THE EFFECTS OF TAX REFORMS ON TAX PRODUCTIVITY AMONG MIDDLE AND LARGE TAXPAYERS IN KENYA

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DECLARATION

This research project is my original work and has not been presented to any other university for any academic award

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DEDICATION

This research paper is dedicated to my family and friends and all who supported me during the entire period of study.

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LIST OF ABBREVIATIONS AND ACRONYMS

CBK	Central Bank of Kenya
CT	Customs Taxes
DT	Domestic Taxes
ETR	Electronic Tax Register
GDP	Gross Domestic Product
IMF	International Monetary Fund
KRA	Kenya Revenue Authority
LTO	Large Taxpayers Office
MTO	Mediums Taxpayers Office
PAYE	Pay As You Earn
PWT	Peacock Wiseman Theory
SPSS	The Statistical Package for Social Sciences
TMP	Tax Modernization Program
TOT	Turnover Tax
VAT	Value Added Tax
WB	World Bank

ABSTRACT

Tax being the main fiscal tool used by government to control economic activities in any country is normally at the heart of every revenue collection agency to better and improve revenues year after year. It is in light of this that the issue of tax reforms comes into consideration. Tax reforms have always since time immemorial played a key role in influencing how various governments improve revenue collections. This study's objective is to assess the effect of tax reforms on tax productivity in the middle and large payers. This study covered a five-year study period of 2010 to 2015 being the period when drastic reforms measures were introduced key of them being automation in the tax systems among others. In this study, secondary data from KRA website, CBK and the ministry of finance has been used.

The collected data was analyzed using multiple Regression model and descriptive statistics. The dependent variable was tax productivity while the independent variables were automation of tax systems, enforcement and compliance and GDP as a control variable. The study findings revealed that the introduction of tax reforms had a positive effect on tax productivity. The tax productivity as measured by tax revenues was better/higher in the period after introduction of tax reforms and thus the study acknowledges the effect of tax reforms in overall tax productivity and suggests introduction of more tax reforms to better tax revenues. .

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

One of the main fiscal tools used by the government to influence, control, and direct some of the economic activities in a country is tax. This is usually with the desire of achieving a desirable social or economic objective in the end. Various types of taxes have different effects on an

economy and are designed to serve various purposes. According to Musgrave and Musgrave (1989) taxes are applied to achieve allocative, distributive, and stabilization objectives. Tax reform proposals therefore come into play to improve on the efficiency in revenue collection which ultimately bridges the gap on borrowing. Therefore, there is a need to design tax systems independently depending on how the finance is raised. For this reason, a desirable tax system should reflect both equity and efficiency.

Wilford and Wilford (1978) discovered that GDP influenced revenue collected through taxes. Osoro (1993) revealed that reforms made on taxation system in Tanzania, affected tax incomes negatively. Ariyo (1997) found that organization tax affected Nigeria tax incomes. Chipeta (1998) assessed the impacts of reforms on taxation in Malawi and noticed that the changes had contributed essentially to charge income efficiency. Milambo (2001) affirmed that tax changes had enhanced the revenue productivity of the general assessment framework in Zambia. The allocation role of taxation ensures that the private sector does not dominate the economy's resources and funds are released for use by the public sector. Income redistribution between the low, middle, and large taxpayers is also ensured through taxation (Kiiru, 2010).

Before 1990, Kenya was a stable business environment, where the government had a critical role to play in how business was conducted in the country (Kieleko, 2006). Taxation and donor funds were the major sources of funds in facilitating economic development and mobilizing resources. Structural adjustment policies through the IMF to developing nations recommends countries such as Kenya to harness domestic resources and fiscal reforms, which assist in mobilizing more revenue most especially in the areas of tax policy reforms as a way to reduce the fiscal deficit (IMF, 2007). Reducing fiscal imbalances is crucial in the projection of incremental income that can be mobilized through the existing tax system as an economy grows (Ariyo, 1998). Improving

the Kenyan tax system has been attempted ever since the country gained its independence. It has been done with the aim of enhancing revenue productivity to give the government a chance to finance its expenditure.

1.1.1 Tax Reforms

Gituku (2011) defines a tax reform as the process of managing and changing how taxes are collected by the administrative body. Other scholars such as Ariyo (1997), Moyi and Ronge (2006), have also referred to tax reforms as changes in the status quo. Tax reform only comes up when there is a deficiency in the existing tax system in achieving the set goals of taxation. The most commonly used criteria in establishing a tax reform are allocative-neutrality, revenue adequacy, efficiency, and equity of tax administration (Musgrave, 1980). Therefore, a tax reform is only of importance if it's able to improve the social welfare and general livelihood of the citizens of any single country.

One of the key roles of tax reforms is to ensure efficiency of tax systems in upholding equity among people in the society. Tax reforms should also be used to reduce fiscal imbalances through effective mobilization of revenue. This is only possible if governments come up with tax rules and strategies that enable receptiveness of individual and complete tax systems to national income (Gituku, 2011). Nevertheless, only a few of the tax reforms achieve all these objectives.

In 1986, Kenya introduced the first Tax Reform Program with anticipations of enhancing revenue allocation, reduce compliance and collection costs, and improve tax administration. It was through the Tax Modernization Program (TMP) that these reforms sought to enhance the elasticity of the tax system. In spite of the tax modernization efforts, the challenges that seem to affect the Ministry of Finance and the KRA currently are much more severe than those that faced

these authorities before the introduction of these reforms. There have also been concerns that in comparison to other countries, tax affordability is Kenya is very low and the country remains among the most tax unfavorable in the region (Kiiru, 2010).

Therefore, the introduction of tax reforms in Kenya began with indirect taxation reforms that were intended to help redistribute wealth and in the creation of new and more sustainable tax system in the generation of more revenue. Major reforms that have been implemented by the modernization policy include: widening the tax brackets, extending relief to low-income recipients, and lowering top marginal rates (Bondo, 2008).

Furthermore, there have been recent tax policy reforms in the tax sector; introduction of the iTax platform, incorporation of rent income tax into the bracket, changes in tax rates, and amendment of the Tax Act. There have also been improvements in the areas of lowering of tax rates, exemptions and raising VAT administration capacity through a higher budgetary expense. These reforms have resulted in major changes and outcomes in the Kenya tax systems (Kiiru, 2010).

1.1.2 Tax Productivity

Tax reforms in most countries including Kenya are formulated due to the need of raising revenue (Kusi, 1998). Therefore, there is a need to establish certain quantitative measures to evaluate the progress of stimulating public resources through a tax policy. One of these measures is showing how responsive tax structures are to national income. This is called the productivity of a tax system, which is traditionally measured by buoyancy and elasticity (Kusi, 1998). The buoyancy of a tax measures the total response of tax to changes in people's earnings and discretionary changes. Changes in tax rates and rules of governing the tax system are referred to as the discretionary changes. According to Mansfield (1972), a higher elasticity is desirable as it

favours an increase in spending to be financed through an increase in tax revenue without raising the tax rates, which is unpopular.

Tax reforms in Kenya were introduced under the tax modernization program in the late 1980s. The major goal for taking into these reforms was to create a sustainable tax system that could generate enough revenues to fund the public expenditure and also take care of the issues of inequality. These reforms have had to tackle some common problems facing tax systems in middle income and developing countries. Some of the reforms include improving tax administration, increasing tax productivity and reducing economic distortions created by taxes. The importance attached to different goals such as efficiency, fairness and administrative feasibility of the tax regime has changed over time.

A research conducted by Barnett and Grown (2004) revealed that tax policy and productivity is at the center of political discussions. The main point of discussion revolved around public services that should be provided and who should pay for the services since taxes are the main sources of revenue under government control. Moreover, taxes are also used to assist in the reorganization of capital and control fiscal activities. Questions of a primary redistributive nature may be deemed political and so unsuitable for neutral economic analysis and moreover as questions to be resolved by the democratic process in respective nations. On the other side, many questions are raised in-terms of system reform and these may instead be considered as purely "procedural" issues of economic and bureaucratic efficiency to be settled by experts (Martinez Vasquez, 2001). It is important to note that tax structure in Kenya is aligned heavily towards incomes taxes and VAT. Any improvement on any leads to a substantial increase in revenue numbers to the paymaster general e.g of the sales tax to VAT led to a considerable rise in the revenue band under VAT, introduction of TOT etc.

