

# **THE RELATIONSHIP BETWEEN GOVERNMENT REVENUE AND ECONOMIC GROWTH IN KENYA**

**Cyrus Muriithi**

Master of Business Administration, University of Nairobi, Kenya

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## **ABSTRACT**

Economies with large public sectors grow slowly because of large tax wedges but a lack of growth-enhancing government initiatives may stymie growth in countries with very small governments. Governments need to perform various functions in the field of political, social and economic activities to maximize social and economic welfare. Government revenue impacts economic growth through meeting the various governmental need. Though all taxes have disincentive effects, taxes that reduce incentives to invest in human or physical capital and innovation are particularly damaging. The objective of this study was to determine the relationship between Government revenue and economic growth in Kenya. The study adopted a descriptive research design. This study was a case study of one Country since only Kenya was involved. The study used secondary data collected from the Central Bank of Kenya, KNBS, KIPPRA, and Ministry of Finance, Public libraries and National Budget and other Government records including import duty, excise duty, income tax and Value

Added Tax (VAT) which comprised the tax revenue. In addition, the study collected data on non tax revenue. Collected data was presented using tables and figures. The study concludes that there is an inverse relationship between economic growth and Import duty. As import duty is increases the economic growth declines and vice versa. With regard to excise duty, this study concludes that as increase in excise duty slows reduces the rate of economic growth. On Income tax, the study concludes that established Income Tax leads to continuous increase in revenue obtained by government. The study further concludes that there is a direct relationship between Income tax and economic growth. The study concludes that increase in VAT leads to positive effects on the rate of economic growth. Regarding Economic Growth, the study concludes that there has been an increase in the Economic Growth in Kenya over the years. However, the study concludes that the rate of economic has been gradual.

**Key Words:** *government revenue, economic growth, Kenya*

## **INTRODUCTION**

Government revenue refers to the revenue received by a government to finance its operations and development projects. It is an important tool of the fiscal policy of the government as it facilitates government spending (OECD, 2008b). Governments need to perform various functions in the field of political, social and economic activities to maximize social and economic welfare. In order to perform these duties and functions government require large amount of resources. These resources are called Public Revenues. Public revenue consists of taxes, revenue from administrative activities like fines, fees, gifts and grants. Public revenue can be classified into two types including: tax and non-tax revenue (Illyas and Siddiqi, 2010). Taxes are the first and foremost sources of public revenue. Taxes are compulsory payments to government without expecting direct benefit or return by the tax payer. Taxes collected by

Government are used to provide common benefits to all mostly in form of public welfare services. Taxes do not guarantee any direct benefit for person who pays the tax. It is not based on direct quid pro quo principle. The government collects tax revenue by way of direct & indirect taxes. Direct taxes includes; Corporate tax; personal income tax capital gain tax and wealth tax. Indirect taxes include custom duty, central excise duty, Value Added Tax (VAT) and service tax (Chaudhry and Munir, 2010). Non tax revenue refers to the revenue obtained by the government from sources other than tax. These include fees, fines and penalties, surplus from public enterprises, special assessment of betterment levy, grants and gifts and deficit financing.

Fiscal policy aligning government revenue and expenditure is of crucial importance in promoting price stability and sustainable growth in output, income and employment which are important parameters of economic growth (Ahmed, 2010). It is one of the macroeconomic policy instruments that can be used to prevent or reduce short-run fluctuations in output, income and employment in order to move an economy to its potential level. However, for sound fiscal policy, a good understanding of the relationship between government revenue and economic growth of a nation is very important, for instance, in addressing government's budgetary deficits. Government collects tax revenues, provides goods and services not produced by the private sector, engages in commercial-type activities, makes cash and in-kind transfers to families and businesses, and pays interest on its debts (Abiola and Asiweh, 2012). All these activities require that government raise enough revenue. Governments raise revenue from different sources in order to undertake its development agendas ((Ahmed, 2010).

A country's revenue structure determines who pays for public services and goods. By spreading revenues across different instruments, countries can distribute the burden across particular groups of citizens and sectors of the economy. In all OECD member countries, taxes other than social contributions represent the largest share of government revenues.

### **Government Revenue**

Revenue is defined as all amounts of money received by a government from external sources for example those originating from "outside the government" net of refunds and other correcting transactions, proceeds from issuance of debt, the sale of investments, agency or private trust transactions, and intragovernmental transfers ((Ahmed, 2010). Government Revenue comprises amounts received by all agencies, boards, commissions, or other organizations categorized as dependent on the government concerned. Stated in terms of the accounting procedures from which these data originate, revenue covers receipts from all accounting funds of a government, other than intra-governmental service (revolving), agency, and private trust funds (Chaudhry and Munir, 2010).

The methodology used to measure revenue involves addressing four issues: refunds and correcting transactions; timing; aggregation and tabulation; and government enterprise activities. In Measuring issues: refunds and correcting transactions, revenue data are adjusted for refunds

