

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

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**Abstract:** Kenya has been over years faced by challenges of meeting its budgets resulting to too much domestic and external borrowing. 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 government budget estimates have grown over a period year from Ksh 508b in 2006/2007 financial year to Ksh 2.2 trillion in 2016/2017 financial year. In spite of these efforts by the government there are still a myriad of problems militating against effective and efficient tax system in Kenya and therefore this study examined the role of tax policy reforms on public revenue growth in Kenya. The specific objectives were to; to determine the effect of tax administration, 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 administration, ANOVA test was conducted to test the significance of the overall model and a correlation analysis was used to determine the strength of relationship between the variables. The study found that KRA tax reforms influence National public revenue growth in Kenya. Tax administration reforms The emphasis should be increased on improving tax administration to broaden the tax base so that existing tax rates can be reduced without affecting government revenues. The research findings were expected to benefit KRA as well as other Government collection agents.

**Keywords:** Effect, Tax Policy, Public Revenue Growth In Kenya.

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## 1. INTRODUCTION

### Background of the Study:

Tax reform is the process of changing the way taxes are collected or managed by the government. It may involve the adoption of a Value Added Tax (VAT), the expansion of the VAT, the elimination of stamp and other minor duties, the simplification and broadening of personal or corporate income or asset taxes, or the revision of the tax code to enact comprehensive administration and criminal penalties for evasion (Sundet & Moen, 2009). Institutional aspects of tax reform involve the Semi-autonomous Revenue Authority Model, where traditional line departments are separated from

the Ministry of Finance and granted the legal status of semi-autonomous authorities. Tax reform involves broad issues of economic policy as well as specific problems of tax structure design and administration. At the theoretical level, tax reforms are initiated either following an economic crisis or as a response to international pressure (Mahon, 2007).

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). The key to successful public finance management is a matter of governance to balance the economic, managerial and political roles of public finances. When fiscal governance is poor has a little chance of succeeding the fiscal policy objectives. The Government will also pursue comprehensive civil service reforms aimed at improving the efficiency of delivery and quality of public services, improving taxation through payroll management and enhancing a regular auditing to create a further fiscal space. 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, McLiesh & Schleifer, 2010).

Kefela (2009) reported that few developing countries have managed to establish their tax systems in such a way as to achieve an appropriate level of revenue and to keep tax-generated mis-allocations within tight bounds. In most other countries, neither has it been possible to ensure the financing of public expenditure nor have the tax systems operated in conformity with economic policy objectives. Although there have been some changes in tax policies along the predicted lines, to date these changes on the level of collections, the composition of revenues, the convergence in tax rates have been minimal, even when present. While the economics of these changes may well be plausible, the process by which they occur seems slow, erratic, and uncertain, and disentangling the empirical evidence remains difficult. Faced with these difficulties, some analysts have applied a standard tax competition model to globalization issues (Zodrow & Mieszkowski, 2006).

According to Bird (2009), developing countries often face difficulties when dealing with the tax administration. Many of the difficulties with the tax authorities are the consequence of poorly conceived tax policies. Complaints about complexity and/or ambiguity of the tax laws, high tax rates and a lack of an integrated fiscal strategy that determines the overall burden placed on businesses community are numerous (Olayemi, 2009). Complexity of the tax system leads to non-compliance with tax laws, since taxpayers find it hard to meet their tax obligations (Shekidele, 2009). One of the key reasons for undertaking tax reforms in Kenya was to address issues of inequality and to create a sustainable tax system that could generate adequate revenue to finance public expenditures.

Unlike many other Sub-Saharan countries, Kenya is a high tax-yield country with a tax-to-GDP ratio of over 20%. 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. Like most developing countries, it has had to challenge with the common problems of tax systems with rates and structures that are difficult to administer and comply with; that are unresponsiveness both to growth and discretionary tax measures hence offering low tax productivity; that raise little revenue but introduce serious economic. They attempt to use income taxation to address equity objectives; however, Kenya fell into the same trap as many other countries that had hoped to use income taxation for redistributing purposes (Karingi & Wanjala, 2005).

