Table 4.5 established in general that all KRA related factors significantly influence tax compliance with a mean of 3.65583 and a standard deviation of 1.11456. The most significant factor was that of tax payers being well informed of their tax obligations under the Kenyan laws, with a mean of 4.3000 and standard deviation of 0.77729. The respondents also strongly agreed that withholding tax system positively contributed to their tax compliance status with a mean of 4.1625 and a standard deviation of 0.92085.

Moreover, most of the respondents agreed that iTax platform of filing returns positively influences their tax compliance status with a mean of 3.6458 and a standard deviation of

1.05278. Finally the respondents agreed that penalties or interest charged by KRA and tax audits positively influence their tax compliance status with a mean of 3.6375 and 3.6208 respectively.

The findings of the study concurred with Gichuku (2014), Obeid (2015), Kamil & Nurlis (2015), Kirchler et al. (2012) and Sekhon & Redae (2016) which revealed that tax audits and penalties or interest charged positively influence tax compliance. On the other hand it contradicted the findings of Webley et al. (1991) and Pommenhene & Weck-Hannemann (1996) which established that penalties has no influence on tax compliance; and Inasius (2015) and Young (1994) which established that tax audits have no significant effect on tax compliance.

#### **4.6 Non-KRA factors Influencing Tax Compliance**

The study sought to establish the influence of non-KRA factors on tax compliance. To achieve this objective the participants of the study were asked to indicate on the basis of the level of agreement which factors influence tax compliance. The statements were put on a 5 - Likert scale where; 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree. The results are displayed in Table 4.6.

**Table 4.6: Descriptive Analysis and Presentation of Non-KRA Factors Influencing Tax Compliance**

<b>Non-KRA Factors Influencing Tax Compliance</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Rank</b>
<b>Statement</b>			
My tax compliance status is a choice between being tax compliant and being tax non-compliant	<b>4.2583</b>	<b>1.03087</b>	<b>1</b>
I think that the reasons given on tax compliance by my friends and/ or relatives are valid	<b>4.2542</b>	<b>0.88572</b>	<b>2</b>
My tax compliance status is informed by the benefits I derive by me not being detected by KRA	<b>3.9833</b>	<b>0.91463</b>	<b>3</b>
I need the services of a tax agent to assist me to be tax compliant	<b>3.9500</b>	<b>0.95374</b>	<b>4</b>
The efforts put in place by the government to curb corruption in the country influence my tax compliance status	<b>3.9458</b>	<b>1.08681</b>	<b>5</b>

The government sufficiently informs us on the taxes collected from the economy and by how much of the taxes were spent and it affects my tax compliance	<b>3.9083</b>	<b>0.98945</b>	<b>6</b>
The amount of taxes that I am legally supposed to pay influence my tax compliance status positively	<b>3.8708</b>	<b>1.14803</b>	<b>7</b>
Taxes levied by the county government contribute to my compliance to national government tax	<b>3.8417</b>	<b>1.13518</b>	<b>8</b>
The transparency in expenditure of taxes collected by the government has influenced my tax compliance behavior	<b>3.7458</b>	<b>1.20233</b>	<b>9</b>
My tax compliance status is informed by the risk of detection by KRA that I may expose myself to	<b>3.6750</b>	<b>1.38227</b>	<b>10</b>
My tax compliance status is informed by the cost, in terms of money and business/occupational disruption I would suffer if I was detected by the KRA	<b>3.6708</b>	<b>1.12966</b>	<b>11</b>
<b>Total Mean Score</b>	<b>3.9186</b>	<b>1.07806</b>	

**Source: Author (2018)**

In Table 4.6 , generally all the non-KRA factors positively influence tax compliance. This was based on the average strong agreement level based on the ratings of the respondents. This was based on a total mean score of 3.9186 and a standard deviation of 1.07806.

