

EFFECT OF FISCAL POLICY ON THE COST OF LIVING IN KENYA

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DECLARATION

This research project is my original work and has not been presented for the purpose of degree or master award in any other university.

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DEDICATION

I dedicate this thesis to my friends and family who has assisted me with both moral and financial resources to prepare and compile the research proposal, thank you very much for your encouragement, support and continuous inspirations through my postgraduate program. Without your moral support I would not have achieved the much I have achieved in my academic journey as more so in the conduct of this research study. May the Almighty God always bless you abundantly for the selflessness that you all showed in the endeavor of my research study. May your wishes ever be fulfilled now and forever for the good heart you showed me at the point of need.

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LIST OF ABBREVIATIONS

GDP – Gross Domestic Product

CPI – Consumer Price Index

VAT – Value Added Tax

LDC – Less developed countries

OLS – ordinary least squares

ACFs – Auto correlation functions

AR - Auto regressive

MA – Moving average

ARMA – Auto regressive moving average

ARIMA – Auto regressive integrated moving average

PACFs – Partial auto correlation function

LDC - Less Developed Countries

PD - Public Debts

GR-Government revenue

GE - Government expenditure

DEFINITION OF TERMS

Fiscal Policy- Refers to government initiative to control the general direction of the economy through changes in taxes or expenditures ([Khalid,2008](#)).

Government Expenditure- Total spending by local, county and national government in future investment, acquisitions or transfer payments (Mitchell, 2005).

Government Revenue- This refers to all the monies received by a government to fund both its recurrent and development budget (OECD ,2008).

Government Debt- This refers to all the borrowed funds by both the county government and national government (Makau,2008).

Cost Of Living-The ability of an individual to meet own daily needs to satisfy ones satisfaction (Jhinga, 2003).

Consumer Price Index- It is the most used method in estimating the changes of prices of such commodities and hence the inflation rates that will be of assistance on assessing cost of living (World Bank, 2018).

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ABSTRACT

The study aimed at determine the effect of fiscal policies on the cost of living in Kenya where it was construed around the facets of government expenditure, government revenue and public debt. Specifically, the study was seeking to answer the following research objectives: To find out the effect of government expenditure on the cost of living in Kenya, to determine the effect of government revenue on the cost of living in Kenya as well as to evaluate the effect of public debt on the cost of living in Kenya. It unveiled the literature brought forth by Renown scholars in matters of the economy. The theories included the Keynesian theory, Dual Gap Theory, Debt Overhang theory and Distribution theory. Majority of previous studies proved to have much focus on the effect of fiscal policies on the economic growth of the country and therefore leaving the area under focus with scanty information that can be used in further research. The study adopted descriptive research

design which enhanced quantification of the desired research questions. The target was the Kenyan economy whose secondary data was gathered from the World Bank database. The scope of the research was macro data between 1963 and 2017. The results of the study showed that Government expenditure influences positively cost of living is when the government increases money in circulation in the economy thus lowering the cost of doing business which automatically have an impact on the prices of goods. Government expenditure have however attracted attention from various scholars who in their undertaking found contradicting results regarding the relationship between government expenditure and the cost of living. Government revenue is directly proportional to the standards of living if prudently utilized. In this case, the government policies and the understanding of economics plays a critical role in the management of the cost of living. The need for tax revenue is undisputable due to the global significance it has attracted on the economic development irrespective of the national differences. This means that when the dependable variables increases the cost of living will decrease while the public debt has positive relationship with cost of living. This means that when the debt levels are increased within the economy over long-run, the cost of living will be high. It was evident that the variance decomposition of CPI at time period 10 was the most influential on government debt by 10.07% than the government revenue and government expenditure by 3.87% and 8.55% respectively. The main cause attributed to the findings is that the debt component comes with obligations to settle which drains the cash flows in the economy. Due to this reason, the country ought to increase prices of goods and services to cater for the interest expense payment. As per the findings, the study recommends that the government through the finance ministry should embark on the reconstruction of stringent measures that stipulates the usage of the available resources in the various government entities, these measures should then be adopted in the budget policy statement so that every person is responsible on the way they use public resources. In this regard, even coin from the public coffers will be put into use and the spilling effect will eventually lower the cost of living of the general citizens.