### **Statement of the Problem:**

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. Given the destabilizing effects of the budget deficits and the fact that they were becoming unsustainable, the Kenya Government came up with measures to address this problem the most notable fiscal policy proposals adopted being the Tax Modernization Programme (TMP) and the Budget Rationalization Programme (Murith & Moyi, 2009).

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.

### **Specific Objectives:**

#### **The study sought to address the following;**

1. To establish the effect of tax administration on national public revenue growth in Kenya.

## **2. LITERATURE REVIEW**

### **Fischer Tax Compliance Model:**

Tax compliance determinants based on Fischer model (Fischer, 1992) have been an important subject of research in developed countries over the past couple of years. Fischer tax compliance model provides a framework for understanding the influence of socio-economic and psychological components on taxpayers' compliance decision. These factors are categorized by Fischer and associates (Fischer, 1992) into 4 groups in his expanded model (Fischer Model): Demographic (e.g.- age, gender and education), Noncompliance opportunity (e.g. income level, income source and occupation), Attitudes and perceptions (e.g. fairness of the tax system and peer influence) and Tax system/structure (e.g. complexity of the tax system, probability of detection and penalties and tax rates).

Thus Fishers' Model of tax compliance incorporates economic, sociological and psychological factors into a comprehensive one. In Kenya Revenue Authority, revenue collection is managed by three Revenue departments, that is, Customs services, Domestic Taxes and Road Transport. According to Fishers' model of tax compliance, tax revenue has been suffering some setbacks despite the fact that the VAT registered tax payers population has grown substantially in the last ten years as well as the evident economic growth that the country has experienced in the recent past. Most of the tax administrations are organized along functional lines.

According to this theory, behaviors of the individuals within the society are under the influence of definite factors, originate from certain reasons and emerge in a planned way. The ability to perform a particular behavior depends on the fact that the individual has a purpose towards that behavior. The theory thus suggests that Kenyan taxpayers would comply better when the reforms are favourable. The theory lays emphasis on changing individual attitudes towards tax systems.

### **Optimum Income Tax Theory:**

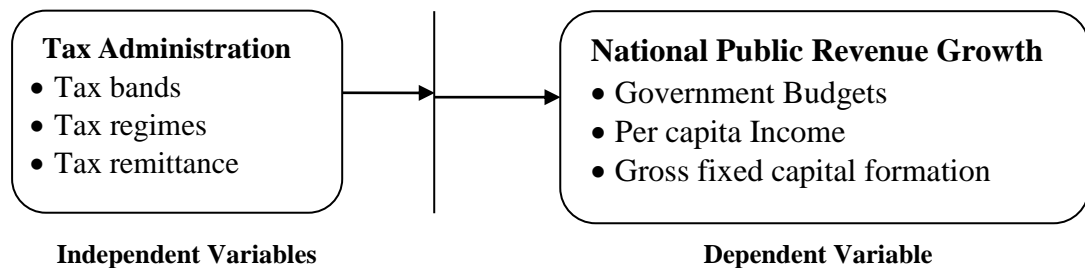
The optimum income taxation theory was pioneered by Mirrlees (1971) though in the recent past there are a number of theorists who have examined it including Creedy (2009), O'Brien (2009) and Sorensen (2010). The theory postulates that in any economic system where equality is valued, the assumption is, income taxation would be a vital instrument of policy. It is further stated that the redistributive progressive taxation is often linked to a man's income. Mirrlees observed that, due to the use of people's economic performance as evidence of their economic potentialities, absolute equality of social marginal utilities of income ceases to be desirable for the tax system that would bring about that result would completely discourage unpleasant work. The foregoing observation leads to a number of queries regarding the kind of principles that are supposed to govern optimum income tax, the nature of+ the tax schedule, and the degree of inequality upon the establishment of the tax schedule.