1.1.3 Tax Reforms and Tax Productivity

The implementation of the Kenya vision 2030, coupled with financing expenditures under the devolved government in the new constitution requires enormous resources. The vision requires the government to ensure that the bulk of its expenditures are met from tax revenue and that overall expenditure should be controlled to ensure a stable macroeconomic environment. The Government of Kenya continued to carry out tax reforms over the years with an aim of improving taxation efficiency and increasing the amount of revenue raised to finance the ever-rising government expenditure.

The continuous tax reforms since 1986 have brought improvement on tax productivity to Gross Domestic Product ratio at a considerable level. The tax reforms should be aimed at improving the tax productivity as the end goal. Income tax is levied on individual and corporate incomes thus as the economy keeps expanding, the contribution of this category of tax to revenue is bound to increase, assuming the reforms are aimed at broadening the tax base. Similarly, Value Added Tax is a consumption tax charged on both local sales and importation, as opposed to import duty, which is levied on the value of imports. Excise duty is levied selectively on particular goods and services. Compared to Import and Excise duties, Value Added tax has more potential to increase revenue through reforms aimed at increasing consumption spending in Kenya (Bondo, 2008).

The key objective of tax policies and reforms in Kenya is to guarantee and ensure that the tax structures and systems put in place can attain and achieve revenue armament and reduce fiscal inequalities persistent in Kenya. This is to be achieved through tax acts, laws and strategies intended to ensure receptiveness of individual and overall tax system to national income. There has been a tremendous rise in the annual country's budget every year in June and this presents a glaring need for the tax man to explore more ways of meeting the budget deficits. In a bid to

meet the budget, top on the list would be to introduce reforms in the tax authority that would seal all the loop holes and improve on efficiency in tax collection. Reforms if well implemented would have a favorable effect on the overall tax productivity.

1.1.4 The Tax Structure in Middle and Large Taxpayers in Kenya

The Kenyan taxation structure as of now is made out of two main direct taxes made of corporate duty and individual wage tax; and three indirect taxes; VAT, Custom duty and Excise duty. Much the same as numerous developing nations, government utilizes tax income to guarantee it has enough income to fund public expenditure and keeping in mind that doing this, it likewise goes for ensuring that it meets the different standards of tax assessment and furthermore decreases different expense disincentives (Kiiru, 2010). Achieving all the set standards and goals of taxation is a huge challenge even to the developed nations. Most tax policies have sufficiently failed in ensuring equality among the citizens within these countries. Most tax reforms are formed with an emphasis on revenue adequacy (Gituku, 2011).

According to the World Bank's Statistics (2008), the informal sector is said to employ close to 75% of the Kenyan population and this group contributes to over 19% of the total GDP, however, this sector generates huge amounts of revenue. The Kenya Revenue Authority (KRA), which has the mandate of collecting taxes in Kenya, is yet to come up with a policy that will ensure the informal sector is appropriately taxed. Kenya's tax system experiences many loopholes and rampant tax evasion. Failure to raise enough revenue through taxation has led to low revenue productivity and worsening of the budget position in general. The informal sector, composed of mainly the low taxpayers in the country is diversified with activities ranging from transportation, farming to small-scale traders (hawkers). They are one of the reasons for the

challenges involved in developing a tax policy that encompasses all the activities. Eliud and Eric (2006) also agree that a large informal economy makes taxation a difficult procedure to excise.

To ensure taxation of the private sector, the country has seen an introduction of iTax; an improvement of the Integrated Tax Management System (ITMS) that was rolled out by KRA in 2007. iTax has enabled the registration of taxpayers all over the country, people have been able to file returns, ease in making payments and enquiries of one's tax status, and also monitoring of individual's accounts in real time has been manageable from the comfort of people's homes and offices. The platform has further cut down the cost of taxation in that taxpayers can easily fill their returns offline after downloading the returns forms, fill it and upload it at their convenience. The system has integrated with more than 30 banks to ensure all taxpayers largely are covered. In addition, the system has exemplified and quickened tax compliance in the country reducing the costs of tax compliance logistics (KRA,2014).

Further, KRA collects taxes inform of Value Added Tax (VAT) which was introduced in 1990 as a replacement of Sales Tax. The VAT was preferred over sales tax because of the economical nature regarding revenue collection and administration as compared to the latter. VAT has undergone various reforms in base expansion and rate structure over the years. Initially, VAT was so high at above 100% for over 50 items but it has reduced over time. This resulted in a reduction of the VAT to 15% and was later revised to the current 16% for all other goods apart from power and electricity. VAT administration and the introduction of the ETR machines have seen an improvement in the collection of VAT revenue from 2004-2006 by kshs 10billion. There have been many changes in the VAT Act that were enacted in 2013 that resulted in the removal of the long list of exempt and zero-rated supplies. Therefore, VAT has since then seen an increase in its scope and coverage as it applies to all imports, manufactured goods and services,

and supplies provided in Kenya except those that were specifically listed in the new list of zero-rated goods (KRA 2014).

1.2 Research Problem

An economy suffers from serious consequences due to rising fiscal deficits. Increase in the expenditures and lack of control in how public funds are used are some of the major reasons behind Kenya's fiscal deficits. The government is in charge of setting tax rates and also deciding on the modes to be used in financing deficits. Nevertheless, these modes of financing deficits have their disadvantages. Moreover, heavy borrowing is not a reliable method since, in the long run, the country could suffer from unsustainable debts. It is therefore prudent to harness domestic resources through the necessary fiscal reforms that will assist in mobilizing revenue particularly in the area of tax policy reforms (Bondo, 2008).

Faced with the problem of increasing tax revenue, there is a need to adopt measures to change tax policy. Some of these measures include widening the tax base and changing the tax rates. Tax performance is a key attribute to an economy and may be improved by ensuring smooth tax administration policies and specially to achieve a high compliance proportion. In this sense, the government through the KRA has relied heavily on discretionary tax changes to increase tax productivity of the tax system. Many changes have occurred from 2013-2016 including; the introduction of i-Tax, incorporation of rent income tax into the bracket, reduction in rates and exemptions, and increasing VAT administration among many others. In spite of the tax efforts, there are still concerns about the obstacles that face the Ministry of Finance and the KRA with regard to revenue generation to date (Bondo, 2008).

Locally, most research projects on tax questions have concentrated on various perspectives. For example, Owuor (2010) concentrated on economic risks that influence VAT income

accumulation by KRA. Chege (2010) on the effect of utilizing ETR on VAT compliance of major hotels within the city of Nairobi and Leseeto (2010) on impacts of expense absolution on VAT consistence in Kenya, The investigation goes a miss of how tax reforms have affected the different levels of taxpayers in the country. Earlier examinations have demonstrated that tax reforms have affected various sections such as GDP, and economic growth. Among others, the study thus poses the question: how does the tax productivity react to effects of tax reforms among middle and large taxpayers in Kenya?

The various tax reforms have also come with several perks with taxpayers defaulting in payment of tax, hence preventing a threat to achieving the goals of the tax policies. Various forms of tax evasion by the taxpayers fail to meet the budget in the collection of revenue. It is therefore not clear whether these tax reforms have impacted the taxpayers on tax productivity leading to significant change even in tax administration. Hence the question: To what extent has the tax reforms impacted the middle and large taxpayers on tax productivity?

1.3 Objectives of the Study

This study aimed at identifying the role of tax reforms in enhancing tax productivity and more specifically in improving tax revenue collection in the middle and large tax groups. The goals of this study were thus to estimate the effect of tax reforms on buoyancy of tax, as well as estimating the effect of the reforms on the bounciness of the tax system

Specific objectives of the study:

i. Determine the impact of reforms and policies on tax productivity in Kenya.
ii. Identify the impact of GDP Gross Domestic Product on tax productivity among different levels of taxpayers in Kenya

iii. Analyze Gross Domestic Product and tax reforms effects on tax productivity among middle and large taxpayers in Kenya.

1.4 Value of the Study

This study aimed at identifying the need and appreciating the role of reforms to the overall tax administration and tax productivity at large. The study will be of great significance to many stakeholders including but not limited to the following:

Taxpayers in any given economy always wish to have a tax system that is certain, convenient, simple, fair and economical. A fair and simplistic tax system eases compliance especially in this digital era. This study will reveal whether there have been reforms geared towards achieving these.

The tax consultants are also highly likely to benefit with the changing tax reforms. This research is aimed at bringing out a profound explanation and understanding of the Kenyan iTax system and bring out the key challenges faced by the taxpayer's when filing taxes. The study will, therefore, help tax consultants to properly address taxpayer's challenges.