CHAPTER ONE

INTRODUCTION

Background of the study

Fiscal policy refers to government initiative to control the general direction of the economy through changes in taxes or expenditures. Its dynamic transmission mechanism through longer policy lags causes different impacts on key variables of the economy such as unemployment, cost of living, inflation and the gross domestic product of the country (Ali, Ahmad & Khalid

2008). According to Fu, Taylor, Yücel & Dallas, (2003), the relationship between fiscal policies and cost of living has been fascinating to the economists due to multiplicity of indicators of the economic growth which are never exhausted. The study focuses on the consumer price index (CPI) in measuring the cost of living which is one of the indicators of economic growth of the country. The government expenditures consequently increased on both developmental and social services thus leading to adjustment of the rates of taxes across board (King & Gurr, 1988). From 1963- 1977, the government managed its fiscal requirements using government revenue collected from internal sources to finance both its recurrent expenditures and part of development programs, however, fiscal hints emanated in the late 70's due to a series of unprecedented internal and external shocks (Kiptui, 2005).

Kiptui (2005) looked on the effect of the fiscal policies on the investment rate from 1972-1999 by using Error correction model and co- integration analysis. He concentrated on the private investment which measures on the economic growth of a country since it is affected by the fiscal policies of a country. In this study, Kiptui identified the fiscal policy instruments include budget deficits, government consumption expenditure, tax burden and public debt. One of the findings was that a huge amount of debt borrowed by the government leads to decline of investment in the long run since there must incur interest rates payments. The second finding was that the budget deficits leads to decline of private investment. The reason behind this is that budget deficits results to decline of public revenue in the economy. The third finding was that government expenditure had a positive effect on private investment. This is because government expenditure does boost the income flow in the economy hence a common Mwananchi can be able to purchase goods and pay for services. In relation to my study, Kiptui's study is related since it shows relationship of fiscal policies on the investment rates which they do measure cost of living indirectly. We conclude that there exists mixed results in the study.

M'Amanja and Morrissey (2005) did research on the effect of fiscal policies of a country on the economic growth in terms of private investment using cointegration analysis and error correction Model. They found out that increase of government expenditure leads to increase of private investment and growth of the economy at whole. Another findings in the same study was that, government borrowings does drain the economy growth because it leads increase of waste of resources in paying the interests rates. They argued that if a country was to borrow with the aim

of boosting private sector more than public sector, the borrowing policy could benefit an individual hence increase of private investment. Kimani (2005) goes further to explain that budget deficits mostly arises due to a government not utilizing its resources in the most profitable sectors that would high returns by Vector-auto regressions method . In different perspective of the same study, the government borrowings in a country could arise due to competition of various sectors in an economy that have a replication effect on the foreign market. When the foreign market is deprived, the interest rates goes up causing huge burden in a country.

Maingi (2010) researched on government expenditure on the economic growth of Kenya annual time series data for the period 1963 to 2008. He measured the economic growth in terms of GDP rate. He concentrated on only government expenditure in terms of government investment, physical infrastructure, education, health care, public debt servicing, economic affairs, general administration and services, defense, public order and national security, and government consumption using vector auto-regression estimation technique. The Johansen cointegration tests, bi-directional causality and Granger- Causality test identified that there exists a positive relationship between government expenditure components and growth rates in Kenya.

1.1.1 Fiscal Policies in Kenya

Fiscal policies, according to Khalid (2008), fiscal policy refers to government initiative to control the general direction of the economy through changes in taxes or expenditures. The analogy of fiscal policies in Kenya can be traced back from 1963, when Kenya attained independence. The Fiscal policies to be discussed in the context of the study include the following: Government Expenditure, Government Revenue & Government Debt.

The first fiscal policy is the Government Expenditure. Government expenditure is the total spending by local, county and national government in future investment, acquisitions or transfer payments (Mitchell, 2005). The effect of government expenditure is contradictory as explained by the classical and Keynesian approach. The Keynesian economists argue in favour of government expenditure indicating that it influences the cost of living through increased production and thus low price for the goods and services. On the other hand, classical economists, points that increased government revenue takes resources from the private sector

which is productive and puts the resources to the unproductive public sector and thus deter progress leading to increased cost of living (Auerbach & Gorodnichenko,(2012)

According to Arnold, Brys, Heady, Johansson, Schweltnus & Vartia, (2011), the only way the government expenditure influences the cost of living is when the government reduces the tax rates thus lowering the cost of doing business which automatically have an impact on the prices of goods. Government expenditure have however attracted attention from various scholars who in their undertaking found contradicting results regarding the relationship between government expenditure and the cost of living.

