

**RELATIONSHIP BETWEEN BUDGET DEFICIT FINANCING AND
ECONOMIC GROWTH IN KENYA**

SAMSON SAITOTI SIRERE

**A RESEARCH PROPOSAL PRESENTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE IN FINANCE
DEGREE, UNIVERSITY OF NAIROBI**

SEPTEMBER, 2015

DECLARATION

STUDENT’S DECLARATION

This research project Report is my original work and has not been submitted to any other University for examination.

Signature.....

Date.....

SAMSON SAITOTI SIRERE

D63/67223/2013

This research project Report has been presented for examination with my approval as the University Supervisor.

Signed

Date.....

Prof. Josiah Aduda

Department of Finance and Accounting

School of Business, University of Nairobi

DEDICATION

I dedicate this project Report to my family members for the love, tolerance, encouragement and enduring support they have given me in pursuit of education. May this be an inspiration for you to strive for even greater things in life. Thank you and God bless you abundantly.

ACKNOWLEDGEMENTS

This project Report could not have been successful without the spiritual, technical and moral support from all those I interacted with in the process of its compilation. First I would like to thank the almighty God for his protection, care, blessings and energy throughout the process.

My profound thanks and appreciation goes to my supervisor Prof. Josiah Aduda for his scholarly guidance throughout the conduct of this research project. His support, advice, guidance and comments were very instrumental in the research implementation.

I express my sincere heartfelt appreciation to my family members for their encouragement, financial, material and any other form of support they have given me for the success of this project. They are a true source of inspiration and moral support to me.

Finally, I also acknowledge my friends who graciously shared their ideas and assisted me in this research.

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LIST OF ABBREVIATIONS

CBK	Central Bank of Kenya
GDP	Gross Domestic Product
GDP	Gross Domestic Product
FY	Fiscal Year
IMF	International Monetary Fund
GNP	Gross National Product
IS	Investment Saving
LM	Liquidity Money

ABSTRACT

The study main objective is to establish the This study seeks to find out the relationship between budget deficit financing and economic growth in Kenya. for Kenya, the central government budget deficit shows double digit levels in almost each year since 1963. These budget deficits and a host of other factors could be some of the causes of low investment and slow economic growth. Study used descriptive research design. A descriptive study is concerned with finding out who, what, where, when, or how much (Cooper and Schindler, 2006). This research was descriptive because it was concerned with discussing Relationship between Budget Deficit Financing and Economic Growth in Kenya affects. The data collection of this study was secondary data. The data collection of secondary data involved analysis of Kenya's budget from year 2005 – 2014, The researcher also utilized reports from office of the controller of Budget, Parliamentary Budget reports and the researcher also surfed the internet and websites in order to find more information and gather the electronic journals or articles that helped the researcher to do the research well. The study found out that Findings of the study indicate that Inflation was at lowest point in 2010 at 0.03%. From the findings the higher the Budget deficit the higher the inflation this is well seen in 2007 when the budget deficit was high at 5.3% and inflation was at 31%. Figure 4.2 indicate that The exchange in 2005 was 7.2% drop to 6.7% in 2009 and begin to trade highly at above Ksh. 80 in the period between 2012 to 2014. Government Budget in Kenya averaged 2.93 percent of GDP from 1998 until 2014, in 2005 the BD was 0.01% raised to 2.6% in 2007, drop to 0.2% in 2009 sharply increased to 5.2% in 2010 and recording highest Budget deficit equal to 8 percent of the country's Gross Domestic Product in 2014. The Coefficient of Determination (R²) of 0. 843 (see table 4.2) shows that the independent variables included in the model explains 73% of the variations in the dependent variable. Therefore the model is a good fit to the relationship. The result has F-Statistics produced (F=1.242) was significant at 0 per cent level (Sig. F<.000) thus confirming the fitness of the model.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In developing countries, recent economic stabilization programmes have emphasized reductions in fiscal deficits. The idea that fiscal deficits are something that can be measured and controlled is implicit in that assumption, yet as experience in both developed and developing countries shows, deficits may not be so easy to measure nor to control. Fiscal deficits and their financing are the major problem and source of concern for politicians and policy makers in African countries. Large fiscal deficits have adverse effects on the economy arising from large current account imbalances, and a high dependence on an unstable oil price and exports of raw materials implies greater vulnerability of these African economies to adverse external shocks and the consequent economic disruption. Also in these countries, budgetary administration has been characterized by irregular release of budgeted funds and poor monitoring of government expenditure. The structural adjustment programme was conceived and born as a result of the debt crisis that struck most developing countries in the 1980s. The causes of the debt crisis in these countries are; the oil crisis of the 1970s, sloppy lending policies, increase in the interest rate in the United States, falling prices of commodities prices and large withdrawal of funds from indebted countries (Easterly, W., Schmidt-Hebbel K., 1993).

More specifically, for Kenya, the central government budget deficit shows double digit levels in almost each year since 1963. These budget deficits and a host of other factors could be some of the causes of low investment and slow economic growth. In the 1992

fiscal year, the government ran the largest deficit in Kenyan economic history amounting to KSh.24, 967 million (Republic of Kenya, 1993). Easterly et al (1994) note that large fiscal imbalances characterized by persistent fiscal deficits have severely affected macroeconomic stability and growth in Kenya. One consequence of the persistent fiscal deficits is a growing national debt. The government has had to borrow both domestically and externally to finance its expenditure 'due to the persistent and growing budget deficit. Domestic borrowing is mainly through the sale of securities from the open "market (Keho, Y., 2010).

Budget deficit financing in Kenya comes from two major sources namely; external and domestic debt. Since the government is the largest borrower in the capital markets, debt management influences general credit conditions in the economy. If government decides to increase the return on its securities, this has an influence on all other financial assets, tending to increase their yields and therefore affecting interest rates so that they may remain competitive Budget deficit financing in Kenya comes from two major sources namely; external and domestic debt. Since the government is the largest borrower in the capital markets, debt management influences general credit conditions in the economy. If government decides to increase the return on its securities, this has an influence on all other financial assets, tending to increase their yields and therefore affecting interest rates so that they may remain competitive (Keho, Y., 2010).

1.1.1 Economic Growth

Economic instability has become common structural problem for many developing countries. However budget deficit has to be considered as a main problem for the economy. The source of the budget deficit could be explained either with inability of collecting taxes or high government spending or both of them. But it does not matter what would be the answer the problem is common for each case: the result is budget deficit. In the case of North Cyprus this could be explained with being a developing country. As Brender (2008) explained in his study developing countries vote for expansionary fiscal policy, however developed countries vote for low inflation. But high government spending or budget deficit does not always result with negative impact on the economy. If the budget expenditure is too high and if the government use it for productive purposes and not for political interest then the budget deficit could result with economic growth (Gupta *et. al.*, 2005).

1.1.2 Budget Deficit Financing

The deficit budget policy is famous instrument of fiscal policy used to establish the rate of economic growth of the country. That way of financing was establish after the two world wars, oil crises and current financial and economic crises. There are three ways to finance the deficit taxes, borrowing and monetization (inflation tax). The most popular model of deficit finance is borrowing, which is usually done by issue of government bonds. When the government is over indebted tends through national bank to buy government bonds which increases the money flow and reduces the interest rate pressure. Budget deficit or budget surplus is one of the most important macroeconomic factor that

has an impact on economic growth (Fischer, 1993). But it is possible to say that budget deficit or surplus is a result of fiscal policy instrument of a government. As Fischer (1993) indicated that, it is not easy to use budget deficit as a representative of fiscal policy or to estimate the impact of fiscal policy effect by using only budget deficit. It is one of the most reliable and effective indicator which has an impact on economic growth. On the other hand budget deficit has an impact on all the macroeconomic variables and at the same time macroeconomic indicators have an effect on budget deficit or budget balance (Risti *et. al.*, 2013).

Budget deficit financing in Kenya comes from two major sources namely; external and domestic debt. Since the government is the largest borrower in the capital markets, debt Management influences general credit conditions in the economy. If government decides to Increase the return on its securities, this has an influence on all other financial assets, tending to increase their yields and therefore affecting interest rates so that they may remain competitive(Groves, 1964). A potential harmful effect of financing the budget deficit through domestic borrowing is a reduction in private investment. This could lead to adverse effects in the economy such a slower productivity; lower standards of living and slow rate of economic growth. Budget deficit financing and private investment is When the government borrows from the private sector to finance the fiscal deficit, it sells securities to the private sector. In return, it receives money from individuals and firms. The money from the sale of government securities is deposited in government accounts and Can be spent in the same way as tax receipts. Alternatively, the government can borrow from the Central Bank by selling securities to the bank.

