EFFECT OF TAX POLICY REFORMS ON NATIONAL PUBLIC REVENUE GROWTH IN KENYA

¹James Nyamu Nyaga, ²Dr.Assumptah.Wairimu. Kagiri (PhD), ³Dr.Kepha Ombui (PhD)

¹PhD Candidate ,in the Department of Economics, Accounts &Finance in the School of Business, of College of Human Resource and Development of Jomo Kenyatta University of Agriculture and Technology, Kenya.

²Lecturer, in the Department of Economics, Accounts &Finance in the School of Business, of College of Human resource and Development of Jomo Kenyatta University of Agriculture and Technology, Kenya.

³Adjunct Lecturer, in the Department of Economics, Accounts &Finance in the School of Business, of College of Human resource and Development of Jomo Kenyatta University of Agriculture and Technology, Kenya.

Abstract: KRA has been allocated more budgetary support to enhance pay structures of revenue Officers, attract and retain professional staff as well as establishing structures for identifying and dismissing incompetent and corrupt staff. This was necessary since efficient revenue collection was seen as a means to lower Government borrowing and easing pressure on inflation and interest rates as well as increasing Government revenues to meet both recurrent and capital expenditure. This study focused on measures undertaken by KRA to bring reforms that have enhanced National public revenue growth in the recent few years. Kenya's 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 tax gap. The specific objective was to; effect of tax enforcement, Descriptive research design was used. The scope of the study was KRA's five (5) regional offices namely; Nairobi, Mombasa, Nakuru, Nyeri and Kisumu. The target population was 562 where a sample of 157 respondents was drawn using stratified random sampling technique. Primary data was collected using questionnaires which were both closed ended and open ended. Quantitative data was analyzed using SPSS. Descriptive statistics were used and multiple regression analysis was run to predict the role tax enforcement, The study found that KRA tax reforms influence National public revenue growth in Kenya. Tax enforcement reforms in KRA should be improved and upgraded to suit both government and citizens. A good tax system should be responsive to economic growth. The research findings were expected to benefit KRA as well as other Government collection agents.

Keyword: Effect, Tax Policy Reforms, Revenue Growth In Kenya:

1. INTRODUCTION

Background of the Study:

There are two main epochs in the reform of tax policies and administration in Kenya. The first epoch generally corresponds to the Tax Modernization Programme (TMP) that was launched in 1986 and was under implementation until the new government in 2003. The main elements of the policy thrust under the first phase of the TMP included: raising and maintaining revenue as a ratio of GDP at 24% by 1999/2000; expanding the tax base; rationalizing the tax structure to make it more equitable; reducing and rationalizing tax rates and tariffs; reducing trade taxes and increasing them on consumption to support investment; and sealing leakage loopholes. During this epoch VAT was introduced in 1990, and the KRA was established in 1995 (KIPPRA, 2006).

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

It is noteworthy that during the TMP epoch, in terms of fiscal decentralization, the Single Business Permit (SBP), which is arguably the most progressive feature of Kenya's local government system was introduced to replace a number of local licenses and revenues-raising permits on local businesses. The other local tax is property rates. Local governments also receive from the central government a significant block grant (local authority transfer fund) and limited earmarked funds for maintenance of rural and urban roads. Nonetheless, public services are predominantly provided through a decentralized system (KRA, 2001).

The second epoch is the on-going Revenue Administration Reform and Modernization Programme (RARMP), which was launched in FY2004/05 by the new KRA top management that had been appointed by the NARC government (2003-2007). The goal was to transform "KRA into a modern, fully integrated and client-focused organization". The strategic thrust is to harness Information and Communication Technology (ICT) applications to drive the modernization of the tax administration. In this regard, for example, the e-Filing system and Simba 2005 online system in customs are working. Key changes to tax policy have revolved around: pursuit of equity; further widening the tax base; promoting increased investment; and reducing the tax compliance burden, Nada and Jack (2009)

The reforms under the RARMP epoch were not specifically anticipated in the TMP. In other words, there was no specific initiative to sequence between the two programmes. Furthermore, there are aspects of certain tax policy initiatives that transverse the two programmes, and elements of which are also to be found in the pre-TMP period. In the latter context, two observations are pertinent. First, certain itax policy initiatives are not particular to any reform epoch. In this regard, it is noted that some tax policies cannot be located as once-off changes in a long-term strategic trajectory. Rather, they need to be monitored, evaluated and changes effected, where appropriate, on a regular basis (KRA, 2006).

Ineffective tax administration is often seen as one of the main constraints on the ability of states to collect revenues in general and direct taxes in particular (Fjeldstad & Semboja 2001). Hadler (2000) estimates that better administration of existing tax legislation may increase revenue by 30 per cent or more in many countries in SSA. In a famous statement, Casanegra de Jantscher (2000) claimed that 'in developing countries, tax administration *is* tax policy'. However, the opposite is equally true, (Keen, 2012). Simplification of tax legislation and improved tax administration are closely linked. Tax agencies will be more effective if their tasks are made more simple, stable and predictable. On the other side, questionable options in tax policy sometimes lead to equally questionable administrative practices. Exemptions, for instance, not only pose control problems for the tax administration, but create opportunities for corruption.

In practice, the distinction between administration and policy is often hard to make, (IMF 2011). But there is no doubt that weak and often corrupt revenue administration remains a fundamental barrier to effective and fair taxation and to building wider trust between government and citizens in many countries, (Fjeldstad, 2009). During the last two decades, support to tax administrations has been an important part of foreign technical assistance to public sector reform in developing countries, (Kloeden 2011). The content of administrative reform in specific countries has depended a great deal on what was already in place (Bird et al. 2006; Owens & Hamilton 2004).

Some of the more widespread components are: exploiting new information and communication technologies; moving from a system organized around different taxes to one organized around localities and/or industries so that individual taxpayers have to deal with fewer tax officers; introduction of unique taxpayer identification numbers; establishing different offices and procedures for different categories of taxpayers, typically starting with eight Among the exceptions are reforms in East-Africa which have led to the abolishment of so called 'nuisance' taxes, including poll (head) taxes in Tanzania and Uganda, and simplification of the local tax structure, (Fjeldstad *et al.* 2010). The establishment of semi-autonomous revenue authorities (ARAs) has been a widely noted tax administrative innovation during the last two decades. Several aid agencies and international financial institutions have concentrated much of their tax work on support for the creation and development of ARAs.