The second fiscal policy is Government Revenue. According to (OECD,2008) government revenue is all the monies received by a government to fund both its recurrent and development budget. The revenue consist of both tax and non-tax revenue such as legal fees, grants as well as both internal and external borrowings (Illyas & Siddiqi, 2010). On the other side, tax is a compulsory payment by the tax payers to the government for no service in return (Omotoso, 2011).

Tax revenue is the main source of government revenue and is charged directly and others indirectly on the citizens of a nation, direct tax include; personal income tax, corporate tax, etc while indirect tax consist of VAT, custom duty, excise duty (Chaudhry & Munir, 2010). Ahmed (2010), pointed out that government revenue is directly proportional to the standards of living if prudently utilized. In this case, the government policies and the understanding of economics plays a critical role in the management of the cost of living. The need for tax revenue is un - disputable due to the global significance it has attracted on the economic development irrespective of the national differences (Oboh & Isah, 2012).

Another element found in the fiscal policy is Public Debt. Public Debt is defined by (Makau, 2008) as all the borrowed funds by both the county government and national government. The government choose between creating money and borrowing from either the internal sources or the external sources, however, the option of creating money does not solve much of the economic problems since it ends up causing hyper-inflation which lowers the purchasing power of money and thus increasing the cost of living as opposed to borrowing (Martin, 2009).

According to Ayres and Warr (2010), public debt is only inversely proportional to the cost of living when the public debt is effectively managed in order to spur the drivers of the economy. If not well managed, a lot of funds will be used to service past debts and therefore not able to finance development projects in the country. This indicates the cyclical effects of more public debt without taking into consideration the management and usage of the borrowed funds. Previous scholars have entirely focused on external debts for two reasons, where first internal borrowing involves the circulation of the same resources in the country and therefore not much anticipated economic effects while secondly, external debt can lead the country to debt vulnerabilities resulting from debt servicing challenges (Panizza, 2009).

The government must prudently assess its ability to pay the borrowed amount as well as the loan obligations. Assuming the government is able to repay the loan and it will be prudently managed then can use public debt as a monetary policy where it increases the level of internal borrowing so as to reduce the amount of money in circulation which reduces the level of inflation. This in turn lowers the cost of living of the citizens since the prices of general commodities goes down (Ribeiro, 2012). Additionally, external borrowing increases the amount of money in circulation thus raising inflationary levels which increases the cost of living. It also makes the local currency loose value since there is high demand for dollars used in loan repayment, this leads to foreign exchange loss to importers and therefore increases the cost of doing business and thereby increase the cost of living (Panizza, 2009).

According to International Monetary Fund, 2016 the financial debt statistics has risen to 50 percentage points since the world financial crisis. Pattillo (2004) researched on the effect of debt levels for 61 developing countries over the period 1996-1998 on the economic growth and the findings were high levels does decline the growth due to the high cost of servicing. He also found out that private investment did have apposite impact on the economic growth. Schclarek (2004) found out that in 59 developing countries over 1970-2002, there exists a negative relationship between debt and growth while in advanced economies, there is no focusing on a panel of 59 developing and 24 advanced countries over the period 1970–2002, concludes that, for developing countries, there is a negative relation between debt and growth, but he does not find any significant relation between government debt and economic growth in advanced countries. Also, the results show that investments and exports have a positive contribution to

GDP growth. Sen (2007) studied the impact of debt on economic growth of Argentina, Brazil, Columbia, Venezuela, Mexico, China, India, Indonesia, Philippines, Korea and Thailand. He found out that the debt levels does have negative effects in Asian Countries. Misztal (2010), examined a number of EU Member States over the period 2000–2010, concluded that when the debt levels by 1%, the GDP rates will fall by 0.3%.

Kumar and Woo (2010), researched on 38 developed and emerging countries over the period 1970–2007, and the results were that when debt levels increase by 10%, the GDP will decrease by 0.2% and this greater impact is in developing countries more than the developed ones. A research done by Drine and Nabi (2010) on 27 developing countries for the period of 1970–2005 found out that increase of public debt does decrease efficiency in production since much of the funds will be utilized in servicing the debt. Afonso and Jalles (2013) use a panel of 155 countries to examine the relationship between growth, productivity and government debt. They found a negative effect of the debt-to-GDP to economic growth and that financial crisis is detrimental for growth, while fiscal consolidation promotes growth.