The most significant factor with a high level of agreement score, comprised of tax compliance status being a choice between being tax compliant and being tax non-compliant with a mean score of 4.2583 and a standard deviation of 1.05087. This was followed by influence of reference groups that include friends and/or relatives with a mean score of 4.2542 and a standard deviation of 0.88572. The other factors with the highest mean of level of agreement comprised of: being not being detected by KRA; services of a tax agent; government action to curb corruption and the government accounting for how much tax is collected and spent with mean scores of 3.9833, 3.9500, 3.9458 and 3.9083 respectively.

The findings of the study concurred with Alm, Jackson and McKee (1992), Svallfors (2013) and Fjeldstad, Schulz-Herzenberg and Sjursen (2012) which established that the government's accountability of how the taxes were spent for the benefit of the public positively influences tax

compliance. Furthermore, the outcomes of the study are in agreement with the findings of Torgler and Schneider (2007) and Picur and Riahi-Belkaoui (2006) which established that governments with zero levels of tolerance on corruption positively influence tax compliance. The findings conflicted with the empirical outcomes of Sen-Gupta (2007) and Imam and Jacobs (2014) which established that government accountability has no effect at all on tax compliance.

The findings of the study also corresponds with the research outcomes of Hasseldine et al. (1994) and Clotfelter (1993) which revealed that influence by reference groups like friends and/ or relatives positively influence tax compliance. On the other hand, it conflicts with the findings of Alon & Hageman (2012) and Inasius (2015) which established that influence of reference groups was negative on tax compliance.

#### **4.7 Regression Analysis**

Multiple regression analysis based on a logistic regression model was employed to establish the relationship between tax compliance (dependent variable) and independent variables (KRA related factors) and (Non-KRA related factors). Factor analysis was used to compress the three attributes of tax compliance into a Y-factor. The KRA related factors that were used for the regression analysis comprised of two variables namely: I am well informed of my tax obligations under the Kenyan laws and; I am fully aware that the tax system in Kenya is a self - assessment system whereby I file returns and make declarations voluntarily. They were derived by using Principal Component Analysis that pin points the variables that accounts for a huge variability when compared to the others in form of factors. The Principal Component Analysis identified the aforementioned KRA related factors as the factors that account for more variability. This was after confirming that there was a strong correlation between the 10 variables, which can be used

to develop construct variables. Table 4.7 presents the factor variance and the variability they account for based on each factor.

**Table 4.7: Factor Variance for KRA Related Factors**

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.514	45.141	45.141	4.514	45.141	45.141	3.420	34.197	34.197
2	1.222	12.224	57.365	1.222	12.224	57.365	2.317	23.168	57.365
3	0.896	8.960	66.325						
4	0.776	7.756	74.081						
5	0.702	7.022	81.103						
6	0.663	6.634	87.737						
7	0.416	4.157	91.894						
8	0.337	3.372	95.266						
9	0.305	3.053	98.320						
10	0.168	1.680	100.000						
Extraction Method: Principal Component Analysis.									

**Source: Author (2018)**

From Table 4.7 the components in the first column are the numbers of the variables used in the Factor Analysis. The initial Eigen values are the variances of the factors to be extracted. The total column contains the Eigenvalue. The first factor and the second factors accounted for the most variance and hence have the highest Eigen values. The percentage of variance represents the percent of total variance accounted by each factor and the cumulative percentage gives the cumulative percentage of variance account by the present. Factor 1 accounted for 34% of the variability in all the 10 variables, and Factor 2 accounts for 23% of the variability. These two factors explains 57% of the total variability.

Factor analysis was deemed necessary because the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value of 0.822 was close to 1 hence the study proceeded to do factor analysis. Table 4.8 presents the coefficients of KMO.

**Table 4.8: Kaiser-Meyer-Olkin Measure of Sampling Adequacy for Kenya revenue authority related factors and other Factors Influencing Tax Compliance**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>	
<b>Kenya revenue authority related factors</b>	0.822
<b>Other factors influencing tax compliance</b>	0.849

**Source: Author (2018)**

Furthermore the Non-KRA factors influencing tax compliance employed in the regression analysis, comprised of three variables namely: My tax compliance status is informed by the benefits I derive by my not being detected by KRA; I think that the reasons given on tax non-compliance by my friends and/or relatives are valid and; The government sufficiently informs us on the tax collected from the economy and how the tax is spent and this affects my tax compliance.