The business owners and investors are normally on the front line and end up experiencing the direct effects of taxes. This study will guide in decision making as to which sector to invest in depending on where the business owner is likely to get more gains in reliefs brought about by the many reforms lately. Many investors who flock the country have a great interest in the tax man's rules and regulations and the reforms in the sector, of course, go a long way in influencing investing decisions.

Every vibrant economy has to have some policy makers to guide the thought in tax administration. This is the group tasked with coming up with policies that guide administration of tax in any sector. This study will recognize some tax organizational factors that need the consideration of the tax authorities and officers for improvement of efficiency.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter covers the theoretical review that looks at the theories underpinning the study. It looks at the determinants of the two concepts discussed in chapter one. After which, an empirical study reviews studies done on and around the topic. There is a section that explains the conceptual framework diagram showing the conceptualized relationships between the variables. Finally, a summary of the literature review and the gap that the study intends to fill concludes the chapter.

2.2 Theoretical Framework

This section provides the theoretical foundation that this study was anchored on and more so on tax reforms. The theoretical framework is a collection of related thoughts and guides in study to determine what items and issues to measure, and what statistical relations to check out for (Defee, Randal, Thomas et al 2010). Esper, Mentzer and Stank (2008) stress that a good study should be anchored on philosophy and theory.

2.2.1 Wagner's law of Increasing State Activity

The law of Wagner's increasing state activity argues that there is a steady relationship between industrialization and relative growth of the public sector. Giving case studies of Japan, UK and USA, he came to a conclusion that as per capita income and output increases, the public sectors of the said countries grew as a proportion of the total economic activity (Idenyi, Ogonna, Chinyere, & Chibuzor, 2016).

Wagner in his theory states that: "Full complete comparisons of different and diverse countries and at diverse periods show that among the developed nations, with which we alone are

concerned, growth and development often takes place in the activity of both central and local governments. This increase is both widespread and exhaustive. The central and local governments continually assume new roles and functions, while they perform both old and new functions more proficiently and exhaustively." Public expenditure as mentioned is derived from taxes (Magazzino, 2011).

The theory explains how in progressive societies there are increases in activities by both central and local governments regularly. The government often undertakes progressive activities for the benefit of the society. The objective of most governments in the above theory is ensuring that the economic needs of its people are met. By expanding and intensifying governments' functions, there is an obvious increase in public expenditure. This consequently means there ought to be better revenue collections methods; this ultimately leads to taxation reforms.

2.2.2 The Peacock-Wiseman Hypothesis

This theory went ahead to further what Wagner had argued. The writer came up with a couple of conclusions. For instance, Revenue collection greatly influences public expenditure and it's directly related and thus a rise/increase of revenue collection increases expenditure (Cassou & Lansing, 2006). Secondly, there is a relatively huge gap between the expectations of the public regarding public expenditure and level of taxation tolerance. This means that the tax authorities cannot disregard people's concerns, especially where revenue collection is increasing with similar increases in tax rates while the service delivery is in the decline.

Last but not least, during times of war, governments in collaboration with tax authorities do increase tax rates and tax bands but this case does not change even after war ceases, this means that the public gets to be taxed more as they get used to the new tax laws which result in increased tax revenues (Henry & Olekalns, 2010). From the above theory, it is evident that over

time, there is a tendency of bulging of the public spending. The researchers' (Allan Peacock and Jack Wiseman) study was based on the political argument of government spending which dictates that governments prefer to spend more resources where's the public does not agree to this and thus the government as the revenue earner needs to look keenly to the aspirations of its people instead of increasing taxes.

Taking a case example with Britain, during period of war, the government spending grew exponentially in central London and remained at a constant level for during the war period bringing about famine and disaster. The two philosophers argued that government spending is mainly dependent on revenue or taxation. The theory argued that as the nations economy grew, tax income would increase and thereby assisting the government meet its financial obligations and increase of government spending in line with the GDP. The acceptance of the existence of acceptable level of taxation which acts as a restraint on government acts is constant with Clark's Catastrophe's school of taxation. The two researchers argued that public spending would tend to experience an upward trend during peak even though there may be some inconsistencies between the expected level of government spending and a desirable level of taxation.

2.2.3 Colin Clark's Critical Limit Hypothesis

The theory seeks to explain the tolerance levels of individuals and more so corporation taxation. According to Cassou and Lansing, (2006), Clark argued that inflation pops when the share of the government spending (which is measured in taxes and other receipts) exceed 25% of the aggregated economic activity in that country's economy. In a case where the public expenditure reaches 25% of the total economic activity or aggregate amount of spending in the country, the tax payers' capability to pay more in terms of taxes is exhausted. Public spending beyond this

limit translate to disincentive to producers and fall in production due to taxation beyond the acceptable level.

The theory rests on two institutional factors. One is that when the government exceeds its tax collection over the 25% limit, the income earners are affected badly by decreased incentives and a reduction in productivity. They produce below their capability which leads to a reduction in supply. Secondly, even the government budget remains balanced, an increase in expenditure would result in increased demand. Thus, resulting in inflation which comes from a mal-adjustment between supply and demand (Cassou & Lansing, 2006). Colin Clark offered an undue illustration on his critical limit of 25% (Rothbarth & Clark, 1941). Though the hypothesis is well received by the business community, in the academic circle the theory is less significant.

In the modern world a number of countries are incurring public expenditure much beyond their limit, without facing worse situation of inflationary pressure. Impact of budgetary spending on generation of inflationary situation; depend upon the manner and nature in which public expenditure is incurred. Inflation is a complex economic phenomenon influenced and characterized by a number of mutually exclusive and inter-dependent factors. Hence, we can only fairly conclude that in a market economy, increasing state activity may create inflationary pressure. The desirable level of taxation may not be determined numerically. But the economic capacity of the taxation should be answered. It may not be identical on both classical finance and the modern formation of fiscal policy. The classical model postulates the view that the level of public expenditure is the resultant of the level of taxation. It means vice versa for the level of public expenditure has been claimed to have been determined by policy.

2.3 Determinants of Tax Productivity

Over time, there have been numerous reforms to deal with the said economic problem. A look at a comparative analysis of Kenya and other Sub Saharan countries, Kenya has a higher GDP as compared to the rest. Kenya has a chronic problem of often having a deficit in her fiscal budget. This means that the budget is serviced by heavy external borrowing which consequently has adverse effects on the monetary policies such as interest rates and balance of payments too. Kenya acknowledged the problems created and adopted tax reforms in the year 1986. It is worth noting that it is during this time that had gone to economic rescission for a long period. The main objectives of tax reforms were to better tax collection, improve tax administration and lastly to reduce tax collection cost.

2.3.1 Tax Reforms

There are numerous studies that have been done in the past to keep tabs with how tax reforms are done and what perpetuates these reforms. Below is a brief chronology of how tax reforms have been undertaken in Kenya in the recent past. Tax reforms are changing how taxes are administered often for the better. In an ideal economy, tax reforms are geared to introduce the lowest tax rate and make the widest tax base. Secondly, with tax reforms, there ought to be the least tax reliefs and minimum tax evasion. Kenya's fundamental priorities in the new millennium are security, health, education and important public services. For proper taxation, there are several canons of taxation that ought to be followed among them being: equity, simplicity, certainty, economical, convenient, productivity, elasticity and expediency. Kenya for a long period has often diverged from the set guidelines of taxation. That is the main reason for many tax reforms to get back in line and follow the canons. In the recent past, tax liability has continuously shifted from those who can best bear the liability to the middle-income earners;

consequently, corporates have often evaded tax by simply shifting operations overseas. Tax reforms are custom made for individual economies, however; there are general problems that lead to tax reforms. The factors are discussed below:

Seeking alternative indirect tax, this is mainly applicable to sales tax. It was noted that sales tax collected revenue in a very burgoos manner leaving many loopholes. This led to the adoption of VAT tax in most developing countries. VAT has led to a more equitable and predictable source of tax revenue. Expanding the tax base- Income tax often is difficult to administer especially when not on a payroll system. Secondly, the events of tracing capital gains and the many fringe benefits are a goose hunt. Lastly, the presence of large numbers of people in the many organizations in the country makes it a challenge for the administration of taxes effectively. Simplifying tax system for effective taxation, all taxpayers need to be in the loop of how collection and administration of taxes are done. When taxpayers are unaware of administration, they often fail to give accurate and timely information concerning income and taxation as a whole. With tax reforms when direct and indirect taxes are simplified, the collecting authority would comfortably focus on collection and accounting of the revenue collected. Automation of systems, stiffer consequences of non-compliance, shorter collection lags and general streamlining of administration may be a good start for tax reforms.

