THE EFFECT OF DEBT MANAGEMENT TOOLS ON REVENUE COLLECTION
AT KENYA REVENUE AUTHORITY

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NAIROBI.

OCTOBER, 2013
DECLARATION

This research project is my original work and has not been submitted for award of a degree in any other university.

Sign:……………………… Date:……………………………

Jesang Cherogony
Reg no. D63/79912/2012

This research project has been submitted for examination with my approval as the university supervisor

Sign:……………………… Date:……………………………

Dr. J. Aduda
DEDICATION

This research project is dedicated to my mother Beatrice Cherogony who has always encouraged me and instilled in me the virtues like honesty, perseverance and resilience. To my siblings- Rotich, Jeptoo, Kandie, Jerop, Godwin and Jebet- who inspire me to do even more.
ACKNOWLEDGEMENT

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I thank my friends and colleagues for their support and understanding as I spend much time in working on the research. I am also thankful to my family who endured my absence on weekend and nights and some of the family functions as I undertook the writing of this research project.

Above all, I give thanks to the Almighty God who gives strength, favour and honour to all His children.
ABSTRACT
Taxation is the key source of revenue that the government of Kenya uses to provide public goods and services to its citizenry. Over the last decade the tax revenue has been growing steadily. Despite this growth the tax gap (as a result of underreporting, underpaying or non-paying of taxes due) has continued to grow. It is important for the revenue agency to ensure that taxes are paid on time and that debt is recovered in order to increase on revenue collection. Where the tax debts are not followed up and collected the taxpayers may not believe that the government will collect overdue taxes and this may cause them to be less motivated to pay it. This will in the long-run have a negatively effect on revenue base. The objective of the study was to establish the effect of debt management tools on revenue collection at Kenya Revenue Authority. To achieve this secondary data was used and it was analysed using descriptive analysis, correlation analysis and regression analysis. The findings show that there was a positive relationship between revenue collected and GDP and debt collected and a negative relationship between revenue collection and rate of inflation. It was further found that GDP was statistically significant in the regression model while debt collected and rate of inflation were not statistically significant. Though debt collection is not a strong determinant to revenue collection it was concluded that use of effective tools would reduce debt portfolio and that following up on unpaid taxes will foster equity and encourage compliance amongst taxpayers.
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<th>Abbreviation</th>
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<tr>
<td>EACCMA-</td>
<td>East African Community Customs Management Act</td>
</tr>
<tr>
<td>GAO-</td>
<td>Government Accountability Office</td>
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<tr>
<td>GDP-</td>
<td>Gross Domestic Product</td>
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<tr>
<td>HRMC-</td>
<td>Her Majesty’s Revenue and Customs-United kingdom</td>
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<tr>
<td>IRS-</td>
<td>Internal Revenue Service</td>
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<tr>
<td>IT-</td>
<td>Information Technology</td>
</tr>
<tr>
<td>ITMS-</td>
<td>Integrated Tax Management System</td>
</tr>
<tr>
<td>KNBS-</td>
<td>Kenya National Bureau of Statistics</td>
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<tr>
<td>KRA-</td>
<td>Kenya Revenue Authority</td>
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<tr>
<td>NAO-</td>
<td>National Audit Office</td>
</tr>
<tr>
<td>OECD-</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>SPSS-</td>
<td>Statistical Package for Social Sciences</td>
</tr>
<tr>
<td>TMP-</td>
<td>Tax Modernization Programme</td>
</tr>
<tr>
<td>VAT-</td>
<td>Value Added Tax</td>
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CHAPTER ONE
INTRODUCTION

1.1 Background of the Study
Tax revenue refers to compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded. Taxation is the key source of revenue that the government of Kenya uses to provide public services to its citizenry. Over the last decade tax performance in Kenya has significantly improved in nominal terms averaging about 24% of the size of the economy (Mutua, 2012). This has enabled the government to finance 96% of the budget. Despite the growth in revenue performance the tax gap has continued to grow. The tax gap is a combination—underreporting, underpaying or non-paying of declared taxes resulting to a tax debt, and non-filing of required tax returns altogether.

Tax debt is tax that has become due but has not yet been paid. Tax debt comprises of principal tax payable, penalties and interest. Any penalty and interest charged becomes tax due and payable. Tax debt comes about where a taxpayer has self-assessed himself but has failed to pay, additional assessment has been made by the commissioner on income that was not declared by the taxpayer on earlier self-assessment or estimated assessment is made where the taxpayer had not made a self-assessment and taxes payable remain undisputed and unpaid after 30 days after the issues of assessment notice. Tax debt may also come about as a result of poor data entry resulting to ledger error hence reporting of wrong debts in the system. The tax debt needs to be validated and collected and for this reason debt management strategies have to be put in place by a revenue agency.

The good revenue performance has been attributed to the Tax Modernization Programme (TMP) that have been undertaken by Kenya Revenue Authority (KRA) from the 1980’s to date. The programme was meant to reform the tax system. According to Karingi et al (2005), the success of this reform package depended on the realisation of a set of objectives among them raising revenue levels from 22 to 28 percent of GDP, improving economic efficiency of the tax system by lowering and rationalizing tax rates, and enhancing greater reliance on self-assessment systems supported by selective audit, improving administrative efficiency through computerization and audit capacity and establishing tax policy analysis capacity to implement
organisational reforms. The tax reforms as we can see has not in any way looked into the administrative capacity of KRA, for instance, in terms of tax debt collection, rather its emphasis has all been on widening the tax base and increasing revenue while not putting in place proper modern mechanism to ensure that taxes are all collected as and when they fall due. This is evidenced by large tax arrears presently at KRA (estimated 100B). This shows that tax administration still needs to be enhanced to reduce tax arrears and therefore increase tax collection.

According to Annette (2007) California and other states with growing revenue needs can no longer ignore growing uncollected use tax. Failure to collect use tax violates the principles of equity and neutrality. The use tax is a longstanding tax and better collection techniques can avoid the need to create new taxes or raise tax rates of other taxes. While the use tax has been around since the 1930s in most states, few people are aware of it which obviously leads to low compliance. California and other states have recently improved collection practices, but more work is needed.

Some forms of taxpayer assistance are counterproductive and should be avoided. In an effort to help taxpayers cope with the crisis, some countries are considering the implementation of tax amnesties, moratoria on auditing taxpayers, and other similar measures. International experience has shown that such measures are not effective tools for improving revenue collection and create perverse incentives for currently compliant taxpayers to stop complying with the tax laws (Baer & LeBorgne, 2008).

Unlike private businesses, a tax authority does not choose its clients based on their credit-worthiness. All taxpayers are rated the same and the law in force concerning tax collection applies equally to all of them. Therefore, it cannot charge higher interest rates or refuse to extend credit based on a poor credit rating of a tax payer. However, a tax authority does have legislative abilities that private organizations do not have, such as the ability to garnish a debtor’s source of income to collect taxes owing, without a court order.

Debt collection strategies involves developing a strong collection unit with clearly defined, documented and consistent policies and procedures that guide staff through the collection process and instruct them on how to respond to a particular matter (Wambugu, 2012). There is need to address staff training needs especially of the debt management staff. They should
know the law governing the collection of tax debt, be familiar with the tax debt management manual and the KRA’s service charter so as not to infringe into the taxpayers’ right and at the same time ensure the collection tax debt in a legal way.

Timely collection of overdue accounts is important, because it is the final element in taxpayer compliance. If taxpayers do not believe the government will collect overdue taxes, they may be less motivated to pay. Not paying debts will have a negative effect on revenue base over time (Canada, 2013).