Similarly, the three variables were retrieved by using Principal Component Analysis, which identified them as the factors that account for more variability. This was after confirming that there was a strong correlation between the 11 variables, which can be used to develop construct variables. Factor analysis was deemed fit for the data set because its KMO value was 0.849 which is close to 1 hence the study proceeded to do factor analysis. As shown in Table 4.8. In Table 4.9 below shows, that Factor 1 accounted for 41.72% of the variability in all the 11 variables, and

Factor 2 accounted for 10.783% of the variability followed by Factor 3 that accounted for 9.739% of the variability. These three factors explains 62.241% of the total variability. They comprised of the three variables aforementioned in the first paragraph that was used in regression analysis.

**Table 4.9: Factor Variance for Non-KRA Related Factors**

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.589	41.720	41.720	4.589	41.720	41.720	3.349	30.449	30.449
2	1.186	10.783	52.503	1.186	10.783	52.503	2.338	21.258	51.707
3	1.071	9.739	62.241	1.071	9.739	62.241	1.159	10.535	62.241
4	0.890	8.089	70.330						
5	0.720	6.543	76.873						
6	0.615	5.593	82.466						
7	0.537	4.885	87.351						
8	0.482	4.384	91.736						
9	0.332	3.019	94.755						
10	0.299	2.718	97.473						
11	0.278	2.527	100.000						

**Source: Author (2018)**

#### 4.7.1 Multicollinearity

In order to conclude if collinearity existed, diagnostic tests were conducted and the results are as displayed in Table 4.10. Pallant (2004) recommended that the level of multicollinearity is zero when the tolerance value is more than 0.1 and the VIF value is less than ten.

Based on the outcomes of the study, the tolerance values of the independent variables were; KRA factors (represented by  $X_1$  and  $X_2$ ) were 0.899 and 0.886 respectively and with respect to Non-KRA factors (represented by  $X_4$ ,  $X_5$  and  $X_6$ ), the tolerance values were 0.832, 0.841 and

0.973 respectively. The values were above 0.1 hence the outcomes did not violate the multicollinearity assumption.

Furthermore, the outcomes were justified by VIF values of; KRA factors (represented by  $X_1$  and  $X_2$ ) 1.112 and 1.128, respectively and Non-KRA factors (represented by  $X_4$ ,  $X_5$  and  $X_6$ ) 1.202, 1.189 and 1.028 respectively which were below the benchmark value of 10.

**Table 4.10: Collinearity Statistics**

<b>Collinearity Statistics</b>		
	<b>Tolerance</b>	<b>VIF</b>
I am well informed of my tax obligations under the Kenyan laws ( $X_1$ ; <b>KRA Factor</b> )	0.899	1.112
I am fully aware that the tax system in Kenya is a self -assessment system whereby I file returns and make declarations voluntarily( $X_2$ ; <b>KRA Factor</b> )	0.886	1.128
My tax compliance status is informed by the benefits I derive by my not being detected by KRA( $X_4$ ; <b>Non-KRA Factor</b> )	0.832	1.202
I think that the reasons given on tax non-compliance by my friends and/or relatives are valid ( $X_5$ ; <b>Non-KRA Factor</b> )	0.841	1.189
The government sufficiently informs us on the taxes collected from the economy and how much of the taxes were spent and this affects my tax compliance ( $X_6$ ; <b>Non-KRA Factor</b> )	0.973	1.028

**Source: Author (2018)**

#### **4.7.2 Model Summary**

To determine the association of tax compliance and KRA and Non-KRA factors, the dependent variable (tax compliance) was regressed against the independent variables ( **KRA factors**: I am well informed of my tax obligations under the Kenyan laws; I am fully aware that the tax system in Kenya is a self - assessment system whereby I file returns and make declarations voluntarily and **Non KRA factors**: My tax compliance status is informed by the benefits I derive by my not being detected by KRA; I think that the reasons given on tax non-compliance by my friends

and/or relatives are valid and the government sufficiently informs us on the tax collected from the economy and how much of the tax is spent and this affects my tax compliance). The model summary is shown in Table 4.11.