According to Gordon R (2010), taxes are a crucial policy issue especially in developing countries. Just recently, proposals to raise middle-class taxes toppled the Bolivian government and plans to extend or increase the VAT caused political unrest in Ecuador and Mexico. Despite the impact of tax policy on developing countries, a comprehensive study has yet to be written. Taking Argentina, Brazil, India, Kenya, Korea and Russia as key case studies from among the poorest and wealthiest nations; the mix uniquely demonstrates the diverse fiscal problems of tax

reforms. Each economy relies heavily on indirect and corporate income taxes, though recently some have reduced their tariff rates and have switched from excise to valued-added taxes. There is a large, informal economy in most of these countries, and tax evasion by firms is a significant concern. As a result, tax revenue remains low, even though rates are as high as those in developed countries. Lastly, unconventional methods to collect revenue have been implemented, including bank debit taxes, state ownership of firms, and implicit taxes on individuals in the informal sector.

2.4 Empirical Review

Many studies have been done in the past in the quest to identify the impact of tax reforms on tax productivity especially on the middle and large taxpayers. Secondly, to also determine the impact on the whole tax revenue in the country. Many developing countries where Kenya belongs face many institutional challenges in administering taxation, especially with the growing expenditure. The main challenges can be attributed to failing government systems in administering taxes, corruption in tax administration and lastly low revenues generated from the taxes. One of the indicators of economic instability is its inability to make long-term reforms especially economically. Lack of accountability and tax evasion in tax administration significantly affects the tax revenue and consequently the economic growth and development of the country.

A study by Osoro (1993) evaluated the ramifications of Tanzania tax reforms on tax productivity. To estimate the buoyancy of tax, the author adopted a double log equation. Likewise, the author embraced a relative adjustment technique to estimate tax revenue elasticity. As per the author, the relative adjustment method was the most proper on the grounds that various reforms had been acquainted in this way making the use of dummy variables impossible. The consequences of the investigation in that review showed that tax reforms had been

inconsequential in upgrading productivity in revenue among the middle and large taxpayers in Tanzania. The investigator credited this to a high rate of exceptions and poor organization of tax.

In another study, Chipeta (1998) looked at tax policies and reforms on income in Malawi between 1970 and 1994. The author utilized tax income as independent variable while GDP was autonomous variable in the analysis of regression. Chipeta (1998) utilized two equation set conditions in estimation. Disaggregation of revenue from tax assessments was done in the second arrangement of regression, with the incorporation of dummy variables in order to catch the impact of optional duty strategy on incomes. The outcomes from that review showed that few assessments were buoyant. In any case, the aggregate arrangement of duty was not buoyant. What's more, the investigator found that GDP had developed quicker than the bases of assessment, and thus the personal taxes and the aggregate arrangement of duty were not buoyant. In the expansion, the aggregate arrangement of duty and individual taxes were inelastic to GDP changes.

Milambo (2001) in his study used the Divisia index method to study the revenue productivity of the Zambian tax structure for the period 1981 to 1999. The results showed elasticity of 1.15 and buoyancy of 2.0, which confirmed that tax reforms and policies had improved the revenue productivity of the overall tax system. However, these results were not dependable because time trends were used as substitutes for uncontrolled changes and this was the study’s major weakness. In relation to Kenya, Ole (1975) estimated income elasticity of tax structure for the period 1962/63 to 1972/73. The tax revenue was regressed on income without adjusting for unusual observations. The results showed that the tax structure was income inelastic (0.81) for the period under study. The research recommended that the system required urgent reforms to

improve on its productivity. The results also implied that Kenya's tax structure was not buoyant and therefore the country would require foreign assistance to close the budget deficit.

Adari (1997) conducted a study about the execution of VAT in Kenya. The examination evaluated the structure, execution and managerial procedures of the VAT. The examination demonstrated that the coefficients in both the flexibility and lightness of relapses were less than unity recommending that VAT reacted gradually to GDP variation. According to the study, this was because of poor organization of VAT in the nation. The examination by anyway did not represent properties of time arrangement and furthermore bizarre events; in this way restricting the dependability for reasons for strategy.

In a study conducted by Anyo (1997), it assessed the productivity of the Nigerian tax system for the period 1970 – 1990. The objective was to devise a reasonable accurate approximate of Nigeria's sustainable revenue profile. In the study, tax buoyancy and tax revenue elasticity were estimated. It was found that on the overall, productivity level was satisfactory. However, the results indicated wide variations in the level of tax revenue by tax source. The variations were attributed to the laxity in administration on non-oil; tax sources during the oil boom periods. Significant reduction in public spending and prudent management of financial resources were suggested as solutions to the fiscal deficit. The study further asserted that there was need to improve the tax information system to enhance the evaluation of its performance and facilitate adequate macro-economic planning and implementation (Ariyo, 1977).

A study was done by Jacob & Imams (2007) on the relationship between tax revenue and corruption in the Middle East countries. It was concluded that the taxes paid with the interaction of tax authority individuals are most hit by corruption thus the need to reform the administration. For instance, in Kenya, there was the introduction of itax platform that is purely online and

reduces the visits to the revenue authority offices. A review on tax design and administration, between 1995-2006 in order to identify areas of tax reforms so that there is an improvement in tax revenue performance. Analysis indicates that inflation has an adverse effect on taxation. The tax structure is less buoyant and inelastic in indirect taxation as compared to direct taxation (Loyi and Ronge, 2006). Elasticity and buoyancies, when computed pre-and post-period when determining the effect of policies and reforms on the tax system, indicated positive impact (Mureithi & Moyi, 2003).

2.5 Conceptual Framework

This is a hypothesized model which is meant to identify the variables under study and identify the relation between them. The framework is also an instrument meant to help the researcher to get more understanding of the variables under study and their relationship. In this regard, a conceptual framework has been designed to show the effect of tax reforms in the middle and large taxpayers on tax productivity in Kenya.

According to Fama (1991), the conventional way to select these variables is to look at what determinants previous studies have selected for analysis. Therefore, tax classification and government policies have been considered as extraneous variables in this study.

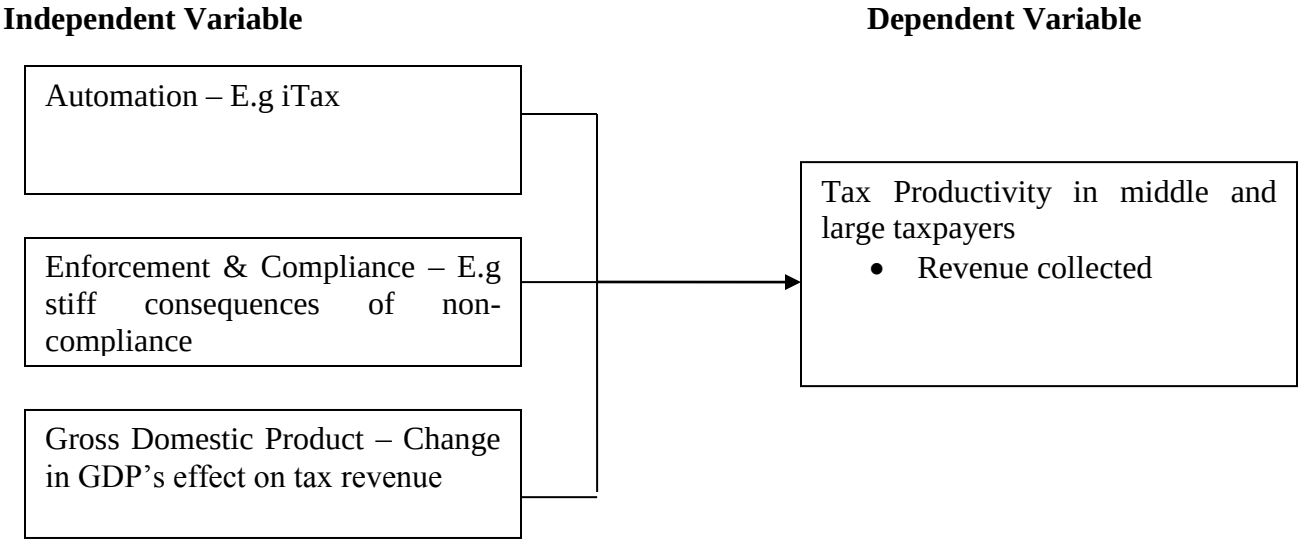


Figure 2.5.1 Conceptual Framework

2.6 Summary of Literature Review

From the literature review, it is obvious that there have been many types of research that try to unravel the effect of reforms on the various avenues of tax administration. This study will also go a long way in impacting the theoretical bit of research and further add to the bulk of literature review that has been done previously. It is also clear the Kenya Revenue Authority and all its stakeholders have been active in ensuring that there are reforms to propel tax revenue and tax administration to the next level. Lastly, it is evident that there is greater improvement in tax productivity when the tax reforms are well implemented. In conclusion, is worth noting that there is still a lot be done to ensure that tax reforms yield maximum benefit to the taxpayers, especially the middle and large taxpayers.

