THE EFFECT OF TAX ADMINISTRATION ON TAX REVENUE COLLECTION IN KENYA REVENUE AUTHORITY

BY

ROBERT G. KAMARA

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DECLARATION

I hereby declare that this project is my original work and has not been presented anywhere else for an academic ward of any kind.

Signature   **Date 11th November 2021**

Robert G. Kamara

REG NO: D63/5247/2017

Supervisor

This research project has been presented with my approval as the University Supervisor

Sign   **Date November 10, 2021**

Dr. Herick Ondigo, PhD.

University of Nairobi

DEDICATION

To my caring brother Mr. William K. Kollie and Mrs. Victoria M. Kollie, a big thank you for the immeasurable support and encouragement you have given in the course of this study. I also obligate the study to my wife Hawa Venvojai Kamara and children, and the entire family for their continuous words of inspiration and prayer during my study period.

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LIST OF ABBREVIATIONS

GDP   Gross Domestic Product

ICT   Information Communication Technology

IEA   Institute of Economic Affairs

KRA   Kenya Revenue Authority

OECD   Organization for Economic Co-Operation and Development

PIN -   Kenya Revenue Authority Personal Identification Number

RGDP   Real Gross Domestic Product

VAT   Value Added Tax

ABSTRACT

The research investigated the influenced of tax administration on the collection of tax revenue in Kenya. The study specifically aim to establish how tax compliance, tax structure, taxpayer services delivery influenced tax revenue collection in KRA. The study used the descriptive study design and management employees working at the KRA offices in Nairobi County was the chosen population. The study relied on raw data collected using a questionnaire. The questionnaires were issued to selected KRA managers using as online survey. The survey employed the descriptive and inferential statistical techniques to scrutinize the primary and secondary data gathered. Mean and standard deviation were computed using data gathered from the participants. The multivariate regression model was used to link the independent variables to the dependent variable. The results showed that tax compliance had a coefficient of $\beta=0.300$ (p-value $=0.017$) which revealed that tax compliance had positive and significant influence on tax revenue collection. The results further showed that tax structure had a coefficient of $\beta=0.279$ (p-value $=0.039$) which revealed that tax structure had a positive and statistically significant influence on tax revenue collection. Finally, the resulted established that taxpayer services delivery had a coefficient of $\beta=0.355$ and a corresponding p-value $= 0.007$ which was statistically significant at 5 percent level of significance. These results showed that taxpayer services delivery had positive and significant influence on tax revenue collection. This study therefore concluded that tax administration is central to countries development and therefore tax compliance, tax structure and taxpayers' services are key to an effective tax administration strategy. The study recommends that management of KRA should come up with more stringent policies on tax administration in order to curtail tax evasion and increase tax revenue collection. Tax administration strategies should be based on the analysis of the performance of the existing strategies such adoption of automated systems, progressive policies implementation and tax rates harmonization in order to increase tax compliance and revenue collection.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Tax revenue is described as funds collected from incomes of individuals and businesses categorized into direct and indirect taxes (OECD (2018). Tax revenue can speed up growth in the economy and fund government programs intended for the well-being of the citizens. When the government meets it annual tax revenue target, it is capable of funding budgeted expenditures for development programs in the fiscal budget (Andrejovska & Pulikova, 2018; Etim et al., 2020). For instance, Kenya has a major development program left behind by the Kibaki's administration for implementation. The primary focused of the project is to improve the living standard of every Kenyan more than what is now by the year 2030. Development projects of every organization or a nation has to be financed to achieve its goals. Huge amounts of resources are needed for the country's vision 2030 economic policy and the government has to secure funds to support the agenda. The primary source identified for funding this program is tax revenue. To raise the needed funds for vision 2030 and also meet the country's fiscal deficit targets, the authority in recent times upgraded it tax collection apparatus (Njenga, 2019; Kigunda, 2018; KIPPRA, 2020).

The government introduced the integrated tax management system involving the use of technology filing and registration, payment, electronic taxpayer accounts and internal audit modules covering compliance. Also, the electronic tracking system for cargoes, risk identification and control system and a common cash receipting system. Have in place a strategy for collection of turn over based tax and taxes from the real estate and mining sectors. The upgrading of the tax system was intended to make the tax administration effective and efficient in the KRA for tax collection to fund programs at the two levels of government (Muthama, 2016; Gitaru, 2017). Despite the automation of the tax system the KRA is yet to meet the annual tax revenue collection target (Adam International, 2018). In the wake of these developments, the study come to assess how tax administration had influenced tax revenue collection in the Kenya Revenue Authority supported by selected theories of taxation.

Tax administration and tax revenue collection are guided by traditional theories of taxation that include the optimal theory of taxation, the benefit theory and ability-to-pay theory. These theories discussed the importance of fairness, certainty, and efficiency as bedrock of taxation (Koritnik & Podlipnik, 2017; Tin, 2019). The optimal theory of taxation anchoring the study provides empirical evidence that underpins the need for good tax administration to meet tax payers' satisfaction and enhance tax revenue collection. Further, Ramsey rules corroborate with other taxation theories on equality and fairness in the tax system. It sets the pace for better regulatory framework by tax policy makers in imposing indirect and direct taxes for the welfare of society (Cremer & Gahvari, 2017; Selim, 2017).

According to Koritnik and Podlipnik (2017), the ability-to-pay theory supports the legitimacy of tax laws and rules that also supports equality and fairness in the tax system. In addition, the justice and convenience concept of the tax system are associated with the taxpayers' ability-to-pay postulate and is part of the constitutional principles appropriate for effective tax compliance which is the key objective of tax administration that influences revenue collection (Rossikhina, Hultai & Shrub, 2018). The ability-to-pay is simply a legal tax burden distribution to individuals in the various sectors of the economy. The theory is a good working tool for modern tax administration and is useful in developing tax structure for revenue generation (Pressman, 2018).

The preposition also suggests that government should design the tax structure based on the citizens' ability to pay for expected benefits. Arthur Laffer in 1974 agreed with the ability-to-pay preposition and proposed that government should lower the tax rate to increase tax revenue collection. Laffer argued that reduction of the rate of taxation is an effective strategy for economic growth because it will bring more taxpayers under the tax bracket and will enhance government revenue. The adjustment of the tax rate encourages compliance and increases allocation efficiency (Soldatos, 2016). When the amount of tax to pay is not exorbitant it creates the opportunity for all taxpayers to contribute to tax revenue. The tax structure should be flexible to bring down the direct and indirect taxes thereby allowing everyone to come under the tax brackets (Latif, *et al* 2019).

The benefit theory focused on the willingness of the taxpayers based on satisfaction gain from government public services utilization. Since tax payment is for welfare, certainty should be attached to the tax system. Certainty has to do with the reliability and efficiency of the tax system from the tax administration to induce the taxpayers to pay. The tax laws and practices should be fair and the procedures and manner of tax payment should be to the taxpayers convenient (Tin, 2019). Another theory of the study is expectancy theory of customer satisfaction. This theory is in agreement with the optimal preposition in seeking the well-fare of tax payers. The theory argued that consumers' happiness should be paramount to the providers of goods and services. It involved accurate and timely information dissemination and adequate services delivery. These activities bring satisfaction to customers and should be of importance to the organization (Mill, 2018; Mutinda, 2020).

Nevertheless, universally accepted definition doesn't exist for tax administration as well as the instrument for its measurement in research. Tax administrative approaches and practices for managing tax compliance varies from one jurisdiction to another. It doesn't have a universal design. Each country design its tax administration based on the size of the economy and the population and therefore measuring instruments are chosen based on the problem to address. The study will use tax compliance, tax structure and taxpayers services delivery to measure tax administration. No study has used these constructs to measure the adminstration of taxes. The OECD developed a non-mandatory tax diagnostic assessment measure of tax administration for tax compliance. The technique concentrates on the performance of the major national taxes that contribute to the tax revenue of the country (Hauptman *et al.,* 2014; Akol *et al.* 2019; Chang *et al.,* 2020).

The study was carried out at the KRA. The KRA as the country tax administrator collects all revenues and advice the government on issues relating to taxes and such other purposes as the Cabinet Secretary responsible for finance may direct in line with the specified provisions of the written laws (Githinji, 2021). Further, a reviewed of previous literature showed that there is little attention on the effect of tax administration on tax revenue collection in KRA. Similarly, tax administration is critical to government for advancement of the economy. Hence there exists both a conceptual gap and a knowledge gap on how tax

administration influences the tax revenue collection in KRA. From the research gap identified, the main research question for the study was: How does tax administration affects tax revenue collection in the Kenya Revenue Authority?

1.1.1 Tax Administration

There are many definitions of tax administration and none is universally accepted. According to OECD (2017), tax administration is the measures put in place for the collection of tax revenue due the government in a fair and efficient manner. It is intended to encourage, facilitate and enabled the payment of tax obligations. Agwang, (2019) view tax administration as the implementation of the choice of tax measures or procedures to apply in managing tax related activities in a country. It entails the assessment and enforcement of compliance. The primary goals for implementing tax administration is to generate tax revenue to finance government expenditures including development programs (Ligomeka, 2019).