**Table 4.11: Model Summary**

<b>Model Summary<sup>b</sup></b>					
<b>Model</b>	<b>R</b>	<b>R-Square</b>	<b>Adjusted R-Square</b>	<b>Std. Error of the Estimate</b>	<b>Durbin Watson</b>
<b>1</b>	<b>0.250<sup>a</sup></b>	<b>0.062</b>	<b>0.042</b>	<b>1.016257</b>	<b>1.536</b>
<p><b>a. Predictors (Constant), KRA factors (I am well informed of my tax obligations under the Kenyan laws, I am fully aware that the tax system in Kenya is a self -assessment system whereby I file returns and make declarations voluntarily) Other factors (My tax compliance status is informed by the benefits I derive by my not being detected by KRA, I think that the reasons given on tax non-compliance by my friends and/or relatives are valid, The government sufficiently informs us on the taxes collected from the economy and how much of the taxes were spent and this affects my tax compliance)</b></p> <p><b>b. Dependent variable (Tax Compliance Attributes)</b></p>					

**Source: Author (2018)**

The results of the regression analysis pointed out that there is a moderate relationship between the two KRA related factors and the three Non-KRA/Other factors with an R-value of 0.250 as presented in Table 4.8 in the previous page. Cohen (1988) and Chin (1998) recommended R-values of between 0.2 and 0.3 to indicate a moderate relationship between the independent and dependent variables. This study adopted this as the cut-off point. Consequently, this meant that there was a moderate relationship between KRA/non-KRA related factors and tax compliance.

The difference between the R-square value and the adjusted R-squared value is that the R-squared supposes that every independent variable in the model explains the variation in the

dependent variable. It gives the percentage of explained variation as if all independent variables in the model affect the dependent variable (Investopedia, 2018). Adjusted R-squared, on the other hand, gives the percentage of variation explained by only those independent variables that in reality affect the dependent variable (Investopedia, 2018). The outcomes of the regression analysis revealed that the KRA related factors and Non-KRA factors pointed out in Table 4.11 explains 6.2% of the aggregate variance in tax compliance, which is evident with the R-Square value of 0.062. The R-square is a measure of explanatory power, not fit (Cohen, 1988; Chin, 1998). One can generate many data with low R-square, because we do not expect models to include all the relevant predictors to explain an outcome variable (Cohen, 1988). Even when the R-square is low, it can be significantly different from zero, indicating that the regression model has statistically significant explanatory power (Chin, 1998). The outcome of the durbin-watson statistic of 1.536 inferred that the residuals of the regression model were not serially correlated. Ngechu (2004) recommended a durbin-watson statistic of value above 1.5 where residuals of regression model are not serially correlated.

### 4.7.3 Analysis of Variance

The Analysis of Variance (ANOVA) was carried out with an aim of testing the regression model's goodness of fit. The significance level of the model was 0.010; meaning  $p < 0.05$ . This means that the model is statistically significant in explaining the association between tax compliance (dependent variable) and KRA and Non-KRA factors (independent variables). The regression model demonstrates goodness of fit when the p-value is less than 0.05. The outcomes of ANOVA are presented in Table 4.12.

**Table 4.12: Analysis of Variance**

ANOVA <sup>a</sup>					
Model	Sum of	Df	Mean Square	F	Sig.