Debt collection faces challenges during economic crisis. According to Brondon (2009) when credit is tight or unavailable, credit-constrained taxpayers may be tempted to use tax evasion as an alternative source of finance for their operations. For example, businesses may fail to remit to the government the taxes they have withheld from their customers (value-added tax—VAT) or employees (payroll taxes). Taxpayers who face severe economic stress—such as the risk of bankruptcy—may perceive the downside risks of tax evasion (penalties) to be minimal compared with the potential upside gains (avoiding bankruptcy). During such times the debt collection strategies that maybe applied should not push the taxpayer to close his business which would result into loosing tax revenue altogether. The tax collector may opt to work out a tax payment plan that is favourable to the business or defer the debt to a later date till the taxpayer is able to pay.

A cost-benefit analysis should be undertaken when selecting a debt management strategy to use at any time. In following an optimal collection policy the firm should compare the cost and benefits. The optimal credit policy will maximize the profit (revenue) and will consistent with the objective of maximizing the value of the firm (Wambugu, 2012).

Ultimately for government departments, reducing the volume of debt that moves into impairment and accelerating its recovery will reduce write-offs and release funds for frontline services. By determining an accurate valuation of departmental debt alongside the ability to effectively monitor the performance of both internal and external debt collection and recovery processes, the government can optimise activities accordingly (SAS, 2012).
1.1.1 Debt Management Tools
Debt management tools are tools used undertaken to accelerate the collection of delinquent debt. Debt management strategies are the collection strategies which are organized plans of action incorporating the various collection tools to be used by an agency, an individual or a company to recover debt.

Each agency or company should establish and implement effective collection tools that suit the agency’s programs and needs. Collection tools must meet all statutory requirements set out by the agency or company in its credit policy. A collection strategy will facilitate debt collection by providing a systematic, uniform method for collecting accounts (Financial Management Services).

Early intervention approach to compliance and debt management issues is important. Use of information technology (IT) assist in profiling of taxpayer and timely identification of tax debtors for early intervention. It is also important to use appropriate strategies during economic crisis. This is because the rate of defaulting is high and the forceful enforcement strategy may not be taken well by the tax debtor.

1.1.2 Revenue Collection
Governments, both of the developed and developing countries, require revenue to finance their expenditures. The government revenue consists of tax and non-tax revenues. Taxes are levied on persons either on their incomes or on consumption of taxable items- goods and/or services. Non-tax revenue consists of foreign aid, revenue from state-owned enterprises, fees on licences and other services offered by the government, fines among other sources.

Successful collection operations are using data and technology to drive collections at reduced costs per dollar collected, and demonstrate significant increases in revenues without increases in staff. They are deploying best practices and tools in key areas such as data gathering, decision analytics, automated involuntary enforcement, self-service and call management. Many government entities have a wealth of data that can enhance collection activities. This includes employer data, information from checks previously received, bank account numbers from electronic debit and refund transactions, and addresses from drivers’ licenses and even utility bills. Governments able to centrally warehouse data from many different organizations (including state and local governments) have a much more complete view of the debtor.
Automating involuntary collection efforts is another powerful tool. While many agencies have the authority to levy and garnish debtors, the process is cumbersome and often ineffective. Government collection organizations typically can access data regarding a debtor’s bank accounts through previous tax returns, prior payments to or from the debtor, financial institution data matches, interest reporting from banks and other data sources. In addition, employment information often is obtained through employer withholding forms and relationships with other government agencies. This data sharing is a key to automating involuntary activities (London & Hamilton, 2013).

In a perfect world, financial institutions and collection agencies would know which debtors would pay, which accounts would become delinquent, how long they would be delinquent and the most effective way to contact the delinquent debtors. This would allow collections management to determine how to best allocate resources to maximize the amount collected while minimizing collection expense. Collections management could increase unit yields and decrease time and financial resources wasted on those accounts that would not be impacted regardless of the treatment (Davey, 2009).

Governments have agencies or departments responsible with collecting government revenue from individuals and companies. For instance in Kenya, Kenya Revenue Authority (KRA) is mandated to collected taxes for the government under the various Acts (KRA Act, Cap 469). The tax collected includes current taxes and tax arrears. Over the years the revenue collected by the authority has increase, for instance Kshs. 122B in 1995/96 to Kshs. 840B in 2012/13, accounting for about 96% of ordinary government revenue (KRA Financial Statement, 1996-2013)

**1.1.3 Effects of Debt Management Tools and Revenue Collection**

Improving tax collection requires mechanisms for voluntary tax payment and coercing payment by non-complying taxpayers. It requires adequate withholding systems, an appropriate penalty structure, use of audits and provision of incentives linked to tax recovery, and taxpayer’s incentives for prompt payment (Moyi & Ronge, 2006).

The level of debt is driven by the economic climate, tax policy, and debtors’ behaviour, as well as by the tax agency’s efforts to assess and collect taxes in a timely manner. Though a big proportion of revenue is collected on time, some revenue remains unpaid. There is need
to profile the debtors, identify them and find an appropriate strategy to recover the debt in a timely manner. Therefore, the earlier a debt is detected and collection strategies instituted, the lower the amount of delinquent debt and this enhances the government revenue.

Tax agencies should, therefore, consider liberalizing the use of payment arrangements to assist distressed taxpayers, but firm enforcement action should be taken against businesses that have the capacity to pay their taxes but refuse to do so. Instalment arrangements provide an important tool for collecting tax revenue from cash-strapped taxpayers. The tax laws in many countries include provisions that allow financially distressed taxpayers, under certain conditions, to pay their tax liabilities in instalments. The instalments typically span one to two years during which time interest accrues but late payment penalties are usually waived. Such arrangements help promote compliance because they allow the tax agency to bring a tax debt quickly under control and usually require the taxpayer to stay current with all future tax payments; failure to do so results in the plan’s termination and severe collection actions. Good debt collection practices are even more important during a crisis. This is because the window for collecting tax debts may close more quickly in a recession, when taxpayers’ cash-flow problems worsen and bankruptcies increase. In this situation, it is essential for tax agencies to (1) ensure early detection of tax arrears and establish appropriate time standards for follow-up, (2) maintain the quality and timeliness of tax arrears data, (3) target enforcement efforts on recoverable arrears—usually by focusing on the most recent and largest arrears first, (4) leverage the telephone context center to place outgoing debt collection calls, (5) write off arrears deemed unrecoverable, (6) implement proper organizational and staffing arrangements for collection enforcement, including a greater organizational focus for large tax debts, and (7) be vested with a full set of enforcement powers (Brondon, 2009).

In financial year 2004/05 the Ministry of Finance announced a tax amnesty which realised Kshs. 4.8B (KRA. Financial statements, 2004). Baer and LeBorgne (2008, p. 5) define a tax amnesty to be “a limited-time offer by the government to a specified group of taxpayers to pay a defined amount, in exchange for forgiveness of a tax liability (including interest and penalties), relating to a previous tax period(s), as well as freedom from legal prosecution.” These temporary programs allow taxpayers who have previously evaded taxation to voluntarily remit unpaid taxes without incurring all the sanctions that failure of timely payment would ordinarily incur. If collected through enforcement action, taxpayers with
these liabilities would owe the tax plus various penalties and interest on the unpaid amount and might also be subject to felony prosecution. By participating in the amnesty, taxpayers can avoid certain program-specified consequences (Mikesell & Ross, 2012). The amnesty was to enable KRA to reduce on debt and to bring in more tax payers into the tax net.