and other correcting transactions. However, the rules for refunds of taxes differ from those for other revenues (Abiola and Asiweh, 2012). In measuring issues in timing, revenue is measured over the full fiscal year of the government. Revenue received at any time during the fiscal year is included in the measurable amounts reported. Thus total property tax revenue reflects such tax collections received by the government over the full twelve months of its fiscal year (Illyas and Siddiqi, 2010). Governments often report revenue, and keep their official accounting records, in terms of a modified accrual form of accounting. Where this happens, Census Bureau statistics reflect this accounting approach, even though it does not correspond exactly to the concept of cash received during the fiscal year. In aggregation and tabulation, aggregate statistics for an individual government reflect the revenue of the parent government and all of its dependent agencies (Chaudhry and Munir, 2010). However, flows of funds between these entities are considered internal transfers and are excluded, by definition, from revenue totals. These are treated as intra-governmental revenue and are excluded in much the same way as most intra-governmental service or revolving funds. Tabulated statistics on revenue for multiple governments reflect the fiscal years of the governments being summed. Since these fiscal years differ, total statistics such as for all local government in a state or all townships nationally, reflect a mix of fiscal periods (Abiola and Asiweh, 2012). For the annual surveys of government finance, the Census Bureau makes no effort to adjust aggregates so that they represent a standard time period. In government enterprises activities, Revenue of business-type activities of governments (utilities and other commercial or auxiliary enterprises) is reported on a gross basis. That is, related expenditures are not deducted from their revenues to derive net revenue amounts. In this regard; the Census Bureau uses a methodology that differs from that used by some other statistical agencies (Chaudhry and Munir, 2010).

### **Economic Growth**

Ayres and Warr (2006) define economic as 'a rise in the total output (goods or services) produced by a country'. It represents an increase in the capacity of an economy to produce goods and services, compared from one period of time to another. Economic growth refers only to the quantity of goods and services produced. Economic growth can be measured in nominal terms including inflation, or in real terms, which are adjusted for inflation like by the percent rate of increase in the gross domestic product (GDP). Economic growth measures growth in monetary terms and looks at no other aspects of development (Illyas and Siddiqi, 2010).

Economic growth can be either positive or negative. Negative growth can be referred to by saying that the economy is shrinking. Negative growth is associated with economic recession and economic depression (King and Levine, 1993). Gross national product (GNP) is sometimes used as an alternative measure to gross domestic product. In order to compare multiple countries, the statistics may be quoted in a single currency, based on either prevailing exchange rates or purchasing power parity. Then, in order to compare countries of different population sizes, the per capita figure is quoted (Beck and Web, 2003).

To compensate for changes in the value of money (inflation or deflation) the GDP or GNP is usually given in "real" or inflation adjusted, terms rather than the actual money figure compiled in a given year, which is called the nominal or current figure (Ayres and Warr, 2006). King and Levine (1993) and Beck and Web (2003) suggest that financial systems are important for productivity, growth and development. Well functioning institutions and markets, it is noted, augment technological innovation, capital accumulation and therefore economic growth. They also note that well-functioning financial markets lower the costs of transaction increasing the amount of savings put into investment (Illyas and Siddiqi, 2010). They also allows for capital to be allocated to projects that yield the highest returns and therefore enhance economic growth rates

### **Relationship between Government Revenue and Economic Growth**

Government revenue impacts economic growth through meeting the various governmental needs (Illyas and Siddiqi, 2010). Perhaps the most important mechanism through which government expenditure impacts on economic performance are the costs of raising taxes to finance that expenditure because taxes affect the decisions of households to save, supply labour and invest in human capital and of firms to produce, create jobs, invest and innovate, as well as the choice of savings channels and assets by investors (Johansson, 2008). By lowering the returns to earning income, taxes reduce incentives to work, save and invest, thereby "crowding out" or discouraging private sector activity. Setting the right mix is important, as the distortionary effects of collecting revenue from different sources can be very different. Though all taxes have disincentive effects, taxes that reduce incentives to invest in human or physical capital and innovation are particularly damaging. Consequently, theory and evidence suggest that a shift from taxing incomes or profits to property or consumption can enhance growth (Barrios and Schaechter, 2008 and Johansson, 2008). Consumption taxes may discourage work and investment in human capital but they appear to have a relatively minor impact on the long-run determinants of growth, such as investment, education or technical progress (Bassanini, Scarpetta and Hemmings, 2001). Therefore, endogenous growth models tend to make a simplifying distinction between 'distortionary' taxes that impact on investment decisions and 'non-distortionary' taxes that have little impact on investment.

While financing expenditure carries costs to economic growth, some types of government expenditure are beneficial to economic performance. Some government expenditure is a prerequisite for a functioning market economy, such as a legal system to protect private property rights (Barrios and Schaechter, 2008). Beyond this foundational level, expenditure initiatives may lift long-run growth rates by increasing investment in physical capital, knowledge, human capital, research and development or public infrastructure, particularly where market failures lead to under-investment by the private sector. For example, government investment in physical capital could boost long-run economic growth if investment stimulates technological progress or if the productivity of businesses is boosted from others' investment or innovation (knowledge spillovers) (Bassanini, Scarpetta and Hemmings, 2001).

Government can directly invest in physical capital or infrastructure or it can encourage private sector investment. Investments in human capital may have persistent impacts on economic growth if education enables ongoing innovation and advances in technological progress. Individuals and firms may under-invest in human capital from an economy-wide perspective as they will not factor in the positive flow-on effects to other workers and businesses from investment in education and training. This can be compounded by problems in accessing capital to finance investment in education, providing a rationale for government funding of education (Ayres and Warr, 2006).

## **RESEARCH PROBLEM**

Economies with large public sectors will grow slowly because of large tax wedges but a lack of growth-enhancing government initiatives may stymie growth in countries with very small governments (Barker, Buckle and St Clair, 2008). However, not all expenditure and methods of financing have the same impacts on economic growth. While economic research suggests that the cumulative effect of taxes on economic growth is moderate, recent research (OECD, 2008b) has suggested that there is a relationship between the types of taxes imposed and economic growth.

