RELATIONSHIP BETWEEN FISCAL POLICY AND PUBLIC INVESTMENT IN KENYA

BY

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DECLARATION

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

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DEDICATION

This research project is dedicated to my departed father, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mother, who taught me that even the largest task can be accomplished if it is done one step at a time and to my family whose advice, insightful criticisms, and patient encouragement aided the writing of this project in innumerable ways.

ABSTRACT

The share of public investment in GDP, and especially the share of infrastructure investment, has declined during the last three decades in a number of countries, particularly in developing countries. Fiscal impact of public investment has to be determined. The size and composition of an annual investment program should be chosen taking into account its short- and longer-term impact on government finance. The constraints in Kenya's public investment program are reflected in the state of infrastructure. Kenya's strong economic performance between 2002 and 2007 has been partly attributed to macroeconomic stability and strong fiscal consolidation. This study sought to establish the relationship between fiscal policy and public investment in Kenya.

This study used a descriptive survey. Population of this study was data obtained from the Kenya national bureau of statistics and Annual Economic Survey. The study used secondary data sources in gathering data for analysis. Descriptive statistics such as means, standard deviation were used to analyze the data. Data presentation was done by the use of frequency tables for easy of understanding and interpretation. Inferential statistic such as regression and correlation analysis was carried out to establish the extent to which fiscal policy influence public investments. The study found that fiscal policies such as introduction of taxes by the government would influence the growth of public investments. The results indicated that Government recurrent expenditure was significantly associated with fiscal policy introduced in the economy, while Government Capital Expenditure was significantly associated with the degree of fiscal policy applied. The study concluded that there exist positive change in Government Capital Expenditure would lead to an increase in public investments. The study concluded that low-income countries such as Kenya fiscal policies may not be harmful for either long- or short-term growth.

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ABBREVIATIONS

FDI-Foreign Direct Investment

GDP-Gross Domestic Product

IMF- International Momentary Fund

KIA-Kenya Investment Authority

KIPPRA- Kenya Institute for Public Policy Research and Analysis

LIC- Low Income Countries

MDBs.-multilateral development banks

MDGs-Millennium Development Goals

National Investment Council

PPP-Private-Public Partnerships

SSA-sub-Sahara Africa

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The share of public investment in GDP, and especially the share of infrastructure investment, has declined during the last three decades in a number of countries, particularly in developing countries. Since the private sector has not increased infrastructure investment as hoped for, significant infrastructure gaps have emerged in several countries. These gaps may adversely affect the growth potential of the affected countries and limit targeted improvements in social indicators. The governments of these countries are now seeking to reverse the declining trend of public investment through increasing private-public partnerships (PPPs), and multilateral development banks (MDBs).

The contraction of public investment has been among the most important reasons for the widening infrastructure gap and consequent decrease in the average growth rate in certain regions (Calderon and Serven, 2003).

Fiscal impact of public investment has to be determined. The size and composition of an annual investment program should be chosen taking into account its short- and longer-term impact on government finances. This requires detailed projections of any multi-annual outlays to cover construction costs, future operation and maintenance, and debt service, and of any direct revenues (e.g., user fees) from the projects. These projections are needed for a reliable assessment of the consistency of the proposed investment program with financing availability, short-term macroeconomic stability, and longer-term

debt sustainability. Insofar as possible, any quantifiable impact on productive potential, and therefore on growth and tax revenue over the longer term, should also be assessed. (IMF, 2004).

1.1.1 Theoretical Background

Much of the public investment takes the form of infrastructural outlays—for road and rail networks, ports, bridges, energy generating plants, telecommunication structures, water and sanitation networks, government buildings—which can have a productive life of several decades (Scandizzo and Sanguinetti, 2009). Such outlays range from small, one-off, limited infrastructural projects that can be implemented within a year to more complex projects that takes place over decades—the so-called *mega projects.* But *other* types of outlays, some of a more current form, can also contribute to capital formation.

Fiscal policy deals with government deliberate actions in spending money and levying taxes with a view to influencing macro-economic variables in a desired direction. This includes sustainable economic growth, high employment creation and low inflation (Microsoft Corporation, 2004). Thus, fiscal policy aims at stabilizing the economy. Increases in government spending or a reduction in taxes tend to pull the economy out of a recession; while reduced spending or increased taxes slow down a boom (Dornbusch and Fischer, 1990).

One of the central tenets of macroeconomics is that fiscal policy can be effective in stimulating aggregate demand, reviving a stagnant economy and promoting economic growth. Economic growth, according to Garfield (1995), is created over the long-run by a labour force which possesses the incentive to work and produce, and by entrepreneurs

who have incentives to invest in capital stock. In other words, pursuing government polices to further these incentives translate into economic growth.

The importance of fiscal policy in growth economics has received a lot of research interest in recent decades. This deep-seeded belief that taxation, public investment and other aspects of fiscal policy can contribute to growth miracles as well as to enduring stagnation has been articulated in the context of growth models. As Easterly and Rebelo (1993) adequately put it, any economist, when asked to explain the growth performance of any economy is likely to mention fiscal policy as being a very important determinant.

There are mixed views on the impact of fiscal policy with respect to stimulating economic growth. On one hand, Keynesian economists believe that left alone an economy would rarely operate at full employment and as such both fiscal and monetary policy is needed to stimulate aggregate demand. On the other hand, Monetarist and Classical economists believe that fiscal policy should be kept to a minimum due to its potential to create inefficiency in the use of resources (Roache, 2007).

However, most economists would agree that there are situations when increasing government spending would be beneficial and situations where less government spending would spur growth. This is exemplified by the Rahn curve, which shows that when government spending is zero there is little or no growth, however after a certain point, increasing government spending results in lower growth.

It is argued that government spending can bolster economic growth by putting money in the hands of the public (Pineda and Rodriguez, 2006). This is as public investment may

lead to an increase in employment which should multiply throughout the economy. Public investment in infrastructure development may provide an incentive for further investment by the private sector. However, public investment could also lead to a crowding-out of private investment which would have negative implications for growth (Aschauer, 1989).

1.1.2 Contextual Background

Public Investment in Kenya

Investment can be many things such as investment in machinery, buildings, facilities and computers. Operating expenditure on training, education and research is sometimes also regarded as investment. Physical investment involves constructing new buildings, roads and facilities.