In particular, the British Government, first through Overseas Development Administration (ODA) and later through the Department for International Development (DFID), has been influential in the establishment of revenue authorities in Anglophone Africa. ODA/DFID have funded UK experts from the British revenue administration, Crown Agents and various consulting firms to provide technical assistance to tax administrations (Kloeden, 2011). Germany (GIZ) has provided technical assistance to tax administrative reforms in Ghana, Tanzania and Zambia; the US Treasury to Liberia, Nigeria and Uganda; Norway to Mozambique, Tanzania and Zambia; Sweden to Botswana; Denmark to Tanzania; the European Union to The Gambia and Seychelles; and the African Development Bank to several countries, including Liberia and Swaziland. The World Bank has been heavily involved in the Tax Modernization Programme in Tanzania (Fjeldstad & Heggstad, 2011)

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

In Kenya, taxation is the single largest source of government budgetary resources. Between 1995 and 2004, tax revenue constituted 80.4% of total government revenue (including grants). Given its central role, taxation has been applied to meet two objectives. First, taxation is used to raise sufficient revenue to fund public spending without recourse to excessive public sector borrowing. Second, it is used to mobilize revenue in ways that are equitable and that minimize its disincentive effects on economic activities, (Glenday, 2002). Revenue mobilization was not a challenge for the government in the first decade of independence until the energy crisis of 1970 which necessitated tax reforms to mobilize more revenue (KIPPRA, 2006).

One of the key reforms during this era was the adoption of the Income Tax Act, Cap 470 in 1973 (AFDB, 2010). Since then, there have been three distinct phases of tax reform measures. According to a study by African Development Bank Group (AFDB, 2010), the initial measures were aimed at widening the tax base by way of introducing the sales tax in 1973 and the capital gains tax in 1975. These were reactive strategies aimed at mitigating the decline in duty revenues brought about by the imports substitution and industrialization policies.

Subsequently in the third decade, additional tax reforms were instituted. The World Bank study of 1985 on Kenya's economic policy led to drafting of Sessional Paper No. 1 of 1986. Under the theme – Economic Management for Renewed Growth – the Sessional Paper underscored the necessity to boost local revenue to fund economic development. In the period 1986 and 2002, through policy framework on Tax Modernization Programme (TMP), there was an effort to entrench tax reforms by: improving revenue raising capacity from 22 to 28 % of GDP, improving economic efficiency of the tax system through lowering and rationalization of tax rates, enhancing greater reliance on self-assessment system supported by selective tax audits, improving administrative efficiency through computerization, and lastly address constraints in existing tax structures as well as overreliance on direct taxes (KIPPRA, 2006).

Statement of the Problem:

Kenya's Budgets estimates have grown over a period of years with ksh 508b being budgeted for the year 2006/2007, ksh 540b for financial year 2007/2008, ksh 693billion for financial year 2008/2009, ksh 760 Billion for financial year 2009/2010, ksh 867billion for financial year 2010/2011, 997 billion for financial year 2011/2012, Ksh 1.15 trillion for financial year 2012/2013, ksh 1.45 trillion for financial year 2013/2014 and, ksh 1.6 trillion for financial year 2014/2015, (KRA, 2016)

The budget for the FY 2015/2016, the fifth (5th) annual budget under the Constitution of Kenya 2010, saw the release of a KES 2.2 Trillion budget figures. The sheer size of growth of these budgets has occasioned discussions regarding the country's capability to raise the revenue to fund the expenditure plans given the level of the national debt book and; previous performances and overall budget absorption capacity at both levels of government. The debate on how realistic Kenya's budgeting framework is has also ensued with the recorded failure by the revenue collector, the Kenya Revenue Authority, to meet the revenue targets, (KRA 2016)

In spite of the efforts by the Government of Kenya there are still a myriad of problems militating against effective and efficient tax system in Kenya and hence affecting the tax revenue collected by the Kenya government at the National level. It was therefore against this background that the researcher sought to examine roles of tax policy reforms on public revenue growth in Kenya.

2. LITERATURE REVIEW

Under this chapter facts and findings of other scholars are given. The researcher reviewed literature of past studies on taxation in relation to tax revenue growth.

Theoretical Frame Work:

Adams Smith Canons of Taxation Theory:

This study is based on Adams Smith canons of taxation theory as outlined in his book; "The wealth of Nations." This theory states that a good tax system is one which is designed on the basis of an appropriate set of principles. The tax system should strike a balance between the interest of the tax payer and that of the tax Authorities. He based his argument on four principles otherwise known as canons of taxation. These are Canon of equity, Canon of certainty, Canon of convenience and Canon of economy.

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

Canon of Equality:

The first canon or principle of a good tax system emphasized by Adam Smith is of equality. According to the canon of equality, every person should pay to the Government according to his ability to pay that is in proportion of the income or revenue. Thus under the tax system based on equality principle the richer persons in the society will pay more than the poor. On the basis of this canon of equality or ability to pay Adam Smith argued that taxes should be proportional to income, that is, everybody should pay the same rate or percentage of his income as tax.

However, modem economists interpret equality or ability to pay differently from Adam Smith. Based on the assumption of diminishing marginal utility of money income, they argue that ability to pay principle calls for progressive income tax, that is, the rate of tax increases as income rises. Now, in most of the countries, progressive system of income and other direct taxes have been adopted to ensure equality in the tax system. It may, however, be mentioned here that there are two aspects of ability to pay principle. First is the concept of horizontal equity. According to the concept of horizontal equity, those who are equal, that is, similarly situated persons ought to be treated equally.

This implies that those who have same income should pay the same amount of tax and there should be no discrimination between them. Second is the concept of vertical equity. The concept of vertical equity is concerned with how people with different abilities to pay should be treated for the purposes of division of tax burden. In other words, what various tax rates should be levied on people with different levels of income. A good tax system must be such as will ensure the horizontal as well as vertical equity.

Canon of Certainty:

Another important principle of a good tax system on which Adam Smith laid a good deal of stress is the canon of certainty. To quote Adam Smith, 'the tax which each individual is bound to pay ought to be certain and not arbitrary. The time of payment, the manner of payment, the quantity to be paid ought all to be clear and plain to the contributor and to every other person. A successful function of an economy requires that the people, especially business class, must be certain about the sum of tax that they have to pay on their income from work or investment.