1.1.4 Kenya Revenue Authority
The Kenya Revenue Authority (KRA) was established by an Act of Parliament, Chapter 469 of the laws of Kenya, which became effective on July 1, 1995. The Authority is responsible for assessing, collecting and accounting for all revenues in accordance with specific laws, advising the Minister for Finance on matters relating to revenue administration and performing such other functions in relation to revenue as the Minister may direct. In fulfilling its mandate, KRA administers 17 revenue Acts, with the key ones (in terms of revenue importance) being the Value Added Tax (VAT) Act (Cap. 476), the East African Community Customs Management Act (EACCMA), the Income Tax Act (Cap. 470), the Customs and Excise Act (excise provisions) (Cap. 472) and the Traffic Act (Cap. 403).

The Kenya Revenue Authority is the predominant government revenue collection agency accounting for over 96% of Government Ordinary revenues. KRA fifth corporate plan undertakes to revamp its debt strategy with the objective of reducing debt annually by 22%. Initiatives will include; consolidating debt management in one department, data cleaning, a focus on collecting debt arising from court cases and efforts to have uncollectible debt removed from the books.

In terms of revenue collection and other support functions, the Authority is divided into the following Departments: Customs Services Department, Domestic Taxes Department, Road Transport Department, Support Services Department and Investigations & Enforcement Department. Each Department is headed by a Commissioner. KRA also has seven service Departments that enhance its operational efficiency. These are as follows: Human Resources Department, Finance Department, Board Corporate Services & Administration Department, Internal Audit Department, Information & Communication Technology Department, Research & Corporate Planning Department and Marketing & Communication.
1.2 Research Problem
The main source of government revenue is tax. Though, the level of revenue of tax collected has been increasing since inception of KRA, the tax debt level continues to grow as the taxpayers continue to be non-compliant. The non-compliance is encouraged by poor management of revenue collection. Also it has been motivated by taxpayer’s illiteracy level and ignorance on online return filing which has led to unnecessary debts due to wrong data entries. Wambugu (2012) argues that in many authorities taxpayers have become debtors having progressed through the system as non-payers, encouraged by lax management and political interferences.

The authority has intensified its debt management programme over the years. In financial years; 2001/02 a debt of Kshs. 12B (7% of tax collected) was realised, 2002/03 Kshs. 18.6B of debt was collected, and improvement of 55% over the previous year, 2003/04 Kshs. 19.1B was collected attributed to development of a debt management system and in 2004/05 the debt collected was Kshs. 13B, this show a decline from previous years collections (KRA Financial Statement, 1996-2013).

Some research studies have been done that relate to this study. However, no study has been done on the impact of the debt management tools on revenue collection at KRA. Kariuki (2011) did a research on effects of debt collection strategies on the financial performance of companies at the Nairobi Securities Exchange. The study found that there is no significant relation between debt collection management and market performance and no significant relationship between bad debts and any of the variables tested in the regression model. Ogolla (2012) did a research on “debt recovery as an operational strategy used in NIC Bank to manage non-performing loans portfolio.” It was noted that the operational strategies employed by NIC bank were effective and should be emulated by other banking institutions to reduce the growth of the NPL portfolio. Wambugu (2012) did a research on the effect of debt collection strategies on financial performance of local authorities in Kenya. The study found that the subcontracting of the debt collection to third parties and the enforcement strategies had a positive relationship with the level of debts while pro-active debt collection strategies and the use of internal debt collection units were found to have a negative relationship with the level of debt collection in the councils.
Several studies have been done in KRA in many areas but none has been done on the effects of debt management tools on revenue collection despite the fact that the KRA Fourth and Fifth corporate plans have mentioned the importance of enhancing the debt management strategies and there being a growth of tax debt every year. Therefore, there exists a gap that this study sought to find the effect of debt management strategies on revenue collection at KRA. The research sought to answer the following questions: what is the effect of debt management tools on revenue collection at Kenya Revenue Authority KRA?

1.3 Objective of the Study
The objective of the study to establish the effect of debt management tools on revenue collection at Kenya Revenue Authority.

1.4 Value of the Study
The findings of this study will be useful to various groups. Firstly, it will be useful to the management of KRA and the debt management staff as they will be able to know the effect of the debt management tools on revenue collection.

Secondly, the study will be useful to the government and other policy makers. They will use the finding of the study to make changes and/or improvement on the laws governing debt recovery.

Thirdly, the finding of this study will contribute to the existing body of knowledge. This may an area of interest for other researchers and academicians seeking to explore this area of study and may also form a basis for further studies.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
Every scientific study begins with the researcher examining reports of previous studies related to the topic of interest. Without this step, researchers cannot expect to construct and integrated, comprehensive picture of the world. They cannot achieve the progress that comes from building on the efforts of others. Also, investigators working in isolation are doomed to repeat the mistakes made by their predecessors (Cooper, 1998).

This chapter will include the review theories guiding the study, review of empirical studies, review of general literature, theoretical framework and conclusion.

2.2 Theoretical Review

2.2.1 Resource-based Theory
The resource-based theory as a basis for competitive advantage of a firm lies primarily in the application of the bundle of valuable interchangeable and intangible, tangible resources at the firm’s disposal. To transform a short-run competitive advantage into a sustained competitive advantage requires that these resources are heterogeneous in nature and not perfectly mobile. Effectively this translates into valuable resources that are neither perfectly imitable nor substitutable without great effort. If these conditions hold, the firm’s bundle of resources can assist the firm sustaining above average returns (Priem & Butler, 2001).

The key points proposed by this theory include the identification of firm’s potential key resources, evaluate whether the resources fulfil the following criteria and care for and protect resource that possess these evaluations, because doing so can improve organisational performance. The theory gives more weight to the firm’s proactive choices. Although environmental opportunities and threats are important considerations, a firm’s unique resource comprises the key variables that allow it to develop and sustain a competitive strategic advantage (Rugman & Verbeke, 2002).

2.2.2 Stakeholders Theory
According to this theory by (Freeman, 1988), corporation have stakeholders, that is, any group or individual who can affect or is affected by the corporation. The stakeholders may include the shareholders, stakeholders (Freeman, 1988). employees, suppliers, customers,
government and the community. Because of the involvement of these various groups in a corporation the role of the management is to maximize the wealth of the

Therefore, an organisation is required to carry out its mandate with all stakeholders in mind. Any action taken in achieving the goals and objects of the organisation should be aligned towards maximizing shareholders’ wealth.

2.2.3 Asymmetrical Information Theory
This theory was first introduced by George Akerlof (1970) and further developed by Michael Spence (1973) and Joseph Stiglitz (1975). Akerlof in his paper “The Market for "Lemons": Quality Uncertainty and the Market Mechanism” develops asymmetric information with the example case of automobile market. His basic argument is that in many markets the buyer uses some market statistic to measure the value of a class of goods. Thus the buyer sees the average of the whole market while the seller has more intimate knowledge of a specific item. Akerlof argues that this information asymmetry gives the seller an incentive to sell goods of less than the average market quality. Michael Spence continues the ideas of George A. Akerlof in his 1973 paper “Job Market Signaling”. He uses the job market as an example in his paper. He models hiring employees as uncertain investment in that the capabilities of the employee are not know and even after employment the capabilities will take time to be known as the employee goes through learning and training. The employee gets hired because of the signal relayed to employer at time of selection. Spence likens job hiring with a lottery. Joseph Stiglitz in his 1975 paper “The Theory of 'Screening,' Education, and the Distribution of Income” explore whether screening could be used by the seller (employer) to screen the applicants (potential employees) into categories that reflect their productivity or some other capability. By screening then the qualities will be to know a correct placement or increase in wage (Auronen, 2003).