Summary of Literature Review

Author of study	Focus of Study	Methodology	Findings	Knowledge Gaps	Focus of current study
Osoro (1993)	To evaluate the ramifications of tax reforms on tax productivity in Tanzania.	The study used a double log equation to estimate buoyancy of tax. The author also used a relative adjustment technique to estimate tax revenue elasticity.	Tax reforms were insignificant in improving tax productivity in Tanzania	There arose a gap in evaluating the buoyancy of tax in relation to reforms on tax and the increase in tax revenue collection	Effects of tax reforms on tax productivity among the middle and large taxpayers in Kenya.
Chipeta (1998)	To evaluate tax reforms on income in Malawi.	The study used regression analysis with tax income as an independent variable and GDP as autonomous variable. The author used two set of equations with dummy variables being introduced.	Very few tax assessments were buoyant. Individual taxes were inelastic to GDP changes.	The buoyancy level between Economic growth and tax reform is an important aspect but little study has been conducted to confirm the theory/research.	Effects of tax reforms on tax productivity among the middle and large taxpayers in Kenya.
Adari (1997)	To evaluate the structure, execution and managerial procedures of VAT in Kenya	The study analyzed historical/secondary data	VAT reacted gradually to GDP variation. The study did not factor the element of time.	VAT being a key contributor to tax revenue is time bound and thus time is a key factor in making a conclusion in this study which was otherwise not factored	Effects of tax reforms on tax productivity among the middle and large taxpayers in Kenya.
Jacob &	To study the	The study adopted survey	It was noted that taxes	Is corruption the	Effects of tax

Author of study	Focus of Study	Methodology	Findings	Knowledge Gaps	Focus of current study
Imams (2008)	relationship between tax revenue and corruption in the middle east countries	design. Primary data was collected using structured questionnaires with open questions.	paid with the interaction of authority officials were most hit by corruption and thus the need for reforms.	only factor influencing tax revenue collection? Would it be ideal analysing it in isolation? Such would be the questions to tackle in the study.	reforms on tax productivity among the middle and large taxpayers in Kenya.
Anyo (1997)	To assess the productivity of tax system in Nigeria	Tax buoyancy and tax revenue elasticity were estimated using equations and with introduction of dummy equations	Overall productivity level was satisfactory. However, there were differences in the level of tax revenue source	The study noted a gap to improve the tax information system to enhance the evaluation of its performance and facilitate macro-economic planning.	Effects of tax reforms on tax productivity among the middle and large taxpayers in Kenya.
Milambo (2001)	To study the revenue productivity of the Zambian tax structure in 1981 – 1999		The study confirmed that tax reforms had improved revenue productivity on the overall tax system.	Time trends were used as substitutes for unrestricted changes in the study weakening the theory thus creating a gap for more research	Effects of tax reforms on tax productivity among the middle and large taxpayers in Kenya.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter focusses on the methods to be used in gathering, analyzing the data and interpreting the results as well. This section covers the research design adopted in the study, the population that will be used in terms of numbers, the sample size and sampling techniques, data collection methods, diagnostic tests, and finally data analysis of the information gathered.

3.2 Research Design

A correlational research design was utilized. This is a nonexperimental research in which the researcher measures two variables and assesses the statistical relationship between them with little or no effort to control extraneous factors. This outline was embraced by Gachanja (2012), in his examination on the impact of expense changes and monetary factors on assessment of incomes in Kenya. The correlational investigation is a type of examination in which you correspond one variable with another to decide whether there is a connection between them. The correlational model takes a look at the tax policy reforms estimation scale, comprising of four-dimensional structures in particular wage assessment arrangement changes, reforms in VAT strategy, customs duty arrangement changes, and tax organization policy changes.

According to Cooper and Schindler (2011), a research design is a road map or a plan of research to be used to answer the research objectives and hypotheses. It is the plan, structure and strategy conceived to obtain answers to the research questions. It is ideally meant to discover relationships among variables and to allow the prediction of future events from present knowledge. The value of the correlation coefficient ranges from r= -1 to r= +1. A research design in which more than one predictor variable is used a single outcome variable is analyzed through multiple regression Aiken S L and Stephen G West (1991).

3.3 Data Collection

The study used secondary data obtained from KRA & CBK. The data included KRA revenue collections collected over a five-year period from 2010/2011 to 2015/2016. The data also incorporated all the tax reforms and changes which have been introduced in the five-year period as well. Data was obtained from historical records provided by the Kenya Revenue Authority. Data on revenues generated by the two tax groups, the middle and larger taxpayers, was used.

3.4 Data Reliability/Validity

Mugenda and Mugenda (2003) argue that any serious and qualitative researcher must concern himself with both reliability and validity when conducting a given research, analyzing the study results and indeed evaluating the quality of his work. Validity refers to the degree of accuracy and an assessment of the specific concepts that the researcher will measure. This will help ensure that the questionnaire represents the content and that they are appropriate for the sample to properly and comprehensively work to collect all the information needed in addressing the purpose and goals of the study. Reliability of the data, on the other hand, will be established through a pilot study to ensure that the expected results can be produced more than once by the research instruments in collecting data drawn from two samples of the same population.

3.5 Data Analysis

The researcher will use exploring research design for collecting, analyzing and evaluating quantitative data in the research process. In this research, priority will be given to the quantitative methods. Statistical data will be mainly collected from history records through checks in websites reports, journals, previously written institutional papers among other sources. Trend analysis will also be used to graphically present some of the trends that will be observed

in the data. With the use of SPSS, the researcher will employ multivariate analysis with the help of an OLS regression. The study will apply both descriptive and inferential statistics to analyze the data. In descriptive statistics, the study will use mean, standard deviation and scatter plot while under inferential statistics, the study will use multivariate regression analysis to determine the relationship between the dependent variable and the independent variable.

The regression equation to be used will be.

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon}$$

Where:

Y = Tax Revenue

X_1 = Automation of tax systems

X_2 = Enforcement and Compliance

X_3 = GDP - This is the control variable

ε = Error term

β_0 = Constant term which represents the intercept at the beginning of the modelling.

β_1, β_2 & β_3 are the regression coefficients

3.5.1 Measurement of the Variables

Variable	Measurement
1. Tax Productivity	This will be measured by the change in the annual tax revenues collected
2. Automation of tax systems	This will be measured by the number of taxpayers in the medium and large category who have incorporated the itax platform
3. Enforcement and Compliance	This will be measured by the number of prosecuted court cases relating to non-compliance and tax evasion. The annual budget allocated to enforcement and compliance department will also be considered.

3.5.2 Tests of Significance

The variables will be measured as follows: Parametric tests i.e F-test in analysis of variance (ANOVA) and t-test will be used to measure statistical significance in the difference of mean ratios. The F-test and the t-test will be used at 95% confidence level. The F statistic will be utilized to establish a statistical significance of regression equation while the t statistic will be used to test statistical significance of study coefficients.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Data Analysis

This chapter contains the results of the study and the data analysis. The study data was obtained from several websites including the Kenya Revenue Authority, CBK and ICPAK's websites. The period of study was a five-year period from 2010/2011 to 2014/2015.

4.2 Descriptive Statistics

This section discusses the results of the descriptive statistics for the analyzed data for the five-year period. The table below presents the summary of the descriptive statistics for both the dependent variable and the independent variables.

Table 4.2.1

Table summarizing the descriptive statistics

	Mean	Std. Error	Std Deviation	Variance	Skewness
Lg_{10} Tax Revenue	11.300475	.028634	.128057	.016	-.014
Lg_{10} No of taxpayers on iTax	4.543459	.034776	.155524	.024	-.428
Lg_{10} Prosecuted court cases	1.334110	.091243	.408054	.167	.050
Lg_{10} Nominal GDP	11.934725	.011033	.049341	.002	.413

Source: Research data 2015

The descriptive statistics results above show that over the study period of five years, the Total tax Revenue collected had a mean of 11.30 and a standard deviation of 0.128. The table further shows the standard error of 0.286 and variance of 0.16.