The key objective of tax administration includes ensuring that tax laws and regulations are effectively applied for tax compliance and ensuring that taxpayers' knowledge is improved through awareness to improve government revenue (Hauptman *et al.,* 2014). The best tax administration is seen from how taxes are collected more effectively. Tax administration effectiveness is seen from the performance of programs initiated annually. The indicators are good functioning of the economic system, stability of the economy, well-trained tax administrators, transparency and accountability in tax collection and reporting, and taxpayers' timely awareness of any changes in laws and regulations (Serikova *et al.,* 2019).

Nevertheless, tax administration is influenced basically by two things. Firstly, the policing of tax to avoid tax evasion. The administrators ensure that policies of taxation are ahead to by all taxpayers. Secondly, to design a proper mechanism that will enhance transparency and accountability for the collection and reporting of taxes. Tax collection needs to be performed using better approaches because the payment is crucial for the provision of quality education, health care, welfare programs, social protection, infrastructure, and

inclusive growth (Jacobs, 2016; OECD, 2017; Serikova, Sembiyeva, Mussina, Kuchukova & Nurumov, 2018).

A well-structured tax system with a good tax administration strategy builds a mutual relationship between taxpayers such as the citizens, non-residents residing in the country, and the government in terms of tax payment (Gurría, 2018). The core basic functions of tax administration comprised of taxpayer registration, taxpayer services, tax declaration, filings and payments, taxpayer audits, taxpayer appeals, collection of tax arrears, and Tax-fraud investigations (Koritnik & Podlipnik, 2017; Tin, 2019).

Implementing appropriate tax administration procedures is one best ways administrators can succeed in tax matters. One practice that has ensured proper tax compliance is risk mitigation. Using this method, tax administrators find means to reduce non-compliance by using their experiences to study the compliance behavior of individual taxpayers (Rabatinová and Schultzová, 2018; Alm, 2018). Other compliance practices include providing guidance and simplifying tax information considered as public disclosure, use of technology for service quality, and assigning a personal identification number to the individual taxpayer to monitor every transaction (Devos & Zackrisson, 2015; KRA, 2016).

Tax administration objectives have not fully been achieved and taxpayers in most developing countries still have challenges with satisfaction and limited tax education with frequent changes in tax regulations. Ogoun and Ekpulu (2020) acknowledge that as taxpayers continue to encounter challenges the best option is continuous improvement of tax awareness. Training of new taxpayers for tax compliance was found to be good but is still on a low scale (Mascagni, Santoro, and Mukama, 2019). New taxpayers also have challenges from institutions designated by tax authorities such as banks for tax sensitization on their products and services.

When goals are difficult to achieve, administrators employ strategies for achieving them. A good strategy for tax collection curtails tax evasion and increases revenue. Such effort supports a straightforward path that enables individuals and businesses to pay taxes on a timely basis (OECD, 2017). A better way to enhance government revenue annually is using a proper tax administration approach which involved having a better relationship between

the taxpayers and tax administrators concerning tax practices and collection procedures. Two of the main focuses of tax administration from tax reforms are tax compliance and tax revenue collection.

1.1.2 Tax Revenue Collection

Funds gathered from taxes on employment and other incomes and profits; social security; goods and services, property, professional work, and other taxes levied is called tax revenue. Also, tax revenue is referred to as the contribution made by businesses and individuals through the use of proper tax administration to support government spending (Shang, 2016; Ali, Ali, & Dalmar, 2018). This tax can be collected from tax revenue and non-tax revenue sources. The former is comprised of direct taxation. Direct taxes are inescapable. These are taxes levied on income and property. The indirect tax category includes value-added tax, sale tax, goods tax, excise tax, customs duty, entrainment tax, and anti-dumping tax. Additonally, services provided by the state constitute non-tax revenue.

Few of the revenues are policies, electricity, health, state broadcast, and administrative services. Individual income, corporate tax, personal property, and real property tax are considered direct taxes. This revenue can be influenced by several things or factors. For Kenya and the rest of East Africa, things that affect tax revenue include interest rate, exchange rate, oil prices, and inflation, per capita income, agriculture produce, foreign government contributions, donations, and international trade (Terefe & Teera, 2018; Shivanda & Obwogi, 2016). The imposition of charges on residents by the state actors is intended for raising tax revenue. The funds is purposely use to finance all budgetary demands. These include salary payment to civil servant, development projects, government business activities and payment of external debts.

The state should have effective revenue collection strategies in place to ensure sufficient cash is available to pay operational costs. Reviewing all points of revenue collection as well as policies and ordinances in place annually is a best practice. Revenue collection is necessary to ensure the availability of resources to fund governmental services (Kiminyei, 2018). The tax gap comes about when taxes are unpaid. The gap is usually created from tax

evasion. The remedy to such inefficiencies in revenue collection is the use of proper tax policy and practices.

1.1.3 Tax Administration and Tax Revenue Collection

Research showed an association between the administration of taxes and revenue from taxation. What this means is, increases in tax revenue come from the successful tax administration. Studies also maintain that developing countries' success in meeting target tax revenue projection lies in the proper staffing of tax agencies which involved manpower development in the tax administration cycle and is key for tax compliance (Chang, Gavin, Gueorguiev, Honda, & Baer, 2020). Gerger, *et al.* (2014) using Turkey tax practices demonstrates the importance of a good tax administration for revenue enhancement. Good polices of taxation have influenced on tax collection determinants that include taxpayers' protection this involves knowing their rights and responsibilities, adoption technology, adequate accountability and reporting of taxes, quality of the services provided and amicable and timely resolution of challenges between taxpayers and the tax authority.

Hauptman, Horvat and Korez-Vide (2014) identify the purposes of tax administration as mentoring taxpayers both new and old, providing proper and timely guidance for new legislation to change tax laws, improving tax infrastructures and collection strategies, enforcing tax compliance, and upgrading communication techniques between the tax institutions and the taxpayers. Slemrod (2019), mentions the advantages of tax administration to avoid tax evasion involves enabling a proper tax system design, supervision and monitoring of activities carried out in the tax system, conducting tax system audits, managing risk in tax compliance from taxpayer behaviors, proper implementation of tax reform decisions, and continuous research to upgrade tax practices and sensitization.

1.1.4 The Kenya Revenue Authority

Different categories of taxes make up the tax system. These taxes include consumption tax; sales tax; VAT; excise duty; trade taxes; customs duty and taxes on individual and business income. The system has initiated several measures among others to restore lightheartedness

in tax revenues, reduce the complexity, and enhance transparency & accountability (Ouma 2019).

Kenya has introduced five different measures in the revitalization of its tax administration for effective tax revenue collection. The first was in 1986 focusing on revenue mobilization in the tax system. This process lasted from 1986 to 1989. The second focused on the tax structure and was carried out in 1990. The theme was achieving economic efficiency in tax administration. The measure introduced value-added tax which replaced the commodity sale taxes. The Third was instituted in 1995 called tax modernization which established the KRA. This body came to find solutions to several challenges the National Treasury, commonly called the "Finance Ministry" was facing in tax administration.

The Integrated Tax Management System introduced in 2008 for electronic filing system and lastly the enactment of the Finance Bill of 2019 which introduced the KRA PIN and adjustments in direct and indirect taxes measures (Deloittee, 2019; Moyi & Ronge, 2016; Mararia, 2014). These remodeling exercises introduced new measures such as improving tax administrators' capacity for efficient and effective tax administration, the provision of quality tax education, the building of infrastructures for tax activities, use of technology for timely and quality service delivery. Also, for collection and processing of data for proper accounting and reporting of taxes (Singh, 2019; Ganyam, Ivungu, and Anongo, 2019; Ndiaye, 2019).

The measures generated a workable tax system that could create enough revenues for public expenditure and also address the matter of inequality. The importance attached to different objectives such as efficiency, fairness, and administrative feasibility of the tax regime continue to change (Karingi, B Wanjala, 2015). Before the KRA was formed in 1995 the government's tax administration function was distributed among five ministries and departments, leading to inefficiency and low accountability since the work of these agencies was not coordinated. The tax authority was therefore established to enhance efficiency, transparency, and accountability in revenue generation by bringing the various agencies under one umbrella (Akech 2015).

Currently, KRA operates under the supervision of the National Treasury and has the mandate of tax administration which involves assessing, account, audit, and enforcement of all the laws relating to revenue and creating organizational structures that maximize revenue collection fairly and efficiently at low cost to the taxpayers (Obiero & Genga, 2018). The authority ensures compliance with tax laws and is authorized to audit or investigate a taxpayer where it has reason to believe that the taxpayer's self-assessment return is not honest, and to adjust the taxpayer's liability. This power is required because the government should be able to verify the information provided by taxpayers and detect noncompliance.

