

EFFECT OF TAX INCENTIVES POLICY ON OPTIMAL REVENUE COLLECTION IN KENYA REVENUE AUTHORITY

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Abstract: Kenya has moved from being a low tax burden country to a high tax burden country, yet the country faces the obvious need for more tax revenues to maintain public services. Given the high tax burden, prospects to raise additional revenue seem bleak. Therefore, the study examined the effect of tax incentives policy on optimal revenue collections in KRA. The theoretical base for the study was founded on economic deterrence model. The study applied positivism research philosophy. Descriptive correlational research design was employed in the study. The target population comprised of all the revenue officers working in the 34 KRA stations in the six regions across the country. The study sampled a total of 313 revenue officers in 34 KRA stations. The study used both primary and secondary data. Questionnaires containing close ended questions were used in the collection of primary data. The collected data was analyzed using statistical package for social sciences (SPSS) version 24 computer software. Descriptive statistics as well as inferential statistics were used in data analysis. Data was presented in charts and tables accompanied by relevant discussions of the findings. Findings from the correlations indicated that tax incentives had a significant influence on optimal revenue collection. Regression analysis indicated that tax incentives had a significant influence on revenue collection. The study concluded that tax incentives were important in determining optimal revenue collection in KRA. The study recommended that KRA should make optimum use of tax incentives to encourage more investments thus enhancing the tax collection bracket.

Keywords: Kenya Revenue Authority, Optimal Revenue Collection, Revenue Collection, Tax Incentives. `

1. INTRODUCTION

Public revenue collection is an integral component of fiscal policy and administration in any economy because of its influence on government operations. It is the fuel of every government as it is the main instrument through which government funding is ensured. Tax revenue collection should comply with best practices of equity, ability to pay, economic efficiency, convenience and certainty (Visser & Erasmus, 2005). For any government to match in performance with the growth and expectations of its citizens, it needs to increase its fiscal depth without incurring costly recurring overheads (Gidisu, 2012).

There is an increasing need by the government to collect much revenue by way of taxes to face the increasing financial expenditures budgeted by the country. Automated systems have been proven to be capable of introducing massive efficiencies to business processes that can result in increased revenue collections (Zhou & Madhikeni, 2013). Application of technological solutions towards the strategic goals for government is a key step towards transforming government into an entity that can keep abreast of the needs, requirements and expectations of today's modern world (de Wulf & Sokol, 2005).

Studies have been done across the world in regard to the optimization of revenue collection. Imam and Jacobs (2007) estimated the impact of corruption on the revenue-generating capacity of different tax categories in the Middle East and found that the low revenue collection as a share of GDP there compared to other middle-income regions was due in part to corruption. This suggests that corruption is one of the factors that influence amount of taxes collected by governments. This view is also held by Ajaz and Ahmed (2010).

UNCTAD (2006) in their report indicated that system based automation approaches are important vehicles for achieving efficiency in tax administration. The report noted that automation impacts on the efficiency of tax administration. According to a study conducted in Ghana by Gidisu (2012) on the automation system procedure of the Ghana revenue authority on the effectiveness of revenue collection, Ghana Revenue Authority (GRA) adopted the UNCTAD developed Automated System for Customs Data and Management, which is fully integrated and covers the complete tax clearance process. The system handles customs declarations, accounting procedures, transit and other suspense procedures, generation of trade data that can be used for statistical and economic analysis (United Nations Economic Commission for Europe, 2007).

The public revenue collection challenge should be broadly conceptualized within the tax reform initiatives. System modernization is key in improving the efficiency and effectiveness in revenue collection. No doubt the traditional form of fiscal receipts will always be an essential part of the tax administration system (UNCTAD, 2008). Through system automation, a tax collection agency will be able to meet their revenue collection targets at the grassroots as well as less tax avoidance and evasions. Automation of the custom system falls under the Public Administration sector and its objective is to improve the efficiency and effectiveness both at the national level and in the county governments.

Fjeldstad and Rakner (2003) stated that, most sub-Saharan countries are faced with a tri-lemma with respect to taxation: First, there is an urgent and dire need for more revenue to enable the countries to provide even the most basic of public services and maintain government resources as well as resolving of crises that arise; Second, those economically able are few, and they do not want to pay taxes, in-fact, they spend a lot of their money to acquire tax planning and avoidance services; and Third, those without economic ability, who are the majority, have almost nothing to tax and resist paying taxes anyway.

Muhaki (2009) undertook a research on factors affecting revenue collections in local government in Uganda. Findings from the study show that constraints both endogenous and exogenous to the existing local revenue generation in the district hinder the prospects for a significant increase in local revenue. Gyamfi (2014) researched on effective revenue mobilization by districts assemblies in Ghana. Finally, the study found that some of the problems undermining revenue mobilization are inadequate data on revenue sources, lack of enforcement of revenue mobilization bye laws, inadequate revenue collectors and their training.

Over time, Kenya has moved from being a low tax burden country to a high tax burden country, yet the country faces the obvious need for more tax revenues to maintain public services. Given the high tax burden, prospects to raise additional revenue seem bleak. In addition, Kenyans are yet to accept a tax paying "culture". On one hand, those with political power and economic ability are few and do not want to pay tax. On the other hand, those without political power are many, have almost nothing to tax, and do also resist paying taxes. Since no one enjoys paying taxes, there is mistrust between those collecting taxes and taxpayers. This mistrust generates a game theoretic coexistence between tax agents and tax payers, with agents perceiving taxpayers as criminals unwilling to pay their taxes, and tax payers wary of government agencies' high-handedness in collection of taxes (KRA, 2004). This creates the need for the tax agents to improve their image by building trust and public confidence.

According to Smith, the subject of every state ought to contribute towards the support of the government as nearly as possible in proportion to their respective abilities that is in proportion to the revenue which they respectively enjoy under the protection of the state. Governments use different kinds of taxes and varying tax rates. This is done to distribute the tax burden among individuals or classes of the population involved in taxable activities (Hunter, 2010).