1.1.3 Economic Growth in Kenya

Kenya's economic freedom score is 55.6, making its economy the 122nd freest in the 2015 Index. Its score is down by 1.5 points from last year, with an improvement in freedom from corruption outweighed by declines in five of the 10 economic freedoms, including trade freedom, business freedom, and the control of government spending. Kenya is ranked 23rd out of 46 countries in the Sub-Saharan Africa region, and its overall score is just above the regional average. Over the past half-decade, Kenya's economic freedom score has declined by 1.8 points, pushing the economy further down into the ranks of the "mostly unfree." Declines in four of the 10 economic freedoms include alarming deteriorations in business and trade freedom that could threaten local entrepreneurs and Kenya's integration into global trading networks. Kenya ranks higher than the global average in just three of the 10 economic freedoms.

Property rights are poorly protected, much of the population lacks land titles, and corruption throughout all levels of government undermines basic procurement of government services. Implementation of reforms to enhance regulatory efficiency has been uneven. Launching a firm still takes 10 procedures and 30 days, and completing licensing requirements takes a month. The public sector is the main source of employment, and the informal economy employs much of the labor force. The government still regulates prices through subsidies, agricultural marketing boards, and state-owned enterprises. Kenya's average tariff rate is 10.5 percent. Efforts to facilitate trade through customs improvements are underway with other members of the East African Community. Foreign investors face regulatory hurdles. The state still owns or

holds shares in several domestic financial institutions and continues to influence the allocation of credit. Financial inclusion has increased through mobile banking.

1.2 Research Problem

The relationship between budget deficits and other macroeconomic variables represents one of the most widely debated topics amongst economists and policy makers in both developed and developing countries (Aisen and Hauner, 2008, Georgantopoulos and Tsamis, 2011). It's widely believed that huge budget deficits have adverse macroeconomic effects such as high interest rates, current account deficits, inflation etc. (Bernheim, 1999). It is important to note that budget deficits have many implications for the macro economy. However, this will depend on the level of employment. In a situation of full employment, excessive deficit will bring about macro-economic imbalances. Here, large and persistent fiscal deficits usually contribute to macro-economic instability. It will adversely affect output growth and raise inflationary pressures in the economy. This is because it increases the reserve base of commercial and merchant banks thereby creating excess liquidity in the financial system. Also, deficits bring about a reduction of loanable funds that are available to the private sector (Aisen & Hauner, 2008).

Specifically, it will crowd out private investment in the real sector, private savings, result to low growth and intensive inflationary pressures, current account deficits, real exchange rate appreciation and external debt crisis if the debt is unsustainable. However, in a situation of less than full employment, budget deficits could contribute to growth as a result of the idle capacities that are being employed in the economy. If the deficits are

channeled into investment in productive activities such as capital goods, training or new technology, the economy might grow faster than the burden of the debt. This is because the investment will lead to long term growth. Therefore, deficits could lead to the failure of macroeconomic stability and growth. Hence the study will seek to assess the relationship between budget deficit financing and economic growth in Kenya.

According to Bamidele & Englama (1995) deficit financing is a veritable tool in macroeconomic management provided it is efficiently financed and productivity utilized on projects and programmes that could be self sustaining. However, excessive and prolong deficit financing through the creation of high powered money negates the attainment of macroeconomic stability, which may in turn, curtail the level of desired investment in an economy and thereby stifle growth. Blejar and Khan (1984) conducted a study in Cote'Divoire, Thailand and Argentina. Their findings revealed that public deficit have a negative effect on private investment in all the countries mentioned. Local studies by Aluoch (2009) on the effect of fiscal deficit on private investment in Kenya reports that fiscal deficit is capable of contracting private investment as 1 per cent increase in fiscal deficit leads to a 61 per cent decrease in private investment. This however confirms the crowding out effect of private investment by fiscal deficit. Again, Paiko (2012) examines the implication of deficit financing on private sector investment in Kenya. The study findings are that a negative relationship exists between deficit financing and investment in Kenya; and that deficit financing in Kenya crowds out private investment.

The relationship between budget deficit financing through domestic debt and private investment is still not clear. Researchers such as Okelo (1997), Asante (2000) and Atukeren (2004) have suggested carrying out an investigation on the relationship between budget deficit financing and private investment as an avenue for research. Moreover, economic theory postulates that, it is not the budget deficit, which crowds out private investment but the method of financing it (Hyman, 1994 and Groves, 1964). Further still, it is the component of budget deficit financing that is sold to the public that reduces the amount of credit available to the private sector thus crowding out private investment. Buscemi and Yallwe, (2012) using GMM technique, find that fiscal deficit results are significant and positively correlated to economic growth and saving in China, India and South Africa. What was the relationship between budget deficit financing and economic growth in Kenya?

1.3 Objectives of the Study

This study seeks to find out the relationship between budget deficit financing and economic growth in Kenya it will also;

- i. Establish how Budget Deficit Financing affects economic growth in Kenya;

1.4 Significance of the Study

Few empirical studies have been carried out in this area. Moreover, none of these has incorporated the view of domestic public debt financing of the budget deficit in, their analysis. In light of this, the findings of this study provide empirical evidence to policy makers in the design of different programmes aiming at enhancing private investment and

for forecasting purposes using the (Vector Autoregressions) VAR method. The study also adds knowledge to the existing literature and provides a basis for future research in the area of fiscal policy and economic growth.

The study is useful in policy formulation regarding budget deficit financing of Kenya through findings of the relationship between budget deficit financing and economic growth reports. It will act as a reference point of the role of budget deficit financing for the economic growth of Kenya. For economic growth to be achieved governments have to employ fiscal policies, monetary policies or a mix of both. The findings will inform policy makers and national planners on the long run effect of debt on economic growth. This can inform their future policy and decision making on matters relating to national debt.

The study will provide a useful basis upon which further studies on relationship between budget deficit financing and economic growth. This research will make a contribution to the academic literature on the field of Finance in Kenya more literature is needed to enhance economic growth through findings of relationship between budget deficit financing and economic growth

The findings of the study will provide some insights to developing countries that benchmark with Kenya on the relationship between budget deficit financing and economic growth and hence formulate timely and appropriate interventions to spur the economy.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter brings relevant literature required to find answers and connect to the research. It focuses on theoretical review, financial literacy and individual investor decision and empirical literature review.

2.2 Theoretical Review

A number of theories have been developed on real estate investment industry. Some of these are the decision theory, prospect theory, disposition effect theory, mental accounting theory and theory of overconfidence

2.2.1 Keynesian Absorption Theory

The Keynesian absorption theory suggests that an increase in the budget deficit would induce domestic absorption and thus, import expansion, causing a current account deficit. Another contrary view is provided by Barro (1989), known as the Ricardian Equivalence Hypothesis (REH). He states that shifts between taxes and budget deficits do not matter for the real interest rate, the quantity of investment, or the current account balance. In other words, theoretically, REH negates any relationship between the two deficits.

Why do countries run deficits and how can they be reduced (and countries' debt levels) ? Since deficits and debt are usually expressed as a percentage of GDP, there are three ways to reduce (enlarge) deficits (surpluses): by raising taxes, by lowering government

expenditure and, because it is expressed as a percentage of GDP, by raising GDP. But there are several other ways to reduce deficits. To be able to explain these other ways, I will give a brief review of the Keynesian view of an economy and I will explain why countries run deficits.

In a simple Keynesian model, output is determined by aggregate demand, because of price rigidity and excess capacity (an output gap). Aggregate demand consist of public and private spending. If there is an exogenous shock, governments can boost public spending and so get the aggregate demand up at the trend level of output with the cost of running a deficit. Another reason to run deficits is unemployment. Unemployment rises when a country is in a recession. When unemployment rises for the long term, fiscal policy is useless, because the equilibrium unemployment has shifted. But when there are short run fluctuations around the long term equilibrium because prices and wages are too rigid, fiscal policy can help. This is called countercyclical fiscal policy. Fiscal policy can also be seen as an automatic stabilizer. When an economy slides into recession, taxes will drop and spending, because of social security schemes etc., will rise. This is an implicit form of expansionary fiscal policy. The government's budget thus acts as an automatic stabilizer to counter negative business cycles.

So budget deficits are seen as a necessary evil, because of their stabilizing function on the economy. But how can the budget itself be stabilized? Besides cutting the deficit via fiscal policy, other measures are seigniorage and inflationary tax. Bose et al (2007) conducted a panel data for 30 developing countries and they found out that if the budget

deficit is a result of productive spending then the budget deficit will have positive impact on economic growth (Odhiambo et al., 2013)

2.2.2 Modern Theory of Economic Policy

The modern theory of economic policy was largely invented by Tinbergen. He showed that a government could achieve as many targets as it had instruments available to do it. His whole approach was based on these concepts: that a government manipulates instruments, such as tax rates, so as to achieve targets, such as the level of employment. No government can achieve more targets than it has instruments; this follows from elementary algebra. It is basically the same as the proposition that one can solve n simultaneous equations for n variables. Rather controversially, Tinbergen and his followers went on to argue for assigning one instrument to each target.