Recent advances in optimal tax theory have made the theory far much easier to apply and could possibly facilitate to explain some of the current trends in international tax policy (Sorensen, 2010). According to O'Brien (2009), the classical political economists came up with a normative analysis of tax policy which tended to follow a principles-oriented approach where it was stated that a good tax system ought to satisfy certain desirable criteria. According to this theory, tax system should be productive, computable, popular, equal, frugal, divisible, and incorruptible. It is exemplified that in the event that the social welfare issues implied by the current tax system are not monotonically decreasing with the taxpayer's

level of income, it would presumably be difficult to defend such a system and as such reforming the system would be considered. The optimum income taxation theory can be adopted to explain the necessity of reforming the customs system with a view of maximizing tax revenue.

### 3. CONCEPTUAL FRAMEWORK

The independent variables is tax administration; Dependent variable is National public revenue growth.



#### Tax Administration:

The fact that attempts to increase tax revenue through increasing the capacity of KRA has failed is not seen as critical by either the international financial institutions or the Kenyan government. In fact, the international financial institutions seem more than pleased with the performance of the KRA to date. Perhaps the relaxed attitude towards the KRA's failings results from the policy/administration distinction that often lurks at the base of the justification for exporting good governance and good practice ideas. Recently, the structural reforms attached to aid packages have come under great scrutiny and have been criticized for increasing poverty levels and being antidemocratic (Sen, 2006)

As a result international financial institutions have softened such demands, with donors now looking to ensure 'ownership' and 'sustainability' where once compliance and efficiency were the aims. However, the pursuit of good governance has largely been resistant to this policy sea-change, because international organizations can argue that good governance reforms do not interfere with a government's policies, they merely suggest the best way that those policies can be enacted. As they are merely devices for helping the domestic government to implement its own policy choices in a more effective manner, the argument goes; there can surely be nothing undemocratic or questionable about such good governance reforms, (Shalo, 2003).

This distinction between policy and administration has been internalized into the administration of the countries themselves. In describing the role of the KRA Waweru argues that 'We need to distinguish tax policy from tax administration. At the risk of repeating the obvious, let us bear in mind that promulgation of tax policy is the domain of the Ministry of Finance (Treasury), while tax administration in Kenya is vested in the Kenya Revenue Authority (KRA, 2000).

The emphasis that has been placed on increasing tax revenue through improvements in tax administration is itself a tax policy and to dress it up as anything else will distort the options available to the Kenyan government. This is because in an economy as strapped for cash as the Kenyan economy the financial resources, time and energy that have been spent on the KRA represent a significant and real opportunity cost to the Kenyan government. These are resources that could have been spent elsewhere but have not been as a direct result of the focus on tax administration. What is more, the KRA and the Kenyan government are being tempted into considering the expenditure of vast sums on further improvements to the KRA's capacity. Speaking this year, Waweru noted that use of information technology in support of tax administration had boosted the tax administration in countries as diverse as Spain, Mexico, Canada, Singapore and New Zealand, (Green, 2009).

Lamenting the analysis of the John F. Kennedy School of Government in 2000 that 'Kenya failed to computerize Income tax administration in the 1970s and Customs administration in 1989', Waweru continued 'We realise that we must use technology to support tax administration, even if this is an expensive venture. How else shall we be able to address the problems of transfer pricing, taxation of e-commerce and tax evasion? We look forward to the time all the KRA departments, both revenue and support, will be networked, and taxpayers and other stakeholders will be able to transact business with KRA online, (Waweru, 2004).