Several research studies have been conducted on government revenue and economic development. For example, Jepkemboi (2008) studied macroeconomic determinants of tax revenue share in Kenya and established that estimated long-run results indicates that tax revenue share in Kenya is determined by the level of per capita income, imports, agriculture, manufacturing, external debt and trade liberalization. In the short run, only variables of manufacturing, terms of trade and tax reform are significant.

Okech and Mburu (2011) did an analysis of responsiveness of tax revenue to changes in national income in Kenya between 1986 -2009 and concluded that the Kenya tax system is neither income elastic nor buoyant. Ndonge (2012) analyzed factors affecting revenue collection in the ministry of state for immigration and registration of persons (MSIRP). The study found that 65% of the respondents strongly agreed that making online applications is challenging among the people seeking the service due to lack of technological knowledge making it a challenge to revenue collection in the ministry. Gacanja (2012) who did an empirical case study of Kenya on tax revenue and economic growth revealed a positive relationship between economic growth and tax revenues. All the tax variables; income tax, import duties, excise duties and sales tax/VAT showed a positive effect on GDP with income tax posing the highest effect followed by sale tax/VAT, then excise duties and finally import duties showing the least effect. From the above discussions, it is evident that very few studies have concentrated on reviewing the relationship between Government revenue and economic growth in Kenya. Government revenue has been increasing year after another as evidenced by the annual government budget. However, this has not been fully reflected in economic growth. This study therefore sought to fill this research gap



by answering one question: What is the relationship between Government revenue and economic growth in Kenya?

## **RESEARCH OBJECTIVE**

To determine the relationship between Government revenue and economic growth in Kenya

## **LITERATURE REVIEW**

### **Dynamic Theory of Public Spending, Taxation, and Debt**

The theory builds on tax smoothing approach to fiscal policy pioneered by Barro (1979) which predicts that governments will use budget surpluses and deficits as a buffer to prevent tax rates from changing too sharply (Battaglini and Coate, 2008). Following this, governments will run deficits in times of high government spending needs and surpluses when needs are low. Underlying the approach are the assumptions that governments are benevolent, that government spending needs fluctuate over time, and that the deadweight costs of income taxes are a convex function of the tax rate (Battaglini, 2006). The economic environment underlying this theory is similar to that in the tax smoothing literature. However, the key departure is that policy decisions are made by a legislature rather than a benevolent planner. This theory introduces the friction that legislators can distribute revenues back to their districts via pork-barrel spending (Bohn, 1998).

The theory considers a political jurisdiction in which policy choices are made by a legislature comprised of representatives elected by single-member, geographically-defined districts. The legislature can raise revenues in two ways: via a proportional tax on labor income and by borrowing in the capital market. Borrowing takes the form of issuing one period bonds. The legislature can also purchase bonds and use the interest earnings to help finance future public spending if it so chooses. Public revenues are used to finance the provision of a public good that benefits all citizens and to provide targeted district-specific transfers, which are interpreted as pork-barrel spending. The value of the public good to citizens is stochastic, reflecting shocks such as wars or natural disasters. The legislature makes policy decisions by majority (or super-majority) rule and legislative policy-making in each period is modeled using the legislative bargaining approach of Baron and Ferejohn (1989). The level of public debt acts as a state variable, creating a dynamic linkage across policy-making periods.

### **The Benefit Theory**

Under the benefit theory, tax levels are automatically determined, because taxpayers pay proportionately for the government benefits they receive. In other words, the individuals who benefit the most from public services pay the most taxes. In analyzing the benefit approach, two models have been discussed: the Lindahl model and the Bowen model. In the Lindahl model, if the supply curve of state services it is assumed that production of social goods is linear and

homogenous. Since the state is non-profit, it increases its supply until equilibrium is reached at a point on a voluntary-exchange basis (Samuelson, 2012).

Bowen's model has more operational significance, since it demonstrates that when social goods are produced under conditions of increasing costs, the opportunity cost of private goods is foregone. For example, if there is one social good and two taxpayers (A and B), their demand for social goods is represented by  $a$  and  $b$ ; therefore,  $a+b$  is the total demand for social goods. The supply curve indicates that goods are produced under conditions of increasing cost (Giersch, 2007). The production cost of social goods is the value of foregone private goods; this means that  $a+b$  is also the demand curve of private goods. The intersection of the cost and demand curves determines how a given national income should according to taxpayers' desires be divided between social and private goods (Samuelson, 2012)

## **REVIEW OF EMPIRICAL STUDIES**

Nyamongo (1987) studied government revenue and expenditures in Kenya with emphasis on trends and compositions. According to Nyamongo, Since the Second World War, the role of the public sector has expanded significantly in most economies. This is evidenced by total Government expenditure's share in GNP which averages 30 percent and 25 per cent for developed and developing countries, respectively. It is thought that the expanded role of Government which is financed mainly by taxes comes as a result of the Government's power to allocate resources efficiently where the market fails to do so and from its ability to provide relief to the poor. The public finance literature review presents methods of identifying tax capacities for both developed and developing countries. Some of the methods used in developed countries are not found to be applicable in developing countries. The study examines the composition and trends of expenditures and revenues in Kenya, between 1964/65 to 1986/87.

Ahsan and Wu (2005) examined the tax share in GDP for developed and developing countries for 1979-2002 and found the negative and significant relation of agriculture share, GDP per capita, and population growth to the tax ratio while trade share in GDP has positive and significant relation but corruption has negative and insignificant relation.