(Auronen, 2003) enumerates that it is empirically clear that people possess different information. The information they possess affects their behavior in many situations. Consider buying goods, for example, the seller adjusts the price of an item based on her knowledge of the prices of similar items on the market and the condition of the item among other factors. The buyer similarly can have information about the prices of similar items in the market. But what he probably does not have is the same depth of information about the quality of the item as its seller. There is clearly an information asymmetry between the two parties at issue.
The information available to the revenue authority about a taxpayer may not be correct or may give not be true picture of the situation. A debtor may be in a position to pay the tax debt in full but enters into an agreement to pay over a longer period of time because of failure to properly screen them of improper signal given by the debtor.

2.3 Debt Management Tools
There are a number tools that can be applied in the management of debt. This tools ensures that tax due is collected as soon as possible and in full. The tools should be applied gradually, that is start with the friendlier tools as you progress to the more forceful ones.

2.3.1 Notice and Demand for Payment
When a debt has been confirmed to be valid, debt management officer seeks approval from the manager to raise a demand notice. This notice indicates the amount a debtor owes the authority. A settlement plan may be entered into; this is an arrangement to pay tax over a period of time agreed upon, and the debt is hence collected (Domestic Taxes Department, 2006).

2.3.2 Issue of Agency Notices
This is one of the involuntary enforcement tools. This is a notice issued after a period given in demand has elapsed and the debtor has not responded. It is issued to a third party who may be owing money to the debtor. If the agent has no money owing to the debtor he has to respond in 7 days otherwise if 30 days lapses then taxes will be recovered from the agent. (Domestic Taxes Department, 2006; Income Tax Act, 2010)

2.3.3 Recovery of Tax by Distraint
This enforcement provision is most efficient where the defaulting taxpayer is known to be in possession of distrainable goods. This is appropriate where the debtor is uncooperative after being contacted, is a perpetual defaulter, the tax debt is fairly large, agency notice has failed to yield any taxes, possibility of bankruptcy and threats of the taxpayer leaving the country. Commissioner may, instead of suing for the tax, recover it by distress, and for that purpose may by order under his hand authorize an officer to execute distress upon the goods and chattels of the person from whom the tax is recoverable and that officer may, at the cost of the person from whom the tax is recoverable, employ such servants or agents as he may think necessary to assist him in the execution of the distress. Where full or part is not collected through distress then it shall be recovered through suit and where the tax debt is recovered after the issue of an order under this section and before the execution of distress, any costs
and expenses incurred by the Commissioner prior to the payment of the tax shall be deemed to be a debt due and payable to the Government by the person in respect of whom the order was issued (Domestic Taxes Department, 2006; Income Tax Act, 2010)

2.3.4 Collection of Tax by Suit
This is employed when all other strategies have been applied without satisfactory results. The conditions for pursuing debt through law suits are outlined in the Income tax Act and the customs and excise Act (Domestic Taxes Department, 2006). According to the Income Tax Act (2010), where payment of tax has not been made on or before the due date; or a notice which has been served on a person about to leave Kenya without paying tax due has not been complied with, the tax due by that person may be sued for and recovered as a debt due to the Government in a court of competent jurisdiction by the Commissioner in his official name. In a suit under this section 101 of the Act, the production of a certificate signed by the Commissioner giving the name and address of the person concerned and the amount of tax due and payable by him shall be sufficient evidence that the amount of tax is due and payable by that person.

2.3.5 Security on Property & Security Bond
Where a person being the owner of a land or building fails to make payment of tax due by him on or before due date or fails to comply with the notice served on him under section 98 of Income Tax Act, the commissioner may notify that person in writing of his intention to apply to the Registrar of Lands to the subject of security for the tax amount specified in the notice (Domestic Taxes Department, 2006; Income Tax Act, 2010).

2.4 Empirical Review
There are some empirical studies on debt collection management. However, most studies done in Kenya have focused on working capital management, credit selection and analysis, and trade credit theories. Some of the empirical studies are discussed in the section.

The United States Government Accountability Office - GAO (1996;2008) reviewed the Internal Revenue Service’s (IRS) tax debt collection practices. It found that every year IRS successfully collects over a trillion dollars in taxes owed the government, yet at the same time tens of billions more remain unpaid. This was attributed by lack of reliable and accurate information on the nature of the debt and the effectiveness of IRS collection tools; old debts that are uncollectable as the debts are untraceable, deceased, and defunct corporations;
antiqued computer hence need for modernisation and use of out-dated collection processes. The data on debt from 2002 to 2008 was collected and analysed. They analysed yield of each collection tool applied and changes in debt inventory. GAO has identified material weaknesses in IRS’s controls over unpaid tax assessments and collections partly due to the lack of agency wide cost-benefit data and related performance measures. Although IRS has made some progress on these weaknesses, progress has not been sufficient to resolve them.

Dohrmann & Pinshaw (2009) did an in-depth research on direct taxes at federal tax administrations in a diverse set of 13 countries: Australia, Belgium, Brazil, Canada, Chile, Denmark, France, Ireland, Norway, South Africa, Spain, Sweden and the United States. They found that the more important drivers of collection performance are demand management, taxpayer segmentation, streamlined debt-settling operations and performance tracking. The high performing tax administrations determine the probability of default based on the taxpayer’s ability and willingness to pay. Effective segmentation, combined with early validation of debt, ensures resources allocated to cases that will yield the highest returns; dynamic risk scoring enables tax administrations regularly to re-prioritize and reallocate resources to cases with higher-risk profiles. Segmentation is used to determine contact strategy. Top performing tax administrations offer taxpayers flexible instalment agreements based on an assessment of their financial situation, occasionally negotiating interest payments and penalties. They also found that the top performers in collections rigorously track the performance of the entire collections unit as well as individuals, against the most critical measures. They communicate these results to staff, and adjust and improve their operations accordingly. (Hira, 2011) concurs that segmented approach is important as it ensures that focus on groups of taxpayers is correct as clearly different segments of the market and industry will have different idiosyncrasies.

Tax arrears tend to rise sharply during an economic downturn. According Brondon (2009) this is because when credit is tight or unavailable, credit-constrained taxpayers may be tempted to use tax evasion as an alternative source of finance for their operations. For example, businesses may fail to remit to the government the taxes they have withheld from their customers (value-added tax—VAT) or employees (payroll taxes). Also, taxpayers who face severe economic stress—such as the risk of bankruptcy—may perceive the downside risks of tax evasion (penalties) to be minimal compared with the potential upside gains.
(avoiding bankruptcy). Indeed it can be shown, for instance, that if the bankruptcy costs are large enough, this effect—gambling for resurrection by becoming less tax compliant—can outweigh the progressivity consideration noted above. Further OECD (2013) indicates in its research that in the aftermath of the global economic crisis there has been upwards growth in the overall incidence of tax debts written off as uncollectible; applying the ratio “tax debts written off/value of year-beginning tax debt outstanding”, the average ratio across OECD countries rose from around 19% in 2007 to just over 25% in 2009, and eased only marginally in 2010 and 2011.

Kariuki (2011) found that there is a great emphasis on credit screening and debt collection by large Kenyan firms, where also 80% of the credit activity and staff is. Most companies do not outsource credit activities due to the sensitivity required in dealing with customers and wish to retain flexibility in credit extension and collection matters. He also observed that legal debt recovery is difficult due to poor court systems, corruption and long court hearings. However, with the on-going judicial reforms, firm may look into ways of dealing with perpetual bad debtors through the legal process available. Arbitration is also becoming an important dispute resolution mechanism because it is cheaper than going to court, takes a shorter time, and does not severely impair good customer relationships since the arbitrator is mutually agreed upon by the both parties in a commercial disagreement.