The evidence from recent attempts also suggests that such a computerization policy is unlikely to make much of a difference. This is for two reasons; Firstly computerization programs have a history of failure in Kenya. Either the contract goes to an unsuitable company, or the program is left incomplete and leaves an organization with two incompatible administrative systems in which case it is inevitably the newer system that is abandoned. The fate of the computerized passport system which was the brainchild of the US government following the Embassy Bombings in 1998, and which is currently at the center of one of Kenya's biggest ever corruption scandals is a classic example of the former. The attempt to computerize Kenya's customs administration in 1989 is a pertinent example of the latter. Secondly, it is unclear that a more efficient KRA would lead to greater tax revenue, (Turbin, 2001).

The resources that have so far been spent on increasing capacity have not resulted in significant increases in tax revenue, and what needs to be proved before more is spent is that such increases exist to be realized. There is nothing wrong with having closing the taxation gap as a long term plan but what is dubious is the idea that there is scope for realizing serious gains in revenue from income tax by closing the taxation gap in the short-term. What seems more likely is that there is little scope for gains in this area for a number of reasons, most importantly the widespread levels of poverty which are increasing year on year and the elusive nature of the informal economy. In other words the supposed taxation gap which the KRA is hell bent on closing may in reality be a mirage that, as the KRA perceives itself to be getting closer to closing it, will simply slip further away, (Dessler, 2013).

The government, through its income tax system, is only contributing to this poverty, and to the corruption perpetuated by need. It is widely accepted that public employees will take 'gifts' on the side to make up their income. Such gifts can range from police officers who routinely offer to reduce your fine if you don't ask for a receipt, to hospital officials working at 'free' hospitals taking small payments for health services. While government officials do not earn enough to live and support their dependents, such 'graft' will remain endemic and public perceptions concerning the legitimacy of graft will continue to be ambiguous. Unfortunately, it is partly pressure from international financial institutions that has kept wages for government employees low. Where there is pressure to balance the budget and decrease government expenditure, the Kenyan government will attempt to keep service provision consistent, while forcing funding down, (Daris, 2003).

Although it is true that there are areas of the Kenyan economy that are currently evading taxation and undoubtedly could contribute, it is also true that much of the informal economy exists as the informal economy because, were it formalized, it would fail to achieve profitability. As a result, attempts to formalize certain areas of the informal economy may lead to a loss of 'informal jobs'. What is needed if the informal sector is to be effectively formalized is to provide the support and infrastructure to that sector to enable the transition to be survived, (Green, 2007).

This is something increasingly recognized by international financial institutions and the Kenyan government. According to the latest Economic Recovery Strategy released by the Kenyan government, 'The false dichotomy between the formal and informal sectors in our economy has only been meaningful in as far as the small enterprises remain small, are denied needed services, and infrastructure, and do not pay taxes. This strategy for economic recovery progressively seeks to eliminate this dichotomy by providing infrastructure and services, particularly financial, to small and medium enterprises and by ensuring that they pay taxes, (Kenyan Ministry of Planning and National Development, 2003).

In other words, for companies to fulfill their duty to pay taxes to the government, the government must fulfill their own duty to provide infrastructure and services to these companies. The government, if it wants to formalize more of Kenya's economy, must do more than simply ensure that more people and businesses pay taxes. Whilst this approach is much more realistic, it is unlikely to see an increase in resources available to the government in the short term, because providing the infrastructure to support the formalizing of the informal sector is likely to cost as much as, if not more than, the formalizing would initially bring in by way of increased tax revenue. Furthermore, much of the taxation gap that the Authority has set his sights on closing is the result of tax breaks for the political friends of the government and institutionalized corruption by government members themselves and is consequently beyond the reach of the KRA. The international community is more than aware of this problem, (Kenya Ministry of Planning and Development 2004).

In addition to the fact that replacing taxes from trade with domestic taxes may not be feasible, if it were possible it would most likely be a highly regressive move. Given that direct taxation is unlikely to be able to make up the lost revenue, the Kenyan government is likely to turn to VAT. Although there are problems with expanding VAT as discussed above, VAT collection is far straighter forward than direct taxation. However, an increase in the rate of VAT will increase incentives for companies to stay in the informal sector and 'dodge' the tax. This may damage tax compliance and constrain attempts



to expand the tax base. Furthermore, VAT hurts those who consume a higher proportion of their income (to the extent that standard consumption goods such as basic foodstuffs are in the formal sector) and is therefore damaging to the standards of living of the poorest members of society, (Stotsky *et al.*, 2000).