The tax authority can be empowered by the parliament through its enacted laws to issue agency notices compelling an institution holding a taxpayer's money, such as a bank, to transmit such money for tax debt settlement (Akech, 2015). The tax authority has achieved in terms of performance measurement regarding revenue collection. For the first time in KRA history, domestic tax collection exceeded Kshs. 1 trillion, while Customs revenue exceeded Kshs. 500 billion. The overall collection of revenue experienced growths of 11.0% and 11.8% (KRA, 2018 and 2019). The challenges include taxing the cash-based informal sector, the possibility of assessing taxpayers' current information is limited, and deficiency in consolidating the tax system, difficulties in performing tax collection tasks at the border and remote areas, and the authority limitation in institutionalizing a risk-based compliance system (KRA, 2019).

1.2 Research Problem

The KRA has measures in place to ensure that individuals and businesses pay adequate tax to fund government development initiatives (Ouma, 2019). Despite these measures the country still faces tax revenue collection challenges. Consolidation is lacking in tax administrative procedures into a single tax procedures Act for national and county governments. Lack of tax awareness programs in sector such as education for schools. The Country has a devolved system of government and the collection of tax revenue is performed at the national and county government levels. Six main sources are identified for governments' tax revenue collection ranging between Ksh 55 billion and Ksh 173 billion annually (Adam Smith International, 2018).

The present collection stands at Ksh 35 billion which showed a gap in revenue collection from inconsistency in tax administration procedures. Limited human resource, technology, internal controls, and enforcement of laws usually affect the tax administrative procedures for tax collection (Adenya & Muturi, 2017; Adam Smith International, 2018). KRA is often challenged with tax assessment involving the turnover tax of businesses (Karanja, 2018). Litigation is brought against those involved but goes for appeals to Tax Appeals Tribunal which takes a longer time to be resolved. The informal business sector is larger than the formal sector and employs over 70% of the labor force. Tax revenue collection from the informal sector is challenged by limited resources and poor implementation of tax collection strategies of tax authority (Karanja, 2018; IEA, 2017).

Tax revenue collection has received research attention from previous research scholars. For instance, Ali, Ali and Dalmar (2018) studied the impact of tax revenues on economic growth using time series evidence from Kenya. Factors studies included real gross domestic product (RGDP) and grants and other revenues. Chang *et al.* (2020) on the other hand focused on raising tax revenue from tax administrations using variables that included tax to GDP ratio, consumer price index, trade openness, and external debt, oil export, and agriculture out. The study specifically focused on the situation regarding the operational strength of tax administrations for tax performance. Gnangnon and Brun (2019) studied tax revenue collection using tax reform. The study focused on generating tax revenue in developing using trade openness involving the progressive replacement of trade tax revenue with domestic tax revenue. All previous studies reviewed discussed tax performance, tax reform among other things and did not directly address the problems of tax administration in tax revenue collection. This study will use tax compliance, tax structure and taxpayers' services delivery to measure tax administration and fill the gap left by other studies.

1.3 General Objective of the Study

The main objective of the study was to assess the influence of tax administration on tax revenue collection in Kenya Revenue Authority.

1.3.1 Specific Objectives

1. To examine the influence of tax compliance on tax revenue collection in Kenya Revenue Authority.

2. To determine the influence of tax structure on tax revenue collection in Kenya Revenue Authority.

3. To establish the influence of taxpayer services delivery on tax revenue collection in Kenya Revenue Authority.

1.4 Research Hypotheses

The study tested the below null hypothesis:

$H0_1$ There is no significant effect between tax compliance and tax revenue collection in Kenya Revenue Authority.

$H0_2$ There is no significant effect between tax structure and tax revenue collection in Kenya Revenue Authority.

$H0_3$ There is no significant effect between taxpayer services delivery on tax revenue collection in Kenya Revenue Authority.

1.5 Value of the Study

Kenya has the strongest economy in the East Africa Community and is also the transit point for many migrants. People also come to do business. All of these factors make the nation experience a yearly increase in the population Very little is known about the classification of tax revenue collection from various groups of taxpayers (residents, non-residents, businesses) to GDP. This study is therefore relevant in understanding KRA administration policies and practices for such tax revenue collection. It is an eye-opener for policymakers in dealing with issues surrounding the tax activities of these groups. The study could serve as the basis for reviewing legislation on the enactment of new tax laws.

The study results presented will help practitioners in developing appropriate regulations and procedures in alleviating the bottlenecks for tax compliance. The result of the study

add to the body of existing knowledge and make necessary recommendations not only to guide regulators in policy formulation but to improve the level of tax administration to non-residents. Currently, total revenue collection from the Counties is affected by tax administration procedures including self-assessment practices. The findings presented will aid the national and county governments in reviewing tax laws governing the self-assessment of residents and tax revenue collection activities of businesses and individuals. It will also help scholars who may want to conduct further studies related to the topic as a reference point.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed previous literature and theories of tax administration. It began with the review of the relevant theoretical literature and thereafter discussed empirical literature of other studies. The empirical review focused on studies done on tax administration to show its effect on tax revenue. The section ended with identifying a research gap and formulating an appropriate conceptual framework for the study.

2.2 Theoretical Framework

The theoretical framework is very important in empirical studies. Its function as the foundation that holds the literature and the theory used in the research together. The framework discussed the theory that explains the problem under investigation and variables providing a solution to the problem under study. The framework enabled investigator to be connected to existing knowledge (Adom, Hussein & Agyem, 2018). This subsection examined the optimal theory of taxation, Benefit Theory, Ability-to-pay theory, and Expectation theory of customer satisfaction. These principles are pillars supporting the conceptual framework.

2.2.1 Optimal Theory of Taxation

The premise on optimal taxation was developed by economist Frank Ramsey in 1927. He argued that the best way to raise revenue from taxation and maximize consumers' satisfaction is to set and manage a tax structure that will benefit everyone beginning with tax on the consumption of goods and services. That is, efficient taxation is experienced when a array of taxes are levied and not one type of tax. The theory established that taxation that seeks consumers' welfare is the best. Further, the focused of tax administration should be to design a tax system that maximizes the best for the tax payers. The policy should produce a revenue system and tax structure that are in the interest of the tax payers and benefit them. Tax planners are to find ways to reduce constraints in tax administration for adequate services delivery to those who fund government expenditures through payment of taxes (Gentry, 1999; Mankiw *et al.* 2009; Stiglitz, 2015). The scholarly paper of J.A.

Mirrlees in 1971 expanded Ramsey concept in discussing optimal income taxation. They supported and expanded the concept of progressive tax system. To experience equality in an economic system, a person should pay tax on income earned. The lesser his income the less tax and higher income comes with higher tax (Mankiw et al. 2009). Critically, in the theory more emphasis is placed on indirect taxes than direct taxes. Additionally, the argument that inelastic goods should be taxed more than elastic goods to balance taxation is not workable in developing countries in the wake of poverty.

2.2.2 Benefit Theory

The hypothesis in this framework is associated with Wicksell (1896) and Lindahl (1991), both from the Stockholm School of economics. The theory is linked to public finance and used to explain the benefit of taxation. The theory argues that tax compliance is on basis of the benefit that taxpayers expect to receive from the government from the taxes they paid. People followed the rules and regulations and pay taxes based on equity and anticipated benefits Adequate pubic services, effective tax return, and rewards for prompt tax payer's motivation to further strengthen their capacity to pay are expected benefits for tax compliance (Tin, 2019). Increases in government revenue from taxation are related to increases in tax compliance due to the benefits anticipated. From a critical perspective, the theory did not specify how benefit from taxation will be measured quantitatively by individual tax payers from public goods provided by the government from tax revenue collected.

2.2.3 Ability-to- Pay theory

Pigou (1920) develop the ability-to-pay theory of taxation. He argued that payment of taxes is self-sacrifice made by individuals and households who forgo some needs and wants to pay taxes. Since tax is a burden and, in some cases, a fixed cost, payment should be based on the individual ability to pay (Pigou, 1920). Those with high earnings and abundance should pay more taxes than those with few. The ability-to-pay preposition provides the basis for fairness and serves as an effective strategy in tax reform for government revenue collection (Koritnik & Podlipnik, 2017).

The knowledge of capacity-to-pay tax has been a driving force in advancing tax laws and regulations in both developed and developing economies (Englisch, 2014). From this theory, the financial sector has used various measures to generate tax to contribute to government revenue from the financial markets (Ebi, 2018). Financial products and services are offered at various categories and prices on an affordable basis. The consumers' used products and services base on their ability-to-pay for tax purposes. This has increased both the revenue of the government because individuals and households in the population have equal opportunity to use government services (Ernst & Young LLP, 2020) at affordable costs. Critically, the theory proposed three structures of tax payment: regressive, proportional, and progressive. The progressive tax system usually punishes those with great wealth because the more their earnings the greater tax they pay and less benefit they obtain from public goods.

2.2.4 Expectancy Theory of Customer Satisfaction

Oliver (1980) seminar papers put forward a theory to explain customer satisfaction. The expectation theory argued that satisfaction is the aftermath of product performance. The preposition acknowledges that customers purchase goods and services to obtain anticipated benefits from their usage. Customer satisfaction is correlated to the product quality and outcome of the design, conformance, and performance (Quazi *et al.* 2017). Customers are stakeholders in the enterprise and are glad to remain loyal when desire of adequately services delivery in product usage is met and delighted when satisfaction exceeds expectation.

