

**THE EFFECT OF BUDGET DEFICIT ON ECONOMIC DEVELOPMENT IN  
EAST AFRICAN COUNTRIES**

**BY**

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## DECLARATION

This is my own original work and has never been submitted for a degree in any other university.

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## **DEDICATION**

I dedicate this research paper to my family especially my parents for their wisdom and inspiration which has been my pillar in search for knowledge.

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## ABBREVIATIONS

|       |   |
|-------|---|
| ADF   | Augmented Dickey Fuller                             |
| ANOVA | Analysis of Variance                                |
| ARDL  | Auto Regressive Distributed Lag                     |
| DF    | Dickey Fuller                                       |
| EAC   | East Africa Community                               |
| EDPRS | Economic Development and Poverty Reduction Strategy |
| GDP   | Gross Domestic Product                              |
| GNP   | Gross National Product                              |
| OLS   | Ordinary Least Squire                               |



## **ABSTRACT**

The study sought to establish the effect of budget deficit on economic development in East African Countries. The factors identified in the study are budget deficit rate, interest rate, inflation rate and foreign exchange. The theories that were guiding this study are Keynesian, Linear Stages of Growth, International Dependence theory and Neoclassical Counter- Revolution theory. The reason behind conducting this study was the growth of economy at a decreasing rate. The study used quantitative data in form of secondary data from Tanzania, Kenya, Uganda, Rwanda and Burundi for a ten year period from 2004 to 2013. All the data was expressed in terms of percentages and correlation design was considered appropriate as it enables the establishment of the relationship among the variables. The effect of budget deficit on economic development has been conducted in many countries in the world but few in East Africa. The multi variety linear regression was conducted for the countries and the findings was positive relationship in all countries. From the findings, the researcher concluded that the effect of budget deficit on economic development depends on how the funds financing the deficit used, if it was used for development purposes then it would have a positive one but if it is for meeting the recurrent expenditures then there would be a negative relationship between the two. The study recommends that Tanzania, Kenya, Uganda, Burundi and Rwanda should broaden and manage efficiently the tax base in order to finance their expenditure adequately and help increase the multiplier that further generate output hence economic growth. The study also recommends that East African countries should create more revenue sources to increase the income to reduce dependence on developed countries and also to create conducive environment for more opportunities.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Economic Development creates the conditions for economic growth and improved quality of life by expanding the capacity of individuals, firms, and communities to maximize the use of their talents and skills to support innovation, lower transaction costs, and responsibly produce and trade valuable goods and services. It requires effective, collaborative institutions focused on advancing mutual gain for the public and the private sector. Economic development can be referred to as the quantitative and qualitative changes in an existing economy. Economic development involves development of human capital, increasing the literacy ratio, improve important infrastructure, improvement of health and safety and others areas that aims at increasing the general welfare of the citizens. The terms economic development and economic growth are used interchangeably but there is a very big difference between the two. Economic growth can be viewed as a sub category of economic development. Economic development is a government policy to increase the economic, social welfare and ensuring a stable political environment. Economic growth on the other hand is the general increase in the country products and services output (Nafziger, 2005).

A budget deficit is when a country's government spends more than it takes in from taxes or other forms of revenue. Although individuals, companies and other organizations can run deficits, the term usually applies to governments and so it can also be known as government budget deficit, while a structural deficit is when a budget deficit persists for some time. Structural deficits will eventually pose a

problem for any government. Deficits are financed by borrowing, and continued borrowing leads to an accumulation of debt. The ability to pay off this debt is measured by a country's debt relative to its GDP, referred to as its debt-to-GDP ratio. If the ratio gets too high, investors will worry that the government will either default on this debt, or will deflate its value away by monetising the debt and thereby engineer a high inflation rate and eventually affects the economic development negatively (Prunera, 2000).

The East African Countries are under EAC which was established in 2000 by Kenya, Tanzania, and Uganda, Burundi and Rwanda joined in 2007. Its objectives are to deepen cooperation among member states in political, economic, and social fields—including establishment of a customs union, common market, monetary union, and ultimately political federation of East African States. Burundi and Rwanda joined the customs union in 2009 (EAC Report, 2011/12-2014/15).

EAC members are diversified in terms of incomes and social indicators. The EAC has a population of about 153.3 million, a land area of 1.82 million square kilometres, and nominal GDP of \$122.6 billion (2013) and operating under budget deficits. Large shares of the population live in rural areas across the region and three of the countries are landlocked (Burundi, Rwanda, Uganda). While the current EAC has existed for a little more than a decade, there has been a long history of cooperation under successive regional integration arrangements in the region. Kenya, Tanzania, and Uganda have participated in regional integration arrangements dating back to 1917, starting with a customs union between Kenya and Uganda in 1917, which the then Tanganyika joined in 1927, the East African High Commission (1948–1961), the East

African Common Services Organization (1961–1967), the East African Community (1967-1977) and the East African Co-operation (1993–2000) (McAuliffe et al, 2012)

### **1.1.1 Budget Deficit**

By definition, a country faces 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. A budget deficit is caused when a government spends more than it collects in taxes. Reducing tax rates may also cause a deficit if spending is not reduced to account for the decrease in revenue (Rahman, 2012).

Periods of economic growth and economic decline can have a tremendous effect on the ability of a government to finance its spending. In fact, a budget deficit can occur even if a government does not increase its spending one cent or lowers its tax rate one per cent. Deficits can increase even more during economic downturns if the government attempts to stimulate economic growth with spending. Deficits explode in this type of situation because a government dramatically increases spending while revenues are dramatically declining.

Unplanned expenses can also cause a deficit. Natural disasters such as droughts, floods and hurricanes not only destroy assets, but also impede or stop economic activities that will result in less taxable income from which to collect revenue. War is another example of a major unplanned event that is very costly (Rahman, 2012).

### **1.1.2 Economic Development**

Economic development is the sustained, concerted actions of policy makers and communities that promotes the standard of living and economic health of a specific area. It is also referred to as the qualitative and quantitative changes in the economy.

Economic Development creates the conditions for economic growth and improved quality of life by expanding the capacity of individuals, firms, and communities to maximize the use of their talents and skills to support innovation, lower transaction costs, and responsibly produce and trade valuable goods and services. Economic Development requires effective, collaborative institutions focused on advancing mutual gain for the public and the private sector. Economic Development is essential to ensuring economic future (Bwire et al, 2014).

In economics, the study of economic development was borne out of an extension to traditional economics that focused entirely on national product, or the aggregate output of goods and services. Economic development was concerned in the expansion of people's entitlements and their corresponding capabilities, morbidity, nourishment, literacy, education, and other socio-economic indicators. Borne out of the backdrop of Keynesian, advocating government intervention, and neoclassical economics, stressing reduced intervention, with rise of high-growth countries and planned governments, economic development, more generally development economics, emerged amidst these mid-20th century theoretical interpretations of how economies prosper (Todaro et al, 2009).