KRA has come up with effective systems and administration measures that have enhanced protection of revenue collection, efficient and effective provision of services to public and taxpayers. The system has on-line services such as; electronic transactions, enquiries and electronic applications for KRA processes. The revised administrative and systems has components such as Taxpayer Register (TRE), Tax Returns Processing (TRP), Banks Collection (BCL), Taxpayer Services (TPS), External Information Management (EIM), Data Base Management (DBM), Taxpayer Account (TCA), Payment Plans Processing and Control (PPP) and Tax Credits and Refunds (TCR). All these have contributed greatly to the tax collections growth, (KRA, 2006).

#### **4. EMPIRICAL REVIEW**

##### **Tax Administration:**

Wawire (2000) did a study on the tax buoyancy and income-elasticity of Kenya’s tax system. Tax revenues from various sources were regressed on their tax bases. The study concluded that the tax system had failed to raise necessary revenues. However, the shortcomings of the study were that it never considered other important determinants of tax revenue, for instance the unusual circumstances that could have affected tax. It also never disregarded tax revenue data by source hence it was difficult to say which tax bases contributed more to the exchequer. Finally, it never considered the time series properties of the data used.

Muriithi and Moyi (2003) did a study on the productivity of Kenya’s tax structure in the context of the tax reforms focusing on pre and post reform period. In the study, they assessed the buoyancy and elasticity of individual taxes and the overall tax system. Their findings suggested that tax reforms had a positive impact on the overall tax structure and on the individual tax handles, even though the impact of the reforms was not always uniform. The reforms had a bigger impact on direct taxes than on Imperial Journal of Interdisciplinary Research

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#### **5. RESEARCH FINDINGS AND DISCUSSION**

##### **Tax Policy Reforms and National Public Revenue Growth:**

This section presents the findings and discussion on national public revenue growth and the KRA reforms. The study sought to find out the extent to which KRA reforms influence public revenue growth in Kenya.

##### **Public Revenue Growth:**

The study sought to determine the extent to which KRA reforms influence Public revenue growth.

**Table: Extent to which KRA Reforms Influence Public Revenue Growth**

<b>Extent</b>	<b>Frequency</b>	<b>Percent</b>
Not at all	1	.7
Little extent	39	26.2
Moderate extent	60	40.3
Great extent	45	30.2
Very great extent	4	2.7
Total	149	100.0

According to the results depicted above, 40.3% of the respondents reiterated that KRA reforms influence public revenue growth in Kenya to moderate extent, 30.2% of them indicted to great extent, 26.2% of the respondents reiterated that KRA reforms influence public revenue growth in Kenya to little extent, while 0.7% indicated that KRA reforms do not influence public revenue growth in Kenya at all. These results are an indication that reforms have significant influence on public revenue growth.

The study further sought to establish the extent to which KRA reforms influence various aspects of public revenue growth in Kenya. Table shows the results obtained.

**Table: Extent to which KRA Reforms influence aspects of Revenue Growth**

Aspects of public revenue growth	Mean	Std dev
Government budgets	3.1342	.85153
Per capita income	2.9329	.76815
Gross fixed capital formation	2.8456	.76868
Gross savings rate	3.0470	.85689

From the study, majority of the respondents indicated that KRA reforms influence government budgets to a moderate extent as shown by a mean score of 3.1342. This was followed by gross savings rate, then per capita income and gross fixed capital formation all to a moderate extent as shown by mean scores of 3.0470, 2.9329 and 2.8456 respectively. These results imply that KRA reforms have moderate influence on various aspects of public revenue growth in Kenya.