Nevertheless, the buyer is dissatisfied when a difference is observed between expectation and outcome from the good usage (Khadka & Maharjan, 2017). From this theory, the increase in tax revenue collection is linked to adequate public services provided to the citizens. Although tax payment is compulsory when there is satisfaction in services provided there will be more voluntary payment and evasion of tax would be curtailed. When the tax administration activities that include tax information preparation, dissemination, execution, and audit and evaluation processes are effective and transparent, satisfaction is assured and will result in a rate of increase in tax payment which will enhance revenue collection. There is proliferation of customer satisfaction theories. This makes it

difficult in choosing a particular theory. They are all similar and saying almost the same thing. For this theory it lacks explanation on the taxonomy of satisfaction and did not categorize goods and services along with their level of satisfaction for consumers to choose between them.

2.3 Tax Administration and Revenue Collection

Tax administrators are concerned about the increased in revenue generation each year. They usually make adjustments in tax activities to reflect tax collection. A number of factors are considered by the policy makers before decisions are taken. They take into consideration things that influenced tax revenue. The determinants of tax revenue include the level of financial deepening, per capita GDP, value added to agriculture, openness of trade and political stability. Others are foreign aid, corruption, share of direct and indirect taxes, change in global oil prices and exchange rates, the level of inflation and change in tax rates (Boukbech *et al.* 2018; Omolo, 2012; Piancastelli and Thirlwall, 2021).

2.3.1 Tax Compliance

After levying taxes, processes for revenue collection needs to be put in place so that revenue collected can be high enough to finance government activities. Kenya has a devolved system of government and revenue collection functions are divided between the national and county administrations. Both do not collect the same kind of revenue. Parliament granted the statutory right to county authorities to generate government revenue from properties owned by individuals, businesses, and organizations. The revenue collection at the county level is comprised of revenue from property ownership and include land, building, real estate or residential property, farmland, conservation centers, houses, parks, hotels, vehicles, and other properties determined by the revenue authority. Other sources of revenue include land owned by County Government and used by business people and organizations in various markets and trading centers, entrainment fees, administrative fees & charges, business permits, vehicle parking fees, natural resources, natural resources exploitation, public health services, markets, trade services & slaughterhouses, sanitation services, water & sewerage services and digital services (Odanga, 2019).

The national government generates revenue from the issuance of licenses, payment of fines, and penalties, selling and leasing of government properties. Revenue is also generated from government business transactions including renting and sale of land, water, and air transport services, external borrowing, surpluses from public institutions, grants, and donations, and internal borrowing such as issuing of government bonds to the general public. Revenue is collected from professional practice that involves consultancy, agency or contractual fees, person employed income, shareholders' dividend, royalty, rent, interest, value-added, pension income, and corporation income. Agency revenue services involving stamp, betting, and pool services. Others are custom duty, excise duty on goods produces in the country (Development Initiatives, 2018).

2.3.2 Tax Structure

Governments are responsible to provide public services to the population. The services are provided from revenue collected daily, quarterly or annually. The collection is tied around tax administration. This involves making good policies and implementing them. In making the policies and laws, the revenue authority considers things that affect tax revenue to be collected. They have to examine them carefully and know how they affect tax revenue both negatively and positively. The reason is to ensure policies design should influence the effectiveness of tax collection. The determinants or factors that affect taxation are studied by tax administrators in regulating tax activities. The issues include inflation, employment, the tax rate itself, statutory laws-these are laws made by parliament, stability of the economy, corruption, openness of trade with other nations, the gross domestic product, level of public debt, agriculture contribution to GDP, and foreign direct investment (Andrejovska & Pulikova, 2018; Boukbech *et. al* 2018).

2.3.3 Taxpayer Services Delivery

Tax policies are implemented for providing guidelines on levying of taxes and collection of tax revenues. When a nation is experiencing inflation, the currency value and the purchasing power for commodities will reduce. This means the money supply is high which depicts that more people in the population have the cash to spend. To reduce inflation there is a need to increase taxes to reduce the money in circulation in the hands of people. What

this means is during inflation government benefits from taxation, however, the tax authority should be cognizant of other factors that will affect tax revenue collection during the time of inflation.

When jobs are created and people are employed they earn incomes and pay taxes on their earnings. The availability of jobs for the population is an important variable for taxation. Governments have to create opportunities for employment. Such action has positive impact on tax revenue. Taxation worldwide is progressive, that is those with higher income pay more tax. To keep away from tax evasion, the tax rate adjustment should be of concern to the authority. The lesser the rate of taxation, more people will pay tax. If the opposite occurs they may try to relinquish tax payments. Macroeconomic variables affect taxation and there is association between these variables and tax revenue performance. Nalyanya, Byaruhanga, Rutto, & Simiyu, 2020).

2.4 Empirical Studies

The literature comprised of the review of other scholars' scientific research writing in tax administration and tax revenue collection. It analyzes their variables, sample, methodology, and findings derives, and assesses the study's contribution to knowledge. For instance, Rabatinová and Schultzová (2018) evaluated taxpayer behavior that influences their tax compliance for tax revenue collection in the Slovak Republic. The study sought to research strategies and instruments for voluntary compliance of tax payment. Variables studied were taxpayer attitude to tax fraud, risk aversion to tax evasion, and tax morale. The study adopted the field survey design. Primary data were gathered using a structured questionnaire. The target population was 247 comprising 166 females and 81 males. Descriptive statistics was employed for data analysis. The results showed individual prestige or morale is significantly associated with tax players' compliance decisions. The authors concluded that introducing taxpayers' rewards as a benefit for voluntary tax compliance can be used as an instrument for effective tax collection.

Abbiati (2020) evaluated the use of information in meeting the preference of taxpayers and recognition of tax burden in government tax revenue collection in Italy. The independent variable was social demographic characteristics measured using age, income, professional

status, gender, income, and race. The output variable was tax burden measured by information, tax rate, and taxpayer preference relation to public goods. The population was 282 participants and a questionnaire was used to gather the primary data. The study used experimental design and used descriptive statistics to compute the mean and standard deviation. Parametric regressions was adopted to establish a correlation between the constructs. The results were interpreted using charts. The results established that accountability in the use of collected tax revenue to finance public goods is the requirement for which taxpayers take heavy tax burden of government.

The study by Ali (2018) assesses tax revenue collection practices on growth of the Kenyan economy. The independent and dependent variables were revenue from taxes and economic growth. The indicators of the outcome variable were the prices index, gross domestic product, and grants. The study used secondary research data from IMF and the World Bank. The data covered from 19960 to 2013. The sample size considered activities from 1991 to 2003. The sampling methods included convenient and systematic approaches for the true reliability of the data used. The results showed a positive association between revenue from taxation and economic growth and that adequate legislation to curtain corruption and other bad practices can enhance tax revenue collection.

According to Nyakundi et al. (2020), there is positive association between macroeconomic variables and tax revenue performance. They further argued that to achieve high performance from taxation the government should embark on initiatives such as increasing the rate and tax base to improve performance. Aribaba, Oladele, Ahmodu and Yusuff (2019) establish that restructuring the tax system in the long-run is the best way in achieving compliance to enhance government revenue from taxation. The overhauling of the system of taxation will create the opportunity for significant changes. The process will introduce variables such as accountability, transparency and training of employees for effective implementation of policies and practices of taxation. Adequate training will strengthen the tax agency to enforce developed tax collection procedures.

The study of Mwendwa (2020) disclose that KRA introduced electronic tax system as an effective strategy for tax collection. In addition, the system was formulated in 2003 as part of KRA plan in reforming the tax system and was successfully implemented in 2009. The new system brought motivation to the authority due to its ability to serve huge number of tax payers and generate accurate information. The development brought efficiency in tax collection and enhanced tax revenue of the government. The strategy enabled KRA to establish many departments including the ICT department to support the electronic tax system. The work of the department strengthen the organization in the effective management of the system to achieve goals and objective including compliance by taxpayers.

Madegwa, Makokha and Namusonge (2018) knowledge that internet services tried to enhance recent trend in tax assessment involving the use of electronic tax system developed to reduce the stress in public taxation for adequate collection of tax revenue. Governments in emerging economies are challenged with collection and reporting or adequate tax revenue for development purposes. The difficulties face create a gap between what they could collect and what they actually collect and therefore adopting internet services would improve revenue collection. According to Kinyua, (2019) embracing and using technologies adequately and employing appropriate tax payment methods would curtail the problems and thereby improve revenue collection. The use of technology will reduce corruption and wastages in the tax system.

2.5 Conceptual Framework

Frameworks are important players in research. For the conceptual framework it provides proper explanation about the study variable and show their relationship (Adom, *et al* 2018). The framework in this survey showed both the variables and their constructs for measurement. The main variables measured are the response and outcome variables.