In a study by Kilonzo (2012) on the effects of tax amnesty on revenue growth in Kenya, he found that there was negative association between revenue growth, inflation and tax amnesty and a positive relationship between tax revenue growth and gross domestic product (GDP). The results indicated that amnesty by itself does not have a positive effect on revenue growth. Governments have been granting amnesty to its citizens in order to encourage them to be compliant. The taxpayers in most cases are exempted from paying penalties and interests accrued over the time they were non-compliant.

A study undertaken by the UK NAO (Comptroller and National Audit Office, 2012) noted that during 2009-10 Her Majesty’s Revenue and Customs-United kingdom (HMRC) began to implement a revised debt management strategy which aimed to target collection activities more effectively to increase the likelihood of recovery, improve the speed of collection, and reduce costs. The strategy was also to help prevent taxpayers getting into debt by supporting
them better before their tax liabilities became overdue and communicating more effectively with them so that any queries were resolved and debt paid without needing multiple contact. To implement this revised approach the Department aimed to improve its debt collection processes through: 1) a campaigns-based approach; 2) better understanding of taxpayer behaviour; 3) developing its channels of customer contact, particularly by telephone; 4) improving its information systems; and 5) improving the quality of its information on debt balances. The NAO noted that HMRC has made progress in a number of areas in implementing its revised debt management strategy, particularly in rolling out its campaigns-based approach. Previously the directorate used a standard debt collection process for all debts, sending automated debt reminders initially, following up with telephone calls, in writing and through visits. The directorate used this approach regardless of the type of debt, with limited differentiation by value and risk of non-payment. In contrast, a campaign is an individually designed, time-limited set of actions taken for a particular tax stream’s debts. It involves segmenting debts into groups, such as by value and behaviour of groups of taxpayers, and tailoring collection activities to each group. NAO also noted that HMRC had increased its use of new payment methods (e.g. debit and credit cards), introduced a new penalty regime to better align penalties across the major taxes, increased accessibility to payment arrangements, substantially increased the capacity of its debt management telephone centre, and expanded its out-of-hours calls to different target groups.

In a research done by Wambugu (2012) it was found that local authorities consider employing a mix of aggressive debt management strategies and third party agencies to collect their taxes. Further the findings indicated that a local authority should have internal debt collection strategies which should be up to date since the market will always develop mechanism to evade paying rates and levies. Effective internal collection strategies supplement the efforts by the third party that has been outsourced.

Ogolla (2012) did a study on Debt recovery as an Operational Strategy used by NIC Bank to Manage Non-performing Loans Portfolio. She collected primary data using semi-structured questionnaires answered by the staff in the debt department in the various branches of the bank. The study supported the three strategies employed by the bank in managing the loan book through operational strategies. These strategies are: legal strategies, debt portfolio management and relationship management. It also revealed that the bank has put in place
various measures to ensure loans don’t go bad and before they go bad, enough efforts have been put in place to seek early recovery and in effect reducing the exposure even if it means getting a small part of the loan and writing off the accumulated interest.

Chambers & Curatola (2012) conducted a behavioral experiment to see if a taxpayer who is given the opportunity to pay estimated federal income taxes monthly (instead of quarterly) will do so, and also whether they are less delinquent than those in the control group, who paid estimated federal income taxes quarterly. Their results indicated that when respondents were explicitly offered the opportunity to make monthly rather than only quarterly payments, the majority of the respondents opted to make monthly prepayments at least once. Additionally, those with an explicit option to pay as often as monthly rather than quarterly had significantly fewer dollars of delinquency. Paying more frequently could alleviate some budgeting pressures for the self-employed and result in fewer delinquencies to be collected at the federal level.

An audit by Michigan office on Tax Compliance Bureau reported that the Discovery and Tax Enforcement Division did not sufficiently pursue taxpayer with potential tax deficiencies. Their Law authorizes the Department of Treasury to determine and notify the taxpayer of a tax liability based on examination of a tax return, a payment, or an audit (McTavish, 2013). The lapse by an authority in following up the already defaulting taxpayers leads to growth in tax debt that would have otherwise been contained in early stages of their discovery.

The collector-general for Canada Revenue Authority observes that Information Technology (IT) can be used to consolidate all information of the taxpayer. A key feature of their approach to compliance and debt management is early intervention by Revenue staff when payment and compliance problems arise. Sophisticated Revenue I.T. systems have been developed and refined to assist them in the timely identification of cases for direct intervention relating to either payment or return compliance. The riskiest cases are targeted first but there is a structured programme in place to ensure that all cases that are non-compliant in any form are examined and subject to appropriate intervention. Problem cases are assigned to an individual caseworker, within a specific highly skilled team and that caseworker and team will determine the appropriate action needed in each case. The key
deliverable from the caseworker’s intervention is to bring the case to full compliance in the shortest timeframe possible (Canada, 2013).

In a study by OECD (2013) internationally comparative data on aspects of tax systems and their administration in 52 advanced and emerging economies over a seven year period (2005 to 2011) was provided. The information was obtained from a survey of revenue bodies, 34 OECD and 18 non OECD countries. In applying the benchmark ratio “undisputed tax debt as a share of net revenue collections” for 2011 as a broad indicator of the relative magnitude of the debt inventory 13 revenue bodies had a ratio < 5%; 9 revenue bodies had a ratio between 5 and 10%; 15 revenue bodies had a ratio between 10-20%; 9 revenue bodies had a ratio over 20% (the highest over 60%); and 7 reported no data. Looking at movements between end-2007 and end-2010 period, using the same benchmark ratio as a broad indicator of payment compliance/collection effectiveness 25 revenue bodies display an increasing ratio; 7 revenue bodies display a declining ratio; and for 20 revenue bodies there were insufficient data to ascertain the movement. Looking at the benchmark ratio “tax debts written off/value of year-end tax outstanding” over seven years to gauge the relative magnitude of tax debts written off, on average, revealed 9 revenue bodies generally had a ratio less than 10%; 9 revenue bodies generally had a ratio in the range 10-20%; 7 revenue bodies generally had a ratio in the range 20-40%; 3 revenue bodies generally had a ratio over 40%; and for 24 revenue bodies, there were insufficient data to compute this ratio and its trend or the computed ratios fluctuate widely with no discernible trend evident. There were gaps in survey responses for latter years (i.e. 2010 and 2011) which suggests weaknesses in the management information systems used for debt collection for many revenue bodies; for example, almost one third of revenue bodies were unable to report the amount of tax collected resulting from enforced debt collection activities, while around 40% failed to report the number of debtors/cases on hand at year-end 2011.

2.5 Summary of the Literature Review
Tax debt is an important aspect when it comes to revenue collection. Just like in private businesses, the tax agencies should take collection of debt seriously in order to foster a good image to the population that the taxation of a country if fair and equitable. This will encourage compliance to the tax laws in place and enhance revenue performance. Hence this will enable the government to finance its annual budget.
There is need to analyse the strategies put in place by KRA in collecting tax debt and find out how efficient they are. The information needed to manage debt needs to be up to date. This will enhance collection of delinquent accounts using appropriate collection tools and even write-off tax debts which have been rendered unrecoverable due to various reasons. Writing-off of unrecoverable tax debt will reduce on the tax debt level reported at year end, giving the correct picture of the tax debt liability owed to the government by the taxpayers. The use of IT in managing debt is important. This will enable the authority to have a better way to follow up on debt and knowing its debtors. In this view and from the literature review, the study will establish the effect of debt management tools on revenue collection at KRA.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
The method section of a research study describes the procedures that have been followed in conducting the study (Mugenda & Mugenda, 1999). This chapter includes research design, data collection methods and data analysis.