This is the type of investment included in the public capital budgets, and it is also the focus area of the Government's strategic investment programme.Total public investment encompasses investment in physical infrastructure made by central government, local government and public corporations (Ministry of Finance,2001).

Although total government expenditure accounts for about 27 percent of GDP, development spending in Kenya has averaged 4 per cent of GDP, and only 2 percent of GDP is used for the core assets (Government of Kenya, 2011). On a positive note, development spending has been rising in recent years; in 2008/09 it increased to 6 per cent of GDP. However, a closer analysis of this expenditure shows that, on average, 48 percent of development spending is used for the acquisition of assets, with the rest used for recurrent type expenditures. This implies that acquisition of non-financial public assets

has been about 2 per cent of GDP (Government of Kenya, 2009). However, it is notable that a significant share of development spending is off-budget, especially through state-owned enterprises.

The challenges in Kenya's public investment program are reflected in the state of infrastructure. Kenya's infrastructure development lags behind other low income countries in sub-Sahara Africa (SSA). The most significant difference is in the paved roads density, where Kenya has a density of 16km compared to a SSA average of 31km, and an average of 134km for other Low Income Countries (LIC). Electricity coverage also lags, with population coverage of 18 per cent in Kenya compared to 72 percent for middle income countries.

Even the country's 2011 target coverage of 33 per cent will be below the current average for LICs. Poor infrastructure, notably in transport and electricity, constrains economic growth and has been identified as a major performance challenge under the Doing Business Indicators (World Bank, 2007)

While Kenya has reversed the decline in public investment that occurred in the 1990s, it has yet to reach the historically high rates of investment seen in middle-income country comparators. Using the IMF's GFS01 fiscal data set, Kenya's spending on non-financial (mostly fixed) assets over time has declined considerably in public investment spending over the 1990s, a trend that was reversed in the following decade.

However, at less than 4 per cent of GDP in 2007/08, this is still below the investment spending as a percentage of GDP of Indonesia and Malaysia in the 1990s, and South

Africa's average since 2000. As richer and larger economies (in terms of GDP), this also means that in per person terms, this is considerably lower (World Bank, 2008).

Fiscal Policy in Kenya

Fiscal Policy is the use of government revenue collection (taxation) and expenditure (spending) to influence the economy. The two main instruments of fiscal policy are government taxation and expenditure. Governments use fiscal policy to influence the level of aggregate demand in the economy, in an effort to achieve economic objectives of price stability, full employment, and economic growth. Keynesian economics suggests that increasing government spending and decreasing tax rates are the best ways to stimulate aggregate demand, and decreasing spending & increasing taxes after the economic boom begins.

Kenya's strong economic performance between 2002 and 2007 has been partly attributed to macroeconomic stability and strong fiscal consolidation. After two decades of sluggish performance, economic growth resumed in 2002 and steadily in- creased from 0.5 per cent to 7 per cent in 2007 (Kirira, 2009). During this period, the government retired debt and started creating fiscal space to fund essential infrastructure. The ratio of debt to Gross Domestic Product (GDP) declined from 60 per cent in 2000 to 40 per cent in 2008. Fiscal space was achieved through a strong revenue effort and stringent fiscal management. The budget deficit averaged about 2 per cent during this period. As a result of the strong growth performance, income per capita increased and poverty declined from 56 percent in 2000 to 47 per cent in 2005/06 (Kirira, 2009).

Since the current government took office in 2003, fiscal policy has been 'time consistent'. There have been no major differences between policy announcement percentents and outcomes, and the overall macroeconomic framework has remained broadly consistent with targets (Nyoro, 2008). This positive performance can be attributed to the strong fiscal adjustment between 2002 and 2007, with remarkable reduction in debt as a share of GDP and a strong revenue effort. Public borrowing was limited to 1.8 per cent of GDP. These efforts have paid off, and Kenya can now issue debt at single digit interest rates (GOK, 2009).

Kenya's debt to GDP ratio fell by over 30 points during the period 1995/96 to 2006/07. It is estimated that the current level of total debt stock is around 40 per cent of Kenya's GDP, with the share of foreign exchange denominated debt being at 60 per cent. This is a remarkable fiscal adjustment, which had the effect of reducing country risk, which in turn led to declines in real interest rates (World Bank, 2008). This situation, combined with sustained revenue effort, enabled Kenya to lay the foundation for the solvency of the public sector. As a result, the country has been able to issue debt at single digit interest rates, a situation not enjoyed by larger emerging market economies.

This policy credibility, which paid particular attention to the level of domestic debt -a net domestic financing position - has been the main fiscal indicator for the government. It has allowed the private sector to expand its horizons, and encouraged it to invest in productive activities. The end result has been the steady rate of growth of Kenya's economy during the period 2002-2007 which, however, could not be sustained in 2008

due to the combined effects of violence that followed the December 2007 elections, and the ongoing global financial crisis (World Bank, 2008).

1.2 Statement of the Problem

The intent of fiscal policy is essentially to stimulate economic and social development by pursuing a policy stance that ensures a sense of balance between taxation, expenditure and borrowing that is consistent with sustainable growth. The share of public investment in GDP, and especially the share of infrastructure investment, has declined during the last three decades in a number of countries (World Bank, 2004). It may curtail the capacity of developing countries to meet broader development objectives, including the Millennium Development Goals (MDGs).

There is also a concern that the widely used approach to fiscal analysis and policy—which focuses on the overall fiscal balance and gross public debt—may unduly constrain the ability of countries to take advantage of increased opportunities to finance public investment by borrowing from MDBs, bilateral donors, and market sources (Talvi et. Al, 2005).

There is evidence suggesting that in a number of cases fiscal adjustment has fallen disproportionately on public investment. For example, the World Bank (1988) report that cuts in public investment were on average more than three times larger than cuts in current spending during periods of fiscal adjustment in the 1980s.

There is also evidence that fiscal adjustment has had a significant impact on public investment in Latin American countries (Calderon, Easterly, and Serven, 2003). It is

estimated that about half of the fiscal adjustment in Argentina, Bolivia, Brazil, Chile, and Peru during the 1990s reflected a compression of investment in infrastructure (Calderon, Easterly, and Serven, 2003). For OECD countries, Roubini and Sachs (1989) observe that public investment is often quickly and drastically cut during periods of restrictive fiscal policy. More specifically for the euro area, it has been claimed that the SGP deficit limits have contributed to the recent decline in public investment in Europe (Blanchard and Giavazzi, 2003).