Tax Administration

```
┌─────────────────────────────┐
│ Tax Compliance              │
│  ✓ Extent of tax evasion    │
│  ✓ Enforcement mechanism    │
│  ✓ Financial Penalties      │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Tax Structure               │
│    ✓ Tax Rate               │
│    ✓ Tax Base               │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Taxpayer Services Delivery  │
│    ✓ Tax Awareness          │
│    ✓ Online Tax Services    │
└─────────────────────────────┘
```

┌───────────────────────────────────┐
│ Tax Revenue Collection   │
│ ✓ Tax collection environment   │
│ ✓ Available opportunities for   │
│   increased revenue collection   │
│ ✓ Tax revenue collection   │
│   loopholes   │
│ ✓ Tax to GDP ratio   │
└───────────────────────────────────┘
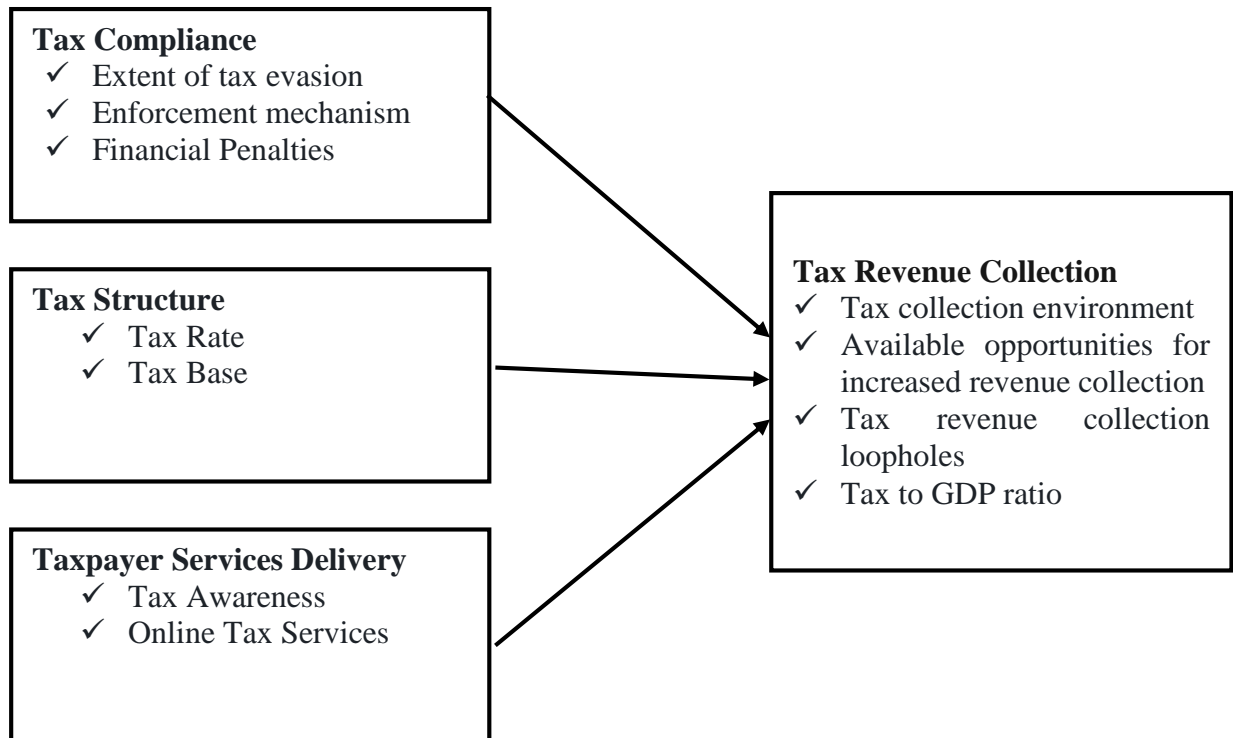
Dependent variable

Independent variables

2.6 Summary of Literature review

The chapter looked at both the theoretical and empirical literature. The theoretical review considered theories supporting the study variables. The empirical literature on tax administration of previous studies was carefully reviewed. The focus of tax administration had been on adequate tax policy development and its implementation to curtail tax evasion. Tax compliance, concern with rules and regulations to govern the taxpayers has been looked at from different angles in empirical studies. Some considerations have been on tax jurisdictions concerning practices for law enforcement regarding compliance. Others have viewed it from human behavior studies and support the argument of taxpayer reward as an important instrument for effective compliance then rigidity in tax enforcement. All of the past studies did not focus on appropriate practices that could enhance the effectiveness and efficiency of tax administration for collectability of tax to improve government revenue. All previous studies reviewed were limited in terms of variables in discussing the tax

administration. This study put forward tax compliance, tax structure, and taxpayer services delivery as additional variables for studying tax administration to enhance government tax revenue collection. The variables reinforce tax collection which is based on the decisions of tax administrators towards tax payment for the government tax revenue generation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter comprised of the methods adopted for the study and includes the blue print, the population, the source of data, approach of data analysis, diagnostic test, and an empirical model.

3.2 Research Design

A study design showed the study composition for achieving the study objectives. It brings together the different aspects of the research in a well-organized and consistent way and ensures how the issues can be effectively addressed (Akhta, 2016). This survey used the descriptive study design. It enables researchers to collect data on a number of variables without trying to influence those variables (Thomas, 2020). The design enabled the accurately testing of the hypothesis and draws an effective conclusion.

3.3 Data Collection

The research relied on raw data gathered using a questionnaire. The questionnaire was made up of 5 sections covering the background and each of the specific objective and finally a section on the dependent variables. The questionnaires were administered to selected KRA managers using an online survey. The online survey was preferred to because of the adherence to Covid-19 Protocols by the government.

3.4 Pilot of the Data Collection Instrument

To conduct the main study, a pilot survey was first carried out on few of the top managers to meet the requirement of primary data collection. This was intended to assess the appropriateness of the chosen instrument for gathering the data. The test enables the identification and elimination of problems that could be encountered by the participants from the data collection tool (Saunders, 2009). According to Mugenda & Mugenda, 2003 pre-testing helps to correct and improve the research instrument thus improve efficiency and effectiveness in data gathering. The items of the study were designed with the help of

the experts to accurately measure the influence of tax administration and revenue collection.

The survey employed Cronbach's alpha for measuring the internal consistency of the tools used for data collection. The reliability of the test is expressed as a variation of the true score from the total score and the threshold for acceptance of the questionnaires was set at Cronbach's alpha greater than 0.7 ($\alpha > 0.7$). Variables below this boundary were edited for correctness and ambiguities removed to ensure reliability.

3.4 Data Analysis

The descriptive and inferential statistical techniques were adopted for the data analysis. The arithmetic mean and standard deviation were computed using both primary and secondary data gathered from the respondents. A multivariate regression model was further used to link the observed variables to the predicted variable. Regression model was used to test the significance relationship tax administration on revenue collection in Kenya. The data analyzed was presented using tables and charts. These diagrams were used to provide a proper explanation of the analyzed data.

The Regression Model was of the form;

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mathcal{E}$

Where;

Y – Tax revenue collection

X_1- Tax Compliance

X_2-Tax Structure

X_3-taxpayer services delivery

$\mathcal{E}$- error terms

$\beta_1, \beta_2, \beta_3$ =coefficients for independent variables

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presented data analysis, findings and discussions using descriptive statistics and inferential statistics that included correlation and multivariate regression analysis. The results were presented using charts and tables. The study respondents comprised of 58 KRA officers from the domestic taxes department, strategic operations department and investigations & enforcement department at the Sameer and head office in Nairobi. The study used online survey using google forms to collect data from the target respondents.

4.2 Background Information

This section presented information on management level, experience and education of the respondents. Obtaining the background information was necessary to verify the participants understanding of tax related issues at KRA. The results were shown in Table 4.1.

Table 4.1 Background Information

Characteristics	Category	Frequency	Percent (%)
Indicate your management cadre	Operational	25	43.1
	Low level management	23	39.7
	Middle level management	7	12.1
	Top level management	3	5.2
	Total	**58**	**100**
Number of years worked at KRA	Less than 5 years	20	34.5
	5-10 years	23	39.7
	10-15 years	12	20.7
	Above 15 years	3	5.2
	Total	**58**	**100**
Indicate your level of education	Diploma	4	6.9
	Bachelor Degrees	22	37.9
	Master Degrees	27	46.6
	Doctorate	5	8.6
	Total	**58**	**100**

Source: Author (2021)

The study results showed that 43.1% of the respondents indicated they held operational level, 39.7% indicated they held low level management positions, 12.1% occupied middle level management position while 5.2% occupied top management positions. The finding implied that data used in this study include KRA officers from the different level of management. Top managers are involved in policy formulation which impact on tax administration while middle, low and operational level are involved in supervision and implementation of tax management hence the information was collected from respondent who were well versed with the tax administration strategies used by KRA.

The study investigated the number of years the respondent had worked with the KRA. The results showed that 39.7% indicated they had worked for between 5 and 10 years, 34.5% indicated they had worked for less than 5 years, 20.7% indicated they had worked for authority for between 10 and 15 years, while 5.2% indicated they had worked above 15 years. These findings indicate that sampled respondents had varying experience hence varied level of understanding of tax administration. The results further show that tenure bias was eliminated from the study.