The tax system should be such that sum of tax should not be arbitrarily fixed by the income tax authorities. While taking a decision about the amount of work effort that a person should put in or how much investment should he undertake under risky circumstances, he must know with certainty the definite amount of the tax payable by him on his income. If the sum of tax payable by him is subject to much discretion and arbitrariness of the tax assessment authority, this will weaken his incentive to work and invest more.

Moreover, lack of certainty in the tax system, as pointed out by Smith, encourages corruption in the tax administration. Therefore, in a good tax system, "individuals should be secure against unpredictable taxes levied on their wages or other incomes. The law should be clear and specific; tax collectors should have little discretion about how much to assess tax payers, for this is a very great power and subject to abuse." In the opinion of the present author the Indian tax system violates this canon of certainty as under the Indian income tax law a lot of discretionary powers have been given to the income tax officers, which have been abused with impunity. As a result, there is a lot of harassment of the tax payers and corruption is rampant in the income tax department.

Canon of Convenience:

According to the third canon of Adam Smith, the sum, time and/manner of payment of a tax should not only be certain but the time and manner of its payment should also be convenient to the contributor. If land revenue is collected at the time of harvest, it will be convenient since at this time farmers reap their crop and obtain income. In recent years efforts have made to make the Indian income tax convenient to the tax payers by providing for its payments in installments as advance payments at various times during the year. Further, income tax in India is levied on the basis of income received rather than income accrued during a year. This also makes the income tax system convenient. However, there is a lot of harassment of the tax payers as they are asked to come to the income tax office several times during a year for clarifications of their income tax returns.

Canon of Economy:

The Government has to spend money on collecting taxes levied by it- Since collection costs of taxes add nothing to the national product, they should be minimized as far as possible. If the collection costs of a tax are more than the total revenue yielded by it, it is not worthwhile to levy it. More complicated a tax system, more elaborate administrative

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

machinery will be employed to collect it and consequently collection costs will be relatively larger. Therefore, even for achieving economy in the tax collection, the taxes should be as simple as possible and tax laws should not be subject to different interpretations. According to Adams Smith and other political philosophies, taxes are justified as they fund activities that are necessary and beneficial to society. Additionally, progressive taxation can be used to reduce economic inequality in a society. According to this view, taxation in modern nation-states benefits the majority of the population and social development.

Holmes posits that taxes are the price of civilization. It can also be argued that in a democracy, because the government is the party performing the act of imposing taxes, society as a whole decides how the tax system should be organized. Compulsory taxation of individuals, such as income tax, is often justified on grounds including territorial sovereignty, and the social contract. Defenders of business taxation argue that it is an efficient method of taxing income that ultimately flows to individuals, or that separate taxation of business is justified on the grounds that commercial activity necessarily involves use of publicly established and maintained economic infrastructure, and that businesses are in effect charged for this use.

Although many taxpayers report their income and pay their tax liabilities properly, there are still many taxpayers who do not. The challenge to coordinate policy reforms with parallel reforms in tax administration has rarely been fully addressed yet the menu of administrative reform options has been greatly enriched with new approaches to organizational design, taxpayer services, ICT solutions, human resource incentives and formal anti-corruption strategies. The canons of taxation theory would help in relating tax administration and revenue growth thereby providing a critical path to follow in obtaining the actual determinants of public revenue growth in Kenya.

3. CONCEPTUAL FRAMEWORK

The independent variables are tax administration, tax enforcement and human resource revitalization. Dependent variable is public revenue growth while the moderating revenue is business automation system.

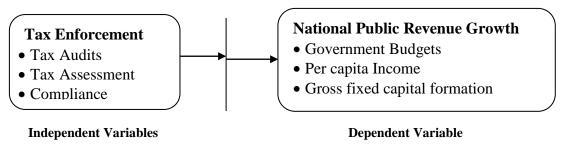


Figure: Conceptual Framework

Tax Enforcement:

Auditing is an independent examination and expression of opinion on the financial statement of an enterprise by an appointed auditor in accordance with his terms of engagement and compliance with statutory regulation and professional requirements (Daniel, 1999). It is important to note that any individual or organization that falls within the scope of the above income groups, is obliged to pay tax, this can be voluntarily or otherwise. It is within this process that the issues of returns and assessment arose. Every individual or organization liable to income tax for a year of assessment is required to submit returns of his income and other relevant matters to the tax authority having power to assess him to tax. And this is subject to satisfaction of the returns by the Tax Authority, (Oyebanji, 2006).

To spur tax compliance, two opposite set of tax enforcement approaches are used: the coercive and persuasive approaches (Honegham, 2010). The coercive approach advocates hard actions and the persuasive approach advocates collaborative working with the taxpayers. Little attention has been paid to understand the combined effects of these conflicting approaches. Spurring tax compliance is a commonly experienced challenge for tax authorities in developed and developing countries (Silvani, 2008). In response to this challenge, which largely depends on taxpayer's type and size, tax authorities have innovated diverse compliance approaches and techniques. Approaches used to address small and large business tax compliances differ due to the risks they impose and the revenues they provide to the tax system, (Baer, 2002).

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

Large corporate taxpayers (also referred to as large taxpayers) provide the majority of tax revenues to the tax system and play an instrumental role to its revenue imperatives. Large taxpayers are different from other taxpayers not only for the huge tax revenues they provide, but also for the risks and complexities they exert to the tax system. Tax authorities across the world have created Large Taxpayer Office (LTO) to secure tax compliance of the large taxpayers by employing an approach that tends to rely more on the persuasive than the coercive instruments, (Donnelly & Heneghan, 2010).

In the small and medium taxpayer's division the coercive philosophy also called deterrence or stick based approach is common, where taxpayers conform to their tax obligations if they are punished for non-compliances (Allingham & Sandmo, 2002). In general, higher audit probabilities and severe penalties encourage tax compliance. Probability of detection refers to the likelihood that the tax authorities will discover an individual's noncompliance and seek to remedy the evasion. Individuals normally would like to evade their tax liabilities entirely and the only reason they might not do so is that there is some non-zero probability of being caught (Massimo, 2013). Raising the probability of detection will increase tax compliance and tax audit represents one of the effective detective measures used by tax authorities (Alm, 2001). In fact, tax audits are considered to have both direct deterrent effect on the taxpayers actually audited and indirect deterrent effect on taxpayers not audited, (Alm, 2004).