According to the IMF (2003), Kenya's tax system has performed better than average, for Africa, in the past three decades. In 1989/90, Kenya's tax revenue collection was 23.3% of GDP. Revenue collection peaked in 1995/96 at 30.4% of GDP, as a result of economic liberalization, and thereafter, declined to 20.5% of GDP in 2002/03, before increasing to 22.0% in 2007/08. This superior performance was attributed to a stronger tax administration system and a relatively large formal

sector. The reforms of the 1970s and early 1980s, as well as the introduction of VAT in 1990, which widened the tax base, enabled GoK to mitigate for revenue losses resulting from the reduction in and removal of import and export tariffs, which were imposed both by global (WTO) conventions, as well as the structural economic adjustment measures.

Empirical analysis by Muriithi and Moyi (2003) suggests that tax reforms in Kenya under the TMP have led to improved productivity of direct taxes. In particular, administrative reforms (such as lower tax rates, PIN) aimed at eliminating "avenues for evasion and corruption". However, Kenya's performance effectiveness indicators suggest that whilst the tax effort is high, there is potential to increase tax revenue collection as a percentage of GDP by reducing the tax gap.

Government Policies and revenue collection

Sound fiscal responsibility is central to achieving macroeconomic stability and ensuring that the benefits of economic growth. On the revenue side, the Government must continue its efforts to broaden the tax base through tax policy reforms and modernization of domestic tax and custom administration (Bird, 2009). It is viewed that in most emerging economies fiscal governance is reflected only in how deep a country can cut into its fiscal deficit, rather promoting a better tax system to mobilize more revenue to prevent it (Djankov et al., 2010).

Kenya has experienced significant changes in its economy over the last four decades. One of the striking characteristics of Kenya at present is that unlike many other Sub-Saharan countries today, it is a high tax-yield country with a tax-to-GDP ratio of over 20 per cent. As a result, Kenya is able to finance a large share of its budget, while external donor finances are used to cover a much smaller share than in other countries of the region. Presently, external donors' aid forms a paltry 3.9% while the bulk of government expenditure is financed through taxation, which the government aims to keep at or above 22% of GDP (GoK, 2014). This however does not mean that Kenya has a high tax collection ration since its base is still extremely narrow. According to Murithi and Moyi (2013), like most developing countries, Kenya has had to contend and still contends with the common problems that plague tax systems of developing countries. These, they identify to include, the existence of tax systems, with rates and structures that are difficult to administer and comply with and that are unresponsiveness both to growth and discretionary tax measures hence offering low tax productivity. In addition, the tax collection strategy raise little revenue but introduce serious economic distortions as well as provide opportunities for differential treatment of individuals and businesses in similar circumstances, and that are selective with regard to tax administration and enforcement, and skewed in favor of those with the ability to defeat the system. This means that for the country to increase its revenue collection, it needs to modernize its collection policy and carry out the necessary tax reforms that will yield an increased tax base.

Kenya Revenue Authority

Kenya revenue Authority was established by an act of parliament in 1995 as a semi-autonomous government agency responsible for revenue collection. The overall objective was to provide operational autonomy in revenue collection and enable its evolution into a modern, flexible and integrated revenue collection agency. KRA was established for assessment, collection and enforcement of laws relating to revenue. The Act made KRA a central body for the assessment and collection of revenue, for the collection and enforcement of laws relating to revenue and to provide for connected purposes. The Authority is under the general supervision of the Minister of Finance as an agent for the collection and receipt of revenue. KRA currently collects around 95% of government revenue (Odundo, 2007).

As part of the reform package, the Kenya Revenue Authority (KRA) was designed with autonomy (self-governance) enhancing mechanisms, including self financing mechanisms, a Board of Directors with high-ranking public and private sector representatives, and sui generis personnel systems (Taliercio, 2004). Thus, KRA amalgamated the five main revenue departments that were initially in the Ministry of Finance namely Customs Duty, Excise Duty, Sales Tax, Income Tax and Corporate Tax). By running on business principles and by being semi-autonomous, KRA was designed to be less vulnerable to political interventions and to have the leverage to recruit, retain, dismiss and promote quality staff by paying salaries above civil service terms. This was intended to motivate staff and reduce corruption. But there are concerns that KRA exists mainly to respond to the demands of IMF and World Bank and not domestic concerns over equitable taxation and the disincentive effects of taxation on economic activity (KIPPPRA, 2004).

The Kenya Revenue Authority focuses on effective methods of revenue collection so as to meet the country's budget revenue targets. The tax base in Kenya, as in most sub-Saharan African countries, is extremely narrow. So far, attempts to

increase tax revenue have focused on closing the 'taxation gap' and expanding the tax base. The main policies recommended by the IMF have led to trade liberalization, the transition from a sales tax to a system of VAT (IMF, 2005). Such policies have been adopted by most African countries with Kenya being no exception.

Since the inception of KRA, revenue collection has continued to grow while professionalism in revenue collection has been enhanced. However, a number of processes remained manual and KRA was yet to operate as a fully integrated organization (Yusuf, 2007). To achieve the above targets, the management of KRA must adopt measures to ensure that available resources are prudently used to obtain value for money from resources allocated to them. Management in turn should generate operational data with which they evaluate the efficiency and effectiveness of their operation. It is a fundamental aspect of management stewardship responsibility to provide interested parties with reasonable assurance that their organization is effectively controlled and that the information they receive are accurate and dependable.

To achieve their purpose, KRA is divided into regions such as North Region, Rift Valley Region, Western Region, Southern Region and Central Region and departments such as Customs Services Department, Domestic Services Department, Road Transport Department and Support Services Department. KRA administers different types of taxes under different Laws (Acts) such as Income Tax, Value Added Tax, Custom duties and Excise Tax among many others (Kuria 2013).