Finally, the study findings showed that 46.6% indicated they had master degree level of education, 37.9% indicated they had undergraduate degree, 8.6% had doctorate while 6.9% indicated they had diploma as their highest level of education. The study results indicated that the respondents were well educated and right position to respond to the information sought by the study. Similarly, the finding indicated that KRA had well educated individuals in the key department to manage tax administration and ensure that tax revenue collection targets are met.

4.3 Descriptive Statistics

This section presented the descriptive statistics on the study variables. The statistics computed include mean, standard deviation, maximum and minimum values. The mean score was used to show the concentration of responses, while standard deviation indicated the deviation from the mean score. The mean of 3 and below indicated disagreement while 3.5 and above indicated agreement of the statement since the variables were measured on Likert scale.

4.3.1 Tax Compliance

The study first specific objective was to analyze the influence of tax compliance on tax revenue collection in Kenya. The study focused on extent of tax evasion, enforcement mechanism and financial penalties. The results for descriptive statistics for tax compliance w are presented in table 4.2.

Table 4.2 Descriptive Statistics for Tax Compliance

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Tax evasion is widespread in Kenya	58	1	5	4.03	0.97
People who regularly evade paying income tax get caught	58	1	5	3.90	0.89
KRA has put in too enough effort to ensure tax compliance	58	1	5	4.19	0.98
KRA is adequately equipped to enforce tax compliance	58	1	4	2.29	0.90
Majority of people in this country think it's okay not to pay tax on cash earnings	58	1	5	4.12	0.88
Financial penalties imposed on non-compliance are sufficient to deter people from regularly evading income tax	58	1	4	2.29	0.71
Aggregate Mean score of Tax compliance				**3.47**	

Source: Author (2021)

The statement on whether tax evasion is widespread in Kenya had mean score of 4.03 which indicated that majority of the respondent agreed. The finding implied that many legible tax payers in Kenya are avoiding their tax paying responsibilities which most likely impact negatively on tax revenue collection. On whether people who regularly evade paying income tax get caught, the results show that respondents agreed as indicated by the mean score of 3.90.

The study wanted to establish whether KRA has put in too enough effort to ensure tax compliance. The statement had a means score of 4.19 indicated that majority of the

respondent agreed. The findings implied that KRA had strategies in place to ensure tax compliance among tax payers. Respondents however disagreed as indicated by the mean of 2.29 that KRA is adequately equipped to enforce tax compliance. The finding implied that KRA was not adequately equipped to ensure complete compliance hence there were still loop holes tax evaders exploited. Respondents further agreed as indicated by the mean of 4.12 that Kenya still believe that it's okay not to pay tax on cash earnings. Finally, respondent disagreed on the suitability of the financial penalties imposed on non-compliance are sufficient to deter people from regularly evading income tax. The findings support those of Aribaba, Oladele, Ahmodu and Yusuff (2019) who argued that to improve and sustain a significant level of tax compliance, demands focus on long-run tax reform initiatives.

The implication of these descriptive findings is that KRA was struggling with tax evasion challenges due to lack of sufficient equipment and organisation to enforce compliance. Similarly, the finding implied that enforcement of tax compliance if achieved to automatically raise the amount of tax revenue collected by KRA. Achieving tax compliance still remain a major challenge of the revenue authority in Kenya which negatively impact on the tax revenue targets. The study finding support those by Rabatinová and Schultzová (2018) wo argued that implementing appropriate tax administration procedures is one best ways administrators can succeed in tax matters. One practice that has ensured proper tax compliance is risk mitigation. Using this method, tax administrators find means to reduce non-compliance by using their experiences to study the compliance behavior of individual taxpayers.

4.3.2 Tax Structure

The study further sought to analyse the influence of tax structure on tax revenue collection by Kenya Revenue Authority. The study specific focused on whether tax base was bigger enough to meet revenue target and whether tax rates used by KRA are competitive in achieving high tax revenue collection. The results are presented in Table 4.3.

Table 4.3 Descriptive Statistics for Tax Structure

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Dev
KRA rely on a narrow tax base for all form of taxes	58	1	5	3.59	0.738
KRA uses a balanced tax structures without biases	58	1	5	3.98	0.835
Tax rates charged by KRA is reasonable to all tax payers	58	1	5	4.05	0.820
KRA has imposed rates on all financial transactions as stipulated in tax regulatory framework	58	1	5	3.78	0.890
Rates charged by KRA are competitive when benchmarked by other emerging economies	58	1	5	4.02	0.862
Aggregate Mean score of Tax Structure				**3.884**	

Source: Author (2021)

The study asked the respondent whether KRA relied on a narrow tax base for all forms of taxes. The statement had mean score of 3.59 which indicated that majority of the respondent agreed. The study finding implied that there was potential of KRA to increase the tax base in order to achieve tax revenue targets. The respondent further agreed tax rates used y KRA were without bias and also that Tax rates charged by KRA were reasonable to all tax payers. These finding agreed with Nyakundi (2018) who noted that the government always take on initiatives such as increasing the rate and tax base to improve performance. The study establish a positive association between macroeconomics indicators and tax revenue performance.

The means score of 3.78 also indicated that respondent agreed that KRA has imposed rates on all financial transactions as stipulated in tax regulatory framework. On whether rates charged by KRA are competitive when benchmarked by other emerging economies, the results show that majority of the respondents agreed as indicated by the mean score of 4.02. The implications of these findings were that KRA had a competitive, and organized tax structure which was applied on a narrow tax base. The finding further demonstrated that active payers were just a fraction of the potential tax payers which confirmed that the level of tax evasion in Kenya was high.

This study finding supports argument by Gurría, (2018) who posited that a well-structured tax system with a good tax administration strategy builds a mutual relationship between taxpayers such as the citizens, non-residents residing in the country, and the government in terms of tax payment.

4.3.3 Taxpayer Services Delivery

The study also sought to find out the influence of taxpayers' services delivery which include tax awareness and online tax services and the influence of tax revenue collected by KRA. The results for descriptive statistics for taxpayer services delivery are presented in Table 4.4.

Table 4.4 Descriptive Statistics for Taxpayer Services Delivery

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Dev
The nature of electronic services offered to taxpayers is adequate	58	1	5	4.07	0.730
KRA has enhanced the tools for the delivery of services to taxpayers	58	1	5	3.71	0.690
KRA has substantially increased the information content, functionality, and "user-friendliness" of their websites	58	1	5	3.74	0.780
The content provided by KRA to tax payer is adequate to guide in filing of taxes	58	1	5	3.93	0.712
KRA continuously explore new opportunities for improved service delivery to taxpayers	58	1	5	3.88	0.721
Aggregate Mean score of Taxpayer Services Delivery				3.87	

Source: Author (2021)

The study asked the respondent whether the nature of electronic services offered to taxpayers was adequate, the statement had a mean score of 4.07 indicating that respondent agreed on the suitability of the electronic tax services provided by KRA. The study further sought to find out whether KRA had enhanced the tools for the delivery of services to taxpayers. The results show that majority of the respondent as indicated by the mean score

of 3.71. The finding agreed with those of Mwendwa (2020) who disclose that KRA introduced electronic tax system as an effective strategy for tax collection. In addition, the system was formulated in 2003 as part of KRA plan in reforming the tax system and was successfully implemented in 2009. The new system brought motivation to the authority due to its ability to serve huge number of tax payers and generate accurate information. The development brought efficiency in tax collection and enhanced tax revenue of the government. The strategy enabled KRA to establish many departments including the ICT department to support the electronic tax system. The work of the department strengthen the organization in the effective management of the system to achieve goals and objective including compliance by taxpayers. On the other hand, Kinyua, (2019) found that embracing and using technologies adequately and employing appropriate tax payment methods would curtail the taxation problems and improve revenue collection.

On whether KRA had substantially increased the information content, functionality, and "user-friendliness" of their websites. The statement mean score was 3.74 indicating agreement by respondents. Study results show that respondent agreed on whether content provided by KRA to tax payer is adequate to guide in filing of taxes and whether KRA continuously explore new opportunities for improved service delivery to taxpayers as indicated by the mean score 0f 3.93 and 3.88 respectively. These statements had standard deviation ranging from 0.690 to 0.780 which implied the deviation from the mean were very low.

According to the finding in this section, taxpayer services delivered by KRA were adequate for any tax payer seeking to understand how the revenue filing systems works to facilitate the tax payment. The authority according to the respondents had made available information to taxpayers enhance tax revenue collection. The findings concur with those of Gerger, *et al.* (2014) who found that determinants of revenue collection include taxpayers' protection this involves knowing their rights and responsibilities, accountability in the tax system, the use of technology, adequate accountability and reporting of taxes, quality of the services provided and amicable and timely resolution of challenges between taxpayers and the tax authority. Similarly, the study finding supported those by Hauptman, Horvat and Korez-Vide (2014) who identified the purposes of tax administration as

mentoring taxpayers both new and old, providing proper and timely guidance for new legislation to change tax laws, improving tax infrastructures and collection strategies, enforcing tax compliance, and upgrading communication techniques between the tax institutions and the taxpayers. The study finding concurs with Ajape, Afara and Uthman, (2017) who also found that citizens everywhere exert pressure on the governments for adequate public services delivery in cost-effective ways.