The empirical studies cited above, relating to fiscal policy, left some gaps. No studies have, so far, focused on the relationship between fiscal policy and public investment in Kenya under the period under review. The aim of this study is not to resolve the fiscal policy-public investment debate but rather to contribute to the literature by examining the relationship of fiscal policy on public investment in Kenya. This is the gap our study intends to fill.

The study expects to establish a negative relationship between fiscal policy and public investment. In other words, public investment is often quickly and drastically cut during periods of restrictive fiscal policy. Thus this study sought to answer the question; what is the relationship between fiscal policy and public investment in Kenya?

1.3 Objectives of the Study

The objective of this study is to determine the relationship between fiscal policy and public investment in Kenya.

1.4 Importance of the Study

This study will be of significance to several parties .It will be significant to the government especially at this moment when the government is implementing 'VISION 2030' which is intended to transform Kenya into a middle-income country by 2030. With growth expected to be around 10% per annum for the next 25 years, the growth of public investment will be a key driver. Government and financial policy makers will also benefit from this study as they will be able to gain insight on the critical role that is played by fiscal policy on public investments in articulation their vision 2030 for the next two decades of Kenya's development.

A development transformation requires a sustained period of increased investment spending to support economic growth and deliver the basic services necessary to achieve human development. While both public and private investments have a key role to play in this context, the State, and therefore public investment has a key role to play in kick-starting growth, poverty reduction and providing the capital goods and investments needed to secure human development objectives. In short, a development transformation requires a major scaling up in public investment.

Policy makers especially governors of counties who will be managing resources, will be able to make better policies that will have an impact of the public investment once they get to know the relationship of these two variables. The policy makers will gain from the knowledge obtained and be able to prepare alternative policies which will aid in increasing public investments, GDP growth rate and alleviate poverty in Kenya.

Potential investors, both local and international, who may want to channel their funds for investment in public investment will clearly understand the relationship between the fiscal policies undertaken by the respective government therefore it can be a determinant of whether to channel their funds to these governments.

Academicians will benefit from the findings of this study as it will add to the body of existing knowledge in finance. The results will establish additional information on the relationship between fiscal policy and public investment in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to fiscal policy and public investment. In section 2.2 we will look at theoretical literature, section 2.3 discusses empirical literature, section 2.4 factors influencing investment in Kenya and finally 2.5 is the summary.

2.2 Theoretical Literature

The theoretical framework on investment originates from the neo-classical factors of investment. These factors are the GDP and the real interest rate. Other factors that have been added to the neo-classical argument include policy-related factors (government expenditure, inflation and foreign exchange) and open economy factors. Open economy factors include availability of external reserves, variability in terms of trade, openness to international trade and impact of external debt (Agenor and Montiel, 1996).

According to the neo-classical investment theory (also known as the .accelerator effect.), public investment is influenced by the growth rate of real GDP and user cost of capital (Jorgensen, 1967). The growth rate could be construed as a proxy for expectations about future demand and returns from the output of investments (Jayaraman 1996).

Neo-classical theory also suggests that, as high interest rates discourage investment by raising user cost of capital, private investment is negatively related to interest rate. However, the interest rate can have a negative effect through the saving channel (Mckinnon, 1973; Shaw, 1973). Low or negative interest rates discourage saving, which

would reduce the amount of resources for investment. The interest rate can hence have a positive effect on investment.

The neo-classical model is however criticized on its assumption of perfect markets and restriction on growth and user cost of capital. The model is adjusted for developing countries in order to capture several imperfections that include financial repression, debt overhang, a dominant role of imported capital goods, and macroeconomic instability (Agenor and Montiel, 1996). Therefore, other variables are included when analyzing investments in developing countries.

Public investment is one of the variables included, where account is taken of government spending which affects availability of savings for the private sector. The crowding out effects of government expenditure is reflected in credit availability for the private sector. Public investment can also have a crowding-in effect if it involves activities that make the environment conducive for private sector investments (Greene and Villanueva, 1991).

Another factor is inflation, which affects investment by increasing the uncertainty of investment. A rise in domestic inflation relative to overseas inflation, given the nominal exchange rate, results in the appreciation of the real exchange rate adversely affecting export competitiveness (Pindyck, 1991). High debt servicing obligations are usually financed out of export earnings. The presence of a large external debt can also adversely affect investment by reducing the funds available to invest, given that the return from new investments must be used to repay the existing debt (Cohen, 1994). Greater availability of external reserves, in terms of months of import coverage, is expected to

encourage private investment. Trade openness increases competitiveness and provides access to enlarged markets (Balassa, 1978; Feder, 1982).

According to Mitchell (2005), economic theory does not automatically generate strong conclusions about the impact of government out-lays on economic performance. Indeed, almost every economist would agree that there are circumstances in which lower levels of government spending would enhance economic growth and other circumstances in which higher levels of government spending would be desirable. If government spending is zero, presumably, there will be very little economic growth because enforcing contracts, protecting property, and developing an infrastructure would be very difficult due to the absence of a government. In other words, some government spending is necessary for the successful operation of the rule of law. Economic activity is generally very low or nonexistent in the absence of government but jumps dramatically as core functions of government are financed. This does not mean that government costs nothing, but that the benefits outweigh the costs (Mitchell, 2005).

In traditional Keynesian macroeconomics, many kinds of public expenditures, even of a recurrent nature, can contribute positively to economic growth (Diamond, 1989). High levels of government consumption are likely to increase employment, profitability and investment via multiplier effects on aggregate demand. Thus, according to Keynesian macroeconomics, government spending raises aggregate demand, leading to increased output depending on the size and effectiveness of expenditure multipliers.

First and foremost, the higher taxes or the further borrowing that is required to finance growing government expenditures inhibit growth. These are expected to influence

economic growth negatively, because they serve as disincentives for households to invest, take risks and find jobs. Borrowing can also affect PI negatively since government accesses funds that could otherwise have been invested in the private sector, thus crowding out PI (Gallaway and Vedder, 1998).

Secondly, a large government sector increases potential profits from rent-seeking activities; this might lead to a movement of resources into more unproductive use (Folster and Henrekson, 1997). Rent-seeking occurs when people try to obtain income by having government transfers to themselves rather than providing goods and services to others. Rent-seeking benefits, the recipient but drains the economy as a whole and economic growth suffers.