Economic Theory on Budget Deficits; Governments collect taxes or issue bonds to ‘produce’ public goods that civilians, or private agents, themselves wouldn’t produce, like education, national defense, social benefit schemes etc. This implies that they also have a budget constraint like the households they serve. Basic macroeconomics tells us that the government’s budget constraint in a two period model is:

$$(1) \quad G_1 + \frac{G_2}{1+r} = T_1 + \frac{T_2}{1+r}$$

So the present value of government’s spending G in the two periods should equal the present value of government’s income T . To expand it to an infinite time period and to make it more realistic, the government should also be able to issue debt D . The constraint should also include all discounted values of all future tax income, government’s

expenditures and future rent payments on the debt. The present discounted value of a continuous income stream of a rate $f(t)$ per unit t , with continuously compounded interest at rate r per unit t over a time interval of $[0, \infty]$ is given by:

$$(2) \int_{t=0}^{\infty} e^{-rt} f(t) dt$$

Since the real interest rate r the government faces may vary over time, we need to account for this in our function. Thus we state that:

$$(3) R(t) = \int_{t=0}^t r(t) dt$$

Now it is possible to adjust (1) to a multi period model (towards infinity) and state that the present discounted value of all future expenditures $G(t)$ must equal the initial debt $D(0)$ plus the discounted value of all future income $T(t)$. The government's budget constraint is therefore:

$$(4) \int_{t=0}^{\infty} e^{-R(t)} G(t) dt \leq -D(0) + \int_{t=0}^{\infty} e^{-R(t)} T(t) dt.$$

To describe the limit of debt, rewrite (4) to a limit. I first bring both integrals to the same side and combine them to get:

$$(5) -D(0) + \int_{t=0}^{\infty} e^{-R(t)} [T(t) - G(t)] dt \geq 0$$

Since by definition:

$$(6) \int_a^{\infty} f(x) dx = \lim_{b \rightarrow \infty} \int_a^b f(x) dx$$

Writing (4) as a limit gives:

$$(7) \lim_{s \rightarrow \infty} \left[-D(0) + \int_{t=0}^s e^{-R(t)} [T(t) - G(t)] dt \right] \geq 0$$

Now consider debt at point $t=s$, $D(s)$:

$$(8) \quad D(s) = D(0)e^{R(s)} + \int_{t=0}^s e^{R(s)-R(t)} [T(t) - G(t)] dt$$

Looking closer at (8) reveals that it is the same as the part in brackets in (7) times $e^{R(s)}$, with the first term representing the initial real debt issued until s and the second term what has been added to it from t to s . Using (6) again we can now state that (4) is equal to:

$$(9) \quad \lim_{s \rightarrow \infty} e^{-R(s)} D(s) \leq 0$$

So the limit of the present value of the government debt can never be positive. This shows two important things: if the real interest rate is always positive, a positive but constant debt satisfies the government's budget constraint, implying that the government has the possibility to never pay off his debt. Second, even if the debt is growing each time sequence, it is still within the government's budget constraint if the real interest rate is higher than the debt growth rate. So (4) gives the government the possibility to stay in debt forever and to let the debt increase forever, as long as the debt remains sustainable.

Government debt is not the same as a government's budget deficit. A simple definition of the budget deficit is the change in the government's real debt in a time period, or:

$$(10) \quad \dot{D} = [G(t) - T(t)] + r(t)D(t)$$

Where the term in brackets on the right hand side represents the so-called primary deficit and the other part of the government deficit is formed by rent payments on the outstanding debt.

Although the budget constraint (1) and the budget deficit (3) look closely related, it is easily shown that one can be affected without changing the other. A conventional method of displaying a country's deficit is in nominal terms. A change in nominal debt B is:

$$(11) \quad \dot{B} = P(t)[G(t) - T(t)] + i(t)P(t)D(t)$$

where P is the price level or inflation and i is the nominal interest rate. If P rises, interest rate i rises too, since it is linked to a given real interest rate, and so interest payments increase and so will the deficit. But because of higher inflation, the real value of debt is falling and the effect of higher interest payments just offsets the lower debt, so the government's (real) budget constraint is not affected while the deficit has increased (Romer, 2006). This clear lack of connection between the deficit and debt gives governments the opportunity to satisfy deficit goals set by parliaments while not reducing the debt. In this study the researcher will try to relate Modern theory of economic policy to budget deficit financing and economic growth in Kenya.

2.2.3 The Mundell Model

Robert Mundell has been one of the great pioneers of international monetary economics over the last 25 years. The model which bears his name is only one of his many contributions and certainly he no longer thinks it an accurate description of reality, if he ever did. Nevertheless the Mundell model is important for a number of reasons. One is that UK governments according to its logic from 1951 to 1967. -Indeed, one of the reasons for its development was to explore the implications of their actions and those of many other governments who pursued similar policies. Another, more important reason is that it introduces the key concepts of external and internal balance which are central to all

advanced Keynesian macroeconomic theory. Moreover, it incorporates the capital account into Keynesian analysis. Finally, the model serves as an introduction to the formal theory of policy making. Mundell suggested that a government has two instruments: the rate of interest (r) and the level of government spending (G) (or budget deficit). It has two targets: an optimal level of income, the internal target, and a balance of payments target, the external target.

The internal target might be full employment or more generally the level of nominal income which produces the least undesirable combination of unemployment and inflation. Within any conventional macroeconomic framework (e.g. IS-LM) this can be achieved by a large number of combinations of r and G ., which has interest rates on one axis and G on the other. As, *ceteris paribus*, higher interest rates would reduce income and so require a higher level of G to offset. A model of the capital account Capital flows are assumed to be interest-sensitive. Thus a higher rate of interest will produce capital inflows.

Governments are assumed to be interested in the sum of these two, a balance of payments definition akin to the balance for official settlements. A higher rate of interest will improve both the current and the capital accounts while a higher level of government spending will worsen the current account. Accordingly, various combinations of r and G will generate the target balance of payments which may be an exact balance or a planned surplus or deficit. FF is called the external balance line. Like the internal balance line this is upward sloping - as one moves rightwards along FF, the adverse effect of a higher G is

offset by a higher r . A combination of policies represented by a point to the left of FF will produce an excess surplus - since either interest rates are higher or government spending is lower than is necessary for the target (or both). Similarly, any point to the right of FF represents a policy combination which will produce a deficit.

2.3 Determinants of Economic Growth

2.3.1 Exchange Rate

An extensive literature has examined the relationship between the budget deficit and exchange rates. Abstracting from direct spending effects, or transactions crowding-out, a central concern of large budget deficits can be stated as the “portfolio Crowding-Out” hypothesis. This hypothesis asserts that debt disturbances, associated with large deficits, a closed economy this hypothesis implies a significant positive association between debt stock disturbances (budget deficits) and real interest rates. Such a relationship is consistent with a domestic loanable funds approach to interest rate determination. In an open economy, portfolio crowding-out can arise through the exchange rate affecting the current account. This view stresses the importance of international capital movements in response to debt disturbances and the linkage between budget deficits and exchange rates (Bundt and Solocha, 1988). An example of “exchange rate crowding-out” is found in Mundell (1963) and Fleming (1962), who showed that, in a small open economy model with fixed prices and static exchange rate expectations, expansionary debt-financed fiscal policy is completely crowded out under a flexible exchange rate and perfect capital mobility. Dissatisfaction with the flow approach to modelling exchange rates gave rise to the portfolio balance approach and monetary approaches.

The portfolio-balance approach follows Floyd (1969), who argued that analysis of international capital movements should be formulated in the context of a stock portfolio adjustment model. The class of portfolio balance exchange rate models (Girton and Henderson, 1976; Branson, Halttunen, and Masson, 1977; Marston (1980)) follow Tobin (1969) in concentrating on short-run impact effects of changes in outside asset stocks on asset prices. These models view the exchange rate as an asset price where exchange rate expectations play an important role in explaining exchange rate variability. It is worth noting here that economic models of exchange rates that incorporate fundamental economic variables such as measures of the money supply, income, and prices have performed poorly compared to random walk models. Many researchers have concluded that there is no significant relationship between exchange rates and fundamental economic variables (Melzer, 1993). In 1983, Meese and Rogoff in a major study, concluded that a random walk model of exchange rates performs as well as any structural model. Other studies have concentrated on the stationarity of real and nominal exchange rates and whether exchange rates and fundamental economic variables are cointegrated (Chinn, 1991). These studies have attempted to establish the existence of a long-run relationship between exchange rates and economic aggregates. Many studies reject that there exists cointegration, suggesting that there is no long-run relationship between these variables. Earlier support of non-stationarity of exchange rates has been challenged by many more studies such as Huizinga (1987), Engel and Hamilton (1990), Hakkio and Joines (1990).