Lutfunnahar (2007) identified the determinants of tax share and revenue performance for Bangladesh along with 10 other developing countries for the 15 years through a panel data analysis. The results obtained suggest international trade, broad money, external debt and population growth to be significantly determinants of tax efforts. The study concluded that Bangladesh and other countries have low tax effort (less than unity index) and are not utilizing their full capacity of tax revenue and therefore have the potential for financing budgetary imbalance through raising tax revenue.

Jepkemboi (2008) studied macroeconomic determinants of tax revenue share in Kenya. According to Jepkemboi, Kenya's fiscal structure reveals that government expenditure and revenue have maintained consistent growth patterns with expenditures always exceeding



revenues. The imbalance between revenue and expenditure results in large fiscal deficits. Even after undertaking tax reforms the taxes have not been as productive as desired. A poor tax performance, in terms of raising revenue can either mean deficiencies in tax structure or an inadequate effort on the part of the government, both of which are influenced by various factors. The main objective of this study was to establish the macroeconomic determinants of tax revenue shares in Kenya for the period 1970-2005 especially the economic development and structural factors.

The study utilized a model of tax effort that was used by Teera (2002) in establishing the determinants of tax revenue share in Uganda. Annual time series data for the period 1970-2005 were used. The study employed Ordinary Least Squares (OLS) method to estimate the long-run co-integrating equation and also the short run error correction model. The estimated long-run results indicates that tax revenue share in Kenya was determined by the level of per capita income, imports, agriculture, manufacturing, external debt and trade liberalization. In the short run, only variables of manufacturing, terms of trade and tax reform are significant. The main policy implications derived from the study were: that possible future direction of policy in Kenya lies on the above variables that determine the tax revenue share and hence policies should be formulated to influence their impacts. Of particular importance was for the government to use appropriate taxation policies to ensure that tax revenue productivity from imports is always positive.

Mahdavi (2008) used the advanced estimation techniques with an unbalanced panel data for 43 developing countries over the period 1973-2002 including Pakistan. His results showed that aid had a negative effect, non-tax revenue had also negative effect while agriculture sector share had positive but insignificant coefficient. Trade sector share had a positive effect and economically active female variable had a net adverse but insignificant effect while the old-age portion of population showed negative association for both income and sales tax. Extent of urbanization and literacy rate both showed positive effect. Population density, monetization and inflation rate remained negatively correlated. Inverse of GDP per capita was strongly and negatively correlated with the level of taxation. Net effect of political rights and civil liberties was significant.

Mwakalobo (2009) studied economic reforms in East African countries by reviewing the impact on government revenue and public investment. Mwakalobo established that inadequate and erratic revenue generation had adversely affected public investment spending in the three East African countries particularly Tanzania, where the declining trends in government and tax revenue had been accompanied with the declining public investment in almost all spending categories. Where government revenue declined and revenue generation was inadequate, public investment spending in physical infrastructure declined. This again was particularly visible in Tanzania. Where government revenue increased and tax revenue performance had been more impressive, public investment spending rose, as in Uganda. Heterogeneity in sectoral spending

priorities has significantly changed in the three countries. Spending on defense has been reduced; however, it has remained relatively higher in Uganda than in Tanzania and Kenya. The priority sectors that have been receiving higher shares of government expenditures are general public services, human capital development, and physical infrastructure in Tanzania, Kenya and Uganda, respectively. Spending in human capital development has been relatively low in Tanzania compared to that in Kenya and Uganda. This creates some concerns on commitments of the Tanzanian government to achieving the MDG objectives, reducing poverty and overall economic development.

Ahmad (2010) examined the determinants of tax buoyancy of 25 developing countries by using the cross section data for the year 1998 to 2008 and pooled least square method for result analysis. For agriculture sector it showed insignificant effect and for services sector it showed positive and significant effect instead of past insignificant result of many researchers. Monetization and budget deficit showed positive influence while growth in grants showed negative impact on tax buoyancy.

Chaudhry and Munir (2010) studied the determinants of low tax revenue in Pakistan. According to Chaudhry and Munir (2010), tax revenue collection is one significant issue of economic development among others. Pakistan's economic performance since its emergence in 1947 has remained volatile across the sectors and provinces, and even its structure has changed over the time. The results obtained suggest that openness, broad money, external debt, foreign aid and political stability to be the significant determinants of tax efforts, with expected signs of the estimated coefficients. Agriculture share, manufacturing share and service sector share turn out to be insignificant and the sign of the coefficient of agriculture share deviates from expectations and same as the sign of GDP per capita and urbanization. But both latter are highly significant. In addition to the traditional explanatory variables used in previous studies, this study addresses the possible impact of monetization on the revenue performance and finds broad money to be significant determinant of tax share in Pakistan. It was indicated that determinants of low tax revenue in Pakistan are narrow tax base, more dependence on agriculture sector, devaluation, foreign aid, informal economy and low level of literacy rate. It is very difficult task for Pakistan to design and implement suitable tax system since Pakistan has large traditional agriculture sector and other "hard to-tax" sectors such as small business, and shadow economy. The results suggest that boosting the openness, money supply and political stability, there is a potential to raise the level of taxation.