Also, continuous expansions of the government moves expenditure into less and less productive activities. Eventually, the government becomes too large and carries out activities for which it is ill-suited. When this happens, negative returns set in and retard economic growth. When government provides private goods such as food, there is no reason to expect the provision or allocation to be done more efficiently than the market sector (Sjoberg, 2003). The purpose of the government intervention through government spending or taxing is to make the economy more stable. The overall impact therefore depends on the trade-offs between the productivity of public expenditure and the distortionary effects of taxes.

2.3 Empirical Literature

The impact of fiscal policy on growth has generated large volume of empirical studies with mixed findings using cross sectional, time series and panel data. Some of these studies are country-specific while others are cross-country. Few of the studies are selected for review as follows: Fuente (1997) examined the impact of public expenditures and taxation on economic growth of 21 OECD countries from 1965 to 1995. The results of the study could not provide evidence in support of fiscal policy-led growth. Specifically, public expenditures tend to crow-out private investment leading to reduction in disposable income and the incentive to save.

Several studies have also examined the underlying reasons for low efficiency of public investment, with a focus on the regional allocation of public investment in Japan. Variables such as population, area size, and income, which reflect the scale and demand for public investment, are found to be significant for different types of investments (Kondoh, 2008). Allocation can also be affected by other policy objectives such as employment policy or the regional distribution of income.

Yamano and Ohkawara (2000) find that public investment has not been allocated in accordance with marginal productivity and that public capital investment has been used as a policy tool for adjusting income inequality. Public investment has been focused on social infrastructure such as rural roads and agriculture, which have lower marginal productivity compared to larger urban-based projects (Yoshino and Sakakibara, 2002).

Aside from the policy objectives, political economy also factors prominently in the literature. Kondoh (2008) finds that local special interest groups wield substantial influence in the process of budget formation and the allocation of public investment. Public investment policy in Japan is influenced by political incentives both in the central and local governments, and has often been utilized for different political purposes or used as a disguised income transfer to special interest groups. With the end of single party rule and the emergence of coalition government, the clout of the local interest groups has increased, particularly in the construction sector where public investment is concentrated. Doi (1995) argues that political economy factors have led to a higher allocation of public investment in rural areas than metropolitan areas, as rural areas are overrepresented in the Diet.

In Devarajan et al. (1996) (using a sample of developing countries) and Afonso and Furceri (2010) (for advanced countries) government investment has a sizeable negative and statistically significant effect on growth. De Haan et al. (1996) and Sturm (1998) focus on political-economic factors affecting public investment, estimating a range of model specifications for 22 OECD countries between 1980-1992.

Wachira (1991) examined the effect of increased public investment on sectoral and aggregate private investment. The results indicated that private investment is affected by the level of domestic credit and the past levels of investment. Public investment had a positive but insignificant effect on private investment. Serven and Solimano (1993) assert that there are a wide range of factors that affect investment in developing countries,

crucial ones being output growth, real exchange rates, public investment, foreign debt, real interest rates and uncertainties.

Kariuki (2003) studied the determinants of gross fixed capital formation in Kenya and found that government expenditure was the most significant determinant. The research also showed that increases in real interest rates do not deter private investment while monetary policy plays a less significant role. FDI is very significant as a determinant of fixed capital formation, while output growth was insignificant.

Aysan, Pang and Veganzones -Varoudakis (2005) studied the determinants of investment in 40 developing economies using panel data. The results showed that growth anticipations, real interest rate and government policies explain Middle East's and North Africa's low investment rate. Insufficient structural reforms represented as poor financial development and deficient trade openness has been a crucial factor for the deficit in private capital formation. Economic uncertainties of the region have constituted major deterrent for firms to invest. High external debt burden and economic volatility arise as primary reasons for high uncertainty in the region.

There is evidence that public investment has fallen because of fiscal adjustment, and on this count there are reasons to be concerned. There is cause for worry either if cuts in public investment are not reversed, and thus fiscal adjustment contributes to declining public investment ratios, or if cuts are reversed and there is substantial volatility in public investment instead (which can reduce the efficiency of both public and private investment).

There is evidence suggesting that in a number of cases fiscal adjustment has fallen disproportionately on public investment. For example, the World Bank (1988) report that cuts in public investment were on average more than three times larger than cuts in current spending during periods of fiscal adjustment in the 1980s. There is also evidence that fiscal adjustment has had a significant impact on public investment in Latin American countries (Serven and Solimano, 1992, and Calderon, Easterly, and Serven, 2003a). It is estimated that about half of the fiscal adjustment in Argentina, Bolivia, Brazil, Chile, and Peru during the 1990s reflected a compression of investment in infrastructure (Calderon, Easterly, and Serven, 2003a).

For OECD countries, Roubini and Sachs (1989) observe that public investment is often quickly and drastically cut during periods of restrictive fiscal policy. More specifically for the euro area, it has been claimed that the SGP deficit limits have contributed to the recent decline in public investment in Europe (Blanchard and Giavazzi, 2003). Others, however, while acknowledging that fiscal adjustment in the run-up to monetary union (to meet the deficit and debt targets under the Maastricht Treaty) may have adversely impacted public investment, attach more importance to the preference for smaller governments in general (European Commission, 2003, and Galf and Perotti, 2003).

2.4 Factors Influencing Investment in Kenya

2.4.1 Political Risk Factors

The international rating for political risk for Kenya indicates that for the last two decades, Kenya has generally been rated as either high risk or moderate risk economy. While the rating moved from high-risk to moderate-risk in early 2000s, the rating is getting back to high-risk levels (World Bank, 2009). This is attributed to, among other things, the un-sustained improvements in corruption, law and order and government stability. A politically risky environment reduces investment growth by penalizing the investment return. Investors take a precautionary behavior in avoidance of risk by either postponing the investment decisions or by changing their location. When law and order is observed, corruption reduced and government stability maintained, investment net flows increase (World Bank, 2009).

Further, unfavorable macroeconomic environment characterized by low economic growth and instability denies firms' ability to exploit their growth potential and makes them face high costs. This may explain why Kenya was losing to neighboring countries as they were experiencing high GDP growth rates when the Kenya economy was slackening (World Bank, 2009).

The most common form of corruption met directly by business is financial corruption, where investors make special payments and bribes in order to be provided with licenses, tax assessments, installation of utilities, and security through police protection and justice system. This makes it difficult to conduct business effectively, and

in some cases forces investors to withdrawal or withhold business investment decisions.