2.3.2 Inflation Rates

Meltzer (1989) provided a monetarist approach to the budget deficit by arguing that deficits have an effect on inflation. He argued that Argentina, Bolivia, and Brazil provide examples of inflation that was financed by money issued to pay for government spending during the 1980s. Furthermore, he argued that the experience in most developed countries does not support the view that deficits must sooner or later increase money growth and produce inflation. An example is Italy, which experienced a budget deficit of about 10 percent of GNP throughout the 1980s. However, inflation was reduced from about 20 percent to about 5 percent a year during this period. Other examples of persistent deficits and declining inflation are noticeable in Japan and the Metzler (1951); Patinkin (1965); Friedman (1968); Sargent and Wallace (1981); Dywer (1982); Miller (1983); among others] has argued that government deficit spending is a primary cause of inflation. However, the inflationary effect of government deficits depends upon the means by which the deficit is financed and the impact of that on aggregate demand.

Darrat (1985) examined empirically the link between deficits and inflation in the U.S. during the post-1960 period. The estimation results, using the OLS technique, suggested that both monetary growth and federal deficits significantly influenced inflation during the 1960s and 1970s. In addition, he concluded that federal deficits bore a stronger and more reliable relationship to inflation than monetary growth. McCallum (1984) used a perfect foresight version of the competitive equilibrium model to investigate the theoretical validity of a “monetarist hypothesis” one that asserts “that a constant, per capita budget deficit can be maintained without inflation if it is financed by the issue of

bonds rather than money.” He found the hypotheses to be valid under a conventional definition but invalid if the deficit is defined to be exclusive of interest payments (Shojai, 1999, p. 69). Ahking and Miller (1985) modelled deficits, money growth, and inflation in the U.S. over the period 1950-1980 as a trivariate autoregressive process. It is also worth noting that their results treated government deficits, base-money growth, and inflation as endogenous variables in the trivariate autoregressive model. This study found that, a two-way causal relationship occurs for the 1950s and the 1970s between government deficits and inflation. Thus, government deficits appear to be inflationary in the 1950s and 1970s but not in the 1960s. Using a rational-expectations macro model of Peruvian inflation, Hafer and Hein (1988) tested the temporal relationship between inflation and privately held federal debt. They found that neither the par value nor the market value of debt were related to inflation (p.239).

Eisner (1989) examined the impact of deficits on inflationary pressure to see if structural deficits contribute to inflation. He found that there is no support for the proposition that the federal budget deficit, by any measure, contributes to inflation.

2.2.3 Interest Rates

According to Al-Kheddar (1996) interest rates increases in short run due to budget deficit, but in long run there is not impact explored. He studied taking VAR model by selecting data of G-7 countries for the period 1964-1993. He also explored that the deficit negatively affects the trade balance. However the budget deficit has a positive and significant impact on the economic growth of the country. Aisen and Hauner (2008) explored that the budget deficit negatively affecting the interest rate. The results were

taken from the study of the period 1985-1994 for different countries. However, the effect is positive after the year 1995. They further argued that there is a positive effect of budget deficit on interest rate, which the effect varies from state to state.

The Keynesian models and neoclassical models represent the standard analysis where the impact of increased deficits on interest rates operates through the effects of higher spending and increased wealth on the demand for money. In the Ricardian model, however, the value of the new debt is simply perceived as the present value of the future tax liabilities. This means that the government debt is not viewed as net wealth and, as a result, money demand would not be affected. Consequently, interest rates remain unchanged as well¹⁶ Knot and de Haan (1999) utilised the deficit announcement effect methodology to examine the relationship between budget deficits and interest rates in Germany over the period 1987-93. Their results suggested that the positive relationship between budget deficits and interest rates is due to fear that government debt may crowd out private investment (Knot and de Haan, 1999).

2.2.4 Unemployment

Kenya's population has grown steadily since the 1970s, with its composition skewing towards persons below the age of 30. In contrast, real economic growth has been on a downward trend, despite stints of rapid growth. The net effect of a faster-growing population relative to real economic growth is declining employment elasticity (or employment intensity of growth), which is the change in employment due to a change in GDP Omolo (2012) reports estimates of employment elasticities for Kenya declining

from 1.8 (1996–2000) to 0.5 (2004–2008). Notwithstanding declining economic growth rates, the choice of technology has also worked to reduce the positive effects of growth on employment. This argument introduces the role of wages in determining the demand for labour, wherein rising wages relative to labour productivity growth are associated with higher demand for capital goods relative to the demand for labour. The rising cost of labour in Kenya has been attributed to labour market institutions, particularly statutory minimum wages and trade unions (Manda, 2002; Wambugu, Munga & Onsomu, 2009)

2.3 Review of Empirical Studies

A further argument advanced by Elmendorf and Mankiw (1999) is the effect of a budget deficit on savings accumulation. An increased flow of Government borrowing can result in distortionary tax measures which can incite dissaving behaviour among consumers and consequently raise interest rates. By implication, this reduces investible funds and raises the cost of capital through high interest rates. The result is a decline in private sector investments. Aschauer (1989) provides empirical evidence pointing out to budget deficit as the primary source for crowding-out private investments as advanced above by the two scholars.

Nadeem A Burney and Naeem Akhtar (1999) analysis, “government budget deficits and exchange rate determination: evidence from Pakistan”. They used the data from the year 1971-1990. In statistical techniques they used ordinary least square (OLS) method. They resulted that budget deficit has significant impact on real exchange rate in Pakistan.

Salvatore (2006) examined whether large fiscal deficits cause current account deficits for the G-7 countries (United States, Japan, Germany, United Kingdom, France, Italy and Canada) using annual data for the period 1973-2005. He employed three variables; the current account balance as a percentage of GNP, the general government budget balance as a percentage of GNP, the growth of real GNP in the nation, the growth of real GNP in the rest of the world and the current account balance lagged one year. The estimates suggest that higher domestic growth worsens the current account balance in all countries; higher foreign growth improves the nation current account balance. The fiscal deficits lagged by one year for all countries are positively related and statistically significant to current deficits. This result suggests that lagged fiscal deficits lead to current account deficits. The study also examined the impact of global structural imbalances arising from the petroleum shocks which resulted into double digit inflation of the 1970s by using a dummy variable which assumes value of 0 for the period 1973-1980 and the value of 1 for the period 1981- 2005. The results show that the coefficients of the dummy variable is statistically insignificant and does not change the sign, size, as well as the statistical significance of the earlier results.

Kim and Robinson (2008) examine the effect of government deficits on the current account and the real exchange rate in the US for the post Breton Wood period of Flexible exchange rate covering 1973:1-2004:1 using a VAR. The variables include government deficits expressed as a percentage of the GDP, the current account deficits expressed as a percentage of GDP, the real interest rate and the real exchange rate.

They also include the log of real gross domestic product to control for the cyclical component of the fiscal deficits. The ordering of their VAR model is given as (RGDP, GOV, CUR, RIR, RER). Contrary to Keynesian theory, their results suggest that an expansionary government budget deficit shock improves the current account and depreciates the real exchange rate. They argue that increases in private savings and falls in investment contribute to the current account improvement while the nominal exchange rate depreciation, as opposed to the relative price level changes, is mainly responsible for the real exchange rate depreciation. They further argued that the reason for the evidence of twin divergent in the US was because of its relatively closed open economy, which increase the level of private savings. A fiscal expansion may lead to an increase in real interest rate, which in turn crowd out private investment but stimulate private savings.

Korsu (2009) also argued that fiscal deficits affect the current account deficits through the monetary sector. He argues that increase in fiscal deficits increase the supply of money when the deficits is financed by means of seigniorage. Increase in money supply increases the price level, which in turn appreciates the real exchange rate and deteriorates the current account.

2.5 Economic Growth

The impact of the budget deficit on economic growth is theoretically explained through the effect of the deficit on the flow of money into the economy and through the supply side (infrastructure, education, etc). The more that government expenditures exceed revenue the more money will be circulated in the economy, which leads to higher

employment and output (McCandless, 1991). Recent studies, for example the World Economic Outlook (IMF, 1996); concluded that during the mid-1980s a group of developing countries with high fiscal imbalances had significantly lower economic growth than countries with low to medium budget deficits. According to Shojai (1999), deficit spending that is financed by the central bank can also lead to inefficiencies in financial markets and cause high inflation in the developing countries. In addition, budget deficits distort real exchange rates and the interest rate, which in turn undermines the international competitiveness of the economy. Nevertheless, in the face of market failures, some studies have pointed to the beneficial effects of government spending on infrastructure, health, education, and productive development projects. The pioneering work of Rao (1953) indicates that government spending on productive development projects in developing countries is not as inflationary as it might be assumed because of the greater output growth. Eisner and Pieper (1987) report a positive impact of cyclically and inflation-adjusted budget deficits on economic growth in the United States and other Organization for Economic Cooperation and development (OECD) countries. fiscal deficit affects the economic growth and saving through the means financing the deficit. Additionally, Keho (2010), investigates the causal relationship between budget deficits and economic growth for seven West African countries over the period 1980-2005. The author finds mixed results¹ with three out of the seven countries showing no evidence of causality, one showing a unidirectional causality running from deficit to growth and the rest showing two-way causality between budget deficits and economic growth.