4.3 Correlation Analysis

To study the strength of relationship between the variables, correlation analysis was used.

Table 4.3.1

Correlation Analysis

	Lg_{10} Tax Revenue	Lg_{10} Prosecuted court cases	Lg_{10} No of taxpayers on iTax
Lg_{10} Tax Revenue	1		
Lg_{10} Prosecuted court cases	.776	1	
Lg_{10} No of taxpayers on iTax	.703	.762	1
Lg_{10} Nominal GDP	.838	.860	.792

Source data: 2015

The Pearson's correlation coefficient is a statistical measure showing the strength of a linear relationship between paired data, denoted by "r". A positive value of "r" denotes a positive linear correlation while a negative value denotes a negative linear correlation between the variables. The closer the value of "r" is to 1, the stronger the linear correlation between the variables is and the closer it is to 0, then, the weaker the linear correlation.

Our data shows a very strong linear correlation between tax revenue and its independent coefficients. In the study, all the three independent variables depict a strong positive correlation.

4.4 Regression Analysis

Multiple regression analysis was used to help to assess the effect that automation of tax systems and regulation and compliance has had on the amount of tax revenue collected. The regression analysis was performed using SPSS statistical package.

4.4.1 Regression Output

Below is a summary of the regression statistics output;

Table 4.4.1

Summary of Regression Output/Statistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.846	.716	.662	.0744	.716	13.424	3

Source: Research data 2015

R, being the correlation coefficient is used to indicate the nature of relationship between the variables in the study. In this case, from the results in the table above there was a very strong positive correlation of 0.846. Coefficient of Determination measured by adjusted R square illustrates the variance level in the outcome variable (y) that can be explained by variations in the independent variables. The adjusted R squared was at 0.662. This indicates that 66.2% of changes in tax revenue collected in Kenya by KRA is attributable to the changes in automation of tax system, enforcement and compliance and the changes in GDP at 95% confidence interval.

4.4.2 Statistical Significance of the Model

The significance of the estimated model was summarized in the ANOVA table below;

Table 4.4.2

Analysis of Variance (ANOVA)

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	.223	3	.074	13.424	.0015
Residual	.089	16	.006		
Total	.312	19			

Source: Research data 2015

The Null hypothesis, H_0 = There is no significant relationship between the amount of total revenue collected and the automation of tax systems, enforcement and compliance and the GDP.

Alternative hypothesis, H_1 = There is a significant relationship between the amount of total revenue collected and the automation of tax systems, enforcement and compliance and the GDP.

Parameter; 95% Confidence Interval.

The results of the ANOVA in the table above indicates that the model significance level was 0.0015. This value is less than the significance level of 0.05 thus leading us to reject the null hypothesis and accept the alternate. This indicates that the tax revenue collected has significant relationship with the automation of tax systems, enforcement and compliance and the GDP.

4.4.3 Estimated Model Coefficients

The regression of the model was performed on SPSS Software and gave the following model coefficients;

Table 4.4.3

Model Coefficients

Model	Variable	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	GDP - Constant	-8.273	8.500		-.973	.345
	Lg_{10} No of taxpayers on iTax	.051	.186	.062	.275	.787
	Lg_{10} Prosecuted court cases	.061	.085	.194	.718	.483
	Lg_{10} Nominal GDP	1.614	.745	.622	2.165	.046

Source: Research data, 2015

From the above table, the equation derived is;

The regression equation $\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon}$ condenses to;

$\mathbf{Y} = -8.273 + 0.051\mathbf{X_1} + 0.061\mathbf{X_2} + 1.614\ \mathbf{X_3} + \boldsymbol{\varepsilon}$

Thus;

Tax Revenue = -8.273 + 0.051*Automation of tax systems + 0.061*Enforcement and Compliance + 1.614*GDP + Error term

Where GDP is the control variable.

From the above equation, there is a positive relationship between the tax revenue, automation of tax systems, enforcement and compliance and GDP. However, the model constant is a negative constant of -8.273. The model clearly depicts that a unit change in GDP would result in an

increase of tax revenue by 161.4%. Automation of tax systems has a 5.1% positive relation with tax revenue and this means that for every change in no of tax payers on itax, there is a 5.1% increase in tax revenue collected. Enforcement and compliance on the other hand has a 6.1% positive relationship with tax revenues.

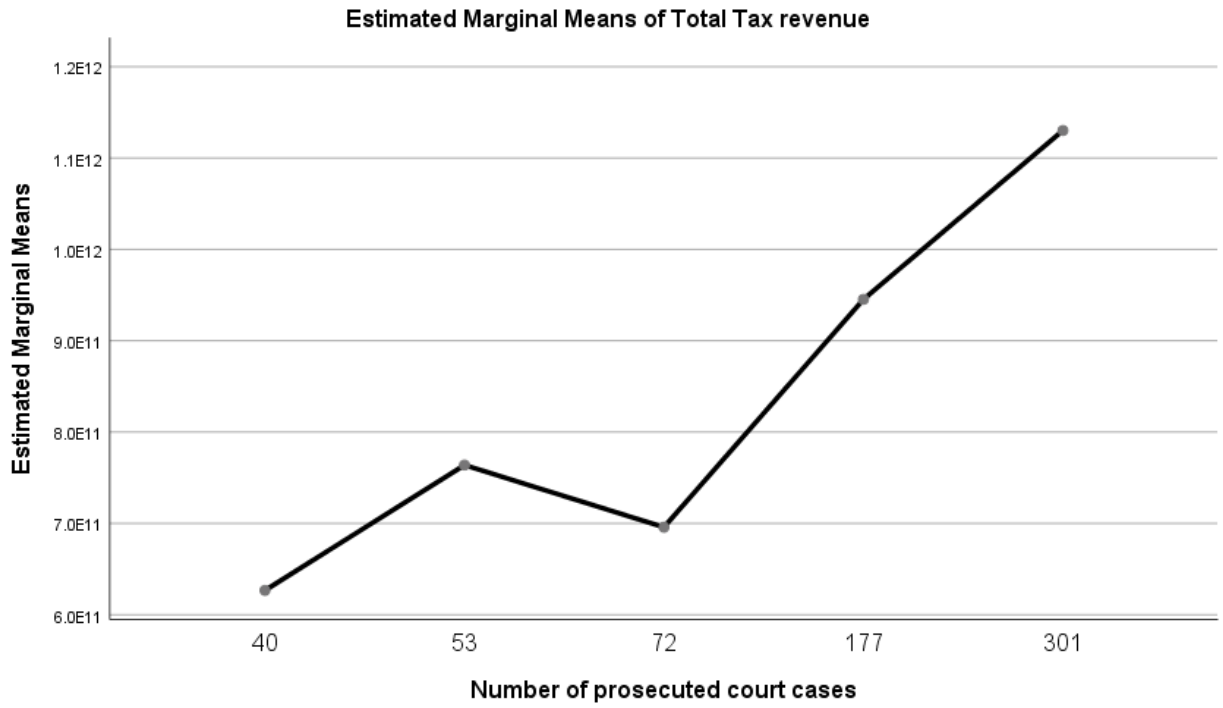
According to the standardized coefficient Beta, a unit change in GDP has the greatest effect on the tax revenue. This is because its standardized Beta coefficient is 0.622 implying that an increase of one standard deviation of GDP leads to an increase of 0.622 of the tax revenues, while automation of tax systems and enforcement and compliance are held constant. The second factor with a big effect on the tax revenue is enforcement and compliance with a Beta factor of 0.194 and the last ranked with respect to its effect on GDP is automation of tax systems with a standardized Beta factor of 0.062.

4.5 Trend Analysis

Trend analysis was used to show the general movement in total tax revenue collected with respect to the independent variables; enforcement and compliance, automation of tax systems and GDP, which is our control variable. This trend analysis depicts the general change in tax revenue over the years, from 2010 to 2015.

The trend analysis for each independent variable was analyzed separately. In each plot, the X axis shows the independent variable with respect to time while the Y axis; which starts at 0, depicts the dependent variable which in our case is the tax revenue collected.

Figure 4.5.1 Trend Analysis of Tax Revenue with respect to Enforcement and Compliance.