One of the reasons why Kenya faced a freeze on aid flow in 1997 was because of government failure to show commitment in fighting such corruption. This had implications on the confidence of investors and the ability of the government to continue providing economic services; given that most of the development funding is donor dependent (World Bank, 2009).

Vision 2030 emphasizes the role of good governance in attracting investment and in determining the effectiveness of government institutions and revenue generation capacity. In response, the government established a Ministry of Justice and Constitutional Affairs and a new department, under the President's Office, in charge of Governance and Ethics (GOK, 2008).

The Kenya Anti-Corruption Commission was also created, through the Anti-Corruption and Economic Crimes Act, in May 2003 to investigate corruption and economic crimes. Also, the passing of the Public Officers Ethics Act provided for a code of conduct for all public officers. The judicial Code of Conduct and Ethics was also approved and published by the Judicial Service Commission in May 2003, which set up the door for an inquiry into corruption in the judiciary (GOK, 2008).

Despite these efforts, Kenya's international rating has deteriorated, losing 2.5 points since 2003. Further, in a recent survey of manufacturing firms, corruption was indicated as a major factor constraining business (World Bank, 2009).

Insecurity and a weak legal system hinder firms from exploiting their full potential. Insecurity affects the production and distribution of goods and services and therefore the performance of the firm. In 2005, the government initiated police reforms aimed at reducing the level of crime in Kenya. However, the international rating of law and order indicates that the economy is yet to reap the benefits of the reforms as the condition is worsening (KIPPRA, 2006).

2.4.2 Cost of Doing Business

Business investment can be constrained by legal and administrative constraints such as entry procedures, registration issues, commercial legislation, insolvency regime, commercial disputes resolution, and licensing procedures. In the Economic Recovery Strategy, the government commits itself to address legal and regulatory factors that make its costly to do business. A law reform commission was set up to review the legal and regulatory framework within which businesses operate. In the 2005/06 and 2006/07 fiscal budgets, a number of licenses were harmonized through the guillotine method (GOK, 2009).

However, there was no significant change in the number of procedures, although the number of days it takes to go through the procedures has come down. In addition, little has been achieved in the enforcement of contracts and duration to close a business. Entry and exit procedures are still cumbersome and this reduces the level of business investment because of the uncertainty. It also means that investors are denied access to credit, for example, when contract enforcement is delayed.

Delays in deciding cases also mean that business operations are halted and in some cases businesses tend to look for alternative ways of resolving disputes (KIPPRA, 2006).

2.4.3 Macroeconomic Issues

The international rating of economic risk indicates that Kenya's economic situation is generally moderately risky (World Bank, 2009). With the increased economic growth in the 2004 and 2005, the market has improved its rating. GDP growth is a pull factor for investment given that investment is attracted not only by the conditions for their entry but also prospects for growth for such economies, as this defines the scope of the market.GDP growth measures the potential market size and investment opportunities.

Growth-oriented firms are driven by their ability to capture a wider market share and grow their operations. At the moment, the economy is growing at an average rate of 5%. Sustaining this growth is crucial in attracting more investment (KIPPRA, 2006). In an effort to promote investment and exports, various initiatives were introduced, including the establishment of Export Processing Zones in 1990. The Zones carry out various activities including manufacturing, commercial and export-oriented services. They enjoy considerable incentives such as ten-year tax holiday followed by a 25% tax rate for ten years, exemption from import duties, value added tax and stamp duty and no restriction on management or technical agreements.

Special incentives are given to foreign companies that invest in lesser-developed areas. There are no restrictions on foreign investment, or on foreign ownership, and repatriation of profits is unrestricted. The Zones have attracted foreign investment into the garment industry to take advantage of the AGOA initiative. This has seen

diversification in origin of FDI with a significant entry of FDI from other developing countries (KIPPRA, 2006).

In addition, import controls have been removed and capital controls relaxed. Low tariffs enable importation of inputs essential for production, which should attract the low-cost investment. An open economy with no sustained economic growth will not see location of FDI in the domestic economy. Instead, FDI will locate outside and serve the domestic economy, especially if openness means reducing the transaction costs. For the market seeking FDI, openness may mean low costs of exporting, and therefore the ability to supply the domestic market from any other location (KIPPRA, 2006).

At the moment, the level of openness of Kenya economy measured by the ratio of export plus imports to GDP is 48%, meaning that the economy has achieved a substantial level of openness with the trade liberalization process. Note that some of the FDI firms were set up during the import substitution strategy and in the policy control regime. It was very costly to produce outside and supply the local market due to the high transaction costs. With trade liberalization, most of the transaction costs have been reduced such that firms have a choice of producing outside and supplying the domestic market (KIPPRA, 2006).

2.4.4 Infrastructure Development

Infrastructure facilitates access to markets and the production process (World Bank, 2002). Efforts towards improvement of infrastructure have included liberalization of telecommunications and energy sector, expansion of road network, improvement in public transport and establishment of water boards to ensure efficient supply (Kirira, 2009). However, a survey of manufacturing firms still rates infrastructure as a major

barrier to growing investment. For example, power is a problem in terms of outages, high losses in transmission and distribution.

About 64% of firms reported damage to equipment due to power outages or fluctuations. To cope with the outages, 70% of the firms acquired generators, which further add to their cost of doing business. Road and rail services are of very poor quality and some firms even spend their resources in improving the quality of the roads in the surrounding. The government has initiated reforms in the energy sector to increase power generation and service quality through separation of generation, transmission and distribution of power.

Recently, the government sold some of its stake in KenGen in an effort to improve the management and fund the necessary investment. Other on-going reforms include the streamlining of the regulatory framework in the energy sector (KIPPRA, 2006).

2.4.5 Investment Regulatory System

In an effort to promote foreign investment, the government enacted an Investment Code, which is defined in the Investment Promotion Act 2004, setting out the investment framework for foreign investment. The Code was reviewed to address some aspects thought to create a barrier for the entry of foreign investors, such as setting of minimum capital requirement. While the investment code generally addresses issues of FDI, an economy is unlikely to sustain FDI inflows if it not able to steer domestic investment (KIPPRA, 2006).