2. STATEMENT OF THE PROBLEM

Kenya revenue authority has continuously failed to meet its revenue collection targets. Between the years 2010 to 2014, the shortfalls in target revenue collection were 2.5%, 2%, 1%, 1.4% and 10.4% respectively. In the year 2016 the treasury reported that Kenya revenue authority had collected sh. 811 billion against a target of sh. 911 billion set by the treasury for the period between July 2015 and March 2016. This was a shortfall of sh. 100 billion (11% deficit). Treasury had set a 20.9% revenue growth target for the taxman but KRA only met about half that target after it posted an 11.7 per cent growth (KRA 2016). These shortfalls in tax collection have resulted to the prolonged government budget deficit that arises every fiscal year.

In an attempt to increase efficiency in revenue collection, the government has instituted several policy measures. For instance, in the year 2005, KRA adopted a policy requiring the automation of their tax collection and went ahead to introduce Electronic Tax Registers (ETRs) to ensure full remittance of VAT by retailers. This was done to replace the manual paper system of filling tax returns. ETRs enables taxpayer internet based PIN registration, returns filing, payment registration to allow for tax payments and status inquiries with real-time monitoring of accounts (Waweru, 2013). The government has moved further to enhance the efficiency of KRA by enhancing the competence of staff through enhancing their recruitment procedures and increasing the training programs and bench marking. On the other hand the government has strengthened internal control mechanisms, revised their tax incentive policies and tax regulations. It is however not clear how these policy measures have impacted on the revenue collection efficiency. This study seeks to fill this gap by assessing the influence of government policy measures on optimal revenue collection in Kenya revenue authority.

Few studies have been done in Kenya to address revenue collection by Kenya revenue authority. A study by Andrew (2014) looked at the effect of integrated tax management system on tax compliance by small and medium sized enterprises in Nairobi central business district. Further Faith (2014) did a study of the effect of internal controls on revenue collection by county governments in Kenya. Further Ndunda, Ngahu and Wanyoike (2015) did a study analyzing factors influencing optimal revenue collection by County governments in Kenya a case of Nakuru County. It is evident that none of these studies have addressed the case of revenue collection countrywide but have concentrated on smaller regions. Further, to the researchers' knowledge no study has been able to address the effect of government policy measures on optimal revenue collection and especially in the Kenyan context. As such no study has been able to determine which of the government policy measures worked and which has not. Therefore this study will be seeking to examine the effect of government policy measures on optimal revenue collection in Kenya revenue authority.

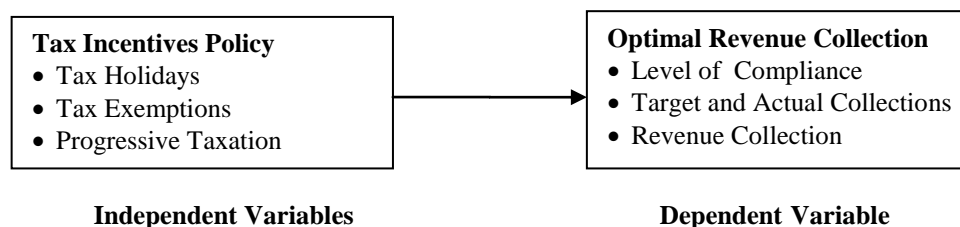
3. OBJECTIVES OF THE STUDY

Effect of tax incentives policy on optimal revenue collection in Kenya revenue authority

4. RESEARCH HYPOTHESIS

Tax incentives policy does not significantly affect optimal revenue collection in Kenya revenue authority

5. CONCEPTUAL FRAMEWORK



Tax Incentives

UNCTAD defines tax incentives as any incentives that reduce the tax burden of any party in order to induce them to invest in particular projects or sectors. They are exceptions to the general tax regime and may include, reduced tax rates on profits, tax holidays, accounting rules that allow accelerated depreciation and loss carry forwards for tax purposes, and reduced tariffs on imported equipment, components, and raw materials, or increased tariffs to protect the domestic market. KRA defines tax incentive as a provision that grants any person or activity favorable conditions that deviate from the normal provisions of the tax legislation. According to Lipsey & Chrystal, 2007 stated that the government plays an important role in the growth process and apart from the expenditure it incurs for development projects, it can employ policies including favorable tax treatment of savings, investment, capital gains, research and development (R&D) tax incentives to encourage investments and innovations. Kenya offers various types of tax incentives as provided for in the Income Tax Act CAP 470, The VAT Act CAP 476 and the EPZs Act CAP 517. These incentives are mainly fiscal incentives and they determine the fiscal policy adopted to affect macroeconomic activity in a country (UNCTAD, 2000).

6. THEORETICAL REVIEW

Economic Deterrence Theory

Deterrence theory is a theory under criminology and was developed by Becker (1968). This theory is based on the concept that, if the consequence of committing a crime outweighs the benefit of the crime itself, the individual will be deterred from committing the crime. This is founded in the idea that all individuals are aware of the difference between right and wrong and the consequences associated with wrong or criminal behaviors. Proponents of deterrence theory believe that people choose to obey or violate the law after calculating the gains and consequences of their actions. Economic Deterrence model, one of the economic based models was developed by Allingham and Sandmo (1972) who extended the expected utility model of criminal activity originated by Becker (1968) to the tax arena. This model incorporates the concept of an economically rational taxpayer who will evade taxation as long as the pay-off from evading is greater than the expected cost of being caught. Allingham and Sandmo (1972) proposed a seminal economic deterrence model based on the expected utility function of the taxpayer who evades. This model incorporates several aspects. Firstly, the taxpayer has some level of risk aversion, the more risk averse the taxpayer is, the less likely (s) he is to evade taxes. Secondly, the taxpayer needs to have knowledge regarding the taxation system in order to assess the probability of being detected, and the extent of the penalties that may be incurred upon detection. Under Allingham and Sandmo model the taxpayer decides upon the amount of taxes to report to the taxing agency. When making this decision the taxpayer seeks to maximize expected utility which is defined to be the sum of the utility value of each outcome weighted by the probability that the particular outcome occurs. The A-S model shows that the higher probabilities of audit deter underreporting and that a higher rate for the proportional tax leads to lower levels of reported income. The general conclusion of this theory is that compliance depends largely on tax audit and penalty. The implication of the theory is that taxpayers will pay taxes only because of the fear of sanctions. The deterrence to tax evasion can be done through enacting regulations outlining the measures to ensure tax compliance. According to Devos (2014), deterrence can be achieved through a number of approaches, punitive and persuasive. This study will be seeking to establish whether punitive or persuasive regulatory measures are used to enhance tax compliance.