	Squares				
Regression	16.100	5	3.220	3.118	0.010 <sup>b</sup>
Residual	241.670	234	1.033		
Total	257.770	239			

**b. Dependent variable (Tax Compliance)**

**a. Predictors (Constant), KRA factors** (I am well informed of my tax obligations under the Kenyan laws, I am fully aware that the tax system in Kenya is a self -assessment system whereby I file returns and make declarations voluntarily) **Non KRA factors** (My tax compliance status is informed by the benefits I derive by my not being detected by KRA, I think that the reasons given on tax non-compliance by my friends and/or relatives are valid, The government sufficiently informs us on the taxes collected from the economy and how much of the taxes were spent and this affects my tax compliance)

**Source: Author (2018)**

**4.7.4 Regression Co-efficients**

In Table 4.13 , the regression co-efficients revealed that at 95% level KRA factor (I am well informed of my tax obligations under the Kenyan laws) has a negative effect on tax compliance and another KRA factor (I am fully aware that the tax system in Kenya is a self -assessment system whereby I file returns and make declarations voluntarily) has a positive effect on tax compliance.

**Table 4.13: Regression Co-efficients**

Model	Unstandardized Co-efficients			
	B	Std. Error	t	Sig.
Intercept	2.773	0.580	4.780	0.000
KRA Factor 1	-0.153	0.058	-2.653	0.009
KRA Factor 2	0.215	0.089	2.421	0.016
Non-KRA Factor 1	0.115	0.066	1.752	0.081
Non-KRA Factor 2	-0.067	0.087	-0.75	0.445
Non-KRA Factor 3	0.079	0.059	-1.341	0.181

a. Dependent variable: Tax Compliance

**Source: Author (2018)**

The outcomes of the study revealed that the KRA related factors that comprised of being informed of one's tax obligations under the Kenyan laws and being aware that the tax system in Kenya is a self- assessment whereby an individual file returns and makes declarations voluntarily were statistically significant to tax compliance. This is evident because the factors recorded p-values and t values of (t = -2.653, p= 0.009<0.05) and (t = 2.421, p =0.016<0.05) respectively.

The following regression equation was retrieved from the regression co-efficients;

$$Y = 2.773 + -0.153X_1 + 0.215X_2 + 0.115X_3 + -0.067X_4 + 0.079X_5$$

Whereby Y = Tax Compliance

$X_1$  = KRA Factor 1

$X_2$  = KRA Factor 2

$X_3$  = Non-KRA Factor 1

$X_4$  = Non-KRA Factor 2

$X_5$  = Non-KRA Factor 3

The constant value of 2.773 indicates that if KRA factors comprising of  $X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$  and  $X_5$  as shown above were absent, then the level of tax compliance would be 2.773 which is a very small value. This is the mean of population estimate that would comply at zero level of influence by KRA and non KRA factors. On the other hand  $X_1$  (I am well informed of my tax obligations

under the Kenyan laws) increases by one unit then tax compliance will reduce by 15.3%. If  $X_2$  (I am fully aware that the tax system in Kenya is a self -assessment system whereby I file returns and make declarations voluntarily) increases by one unit tax compliance will increase by 21.5%.

Furthermore, if  $X_3$  (My tax compliance status is informed by the benefits I derive by my not being detected by KRA) increases by one unit tax compliance will increase by 11.5%. Additionally if  $X_4$  (I think that the reasons given on tax non-compliance by my friends and/or relatives are valid) increases by one unit tax compliance will reduce by 6.7%. Finally if  $X_5$  (The government sufficiently informs us on the taxes collected from the economy and how much of the taxes were spent and this affects my tax compliance.) increases by one unit then tax compliance will increase by 7.9%.

#### **4.8 Chapter Summary**

The objectives of the study was to determine the influence of KRA and Non-KRA related factors on tax compliance. The outcomes of the descriptive analysis revealed that KRA related factors that significantly influence tax compliance with the strongest level of agreement comprised of individual taxpayers being informed about tax obligations under Kenyan laws, withholding tax system, i-Tax platform of filing returns, penalties and tax audits by KRA. On the other hand the influence of Non-KRA related factors that significantly influence tax compliance with the strongest level of agreement comprised of influence by reference groups, services of a tax agent, government action to curb corruption and government accounting for how much taxes were raised and how they were spent.