1.1.2 Cost of Living in Kenya

Cost of living is the cost of maintaining a predetermined standards of living, it is among the major macroeconomic objective that any government thrives to achieve through the economic policy. The government on its agenda to achieve an efficient and sustainable economic growth aims at increasing the living standards and reducing the gap in income distribution among its citizens through increasing per capita income (Jhinga, 2003). In the recent years, statistics have been pointing out the sharp increase in the cost of living depicted by the high level of unemployment as well as the high level of inflation.

The literature on the effects of macroeconomic policies had been previously linked to the macro economic objectives of a nation, however, this notion has been a passed by time especially in the developed nations where they evaluate the effectiveness of the macro-economic policies based on their influence to reduction in the cost of living, high living standards as well as income generation (Agenor, 2004). There is both direct and indirect channels in which fiscal policies can be used to influence the cost of living in a nation which include: direct and indirect channel. Indirect channel is where the government uses contractionary policies to the aggregate demand

leading to reduced public spending, cut in public transfers and incentives/subsidies and therefore increasing the cost of living which promotes poverty levels (Agenor ,2004) .

According to Johannes (2006), one of the most critical tool available to governments in fighting poverty is the fiscal policy. The government of Kenya through initiated programs has over the years focused on different target groups such as youth majority of whom are unemployed, women and even people with disability so that they can easily secure 30% of government tenders which is a fiscal directive on the resource allocation, this together with the initiative to promote small businesses through ‘Uwezo fund’ acted positively towards rationalizing resource distribution and empowering the common citizens to manage the cost of living.

The consumer price index measures the commodities consumed by the consumers in daily basis. The Consumer Price Index is calculated by taking price changes for each item in a certain category of goods and services and averaging them. The commodities include beverages, food, and other services such transportation costs. It is the most used method in estimating the changes of prices of such commodities and hence the inflation rates that will be of assistance on assessing cost of living. When the prices are higher, the higher the consumer price index and thus higher cost of living that leads to low purchasing power by the consumer. The Consumer Price Index method does factor changes in prices of both domestic and imported consumer-related goods and services. Producer Price Index is a relative measure of inflation too but on the focus of production costs i.e suppliers and producers since it is not affected by consumer demand. Thus my main focus is on the consumer demand and not producers’ demand. The Consumer Price Index method can help in determining people’s eligibility for a certain government’s benefits like Health and retirement Benefits provided by NHIF and NSSF respectively. Thus it will provide automatic cost of living wage adjustments to domestic workers (World Bank, 2018)

1.2 Statement of the Problem

Studies by Hooppner (2004) and Claus (2006) in Kenya, found out that government spending shocks as a form of fiscal policy are positively related to GDP growth and cost of living on the other hand tax revenue shocks as a form of fiscal policy is inversely proportional to economic growth and cost of living. Jafri (2006), in his study found negative relationship between budget

deficit and cost of living in the long run. Another study by Amanja and Morrissey (2005), found significant relationship between fiscal policy variables and economic growth. Feldstein (1980) found out that there exists potential conflict between the use of fiscal policy to stimulate aggregate demand when the economy is operating below potential in the short run and the use of policy to promote longer-run goals for national saving and capital formation to improve future living standards. When there are underutilized economic resources, fiscal stimulus can increase investment. But when the economy is operating near potential, an increase in the public debt might eventually depress private investment, unless the fiscal stimulus is reversed as the economy approaches full employment or the policy fosters capital formation and increases the supply of labor

Two cases which are often quoted as clear demonstrations of confidence effect of fiscal consolidation are Denmark and Ireland in the 1980s (Devarajan, 1993). The Danish and Irish cases highlight that a "contractionary" fiscal shock may in fact have an expansionary impact if it occurs in a situation which is generally felt to be an "economic crisis", and if it is combined with a credible exchange rate policy. In 1982 Denmark experienced such a "crisis", with long-term interest rates at 22 per cent, inflation at 10 per cent and the gross debt ratio almost doubling within three years (from 27 per cent in 1979 to 53 per cent in 1982). Mamatzakis (2001) found out that the conservative coalition adopted a draconian fiscal consolidation programme, and the structural deficit fell by almost 10 percentage points of GDP in four years (mostly through higher taxes). Fiscal consolidation was accompanied by credible exchange-rate policies and an abolition of wage indexation. In the wake of these events, GDP grew by 3.6 per year on average in the period 1983-86, and investment grew strongly. House and share prices increased sharply, inflation dropped and long-term interest rates fell sharply.