Gacanja (2012) did an empirical case study of Kenya on tax revenue and economic growth. According to Gacanja, the relationship between economic growth and tax revenues is a debate that has existed for a long time in the living history. The discussion on the two variables has exhibit contentions from academicians and policy makers with one school holding on the view that taxation is bad for the economy while the other school believe that taxation is good for the economy. The object in this study was thus to fill in the literature gap in country specific studies

by exploring the relationship between economic growth and tax revenues in Kenya, and also determining causation between the variables. Three approaches were utilized to accomplish the study objective. The first method involved a classical linear regression model based on the OLS estimation method. The second method used co integration test while the third method involved performing a granger causality test on all the variables. The results of the study revealed a positive relationship between economic growth and tax revenues. All the tax variables; income tax, import duties, excise duties and sales tax/VAT showed a positive effect on GDP with income tax posing the highest effect followed by sale tax/VAT, then excise duties and finally import duties showing the least effect. The co-integration revealed that there is at most one co integrating equation while the Granger Causality test indicated a bi-directional relationship between economic growth and excise duties; a unidirectional relationship between income tax and economic growth, and economic growth and sales tax VAT; however, there existed no causation between economic growth and import duties. These results suggest that the government should desist from concentrating on increasing tax revenues by increasing tax levels but instead employ a tax structure that enhances the tax base thus improving growth rate. In addition, the government should utilize the positive relationship between tax and economic growth to realize efficient government investment expenditure that spurs growth in turn boosting the revenue levels. Finally, the government should particularly target income taxes, sales tax/VAT and excise taxes for its revenues by improving the tax collection system, eliminating fraud, evasion and corruption.

Kabbashi (2005) did study the impact of trade liberalization on revenue mobilization and stability in Sudan. The study examined the buoyancy and the elasticity of the Sudanese tax system paying particular attention to the impact of trade liberalization on revenue mobilization and the stabilization role of the fiscal sector. The liberalization reform of 1992 was comprehensive. Its main objectives as far as the fiscal sector is concerned were to improve the incentive system and to enhance the tax yield and equity as well as to liberalize trade. The expectations were that the reform would increase the level of investment and income growth and hence broaden the tax base. The findings showed that the Sudanese tax system as a whole was not buoyant or is elastic, Comparison of nominal measures of buoyancy and elasticity over the review period indicates that tax yield from import duties has improved as a result of the various tax discretionary changes. However, in the case of other major taxes firm conclusions cannot be drawn. Real measures of buoyancy and elasticity confirm these general results and indicate that the composition of total tax is skewed away from trade and income taxes towards domestic indirect tax.

Abiola and Asiweh (2012) studied the impact of tax administration on government revenue in a developing economy using a case of Nigeria. In conclusion, the study concluded that diversification of revenue sources for economic development is very important if Nigeria must rank among equals in the improvement of the lives of her citizens. The focus on revenue from oil and gas amounts to putting all her eggs in one basket. In this modern days the speedy

technological development will in no distance time render obsolete the use of such mineral resources like oil and gas and possibly replace same with solar energy which is more environmental friendly. Besides, the end of fluctuations in the oil price which characterize the oil market is not in sight. Therefore, to build and maintain the culture of sustainable development, there is urgent need for a review and restructure of the nation's tax policy and administrative system. Why government takes step to address the perennial annual budget deficits and tax gap, the citizens should wake up to their civic responsibilities in terms of tax compliance.

Illyas and Siddiqi (2010) studied the impact of revenue gap on economic growth using a case study of Pakistan over the period of 1980-2008. The under investigating variables had mix order of integration. The results reveal that revenue gap is significant and negatively related with economic growth. The econometric results suggest that if the gap between targeted revenue and actual collected revenue is high, it effects economic growth negatively and significantly (in case of Pakistan, most of the times collected revenue is less than targeted revenue). This gap can be reduced by doing away with exemptions and special treatments. The real increase in revenue can take place effectively only when the collective benefits of all stakeholders are upheld fairly and equitably. This, in turn, with greater public spending in areas of both development and non-development, will bring about a more equitable distribution of income and allocation of this enlarged pie. It can generate greater macroeconomic stability and balance. More sustained economic development would be possible by the availability of enhanced and, hitherto, untapped sources of public revenue. This will help the economy achieve greater self-reliance and avoid large public debts to minimize budget deficits. Without imposing high tariff and tax rates, government tax revenue collection can be increased by just broadening the tax network, setting the right priorities and by tightening and improving the tax administration in the Pakistan.

Owolabi (2011) did a study on revenue allocation formula and its impact on economic growth process in Nigeria. The analysis revealed the extent to which revenue allocation formula adopted in the past had affected the path of economic growth and development in Nigeria. The data was purely secondary data and was sourced from the World Bank publication, CBN, Journal and other published and unpublished materials. There was need, therefore to address the problem by formulating a more efficient revenue allocation wastage and mismanagement of funds. Also effort should be geared towards articulation of policies that will enhance capital formulation, employment of the abundant and measures may include attachment of more weight to the share of local government from the federal collected revenue, placing more emphasis on the internal revenue generation, redefinition of the concept of definition and sustaining the present effort of government as regards budget monitoring and implementation.

Worlu and Nkoro (2012) studied tax revenue and economic development in Nigeria using a macro econometric approach. They examined the impact of tax revenue on the economic growth of Nigeria, judging from its impact on infrastructural development from 1980 to 2007. To achieve this objective, relevant secondary data were collected from the Central Bank of Nigeria

(CBN) Statistical Bulletin, Federal Inland Revenue Service (FIRS) and previous works done by scholars. The data collected were analyzed using the three stage least square estimation technique. The results show that tax revenue stimulates economic growth through infrastructural development. That is, it highlights the channels through which tax revenue impacts on economic growth in Nigeria. The study also reveals that tax revenue has no independent effect on growth through infrastructural development and foreign direct investment, but just allowing the infrastructural development and foreign direct investment to positively respond to increase in output. However, tax revenues can only materialize its full potential on the economy if government can come up with fiscal laws and legislations and strengthen the existing ones in line with macroeconomic objectives, which will check-mate tax offenders in order to minimize corruption, evasion and tax avoidance. These will bring about improvement on the tax administration and accountability and transparency of government officials in the management of tax revenue. Above all, these will increase the tax revenue base with resultant increase in growth.