The study further sought to establish the respondent's level of agreement with various statements on growth of national public revenue as a result of tax policies at KRA. The results are as depicted in Table below.

**Table: Growth of National Public Revenue as a Result Of Tax Policies**

Statements	Mean	Std dev
KRA reforms facilitate Government budgets	2.8591	.77128
KRA reforms lead to improved tax collections	2.8658	.75029
KRA reforms results to improve per capita income	3.2215	.82073
KRA reforms enhances gross fixed capital formation	2.8926	.78103
KRA reforms results to improved gross savings rate.	3.1342	.84356
KRA reforms facilitates achievement of public service targets	2.9060	.74745

Table: shows that most of the respondents showed impartiality on that KRA reforms results to improve per capita income, KRA reforms results to improved gross savings rate, KRA reforms facilitates achievement of public service targets, KRA reforms enhances gross fixed capital formation, KRA reforms lead to improved tax collections and KRA reforms facilitate Government budget. The corresponding mean scores were 3.2215, 3.1342, 2.9060, 2.8926, 2.8658 and 2.8591 in that order. This is an indication that growth of national public revenue shows an indifferent change as a result of tax policies at KRA. This is consistent with Bird, (2013) that the global crisis has put considerable strain on inflows of international resources which have effectively forced countries to focus on budgets, tax collections, per capita income, gross fixed capital formation and gross savings rate.

#### **Inferential Analysis:**

To complement the descriptive results, the researcher conducted inferential analyses involving analysis of variance (ANOVA), Normality test, regression analysis, Karl Pearson Correlation analysis and Diagnostic tests. The dependent variable in this study was public revenue growth while the independent variables were tax administration, tax enforcement and human resource revitalization, while the moderating revenue was business automation system.

#### **Descriptive Statistics:**

Descriptive statistics for the data was analyzed in terms of mean and standard deviation. Skewness, Kurtosis and Jarque-Bera tests were also carried out to establish whether the data was normally distributed. The results are presented in Table below.

Table: Descriptive Statistics

Tax Administration	
Mean	3.789997
Std. Dev.	2.332717
Skewness	-0.179995
Kurtosis	2.064406
Jarque-Bera	1.507395
Probability	0.470623
Observations	36

The mean represents a generalization of the data. It suggests that in any given state, the data values were on average. A set of data having extremely high or low data values, the mean tends to be pulled in the direction of outliers and therefore the central tendency of the data is not achieved. As summarized in Table above the statistics indicate that Tax Administration had a mean of 3.789997 as a percentage, indicating the average value for tax administration in Kenya for the sample period and a standard deviation of 2.332717.

**Normality Test**

The classical linear regression assumes normally distributed error term. From Table above, for normality of data, skewness statistics should be within acceptable range of  $\pm 3$  and Jarque-Bera value below. The data variables are normal since the skewness statistics are within the range and Jarque- Bera values below. The data is thus suitable for further analysis.

**Karl Pearson Correlation Analysis:**

Karl Pearson Moment correlation helps in testing the relationship between the explanatory variable so that the strength of the variables can be determined, to help determine which variable best explains the relationship between tax policy reforms and public revenue growth. The results are as shown in Table

Table: Correlations between Tax Policy Reforms and Public Revenue Growth

Variables	Correlations	public revenue growth	tax administration	tax enforcement	human resource revitalization	business automation system
Public revenue growth	Pearson Correlation	1	.321	.526	.122	.166
	Sig. (2-tailed)	.	.020	.032	.039	.024
Tax administration	Pearson Correlation	.321	1	.426	.166	.174
	Sig. (2-tailed)	.020	.	.002	.024	.030
	Sig. (2-tailed)	.024	.047	.043	.046	

These results show that there is significant relationship among variable (tax administration). The results indicate that the correlation coefficients for the variable was less than 0.05 implying that the study data did not exhibit severe multi-collinearity. From the findings, there was a positive correlation between public revenue growth and tax administration with a correlation figure of 0.321 ( $p < 0.05$ ).