Economic development is measured by the use of indicators and these are some of the indicators according to International Economic Development Council, GDP is the total value of goods and services produced by a country in a year, GNP measures the total economic output of a country, including earnings from foreign investments, GNP per capita is a country's GNP divided by its population, Economic growth measures the annual increase in GDP, GNP, GDP per capita, or GNP per capita, Inequality of wealth is the gap in income between a country's richest and poorest people, Inflation measures how much the prices of goods, services and wages increase each year. High

inflation can be a bad thing, and suggests a government lacks control over the economy, Unemployment is the number of people who cannot find work, Economic structure shows the division of a country's economy between primary, secondary and tertiary industries and Demographics study population growth and structure. It compares birth rates to death rates, life expectancy and urban and rural ratios (Solow, 1956).

### **1.1.3 Budget Deficit and Economic Development**

The relationship between growth and fiscal deficits revolve over three pertinent issues such as excessive domestic borrowing by the government which crowds out private sector investment and push up interest rates, the accumulation of public debts, and the fear that the government may resort to money printing or seignior age, thus resulting in inflation tax. These effects operate through three channels: First, high budget deficits may lead to higher real interest rates in financial markets, which may reduce investment and growth. Second, high deficits may increase risk premiums on interest rates, particularly raising the inflation risk and default risk premium. High interest rates risk premiums may discourage private investment. Third, high budget deficits may signal a high tax burden in future, which may discourage current aggregate expenditures and therefore private investment. (Kustepeli et al, 2004)

Holding other factors constant, sustained deficits tend to reduce national saving. Given standard national accounting identities, the reduction in national saving must be matched by a reduction in domestic investment and/or a reduction in net foreign investment. In either case, the capital owned by people declines, which in turn reduces future national income and future living standards (relative to their level in the absence of the deficit) (Ferraro, 2008).

Ahmad (2013) indicates that there are different views about the relationship between budget deficit and economic development. Keynes (1936) says there is positive relationship between budget deficit and economic development. On the other hand neo-classical are in a view that there is an inverse relationship between budget deficit and economic development while Baro (1988) says that there is neutral relationship between budget deficit and economic development.

#### **1.1.4 Economic Development in East African Countries**

Kenya's economy is estimated to have grown by 5.4% in 2014 and is projected to grow by 6% in 2015. The resilience is likely to continue with the economy expanding at 6.6% in 2016 and 6.5% in 2017. Kenya is emerging as one of Africa's key growth centre and is also poised to become one of the fastest growing economies in East Africa, supported by lower energy costs, investment in infrastructure, agriculture, manufacturing and other industries. The momentum for growth is expected to be sustained by a stable macroeconomic environment, continued investment in infrastructure, improved business environment, exports and regional integration. The government has also maintained discipline in fiscal and monetary policy, despite increasing pressure from devolution and rising public sector wage bill. Total public debt in 2013/14 fiscal year was 43% of gross domestic production (GDP) and is expected to remain below the 50% of GDP threshold. Kenya became a lower middle income country, with its economy 25% larger than earlier estimated, following the rebasing of its GDP in September 2014 (World Bank, 2015).

Tanzania recently completed the rebasing of its national accounts which showed that the country appears to be close to achieving middle income status. The total value of the country's economic output is approximately one-third larger than was previously estimated, with the current average per capita income at \$948, as opposed to the

previous \$695. According to World Bank's new statistics, the economic growth has trickled down to the poor, including the extreme poor. The performance of Tanzania's economy has not been significantly affected by these new and improved statistics though it reveals a higher level of volatility in the economy than previously imagined. Overall improvements in agriculture, construction, mining, education, financial services and tourism sectors contribute to the difference between the old and new GDP figures (World Bank, 2006).

The overall value of exports increased by 9.4% in the period from 2012/13 to 2013/14, as increases in the total value of manufactured exports and service exports compensated for the decline in the value of traditional agricultural exports, while the total value of imports increased at a rate of 9.2%, in part driven by increases in both oil and construction-related imports, over the same period. The current account deficit remained steady at a value equivalent to approximately 11% of GDP in 2013/14. The most significant transformative factor on the economy is the large natural gas reserves that were recently discovered. While the most significant impacts of this discovery on the local economy will not be felt for at least seven to ten years, careful management of the revenues derived from these natural resources will be required to ensure the optimal use of these revenues and to achieve inclusiveness (World Bank, 2006).

Uganda was among the first Sub-Saharan African countries to embark on liberalization and pro-market policies in the late 1980s. Real gross domestic product (GDP) growth averaged 7% per year in the 1990s and the 2000s, but from 2006 and onwards, the country witnessed more economic volatility and gross domestic product (GDP) growth slowed to an average of about 5%. The Ugandan economy is about 20% larger than had previously been calculated, while the population is 3% smaller. Going forward, a huge public investment program is expected to drive growth while private



investments remain subdued. The economy is expected to grow at a rate of approximately 5.6% in 2014/15, and could maintain an upward trajectory into the near future, as oil investments and the large infrastructure program boost construction activities. The agricultural sector, which employs the bulk of the labour force, is unlikely to achieve high rates of growth due to supply-side constraints, such as limited use of improved inputs, lack of irrigation systems and low levels of mechanization. The country has to manage a number of risks, particularly fiscal risks associated with low revenues in the face of reduced aid inflows to Uganda, the sequencing and overall management of the financing and implementation of the government's huge infrastructure development program, and spending pressures, all of which could disrupt spending plans (World Bank, 2015).

Since 2010, Burundi has recorded average annual growth of 4% despite difficult international conditions. These have been characterised by rising world prices for fuel and food, leading to significant inflationary pressure. In 2014, real GDP growth was estimated at 4.7% compared to 4.5% in 2013, due mainly to agriculture through an upturn in coffee production and a dynamic construction sector implementing large-scale infrastructure projects (fibre optic, roads, etc.). Externally, the current account deficit, including transfers, worsened from 8.3% of GDP in 2010 to 9.5% of GDP in 2014 and this is because of poor use of internal resources, decrease in external aid and budgetary balance. The implementation of the second generation strategic framework for growth and poverty reduction, adopted in February 2012, brought significant progress in human development. With regard to investment, major energy, transport and telecommunications projects were started and new programmes were submitted to the country's technical and financial partners for 2015-16. (Tokindang et al, 2015).

According to World Bank Group's economic analysis of 2015, Rwanda has been experiencing remarkable development successes which include high growth, rapid poverty reduction over the last decade and, since 2005, reduced inequality. Between 2001 and 2014, real GDP growth averaged at about 9% per annum. Recovering from the 2012 aid shortfall and the economy grew 7percent in 2014, 2.3 per cent higher than in 2013. Rwanda's long-term development goals are embedded in a strategy entitled Vision 2020, which seeks to transform Rwanda from a low-income agriculture-based economy to a knowledge-based, service-oriented economy with a middle-income country status by 2020. In order to achieve these long-term development goals, the government of Rwanda has formulated a medium-term strategy. The second EDPRS's highest priority is growth acceleration and poverty reduction through five thematic areas: economic transformation, rural development, productivity and youth employment, and governance accountability. The EDPRS aims to achieve the following goals by 2018: increase GDP per capita to \$1,000, reduce the poverty rate to below 30%, and reduce the extreme poverty rate to below 9%.

## **1.2 Research Problem**

Economic development is of great importance to the East African economy as it contributes to the wellbeing of the five economies as well as the individual citizen in general. In addition, economic development forms a base towards macro environment through establishment, growth and diversification of the industries overtime (Lewis, 1954).