In order to facilitate foreign investment, the government established the National Investment Council (NIC) as an advisory and monitoring body, and the Kenya Investment Authority (KIA) to provide professional assistance, facilitation, information and advice to investors. The Authority acts as an investment agent for the government with the aim of providing a one stop shop for foreign investors. However, it operates under a ministry and these constraints its ability to discharge its services effectively as an independent body.

Furthermore, it has no mechanism to follow up with the investors to ensure that what it promised when providing the licenses is actually provided. As a result, it is very difficult for it to capture the issue on the ground affecting investors (GOK, 2009).

2.5 Summary

Fiscal policy affects aggregate demand, the distribution of wealth, and the economy's capacity to produce goods and services. In the short run, changes in spending or taxing can alter both the magnitude and the pattern of demand for goods and services. With time, this aggregate demand affects the allocation of resources and the productive capacity of an economy through its influence on the returns to factors of production, the development of human capital, the allocation of capital spending, and investment in technological innovations. Tax rates, through their effects on the net returns to labor, saving, and investment, also influences both the magnitude and the allocation of productive capacity.

On the whole, however, studies of the relationship between aggregate public investment and fiscal policy have not yielded robust results, with the results of many being sensitive

to small changes in model specification (Levine and Renelt, 1992; Nijkamp and Poot, 2002). Another failing of the empirical research in this area is the failure to recognize the budget constraint and as such factor the implicit costs of financing government outlays into the studies. This failing, according to Benos (2004) results in bias in the coefficient estimates.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presented the methodology that was used to carry out the study. In section research design, population and Sample, data and data collection instruments, data analysis, and finally data validity and reliability were discussed .

3.2 Research Design

This study used a descriptive survey. A descriptive study attempts to describe or define a subject, often by creating a profile of a group of problems, people, or events, through the collection of data and tabulation of the frequencies on research variables or their interaction, (Cooper and Schindler, 2006).

In this case, the research problem was determining the relationship between fiscal policy and public investment in Kenya. Descriptive research is more rigid than an exploratory research and sought to describe uses of a product, determine the proportion of the population that uses a product, or predict future demand for a product. A descriptive research should define questions, people surveyed, and the method of analysis prior to beginning data collection.

3.3 Population and Sample

Target population in statistics was 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. The

population of this study was data obtained from the Kenya national bureau of statistics and Annual Economic Survey.

In statistics, a sample is a subset of a population. Typically, the population is very large, making a census or a complete enumeration of all the values in the population impractical or impossible. The sample represents a subset of manageable size. Samples are collected and statistics are calculated from the samples so that one can make inferences or extrapolations from the sample to the population. The period under study will be from 2000-2011.

3.4 Data and Data Collection Instruments

The study used secondary data sources in gathering data for analysis. Secondary data was used because the data is qualitative and in nature and was fully represent the variables under study. All the data series on fiscal and non-fiscal variables was obtained from the Economic Survey annual publication, published by the Government of Kenya and Kenya national bureau of statistics and Annual Economic Survey.

3.5 Data Analysis

3.5.1 Conceptual Model

The relationship between fiscal policy and public investment was represented in the linear equation below

PI = (GCURR, GCAP, DTAX, DTIP)..... (1)

Where

PI= public investment

GCURR=Government Recurrent Expenditures (% in GDP)

GOVCAP=Government Capital Expenditure (% in GDP)

DTAX=Tax on Domestic Goods and Services (% in GDP)

DTIP=Tax on income and property (% in GDP)

A linear regression model showing relationship between fiscal policy and public investment in Kenya was applied to examine the relationship between the variables. The model treats Public investment as the dependent variables while the independent variables fiscal policy. To accomplish the purpose of the study, PI, was modeled as function of government expenditure and tax revenue where PI - Public Investment; GOVCURR - government recurrent expenditure; GOVCAP - government capital expenditure; DTIP - tax on income and property; DTAX - tax on domestic goods and services.

The early empirical literature on fiscal policy and growth focused on the relationship between growth and the size of government activity. In particular, it was conjectured that government spending and its associated levels of taxation would result in a reduction in the long-run rate of growth by reducing the return on investment. A relatively recent view, however, also holds that with the right mixture of taxation and spending policies, the government can increase the quantity and productivity of aggregate investment. (Ram, 1986).The usual approach to testing these conjectures was to regress the rate of growth of real GDP on measures of the average level of government spending or tax.

Economists and policymakers alike, in line with endogenous growth theory, have long believed that government tax and spending policies can have important impacts on long-run economic growth. In other words, the general view among many economists is that fiscal policy has an important role in stimulating investment. Recent studies using endogenous growth models have also served to buttress the role of fiscal policy as a key determinant of long-run growth (Easterly and Rebelo, 1993).

In view of the fact that this study seeks to eliminate coefficient bias, the government budget constraint is recognized and as such both government expenditure and tax are regressed on PI to assess the impact of government policy, specifically fiscal policy, on PI in Kenya. The major assumption for the study is that the dependent and independent variables are related in a linear manner.

3.5.2 Empirical Model

The relationship equation was represented in the linear equation below.

$$PI = a+p\,1\,GUCURR_t+B2GCAP_t+B3DTAX_t+B4TIP_t+e_t \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where

PI= Public Investment

GCURR=Government Recurrent Expenditures (% in GDP)

GOVCAP=Government Capital Expenditure (% in GDP)

DTAX=Tax on Domestic Goods and Services (% in GDP)

DTIP=Tax on Domestic Goods and Services (% in GDP)

The strength of the relationship between the two variables was measured using correlation coefficients, $r > 0$ indicates positive relationship, $r < 0$ indicates negative relationship while $r = 0$ indicates no relationship (or that the variables are independent and not related). If r is close to 0, it means there is no relationship between the variables. The collected data was thoroughly examined and checked for completeness and comprehensibility. The data will then be summarized, coded and tabulated. Descriptive statistics such as means, standard deviation and frequency distribution will be used to analyze the data. Data will be coded and entered into the Statistical Package for Social Sciences (SPSS 17) for analysis. SPSS was used to perform the analysis as it aids in organizing and summarizing the data by the use of descriptive statistics such as tables. Data presentation was done by the use of frequency tables. The inferential statistic regression and correlation was done to establish the extent to which fiscal policy has a relationship with public investment.