**Sample Adequacy for Tax Administration Factors:**

KMO and Bartlett’s Test were conducted to test sample adequacy for tax administration measures before factor analysis was carried out. The KMO index in particular is recommended when the cases to variables ratio are less than 1:5. The KMO index ranges from 0 to 1 with 0.50 considered suitable for factor analysis. The Bartlett’s test of Sphericity should be significant ( $p < 0.05$ ) for factor analysis to be suitable (Castello & Osborne, 2015). The findings in Table showed that the KMO statistic for tax administration measures was 0.731 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett’s Test of Sphericity was also highly significant (Chi-square = 355.915 with 145 degrees of freedom, at  $p < 0.05$ ). The results of the KMO and Bartlett’s Test provided justification for conducting factor analysis.

**Table: KMO and Bartlett’s Test for Tax Administration Factors**

Indicator	Coefficient
Kaiser-Meyer-Olkin Measure	0.731
Bartlett's Chi- Square	355.915
Bartlett's df	145
Bartlett's Sig.	0.000

Tax administration factors were further subjected to a One-Sample Kolmogorov-Smirnov Test to further test its normality. The results obtained in Table indicated that Kolmogorov-Smirnov Z is 1.5801 (pvalue-.014) the p-value is less than 0.05; we reject the null hypothesis and fail to reject the alternative hypothesis and conclude that the data was normally distributed.

**Table: One-Sample Kolmogorov-Smirnov Test**

Indicator	National public revenue growth	
N	149	
Normal Parameters a, b	Men	3.8518
	Std.Deviation	0.67557
Most Extreme Differences	Absolute	0.149
	Positive	0.098
	Negative	-0.149
Kolmogorov-Smirnov Z	1.58	
Asymp. Sig. (2-tailed)	0.014	

Based on the output coefficient, the obtained value of sig of the tax administration is 0.014, meaning that the value of the variable  $sig < 0.05$ . Therefore, it can be concluded that the data is normal as it did not deviate significantly from the normal distribution and for this reason it was safe to use statistical tests and procedures that assume normality of the variables.

**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 result obtained.

**KRA Tax Reforms and National Public Revenue Growth:**

The study found that KRA tax reforms influence public revenue growth in Kenya to moderate extent. Tax reforms in Kenya were initiated under the tax modernization programs in the last two decades. The major objective for undertaking reforms was to create a sustainable tax system that could generate adequate revenues to finance public expenditure and also address issues of inequality. KRA reforms influence government budgets, gross savings rate, per capita income and gross fixed capital formation to moderate extents. The global crisis has put considerable strain on inflows of international resources which have effectively forced countries to focus on budgets, tax collections, per capita income, gross fixed capital formation and gross savings rate.

The study established that there was neutrality on that KRA reforms results to improve per capita income, KRA reforms results to improve per capita income, KRA reforms results to improved gross savings rate, KRA reforms facilitates achievement of public service targets, KRA reforms enhances gross fixed capital formation, KRA reforms lead to improved tax collections and KRA reforms facilitate Government budget. Reforms have had to tackle some common problems facing tax systems in developing countries. These include improving tax administration, increasing tax productivity and reducing economic distortions created by taxes. The importance attached to different objectives such as efficiency, fairness and administrative feasibility of the tax regime has changed over the period of reforms.

#### **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 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.

#### **Recommendations:**

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

#### **Tax Administration Reforms:**

Tax administration reforms especially 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. The emphasis should be increased on improving tax administration to broaden the tax base so that existing tax rates can be reduced without affecting government revenues. In addition, government revenue collection needs to be consolidated through the KRA. Tax administration contributes more to the increase of public revenue growth followed by tax enforcement, then human resource revitalization while business automation system contributes the least to the public revenue growth.

#### **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.

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