7. EMPIRICAL REVIEW

Tax Incentives and Optimal Revenue Collections

Taxes can be used in promoting investment in certain economic zones initially not very popular to investors. This is applicable in a country where the government extends tax holidays, tax exemptions, remissions and other tax benefits to the investors in specified sectors of the economy or regions. In Kenya, policies on special economic zones referred to as Export Processing Zones (EPZs) are examples of how tax favors can be used to encourage private investment (Wawire, 2000; Karingi, Kimenyi & Ndung'u, 2001).

For many decades, Kenya has been unable to balance its budget and therefore, meet its financial requirements to fund its development projects. Some people blame the deficit on the growth in spending by the government, as is the case of conservatives in the U.S., while others counter that an insufficiently progressive tax system is failing to raise adequate revenues needed for valuable government projects, as it is the case with the liberals in the U.S. Karl Marx also observed that progressive tax systems alone are very inefficient in an economy. The persistent budget deficits could therefore, be due to a clash between those opposing a raise in taxes and those opposing a cut in government expenditures or it could be something deeper, a structural problem with the very nature of the budgeting process (Gruber, 2005).

A study conducted on The Tax Policy for Investment by the working group of the MENA-OECD Investment Program (2007), established that there are a wide range of incentives in MENA countries. The question however, remains why most developing countries including Kenya still offer a wide range of expensive tax incentives while they are faced with huge budget deficits and slow economic growth rates. Governments offer tax incentives to investors simply to attract more FDI hence increasing investments in the country to increase GDP and employment rates (TJN–Africa, 2011). Studies indicate that many investors prefer transparency, simplicity and efficiency in the business environment, political and economic stability and certainty in application of tax law and in tax administration. Tax incentives are not very effective in attracting investment and they proposed that the best practice is to discourage the use of incentives in favor of reduced corporate tax rates on a broad base and if tax incentives must be offered, then there is need to review the design and assess its effectiveness (OECD, 2007). Olhoft (2003) is of the opinion that spending millions of taxpayers' money on tax breaks and tax incentives is most likely a misguided strategy for any State when the State is in budget deficit.

Due to globalization, it has also become extremely easy for multinational companies to do international tax planning and reap maximum economic benefits for the period they enjoy the tax incentives yet most of them remain in a net tax credit position due to the huge incentives or after the expiry of the incentive period, they soon close shop, start a new company in the same locality, doing similar businesses or they move to another country offering similar tax structures and continue enjoying the tax – free status thus denying the government of the much needed revenue to fund its economic projects. Many multinational companies in Kenya pay little to no tax to the Kenyan government for the many years they have operated in this country and for those that operated in the Export processing Zone, most of them closed down after the 10 year tax holiday period and moved to China, India, Uganda and Ghana which had introduced similar programs or had lower costs of production (Blackwell, 2009).

Jack (2003) did a study on income shifting and tax competition. He found out that tax incentives/holidays given to selected companies i.e. foreign direct investment or newly listed companies had the effect on opening an un-fair playing ground. He found out that these companies made other companies competing in the same industry result in tax evasion measures. This gradually impact negatively on the government revenue levels. In conclusion he said “though tax incentive was a good stimulant to the country's economic, they should be discouraged”.

Lipsey and Chrystal (2007) stated that the government plays an important role in the growth process and apart from the expenditure it incurs for development projects, it can employ policies including favorable tax treatment of savings, investment, capital gains, research and development (R&D) tax incentives to encourage investments and innovations. However, studies in the recent past prove that tax incentives offered have not resulted into an increase in FDI into the country. A report released recently by Action aid and TJN showed that KRA loses Kenya Shillings 100 billion in tax revenue through wide ranging exemptions mainly to MNCs yet these incentives do not translate to substantial returns in FDI. Uganda and Tanzania, which give far less incentives than Kenya, have had a better flow in FDI. Kandie, 2011 in his study on the effects of tax incentives on exchequer revenue a case of the top 25 taxpayers in the country concluded that tax incentives have negative effects on exchequer revenues. This research will study the effect these tax incentives have on optimal revenue collection.

Optimal Revenue Collection

Experts on taxation in developing countries strongly agree that there is considerable potential to increase tax revenue in most low-income countries. In its 2011 policy paper on the subject, the IMF stated that an increase was not only possible but also desirable (IMF 2011). The findings of the World Bank study presented in the previous section (Minh Le et al. 2012) confirm that most low income countries have both low tax collection and low tax effort, the latter indicating that tax revenues are below their potential level (Torres, 2013). In addition to having revenue below potential, many LICs still face tax shares (of GDP) below 15% which is considered a reasonable threshold for ensuring government functioning.

Governments in developing countries face great challenges in collecting tax revenues, which result in a gap between what they could collect and what they actually collect. One of these challenges according to Muita (2011), is the embracing of emerging technologies and tax payment methods that are more efficient so as they can reduce wastage. One of the technologies he argues is electronic tax system which so far has been embraced by the Kenya Revenue Authority. Baingana (2011) noted that improvement in administration would lead to increased revenue performance. He further argued that, if a tax is well administered, then inevitably revenue collections have to increase. It is the only way one can be able to know whether a tax is well administered or not.

According to initiative for policy dialogue working paper series (2009), Kenya has the trappings of a modern tax system, including, for example, a credit-invoice VAT, a PAYE individual income tax with graduated but arguably moderate rates, and a set of excise taxes focused on the usual suspects (alcohol, cigarettes, gasoline, etc.). However, with up to 70 percent of GDP produced and possibly as much as 75 percent of labor employed in the informal sector, the ability of the tax system to raise sufficient revenue with minimal distortions is severely circumscribed. In such an environment, raising around one-fifth of GDP in tax revenue is likely to impose very large distortionary costs on the economy. Continued reform of both the policy instruments and the administrative and enforcement capacity of the tax system is therefore imperative.