2.6 Chapter Summary

Generally, there are controversial thoughts regarding on the relationship between budget deficit and economic growth. While the Keynesian economies argued that there is positive relationship between these two series, the new classical economies argued the opposite. Meanwhile, the Ricardian equivalence hypothesis claimed that there is neutral relationship between budget deficit and economic growth L. Ball (1993). The differences in terms of opinions and analyses are mainly due to various factors such as time dimension, types of countries, types of government administration and method of analysis as well as the degree of budget deficit. By definition, a country faces a problem of budget deficit if the government expenditures exceed its revenues. In other words, the level of public savings is negative. This scenario may give harm to the economic growth of a country. In relation to the economic growth, it can be defined as an increase in the level of production over time. It can be measured by looking at the increasing pattern of real Gross Domestic Product (GDP) from time to time. Various factors may contribute to the economic growth of a country; namely labor force, technology, capital, knowledge, natural resources and etc (B. Snowden, 2005).

Bose, Haque and Osborn investigate the relationship between budget deficit and economic growth for 30 developing countries from 1970 to 1990 (N. Bose, 2007). By using panel data analyses, they found that the budget deficit helps the economy to grow provided that the deficits were due to productive expenditures such as education, health and capital expenditures. Same conclusion is derived based on the research made by Fischer (1993), Huge budget deficit helps Morocco and Italy to grow since the excessive

spending helps to increase the level of private consumption in the short-run. It was due to the deficits which were used to reduce the burden of taxation from the consumers' perspective L. Ball, and N.G. Mankiw, (1995), In the long-run, huge budget deficits ruined the level of economic growth for these two countries since they have to struggle in paying back all the national debts.

Most of the studies reviewed found a possible relationship between public budget deficits, government expenditures and interest rates and/or private investment. Islam and Wetzel (1994) on the Ghanaian economy included the flow of credit to the private sector as a measure through which possible crowding out could be evidenced. After further simulations, they concluded that when the supply of credit to the private sector is raised, investment would contribute a much higher proportion to GDP. Similarly, Okelo (1997) and Asante (2000) included the change of credit to the private sector and the growth rate of real credit to the private sector respectively as a measure for crowding out and both noted the ambiguity of the relationship between public and private investment and the possibility of crowding out. Mlambo and Oshikoya (2001) who included the share of the claims on government in total domestic credit to test for crowding out, did not present empirical results of this but only explained that regression results were positive hence crowding out.

Most studies have not zeroed in on the relationship between the two variables in question that is, budget deficit financing through domestic debt and private investment yet as economic theory postulates, it is the method of financing the deficit which crowds out

private investment. Further still, it is the component of domestic debt that is sold to the public that reduces the amount of credit available to the private sector thus crowding out private investment.

From the above discussions most studies done focused on the relationship between budget deficit and economic growth but few or non relationship between budget deficit financing and economic growth especially in kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed the research methodology that was used for the study. Research Methodology gave details regarding the procedures used in conducting the study. The research design, data collection and analysis methods were elaborated.

3.2 Research Design

A research design is a programme to guide the researcher in collecting, analyzing and interpreting observed facts (Orodho, 2003). This study used descriptive research design. A descriptive study is concerned with finding out who, what, where, when, or how much (Cooper and Schindler, 2006). This research was descriptive because it was concerned with discussing Relationship between Budget Deficit Financing and Economic Growth in Kenya affects. The descriptive design was used since it ensures complete description of the situation as it was, making sure that there were minimum bias in the collection of data and to reduce errors in interpreting the data collected. The design also provided a detailed and highly accurate picture of the situation that was very useful in literature review. The researcher used secondary sources of data for this research.

3.3 Data Collection

The data collection of this study was secondary data. The data collection of secondary data involved analysis of Kenya's budget from year FY 2005 – 2014, The researcher also utilized reports from office of the controller of Budget, Parliamentary Budget reports and the

researcher also surfed the internet and websites in order to find more information and gather the electronic journals or articles that helped the researcher to do the research well.

3.4 Data Analysis

The process of data analysis involved several stages. Quantitative method of data analysis was used. The researcher analysed data using Excel sheets program and present data using tables and pie charts to give a clear picture of the research findings at a glance. Results was presented in tables and charts. Correlation and regression analysis was used to establish the association and effect of independent variables and the dependent variable.

Model developed by shojai (1999) used in this research to assess the Relationship between Budget Deficit Financing and Economic Growth in Kenya and its affects to (GDP):

$$\ln (\text{GDP}) = \beta_0 + \beta_1 \ln (\text{INFL}) + \beta_2 \ln (\text{EXCH}) + \beta_3 \ln (\text{RIR}) + \ln \beta_4 (\text{BD}) + \ln \beta_5 (\text{UE}) + u$$

Where, GDP = Gross Domestic Product (GDP) INFL = Inflation EXCH = Real Exchange Rate RIR = Real Interest Rate BD = Budget Deficit UE = Unemployment u = Stochastic Error Terms Where, $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ are the respective parameters.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

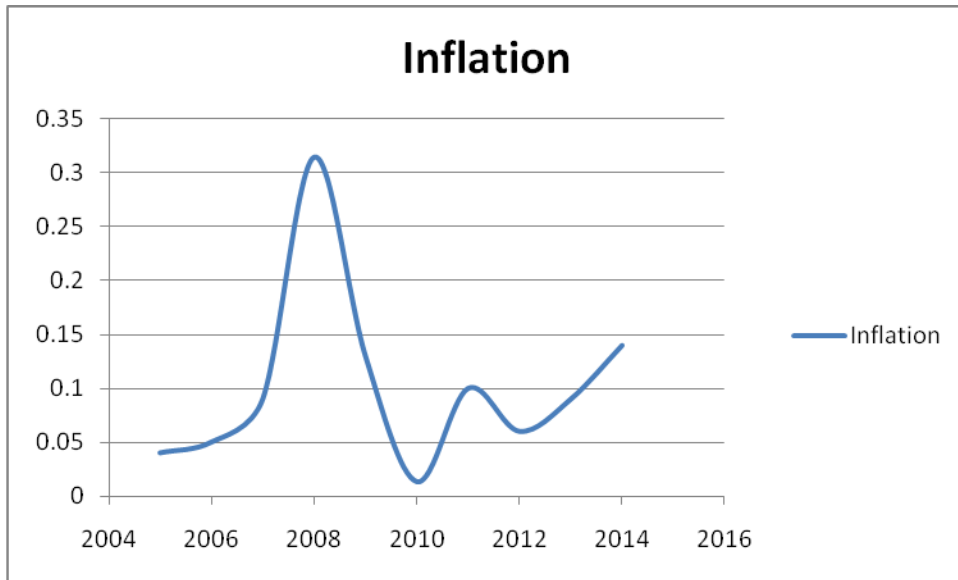
4.1 Introduction

This study presents the data analysis and interpretation of the results. This chapter provides various sections. Section 4.2 provides the Summary Statistics, Section 4.3 provides the Discussion, section 4.4 presents Empirical Model of the study and finally 4.5 summary of the chapter.

4.2 Summary Statistics

By the rule of thumb and assuming every other thing remains equal/constant, since Kenya is at the level below full employment given the rate of unemployment and low standard of living with increased number of its citizens living below the poverty line, Fiscal Deficit is expected appropriation to bring about increased money supply (if financed through external debt and printing more currency) and when supply outweighs demand, cost of fund (interest rate) will go down bringing about an inverse relationship between interest rate and fiscal deficit. This will make more funds available for investment and more investment bringing about increase in Gross domestic Product (positive relationship between GDP and BD). And as more goods are produced and quality enhanced, export will be boosted and/or import reduced bringing about reduction in demand for foreign goods and foreign exchange and increase in demand for local goods and local currency leading to appreciation in the value of local currency (indicating inverse relationship between BD and NER).