4.3.4 Tax Revenue Collection

This section presented results on statement asked to measure the extent of tax revenue collection which include tax collection environment, available opportunities for increased revenue collection and tax revenue collection loopholes. The results are presented in table 4.5.

Table 4.5 Descriptive Statistics for Tax Revenue Collection

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
The amount of revenue collection by KRA is the excellent considering given circumstances	58	1	5	3.67	0.969
KRA has the potential of surpassing its own revenue targets very financial	58	1	5	3.29	1.022
There are numerous loop holes in revenue collection that hinders KRA from achieving set targets	58	1	5	3.69	0.917
KRA is putting in place necessary mechanisms to increase future revenue collections	58	1	5	3.59	1.051
Aggregate Mean score of Tax revenue Collection				**3.56**	

Source: Author (2021)

The study sought to find out whether amount of revenue collected by KRA was excellent considering given circumstances. The statement had a mean of 3.67 which implied that

majority of the participants agreed. The finding implied that KRA was optimally utilizing all the available inputs and resources to collect revenue. The respondents were moderate on whether KRA has the potential of surpassing its own revenue targets as indicated by the mean score 3.29. On whether there were numerous loop holes in revenue collection that hinders KRA from achieving set targets, the results show that respondent agreed as indicated by the mean of 3.69. Similarly, respondent agreed as indicated by the mean of 3.59 that KRA was putting in place necessary mechanisms to increase future revenue collections. These finding support the finding of Ouma (2019) who reported that KRA has initiated several measures among others to restore lightheartedness in revenue collection, reduce the challenges, and enhance transparency and accountability and thereby, considering them as the foremost purposes for the reform.

The study further analyzed the trends in tax revenue to GDP ratio during the study period. These ratios are important since they reveal the potential taxation relative to the size of the economy.
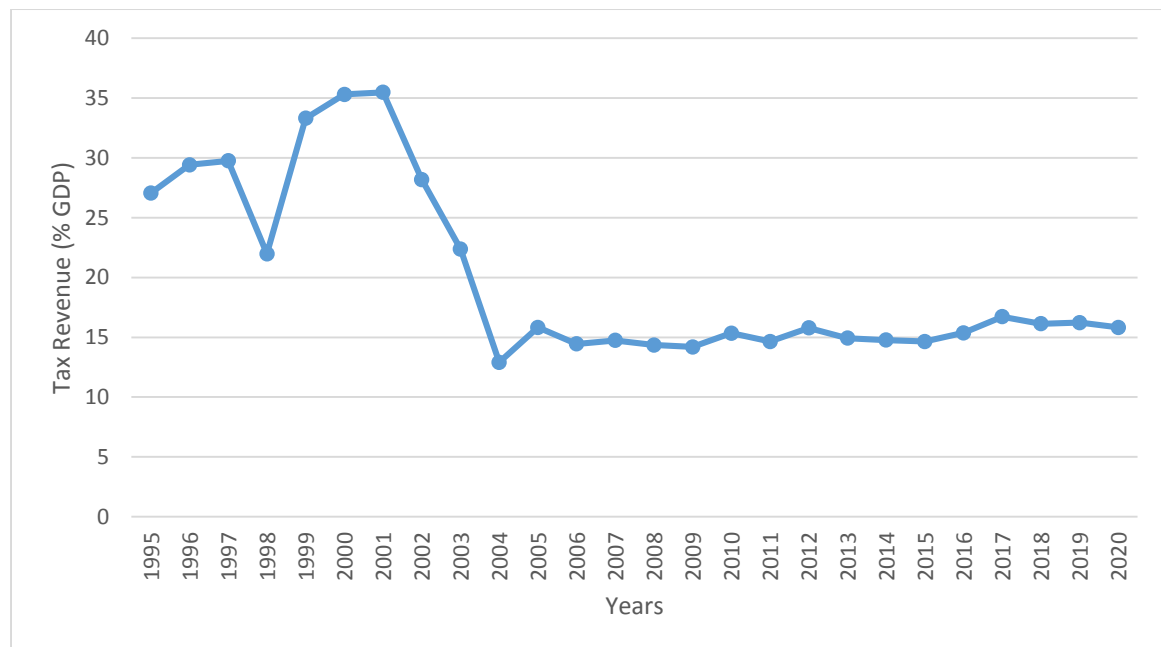

Figure 4.1 Trend Analysis for Tax Revenues to GDP Ratio

Source: Author (2021)

The results showed that the country was on the right track between 1996 and 2003 in terms of taxation revenue since the Tax Revenues to GDP Ratios for the period was above 15% recommended by World Bank. However, from 2005 to 2020, the economy was average as indicated the value of tax revenue to GDP which remained also constant at the threshold of 15%. The findings further agreed with those of Tyce (2020) that found that tax yield rose successfully even before the major tax reform programme to peak on average at 19.7 per cent of GDP by the early 1990s.

4.4 Inferential Statistics

This section presented the inferential statistics used to measure the association between independent variables (tax compliance, tax structure and taxpayer services delivery) on tax revenue collection. The study adopted both correlation analysis and regression analysis. The correlation statistics tested the bivariate association between the control variables and predicted variable while regression test was performed to show whether the independent variables significantly predict the dependent variable.

4.4.1 Correlation Analysis

The study adopted Pearson Correlation analysis to test the existing association between the response variables and dependent variable. The findings of the correlation analysis were shown in the correlation matrix in table 4.6.

Table 4.6 Correlation Matrix

		Tax Compliance	Tax Structure	Taxpayer Services	Tax Revenue Collection
Tax Compliance	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	58			
Tax Structure	Pearson Correlation	.487**	1		
	Sig. (2-tailed)	0.000			
	N	58	58		
Tax payer Services delivery	Pearson Correlation	.467**	.620**	1	
	Sig. (2-tailed)	0.000	0.000		
	N	58	58	58	
Tax Revenue Collection	Pearson Correlation	.560**	.665**	.684**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	**58**	**58**	**58**	**58**

** Correlation is significant at the 0.05 level (2-tailed).
Source: Author (2021)

The result show that tax compliance and tax revenue collection had correlation coefficient r= 0.560, (p=0.000) which implied tax compliance was positively and strongly associated with tax revenue collection. The finding implied that increasing tax compliance would have positive influence on tax revenue collection. The finding of this study support those by Yunus and Ramli (2017) who investigated the influence of tax penalties and they affected tax compliance of small medium enterprises. The survey disclosed that enhancing tax compliance require adoption of tax penalties. The study concluded that tax penalties significantly affected compliance and tax revenue collected. Therefore, voluntary compliance was a critical aspects of government revenue generation from taxes.

The result further show that tax structure and tax revenue collection had correlation coefficient r= 0.665, (p=0.000) which implied tax structure was also positively and strongly associated with tax revenue collection. The finding implied that adopting progressive tax structure would have positive influence on tax revenue collection. These finding agreed with Nyakundi (2018) who noted that the government always take on initiatives such as increasing the rate and tax base to improve performance. The study establish a positive association between macroeconomics indicators between and tax revenue performance. This study finding supports argument by Gurría, (2018) who posited that a well-structured

tax system with a good tax administration strategy builds a mutual relationship between taxpayers such as the citizens, non-residents residing in the country, and the government in terms of tax payment.

Finally, the results show that Tax payer Services delivery and tax revenue collection had a strongly and positive correlation as indicated by r=0.684 (p=0.000). These finding also demonstrated that structuring an effective taxpayer service delivery positively enhanced tax revenue collected. The finding agreed with those of Mwendwa (2020) who disclose that KRA introduced electronic tax system as an effective strategy for tax collection. In addition, the system was formulated in 2003 as part of KRA plan in reforming the tax system and was successfully implemented in 2009. The new system brought motivation to the authority due to its ability to serve huge number of tax payers and generate accurate information. The development brought efficiency in tax collection and enhanced tax revenue of the government. The strategy enabled KRA to establish many departments including the ICT department to support the electronic tax system. The work of the department strengthen the organization in the effective management of the system to achieve goals and objective including compliance by taxpayers. On the other hand, Kinyua, (2019) found that embracing and using technologies adequately and employing appropriate tax payment methods would curtail the taxation problems and improve revenue collection.

4.4.2 Multivariate Regression Analysis

The study employed multivariate regression analysis to test the influence of tax compliance, tax structure and taxpayer service delivery on tax revenue collection. The results of multivariate regression fitted are as follows;

Table 4.7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.760a	0.577	0.553	0.60726

a Predictors: (Constant), Taxpayer Services, Tax Compliance, Tax Structure

Source: Author (2021)

The results of Model summary in Table 4.7 show that R=0.760 which is the correlation between all the independent variables and dependent variables. The finding demonstrated

that there exists a strong correlation between tax administration (taxpayer services, tax compliance, tax structure) and tax revenue collection. The results also show coefficient of determination R-square = 0.577 which implied that tax administration (taxpayer services, tax compliance, tax structure) accounted for 57.7% on the variation in Tax revenue collection. The finding further implied that tax administration had strong explanatory power on the variation of tax revenue collection.