The regression analysis on the other hand revealed that the KRA related factors significantly influenced tax compliance. They comprised of; I am well informed of my tax obligations under the Kenyan laws, which had a negative influence on tax compliance and; I am fully aware that

the tax system in Kenya is a self -assessment system whereby I file returns and make declarations voluntarily, which on the other hand had a positive influence on tax compliance.

## **CHAPTER FIVE**

### **DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter will present the summary of the research purpose and process. It presents a brief discussion of the findings based on each objective that the study aimed to address and the general conclusions of these findings. Based on the findings of the study this chapter also presents recommendations to the KRA and policy makers. Finally it discusses the limitations of the study and recommendations for future research.

## **5.2 Research Purpose and Process**

The main purpose of the study was to determine the drivers of tax compliance among individual taxpayers in Nairobi County in Kenya. The specific objectives of the study were; to evaluate the influence of KRA related factors on tax compliance and to examine the influence of Non-KRA related factors on tax compliance. The research process involved writing a research proposal aligned to the objectives of the study, data collection through questionnaires which were self-administered to the targeted respondents and writing of the findings of the research.

The primary data was retrieved and analyzed using SPSS. The analysis involved both descriptive and regression analysis. The final output were presented in Tables and a research report on the findings that addressed the objectives of the study was written and recommendations made.

## **5.3 Discussions of the Findings**

This section discusses the outcomes of the research process based on each specific objective.

### **5.3.1 The Influence of KRA Related Factors on Tax Compliance**

The KRA related factors comprised of 10 elements as shown in the questionnaire in the appendix section. These factors were assessed by descriptive statistics which comprised of mean scores and standard deviation. Regression analysis was used to regress the most significant factors against the tax compliance attributes. The descriptive analysis outcomes of the study established the most significant KRA related factors influencing tax compliance which comprised of tax payers being well informed of their tax obligations under the Kenyan laws, withholding tax system, iTax platform of filing returns, penalties or interest charged by KRA and tax audits.

The findings of the research investigation coincided with Gichuku (2014), Obeid (2015), Kamil and Nurlis (2015), Kirchler et al. (2012) and Sekhon & Redae (2016) which revealed that tax audits and penalties or interest charged positively influences tax compliance. On the other hand it

contradicted the findings of Webley et al. (1991) and Pommenhene and Weck-Hannemann (1996) which established that penalties have no influence on tax compliance; and Inasius (2015) and Young (1994) which established that tax audits have no significant effect on tax compliance.

The regression analysis on the other hand revealed that only two KRA related factors significantly influence tax compliance. They comprise of; I am well informed of my tax obligations under the Kenyan laws, which had a negative influence on tax compliance and; I am fully aware that the tax system in Kenya is a self -assessment system whereby I file returns and make declarations voluntarily, which on the other hand had a positive influence on tax compliance.

### **5.3.2 The Influence of Non-KRA Related Factors on Tax Compliance**

The non-KRA related factors comprised of 11 elements as illustrated in the questionnaire in the appendix section. These factors were assessed by descriptive statistics which comprised of mean scores and standard deviation. Regression analysis was used to regress the most statistically significant factors against the tax compliance attributes.

The descriptive analysis established that the most significant non-KRA related factors on tax compliance based on the level of agreement comprised of; tax compliance status is a choice between being tax compliant and being non-tax compliant, influence by reference groups that includes friends and/or relatives, not being detected by KRA, services of a tax agent, government action to curb corruption and the government accounting for tax collected and tax spent.

The findings of the study concurred with Alm, Jackson and McKee (1992), Svallfors (2013) and Fjeldstad, Schulz-Herzenberg and Sjursen (2012) which established that the accountability of government on tax expenditure for the benefit of the public positively influences tax compliance.