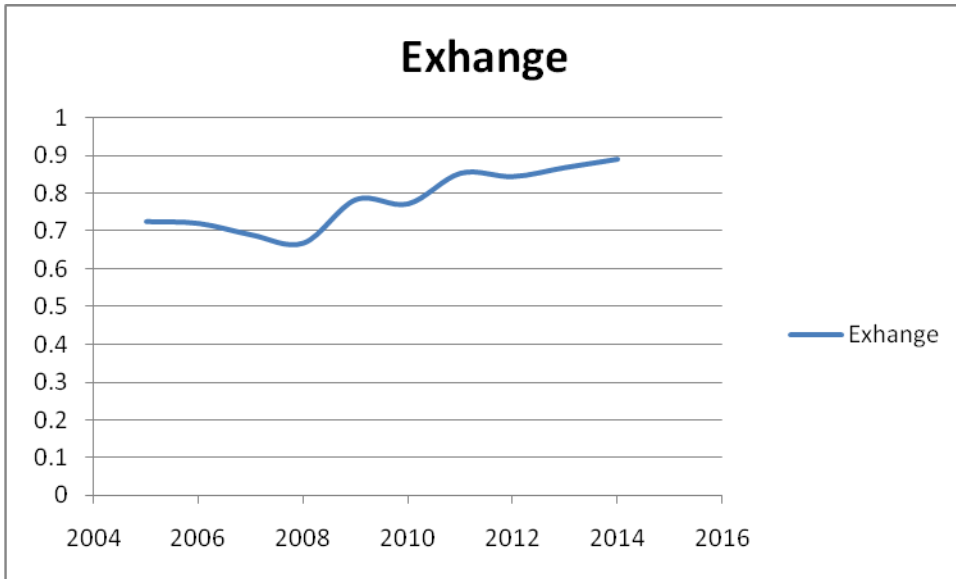
Figure 4.1: Descriptive Statistic of Interest Rate from 2005 to 2014



Source: Kenya National Bureau of Statistics, (2014)

From the figure 4.1: the findings show that inflation between 2005-2014 was at 0.048% in 2005 started raising in 2006 and was at highest in the period between 2007-2008 reaching 31%. Inflation was at lowest point in 2010 at 0.03%. from the findings the higher the Budget deficit the higher the inflation this is well seen in 2007 when the budget deficit was high at 5.3% and inflation was at 31%.

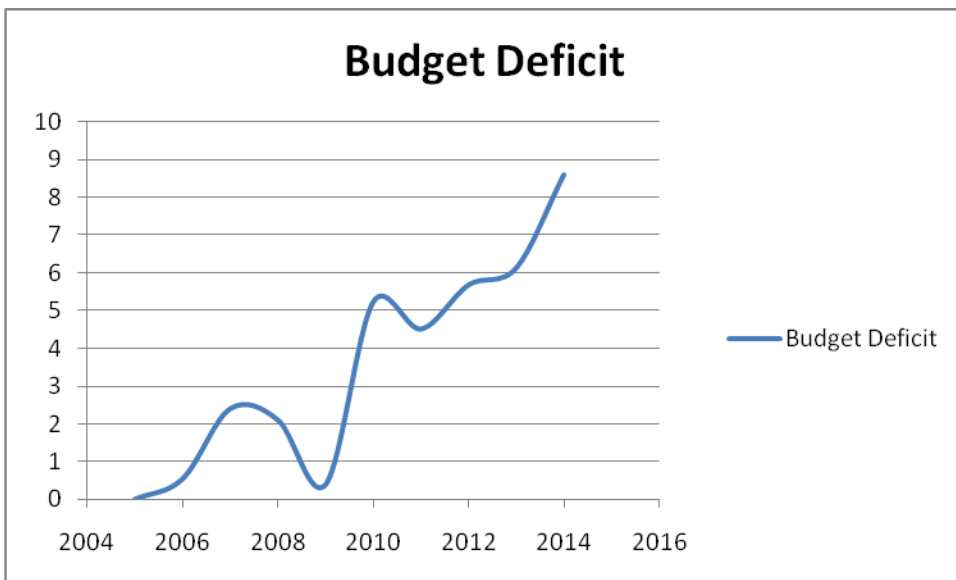
Figure 4.2: Descriptive Statistic of Exchange rate from 2005 to 2014



Source: National Treasury, (2014)

Figure 4.2 above indicate that The exchange in 2005 was 7.2% drop to 6.7% in 2009 and begin to trade highly at above Ksh. 80 in the period between 2012 to 2014. The findings show that a low purchasing power of the shillings result from a higher Budget deficit.

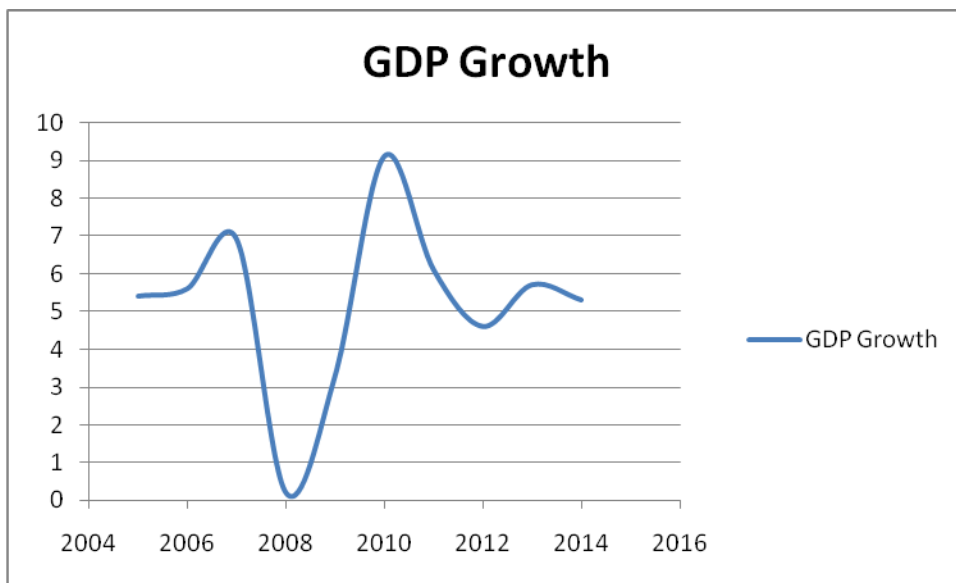
Figure 4.3: Budget Deficit



Central Bank of Kenya report, (2014)

From figure 4.3 above indicates that Kenya recorded a Government Budget deficit equal to 8 percent of the country's Gross Domestic Product in 2014. Government Budget in Kenya averaged 2.93 percent of GDP from 1998 until 2014, in 2005 the BD was 0.01% raised to 2.6% in 2007, drop to 0.2% in 2009 sharply increased to 5.2% in 2010 and recording highest Budget deficit equal to 8 percent of the country's Gross Domestic Product in 2014.

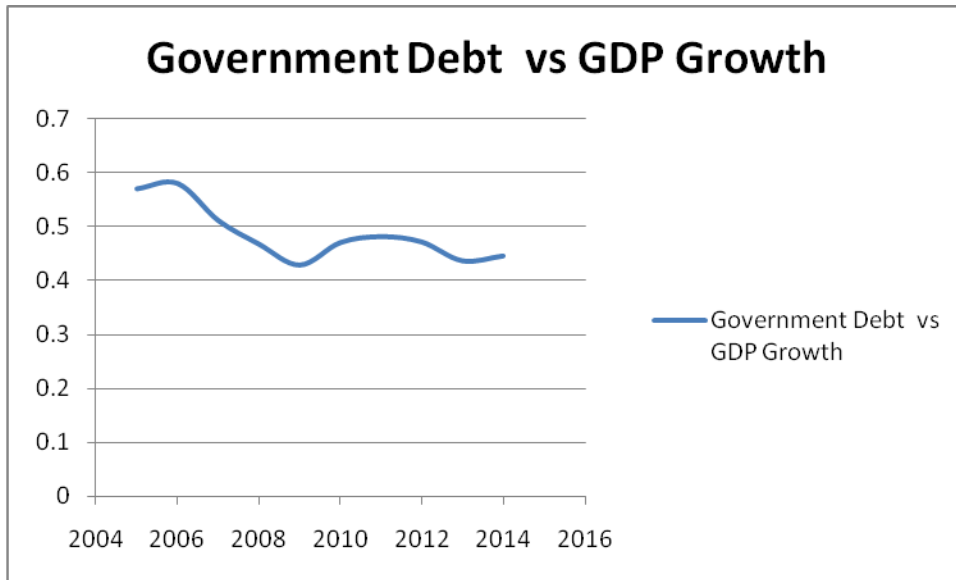
Figure 4.4: GDP Growth



Source: National Treasury, (2014)

Figure 4.4 above shows the economic growth rate and budget deficit rates as a percent of GNP of Kenya between 2005-2014. As it is clear from the figure 4.4 above the growth of Kenya economy can be summarized with instable path. Between 2005-2014 Kenya budget expenditures has been always higher then budget revenues. But GNP growth rates are more instable during the same period. figure 4.4 shows that in 2005 the GDP growth was 5.4% and reached lowest point in 0.2% in 2008, in 2010 it reached 9.1% there after dropping to 4.6 and 5.3 for 2012 and 2014 respectively.