Ndonye (2012) analyzed factors affecting revenue collection in the ministry of state for immigration and registration of persons (MSIRP). The study was guided by the following specific objectives: to establish the effect of technology on revenue collection in the MSIRP, to establish the effect of government policy on revenue collection in the MSIRP, to determine the effect of integrity on revenue collection in the MSIRP and to establish the effect of staff capability on revenue collection in the MSIRP. The study found that 65% of the respondents strongly agreed that making online applications is challenging among the people seeking the service due to lack of technological knowledge making it a challenge to revenue collection in the ministry. Other challenges to the use of technology were: inadequacy of facilities for the use of technology, lack of knowledge and skills on the use of ICT in the collection of revenue among the revenue collection staff, resistance to change by the employees in the ministry, inadequate of ICT infrastructure in the ministry and the incorporation of the non automated system of revenue collection. Regarding the effect of government policy on the collection of revenue, the study found that 87% of the respondents indicated that there were no policies hindering the collection of revenue in the ministry. On the effect of Integrity on revenue collection, the study found that 42% indicated that there was corruption in the collection of revenue in the Ministry. The study finally found that 71% of the respondents indicated that the revenue collection staff in the ministry was inadequate and that they were not properly trained as indicated by 54% of the respondents. The study concluded that the use of technology, integrity, and revenue collection staff were a challenge to the collection of revenue in the ministry while government policy was not a challenge.

Segal and Sen (2011) studied oil revenues and economic development using the case of Rajasthan, India. In their conclusion, they established that efficient and effective management of oil revenues depends greatly on political and administrative institutions. Like any government revenues, their effective use requires that citizens have a say in their expenditure. Transparency



in the receipt and expenditure of resource revenues, and accountability of those in power, are important in achieving this. It is important for local communities, NGOs, and other affected parties to have input into decision making over the development of the industry itself, as well as over expenditures of revenues. This helps to ensure political buy-in and reduces the chance of conflict later. Moreover, disputes can become more acute when the financial stakes are raised by the discovery of natural resources. For this reason stable political structures that provide a peaceful setting for the resolution of disagreements are essential to avoid the escalation of conflict.

Muriithi and Moyi (2003) did study tax reforms and revenue mobilization in Kenya. One of the key objectives of tax reforms in Kenya was to ensure that the tax system could be harnessed to mitigate the perpetual fiscal imbalances. This would be achieved through tax policies intended to make the yield of individual taxes responsive to changes in national income. In addition, it was expected that the predominant taxes in the revenue would be those with highly elastic yields with respect to national income (or proxy bases). This study applies the concepts of elasticity and buoyancy to determine whether tax reforms in Kenya achieved these objectives. Elasticities and buoyancies are computed for the pre-reform period as well as the post-reform period. Evidence suggests that reforms had a positive impact on the overall tax structure and on the individual tax handles. In fact, the elasticity of indirect taxes was low and that of direct taxes was high, especially after the reforms. Despite this positive impact, the reforms failed to make VAT responsive to changes in income, although VAT was predominant in the tax structure.

Okech and Mburu (2011) did an analysis of responsiveness of tax revenue to changes in national income in Kenya between 1986 -2009. The study concluded that the Kenya tax system is neither income elastic nor buoyant. Additionally, the study further affirmed that all major tax components in the country are inelastic. Income tax and excise tax had unity buoyancies over the study period contradicting Muriithi and Moyi (2003) who found the two taxes to have had buoyancies of above 1. This difference could be explained by the various tax reforms that were introduced after the study by Murrithi and Moyi (2003) including the introduction of ETR facility, Simba system among others. Further, from the study, import duty was the most buoyant tax component while the VAT was the least buoyant. Major tax components were found to be inelastic based on tax-to-base inelastic however; import duty, excise duty and VAT had base-to-income elasticity of above 1, while income tax had approximately unity base-to-income elasticity. This leads to the conclusion that, DTMs impact favorably to all major taxes meaning that a large percentage of tax revenue comes from discretionary tax policy and not from pure responsiveness of tax revenue to changes in national income.



## **RESEARCH METHODOLOGY**

### **Research Design**

The study adopted a descriptive research design. According to Cooper and Schindler (2003), a descriptive study is concerned with finding out the what, where and how of a phenomenon. Descriptive research design was chosen because it enabled the researcher to generalise the findings to a larger population. According to Chandran (2004) descriptive studies portray an accurate profile of persons, events or situations, describing the existing conditions and attitudes through observation and interpretation techniques. It allows one to collect quantitative data which can be analyzed quantitatively using descriptive and inferential statistics (Mugenda and Mugenda, 2003). A descriptive approach in data collection is able to collect accurate data on and provide a clear picture of the phenomenon under study (Ngechu, 2004). This design was selected because the researcher sought to build a profile about the relationship between Government revenue and economic growth in Kenya.

### **Population of the Study**

Population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well defined or set of people, services, elements, events, group of things or households that are being investigated. This study was a case study of one Country since only Kenya was involved. Therefore, no sampling was done.

### **Data Collection**

The study used secondary data collected from the Central Bank of Kenya, KNBS, KIPPRA, and Ministry of Finance, Public libraries and National Budget and other Government records. The use of secondary data was justified on the basis that some of these sources had information that was very pivotal to this study and has been vetted and accepted.