3.6 Data Validity and Reliability

According to Rousson, Gasser and Seifer (2002), validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity which was employed by this study and is a measure of the degree to which data to be collected using a particular instrument represents a specific domain or content of a particular concept (Gillham, 2008). To establish the validity of the research instrument the research used both descriptive statistics and empirical model to obtain the validity and reliably of the variable under study.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data analysis , results and discussion of the results seeking to achieve the objective of the study which was to establish a relationship between fiscal policy and public investments in Kenya.

4.2 Summary Statistics.

Table 4. 1: Influence of Fiscal Policy on Public Investment

Financial Performance indicator	Mean	Standard Deviation	Min	Max
Government recurrent expenditure	2.770	0.690	1.278	4.711
Government Capital Expenditure	1.011	0.304	0.805	3.023
Gov. Tax Revenue	0.202	0.5009	0.102	0.304

Source: Author (2012)

The study sought the extent to which fiscal policy influence government public investments. Table 4 presents descriptive statistics for the dependent and independent variables in the model. Standardized public investments scores 2.770 with a standard deviation of 0.690 for Government recurrent expenditure indicating that fiscal policy greatly influenced growth of public investment to a great extent. The public investment growth through Government Capital Expenditure grew by a mean of 1.011 with a standard deviation of 0.304 indicating that the fiscal policy influence growth of public investment to a great extent. The study further found that tax revenue was found to influence growth in public investment by a mean of 0.202 with a standard deviation of 0.5009.

4.3 Estimated or Empirical Model

Correlation Models

Table 4. 2: Correlation Models

	GDP	Government recurrent expenditure **(Gov. Investment)**	Government Capital Expenditure	Government tax Revenue
GDP	1			
Government recurrent expenditure **(Gov. Investment)**	0.5398	1		
Sig. (2-tailed)	0.001			
Government Capital Expenditure	**0.6444**	**0.4314**	1	
Sig. (2-tailed)	0.001	.004		
Government tax Revenue	0.315	,0.614(**)	.490(*)	1
Sig. (2-tailed)	0.004	.001	.007	

Source: Author(2012)

Table 4.2 presents the correlation matrix for the dependent and continuous independent variables. The results indicated that Government recurrent expenditure is significantly associated with GDP for 2000-2011, on fiscal policy use in isolation without controlling for any of the other variables. The study also indicate that Government Capital Expenditure is significantly associated with the degree of fiscal policy applied ($r=.0.6444$, $p< 0.05$). The results also indicated that there was a positive signicantly association between tax revenue and fiscal policy as $r=0.315, p<0.05$ at 0.004.

4.4 Regression Analysis

$PI = a+plGUCURRt+B2GCAPt+B3DTAXt+B4TIPt+e_t$ .....(2)

Where

PI= Public Investment

GCURR=Government Recurrent Expenditures (% in GDP)

GOVCAP=Government Capital Expenditure (% in GDP)

DTAX=Tax on Domestic Goods and Services (% in GDP)

DTIP=Tax on Domestic Goods and Services (% in GDP)

The resulting model is as follows:

Table 4. 3: Significance of Variation Between Fiscal policy and Public Investments

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	dfl	df2	Sig.F Change
1	**.810**(a)	**.65290**	**.58348**	**1.5927**	**0.0094051**	**0.0094051**	5	**1**	**.001**(a)

Source: Author (2012)

a. Predictors: (Constant), Public Investment

b. Dependent Variable: Fiscal Policy

The R^2 is called the coefficient of determination which shows how Public Investment with variation in fiscal policies. From table 4.3 above, the value of R^2 is .58348. This implies that, there was a variation of 58.348% influence of fiscal policy on public investments and the variation was significant as $p > 0.05$ at 0.001

Table 4. 4: Analysis of variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	73.1537	5	183.522	8.640	.000(a)
	Residual	3.9486	12	21.241		
	Total	76.1023	17			

Source: Author (2010)

a. Predictors: (Constant), Public Investment

b. Dependent Variable: Fiscal Policy

An analysis of variance (ANOVA) was used to test whether there is a significant linear relationship between the fiscal policy and public investments. According to Table 4, the *p*-\alue is .000, indicating that the influence of fiscal policy on public sectors was significant as p>0.05

4.3.3 Coefficient of Fiscal Policy

Table 4. 5: Observations used for Estimation Coefficients

Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta	B	Std. Error
(Constant)	.71766	.020280	0.5612	0.00353883	.0019
Government Recurrent Expenditures	.19494	.0074464	0.19367	0.0026.1785	.0020
Government Capital Expenditure	.7567E-3	.4009E-3	0.4561	0.018874	0.00215
Tax on Domestic Goods and Services	.1686E-5	.2261E-4	0.1419-2	0.074542	0.0012

Source: Author (2012)

a. Predictors: (Constant), Public Investment

b. Dependent Variable: Fiscal Policy

The resulting model is as follows:

$Y= PI = a+|31\ GUCURRt+B2GCAPt+B3DTAXt+B4TIPt+e_t$

From the above regression model in Table 4.5, holding fiscal policy constant pub;ic investment would be .71766. The study found that a unit increase in Government Recurrent Expenditures would lead to an increase in public investments by a factor .19494 with a P> 0.05 at .0020 in the country. The implied that fiscal policy influence public investments to a great extent as indictaed by a coefficent of .71766.

The study found that a unit increase in Government Capital Expenditure would lead to an increase in public investments by a factor 7567E-3 with a P> 0.05 at 0.00215 in the country. There is a lag effect in public investment meaning that during the adjustment period in government capital expenditure, the level of public investment in a previous period did affect the level of investment in the following period. The t-statistics of 0.018874indicates that the variable is significant at the 5% level. The implied that fiscal policy influence affects goverment capital expenditure increasing public investments to a great extent as indictaed by a coefficent of 0.7567E-3

The results also indicated that a unit increase in fiscal policy would lead to an increase in tax on domestic goods and Services by a factor 1686E-5 with a P> 0.05 at 0.0012 increasing public investment in the country. The sign of the coefficient of B3DTAXt (-5) was positive as expected. There is a lag effect in investment meaning that during the adjustment period, the level of public investment in a previous period did affect the level

of investment in the following period. The t-statistics of 26.1785 indicates that the variable is significant at the 5% level.The implied that fiscal policy influence public sectors to a great extent as indictaed by a coefficent of .71766.