A deficit policy plays a vital role in assisting countries achieve macroeconomic stability, poverty reduction, income redistribution and sustainable growth. For this reason, most governments use the budget as effective tool in achieving their economic

objectives. This means that large and accumulating budget deficit may not necessarily be a bad policy objective if such deficits are effectively utilized to enhance economic growth. It is in line with this that an appropriate operational definition and measure of budget deficit must be clearly stated. Otherwise, the occurrence of large nominal budget deficit may be misleading depending on the operational measure adopted by a particular country (Antwi et al, 2013).

The size of budget deficit and ways of financing it determine the fiscal constraint of the country in the long term. In this sense, sustainable budget deficit becomes an important factor for which government authorities should pay particular attention. The government's ability to borrow is constrained by the size of its permanent income like an individual, even if it remains in authority infinitely. This implies that whatever debt it accumulates has to be repaid in the future (Kustepeli et al, 2004).

Despite significant growth in economy, there is still a problem of current sustainability analysis focuses on fiscal conditions that may retard economic growth, increase tax burdens or transfer significant costs to future taxpayers. These dimensions reflect concerns that governments accumulate long-term liabilities that do not appear in current budgets but may disadvantage future generations when they are due (Díaz et al, 2004).

Government deficit spending in Tanzania has been the subject of much concern in Tanzania's current economic problems. Particularly, government spending is considered to have contributed significantly to the country's inflation and external imbalance. Accordingly, surmounting these phenomena has been seen as being very much dependent on securing a closer look at the dynamics of the components of the budget balance. The government has been continuously pursuing an expansionary

fiscal policy with the exception of the years 1997, 1998 and 2000. The main culprit for the expansionary fiscal stance was increasing pressure from the public seeking to achieve faster economic growth. The government responded by expanding its expenditure on development projects and infrastructure improvements. However when the impact of the increasing fiscal deficit was felt at the end of 1996, an immediate policy shift was observed. The ensuing macroeconomic instability (high inflation rate and high interest rates) was combated using tight fiscal discipline. The low inflation rate achieved at the end of 1990s and early twenty first century is explained by the introduction of improved fiscal discipline (Solomon et al, 2004).

The performance of the Kenya's economy during the first decade of independence in 1963 was impressive. The growth of real GDP averaged 6.6% per year over the period 1964 –1973, and compared favourably with some of the newly industrialised countries of East Asia. This remarkable performance is attributed to consistency of economic policy, promotion of small holder agricultural farming, high domestic demand, and expansion of market for domestic output within the East African region. The second decade marked the end of easy growth options and the emergence of powerful external shocks which, together with imprudent fiscal and monetary management, ushered in an era of slow and persistent economic decline with average real GDP falling to 5.2% over the period. In the third decade, the effects of expansionary fiscal policy of the previous decade, which led to the establishment of highly protected but grossly inefficient private industries and state corporations, began to cause serious strain on the economy's scarce resources. Budget deficits increased rapidly, exports and imports fell, and the economy performed poorly with average real GDP falling further to 4.2% over the period. The downward spiral continued in the fourth decade of independence. A combination of poor fiscal and

monetary policy regime, external and internal shocks as well as political events resulted in the worst economic performance in the short history of the country. The average real GDP fell to a low of 2.2% between 1990 and 2002 (M'Amanja et al, 2005).

Burundi has a poorly diversified economy, which, in the context of a sluggish international economic climate, resulted in growth of 4.6%, below initial projections of 5.2%. This performance reflects the fragility of an economy that, despite reforms, must deal with various constraints, including low investment, high production costs combined with low-skilled labour, and an unattractive business environment. In addition to the structural weaknesses, the economy is also hit by the consequences of climate change, low levels of production and volatile world coffee prices. Government finances improved, but the country is still faced with major constraints due to the poor mobilisation of domestic resources and the volatility of external aid; meanwhile, political tensions have grown caused by 2015 elections (Nafziger, 2005).

Like any other least developed country, Uganda faces budgetary constraints largely due to its low resource base in terms low incomes, low savings and a low tax base. In order to meet her development needs, the government requires more resources than it collects to finance its expenditure. Available data shows that for the past two decades government expenditure has continuously exceeded government revenue. The ratio of government expenditure to GDP has risen from about 18 per cent of GDP in 1992/93 to about 23 per cent of GDP in 2010/11, while the ratio of government revenue to GDP has increased from about 8 per cent to 13 per cent during this period. This signifies a financing gap of about 10 per cent of GDP in 2010/11 that has to be filled by other sources like borrowing and foreign aid (Lwanga et al, 2014).

Empirical studies indicate there are different relationships existing between budget deficit and economic development based on the time and purpose on which the deficit is expected to serve, also showed few locally researched studies. The studies did not show why while each country operates under increasingly budget deficit the rate of economic development is increasing at a decreasing rate. This study therefore sought to establish the effect of budget deficit on economic development in East African Countries for the purposes of contributing to the body of literature and researched materials; this is because the study has not been done by many local authors (East African Countries). Also to find out if the budget deficit contributes to the increasing rate of economic development at a decreasing rate especially countries like Tanzania, Uganda and Kenya. Does budget deficit have negative, positive or constant relationship with economic development?

### **1.3 Research Objective**

To establish the effect of budget deficit on economic development in East African countries

### **1.4 Value of the Study**

This study will benefit a number of groups among them officials of the ministries of planning and finance of the East African countries as well as of those countries which are going through the same problem which will use the study to have an insight of budget deficit and what it entails. This will in turn help them to decide how to finance the budget deficit which the countries operate under.

The five governments will also benefit from this study in coming up with sources of financing the deficit and appropriate policies that promote the operations of new financing sources can be crafted from the information contained in the research.

Moreover not only the five governments but also the third world countries which are experiencing the same in their budgeting process.

Further the findings will help the five governments, development partners, donor communities, Non-governmental organisations, academicians and other stake holders to effectively target on reducing the negative impact of budget deficit on development growth as well as to correct the problems that are budget deficit and development related. The study will also contribute to the literature in the area of Budget deficit and development that will be beneficial to other scholars as well as society as whole and use the findings of this study as a basis for further research and development.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The chapter explores literature that focuses on the area of budget deficit and economic development. The chapter starts by reviewing the theories that inform the discussion on Economic development. It then reviews empirical studies that discuss the link between budget deficit and economic development.

#### **2.2 Theoretical Review**

There are many theories which attempt to explain the effect of budget deficit on economic development in the country. The theories guiding this study are the one that explaining economic development and budget deficit in general. These theories are significant steps towards the development of a systematic framework for the effect of budget deficit on economic development. The following are some of the theories that have been established to explain the budget deficit and economic development in general.

##### **2.2.1 Keynesian Theory**

Keynes (1936) argued that the solution to the Great Depression was to stimulate the economy ("inducement to invest") through some combination of two approaches:- A reduction in interest rates (monetary policy), and Government investment in infrastructure (fiscal policy). By reducing the interest rate at which the central bank lends money to commercial banks, the government sends a signal to commercial banks that they should do the same for their customers. Investment by government in infrastructure injects income into the economy by creating business opportunity, employment and demand and reversing the effects of the aforementioned imbalance.