Tax audit is one of the most effective policies to prevent tax evasion behavior. The level of tax audit can be determined by two elements; one is how many tax payers are selected for audit and the other is how much intensive the audit is. The first element is easily measured by the number of audited tax payers divided by the total number of tax payers. However, the latter is so difficult to measure due to non-published information about tax audit progress. It is commonly measured by the first element to indicate the level of tax audit for practical comparison, (Slemrod, 2000)

According to Kircher (2008), Tax audit is "an examination of an individual or organization's tax report by the relevant tax authorities in order to ascertain compliance with applicable tax laws and regulations of state". He further said that tax audit is a process where the internal revenue service tries to confirm the numbers that you have put on your tax return, (Kircher, 2008). Tax compliance can be defined as "the ability of a tax liable body to submit accurate, complete and satisfactory returns in conformity with tax laws and regulations of the state to the authority for the purpose of tax assessment". The designed tax authorities audit policy can have important effects on production decision by firms. The nature of such effects depends on whether firms compete or collude. Accordingly, an appropriate designed audit policy may not only achieve greater compliance and higher net revenue, (Frank, 2010)

Surplus budgets output and resources spend on audit but may also have other effects that would be normally considered desirable in a wider economic context. By a smart design of audit policy, the authorities can create information externalities that partially offset the informational advantages of industry insider. Since decision in the product market is in the light of the eventual outcome of net after tax expected profits, the audit policy can create a linkage to output decisions. Specifically, it may be possible to nudge firms in the direction of greater efficiency, (Frank, 2010).

To assist the government in collecting appropriate tax revenue necessary for budget, maintaining economic and financial order and stability, to ensure that satisfactory returns are submitted by the tax payers, to minimize the degree of tax avoidance and tax evasion, to ensure strict compliance with tax laws by tax payers, to improve the degree of voluntary compliance by tax payers and to ensure that the amount due is collected and remitted to government, (Kwon, 2004). According to Silvani, (2008), tax compliance involves two opposite set of tax enforcement approaches namely, coercive and persuasive approaches. The coercive approach advocates hard actions and the persuasive approach advocates collaborative working with the taxpayers. Little attention has been paid to understand the combined effects of these conflicting approaches. Spurring tax compliance is a commonly experienced challenge for tax authorities in developed and developing countries.

In response to this challenge, which largely depends on taxpayer's type and size, tax authorities have innovated diverse compliance approaches and techniques. Approaches used to address small and large business tax compliances differ due to the risks they impose and the revenues they provide to the tax system, (Baer, 2002). Large corporate taxpayers (also referred to as large taxpayers) provide the majority of tax revenues to the tax system and play an instrumental role to its revenue imperatives. Large taxpayers are different from other taxpayers not only for the huge tax revenues they provide, but also for the risks and complexities they exert to the tax system. Tax authorities across the world have created Large Taxpayer Office (LTO) to secure tax compliance of the large taxpayers by employing an approach that tends to rely more on the persuasive than the coercive instruments, (Donnelly & Heneghan, 2010).

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

Alm (2004) asserted that in the small and medium taxpayer's division the coercive philosophy also called deterrence or stick based approach is common, where taxpayers conform to their tax obligations if they are punished for noncompliance. In general, higher audit probabilities and severe penalties encourage tax compliance. Probability of detection refers to the likelihood that the tax authorities will discover an individual's noncompliance and seek to remedy the evasion. Individuals normally would like to evade their tax liabilities entirely and the only reason they might not do so is that there is some non-zero probability of being caught (Massimo, 2003). Raising the probability of detection will increase tax compliance and tax audit represents one of the effective detective measures used by tax authorities. In fact, tax audits are considered to have both direct deterrent effects on the taxpayers' actually audited and indirect deterrent effect on taxpayers not audited, (Silvani 2008).

Tax audit exert only a modest positive effect on tax compliance. Another important factor affecting tax compliance is the relationship between tax compliance and the severity of sanctions. The idea is that fear of penalties prohibits tax noncompliance behavior. Establishing an effective system to penaltize tax evaders is an important measure to encourage tax compliance (Kircher, 2008). Taxpayers will be more likely to comply if noncompliance may result in severe penalties. The persuasive or the collaborative approach views that respectable treatment of the taxpayers with a chance of participation in the taxation process may enhance tax compliance. Coercive instruments enforce obedience to tax obligation by external material, for instance, tax penalty, whereas persuasive instruments induce compliance by means of psychic influence on the taxpayers, for instance, taxpayer service. An obvious question arising is which set of instruments is more important to the understanding of small and medium tax compliance and why, (Beron, 2000).

4. RESEARCH METHODOLOGY

Research methodology is defined by Leedy and Ormrod (2001) as the general approach the researcher takes in carrying out the research project. This chapter covers the methodology and describes the target population.

Target Population:

According to Mugenda and Mugenda (2003) population means all elements in a research area of interest. It is the group of individuals or objects from which samples are taken for measurement. Target population is the totality of cases that conform to some designated specifications, which could be people, events or things of interest to the researcher (Sekaran, 2000). According to Castillo (2009), target population is an entire group of individuals or objects to which researchers are interested in generalizing their conclusions. It also refers to the people events or records that contain the desired information for the study that determine whether a sample or a census should be selected (Cooper & Schinder, 2011). The target population was the employees of Kenya Revenue Authority in all the 5 regional Offices across the country.

The interest of this target population was driven by the fact that KRA requires very highly skilled workers to deliver on their respective mandates as well as vision 2030. The target population comprised of workers from Risk Management & Internal Audit Department, Ethics & Internal Audit Department, Information Communication Technology Department, Finance Department, Administration & Logistics Department, Research & Corporate Planning Department, Human Resource Department, Compliance, Risk & Quality Management Department and Kenya school of Revenue Administration. The categories of staff that were selected for the study included; Risk managers, Internal Audit officers, and Information communication technology officers, Finance Officers, Administrative Officers, Logistic Officers, Compliance & Quality managers, corporate tax managers and Human resource Officers.