According to Gcabo and Robinson (2007), tax collection is important to any country even though it is not favoured or understood by the country's citizens. They went on to argue that, though the taxpayers acknowledge the need to pay taxes and enjoy the benefits offered by the government in form of public service, tax compliance is not favoured by the majority. It is critical that the importance of tax compliance is understood because it determines how the government shapes the lives of its citizens (Oberholzer, 2008). Bird (2012) revealed that in most developing countries, more than half of the potential tax revenues tend to remain uncollected. This he further accredited to the large volume of the informal sector, dominated by the small business owners.

Applying cost benefit analysis models, Sandmo (2005) explained the interplay between tax underpayment and the tax authority's effort to identify and limit tax frauds. This occurs in circumstances where agents gamble by underpaying taxes, and where the probability of detection and the resultant penalties are determined by the resources committed by the regulator, and the efficacy of institutions. These models identify several factors explaining tax underpayment, including the tax burden, the stringiness and efficacy of enforcement, the penalties associated with tax underpayment, and the degree of risk aversion. Using Chilean tax revenues to estimate the impact of changes in enforcement spending, Engel et al. (2001) find that 1 USD of additional enforcement spending increases VAT revenues by 31 USD, and a 10 percent increase in spending could reduce evasion from its current rate of 23 to 20 percent. Keen and Simone (2004) argued that, revenue may increase provided trade liberalization occurs through tariffication of quotas, eliminations of exemptions, reduction in tariff peaks and improvement in customs procedure.

Stotsky and Woldemariam (2007) undertook studies in Sub-Saharan country on tax efforts that revealed many sub-Saharan countries in Africa face difficulties in raising tax revenue for public purpose. The study undertaken was to measure the determinants of tax share of the tax GDP and construct a measure of tax effort. In another study on tax efforts undertaken in Arab countries by Nagy (2000) revealed that Tax Revenue performance varies across Arab countries. Study concluded that Tax revenue trends are not uniform across these Arab countries. Some countries have enjoyed sustained increases in tax revenue shares in recent years while others have seen tax revenue shares weaken.

In Kenya, KRA has sought to boost tax compliance by introducing sanctions such as electronic monitoring, audits, compliance checks, investigations and shutting of non-compliant taxpayers businesses, heavy penalties and prosecution of tax evaders. There is also a whistle blower rewards to those who volunteer information that leads to recover of taxes. This sanctions and the reward has helped in improvising the general level of tax compliance (KRA. 2013).

Kenya is regarded as a low income country and therefore tax compliance of Kenya has significantly been low with tough duty of warranting resourceful and effective tax administration. Kenya revenue authority performs education monthly to all newly registered taxpayers so as to improve tax compliance. Whether the increased taxpayer education has led to improved tax compliance has not been captured in any observed study (KRA, 2011).

8. RESEARCH METHODOLOGY

The study will apply a positivism research philosophy. Research philosophy is the development of the research background, research knowledge and its nature (Saunders & Thornhill 2007). Research philosophy is also defined as a research paradigm. paradigm is a way of thinking about and conducting a research. It is not strictly a methodology, but more of a philosophy that guides how the research is to be conducted. Research paradigm and philosophy comprises various factors such as individual's mental model, his way of seeing things, different perceptions, and variety of beliefs towards reality. The study will apply mixed design including descriptive survey design and correlation research design. The descriptive design will be used since the study will gather quantitative and qualitative data that describe the nature and characteristics of government policy measures and optimal revenue collections in Kenya revenue authority. According to Sekeran (2003), descriptive research design is a type of design used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. The target population will be comprised of all the revenue officers working in the 34 KRA stations in the six regions across the country. There are six regions including Nairobi, Southern region, Northern region, Central region, Rift Valley region and Western region. KRA has a total workforce of 4,539 employees distributed in various stations within the country. The targeted respondents will be comprised of the revenue officers in the customs and excise department, domestic taxes department, heads of audit departments, heads of compliance departments, managers of debt departments and the managers of tax payer recruitment and education section. These comprise of 1646 employees working in these departments. These will form the study's target population. Sampling technique will be used where a sample size of 313 respondents will be selected as the respondents of the study. The study will use questionnaires to collect primary data. Secondary data will be obtained from KRA records and information from the government national treasury guided by a data collection sheet. Orodho (2004) observes that a questionnaire is an instrument that is used to gather data and allows measurement for or against a particular viewpoint. Structured and open-ended questions will be used to collect primary data from the field. The same questionnaires will be pilot tested to ascertain the extent to which the instrument collects the intended data and eliminate ambiguous questions, and improve on validity and reliability. Cronbach's alpha will be used to measure the reliability of the instrument. The use of closed-ended questionnaires will contribute towards gathering of both quantitative and qualitative data. Descriptive statistics method will be applied to analyze quantitative data where data will be scored by calculating the percentages, mean, STD deviation and Variance. This will be done using Statistical Package for Social Sciences (SPSS) version 24 computer software. Inferential statistics will be applied through correlation analysis and the use of multiple regression analysis. Data collected will be subjected through econometric tests to check that the assumptions of multivariate analysis are met before being subjected to regression analysis. The data will be checked for linearity, normality, multi-collinearity and homoscedasticity of residuals. The correlation analysis will be used to establish statistical significance, the nature of the existing relationship between the dependent variable and the independent variables. The regression analysis will be used to determine the statistical significance, the influence or effect that the independent variables have on the dependent variable.