The figure above shows the fluctuations in the tax revenue from 2011 to 2013 as it increased from 2011 to 2012 and decreased in the period 2012 to 2013. It then increased during the period 2013 to 2015 recording a high rate of increase with a steep and high gradient.

This shows that as the number of prosecuted cases increased beyond a certain point, its effect on tax revenue became noticeable

Figure 4.5.2: Trend Analysis of Tax Revenue with respect to automation of tax systems.

According to the figure below, the amount of tax revenue increased steadily as the number of taxpayers registered on iTax increased. However, the slope during the period 2013 to 2015 was steeper than the slope during the period 2011 to 2013. Thus, the impact of having more people registered with iTax was felt in the later years.

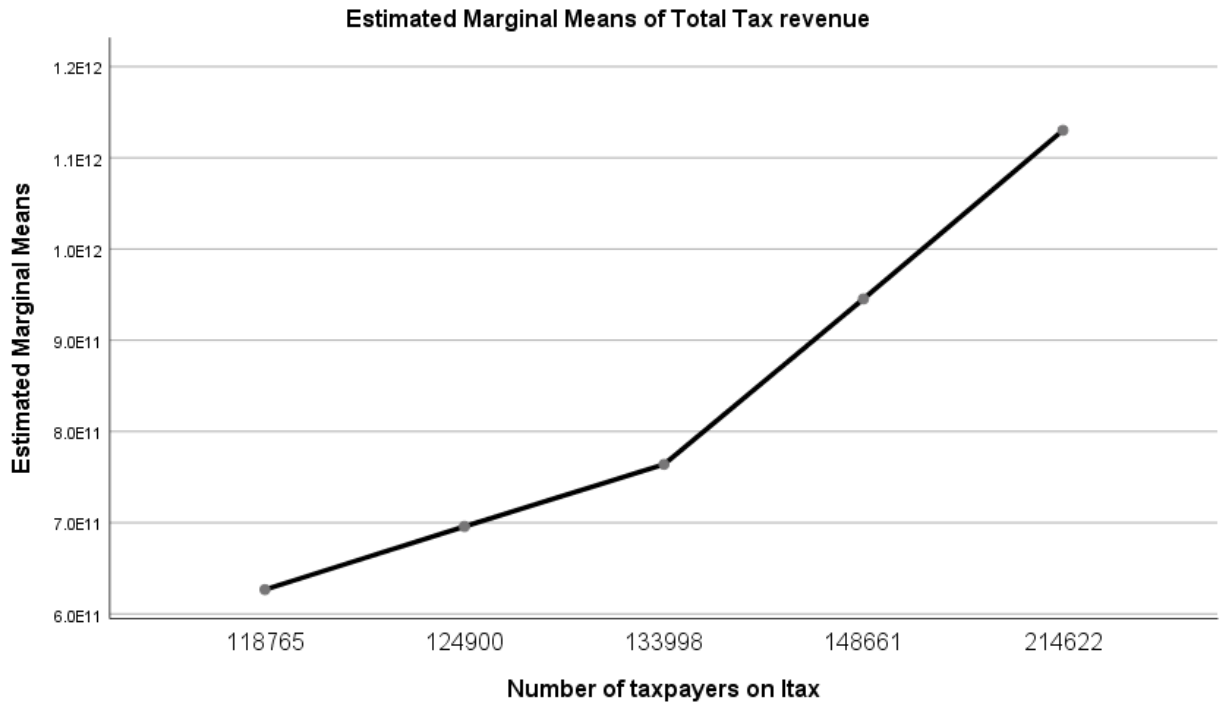
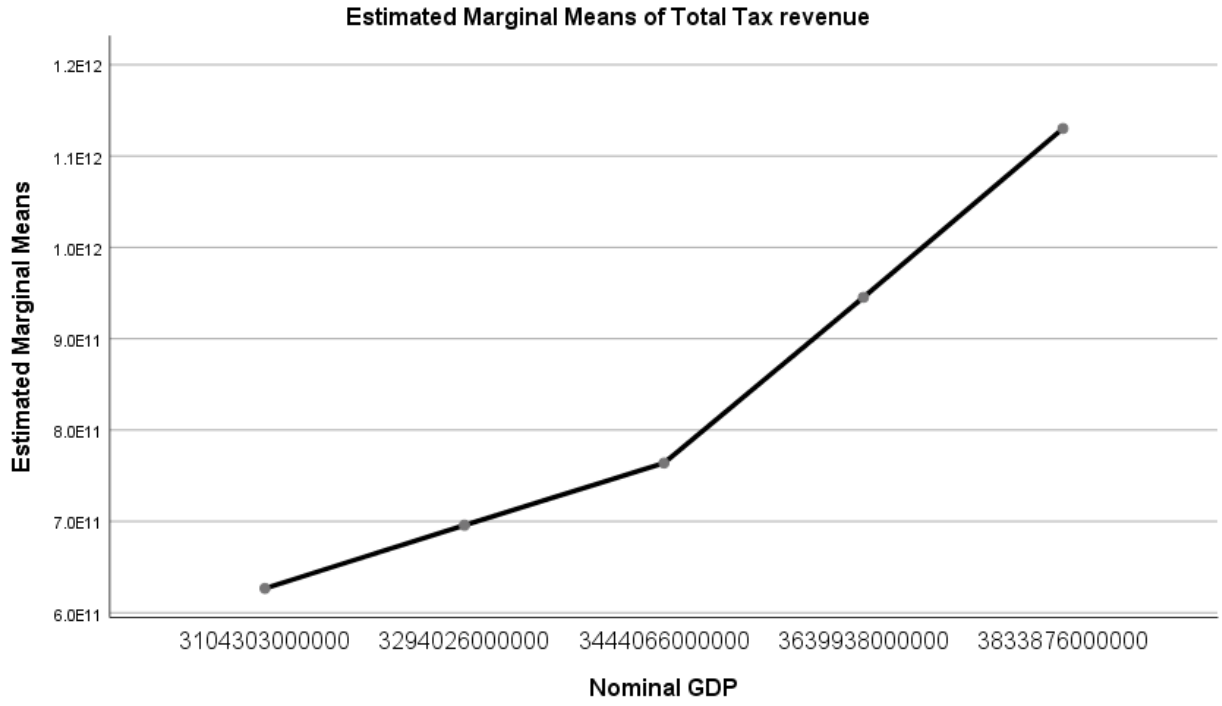


Figure 4.5.3: Trend Analysis of Tax Revenue with respect to GDP.



4.6 Discussion of Research Findings

From the analysis conducted, it was found that there was a moderately very strong positive correlation between the study variables of 0.846. A further analysis of the model reveals that automation of tax systems and enforcement and compliance have all a positive correlation with tax productivity. GDP equally has a strong positive correlation of 1.614 which means that it strongly contributes to tax revenues holding all other factors constant.

Further, from a review of the descriptive statistics, the mean industry tax revenues were higher in the period after introduction of the reforms. This clearly illustrates that the tax reforms had had a positive effect on the increase and improvement of the tax revenues. In a study conducted by Milambo (2001), he studied the revenue productivity of the Zambian tax structure for the period 1981 to 1999. The results showed elasticity of 1.15 and buoyancy of 2.0, which confirmed that tax reforms and policies had improved the revenue productivity of the overall tax system.

In figure 4.51 and 4.5.2, the same rationale is confirmed where automation of tax systems and enforcement and compliance are showing an upward trend in the revenue number. In figure 4.5.3 above, we can clearly visualize that as Nominal GDP increases over the years, so does the amount of tax revenue steadily increase. We also note that the slope during the period 2013 to 2015 was steeper than the slope during the period 2011 to 2013. This showed that the impact of the growth in GDP beyond a certain point had a noticeable effect on the amount of tax revenue collected. This study is also consistent with a study by Muriithi & Moyi (2003) carried out a study to analyze the productivity of Kenya's tax structure in the context of the tax reforms. The findings suggested that tax reforms had a positive impact on the overall tax structure and on the individual tax handles, even though the impact of the reforms was not always uniform. The reforms had a bigger impact on direct taxes than on indirect taxes, suggesting that revenue

leakage is still a major problem for indirect taxes. This just works to show the strong effect reforms have on the overall tax administration and collection process. This serves as a challenge to the administering authorities to invest more in policy formulation and enforcement of already laid down policies to have a better and more efficient tax collection mechanism.

Previous studies have also shown that many of the tax defaulters are normally necessitated by the lengthy, time consuming and inefficient administrative bottlenecks. With this in mind, it would only be paramount to work towards reducing the bureaucracies and any process that would inconvenience the tax payer in the process of tax filing and payments.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter brings out the summary findings, study conclusion, study limitations and policy recommendations as well as the suggestions for future studies.