Ireland went through a similar crisis in 1981, with the gross public debt ratio attaining 77 per cent and the fiscal deficit reaching 12.3 percent of GDP. The current-account deficit exceeded 10 per cent of GDP. The government pursued a similar type of fiscal policy as in Denmark, but confidence did not recover, house and share prices declined, and real consumption fell by more than 7 per cent in 1982. A second effort by the government in 1987 was more successful. Devarajan (1993) found government expenditure on health and transport and Communications to

be growth promoting but found no positive impact of education and military spending. Albala and Mamatzakis (2001), using time series data covering 1960-1995 to estimate a Cob-Douglas production function that includes public infrastructure for Kenya, found a positive and significant correlation between public infrastructure and economic growth. These results reinforce the argument that empirical outcomes are likely to differ from country to country and time to time even when same estimation techniques are employed.

The fiscal policies of a state have both negative and positive effects on the cost of living of the individual, this is dependent on the governments prudence in its recurrent and development expenditure as well as the efficiency of the tax system instituted (Mamatzakis, 2001), however, despite the governments mandate to use the fiscal tools in stabilization of the economic growth and development of the nation, majority of its citizens still find it difficult in meeting their daily basic needs from the high cost of living (World Bank, 2018). The Statistics show that Consumer Price Index (CPI), in Kenya increased to 193.51 in December 2018 from 192.25 a month earlier. CPI index averaged 145.63 for the period between 2009-2018 recording the highest index of all time of 195.05 in May 2018 and an all time low of 99 points in Jan, 2009 which clearly indicates the rising trend of the cost of living in the last one decade. Overall, the consumer price index averaged 149.11 index from 2009-2019 and reached as high as 205.90 index in April 2019. Thus the study concluded that the Index kept on moving upwards.

It is therefore clear from past studies that fiscal policies influence economic growth of a country, however, the magnitude is still ambiguous, in addition most studies were generalized on economic growth and barely on the specific indicators of economic growth such as cost of living and therefore gave rise to the current study that aims to bridge the gap in literature hence the study therefore aimed at determining the effect of fiscal policies on the cost of living in Kenya since past studies carried out on fiscal policies have found contradicting results between fiscal policies and macro-economic variables.

1.3 Research objectives

The general objective of the study was to determine the effect of fiscal policies on the cost of living in Kenya. The following are the specific objectives:

- i. To find out the effect of government expenditure on the cost of living in Kenya
- ii. To determine the effect of government revenue on the cost of living in Kenya
- iii. To establish the effect of public debt on the cost of living in Kenya

1.4 Research questions

- i. What is the effect of government expenditure on the cost of living in Kenya?
- ii. What is the effect of government revenue on the cost of living in Kenya?
- iii. What is the effect of public debt on the cost of living in Kenya?

1.5 Justification of the study

The study positioned on the macro economic sphere where it aimed in the determination of the effect of fiscal policies on the cost of living, the idea came at a time when the standards of living are deteriorating and the gap between the rich and the poor widening in Kenya. Despite Kenya having being recognized by the Kenya National Bureau Of Statistics as a middle class economy, cases of poverty remain rampant. However, the causes are widely distributed but rotate around the management of macroeconomic policies such as high level of unemployment, high interest rate, high level of inflation, high cost of production, increased level of taxation by the government to its citizens as well as the increasing demand by the government to consume more resources.

Statistics show that majority of the citizens are having difficulties in affording at least three meals in a day and therefore critical to undertake the study especially on the fiscal policies so that the government and other relevant agencies can formulate sound policies aimed at easing the cost of living through empowerment of the people to cope with inflationary increase with regards to the general commodities, this thereby put the urgency of the study in its peak in order to expose the effect of some of the macroeconomic policies on the cost of living in Kenya and thereby suggest solutions to the aching menace.