Table: Sampling Frame

Officer category/Regional Office	Nairobi H.Q	Mombasa	Kisumu	Nakuru	Nyeri	Total.	Percentage
Risk managers	10	3	3	3	3	22	3.9
Internal audit officers	35	18	12	10	6	81	14.4
ICT officers	28	20	17	18	15	98	17.4
Finance officers	30	20	18	10	9	87	15.5
Admin & lgistic officers	28	18	15	10	8	79	14.1

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

Percentage	35.8	21.9	17.1	14.2	11	100	
Total	201	123	96	80	62	562	100
Human Resource Officers	6	5	3	3	3	20	3.6
Corporate Tax Officers	28	17	10	8	8	71	12.6
Compliance & quality officers	36	22	18	18	10	104	18.5

Sample and Sampling Techniques:

This study sampled 157 employees of KRA from five (5) regional offices. The choice of the five regional offices was informed by the fact that KRA is segmented into the five regions representing the whole country in matters of collection and administration of tax. The sample was selected randomly from each stratum and sample size of 532 employees represented 28% of the target population. This percentage was used because according to Creswell (2011) and Sekaran (2006) an ideal sample size of 5-20% of population is considered acceptable for most research purposes as it provides the ability to generalize for a population. The sample size was derived using the formula provided by Kothari (2008) based on 95% confidence level and 5% margin of error as follows;

$$n = z^2.p.q.N/e^2(N-1)+z^2.p.q$$

Where; N=Size of the sample

P=Sample population=-p

Z= the value of the standard variate at a given confidence level.

N = the estimate of the population size.

$$n = \frac{1.96*1.96*0.5*562}{0.05*0.05(562-1) + 1.96*0.5*0.5} = 157$$

According to Howitt and Cramer (2004) the sampling technique is the process of selecting the specific methodology to use in deciding the entities in the study. The sample should be as representative as possible of the entire population. The Researcher used stratified random sampling method to pick a sample element. Baird (2007) observed that, stratified sampling technique produces estimates of overall population parameters with greater precision and ensures that a more representative sample is drawn from a relatively heterogeneous population. The researcher chose stratified random sampling because the data was homogenous and it increased the sample's statistical efficiency, provides adequate data for analyzing the various sub populations and enables different research methods and procedures to be used in different strata (Cooper & Schindler, 2011).

This sampling method is suitable because of ease of assembling the sample and it is also considered as a fair way of selecting a sample from a given population since every member is given equal opportunity of being selected. The study generated forty (40) strata derived from derived from eight (8) categories of employees namely; Risk managers, Internal audit officers, Information Communication Technology Officers, Finance Officers, Administration & Logistic officers, Compliance & quality managers, Corporate Tax managers and Human Resource Officers From five (5) Regional Offices.

Table: Sample Size

Region	Officer category	Population	Sample (28%)
Nairobi	Risk managers	10	3
	Internal audit officers	35	10
	ICT officers	28	8
	Finance	30	8
	Admin & Logistic Officers	28	8
	Compliance & quality officers	36	10
	Corporate Tax Officers	28	8
	Human Resource Officers	6	2
Mombasa	Risk managers	3	1
	Internal audit officers	8	2

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

	ICT officers	20	6	
	Finance Officers	20	6	
	Admin & Logistic Officers	18	5	
	Compliance & quality officers	22	6	
	Corporate Tax Officers	17	5	
	Human Resource Officers	5	1	
Kisumu	Risk managers	3	1	
	Internal audit officers	12	3	
	ICT officers	17	5	
	Finance Officers	18	5	
	Admin & Logistic Officers	15	4	
	Compliance & quality officers	18	5	
	Corporate Tax Officers	10	3	
	Human Resource Officers	3	1	
Nakuru	Risk managers	3	1	
	Internal audit officers	10	3	
	ICT officers	18	5	
	Finance Officers	10	3	
	Admin & Logistic Officers	10	3	
	Compliance & quality officers	18	5	
	Corporate Tax Officers	8	2	
	Human Resource Officers	3	1	
Nyeri	Risk managers	3	1	
	Internal audit officers	6	2	
	ICT officers	15	4	
	Finance Officers	9	3	
	Admin & Logistic Officers	8	2	
	Compliance & quality officers	10	3	
	Corporate Tax Officers	8	2	
	Human Resource Officers	3	1	
Total		562	157	

5. RESEARCH FINDINGS AND DISCUSSION

Introduction:

This chapter presents the findings of the study and it is arranged according to the three research objectives that the study sought to answer. The chapter is divided into three subsections namely; introduction, background information about the respondents and the research objectives that the study sought to answer.

Response Rate:

Response rate was critical for this study due to the fact that the fixed sample quantitative data obtained from primary data of the qualifying respondents implied that there was need for a similar response rate from the questionnaire used for the construction of the quantitative primary information. The study sampled 157 respondents drawn from five (5) KRA regional offices. This was a costly and involving process which took the entire time allocated in the time plan. However, this enhanced the achievement of all the intended study objectives. The study utilized a questionnaire presented to the respondents on a personal basis to increase the response rate. The response rate is presented in Table below.

Table: Response Rate

Category	Frequency	Percentage (%)
Responded	149	94.9
Did not respond	8	5.1
Total	157	100.0

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

From the study, the researcher successfully received responses from 149 respondents. The instruments were complete and taken as valid for data analysis which translated to a response rate of 94.9 %. The 8 questionnaires that were either not received at all or were received incomplete accounted for 5.1% of the sample and therefore not considered in the analysis. This was a dependable representation of the targeted population thus adequate for the study analysis. Mugenda and Mugenda (2012) 50% response rate is adequate, 60% is good, while 70% and above is rated to be very good. This implies that the response rate of 94.9% is satisfactory and good for analysis, drawing conclusions and making recommendations.

Demographic Information:

This section concerns itself with outlining and presenting the findings obtained from the questionnaires distributed to the respondents. Prior to the objectives guiding the study, it was of great essence to find out the background information of the participants. The analysis relied on this information of the respondents so as to classify the different results according to their knowledge and responses. This was determined by looking at the gender of the respondents, their age brackets, level of education of the respondents, working experience and their designations.

Gender of the Respondents:

The research sought to find out the gender of the respondents. The subject of gender is considered fundamental in this study largely because it could help the researcher get a balanced view from both genders. Table shows the distribution of the respondents by gender.

 Gender
 Frequency
 Percent

 Male
 89
 60.1

 Female
 59
 39.9

 Total
 149
 100.0

Table: Gender of the Respondents

From the study, eighty nine (60.1%) of the respondents were male respondents while 59 (39.9%) of them were female. This implies that the number of male staffs in the Organization is more than the female staffs. These results show that KRA has both male and female staffs and views expressed in these findings can be taken as representative of the opinions of both genders. The findings show that the enterprises studied had both male and female members. The findings imply that the views expressed in these findings are gender sensitive and can be taken as representative of the opinions of both genders.

Age of the Respondents:

The study sought to determine how the respondents were distributed across the various age brackets and consequently their opinions on the topic of study. Table: is a tabular presentation of the results.