Furthermore, the findings of the research coincides with the empirical outcomes of Torgler and Schneider (2007) and Picur and Riahi-Belkaoui (2006) which proved that governments with zero tolerance on corruption positively influence tax compliance. On the other hand, the findings conflicted with the empirical outcomes of Sen-Gupta (2007) and Imam and Jacobs (2014) which established that accountability of governments on expenditure has no effect at all on tax compliance.

The findings of the study also corresponds with the findings of Hasseldine et al. (1994) and Clotfelter (1993) which revealed that reference groups like friends and/ or relatives positively influence tax compliance. On the other hand, it contradicts the findings of Alon and Hageman (2012) and Inasius (2015) which established that the influence of reference groups on tax compliance is negative.

The regression analysis results indicated that all the non-KRA related factors do not significantly influence tax compliance.

#### **5.4 Conclusion**

In conclusion the findings of the study established that non-KRA related factors significantly influence tax compliance when compared to KRA related factors based on the level of agreement from the descriptive analysis in chapter four. On the other hand based on the regression analysis KRA related factors which comprised of two variables (I am well informed of my tax obligations under the Kenyan laws; I am fully aware that the tax system in Kenya is a self -assessment system whereby I file returns and make declarations voluntarily) significantly influence tax compliance though it was evident that the Non-KRA related factors do not significantly influence tax compliance based on the regression analysis of the study.

## **5.5 Recommendations**

The KRA should focus more on employing the services of tax agents, when dealing with the individual taxpayer's tax issues since the availability of tax practitioners indisputably decreases many of the informational and computational barriers to tax compliance and moreover it increases the tax payer's willingness to comply with their tax obligations.

The policy makers with particular reference to the government should ensure that they are always transparent and fair with regards to how tax collected and all money collected should be accounted for in terms of expenditure and how it benefits the citizens of Kenya. The government should continue to conceive more stringent framework policies to effectively curb corruption menace in the public sector in order to boost confidence among the individual taxpayers thus increasing their willingness to comply with their tax obligations.

## **5.6 Limitations of the Study and Suggestions for Future Research**

The major limitation of the study was the exclusive use of questionnaires as a research instrument. This is because according to Kothari (2004) questionnaires possess the possibility of ambiguous replies or omissions of replies. Furthermore, it is hard to tell whether the participants of the study were truly representative. Additionally the research instrument has inbuilt inflexibility because of difficulty of amending the approach once dispatched and it is the most slowest approach of collecting data compared to interviews and observations. Future studies should incorporate interview guides and secondary data besides using questionnaires to provide robust and reliable research outcomes through triangulating the findings.

Furthermore, the study targeted individual tax payers only as its primary unit of analysis. Hence future studies should consider incorporating the non-individual taxpayers when carrying out research investigations on tax compliance.

Additionally, the study did not focus on control factors that could have influenced the relationship between tax compliance and KRA and Non-KRA related factors. Future studies should consider incorporating control factors to moderate tax compliance and the factors that influence it.

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## **APPENDIX ONE: QUESTIONNAIRE**

### **DRIVERS OF TAX COMPLIANCE AMONG INDIVIDUAL YAXPAYERS IN KENYA QUESTIONNAIRE**

**Dear Participant,**

My name is Ken Waiganjo. I am a Master of Commerce student at Strathmore University conducting a research on “The drivers of Tax compliance among individual Taxpayers in Kenya”. I am at data collection stage and I am requesting for your response to the questions I have listed below. Your response will be important in my study in terms of analyzing and drawing conclusions that will lead to further tax compliance knowledge and possible policy recommendations on tax compliance in Kenya to both the taxpayers and tax collecting agency respectively. Furthermore, it will be of great help in achieving the objectives of my study. I will be thankful if you could take your time to respond to the brief questionnaire/interview that I will carry out. The information you will provide will be treated with strict confidentiality and will be used solely for purposes of this research.

#### **SECTION A: GENERAL INFORMATION**

The information in this section will serve as background to the answers that will be provided in the other sections.