For the purpose of this study, the researcher applied a descriptive research design. A descriptive study is concerned with establishing the rate of recurrence with which something occurs or the association between variables. The study population was composed of deposit taking SACCOs in Nyandarua County which are under SASRA regulation. There are 61 deposit taking SACCOs operating in four sub-counties of Nyandarua County. Given that the sample population is not too big, the study adopted a census where all the SACCOs were included in the study. Primary methods of data collection were used in the study. The study employed the use of questionnaires as the main tools for collecting data. A questionnaire is a research instrument which consists of a series of questions designed to assist the researcher in getting information from the respondent (Mugenda & Mugenda, 2010). The questionnaire contained structured questions. Questionnaires helped the researcher to collect large amount of data in large areas within a short time thus saving time for the study. The questionnaire composed of short structured closed ended statement constructed on a 5 point Likert scale. The instrument was pilot tested where Cronbach alpha (α) was used to test the reliability of the instrument. , data was processed and analyzed by using descriptive statistics and inferential statistics. Tabulation of data was used to enable a

meaningful description of the distribution of scores with the use of frequencies and percentages, means and standard deviation presented in tables. Inferential statistics was done to establish the relationships between variables and the strength of prediction. This was done using correlation, simple linear regression analysis and multiple regression analysis.

9. FINDINGS AND DISCUSSIONS

The researcher distributed 313 questionnaires to the respondents for the purposes of data collection out of which, 276 of them were returned. This constitutes 88.2% which exceed 70% suggested by Mugenda and Mugenda (2003) as very good. According to Babbie and Mouton (2002) a response rate of above 50% is adequate for analysis thus a response rate of 88.2 % in this study was considered adequate.

9.1. Quantitative Analysis

Tax Incentives

The respondents sought to examine the respondents take as regards tax incentives in Kenya revenue authority. The questionnaire was initially taken through factor analysis to establish the factor constructs for the variable. KMO measure of sampling adequacy was used while Bartlett's test was used to test the factorability of the inter-correlation matrix. According to field (2005) a KMO value of 0.5 and above indicates that the constructs are adequate to be taken through factor analysis.

Table 4.1: KMO and Bartlett's Test on Tax Incentives

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.610
	Approx. Chi-Square	58.225
Bartlett's Test of Sphericity	df	10
	Sig.	.000

The findings indicated that the items in the tax incentives questionnaire had a KMO value of 0.61. Therefore the questionnaire was deemed appropriate for factor analysis. The Bartlett's test of Sphericity chi-square value was 58.225 and was significant at $p < 0.05$ level of significance. This indicated that the correlation matrix for the data was an identity matrix hence allowing for factorability of the inter-correlation matrix. Hence the items in the questionnaire were appropriate for the structure detection. Eigen value criterion was used in component extraction with components with Eigen values greater than one being extracted. The findings from the analysis were as shown in Table 1.

Table 1: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	2.633	52.669	52.669	2.633	52.669	52.669	2.610
2	1.335	26.691	79.360	1.335	26.691	79.360	1.389
3	.551	11.025	90.385				
4	.361	7.211	97.597				
5	.120	2.403	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

From the analysis, two components were found to have Eigen values greater than one accounting for up to 79.3% of the variation in tax incentives. The two components account for more than the suggested 60% threshold (Hair et.al, 2006). As such, there are two latent factors that are retained to account for the variation in tax incentives in Kenya revenue authority. A clear factor solution was obtained for the five questionnaire items for tax incentives. The rotated pattern matrix was obtained to show the loading patterns of the questionnaire items on the extracted factors. The findings were as shown in Table 2.

Table 2: Pattern Matrix^a on Tax Incentives

	Component	
	1	2
Through government policies, tax incentives are awarded to companies investing in rural areas	.811	
Tax incentives have encouraged increased private investments thus creating more sources of revenue for KRA		.710
KRA uses progressive tax system in their tax enforcement	.941	
Through progressive tax system, tax compliance has increased	.863	
KRA prefers reduced corporate tax rates rather than tax incentives		.916

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 5 iterations.

The component matrix indicated that three items loaded strongly on the first component while two items loaded strongly on the second component. That KRA uses progressive tax system in their tax enforcement had the highest loading of 0.941 on the first component. This was followed by the assertion that through progressive tax system, tax compliance has increased with a factor loading of 0.863. Also, that through government policies, tax incentives are awarded to companies investing in rural areas had a factor loading of 0.811 on the first component. On the other hand, that KRA prefers reduced corporate tax rates rather than tax incentives had the highest loading of 0.916 on the second component. Further, that tax incentives have encouraged increased private investments thus creating more sources of revenue for KRA loaded strongly on the second component with a loading of 0.71.

Consecutively, the study proceeded to examine the respondents' views in regard to tax incentives. The questionnaire was in a Likert scale of five scores. The frequencies in percentages, means and standard deviations were computed for all the scores to aid in making observations. The findings from the analysis were as shown in Table 3.

Table 3: Descriptive Statistics on Tax Incentives

	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Dev
Through government policies, tax incentives are awarded to companies investing in rural areas	17.0	35.9	27.5	14.9	4.7	3.46	1.083
Tax incentives have encouraged increased private investments thus creating more sources of revenue for KRA	10.1	43.5	31.5	11.2	3.6	3.45	.947
KRA uses progressive tax system in their tax enforcement	16.7	54.3	22.1	4.7	2.2	3.79	.854
Through progressive tax system, tax compliance has increased	18.1	49.3	21.0	9.4	2.2	3.72	.942
KRA prefers reduced corporate tax rates rather than tax incentives	8.3	21.7	45.3	17.8	6.9	3.07	1.001
Valid N (listwise)	276						

Findings established that respondents were not sure whether through government policies, tax incentives are awarded to companies investing in rural areas although majority of them comprising of 52.9% strongly and/or agreed. This aspect had a mean of 3.46 and a standard deviation of 1.083. Also they were undecided on whether tax incentives have encouraged increased private investments thus creating more sources of revenue for KRA. Majority of them comprising of 53.6% agreed recording a mean of 3.45 and a standard deviation of .947. These views contradicts Karingi, Kimenyi and Ndung'u (2001) who had indicated that the Kenyan government sets up special economic zones to provide tax favors and encourage private investments. On the other hand, they agreed that KRA uses progressive tax system in their tax enforcement. 54.3% and 16.7% agreed and strongly agreed registering a mean of 3.79 and a standard deviation of .854.