The Keynesians strongly suggest that government expenditure increases aggregate demand, which enhances the profitability of private investments and further leads to higher level of investment to capitalize on the improved aggregate demand in the economy. Governments source the funding for this expenditure by borrowing funds from the economy through the issue of government bonds, and because government spending exceeds the amount of tax income that the government receives, this creates a fiscal deficit. In conclusion of Keynesian economics is that, in some situations, no strong automatic mechanism moves output and employment towards full employment levels. This conclusion conflicts with economic approaches that assume a strong general tendency towards equilibrium (Odhiambo et al, 2013).

### **2.2.2 Linear Stages of Growth Theory**

Theorists of the 1950s and early 1960s viewed the process of development as a sequence of historical stages. This view was popularized by Rostow (Ingham, 1995). Building on the historical pattern of the then developed countries, Rostow (1960) claimed that the transition from underdevelopment to development would pass through five stages: the traditional society, the preconditions for take-off, the take-off, the drive to maturity and the age of high mass consumption. The decisive stage is the take-off, through which developing countries are expected to transit from an underdeveloped to a developed state. Increasing rate of investments is considered to be necessary to induce per-capita growth.

Like Rostow's stages growth model, the Harrod–Domar model emphasized that the prime mover of the economy is investments. Every country therefore needs capital to generate investments. The principal strategies of development from the stage approach were commonly used by developing countries in the early post-war years.

With a target growth rate, the required saving rate can then be known. If domestic savings were not sufficient, foreign savings would be mobilized (Ghatak, 2003).

### **2.2.3 International Dependence Theory**

The international dependence theory was very popular in the 1970s and early 1980s. The dependence theorists argued that underdevelopment exists because of the dominance of developed countries and multinational corporations over developing countries. The theory is considered an extension of Marxist theory (Hein, 1992). The poor countries are said to be dependent on the developed countries for market and capital. However, developing countries receive a very small portion of the benefits that the dependent relationship brought about. The unequal exchange, in terms of trade against poor countries, made free trade a convenient vehicle of “exploitation” for the developed countries. Developed countries can exploit national resources of developing countries through getting cheap supply of food and raw materials. Meanwhile, poor countries are unable to control the distribution of the value added to the products traded between themselves and the developed countries (Cohen, 1973; Dos Santos, 1973).

The growth of international capitalism and multinational corporations caused poor countries to be further exploited and more dependent on the developed countries. Poor countries therefore could not expect sustained growth from that dependence. Following the international dependence theory, developing countries should therefore end the dependence by breaking up their relationships with the developed world, as well as by closing their doors on the developed countries (Elkan, 1995; Ghatak, 2003; Ferraro, 2008).

#### **2.2.4 Neoclassical Counter-Revolution Theory**

In the 1980s, neoclassical counter-revolution economists used three approaches, namely the free market approach, the new political economy approach and the market-friendly approach, to counter the international dependence model. In contrast with the international dependence model, these approaches mainly argued that underdevelopment is not the result of the predatory activities of the developed countries and the international agencies but was rather caused by the domestic issues arising from heavy state intervention such as poor resource allocation, government-induced price distortions and corruption (Meier 2000). As a response to public sector inefficiency, economists of the counter-revolution thinking, for example Bauer (1984), Lal (1983), Johnson (1971), and Little (1982), focused on promoting free markets, eliminating government-imposed distortions associated with protectionism, subsidies and public ownership.

Another stand of neoclassical free market thoughts called the traditional neoclassical growth theory actually originated from the Harrod–Domar and Solow models. Expanding the Harrod–Domar formulation, Solow neoclassical growth model stresses the importance of three factors of output growth: increases in labour quantity and quality (through population growth and education), increases in capital (through savings and investments) and improvements in technology (Solow, 1956). Technological change in Solow’s model is provided exogenously. Thus, with the same provided rate of technological progress, the growth rate would be expected to converge across countries. By opening up national markets, developing countries can draw additional domestic and foreign investments, thus increasing the rate of capital accumulation and returns on investments. Consequently, developing countries tend to converge to higher per-capita income levels (World Bank, 2000).

Neoclassical economists focused on the market to find a way out for the developing countries. Policies of liberalization, stabilization and privatization therefore become the central elements of the national development agenda. Foreign trade, private international investments and foreign aid flowing into the developing countries are expected to accelerate economic efficiency and economic growth of these countries. Empirically, the models, however, did not bring about the expected results. The growth rates per capita have diverged among countries (Azariadis et al, 1990). Several African countries focusing on these issues achieved an average growth rate of only 0.5 % per year. With weak and inadequate legal and regulatory framework, not to mention the different institutional, cultural and historical context of the developing countries, free market in these countries fails to stimulate economic development (World Bank, 2000).

### **2.3 Determinants of Economic Development**

The study considers five determinants which will also be included in the model. These determinants are budget deficits, inflation rate, foreign exchange rate, interest rate and GDP

#### **2.3.1 Budget Deficit**

The term budget deficit is most commonly used to refer to government spending rather than business or individual spending. It is a status of financial health in which expenditures exceed revenue. The opposite of a budget deficit is a budget surplus, and when inflows equal outflows, the budget is said to be balanced. A budget deficit occurs when a government budgets more spending than there is revenue available to pay for the spending over a specific period of time. Debt is the aggregate value of deficits accumulated over time. At its most rudimentary level of analysis, a budget deficit is caused when a government spends more than it collects in taxes. Reducing

tax rates may also cause a deficit if spending is not reduced to account for the decrease in revenue. However, the world is more complex and a bit more than a mere rudimentary analysis is required (Ahmad, 2013).

Periods of economic growth and economic decline can have a tremendous effect on the ability of a government to finance its spending. In fact, a budget deficit can occur even if a government does not increase its spending one cent or lowers its tax rate one per cent.

### **2.3.2 Gross Domestic Product Growth Rate**

GDP is the sum of the market values, or prices, of all final goods and services produced in an economy during a period of time. The Gross Domestic Product measures the value of economic activity within a country. There are, however, three important distinctions within this definition, GDP is a number that expresses the worth of the output of a country in local currency, it also tries to capture all final goods and services as long as they are produced within the country, thereby assuring that the final monetary value of everything that is created in a country is represented in the GDP and it is calculated for a specific period of time, usually a year or a quarter of a year. Gross domestic product (GDP) is a measure of the size of an economy. It is an aggregate measure of production equal to the sum of the gross values added of all resident, institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs) (World Bank, 2000).

GDP estimates are commonly used to measure the economic performance of a whole country or region, but can also measure the relative contribution of an industry sector. This is possible because GDP is a measure of 'value added' rather than sales; it adds each firm's value added (the value of its output minus the value of goods that are used

up in producing it. Because it is based on value added, GDP also increases when an enterprise reduces its use of materials or other resources ('intermediate consumption') to produce the same output. The more familiar use of GDP estimates is to calculate the growth of the economy from year to year (and recently from quarter to quarter). The pattern of GDP growth is held to indicate the success or failure of economic policy and to determine whether an economy is 'in recession' (Solow, 1956).

### **2.3.3 Foreign Exchange Rate**

Foreign exchange rate is the rate at which one currency will be exchanged for another. It is also regarded as the value of one country's currency in terms of another currency. Exchange rates are determined in the foreign exchange market, which is open to a wide range of different types of buyers and sellers where currency trading is continuous. Exchange rates show the purchasing power of a currency in a different currency. They make the monetary value of goods, services, capital spending and investments comparable the world over (Johnson, 1971).