Age Category	Frequency	Percent	
26 - 35 years	47	31.5	
36 - 45 years	67	45.0	
Over 45 years	35	23.5	
Total	149	100.0	

Table: Age Brackets of the Respondents

Table: shows that sixty-seven of the respondents (taking 45.0% of the responses) reported that they were between 36 and 45 years of age. The second category comprised of forty-seven respondents (equal to 31.5%) whose ages were between 26 years and 35 years, while the remaining 23.5 percent (35 respondents in number) indicated that their ages were more than 45 years. This implies that the Institution employs staff of different age brackets from 26 years but are mainly dominated by middle aged population hence the results depicted in this study are likely to be representative of the real situation regarding the Effects of tax policy reforms on national public revenue growth in Kenya.

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

Level of Education:

The study sought to establish the highest academic qualifications attained by the respondents. The results are as depicted in the Table.

Academic Qualification	Frequency	Percent	
College	49	32.9	
Bachelors degree	71	47.7	
Postgraduate	29	19.5	
Total	149	100.0	

Table: Level of Education of the Respondents

The outcomes depicted in Table show that the majority of the respondents had at least a bachelor's degree and hence understood the information sought by this study. According to the foregoing tabulation, 47.7% of the respondents unanimously reiterated that they had attained a university level of education. Thirty two percent of the respondents comprised of stakeholders who had attained a college level of education as their highest level of education, while nineteen percent of the respondents had a postgraduate level of education. These outcomes mean that majority of the respondents had at least a college level of education and hence understood the information sought by this study.

Working Experience:

The respondents were requested to indicate the number of years they had been working in the Organization. According to Figure: 47.9% of the respondents unanimously indicated that they had been working in the Organization for a period of 5 to 10 years, 26.8% of them had been working in KRA for a period of 11 to 15 years, 18.1% of them had been working in the Institution for less than five years whereas 6.7% of them had been working in the Organization for a period of more than 15 years. This implies that most of the respondents participating in this study had been working in the Organization for an ample time thus they were conversant with the information sought by the study.

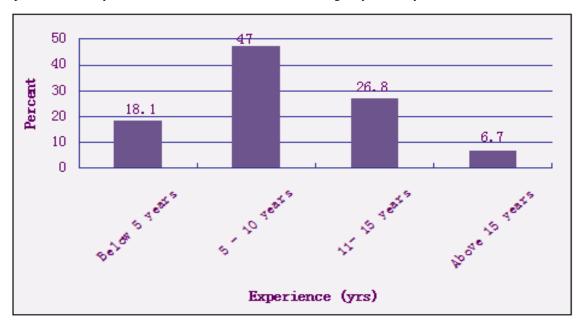


Figure: Respondents Working Experience

Respondents Designation:

This study sought to establish the distribution of the respondents in terms of designations in their Institution as outlined in Figure. Forty five percent (45.6%) of the respondents comprised of employees working in the lower cadres like accountants, and supervisors, 42% of them were assistant managers, 9.4% were managers while 3.4% of the respondents were the senior managers working in KRA. These responses show that the respondents that participated in the study were mainly those involved in the implementation of tax policy reforms in the Organization.

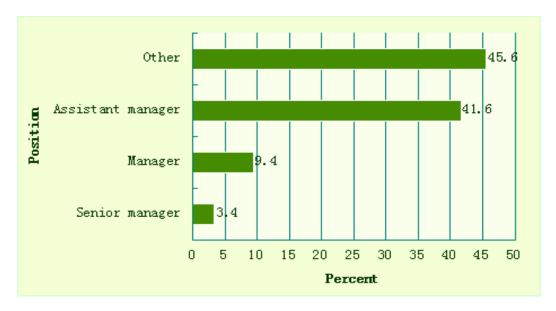


Figure: Respondents' Position in the KRA

Tax Enforcement:

In its second objective the study sought to determine how tax enforcement influences national public revenue growth in Kenya. In this regard, the study was inquisive of the extent to which tax enforcement reforms in KRA affect public revenue growth in Kenya. From the study, 45.7% of the responses indicated that tax enforcement reforms in KRA affect public revenue growth to a great extent, 32.6% of them indicated to a moderate extent, 17.4% of the respondents pointed that tax enforcement reforms in KRA affect public revenue growth to a very great extent, while 4.3% of the respondents reiterated that tax enforcement reforms in KRA affect public revenue growth to a little extent. These results imply that tax enforcement reforms in KRA have a considerable effect on public revenue growth.

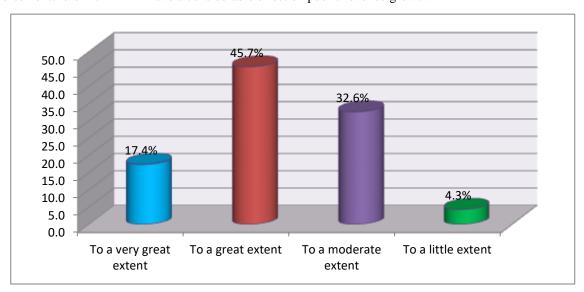


Figure: Extent to which Tax Enforcement Reforms affect Revenue Growth

The respondents were provided with several aspects of tax enforcement reforms in KRA and asked to rate the extent to which these aspects influence public revenue growth in Kenya. The results are as depicted in Table below.

Table: Aspects of Tax Enforcement Reforms that Influence Revenue Growth

Aspects of tax enforcement	Mean	Std. Dev.
Tax Audits	2.9396	.77310
Tax Assessment	2.8725	.78231
Compliance	2.9664	.80047

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

The result in Table: indicated that the given aspects of tax enforcement reforms influence public revenue growth to a moderate extent. Compliance had the greatest influence on public revenue growth as shown by a mean score of 2.9664, followed by tax audits shown by a mean score of 2.9396 and finally tax assessment shown by a mean score of 2.8725. The study further sought to establish the various indicators used for Tax enforcement by KRA. Table below shows the results on the respondents' level of agreement on the extent to which each of them is practiced by KRA.