### **Data Analysis**

The researcher collected data on the different sources of government revenue including import duty, excise duty, income tax and Value Added Tax (VAT) which comprised the tax revenue. In addition, the study collected data on non tax revenue. Information on the dependent variable (Economic growth) was collected from the Kenya National Bureau of Statistics. The study used annual data starting 1992 to 2011. Data collected was presented using tables and figures. The data was be analyzed using SPSS.

In order to determine the relationship between Government revenue and economic growth, the researcher conducted a regression analysis using the following regression model. This model was applied by Lutfunnahar (2007) who sought to identify the determinants of tax share and revenue performance for Bangladesh along with 10 other developing countries for the 15 years through a panel data analysis.

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + \varepsilon$$

Where Y = Economic Growth (Million Kenya Shillings)

X<sub>1</sub> = Import Duty (Million Kenya Shillings)

X<sub>2</sub> = Excise Duty (Million Kenya Shillings)

X<sub>3</sub> = Income tax (Million Kenya Shillings)

X<sub>4</sub> = Value Added Tax (Million Kenya Shillings)

X<sub>5</sub> = Non Tax Revenue (Million Kenya Shillings)

ε = Error term

The data on above variables was collected from secondary data contained in Central Bank reports and reports from the Kenya National Bureau of Statistics (KNBS). All the different sources of Government revenue were computed in Kenya shillings.

To test for the strength of the model and the relationship between economic growth and proxies of Government Revenue, the researcher conducted an Analysis of Variance (ANOVA). On extracting the ANOVA table, the researcher looked at the significance value. The study was tested at 95% confidence level and 5% significant levels. If the significance number found is less than the critical value (α) set 2.4, then the conclusion was that the model was significant in explaining the relationship. Else the model was regarded as non significant.

## RESEARCH RESULTS

### Regression Analysis

In order to establish the relationship between the relationship between Economic Growth and the independent variable which included; budget Non Tax Revenue, Income tax, Import Duty , Excise Duty, Value Added Tax and Non Tax Revenue. The study conducted a multiple regression analysis. The findings were as shown in the table 1 below:

**Table 1: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.980 <sup>a</sup>	.960	.893	53723.796

a. Predictors: (Constant), Non Tax Revenue, Income tax, Import Duty , Excise Duty , Value Added Tax, Non Tax Revenue

Coefficient of determination explains the percentage of variation in the dependent variable (Economic Growth) that is explained by the independent variables or extent to which changes in the dependent variable can be explained by the change in the independent variables.

From the analysis, the independent variable studied here had a strong relationship with Economic Growth as explained by adjusted R<sup>2</sup> of 0.96. A deduction can therefore be made that the

relationship between Economic Growth and the independent variables (budge Non Tax Revenue, Income tax, Import Duty, Excise Duty, Value Added Tax and Non Tax Revenue) is strong.

The study further conducted an Analysis of Variance to check on the significance of the Model. The findings were as shown in table 2 below:

**Table 2: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.068E11	5	4.136E10	14.331	.026 <sup>a</sup>
	Residual	8.659E9	3	2.886E9		
	Total	2.155E11	8			

a. Predictors: (Constant), Non Tax Revenue, Income tax, Import Duty , Excise Duty , Value Added Tax , Non Tax Revenue.

b. Dependent Variable: Economic Growth

From the ANOVAs results, the probability value of 0.026 was obtained which indicates that the regression model was significant in predicting the relationship between Economic Growth and the predictor variables. The F calculated at 5% level of significance was 14.331. Since F calculated is greater than the F critical (value = 5.4095), this shows that the overall model was significant.

**Table 3: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	1330912.905	132755.478			10.025	.002
Import Duty	-39.837	11.549	-1.430		-3.449	.041
Excise Duty	-36.713	8.626	-2.588		-4.256	.024
Income tax	4.303	3.066	1.092		1.403	.035
Value Added Tax	20.944	5.323	2.938		3.935	.029
Non Tax Revenue	9.242	3.630	.692		2.546	.044

a. Dependent Variable: Economic Growth

The researcher conducted a regression analysis so as to determine the relationship between Economic Growth and the predictor variables. The regression equation ( $Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + \epsilon$ ) was:

$$Y = 1330912.905 - 39.837X_1 - 36.713X_2 + 4.303X_3 + 20.944X_4 + 9.242X_5 + \epsilon$$

Where:

Where Y = Economic Growth (Million Kenya Shillings)

X<sub>1</sub> = Import Duty (Million Kenya Shillings)

X<sub>2</sub> = Excise Duty (Million Kenya Shillings)

X<sub>3</sub> = Income tax (Million Kenya Shillings)

X<sub>4</sub> = Value Added Tax (Million Kenya Shillings)

X<sub>5</sub> = Non Tax Revenue (Million Kenya Shillings)

$\varepsilon$  = Error term

As per the regression equation established, there was a direct relationship between Economic Growth and Income tax, Value Added Tax and Non Tax Revenue. However there was an inverse regression relationship between Economic Growth and Import Duty and Excise Duty. All the predictor values were significant as the probability values corresponding to these predictor variables were less than  $\alpha=5\%$ . The constant was 1330912.905 million shillings indicating that in normal circumstances, Economic Growth in Kenya would be 1330912.905 million shillings. A unit change in any of the predictor variables, holding the others predictor variables constant will lead to change in the Economic Growth by the coefficient of that predictor variable.