Depending on agreements between different countries, exchange rates may be fixed or floating, i.e. determined solely by free market forces. If exchange rates are fixed, the countries involved guarantee that their central banks will exchange one currency for the other at a fixed rate. In the case of floating rates, the exchange rate is determined by supply and demand in the currency market. As a result, floating rates can fluctuate enormously. In a system based on a mixture of fixed and floating rates, such as the European Monetary System, parities are set and exchange rates are allowed to deviate from these by a set percentage. The central banks are only obliged to intervene in the market when the currencies reach the upper and lower limits of the bands set (Bwire et al, 2014).

#### **2.3.4 Inflation Rate**

Inflation is defined as a sustained increase in the general level of prices for goods and services while purchasing power is decreasing. It is measured as an annual percentage increase. As inflation increases, every unit of a currency one owns buys a smaller percentage of a good or service. The value of a unit of currency does not stay constant when there is inflation. Purchasing power which is the real, tangible goods that money can buy is used when observing the value of a single unit of currency (World Bank, 2000).

Inflation is a sign that an economy is growing. In some situations, low inflation rate (or even deflation) can have same effects as high inflation. The lack of inflation may be an indication that the economy is weakening. One cannot tell with certainty that inflation is either good or bad - it depends on the overall economy as well as individual situation (Aworinde, 2013).

#### **2.3.5 Interest Rate**

In view of Ball et al (1995) an interest rate is the rate at which interest is paid by borrowers (debtors) for the use of money that they borrow from lenders (creditors). Specifically, the interest rate is a percentage of principal paid a certain number of times per period for all periods during the total term of the loan or credit. Interest rates are normally expressed as a percentage of the principal for a period of one year; sometimes they are expressed for different periods such as a month or a day.

Different interest rates exist parallel for the same or comparable time periods, depending on the default probability of the borrower, the residual term, the payback currency, and many more determinants of a loan or credit. For example, a company borrows capital from a bank to buy new assets for its business, and in return the

lender receives rights on the new assets as collateral and interest at a predetermined interest rate for deferring the use of funds and instead lending it to the borrower (Ball et al, 1995)

#### **2.4 Empirical Studies**

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. 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 (Rahman, 2012).

According to Goher et al, (2012) in their research work which was primarily meant to find the relationship between budget deficit and economic growth in Pakistan, they found a negative relationship between budget deficit and economic growth. With the application of unit root test and OLS model using home country dataset of budget deficit and output growth for the period 1978 to 2009. The negative impact of the budget deficit on the economic growth was because governments are short of the resources to meet their expenses in the long run. Their savings as well as revenues are not enough to meet their expenses. The other variables (similar to variables used in this study) included in their model also affect the economic growth was inflation has a negative impact on GDP, and increase in inflation also affect the interest rate. The governments must take measures to control the deficit to achieve certain level of the economic growth.



Government of Pakistan must utilize its underutilized resources to overcome the problem of the budget deficit, as mere acquiring the loans to meet the unforeseen expenditures.

Another author investigated the relationship between budget deficit and economic growth from Malaysia's perspective. Four variables were used, namely real GDP, government's debt, productive expenditures and non-productive expenditures. ARDL approach used to analyse the long-run relationship between all series since it can cater for small sample size. By using quarterly data from 2000 to 2011, it was found that there is no long-run relationship between budget deficit and economic growth of Malaysia, consistent with the Ricardian equivalence hypothesis. However, productive expenditure has positive long-run relationship with the economic growth. In case if there is a shock in the Malaysian economy, the only variables that can help to converge the economy to its equilibrium is the changes in GDP and productive expenditures. For future recommendation, it is suggested that other researchers will enhance this research by including other developing countries as the sample of analyses (Rahman, 2012).

Bose et al, (2007) looked at the relationship between budget deficit and economic growth for 30 developing countries from 1970 to 1990. By using panel data analysis, 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. 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. 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. Few researchers agreed with the new classical economies' thought, in which there is negative relationship between budget deficit and economic growth. Generally, the government has to borrow money internally or externally in order to finance budget deficit. An increase in the demand of the loanable funds by the government will distort the level of private investment due to an increase in the interest rate. The decline in the private investment will definitely reduce the level of economic growth.

Based on the research conducted by Ball et al, (1995) the previous statement is proven to be true from the case of the United States from 1960 to 1994. The same conclusion was found in a research made on the pattern of government expenditures for 30 developing countries. Huge budget deficits had significantly reduce the level of national savings and private investment. Apart from that, high budget deficits will give signal to the citizens that the government has lost control in managing the funds. It was found that the countries that faced budget deficits have lower growth rate as compared to countries that faced with budget surplus.

A continuous rise in budget deficits will also leads to a problem of bankruptcy. As a result, the investors will have less confidence to invest in a country. It will further reduce the economic growth of a country. Apart from that, the budget deficit can also reduce the economic growth of a country based on the perspective of politic and election process. Brender et al, (2001), found that high budget deficit recorded by a country will give negative signals to the citizens that the government authorities did not perform well in managing the funds of a country. As a result, there is a probability of re-election process to be conducted in order to replace the authorities. Indirectly, the authorities who did not perform well may not be able to bring the country to the

upper level. Hence, it will not contribute to high economic growth due to lack of confidence among citizens, investors and other neighbouring countries.

Odhiambo et al, (2013)'s study aimed at finding the relationship between economic growth and fiscal deficits using annual time series secondary data (1970-2007). Basically, the study used a combination of exploratory and causal research designs purposively selected and was estimated using OLS method. The study also performed various econometric tests such as multi collinearity, DF and ADF unit root test. Based on the dynamic growth model, the study concludes that fiscal deficits can increase economic growth as it enhance productivity by providing infrastructure, education, health and harmonise private and social interest. The study therefore found a positive relationship between economic growth and budget deficits in Kenya. Prompt correction of fiscal balance in the short run would entail slower growth, but it would be positive for growth and standard of living over the longer run compared with delayed adjustment. Prompt correction of the external deficits via exchange rate adjustments, even if it occurs smoothly, is likely to be associated with lower near term growth. A delayed correction of the external deficit may involve larger macroeconomic costs of transaction to a sustainable position.

Another study by Bwire et al, (2014) researched on the relationship among budget deficit, money creation and inflation in Uganda. They analysed using a triangulation of Vector Error Correction model (VECM) and pair-wise Engel-Granger non-causality test techniques over the period 1999 - 2012. Results suggest that fiscal deficits do not seem to necessarily trigger inflation in the short-run, but in the long-run. Also, unidirectional causality running from inflation to the fiscal deficit, from money supply to the fiscal deficit, and a feedback causal effect between money supply and inflation in the short-run are found. Thus, in the short-term, contractionary

monetary policy to reduce inflation in Uganda need not focus on budget deficit reduction, but rather on other macroeconomic determinants of inflation, and inflation should be contained to mitigate its effect on the budget deficit.