3.2 Research Design
Research design is the conceptual structure within which research is conducted; it constitutes the blue print for the collection, measurement and analysis of data. Descriptive design studies are those studies which are concerned with describing the characteristics of a particular individual or a group (Kothari, 2004). It is conducted to demonstrate the association or relationship between variable under study. In this study, descriptive research design has been chosen so as to investigate the effect of debt management tools on the revenue collection at KRA.

3.3 Data Collection
The study used secondary data. Secondary data is information obtained from research articles, books, or casual interviews (Mugenda & Mugenda, 1999). This information was obtained from the monthly, quarterly and yearly reports of the debt sections of KRA and Research and Corporate Planning department, the KRA financial statement reports and statistical bulletins from KRA, World Bank and Kenya Bureau of Statistics (KNBS). The data used was collected from 2003 to 2013.

3.4 Data Analysis
The data collected was descriptively analyzed using Statistical Package for Social Sciences (SPSS). The descriptive statistical tools helped in describing the data and the extent the various debt management tools were used. The data was then analyzed through percentages, measures of central tendency and standard deviation. The regression and correlation analysis was also carried out. The generated quantitative reports were presented through tabulations and graphs.

The research studied the effect of debt management tools used by KRA on revenue collection. A regression model was used in this study. The model was used to analyse the effects of debt collection on revenue by KRA. The revenue collection is the dependent
variable. The independent variables are rate of inflation over the period of the research, GDP over the period of the research and debt collected over the period of the research.

3.4.1 Analytical Model
Model used to analyse the data is as below;

Model : $Y= \alpha_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + u$

Where $Y$ is the dependent variable representing revenue collected,
$X_2$ represents rate of inflation,
$X_3$ represents GDP,
$X_4$ represents tax debt collected through the various tools,
$X_2, X_3, X_4$ are the independent/ explanatory variables
$\alpha_1$ is the constant (y intercept)
$\alpha_2, \alpha_3, \alpha_4$, are the regression coefficient for the variables $X_2, X_3, X_4$
u is the error term
CHAPTER FOUR
DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction
The research objective was to establish the effect of debt management tools on revenue collection at Kenya Revenue Authority. The study was conducted for the period of financial years 2002/03 to 2012/13 where various data on revenue collected, inflation, GDP and debt collected was obtained from relevant sources. This chapter presents the analysis and findings with regard to the objective and discussion on the same. To analyse the data descriptive, correlation and regression analyses were used. The findings are also presented in percentages and graph.

4.2 Data Presentation

4.2.1 Descriptive Statistics

Table 4.1: Descriptive analysis of variables

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Collected (in Billion)</td>
<td>11</td>
<td>9.8580</td>
<td>22.7000</td>
<td>15.030482</td>
<td>4.4036613</td>
</tr>
<tr>
<td>GDP Series (in Billion)</td>
<td>11</td>
<td>1083.5790</td>
<td>3440.1150</td>
<td>2061.287364</td>
<td>780.9480342</td>
</tr>
<tr>
<td>Inflation rate (%)</td>
<td>11</td>
<td>.0470</td>
<td>.2530</td>
<td>.125782</td>
<td>.0601024</td>
</tr>
<tr>
<td>Revenue Collected (in Billion)</td>
<td>11</td>
<td>201.6990</td>
<td>881.2000</td>
<td>457.854455</td>
<td>216.0077666</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>

From the findings in the table above, the study found that the mean of debt collected was Kshs. 15.030482 Billion, the mean of GDP over the period under study was Kshs. 2,061.287364 Billion, the mean of revenue collected was Kshs. 457.854455 Billion and the mean of the inflation was 12.5782%. The highest amount of debt amounted to Kshs 22.7B while the lowest collected debt amounted to Kshs. 9.858 Billion. The highest revenue collected was 881.2 Billion while the lowest revenue collected amounted to Kshs. 201.699 Billion.

4.2.2 Correlation Analysis
The table below shows the Pearson correlation coefficient generated from the data.

Table 4.2: Pearson correlation coefficient
A correlation coefficient, denoted by r, enables one to quantify the strength of the linear relationship between ranked or numerical variables. This coefficient takes the values between -1 and +1 (Saunders, Lewis, & Thornhill, 2009). There is no statistically significant relationship between debt collected and revenue collected (r= 0.053, p>0.01) and the relationship between rate of inflation and revenue collected (r= -0.071, p>0.01). However, there is a statistically strong positive relationship between revenue collected and GDP (r= 0.995, p< 0.01).

4.2.3 Regression Analysis

Table 4.3: Model Summary

```plaintext
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.997²</td>
<td>.993</td>
<td>.991</td>
<td>20.9660075</td>
</tr>
</tbody>
</table>
```

a. Predictors: (Constant), Inflation rate, GDP Series ((in Billion), Debt Collected (in Billion)
From the finding in the above table the adjusted R squared ($\hat{R}^2$) is coefficient of determination which shows the variance in revenue collected due to changes in inflation rate, GDP, and debt collected. $\hat{R}^2$ is 0.991, which means that 99.1% of the total variance in the revenue collected has been explained by the independent variables. The R squared ($R^2$) is 0.993 which means that 99.3% of variation in the revenue collection was explained by the changes in rate of inflation, GDP, and debt collected.

Table 4.4: Anova

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>463516.538</td>
<td>3</td>
<td>154505.513</td>
<td>351.490</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>3077.014</td>
<td>7</td>
<td>439.573</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>466593.552</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Inflation rate, GDP Series ((in Billion), Debt Collected (in Billion)

To determine the goodness of fit of the model ANOVA analysis was done. From the above table the significance level of the model is 0% which shows that the data is ideal for making a conclusion on the population’s parameter as the value of significance (p-value) is less that 5%.

Table 4.5: Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-142.120</td>
<td>34.253</td>
<td>-.012</td>
<td>.721</td>
</tr>
<tr>
<td>Debt Collected (in Billion) ($X_4$)</td>
<td>2.535</td>
<td>1.517</td>
<td>.052</td>
<td>1.671</td>
</tr>
<tr>
<td>GDP Series ((in Billion) ($X_3$)</td>
<td>.275</td>
<td>.009</td>
<td>.995</td>
<td>32.358</td>
</tr>
<tr>
<td>Inflation rate ($X_2$)</td>
<td>-41.365</td>
<td>111.313</td>
<td>-.012</td>
<td>-.372</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Revenue Collected (in Billion)
From the findings the following regression model was established;

\[ Y = -142.12 - 41.365X_2 + 0.275X_3 + 2.535X_4 \]

From the findings of the regression analysis, it was found that holding inflation rate, GDP and debt collected at constant zero the revenue collected would be -142.120 Billion. The model further reveals that a unit increase in rate of inflation would lead to a decrease in revenue collected by a factor of -42.365, a unit increase in GDP would lead to an increase in revenue collected by a factor 0.275 and a unit increase in debt collected would lead to an increase in revenue collected by a factor of 2.535. The finding indicate that the y-intercept and GDP are statistically significant at 5% level of confidence while debt collected and inflation rate are statistically insignificant at 5% level of significance.