It was observed that a mean of 3.72 and a standard deviation of .942 were registered where respondents agreed that through progressive tax system, tax compliance has increased. 49.3% of the respondents agreed while 18.1% of them strongly agreed. Further, respondents were undecided on whether KRA prefers reduced corporate tax rates rather than tax incentives. The respondents demonstrated lack of cohesion in their views with two items in the questionnaire returning standard deviation values greater than one. However, the respondents were in great agreement with each other in their

views regarding the other three items giving them a standard deviation values less than one. TJN-Africa (2011) had observed that countries adopt tax incentives to attract foreign direct investments to increase investments in the country. However, OECD (2007) note that tax incentives are not effective in attracting investment and rather recommended that the best practice is to discourage the use of incentives in favour of reduced corporate tax rates on a broad base and if tax incentives have to be offered, there is need to review the design and assess its effectiveness.

Optimal Revenue Collection

The study further sought to examine the state of revenue collection in Kenya revenue authority. The questionnaire on revenue collection was first taken through factor analysis to determine the suitability of the questionnaire items in measuring the optimization of revenue collection. The KMO and Bartlett's test were used to measure for the sampling adequacy and the factorability of the inter-correlation matrix. The findings from the analysis were as presented in table 4.

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.764
	Approx. Chi-Square	90.643
Bartlett's Test of Sphericity	df	21
	Sig.	.000

From the analysis, the KMO measure of sampling adequacy was 0.764 which was far above the recommended threshold of 0.5 (Field, 2005). Thus the sampling adequacy of the questionnaire was found to be satisfactory. The Bartlett's test of Sphericity chi-square value of 90.643 was found to be significant at $p < 0.05$ level of significance. This shows that the identity matrix is not an identity matrix hence allowing for factorability of the inter-correlation matrix.

The study undertook principal component analysis using Eigen value criterion for the latent factor extraction. The findings from the analysis were as presented in Table 5.

Table 5: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.162	59.450	59.450	4.162	59.450	59.450
2	.899	12.842	72.292			
3	.650	9.291	81.583			
4	.473	6.752	88.335			
5	.357	5.098	93.433			
6	.312	4.464	97.897			
7	.147	2.103	100.000			

Extraction Method: Principal Component Analysis.

From the analysis, one component was extracted with an Eigen value greater than one accounting for 59.45% of the total variance in revenue collection. A clear factor solution was obtained for seven of the revenue collection items. A component matrix was derived to demonstrate the factor loadings on the extracted component. Findings from the analysis were as presented in Table 6.

Table 6: Component Matrix^a

	Component
	1
KRA has recorded increased level of tax compliance among individual tax payers	.733
KRA has been able to reduce the gap between actual collection and projected collection	.820
KRA has been able to reduce the amount of potentially uncollected revenue	.827
KRA has been able to meet its tax collection targets	.658
Through proper data storage facilitated by TCA, KRA has managed to make almost accurate revenue collection projections	.695

Over the past few years, KRA has been registering increased number of new tax payers as a result of increased monitoring and efficiency .831

Use of ICT has greatly enhanced revenue collection by KRA .813

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

The component matrix showed that all the questionnaire items had strong factor loadings on the extracted component. The item with lowest factor loading had a loading value of 0.658 while the item with the highest loading factor had a factor loading of 0.831. Hence, all the seven items in the tax collection questionnaire had loading factors greater than 0.4 hence were appropriate for gathering data regarding optimal revenue collection.

As such, the study further sought to establish respondents' views regarding optimal revenue collection in Kenya revenue authority. Findings were generated in frequencies, means and standard deviation values. Frequencies in form of percentages demonstrated respondents' choices across the Likert scale while means gave the mean responses. The standard deviation values were used to demonstrate the extent to which the respondents agreed with each other in regard to views on the various items. The findings from the analysis were as presented in Table 7.

Table 7: Descriptive Statistics on Revenue Collection

	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Dev
KRA has recorded increased level of tax compliance among individual tax payers	33.7	51.4	9.8	2.9	2.2	4.12	.858
KRA has been able to reduce the gap between actual collection and projected collection	14.9	54.0	20.3	10.1	0.7	3.72	.864
KRA has been able to reduce the amount of potentially uncollected revenue	14.1	49.6	23.2	10.9	2.2	3.63	.931
KRA has been able to meet its tax collection targets	9.4	37.7	29.7	17.8	5.4	3.28	1.037
Through proper data storage facilitated by TCA; KRA has managed to make almost accurate revenue collection projections	12.0	42.8	28.3	12.7	4.3	3.45	1.003
Over the past few years, KRA has been registering increase number of new tax payers as a result of increased monitoring and efficiency	30.4	52.9	9.8	5.8	1.1	4.06	.855
Use of ICT has greatly enhanced revenue collection by KRA	41.3	44.9	9.8	2.9	1.1	4.22	.823
Valid N (listwise)	276						

Findings established that majority of the respondents comprising of 85.1% strongly and/or agreed that KRA has recorded increased level of tax compliance among individual tax payers. This assertion had a mean of 4.12 and a standard deviation of .858. They also agreed that KRA has been able to reduce the gap between actual collection and projected collection where 54.0% of the respondents agreed and 14.9% of them strongly agreed recording a mean of 3.72 and a standard deviation of .864. Respondents agreed with the statement that KRA has been able to reduce the amount of potentially uncollected revenue. 49.6% and 14.1% of the respondents agreed and strongly agreed with a mean of 3.63 and a standard deviation of .931. On the other hand, respondents were not sure whether KRA has been able to meet its tax collection targets. 46.1% of the respondents agreed, 29.7% of them were neutral while 23.2% of the respondents disagreed. This had a mean of 3.28 and a standard deviation of 1.037. Although majority of the respondents agreed that through proper data storage facilitated by TCA; KRA has managed to make almost accurate revenue collection projections, the statement had a mean of 3.45 and a standard deviation of 1.003. On the other hand, respondents agreed that over the past few years, KRA has been registering increase number of new tax payers as a result of increased monitoring and efficiency where 52.9% and 30.4% of the respondents agreed and strongly agreed respectively recording a mean of 4.06 and a standard deviation of .855. Finally, a majority of the respondents agreed that (M=4.22, SD=.823) use of ICT has greatly enhanced revenue collection by KRA. 44.9% of the respondents agreed while 41.3% of them strongly agreed.