4.4 Discussion

The study establishes that fiscal policies such as introduction of taxes by the government would influence the growth of public investments. The results indicated that Government recurrent expenditure was significantly associated with fiscal policy introduced in the economy, while Government Capital Expenditure was significantly associated with the degree of fiscal policy applied (r=. 0.6444, /?<0.05). The results also indicated that there was a positive signicantly association between tax revenue and fiscal policy as r=0.315,p<0.05 at 0.004. This concurred with Mendoza et al., (1997) theoretical findings that public investment can be influence by fiscal policy which can either promote or retard economic growth as investment in physical and human capital both of which can be affected by taxation and government expenditures can affect steady-state growth rates These preliminary findings are consistent with the empirical results obtained by Kneller et al. (1999, 2000), who found that balanced budgets and investment in transport and communications are consistently correlated with growth in a sample of low-income countries.

The study revealed that positive change in Government Capital Expenditure would lead to an increase in public investments by a factor 7567E-3 with a P> 0.05 at 0.00215 in the country with lag effects in public investment meaning that during the adjustment period in government capital expenditure, the level of public investment in a previous

period did affect the level of investment in the following period. The t-statistics of 0.018874indicates that the variable is significant at the 5% level. The implied that fiscal policy influence affects public investment to a great extent

The study also indicated that fiscal policy would lead to an increase in tax on domestic goods and Services by a factor 1686E-5 with a P> 0.05 at 0.0012 increase goverment revenue. The sign of the coefficient of B3DTAXt (-5) was positive as expected. There is a lag effect in investment meaning that during the adjustment period, the level of public investment in a previous period did affect the level of investment in the following period. Similarly, Barro (1989) and Easterly and Rebelo (1993) in their respective cross-country studies, found a positive and significant relationship between government public investment and output. Distortionary tax and non-tax revenues were found to be positively correlated with per capita output implying that both forms of revenues are perhaps better ways of financing government investment and hence growth than alternatives such as domestic and/or external borrowing.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the summary, conclusions and of the study guided by the study objective.

5.2 Summary

From the study, public investment has to be financeable through fiscal measures such as tax, borrowing, and financing constraints may limit the scope to take on new investment projects. Where financing is available, total public investment should be consistent with maintaining macroeconomic stability hence the need to adjust the fiscal policy. The study has revealed that that financial rates of return to public investment earned by the government through tax revenue, are higher than the borrowing costs of the government..

The study confirms the importance of private investment as the most important determinant of economic growth. The openness of the Kenyan economy also promoted investment as firms configured themselves in the face of increased competition for markets following liberalization. However, a dummy variable representing liberalization of the 1990s suggests that its effects were generally negative over this period. The study findings further indicate that increase in imports has a positive effect on private investment (imports are investment related). The appreciation of the exchange rate promotes private investment and a negative relationship exists between private investment and real interest rate and hence a negative relationship between exchange rate

and economic growth. Intuitively, lack of financial sector reforms and macroeconomic instability are the key factors that hindered investment over the study period.

The results have shown that the variables that are significant in determining private investment in Kenya are lagged investment, government consumption expenditure, foreign capital inflow, and terms of trade, real interest rate, debt service, budget deficit, tax burden and investment, growth of exports, debt service respectively.

The empirical evidence provided in this study suggests that in low-income countries such as Kenya fiscal policies may not be harmful for either long- or short-term growth in the period 2000 and 2011. This paper sought to shed light on the relationship between fiscal adjustment, expenditure composition, and economic growth in Kenya in the period Stated Consistent with the previous findings in the literature on industrial countries, the results point to a significant relationship between fiscal policy and pubic investments such development of roads and infrastructures.

The study found that change in composition of government capital expenditure toward more productive uses is particularly important for boosting public investments. Fiscal policy achieved through cutting selected current expenditures tend to trigger higher growth rates than adjustments based on revenue increases and cuts in more productive spending result consistent with the findings for industrial countries. According to the results of the study analysis, protecting government capital expenditures during a fiscal adjustment leads to higher growth.

5.2 Conclusion

Public investment has been a consistently strong determinant of growth both in the short- and long- run. The implication here is that in order to stimulate and sustain economic growth in Kenya, policy makers need to pay closer attention to factors that determine public investment. Government investment has also exhibited strong positive effect on growth.

Nonetheless, it can be made more effective by re-directing it towards economic infrastructure. Furthermore, the issue of efficiency needs to be considered to ensure public investment is made more productive. The policy recommendation therefore is for the government to improve the productivity of its investment so as to generate positive returns and enhance its complementary role to private sector.

5.3 Policy Recommendation

The study recommends that government should focus on instituting effective fiscal policy to improve on government public investments in increase GDP .This was because fiscal policy such as increasing government recurrent expenditure, government capital expenditure and tax revenue was found to influence growth in public investment.

The study recommends that fiscal policy has positive effects for economic growth in low developed countries such as Kenya. Productive consumption expenditure and government investment have a role in determining growth of real per capita income in Kenya. Productive consumption expenditure seems to have a strong negative effect on growth, suggesting that composition of this expenditure category needs to be re-examined with a view to re-organising it so that it contributes to economic growth.

The study further recommend that government should consinder boosting government investment to enhance it's complementarily role to public investment and growth. In the same vein, any austerity measures aimed at reducing government expenditure should not be achieved by budgetary cuts on development budget, as is often the case in Kenya, for this reduces public investment. Consistent with theoretical prediction, unproductive consumption expenditure and non-distortionary taxes have neutral effects on growth.

5.4 Limitations of the study

The main limitation of study was inability to look the relationship between fiscal policy public investment and economic growth. This was due to time and financial constraints.

The study also faces challenges of time resources limiting the study as the period covered is ten years instead of thirty years would have a more accurate finding.

5.5 Recommendations for further study

The study investigated the relationship between fiscal policy and public investment in Kenya .A further research should be carried to determine the impact of fiscal policy on both private and public investment and economic growth.

A topic for further research in this area is to replicate the methodology used in this study on disaggregated data. For instance, it would be interesting to subdivide government investment into such categories as investment in roads, telecommunications, and social infrastructure and assess their impact on private investment and growth.

Additional research should be carried out to establish a relationship between the channels through which fiscal policy affects growth as this study has not examined the

demand and supply side channels through which fiscal policy affects growth, nor the role of accompanying policies such as monetary and external sector policies in Kenya. The findings discussed in this paper provide a starting point to understanding the relationship between fiscal policy and public investment in Kenya.

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APPENDICES