## **SUMMARY AND INTERPRETATION OF FINDINGS**

Regarding import duty, the study found that revenue obtained increased over the years to reach 36,181 million shillings in 2008/2009. A sharp decline was however recorded in the subsequent years with slight increase being recorded 2010/2011 fiscal year at 23425 million shillings. According to Baark (1988), import duty has both negative and positive effects on the level of economic growth depending on the type of goods imported. Import duty raised from capital goods leads to a higher economic development because of they key role of role of capital goods in the manufacturing sector. Capital goods help to achieve new manufactured goods and affect the three main sectors of the economy, namely, agriculture, industry and transport. Import of machines that are related to agricultural and industry increases a country's output as inputs into production besides the duty paid to the government as revenue. From the findings presented above, the study established that as import duty increased, economic growth also increased. From the arguments by Baark (1988), it can be deduced that there is little relation between import duty and economic growth because the change in economic growth is determined by the type of goods imported i.e. capital or consumer goods.

The study found out that excise duty led to increased revenue collection as from 2002/2003 financial year up to 2008/2009 whereby revenue increased from at 35,643 million shillings to 69,872 million shillings but sharp decline was recorded thereafter in 2009/2010 to 39525 million shillings. Like the relationship between import duty and economic growth, the revenue raised by the Government from excise duty is utilized in meeting recurrent Government expenditure. Jaeger (1992) argued that the manner in which the excise duty is utilized determined the level of economic growth recorded by a nation. If the excise income is utilized in the development of

infrastructure, there will be a positive effect on the level of economic development recorded in a nation. However, utilization of government revenue on consumption by meet recurrent expenditure may have negative effects on the level of economic development recorded. The study findings established that the Income Tax led to continuous increase in revenue the revenue collected during as from 2002/2003 financial year whereby 66,744 million was recorded until 2008/2009 financial year which recorded 204,068 million shillings. 2009/2010 fiscal year recorded sharp decline of 104125 million shillings. By the end of the study period, the revenue obtained as a result of Income tax started increasing again.

The study findings found out that Value Added Tax led to increased revenue during as from 2002/2003 financial year up to 2008/2009 after which a sharp decline was recorded in 2009/2010. By the end of the study period, the revenue from VAT had started increasing of which 89871 million shillings was obtained in 2010/2011 financial year. Gendron (2005) argues that consumption tax, such as VAT, it increasing being favoured as a tax base over income and allied items increases economic development of a nation. Nairayan (2003) further supports the introduction of VAT in Nigeria as an instrument for the balance of payments engineering, by encouraging exports through zero-rating of exporting goods. Through encouragement of exports, local industries are encouraged to produce more hence improvement in the level of economic development. Value added tax is beneficial to the any economy as it is statistically significant to revenue generation.

The study findings established that non tax revenue been increasing during as from 2002/2003 financial year up to 2008/2009 but thereafter a continuous decline was witness. Since 2008/2009 financial year, non tax revenue had been decreasing whereby at the end of the study period, non tax revenue was 1,539,306 million shillings.

A continuous Economic Growth was recorded over the study period. The 2002/2003 financial year recorded an economic growth of 1,055,658 million shillings of which it increased continuously to 1,539,306 million as at the end of the study period implying that the revenue obtained had increased over the years. These findings are consistent to those of Jepkemboi (2008) who observed that revenue had consistent growth patterns. In relation to different sources of Government revenue, the study established that established that inadequate and erratic revenue generation adversely affect public investment spending hence its effects on the level of economic development in Kenya. Without enough revenue, Government will not be able to improve infrastructure which are key elements of economic development as they facilitate smooth operations for manufacturing and other firms.

## **CONCLUSIONS**

From the findings, the study concludes that there is an inverse relationship between economic growth and Import duty. As import duty is increases the economic growth declines and vice versa. The study further concludes that in the recent years the revenue being obtained as a result

of import duty has decreased. With regard to excise duty, this study concludes that as increase in excise duty slows reduces the rate of economic growth. Regarding the trend, the study concludes that the revenue obtained as a result excise duty is very low compared to the past years.

On Income tax, the study concludes that established Income Tax leads to continuous increase in revenue obtained by government. The study further concludes that there is a direct relationship between Income tax and economic growth. The study concludes that increase in VAT leads to positive effects on the rate of economic growth. The study further concludes that revenue being collected as had decreases over the recent years. The study finding concludes that non tax revenue has a direct relationship with Economic growth. The study further concludes that there has been a decline in the non tax revenue obtained in Kenya in the recent years.

Regarding Economic Growth, the study concludes that there has been an increase in the Economic Growth in Kenya over the years. However, the study concludes that the rate of economic has been gradual.

## **RECOMMENDATIONS**

This study recommends that the policy makers should take keen interest in ensuring that both the import and export duties imposed promote the economic growth in Kenya. This can be ensured by encouraging capital expenditure using the capital raised from the tax revenues because capital expenditures are key components of economic growth while consumption investment reduces economic development. The policy maker should come up with policies as well that govern the entire taxation process to ensure that the process of revenue collection from imports and exports as well as VAT, Income tax is effectively managed so as to enhance revenue collection. This study however recommends that the taxation process should be controlled so as to ensure that it is fair to the taxpayer and that it does not overburden them

The study findings established that non tax revenue had continuously decreased since 2009/2010 financial year. Having found a positive relationship between non tax revenue this study recommends that policy makers should put in place policies that will lead to collection of more non tax revenue and hence contribute to reversing the trend.

With a gradual increase in economic growth, the study recommends that policy makers need to enact legislations which will control the entire government revenue collection process in order to enhance economic growth of the Kenyan economy. The study further established that economic growth had been very slow during the 2007/2008 financial year which could be as a result of post election violence. This study further recommends that political stability should be upheld as a means enhancing economic growth.



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