4.5.3. Relationship between Tax Incentives and Optimal Revenue Collection

The study sought to establish whether tax incentives and optimal revenue collection have any significant relationship. The data for tax incentive was first composed into composite scores of their means. The composite mean scores for tax incentives were correlated with composite scores of the means of optimal revenue collection. Pearson product moment correlation coefficient was used to establish the relationship. The findings from the analysis were as presented in Table 8.

Table 8: Correlations between Tax Incentives and Revenue Collection

		Tax Incentives
Revenue Collection	Pearson Correlation	.557**
	Sig. (2-tailed)	.000
	N	276

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

Findings established that an average positive significant ($r=.557$, $p=.000$) relationship existed between tax incentives and optimal revenue collection. As such tax incentives were found to have an important role in determining revenue collection in Kenya Revenue Authority. This means that in order to enhance revenue collection in KRA, tax incentives must also be enhanced. Contrary to these findings, Jack (2003) noted that tax incentives had the effect of creating an un-fair playing ground which would result in tax evasion by companies competing in the same industry. This gradually impacted negatively on government revenue levels. Kandie (2011) in his study established that tax incentives have a negative relationship with revenue collection. As such, tax incentives diminish the level of revenue collection. A report by Action Aid (2017) indicated that KRA loses KShs. 100 billion in tax revenue through wide ranging exemptions mainly to Multi-national companies. However, these incentives do not translate to substantial returns in foreign direct investments. On the other hand, Lipsey and Chrystal, (2007) noted that tax incentives are a convenient way for which the government can boost growth process through favorable tax treatments and savings to encourage investments and innovations.

The study went further to test the third hypothesis. The hypothesis was based on the second objective that sought to examine how Tax incentives policy affects optimal revenue collection in Kenya revenue authority. The hypothesis was stated as below

H₀₃: Tax incentives policy does not significantly affect optimal revenue collection in Kenya revenue authority.

The hypothesis insinuated that tax incentives policy do not have a significant influence on optimal revenue collection in Kenya revenue authority. Simple linear regression analysis was used to ascertain this hypothesis. The level of significance was set at $p<0.05$. The findings from the analysis were as presented starting from Table 9.

Table 9: Model Summary on Tax incentives and Optimal Revenue Collection

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.557 ^a	.310	.307	.52716

a. Predictors: (Constant), Tax Incentives

From the model summary (Table), the study findings indicated an R-squared value of 0.31 square units. This shows that tax incentives accounts for 31% of the total variation in optimal revenue collection in Kenya revenue authority. Controlling for the effect of extraneous variables, the R-squared value becomes 0.307 indicating that in ideal situation, tax incentives account for 30.7% of the total variation in optimal revenue collection. To examine how significant the tax incentives are in explaining variation in optimal revenue collection, analysis of variance was used and yielded results shown in table 10

Table 10: ANOVA^b on Tax Incentives and Optimal Revenue Collection

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.161	1	34.161	122.927	.000 ^a
	Residual	76.143	274	.278		
	Total	110.303	275			

a. Predictors: (Constant), Tax Incentives

b. Dependent Variable: Revenue Collection

Table 10 indicated an F-value ($F_{(1, 274)}=122.927$, $p=0.000$) that was significant at $p<0.05$ level of significance. As such, tax incentive policy has a significant role in determining optimal revenue collection. Hence, the null hypothesis **H₀₃** was consequently rejected. The study concluded that tax incentive policy has no significant effect on optimal revenue collection in Kenya revenue authority. The study therefore observed that tax incentive policy is important in determining optimal revenue collection in Kenya revenue authority. The findings were in agreement with Hilda (2014) findings that

established that tax incentives influenced positively the economic growth thereby enhancing revenue collection thus facilitating the funding of more investment projects. In the contrary, Van and James (2010) argued that tax incentives have led to losses in revenue collection especially if not well managed. To fit the regression model between tax incentive policy and optimal revenue collection, the model coefficients' were established as shown in Table 11

Table 11: Coefficients^a on Tax Incentives and Optimal Revenue Collection

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.875	.175		10.717	.000
	Tax Incentives	.546	.049	.557	11.087	.000

a. Dependent Variable: Revenue Collection

Based on the model coefficients (Table) the following simple regression model equation showing the linkage between optimal revenue collection and tax incentives policy was fitted

$$Y = 1.875 + 0.546X_3 \quad R^2 = 0.310$$

(.175) (.049)

Where

Y is optimal revenue collection

X₃ is tax incentive policy

From the equation, with all other factors held constant, the level of revenue collection remains a constant of 1.875 units with an error of ± 0.546 . On the other hand, a unit change in tax incentives policy results to a change in optimal revenue collection by a factor of 0.546 multiple units with an error of ± 0.049 . Therefore the study concluded that tax incentives play a significant role in determining optimal revenue collection in Kenya revenue authority.

10. CONCLUSIONS AND RECOMMENDATIONS

10.1 Conclusions of the Study

In consideration of the findings of the study, it was concluded that tax incentives significantly influence optimal revenue collection in KRA. Findings from correlation analysis demonstrated and confirmed this by indicating that tax incentives have statistically significant relationship with optimal revenue collection in Kenya revenue authority. Therefore, the state of revenue collection in KRA is greatly dependent on policies on tax incentives.

10.2 Recommendations of the Study

From the research findings, tax incentives were shown to significantly impact on optimal revenue collection in Kenya revenue authority. Through tax incentives, the government is able to encourage investment in rural areas thus enhancing KRA revenue collection. In addition to boosting revenue collection, relocation of industries to rural areas through tax incentives helps in distribution of employment opportunities. On the other hand, tax incentives were depicted to enhance the rate of tax compliance hence increasing the number of tax payers. Correlation and regression analysis demonstrated that tax incentives significantly influence the optimization of revenue collection in KRA. Therefore the study recommends that KRA should make optimum use of tax incentives to encourage more investments thus enhancing the tax collection bracket.

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