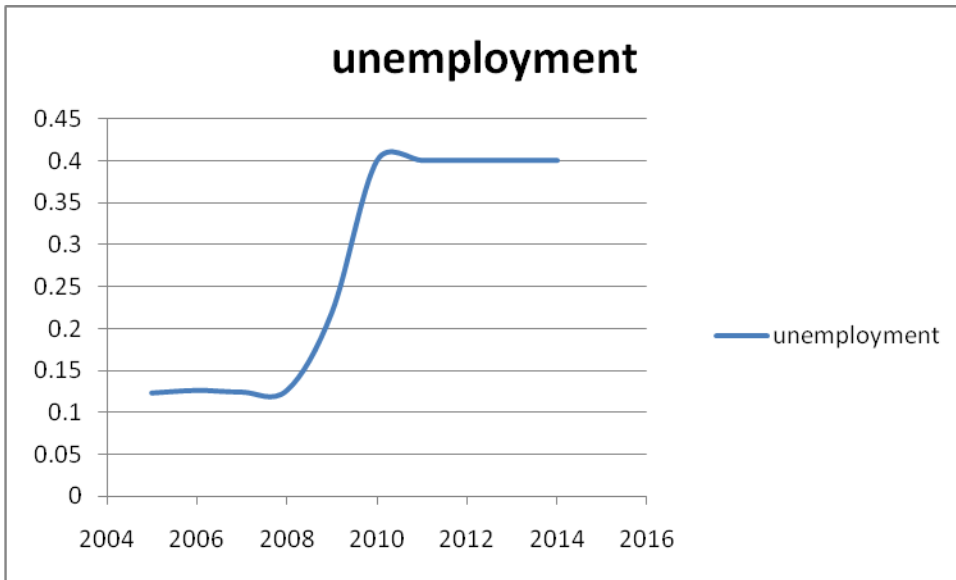
Figure 4.5: Government Debt Vs GDP Growth



Source: National Treasury, (2014)

Figure 4.5 above shows the Government Debt Vs GDP growth and budget deficit rates as a percent of GNP of Kenya between 2005-2014. As it is clear from the figure 4.5 above the Government Debt Vs GDP growth can be summarized with instable path. Between 2005-2014 Kenya budget expenditures has been always higher then budget revenues. But Government Debt Vs GDP rates has been declining from 2005 from 5.8%, recording a low of 4.1% in 2009 and 4.3% in 2014.

Figure 4.6: Unemployment



Source: National Treasury, (2014)

The findings from figure 4.6 above shows that the Kenyan unemployment rate between 2005-2009 to be 12%-22%, but in 2010 to 2014 unemployment rate increased from 22% to 40%. This shows that Kenya has a very high unemployment rate especially between 2010 to 2014.

4.3 Empirical Model

4.3.1 Correlation analysis

Table 4.1: Pearson Correlation coefficients

		Budget Deficit Financing	Interest rate	Exchange rate	Unemployment rate
Pearson Correlation	Budget Deficit	1.000	.733*	.712*	.654*
	Interest rate	.733*	1.000	.536*	.752*
	Exchange rate	.712*	.536*	1.000	.118*
	Unemployment rate	.654*	.752*	.118*	1.000

Note: * Correlation significant at the level 0.001 (two-tailed)

The Pearson product-moment correlation coefficient (or Pearson correlation coefficient for short) is a measure of the strength of a linear association between two variables and is denoted by r . Basically, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient was conducted to examine the relationship between variables, r , indicates how far away all these data points are to this line of best fit (how well the data points fit this new model/line of best fit). The Pearson correlation coefficient, r , can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. As cited in Wong & Hiew (2005) the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from

0.50 to 1.0 is considered strong. However, according to Field (2005), correlation coefficient should not go beyond 0.8 to avoid multicollinearity. Since the highest correlation coefficient is (0.733) being indicated between Interest rate and Exchange rate which is less than 0.8, there is no multicollinearity problem in this research.

Table 4.2: Model of fitness results

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.918(a)	.843	.805	.51038	.843	1.242	4	96	.000

Predictors: (Constant), Interest rate, Exchange rate and unemployment

Dependent Variable: Budget deficit

The correlation analysis was done aimed at establishing the nature of relationship between budget deficit financing and economic growth in Kenya witnessed in the study. A correlation coefficient of 0.843 was obtained suggesting a strong positive relationship between the two variables. This indicates that Interest rate, Exchange rate and unemployment is more likely to affect economic growth. The F-Statistics produced (F=1.242) was significant at 0 per cent level (Sig. F<.000) thus confirming the fitness of the model. Analysis in table below shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the

independent variables) R_2 equals 0.843 that is Interest rate, Exchange rate and unemployment have been explain 84.3 percent of GDP.

Table 4.3: Coefficients of regression equation

		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
(Constant)		.261	.460		0.565	.231
Inflation	X ₁	.130	.233	.254	2.729	.001
Exchange rate	X ₂	.233	.170	.214	2.45	0.02
Interest rate	X ₃	.170	.130	.300	3.778	.002
Budget Deficit (BD)	X ₄	.250	.201	.113	2.217	.002
Unemployment rate	X ₅	.201	.250	.167	2.123	0.03

Dependent Variable: Budget deficit

From these findings, it can be noted that Interest rate, Exchange rate and unemployment rate, where a significant increase in each of these influences GDP.

The established multiple linear regression equation becomes:

$$\ln(\text{GDP}) = \beta_0 + \beta_1 \ln(\text{INFL}) + \beta_2 \ln(\text{EXCH}) + \beta_3 \ln(\text{RIR}) + \ln \beta_4 (\text{BD}) + \ln \beta_5 (\text{UE}) + u$$

Where, GDP = Gross Domestic Product (GDP) INFL = Inflation EXCH = Real Exchange Rate RIR = Real Interest Rate BD = Budget Deficit UE = Unemployment u = Stochastic Error Terms Where, $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ are the respective parameters.

Where;

Ln (GDP) = Gross Domestic Product

X₁= Inflation

X₂= Real Exchange Rate

X₃= Real Interest Rate

X₄= Budget Deficit

X₅= Unemployment

u = Stochastic Error

β₀= Constant

The relationship between development expenditure and recurrent expenditure, Development expenditure includes; Education expenditure, Health expenditure, Infrastructure expenditure and Social expenditure.

$$\text{Ln (GDP)} = \beta_0 + \beta_1 \ln (\text{INFL}) + \beta_2 \ln (\text{EXCH}) + \beta_3 \ln (\text{RIR}) + \ln \beta_4 (\text{BD}) + \ln \beta_5 (\text{UE}) + u$$

$$\text{Ln (GDP)} = 0.261 + 0.233X_1 + 0.170X_2 + 0.130X_3 + 0.201X_4 + 0.250X_5$$

Where

Constant = 0.261, shows that if Inflation, Exchange rate, Interest rate, Budget Deficit (BD) and Unemployment rate =0, then Gross Domestic Product would be 0.261

X₁= 0.233, shows that one unit change in Inflation results in 0.233 units increase in GDP distribution.

$X_2 = 0.170$, shows that one unit change in Exchange rate results in 0.170 units increase in GDP distribution.

$X_3 = 0.251$, shows that one unit change in Interest rate results in 0.130 units increase in GDP distribution

$X_4 = 0.575$, shows that one unit change in Budget Deficit (BD) results in 0.201 units increase in GDP distribution.

$X_5 = 0.250$, shows that one unit change in Unemployment rate results in 0.250 units increase in GDP distribution.

4.4 Discussion of Findings

From the figure 4.1: the findings show that Inflation was at lowest point in 2010 at 0.03%. from the findings the higher the Budget deficit the higher the inflation this is well seen in 2007 when the budget deficit was high at 5.3% and inflation was at 31%. Figure 4.2 above indicate that The exchange in 2005 was 7.2% drop to 6.7% in 2009 and begin to trade highly at above Ksh. 80 in the period between 2012 to 2014. Government Budget in Kenya averaged 2.93 percent of GDP from 1998 until 2014, in 2005 the BD was 0.01% raised to 2.6% in 2007, drop to 0.2% in 2009 sharply increased to 5.2% in 2010 and recording highest Budget deficit equal to 8 percent of the country's Gross Domestic Product in 2014.