1. Kindly indicate your main occupation? Employment [ ] Business [ ] Other .....

2. Length of service in the occupation

Less than 1 year [ ] between 1 to 4 years [ ] between 5 to 10 years [ ] between 11 to 15 years [ ] Over 15 years [ ]

3. Kindly indicate your annual level of income/annual turnover

Less KSh.10M [ ] Between KSh.11M to 50M [ ] Between KSh.51 to 100M [ ] Between KSh.101- 150M [ ] Over KSh.150M [ ]

### SECTION B: TAX COMPLIANCE ATTRIBUTES

This section will measure the level of tax compliance of an individual in Kenya. Please indicate by ticking (√) in the appropriate boxes the extent to which you comply to pay your taxes.

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>The following questions are measures of tax compliance</b>	<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>
Do you file your KRA returns?					
Do you make payments of your tax dues					
Do you observe due dates in filing and payment of taxes?					

### SECTION C: KENYA REVENUE AUTHORITY RELATED FACTORS

This section will establish the influence of the tools/factors that Kenya Revenue Authority administers and how they contribute to level of tax compliance in Kenya. Please indicate by

ticking (√) in the appropriate box the extent to which you agree or disagree with the tool/factor in question.

		1	2	3	4	5
	<b>The following are measures that KRA employs to ensure compliance</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1	I am well informed of my tax obligations under the Kenyan laws					
2	I am fully aware that the tax system in Kenya is a self -assessment system whereby I file returns and make declarations voluntarily					
3	The self- assessment system of tax collection has contributed positively to my tax compliance status					
4	I am aware of the withholding tax system where all/part of my taxes due are deducted at the source of my income and paid to Kenya Revenue Authority (KRA).					
5	The withholding tax system (on VAT, PAYE, Dividends, Interest etc.) has contributed positively to my tax compliance status					
6	The iTax platform of filing returns and paying taxes has contributed positively to my tax compliance status					
7	I am aware that the Kenya Revenue Authority carries out tax audits of taxpayers as part of their efforts to improve tax compliance					
8	The tax audits carried out by the Kenya Revenue Authority have a positive influence on my tax compliance status					
9	I am well informed that tax laws in Kenya provide for charging penalties and/or interest for non-compliance with the provisions of tax laws					
10	The penalties and /or interests charged by Kenya Revenue Authority have positively influenced my tax compliance behavior					

#### **SECTION D: OTHER FACTORS INFLUENCING TAX COMPLIANCE**

This section will establish the influence of other factors other than the tools that Kenya Revenue Authority administers and how they contribute to tax compliance in Kenya. Please indicate by ticking in the (√) appropriate box the extent to which you agree or disagree with the factor in question.

		1	2	3	4	5
	<b>The following are Non-KRA measures that enhance compliance</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1	My tax compliance status is a choice between being tax compliant and being tax non-compliant					
2	My tax compliance status is informed by the risk of detection by the Kenya Revenue authority that I may expose myself to					
3	My tax compliance status is informed by the cost, in terms of money and business/occupational disruption I would suffer if I was detected by the KRA					
4	My tax compliance status is informed by the benefits I derive by my not being detected by KRA					
5	I think that the reasons given on tax non-compliance by my friends and/or relatives are valid					
6	The government sufficiently informs us on the taxes collected from the economy and how much of the taxes were spent and this affects my tax compliance					
7	The transparency in expenditure of taxes collected by the government has influenced my tax compliance behavior					
8	The efforts put in place by the government to curb corruption in the country influence my compliance status					
9	The amount of taxes that I am legally supposed to pay influence my tax compliance status positively					
10	I need the services of a tax agent to assist me to be tax compliant					
11	Taxes levied by the county government contribute to my compliance to national government tax					

**THANK YOU FOR YOUR TIME AND FEEDBACK, PLEASE CHECK IF YOU HAVE ANSWERED ALL QUESTIONS**