### 4.2.4 Debt collected and Revenue collected

#### Table 4.6: Debt collected versus revenue collected

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Revenue Collected (in Billion)</th>
<th>Debt collected (in Billion)</th>
<th>Debt/Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/03</td>
<td>201.699</td>
<td>18.600</td>
<td>9%</td>
</tr>
<tr>
<td>2003/04</td>
<td>229.276</td>
<td>19.121</td>
<td>8%</td>
</tr>
<tr>
<td>2004/05</td>
<td>274.252</td>
<td>13.000</td>
<td>5%</td>
</tr>
<tr>
<td>2005/06</td>
<td>297.703</td>
<td>10.098</td>
<td>3%</td>
</tr>
<tr>
<td>2006/07</td>
<td>360.191</td>
<td>13.212</td>
<td>4%</td>
</tr>
<tr>
<td>2007/08</td>
<td>433.915</td>
<td>22.700</td>
<td>5%</td>
</tr>
<tr>
<td>2008/09</td>
<td>481.300</td>
<td>9.858</td>
<td>2%</td>
</tr>
<tr>
<td>2009/10</td>
<td>534.600</td>
<td>5.001</td>
<td>1%</td>
</tr>
<tr>
<td>2010/11</td>
<td>634.903</td>
<td>12.995</td>
<td>2%</td>
</tr>
<tr>
<td>2011/12</td>
<td>707.360</td>
<td>17.011</td>
<td>2%</td>
</tr>
<tr>
<td>2012/13</td>
<td>881.200</td>
<td>18.739</td>
<td>2%</td>
</tr>
</tbody>
</table>

The findings in the table above shows the percentage of debt collected against the revenue collected for each financial year. It shows that percentage of debt collected against the revenue collected has been decreasing over the years from 9% in 2002/03 to 2% in 2012/13 financial years. In the financial year 2007/08 the debt collected was inclusive of 15 Billion paid by the treasury to facilitate the restructuring of Telkom Kenya. This shows that the amount of debt collected decrease for some periods but increased in the last three years but not at the rate of growth in revenue collection. There was a sharp drop of debt collected in the
financial years 2008/09 and 2009/10 where debt collected was Kshs. 9.858 Billion and Kshs. 5.001 Billion respectively.

4.2.5 Debt Collected, Debt Written off and Year End Debt balances

Table 4.7: Table showing the percentages of debt collected, written off against year end debt balances

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Debt collected/ Debt balance</th>
<th>Debt written off/Debt Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/08</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td>2008/09</td>
<td>10%</td>
<td>41%</td>
</tr>
<tr>
<td>2009/10</td>
<td>6%</td>
<td>44%</td>
</tr>
<tr>
<td>2010/11</td>
<td>15%</td>
<td>43%</td>
</tr>
<tr>
<td>2011/12</td>
<td>16%</td>
<td>32%</td>
</tr>
<tr>
<td>2012/13</td>
<td>16%</td>
<td>57%</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>13%</td>
<td>39%</td>
</tr>
</tbody>
</table>

The table above show that the debt collected average 13% against debt balances over the six year under the study. While debt written off against debt balances at year end average at 39%. The data used comprised data for the last six year. This is because the prior year had gap and the analysis could not be generalised for the whole period under study.

4.3 Summary and Interpretation of the Findings

The correlation analysis revealed that there is a strong positive relationship between revenue collected and the GDP ($r=0.995$, $p<5\%$) and a weak positive relationship between revenue collected and debt collected ($r=0.053$, $p>0.01$). The findings also found that there is a negative relationship between the revenue collected and the rate of inflation ($r=-0.071$, $p>0.01$). This implies that revenue collection is strongly and positively affected by GDP while weakly affected by the debt collected while it is negatively affected by the rate of inflation. The adjusted $R$ squared ($\tilde{R}^2$) is coefficient of determination which shows the variance in revenue collected due to changes in inflation rate, GDP, and debt collected. $\tilde{R}^2$ is 0.991, which means that 99.1% of the total variance in the revenue collected has been explained by the independent variables. The $R$ squared ($R^2$) is 0.993 which means that 99.3% of variation in the revenue collection was explained by the changes in rate of inflation, GDP, and debt collected.

The ANOVA analysis showed that the data used in the model is ideal for making a conclusion on the population’s parameter as the value of significance ($p$- value) is less that
The p-values of the regression coefficient were determined and it revealed that the constant and GDP were statistically significant at 5% level of confidence with the p < 5%. The debt collected and the rate of inflation were not statistically significant at 5% level of significance with p > 5%. This shows that revenue collected is strongly associated with the constant and GDP while it is weakly associated with the debt collected and rate of inflation.

From the findings the following regression model was established:

\[ Y = -142.12 - 41.365X_2 + 0.275X_3 + 2.535X_4 \]

This model revealed that if the rate of inflation, GDP and debt collected are zero then the revenue collected would be Kshs. -142.12, if rate of inflation increased by a unit then the revenue collected would decrease by a factor -41.365, if GDP increased by a unit then the revenue collected would increase by a factor 0.275 and if debt collected increased by a unit then the revenue collected would increase by a factor 2.535.

The findings also show that the debt collection has not been keeping pace with the overall revenue mobilization by KRA. This is shown where the revenue collected has been growing over the years covered by the study while the debt collected has either been decreasing or increasing only marginally over the years under the study.

The findings also found that the average debt collected against debt balances at year is 13%. This shows that the debt is not being efficiently collected using the tools available. The average debt written-off against debt balances at year end is 39%. This shows that there is a chance that the debt being reduced is out of waivers or ledger cleaning.

Kariuki (2011) found that there was no significant relationship between the debt collection strategies on the financial performance of companies at the Nairobi Securities Exchange. The study also found that there is no significant relationship between debt collection management and market performance and no significant relationship between bad debt and any of the variables tested in the regression model.

Brondon (2009) indicated that tax arrears tend to rise while payments reduce during economic downturn. This can be seen for the financial years 2008/09 and 2009/10 where debt collected was Kshs. 9.858 Billion and Kshs. 5.001 Billion respectively. McTavish (2013) saw that the Michigan Office on Tax Compliance Bureau did not sufficiently pursue taxpayers
with potential tax deficiency. This lapse by the authority lends to growth in tax debt that would be contained at an early stage.

Implementation of proper debt management strategy aimed to target collection activities more effectively to increase the likelihood of recovery, improve the speed of collection, and reduce cost is important. This will prevent taxpayers getting into debt by supporting them before their tax liabilities become overdue and communicating more effectively (Comptroller and National Audit Office, 2012).
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary
The objective of the research study was to establish the effect of debt management tools on revenue collection at Kenya Revenue Authority. Descriptive, correlation and regression analyses were used.

From the descriptive analysis of the various variables, the study found that the mean of debt collected was Kshs. 15.030482 Billion, the mean of GDP over the period under study was Kshs. 2,061.287364 Billion, the mean of revenue collected was Kshs. 457.854455 Billion and the mean of the inflation was 12.5782%. From the correlation analysis, the study found that there is a positive relationship between revenue collected and GDP and debt collected and a negative relationship between the revenue collected and rate of inflation. The relationship between revenue collected and GDP was found to be statistically significant at significance level of 0.01. The regression analysis was carried out to establish the association between the revenue collected and the independent variables rate of inflation, GDP and debt collected. It was found that there was a positive association between revenue collected and GP and debt collected while there was a negative association between revenue collection and rate of inflation. The significance of the model was determined and the processed data, which is the population parameters, had a significance level of 0%. This shows that the data is ideal for making a conclusion on the population’s parameters. The following regression model was established;

\[ Y = -142.12 - 41.365X_2 + 0.275X_3 + 2.535X_4 \]

The model summary found that the value adjusted R squared \( \hat{R}^2 \) is 0.991, which means that 99.1% of the total variance in the revenue collected has been explained by the independent variables. The R squared \( R^2 \) is 0.993 which means that 99.3% of variation in the revenue collection was explained by the changes in rate of inflation, GDP, and debt collected.

From the finding above, debt collected versus revenue collected, it was found that the ratio of debt collected to revenue collected has been decreasing over the years under the study. This shows that the debt collection has not been growing as compared to the growth of revenue over the years. It was also found that the average debt collected against debt balances at year
is 13%. This shows that the debt is not being efficiently collected using the tools available. The average debt written-off against debt balances at year end is 39%. This shows that there is a chance that the debt being reduced is out of waivers or ledger cleaning.