5.2 Summary Findings

The study's objective was to assess the effect of tax reforms on tax productivity in the middle and large tax payers category. This study used secondary data which was analyzed using a multiple regression model, trend analysis and descriptive statistics. The descriptive statistics indicated that tax revenues which was the measure of tax productivity had a mean of 11.3. The mean tax productivity before the period of study was 11.0 and comparing this with the period of study depicts an improvement in the mean. The minimum number in tax revenues was 11.052 while the maximum number in tax revenues in the period of study was 11.49.

There was a moderately strong positive correlation of 0.846 between the study variables. The ANOVA results of significance level was 0.015 which is an indication that the model can be relied upon to make conclusions on the population since the significance level value is lower than 5%. The coefficient of determination was at 0.662 which indicates that 66.2% of changes in the tax productivity is explained by changes in the automation of tax systems and enforcement and compliance and GDP.

The regression equation results indicate that the tax productivity as measured by tax revenues is positively related with automation of tax systems and enforcement and compliance. GDP also

has a very strong positive relation to the tax revenues. However, the model constant is a negative constant of -8.273.

5.3 Conclusion

The study findings revealed that tax reforms had a positive effect on tax productivity in the middle and large tax payers in Kenya. The general performance in tax collection had improved in the period of study with the introduction of reforms compared to the prior period. The increase in prosecuted court cases and growth in tax payers registered on the iTax platform greatly contributed to the growth in tax revenues among the middle and large tax payers.

Holding GDP constant, we can equally affirm that enforcement and compliance together with automation of tax systems had a significant positive effect on tax revenues. The study did actually achieve its intended objective which was ascertaining as to whether tax reforms do have any effect on tax productivity and to what extent. With this in place, the challenge now shifts to identifying the specific reforms and probably how each contributes to the overall revenue number. From the trend analysis, we note that the graph is sharply rising from quarter one of year three. This is in line to the duration where the number of taxpayers on iTax platform shot up considerably.

The graph on tax revenue plotted against the number of court cases also depicts a similar trend. We can conclude that the tax authority was abit lenient in the past and thus few taxpayers were prosecuted for non-compliance or any other tax related offence. However, with the tightening of gaps and enforcement measures, more taxpayers were prosecuted from the year 2013/14 and this equally had a positive effect on tax revenue significantly. It would therefore be paramount to conclude that enforcement and compliance significantly affect the tax revenue number positively.

5.4 Recommendations

All major stakeholders i.e the government through the Kenya Revenue Authority and the ministry of Finance should have deliberate efforts to improve on reforms in the tax sector. This will help greatly seal gaps and holes in the tax sector. The government has in the recent past relied on heavy borrowing from the west and east countries to basically fund infrastructure and other developmental projects in the country. However, with proper reforms in place, and tightening of already enacted tax laws, this can greatly improve KRA's annual collection and help minimize borrowings. Tax tribunals have been set in the past though they haven't been of much impact in deciding in cases where parties have differed, and this has also contributed to lost revenues to KRA being the collection agent for the government.

Given that this study and other previous empirical studies both local and international have indicated the role of reforms in improving tax productivity, there is still laxity in the relevant parties enforcing already existing reforms and introducing new ones. The government probably needs to consider some policy changes especially in areas where many gaps exists; these are areas on customs and excise taxes, policies on rental taxes, policies on some of the non-taxed allowances and benefits, policies on juacali sector etc.

The government also needs to borrow heavily on ideas from some of the wester countries which have greatly improved on efficiencies on tax collection. The canons of tax also need to be relooked at and where possible enforced. The canon on equity and simplicity needs to be reevaluated to ensure that the process of filing taxes is made more simpler and that taxes are charged depending on the tax payers ability to pay. Those with higher incomes need to be taxed proportionate to their earnings and vice versa.

5.5 Limitations of the Study

The principal limitation in this study was the challenge faced in obtaining data from KRA records. Given the bureaucracies and complicated administrative procedures in public institutions like KRA, some of the officers who were meant to provide some of the data had to take quite a lengthy duration to provide requested data. However, most of the data was able to be accessed online as I waited for the requested questionnaires from the KRA officers.

Another key limitation was the qualitative nature of data in this study which could not be easily measured. Most of the data in my study was normally in qualitative form, i.e the different tax reforms and policies, finding an ideal measure of tax productivity, Nevertheless, with guidance from the supervisor, I was able to quantify, measure and analyze the data. The monopoly nature of KRA being the sole tax collection agent also posed a challenge. For an ideal study, one may expect to have data ranging from different organizations and firms to present an industry average. However, in this case, KRA acts as the only player in the industry and thus any discussion in this study purely revolves around the authority's mandate and thus posing a challenge on the inability to validate or authenticate self-reported data since at times the element of independence may miss out.

The short duration required for data collection, analysis and conclusion also posed a challenge. Time being the scarce resource it is proved to be quite minimal compared the amount of work that was required in finalization of the study. Unlike an academician or a professor who can literally devote years in a single study, a student carrying a study might not enjoy the same privilege to enable him to scrutinize the research problem in detail and in totality. However, I did manage to adequately prioritize and conclude the study on time having given the study my best.

5.6 Suggestions for Further Research

Looking at composite datasets which include all taxable services and goods often make unbiased results. Therefore, while the results of this study show a high degree of confidence in the relationship between tax reforms and tax revenues, it does so by looking at different categories of tax revenues combined. It would therefore be prudent to carry out further study on these tax revenues individually and help understand the specific effects on each of the tax revenue compared to its unique reforms.

Secondly, with the implementation of the new proposed reforms and policies, some of the proposed reforms tend to deviate so much from the previously suggested reforms and policies and this forces the administrative institution to shift attention to the new policies without necessary or required preparations. In a way, this leaves the administrative body, KRA, facing a logistical bottleneck. It would therefore be important to extend this study and check on KRA flexibility and its ability to take up change and adjust accordingly to these tax policy shocks.

Another key area of possible further research would be to check the effect of these tax reforms on other areas of tax productivity other than tax revenues. Tax Reforms holistically affect tax productivity and thus just by looking at the revenue number in isolation would not paint the ideal picture. It would therefore be prudent to carry a research to critically understand the effect these reforms on other aspects of productivity. These other aspects would include efficiencies in tax collection, administrative aspect e.g customer service to tax payers, dispute resolution, Refunds to taxpayers etc. Such a study would help expound and give a bigger view regarding the greater impact of reforms on tax productivity.

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APPENDICES

APPENDIX A: Data used in the Analysis

Year	Years in quarters	Tax revenue	No of taxpayers on iTax	No of prosecuted cases	Nominal GDP
2010	2010 Qtr 1	151,556,087,496	16,871	4	735,906,834,282
2010	2010 Qtr 2	156,667,187,504	16,902	8	768,220,183,391
2010	2010 Qtr 3	156,099,299,513	22,902	6	791,754,675,666
2010	2010 Qtr 4	162,346,175,487	27,971	13	808,421,306,661
2011	2011 Qtr 1	164,945,927,500	37,580	9	754,444,000,000
2011	2011 Qtr 2	173,999,727,500	40,179	7	814,244,000,000
2011	2011 Qtr 3	174,070,527,500	39,879	15	819,144,000,000

2011	2011 Qtr 4	182,871,527,500	41,380	15	906,194,000,000
2012	2012 Qtr 1	112,892,652,500	29,883	19	729,425,600,000
2012	2012 Qtr 2	199,223,512,500	33,381	15	846,185,600,000
2012	2012 Qtr 3	183,100,652,500	34,417	22	864,227,400,000
2012	2012 Qtr 4	268,611,512,500	36,317	32	802,672,200,000
2013	2013 Qtr 1	138,027,290,000	26,263	25	833,398,900,000
2013	2013 Qtr 2	245,960,490,000	34,263	32	870,504,000,000
2013	2013 Qtr 3	251,985,090,000	43,060	41	928,504,000,000
2013	2013 Qtr 4	309,251,890,000	45,075	43	968,434,000,000

2014	2014 Qtr 1	273,768,655,000	38,890	79	966,970,100,000
2014	2014 Qtr 2	275,222,655,000	44,891	67	1,004,227,400,000
2014	2014 Qtr 3	280,244,655,000	63,520	89	1,036,896,800,000
2014	2014 Qtr 4	300,898,655,000	67,321	102	1,066,434,000,000