The study by Solomon et al, (2004) on Tanzania showed a strong positive relationship between inflation and budget deficit. They stated that budget deficit has a significant effect on inflation and concluded that developing countries should attach more importance to inflation because inflation tends to be affected from many economic shocks such as high budget deficit. In their view inflation should be controlled by efficient fiscal policies. They considered analysis of data over the period of 1961 to 2001 and on the same, Chenery et al, (1975) in their work on the relationship between inflation and budget deficit from different countries observed a weak relationship between the variables in developed countries and a strong positive relationship in LDCs. The Tanzanian economy has remained one of the limited numbers of countries that has experienced a relatively high inflation rate, accompanied by high fiscal deficits for a prolonged period in the absence of any hyper-inflation. Since Solomoni, (2004) shows inflation affect the economic development negatively in the long run and there is a positive relationship between inflation and budget deficit this means budget deficit also affect economic development negatively.

The study of Aworinde (2013), examined the effects of budget deficits on the current account imbalance and inflation in African countries. The aims of his thesis were to use higher frequency data because most studies in African countries use annual data, by contrast he used quarterly data, examine the dynamic interaction between fiscal deficits and current account imbalances using VAR models, explore the long-run relationship between the twin deficits, using the ARDL, assess the long-run relationship between the twin deficits using the threshold ARDL and to model

inflation as being non-linearly related to fiscal deficits using the asymmetric co-integration approach. The empirical literature reviewed on fiscal deficits and inflation suggested that fiscal deficits are inflationary in high inflation economies and developing countries, but not in low inflation and developed countries. Also in response to a positive government deficit shock, the current account remains constant in Kenya, Nigeria and Tunisia. He also examined the long-run relationship between fiscal deficits and inflation in eleven African countries and results showed that fiscal deficits and inflation are asymmetry in Botswana, Egypt, Ethiopia, Ghana, Kenya, Morocco and Tanzania. His thesis centred on the twin deficits and fiscal deficits and inflation in African countries. He concluded by indicating that large fiscal deficits are the cause of current account deficits, and that fiscal deficits are inflationary and further suggested that African countries should spend their resources on projects that will accelerate the level of growth.

## **2.5 Summary of Literature Review**

Many authors have concluded that there is indeed existence of the relationship between budget deficit and economic development but they differ on how the two relate. While the empirical literature review of Goher et al (2012) found a negative relation between the variables, Odhiambo et al (2013), Aworinde (2013) and Bose et al (2007) resulted in a positive correlation and Rahman (2012) did not establish any relationship. However there are few Authors who were interested in the topic from East Africa's point of view because empirical review was predominated by the international literatures than local ones. This research aims to fill the gaps in the available literature and provide information to interested stakeholders on areas of unexplored opportunity.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter covers the mechanisms outlined for conducting the research, the kind of data needed and the details of how this was achieved in practice.

#### **3.2 Research Design**

A Correlation research design was undertaken in order to ascertain reliability of data collected so as to describe the relationship between the variables of interest in the study and consequently test the research hypothesis. This is consistent with other previous researches that have successfully been analysed using the same design and proven appropriate, (Mpuga, 2004, Kimuyu et al, 2000 and Atieno, 2001).

#### **3.3 Population**

Burns et al, (2003) describe population as all the elements that meet the criteria for inclusion in the study. The population of this study is all the five countries in the East Africa Community that is Tanzania, Kenya, Uganda, Rwanda and Burundi.

#### **3.4 Data Collection**

Secondary data was used in this study. This means the study used readily available information obtained from annual reports of the EAC and respective country budget reports. The study data covered the period between 2004 and 2013

#### **3.5 Validity and Reliability**

According to Nachimias (1996) Validity refers to the degree to which a measuring instrument measures what it is supposed to measure and reliability refers to consistency of a measuring instrument that is the extent to which a measuring

instrument contains variable error. Confidence level of 95% and 5% significance level will be used to determine the reliability of the results

### 3.6 Data Analysis

The study used data covering ten year period. The data collected was edited, uniformity, consistency and completeness and arranged to enable coding and tabulation before statistical analysis. A linear regression model used to assess the relationship between the economic development and the factors that were selected as determinants of economic development, budget deficit included for each country separately. The research used ANOVA to estimate the result of the correlation between the variables. The researcher used F-statistical to test the overall model and for each independent variable t-statistical test was used. Confidence level of 95% and 5% significance level used to determine the reliability of the results.

The other independent variables are Gross Domestic Product growth rate, Budget Deficit, Inflation rate, interest rate and foreign exchange rate which influencing the economic development.

Therefore the model used:

$$Y_{ij} = \alpha + \beta_1 X_{1ij} + \beta_2 X_{2ij} + \epsilon$$

Where;

Y Economic development is measured by the GDP growth rate per annum of the respective countries

X<sub>1</sub> Budget Deficits Rate (amount of budget deficit to GDP at the end of each financial year from 2004-2013)

|               |  |
|---------------|--|
| $X_2$         | Interest Rate (Total interest payment to GDP annually in percentage) |
| $\alpha$      | Constant   |
| $\varepsilon$ | error term   |
| $\beta$       | beta coefficients  |
| t             | time, 2005-2014  |
| j             | respective country   |



## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter presents the data analysis, findings, interpretations and presentation of the study based on the research objective which was to determine the effect of budget deficit on economic development in East African Countries. The analysis was based on 10 years secondary data from 2004 to 2013 obtained from EAC reports, Budget reports of each country and World Bank Reports. The results were presented in the tabular form.

#### 4.2 Descriptive Statistics

This section represents descriptive statistics for five countries of East Africa according to data collected for variables selected.

**Table 4.1: Descriptive Statistics**

|                       | <b>Economic<br/>Development<br/>Rate (%)</b> | <b>Budget Deficit to<br/>GDP Rate (%)</b> | <b>Interest<br/>Rate (%)</b> |
|-----------------------|--|---|------------------------------|
| Mean                  | 5.94600                                      | 7.76200                                   | 4.77400                      |
| Median                | 6.05000                                      | 7.40000                                   | 2.25000                      |
| Mode                  | 7.00000                                      | 11.20000                                  | 0.90000                      |
| Standard<br>Deviation | 2.00715                                      | 3.54556                                   | 4.47453                      |
| Variance              | 4.02866                                      | 12.57098                                  | 20.02138                     |
| Kurtosis              | 0.83004                                      | -0.70802                                  | -0.50559                     |
| Skewness              | 0.10052                                      | 0.02150                                   | 0.89245                      |
| Minimum               | 0.90000                                      | 0.00000                                   | 0.00000                      |
| Maximum               | 11.20000                                     | 14.80000                                  | 16.90000                     |
| Count                 | 50   | 50  | 50                           |

Source: Research Findings

Table 4.1 indicates descriptive statistics for the five countries. Economic development rate has been increasing by 5.946 on average annually, with median of 6.05, mode of 7, standard deviation of 2.00715, variance of 4.02866, kurtosis of 0.83, skewness of 0.1, minimum figure of 0.9, maximum figure of 11.2 out of 50 counts. Budget deficit increased by 7.762 on average annually, 11.2 was more frequently appeared data, median of 7.4, standard deviation of 3.54556, the variance between the variables was 12.57, kurtosis of -0.7, skewness of 0.0215 while maximum and minimum figures of 0.00 and 14.8 respectively out of 50 counts. The countries were paying Interest rate of 4.77400 on average annually, with median of 2.25, 0.9 was the most appeared figure in the data set, standard deviation of 4.47453, variance of 20.02138, kurtosis of -0.5, skewness of 0.89245, maximum of 16.9 and minimum of 0.00 for 50 counts.