Table 4.8 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.148	3	9.049	24.54	.000b
	Residual	19.913	54	0.369		
	Total	47.061	57			

a Dependent Variable: Tax Revenue Collection

b Predictors: (Constant), Taxpayer Services, Tax Compliance, Tax Structure

Source: Author (2021)

Table 4.8 showed the results of ANOVA which tested the overall significance of the regression model fitted to predict the relationship between tax administration (Taxpayer Services, Tax Compliance, and Tax Structure) and tax revenue collection in Kenya. The F-statistics =24.54 (p=0.000) implied that the overall model was statistically significant and therefore had a goodness of fit. The model could therefore predict the influence of tax administration (taxpayer services, tax compliance, and tax structure) on tax revenue collection.

Table 4.9 Regression Coefficients

	β	Std. Error	Beta	t	Sig.
(Constant)	0.269	0.424		0.633	0.529
Tax Compliance	0.300	0.121	0.255	2.467	0.017
Tax Structure	0.279	0.132	0.279	2.118	0.039
Taxpayer Services	0.355	0.126	0.364	2.803	0.007

a Dependent Variable: Tax Revenue Collection

Source: Author (2021)

The results of regression coefficients in Table 4.9 show that tax compliance had a coefficient of β=0.300 and a corresponding p-value =0.017 which was statistically

significant at 5 percent level of significance. These results show that tax compliance had positive and significant influence on tax revenue collection. An increase in tax compliance would have positive increase of 0.300 units in tax revenue collected by Kenya Revenue Authority. The findings of the survey support those by Yunus and Ramli (2017) who investigated the influence of tax penalties and they affected tax compliance of small medium enterprises. The study showed that enhancing tax compliance require adoption of tax penalties. In conclusion, tax penalties significantly affected compliance and tax revenue collected as indicated by the results. Therefore, tax compliance was a critical aspects of tax revenue collection.

The results further show that tax structure had a coefficient of β=0.279 and a corresponding p-value =0.039 which was statistically significant at 5 percent level of significance. These results show that tax structure had positive and significant influence on tax revenue collection. An improvement in tax structure would have positive increase of 0.279 units in tax revenue collected by Kenya Revenue Authority. These finding agreed with Nyakundi (2018) who noted that the government always take on initiatives such as increasing the rate and tax base to improve performance. The study establish a positive association between macroeconomics indicators between and tax revenue performance. This study finding supports argument by Gurría, (2018) who posited that a well-structured tax system with a good tax administration strategy builds a mutual relationship between taxpayers such as the citizens, non-residents residing in the country, and the government in terms of tax payment.

Finally, the results further show that taxpayer services delivery had a coefficient of β=0.355 and a corresponding p-value = 0.007 which was statistically significant at 5 percent level of significance. These results show that taxpayer services delivery had positive and significant influence on tax revenue collection. An improvement in taxpayer services delivery would have positive increase of 0.355 units in tax revenue collected by Kenya Revenue Authority. The finding agreed with those of Mwendwa (2020) who disclose that KRA introduced electronic tax system as an effective strategy for tax collection. In addition, the system was formulated in 2003 as part of KRA plan in reforming the tax system and was successfully implemented in 2009. The new system brought motivation to the authority due to its ability to serve huge number of tax payers and generate accurate

information. The development brought efficiency in tax collection and enhanced tax revenue of the government. The strategy enabled KRA to establish many departments including the ICT department to support the electronic tax system. The work of the department strengthens the organization in the effective management of the system to achieve goals and objective including compliance by taxpayers. On the other hand, Kinyua, (2019) found that embracing and using technologies adequately and employing appropriate tax payment methods would curtail the taxation problems and improve revenue collection.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presented summary of the research results, conclusion and recommendation made from the findings and finally suggestion for further research. The summary of the findings was based on specific objectives of the study.

5.2 Summary of Findings

The research was governed by three specific objectives. The first specific objective assessed the influence of tax compliance on tax revenue collection in KRA. The study findings demonstrated that KRA was struggling with tax evasion problems from lack of sufficient equipment and organisation to enforce compliance. The study further showed that enforcement of tax payment significantly influence the amount of tax revenue collected by KRA. Achieving voluntary compliance still remain a major challenge of the revenue authority which negatively impact on the tax revenue targets. The result of correlation and regression analysis showed that tax compliance was positively and strongly associated with tax revenue collection. The finding implied that increasing compliance would have positive influence on tax revenue collection. The results of the regression analysis showed tax compliance to positively and significantly influence tax revenue collection. An increase in tax compliance would have positive increase of 0.300 units in tax revenue collected by KRA.

The study further analyzed the influence of tax structure on tax revenue collection by the Kenya Revenue Authority. The study specific focused on whether tax base was bigger enough to meet revenue target and whether tax rates used by KRA are competitive in achieving high tax revenue collection. The implications of these findings were that KRA had a competitive, and organized tax structure which was applied on a narrow tax base. The finding further demonstrated that active tax payers were just a fraction of the potential tax payers which confirmed that the level of tax evasion in Kenya was high. These results further show that tax structure had positive and significant influence on tax revenue

collection. An improvement in tax structure would have positive increase of 0.279 units in tax revenue collected by Kenya Revenue Authority.

The study also sought to find out the influence of taxpayers' services delivery which include tax awareness and online tax services and the influence of tax revenue collected by KRA. The results established that taxpayer services delivered by KRA were adequate for any tax payer seeking to understand how the revenue filing systems works to facilitate the tax payment. The authority according to the respondents had made available information to taxpayers enhance tax revenue collection. The results further show that taxpayer services delivery had a statistically significant influence on tax revenue collection. An improvement in taxpayer services delivery would have positive increase of 0.355 units in tax revenue collected by KRA.

5.3 Conclusion

Tax administration is important since it determine the amount of tax collected in countries. A country relies on tax collected to spur economic growth, provide critical services to the citizens and also to achieve their development agenda. This study therefore concluded that tax administration is central to countries development and therefore tax compliance, tax structure and taxpayers' services are key to an effective tax administration strategy. The study further concluded that tax compliance is the most critical tax administration strategy that has huge and significant impact on tax revenue collection. The study also concluded that tax structure becomes impactful when they are effectively organized and implemented and this requires the revenue collection body must engage tax payers to establish tax rates that are not draconian to them to encourage tax payment. The study concluded that tax rates increase positively impact on tax revenue and KRA revisions of tax rates significant impacted on tax revenue collected during the study. In relationship to provision of taxpayer services and tax revenue collection the study concluded that emergence of technology and electronic taxation systems enhances effectiveness of communication between tax payers and revenue authority hence increasing tax awareness which ultimately impact positively on tax revenue collected. The study further concluded that adoption of the latest automation and innovation in taxpayers' service delivery is the surest way of increasing tax revenue

collected since it makes easy and convenient for tax payers to file their returns wherever they are provided they can access internet.

5.4 Recommendations

Based on the results the following recommendation were made; the study recommends that management of KRA should come up with more stringent policies on tax administration in order to further curtail tax evasion and increase tax revenue collection. Tax administration strategies should be based on the analysis of the performance of the existing strategies such adoption of automated systems, progressive policies implementation and tax rates harmonization in order to increase tax compliance and revenue collection. The agency should enhance those enforcement rules that have worked and revise ta compliance enforcement measures that are ineffective.

The study further recommends that KRA should benchmark with countries which have state of the art tax structure and adopt some of the strategies these countries have used in broadening their tax base and ensuring large percentage of the potential taxpayers file their returns. The study also recommends that Kenya Revenue Authority should also evaluate taxpayers' services and increase the aspects of taxpayers' education especially on use of automated systems and generally increase the level of awareness among tax payer on the need for continuous filing of their taxes.

Lastly, it is recommended that the management of KRA continues its advocacy for inclusion of tax education in education institutions to help nurture a generation that understand it is their mandate to pay taxes since government rely on these taxes to deliver services to the public. This will create early awareness on civil duty of paying taxes which in turn will improve tax collection. These recommendations are based on the premise of the statistical evidence that established a significant relationship between the tax administration and tax revenue collection.

5.6 Suggestions for Further Research

The study focused on tax administration specifically on tax compliance, tax structure and taxpayer service delivery however, these are not the only aspects of tax administration.

Therefore, further studies should identify other aspects of tax administration and test their effect on tax revenue collection. The study further suggests that further research should assess the level of adoption of use of automate systems of tax collection among taxpayers and influence on tax compliance. This will bridge the knowledge gaps on the perception of taxpayers on complexity of tax systems adopted by KRA in their tax administration strategy to formulate strategies to address the areas of concern of tax payers hence increasing tax revenue collected.

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