Table: Agreement with Indicators for Tax Enforcement

Indicators used for Tax enforcement	Mean	Std. Dev.
KRA has an Audit department	3.5342	.85153
Audit department has competent personnel	2.8658	.79405
Audit department conduct tax audits on tax payers often	3.1342	.89788
Tax audit helps tax payers on compliance	3.1745	.84415
Tax assessment helps to improve tax payers compliance	2.9396	.75541
Assessment improves on tax targets at KRA	3.0134	.83006
Compliance assist in solving tax evasion cases amongst tax payers	3.0805	.80971
Tax Compliance assists in improving on tax avoidance amongst tax payers.	2.8389	.77169
Tax audit and compliance assist in increase of more tax payers into the taxable blanket.	2.9128	.77923

The tabulated results above indicate that there was agreement on that KRA has an Audit department as shown by a mean score of 3.5342. However, the respondents showed neutrality on that Tax audit helps tax payers on compliance as shown by a mean score of 3.1745; assessment improves on tax targets at KRA as shown by a mean score of 3.0134; Audit department conduct tax audits on tax payers often as shown by a mean score of 3.1342; Compliance assist in solving tax evasion cases amongst tax payers as shown by a mean score of 3.0805; Tax assessment helps to improve tax payers compliance as shown by a mean score of 2.9396; Tax audit and compliance assist in increase of more tax payers into the taxable blanket as shown by a mean score of 2.9128; Audit department has competent personnel as shown by a mean score of 2.8658 and tax Compliance assists in improving on tax avoidance amongst tax payers as shown by a mean score of 2.8389. These results imply that KRA innovated Tax enforcement approaches and techniques to address tax compliance, assist in solving tax evasion cases, assists in improving on tax avoidance and increase of more tax payers into the taxable blanket. These study findings are supported by Donnelly and Heneghan (2010) who found that higher audit probabilities and severe penalties encourage tax compliance. Sagas, Nelimalyani and Kimaiyo (2015) established that tax enforcement reforms had a positive impact on the overall tax structure and on the individual tax handles, even though the impact of the reforms was not always uniform.

6. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Major Findings:

The main objective of this study was to examine effect of tax policy reforms on National Public revenue growth in Kenya. The following is a summary of the results obtained.

Tax Enforcementt Reforms:

The study established that tax enforcement reforms in KRA affect public revenue growth to a great extent. Compliance, tax audits and tax assessment influence public revenue growth to a moderate extent. There was agreement on that KRA has an Audit department, However, neutrality on that tax audit helps tax payers on compliance, assessment improves on tax targets at KRA, audit department conduct tax audits on tax payers often, compliance assist in solving tax evasion cases amongst tax payers, tax assessment helps to improve tax payers compliance, tax audit and compliance assist in increase of more tax payers into the taxable blanket, audit department has competent personnel and tax compliance assists in improving on tax avoidance amongst tax payers.

Conclusion:

The study concludes that tax reforms have significant influence on public revenue growth. The study concludes that growth of national public revenue shows an indifferent change as a result of tax policies at KRA. The need for tax revenue to make a larger contribution to the overall consolidation effort has been coupled with additional challenges stemming

Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 - March 2019, Available at: www.researchpublish.com

from the need to support the recovery and restore sustained growth over the medium and longer term through total taxes collected. Tax bands, tax returns management policies, tax audit policies, tax remittance/payment policies and taxpayer regimes, recruitment policies and tax collection enforcement policies affect public revenue growth in Kenya. KRA reforms facilitate Government budgets, KRA reforms lead to improved tax collections, KRA reforms results to improve per capita income, KRA reforms enhances gross fixed capital formation, KRA reforms results to improved gross savings rate and KRA reforms facilitates achievement of public service targets.

The study concludes that tax enforcement reforms had a positive impact on the overall tax structure and on the individual tax handles thus tax administration reforms in KRA have a considerable effect on public revenue growth.KRA innovated Tax enforcement approaches and techniques to address tax compliance, assist in solving tax evasion cases, assists in improving on tax avoidance and increase of more tax payers into the taxable blanket. The study concludes that human resource revitalization in KRA plays an integral role on public revenue growth in Kenya.It involves application of general human resource principles to the management of employees' wages and conditions to enhance their commitment to service delivery.

Knowledge imparts tax compliance and the reforms had a bigger impact on taxes and hence public revenue growth. The study concludes that business automation system in KRA has an enormous effect on public revenue growth in Kenya. Business automation system provides efficient and effective services to taxpayers and public and reduce interaction with staff, improve tax collection, facilitate seamless sharing of information across KRA and relevant third parties for datamatching purposes in order to detect non-compliance and to facilitate combined enforcement actions.

Recommendations:

To ensure that tax policy reforms enhance national public revenue growth in Kenya, the study makes the following recommendations:

Tax Enforcement:

There is need for a well-functioning tax enforcement system to increase tax compliance, tax audits and tax assessment. The tax system should be able to tap the gains from economic growth. This would be enhanced by by ensuring efficient computerization of KRA systems to increase compliance as it would improve the interaction of the KRA with taxpayers and facilitate follow-up using the PIN. Computerization would also make it easier to consolidate payment of all taxes and levies.

Areas for Further Research:

The study has examined the effect of tax policy reforms on National Public revenue growth in Kenya, further studies should be conducted to investigate the influence of business automation system on the public revenue growth in Kenya. This is because, despite KRA having invested heavily on technological systems with an aim of enhancing tax collection, the factor was found to contribute the least to public revenue growth.

REFERENCES

- [1] Adari, M. (2007). Value added tax in Kenya. Unpublished MA Research Paper.
- [2] AfDB. (2009). *Selected Statistics on African Countries*, Volume XIX. Abidjan, Cote *Africa*. Paper presented at the Fourth AERC Senior Policy Seminar. Gaborone,
- [3] Aidt, T. (2003). Economic Analysis of Corruption: A Survey. The Economic Journal, 113(491): 632-652
- [4] Amin. A.A. (2000). Equity, microeconomic and efficiency effects of Revenue Policy in Approach. IMF Staff Papers, 26(1) 1-18.
- [5] Attila, G. (2008) *Corruption, Taxation and Economic Growth:* Theory and Evidence. CERDICNRS Working Paper, 2008
- [6] Boradway, R., Roberts, S. & Shah, A. (1994). Fiscal federalism dimensions of tax reform in developing countries. Working Papers Series 1385. The World Bank, Botswana.
- [7] Brockington, D. (2008). Corruption, Taxation and Natural Resource Management in Tanzania. *Journal of Development Studies*, 44(1), 103 126.

- Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 March 2019, Available at: www.researchpublish.com
- [8] Djankov, S., McLiesh, C. & Schleifer, A., (2010). Private credit in 129 countries. *Journal of Financial Economics*, 84,299-329.
- [9] Dreher, A. & Herzfeld, T. (2005). The Economic Costs of Corruption: A Survey and New Evidence.
- [10] Fisman, R. & Svensson, J. (2002). Are Corruption and Taxation Really Harmful to Growth? Firm level Evidence.
- [11] Fjeldstad, O-H. & Tungodden, B. (2001). *Fiscal Corruption*: A vice or a virtue? CMI Working Paper, 2001:13 Genesis 47:24 Holy Bible
- [12] Gale, W. & Samwick, A. (2014) Effects of Income Tax Changes on Economic Growth. *European Economic Review*, 37, 409-417.
- [13] Ghura, D. (2008). *Tax Revenue in Sub-Saharan Africa*: Effects of Economic Policies and Corruption. September 1998.
- [14] Government of Kenya (GoK) (2003). *Economic Recovery Strategy for Wealth and Employment Creation*, 2003–2007. Nairobi: Ministry of Planning and National Development.
- [15] Hoffiman, P. & Kathryn, N. (2004), Fiscal Crises, Liberty, and Representative Government, 1450 1789, p. 300.
- [16] Karingi, S. N., Kimenyi, M. S. & Ndung'u, N. S. (2001). Beer Taxation in Kenya: an Assessment. KIPPRA Discussion Paper Series DP/4/2001. Nairobi: KIPPRA.
- [17] Karingi, S. N., Wanjala, B., Kamau, A., Nyakang'o, E., Mwangi, A., Muhoro, M. & Nyamunga, J. B. (2005). *Fiscal Architecture and Revenue Capacity in Kenya*. KIPPRA Discussion Paper Series DP/45/2005. Nairobi: KIPPRA.
- [18] Karingi, S.N. & Wanjala, B., (2005), *The Tax Reform Experience of Kenya*, Research Paper 2005/67, United Nations University World Institute for Development Economics (UNU WIDER), Finland
- [19] Kimuyu, I., Wagacha, M. & O. Abagi, (2009), *Kenya's Strategic Policies for the 21st Century:* Macroeconomic and Sectoral Choices. Nairobi: Institute of Policy Analysis and Research (IPAR).
- [20] Kiringai, J., N. S. Ndung'u, and S. N. Karingi (2002). Tobacco Excise Tax in Kenya: an Appraisal. KIPPRA Discussion Paper Series DP/21/2002. Nairobi: KIPPRA.
- [21] Li, H.; Xu, L. C.; Zou, H. (2000). Corruption, Income Distribution, and Growth. Economics and Politics, *Blackwell Publishing*, 12 (2): 155 182.
- [22] Mansfield, C.Y. (1972). Elasticity and buoyancy of a tax system A method applied to Paraguay. *IMF Staff Papers* 19(1).
- [23] Mauro P. (2006). The Effects of Corruption on Growth, Investment, and Government Expenditure.
- [24] Mauro, P. (2005). Corruption and Growth. Quarterly Journal of Economics 110 (3), 681 712
- [25] Morrisset, J. & Izquierdo, A. (1993) *Effects of Tax Reform on Argentina's Revenues*". WPS 1192. Tax reform in developing countries. In D. Newberry and N. Stern, eds., The Theory of Taxation for Developing Countries. Oxford: Oxford University Press. Nicholson Ltd.
- [26] Njuguna, A. E., Karingi, S. N. & Kimenyi, M. S. (2003). Alternative Methodologies for Measuring Kenya's Potential Output and Output Gap. *KIPPRA Discussion Paper Series* DP/28/2003. Nairobi: KIPPRA.
- [27] Nyamunga, J.B. (2001). Assessing taxation in Kenya: The case of VAT. Paper presented at a workshop on "Taxation in Kenya" organized by the Kenya Institute for Public Policy Research and Analysis (KIPPRA) in collaboration with International Tax and Investment Centre (UK). Nairobi, Kenya.
- [28] OECD (2011). OECD Tax Policy Studies, No. 21: Taxation and Employment. Paris: OECD.
- [29] OECD (2012). Economics department policy notes No. 9: Income inequality and growth. Paris: OECD.
- [30] Parkin, M. (2006), Principles of Microeconomics, p. 134
- [31] Pellegrini, L.; Gerlagh, R. (2004). Corruption's Effect on Growth and its Transmission Channels. Kyklos, 57 (3); 429 456 August 2004

- Vol. 6, Issue 2, pp: (1076-1091), Month: October 2018 March 2019, Available at: www.researchpublish.com
- [32] Prest, A.R. (2005). *Public Finance in Developing Countries*. London: Weidenfeld and Research Paper No. 20, African Economic Research Consortium, Nairobi.
- [33] Richardson, G. (2006). Taxation determinants of fiscal corruption: evidence across countries. *Journal of Financial Crime*, 13(2), 323 338.
- [34] ROK. (1999). Economic Survey 1999. Republic of Kenya. Nairobi: Government Printer.
- [35] Ross, M., L. (2007). Does Taxation Lead to Representation?
- [36] SEATINI (2010). TRIPs compliance and social welfare: The implications of intellectual property law reform for Uganda's socio-economic development. *SEATINI publication*, February
- [37] Tanzi, V., & Zee, H. H. (2000). *Tax Policy for Emerging Markets: Developing Countries*. IMF Working Papers WP/00/35. Washington, DC: International Monetary Fund.
- [38] Tanzi, V.; Davoodi, H. (2000). *Corruption, growth and Public Finances*. IMF Working Paper the fiscal balance) in developing countries, IMF Working Papers, WP/88/95, Washington, D.C.
- [39] UNCTAD, (2012). Trade and Development Report. New York and Geneva: United Nations
- [40] Van der Hoek, M.P. (2008). *Enlarging the European Union:* Taxation and Corruption in the New Member States. MPRA Paper No. 11546, November 2008.
- [41] Wagacha, M. (1999). Fiscal policies and their macroeconomic implications for Kenya. Washington, D.C.
- [42] World Bank, (2005). Labour Taxes and Employment in the EU8. Washington: The World Bank.
- [43] World Bank, (2013). Scientific research: Latvia: Who is Unemployed, Inactive or Needy? Assessing Post-Crisis Policy Options. Washington: The World Bank.
- [44] World Bank. (2010). Argentina: Tax Policy for Stabilization and Economic Recovery. www.kra.go.ke/portal
- [45] Zasova, A., (2011). Labour market institutions: an obstacle or support to Latvian labour market recovery? *Baltic Journal of Economics*, 11 (1), pp. 5-24.