5.2 Conclusion
From the results of the findings it can be concluded that debt management and collection in itself does not strongly affect revenue collection. It was found that there was a weak positive relationship between revenue collected and debt collected. Though debt collection contributes to the revenue collection by KRA, debt is not a major factor that drives revenue collection. GDP greatly affect the revenue collected as there is a strong positive relationship between revenue collected and GDP. Therefore, revenue collected is affected strongly by the growth in economy. From the finding the rate of inflation in the economy affected revenue collection negatively albeit their weak relationship. Though debt collection is not a strong determinant of revenue collection it is important that the authority uses effective tools to manage debt and this will reduce debt portfolio and that following up on unpaid taxes will foster equity and encourage compliance amongst taxpayers.

It has been noted that the revenue collected has been growing steadily in the years under study while the debt collected is not growing. The growth in revenue collection is attributed to the Tax Reforms and Modernisation (TRM) being carried on at KRA. The TRM has only focused on growing tax bases while not looking at improving debt collection. Therefore, the authority should modernise the debt management function by employing debt management systems and move from manual system.

To deter non-compliance the authority should improve on debt collection. This will change the attitude the taxpayers maybe having concerning effectiveness of the authority in collection tax in that if the taxpayers do not believe that the government will collect overdue taxes, they may be less motivated to pay. This will hence have a negative effect on revenue base over time.

5.3 Policy Recommendations
The study makes a few policy recommendations that may be effected by the key decision makers. There is need for KRA to install a debt management system. This will ensure that data on debt outstanding, debt collected, uncollectable debt and debt write-off are up to date and reliable. Also establish a data base with sufficient details about the debtors such us the
telephone, mail and physical addresses in order to fast track the collection of the debt outstanding especially from the unreachable debtors. With enhanced debt collection tax compliance will increase and taxpayer will pay their tax promptly to avoid being followed up with punitive consequences on unpaid taxes.

The reforms on tax filing going on is encouraging with the introduction of online filing using ITMS and the latest improved system called iTax. This will go a long way to ensure data capture is accurate as it will be captured by the taxpayers. However, there is need for the authority to sensitize the taxpayers on the advantages of online filing, educate the taxpayers on how to use the system and put in place mechanism to help the taxpayers to embrace the new technology.

There is need for the treasury to fast track waivers processing to enable the KRA reduce its debt portfolio accordingly. Where the waiver has been denied then the authority will be better place to follow up with that debt soon rather than later and where it has been granted then the debt can be written off from the system and update its debt portfolio.

The society in general is ignorant about their tax laws, hence there is need for KRA to simplify the tax system and make it easy for the taxpayers to know their tax obligations and honour them accordingly. This will avoid cases of debt arising out of audit as the taxpayer is assessed on what he was ignorant about.

5.4 Limitation of the Study

The study used secondary data sourced from KRA Statistical publication, the World Bank data bank, and from the revenue departments. The study was limited to the degree of precision though the data was sourced from reliable sources. There was lack of uniformity in how the various departments maintain their data hence the research could not analyse in detail the debt collected through the various tools put in place and see what tools were more effective.

There are other factors that affect the revenue collected each year and not only the ones presented in the model. For example, factors like taxpayers’ behaviour and taxpayer education have an effect on how the taxpayers comply with the tax laws including honouring their debt obligations. This is not quantifiable to be included in the model used above.
During data collection it was found that the operations in all the debt departments were done manually. There is not debt management system in place. This increases the chances of errors in the data produced by these departments.

There was time limitation to carry out the study which necessitated the use of secondary data. The primary data may provide more information that would give better information on debt management tools and the factors that affects their efficiency.

5.5 Suggestion for further studies
There is on-going organisational restructuring at KRA and part of it includes the restructuring of the debt units to form a Centralised Debt Management Unit that will deal with the corporate debt. They are in the process of profiling the debtors and collecting as much data as they can on the taxpayer. A research may be carried out to establish the effect of centralisation of debt unit on debt collection.

There is growth in adoption of online filing in the recent past by the taxpayers. This is envisaged to reduce on wrongful debt and enhance compliance. A research may be done to establish the impact of online filing on debt portfolio and revenue collection.

A government may declare tax amnesty as it deems appropriate. A study may be done to investigate the effect of amnesty in reducing debt portfolio and increasing revenue collected.

An exploration study on possible future trends on debt collection if KRA, through the parliament, introduced third party debt collector.
REFERENCES


### APPENDICES

#### APPENDIX I: Secondary Data Collected

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Revenue Collected</th>
<th>Inflation Rate</th>
<th>Gross Domestic Project</th>
<th>Debt Collected</th>
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<tr>
<td>2002/03</td>
<td>201,699,000,000</td>
<td>9.80%</td>
<td>1,083,579,000,000</td>
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<tr>
<td>2003/04</td>
<td>229,276,000,000</td>
<td>8.29%</td>
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<tr>
<td>2004/05</td>
<td>274,252,000,000</td>
<td>15.02%</td>
<td>1,345,026,000,000</td>
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<tr>
<td>2005/06</td>
<td>297,703,000,000</td>
<td>11.05%</td>
<td>1,519,158,000,000</td>
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<tr>
<td>2006/07</td>
<td>360,191,000,000</td>
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<td>2007/08</td>
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<tr>
<td>2008/09</td>
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<td>2009/10</td>
<td>534,600,000,000</td>
<td>5.30%</td>
<td>2,475,000,000,000</td>
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<td>2010/11</td>
<td>634,903,000,000</td>
<td>14.00%</td>
<td>2,705,000,000,000</td>
<td>12,995,000,000</td>
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<tr>
<td>2011/12</td>
<td>707,360,000,000</td>
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<td>3,048,867,000,000</td>
<td>17,011,000,000</td>
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<tr>
<td>2012/13</td>
<td>881,200,000,000</td>
<td>4.70%</td>
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<td>18,739,000,000</td>
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<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Written off as uncollectable</th>
<th>Debt at year end</th>
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<tbody>
<tr>
<td>2002/03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003/04</td>
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<tr>
<td>2004/05</td>
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<td>2005/06</td>
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<td>2006/07</td>
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<td>2007/08</td>
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<td>2008/09</td>
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<td>2009/10</td>
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<td>2010/11</td>
<td>36,795,000,000</td>
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<td>2011/12</td>
<td>34,772,000,000</td>
<td>107,836,000,000</td>
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<tr>
<td>2012/13</td>
<td>65,229,000,000</td>
<td>115,094,000,000</td>
</tr>
</tbody>
</table>
APPENDIX II: Letter of Introduction

18 October 2013

TO WHOM IT MAY CONCERN

The bearer of this letter is a bona fide continuing student in the Master of Science in Finance (MSc. Finance) degree program in this University.

He/She is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organisation on request.

Thank you.

JANE MUTURI
MSc. FINANCE ADMINISTRATOR
SCHOOL OF BUSINESS.
Ref: 8297

24th October, 2013

Jesang Cherogony
Revenue Officer I
DOMESTIC TAXES DEPARTMENT- LTO

Thro’ Commissioner- LTO

Dear Madam,

RE: REQUEST TO UNDERTAKE RESEARCH

Reference is made to your letter dated 18th October, 2013 on the above subject.

We are pleased to inform you that approval has been granted for you to undertake research on, *The Effect of Debt Management Tools on Revenue Collection at Kenya Revenue Authority*.

The research you intend to undertake should be for academic purposes only and any data or information given should be treated with utmost confidentiality.

Please submit a copy of your research report for retention in the Library.

Yours faithfully,

Magdalene Gathogo
For: Senior Deputy Commissioner- Human Resources