### 4.3 Correlation Analysis

This section sought to establish the relationship of budget deficit on economic development for East African Countries.

**Table 4.2: Correlation Analysis**

|                                     | <b>Economic<br/>Development Rate<br/>(%)</b> | <b>Budget<br/>Deficit/GDP Rate<br/>(%)</b> | <b>Interest<br/>Rate (%)</b> |
|-------------------------------------|--|--|------------------------------|
| Economic<br>Development Rate<br>(%) | 1  |  |                              |
| Budget Deficit/GDP<br>Rate (%)      | 0.31622                                      | 1  |                              |
| Interest Rate (%)                   | -0.46239                                     | -0.10200                                   | 1                            |

Source: Research Findings

Table 4.2 shows the correlation analysis findings for East African countries. While budget deficit had positive relationship with economic development of 0.31622, Interest rate had negative relationship with economic development of -0.46239. This means that when budget deficit increases (decreases) economic development also increases (decreases) and when interest rate increases (decreases) economic development decreases (increases).

#### 4.4 Regression Analysis

**Table 4.3: Model Summary**

| <b>Regression Statistics</b> |          |
|------------------------------|----------|
| Multiple R                   | 0.535685 |
| R Square                     | 0.286958 |
| Adjusted R Square            | 0.256616 |
| Standard Error               | 1.73056  |
| Observations                 | 50       |

Source: Research Findings

Table 4.3 shows the model summary for data. The study established the R of 0.535685 and R square of 0.286958 indicating a weak relationship between economic development and the variables. R square of 0.286958 showed that 26% of total variations on economic development were attributed by the two variables.

**Table 4.4 Analysis of Variance**

| <b>ANOVA</b> |           |           |           |          |                       |  |
|--------------|-----------|-----------|-----------|----------|-----------------------|--|
|              | <b>Df</b> | <b>SS</b> | <b>MS</b> | <b>F</b> | <b>Significance F</b> |  |
| Regression   | 2         | 56.64676  | 28.32338  | 9.45740  | 0.000353              |  |
| Residual     | 47        | 140.75744 | 2.99484   |          |                       |  |
| Total        | 49        | 197.40420 |           |          |                       |  |

Source: Research Findings

Table 4.4 shows the Analysis of Variance for data regressed. This is established if there is significant difference between the means of the variables under study and also to establish the overall significance of the model. Since the F is 0.000353 below the 0.05, it can be concluded that regression model was significant in giving true estimate of the variables and the means of the variables are not significant related.

**Table 4.5 Regression Findings**

|                              | <b>Coefficients</b> | <b>Standard Error</b> | <b>t Stat</b> | <b>P-value</b> |
|------------------------------|---------------------|-----------------------|---------------|----------------|
| Intercept                    | 5.68215             | 0.67501               | 8.41789       | 0.00000        |
| Budget Deficit/ GDP Rate (%) | 0.15391             | 0.07009               | 2.19584       | 0.03307        |
| Interest Rate (%)            | -0.19498            | 0.05554               | -3.51052      | 0.00100        |

Source: Research Findings

Table 4.5 show the coefficients of the model. There is a significant relationship between economic development and the two variables i.e. budget deficit and interest rate because of having a t-statistic figure of more than 2 (2.19584 and -3.51052 respectively). It established that when budget deficit increased by one per cent,

economic development increased by 0.15391 per cent and when interest rate increased by one per cent economic development decreased by 0.19498 per cent with a standard error of 0.23056 and intercept of 5.68215. T stat figures of budget deficit rate (2.19584) and interest rate (-3.51052) are more than 2, this means they were the variables which have effect on economic development among the selected variables. Therefore from the regression results, the estimated model is

$$Y=5.68215 + 0.15391 X_1 - 0.19498 X_2 + 1.73056$$

#### **4.5 Discussion for Research Findings**

The research findings show that there is indeed relationship between budget deficit and economic development. The regression shows that 1% change in budget deficit contributed 0.15391 or 15.39% positive change in the development of the economy. It shows that the expenditure that exceeds the revenue was put on productive ventures. Also 1% change in interest rate contributed 0.19498 or 19.498% negative change in economic development, which shows whenever cost of borrowing goes down investors invest more due to affordable capital and so increases development. In any given year the economic development was 5.68215 when all the predictor variables were equal to zero that is y-intercept.

In East African countries, the relationship found to be positive i.e. when budget deficit increases (decreases); economic development increases (decreases).The findings were the way they are because of fewer number of variable which were under consideration and hence the weak relationship between the variables, also the reasons why budget deficit increased each year, all of the five countries had no enough revenue to meet their development expenditures, as the investment increased budget deficit increased.

This finding strongly support the traditional Keynesian tenets that increased government expenditure can help achieve expansionary fiscal policy as it leads to an increase in domestic production, making private investors become more optimistic about future course of the economy and start investing more capital and hence increased capital accumulation that through multiplier process achieves positive economic growth. The Keynesians strongly suggest that government expenditure increases aggregate demand, which enhances the profitability of private investments and further leads to higher level of investment to capitalize on the improved aggregate demand in the economy.

Maji et al, (2012) investigated on the impact of fiscal deficits on economic growth in Nigeria for the period between 1970 and 2009. The OLS approached was carried out on the data to test the type of the relationship between the two variables and the findings showed positive relationship. Therefore recommended that the government spending should be more on productive sectors of the economy and adequate monetary policy should be geared towards balancing the role money supply plays to both budget deficits and inflation.

Odhiambo et al, (2013) studied the relationship between Fiscal deficits and economic growth using OLS approach in Kenya for the period of 38 years from 1970 to 2007. The multi variety linear regression model used in this paper suggested that there is a positive relationship between the two variables. It shows that 1% change in budget deficits contributes 6.6% positive change in the growth of an economy. It shows that the expenditure that surpassed the revenue was put on productive ventures. The previous level of budget deficits was also found to have positive impact on economic growth at 5% level and that 1% change in the previous level of budged deficits increases growth by 0.09%. This could on the other hand imply that budget deficits

crowds-out private sector investment as government borrows extensively from the domestic financial institutions, pushing up the interest rate on investment fund required by the private sector which today considered by many economies as the engine of growth and hence need enabling environment on which to thrive.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter summarizes the study and makes conclusion based on the results. The implications from the areas for further research are also presented.

#### **5.2 Summary of Findings**

The main objective of this study was to establish the effect of budget deficit on economic development in East African Countries. In findings, budget deficit had positive effect on the economic development of 0.31622 while interest rate had negative effect of -0.46239. The study established the R of 0.286958 and R square of 0.256616 indicating a weak relationship between economic development and the variables.

The F of 0.0353 is below the 0.05, this means regression model was significant in giving true estimate of the variables and the means of the variables are not significant related. Regression findings established T stat figures and coefficients for budget deficit rate of 2.19584 and 0.15391 respectively and interest rate of -3.51052 and 0.19498 respectively with a standard error of 1.73056 and intercept of 5.68215.