The result above implies that there is a positive relationship between budget deficits Financing and Inflation, real Exchange Rate, Interest rate, Budget Deficit (BD) and Unemployment rate but a negative influence on GDP. The implication is that a unit

increase in Budget Deficit decreases the GDP by 0.261units. The result also implies that a unit increase in interest rate 0.170 and inflation rate increases deficits by 0.261units and Unemployment rate 0.201units respectively while a unit decrease in real Exchange rate increases deficits by 0.233. The result, however, supports the Keynesian School in the relationship between budget deficits Financing and inflation rate /interest rate, agrees with the monetarist approach in deficit versus exchange rate and supports neither the Keynesian school nor the monetarist in the negative relationship it shows between budget deficit and GDP. The Coefficient of Determination (R^2) of 0.843 (see table 4.2) shows that the independent variables included in the model explains 73% of the variations in the dependent variable. Therefore the model is a good fit to the relationship. The result has F-Statistics produced ($F=1.242$) was significant at 0 per cent level (Sig. $F<.000$) thus confirming the fitness of the model. The coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R^2 equals 0.843 that is Interest rate, Exchange rate and unemployment have been explain 84.3 percent of GDP. As cited in Wong & Hiew (2005) the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong. However, according to Field (2005), correlation coefficient should not go beyond 0.8 to avoid multicollinearity. Since the highest correlation coefficient is (0.733) being indicated between Interest rate and Exchange rate which is less than 0.8, there is no multicollinearity problem in this research

4.5 Summary and Interpretation of Findings

Kenya's economic performance has been hampered by numerous interacting factors: heavy dependence on a few agricultural exports that are vulnerable to world price fluctuations, population growth that has outstripped economic growth, prolonged drought that has necessitated power rationing, deteriorating infrastructure, and extreme disparities of wealth that have limited the opportunities of most to develop their skills and knowledge. Poor governance and corruption also have had a negative impact on growth, making it expensive to do business in Kenya. According to Transparency International, Kenya ranks among the world's half-dozen most corrupt countries. Bribery and fraud cost Kenya as much as US\$1 billion a year. Kenyans, 23 percent living on less than US\$1 per day, pay some 16 bribes a month—two in every three encounters with public officials. Another large drag on Kenya's economy is the burden of human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS). Prospects significantly improved under the Kibaki government, whose policy aims include budgetary reforms and debt restraint. This is well seen From the figure 4.1: the findings show that Inflation was at lowest point in 2010 at 0.03%. from the findings the higher the Budget deficit the higher the inflation this is well seen in 2007 when the budget deficit was high at 5.3% and inflation was at 31%. Figure 4.2 above indicate that The exchange in 2005 was 7.2% drop to 6.7% in 2009 and begin to trade highly at above Ksh. 80 in the period between 2012 to 2014. Government Budget in Kenya averaged 2.93 percent of GDP from 1998 until 2014, in 2005 the BD was 0.01% raised to 2.6% in 2007, drop to 0.2% in 2009 sharply increased to 5.2% in 2010 and recording highest Budget deficit equal to 8 percent of the country's Gross Domestic Product in 2014.

Despite early disillusionment of western donors with the government, the economy has seen a broad-based expansion, led by strong performance in tourism and telecommunications, and acceptable post-drought results in agriculture, especially the vital tea sector. Kenya's economy grew by more than 7% in 2007 and its foreign debt was greatly reduced. However, it is possible to underscore that situation in Kenya will be stable over foreseeable future and it will result in stable economic growth, in 2015 it is expected to reach 6% and more in 2016 due to growing flow of foreign investment, prospective promotion of Kenyan goods on global markets and increment in demand for agricultural products, especially, for tea and cut flowers. Western donors are now adopting a less paternalistic attitude towards their relations with African nations. However, there is still significant improvement to be done. 2007–2008 post election violence also impacted a lot to Kenyan economy, these prove for the down swing of Kenya business cycle within the period.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1 Summary of the Study

This research was descriptive because it was concerned with discussing Relationship between Budget Deficit Financing and Economic Growth in Kenya affects. The descriptive design was used since it ensures complete description of the situation as it was, making sure that there were minimum bias in the collection of data and to reduce errors in interpreting the data collected Findings of the study indicate that Inflation was at lowest point in 2010 at 0.03%. from the findings the higher the Budget deficit the higher the inflation this is well seen in 2007 when the budget deficit was high at 5.3% and inflation was at 31%. Figure 4.2 above indicate that The exchange in 2005 was 7.2% drop to 6.7% in 2009 and begin to trade highly at above Ksh. 80 in the period between 2012 to 2014. Government Budget in Kenya averaged 2.93 percent of GDP from 1998 until 2014, in 2005 the BD was 0.01% raised to 2.6% in 2007, drop to 0.2% in 2009 sharply increased to 5.2% in 2010 and recording highest Budget deficit equal to 8 percent of the country's Gross Domestic Product in 2014. The result above implies that there is a positive relationship between budget deficits Financing and Inflation, real Exchange Rate, Interest rate, Budget Deficit (BD) and Unemployment rate but a negative influence on GDP. The implication is that a unit increase in Budget Deficit decreases the GDP by 0.261units. The result also implies that a unit increase in interest rate 0.170 and inflation rate increases deficits by 0.261units and Unemployment rate 0.201units respectively while a unit decrease in real Exchange rate increases deficits by 0.233. The result, however, supports the Keynesian School in the relationship between budget deficits

Financing and inflation rate /interest rate, agrees with the monetarist approach in deficit versus exchange rate and supports neither the Keynesian school nor the monetarist in the negative relationship it shows between budget deficit and GDP. The Coefficient of Determination (R^2) of 0.843 (see table 4.2) shows that the independent variables included in the model explains 84.3% of the variations in the dependent variable. Therefore the model is a good fit to the relationship. The result has F-Statistics produced ($F=1.242$) was significant at 0 per cent level (Sig. $F<.000$) thus confirming the fitness of the model. The coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R^2 equals 0.843 that is Interest rate, Exchange rate and unemployment have been explain 84.3 percent of GDP. As cited in Wong & Hiew (2005) the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong. However, according to Field (2005), correlation coefficient should not go beyond 0.8 to avoid multicollinearity. Since the highest correlation coefficient is (0.733) being indicated between Interest rate and Exchange rate which is less than 0.8, there is no multicollinearity problem in this research

5.2 Conclusion

Kenya's economic performance has been hampered by numerous interacting factors: heavy dependence on a few agricultural exports that are vulnerable to world price fluctuations, population growth that has outstripped economic growth, prolonged drought that has necessitated power rationing, deteriorating infrastructure, and extreme disparities of wealth that have limited the opportunities of most to develop their skills and

knowledge. Poor governance and corruption also have had a negative impact on growth, making it expensive to do business in Kenya.

Government budget spending has a big share as a % GNP. The size of the government in Kenya, makes both productive and non-productive expenditures and budget deficit an important instruments of economic growth. Budget deficits and all kinds of government expenditures are related with economic growth. The relation is on both direction and bivariate causality. The share of non-productive expenditures is also causes economic growth and this contradicts with the theory. But this shows that Kenyan economy is dependent to government spending. And today's, nonproductive expenditure and productive expenditure has an impact on the successive years economic growth rates as there is a significant long run relationship.

The findings indicated that, deficit financing have a great effect on the economic growth of a nation as a budget deficit implies lower taxes and increased government spending which will increase aggregate demand and this may cause higher Real GDP and inflation. Increased investments on resourceful activities like industrial production are vital in determining the ability of a nation to achieve economic growth. The study therefore suggests that, greater budgeting discipline that will reduce wastage in government expenditure should be encouraged in the nation and that the government should redirect its fiscal policy that would favor the private investor by discouraging high government expenditure and maintaining low fiscal deficit. Therefore the model is a good fit to the relationship. The result has F-Statistics produced ($F=1.242$) was significant at 0 per cent level (Sig. $F<.000$) thus confirming the fitness of the model. The coefficient of

determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R^2 equals 0.843 that is Interest rate, Exchange rate and unemployment have been explain 84.3 percent of GDP. As cited in Wong & Hiew (2005) the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong. However, according to Field (2005), correlation coefficient should not go beyond 0.8 to avoid multicollinearity. Since the highest correlation coefficient is (0.733) being indicated between Interest rate and Exchange rate which is less than 0.8, there is no multicollinearity problem in this research.

5.3 Recommendation to Policy and Practices

The research further suggests studies on areas of economic growth development level as should be the case, the study to focus on government balanced budgeting if possible.

Therefore the research suggests areas for further studies including; the impact of pressure from external shocks and political uncertainty to foreign investments which are sources of revenue and stimulates of economic growth.

The paper recommends that government should redirect it fiscal policy that would favor the private investor by discouraging high government expenditure and maintaining low fiscal deficit. Also, to avoid crowding out effect, it is recommended that deficit be financed through the capital market

Finally, economists and policy makers should not focus on the level of budget deficit but on the source of financing it to ensure that economic growth and development in Kenya is not retarded.

5.4 Limitations of the Study

The need for a comprehensive study was hampered by time and other resource constraints. Despite frantic follow ups, responses from key informants, especially those at the national level, were generally poor.

Getting data from the Constitutional offices charge with Budget formulation and implementation was a tough challenge, most respondents were uncooperative.

One of the limitation to the study was that data used was secondary data which limits its findings in reliability as explaining the accurate picture of the phenomenon under study. The use of secondary data limits the findings in reliability as generalizing the results might not give accurate picture of the phenomenon under study.

The research was limited only to the effects of deficit financing to economic growth while there are other economic factors that significantly affects economic growth. This limited the results as without studying the other factors; the findings assume that this is the only factor (determinant) of economic growth

5.5 Suggestion for Further Research

1. There are also implications for the researchers to apply the model in the different period of time to validate the results of this study.
2. The same study can be repeated with the budget surplus as a major variable in the model to check the impact of the budget surplus on the economic growth of the country.
3. Research can also be carried out taking both of the variables (i.e. budget deficit and budget surplus) to check their respective impact on the economic growth of the country.
4. These researches will be useful for the policy makers in the country to formulate certain policies, which would be appropriate to achieve the desired level of the economic growth.

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