#### **5.3 Conclusion**

Budget Deficit is part of most of the developing countries' annual financial budgets in the world including East African Countries. This study sought to establish the effect the budget deficit has on economic development in East African Countries. Findings showed that there exist a positive relationship between budget deficit and economic development in East Africa and these results are consistent with the Keynesian. Based on the dynamic growth model, the study concludes that fiscal deficits can increase



economic growth as it enhance productivity by providing infrastructure, education, health and harmonise private and social interest.

Since the positive effects resulted from data for East African countries, these implied that the countries invested heavily on development expenditures but also the researcher considered only the four quantitative variables (budget deficit, inflation rate, foreign exchange rate and interest rate) but only two variables (budget deficit rate and interest rate) were suitable for regression purposes. Deficit financing is also necessary and positive instrument to enhance economic growth in developing countries like of East Africa facing shortage of capital. However, it is necessary to emphasize that fiscal deficits should be undertaken with an efficient and well-executed plan for economic development.

#### **5.4 Recommendations**

The study recommends that Tanzania, Kenya, Uganda, Burundi and Rwanda should broaden and manage efficiently the tax base in order to finance their expenditure adequately and help increase the multiplier that further generate output hence economic growth. The optimal levels of governments' expenditure should be determined so as to avoid deficits and the crowding out effect of private investment which many economies encourage as the impetus to economic growth and development.

East African countries should create more revenue sources to increase the income to reduce dependence on developed countries and also to create conducive environment for more employment opportunities, expand infrastructures in water systems, road networks and power, for establishment of more private sectors which in turn will lead to economic development

The major policy implications of the this study are that stable macroeconomics, trade liberalisation and growth oriented policies are workable if they are complimented by the provision of important public services like health, education, infrastructure of roads, ports, water resources, quick and impartial judicial system, effective policy making system, strong legal framework, judicious taxation and a professional government. Strong and stable policy planning, professional institutions and competitive public service thus considered prerequisite for growth. They may imply cost saving measures, for instance, reliance on flatter commodity taxes, make discriminatory pension, unemployment benefits based on work experience and wage level, disproportionately large spending on education, health and reduction of administrative cost. Expenditure composition can also promote economic growth. Fiscal adjustment that reduces unproductive expenditure and protects expenditure in social sector has proved to be more sustainable and more likely to result in faster growth

Tanzania, Kenya, Uganda, Burundi and Rwanda should also reduce the use of external borrowed funds to meet their budget deficit instead use internally borrowed funds so that both sides which benefit are in the same monetary circulation or from outside but where the borrowing conditions are favourable and conducive for them. This will help in reduction of the accumulation of the public debts in the long run.

### **5.5 Limitations of the Study**

Secondary data used was from EAC reports and World Bank reports. Respective ministries have incomplete information therefore the data used in the study might not have been accurate for estimation due to the possibility of manipulation by the officials to meet their own country's interests or local interests but not international.

Also the data were not directly as per the requirements of the study so there were so many alterations and calculations to fit the requirements.

There was no existence of the recently secondary data collected that is why the researcher decided to use the ten year period from 2004 to 2013 were also some of the years' data were missing and so necessitate the research to collect data from different sources to fill the gaps existed. The duration of the study was not long enough to provide true and significant estimation this is because of the set deadlines by the University for Submission of the final copies for those who want to graduate this year.

### **5.6 Suggestions for Further Research**

The study suggest for further research to be done on the impact of specific components of government expenditure like expenditure on military, education, health and social security and welfare and other variables on economic growth and development to ascertain Keynes' postulation that government expenditure positively spur growth and development through the multiplier effect, thereby crowding-in private sector investment.

There are few people who have carried out this study and so few literature exist on the study especially the local cases in all five countries. Also the study should further be developed in detail to include more variables that affect the economic development so that to come up with reliable findings. Each Country especially the under developing ones should research on its economy to come up with solutions to the problems affecting the economic development.

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## **APPENDICES**

### **APPENDIX I: LIST OF COUNTRIES**

1. Burundi
2. Kenya
3. Rwanda
4. Tanzania
5. Uganda

## APPENDIX II: DATA COLLECTION FORM FOR EAST AFRICAN COUNTRIES

| TANZANIA |         |         |        | KENYA   |         |        | UGANDA  |         |        | RWANDA  |         |        | BURUNDI |         |        |
|----------|---------|---------|--------|---------|---------|--------|---------|---------|--------|---------|---------|--------|---------|---------|--------|
| Years    | EDR (%) | BDR (%) | IR (%) | EDR (%) | BDR (%) | IR (%) | EDR (%) | BDR (%) | IR (%) | EDR (%) | BDR (%) | IR (%) | EDR (%) | BDR (%) | IR (%) |
| 2004     | 7.80    | 10.20   | 2.20   | 4.90    | 9.50    | 16.90  | 5.80    | 7.80    | 2.20   | 5.30    | 11.20   | 12.00  | 4.80    | 5.60    | 8.50   |
| 2005     | 7.40    | 11.20   | 1.70   | 5.70    | 6.30    | 10.90  | 10.00   | 7.10    | 1.90   | 7.20    | 11.00   | 9.20   | 0.90    | 2.20    | 4.50   |
| 2006     | 6.70    | 8.30    | 1.70   | 6.10    | 7.50    | 10.10  | 7.00    | 7.10    | 1.60   | 6.50    | 10.50   | 1.40   | 5.40    | 3.10    | 4.00   |
| 2007     | 7.10    | 8.60    | 0.70   | 7.00    | 5.80    | 10.30  | 8.10    | 4.90    | 0.60   | 7.90    | 13.10   | 0.90   | 3.50    | 2.90    | 3.90   |
| 2008     | 7.40    | 6.20    | 0.80   | 1.50    | 7.30    | 10.90  | 10.40   | 4.60    | 2.40   | 11.20   | 10.50   | 0.90   | 4.90    | 3.10    | 10.10  |
| 2009     | 6.00    | 11.30   | 0.90   | 2.70    | 8.90    | 10.10  | 4.10    | 7.20    | 2.30   | 6.20    | 12.40   | 0.00   | 3.80    | 3.10    | 8.40   |
| 2010     | 7.00    | 11.20   | 1.00   | 5.80    | 8.80    | 12.90  | 6.20    | 6.60    | 3.00   | 7.20    | 13.70   | 1.10   | 5.10    | 2.60    | 5.60   |
| 2011     | 6.40    | 8.90    | 0.90   | 4.40    | 13.50   | 11.40  | 6.40    | 7.20    | 2.10   | 8.20    | 11.60   | 0.90   | 4.20    | 0.00    | 6.80   |
| 2012     | 6.90    | 5.00    | 1.10   | 4.60    | 8.10    | 11.60  | 3.60    | 6.30    | 2.00   | 8.00    | 13.90   | 0.86   | 4.20    | 3.40    | 5.80   |
| 2013     | 7.00    | 4.30    | 1.00   | 4.70    | 10.00   | 11.90  | 4.70    | 6.40    | 1.80   | 4.60    | 14.80   | 2.04   | 4.80    | 3.30    | 2.90   |

**Key: EDR-Economic Development Rate (%), BDR-Budget Deficit/GDP Rate (%), IR- Interest Rate (%)**