1.6 Significance of the study

The study was of benefit to the following groups and or individuals: They include government, financial institutions, non - governmental organizations, international organizations such as international monetary fund (IMF), KNBS, Organization for economic cooperation and development as well as researchers and academicians.

1.6.1 Government

The study is useful to the Government of Kenya since it provided insights into the effect of its decisions on the cost of living by the citizens. The government can therefore use the findings in the policy framework where the parliament/ lawmakers review the existing tax policies, government expenditure adjustments as well as controlling the public debt. In this regard the government's role from the recommendations of the study is critical as it is directly answerable to the citizens of a country. The economic conditions pertaining to the fiscal policies and the cost of living will eventually have a impact on the fiscal behaviour of the government. All the government key financial decision makers such as the treasury, parliament, Kenya revenue authority stands to be the main and the primary beneficiaries of the study at hand.

1.6.2 Non -Governmental Organization

Non- Governmental Organizations have vested interest on the general livelihood of the citizenry of developing countries such as Kenya. They include the United Nations (UN), IMF, World Bank as well as corporations with goodwill in streamlining their operations towards poverty eradication and improvement of living standards of people. In this regard the non - governmental organizations which depends mostly on donor funds will be able to source out for the funds aimed at enhancing dignity to the most vulnerable groups in the society as a result of high cost of living. Despite census data being old since 2009, the study will provide updated statistics that can be used in useful decision making process thus the study plays a very crucial role at the current times.

1.6.3 Financial institutions

Financial institutions must understand the economic conditions especially the ability of the population to save and spend and therefore the findings of the study aid in revising the interest rates together with designing new financial products that are in line with the prevailing

circumstances in the country pertaining the cost of living. The study findings will thus aid in making management decisions that are aimed at streamlining the financial institutions financial performance to their goals and objectives. This calls for the various institutions to involve experts in interpreting the study findings and later implement the borrowed recommendations in order to ensure that the institutions are also part of the economic success of the country.

1.6.4 International Organizations

The international organizations that have some interest in the global economic conditions will benefit from the study findings despite the secondary data having come from some of the renown international organizations such as World bank. It is therefore useful to recognize their quest for the study finding which have been clearly filtered in order to present the most prudent picture of the Kenyan economy situation. These organizations will provide with grants that act as a non-tax government revenue which help in maintaining the stabilize fiscal policy. The international organizations are capable of advising, guiding and even cautioning the government of its fiscal policies especially when the government is not sensitive to the risks that come along with the various policies made.

1.6.5 Researchers and Academicians

The researchers and academicians greatly benefit from the findings of the study since they use the study as a point of reference as well as in getting new areas that requires future studies to fill an existing gap in knowledge. The study will give a basis for the existing literature both empirical and theoretical studies which will then provide a strong base in positioning future studies in literature. The areas for future studies outlined in the studies will not only give the future researchers a topic to undertake a study on but rather expose them to a wider thinking which will contribute to building research.

1.7 Scope of the study

The study aimed at an investigation on the effect of fiscal policies on the cost of living in Kenya, macro data between 1963 and 2017 was used in the descriptive analysis pertaining government expenditure, government revenue and public debt. The secondary data was sourced from the World Bank database in order to aid in operationalizing the research objectives. The secondary

data was preferred since it is highly reliable and easy to tabulate due to its confirmatory nature. The quantitative data aided in quantifying the effects of fiscal on the cost of living in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focus on the review of past studies pertaining to fiscal policies and cost of living as well as the theories that have been put forward to explain the origin of fiscal policies and how it impact on the cost of living as measured by the consumer price index. The conceptual framework shows the relationship between the variables under the study.

2.2 Theoretical Framework

A theory is a set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena (Mugenda, 2003). Theoretical framework is a group of related ideas that provides guidance to a research project or business endeavor (Mugenda, 2003). Theories to be reviewed in this study include: Cost of service theory, benefit theory as well as the dynamic theory of public spending, taxation and debt as follows:

2.2.1 Keynesian Theory

John Maynard Keynes developed Keynesian Theory in the year 1936 when he published *The General Theory Of Employment, Interest and Money* during a time of depression in the economy. He argues that the depression was characterized with high cost of living, low income flows and increased cost of services and goods. He advocates that when the government increases its expenditure and lower taxes will boost demand thus having increased money in circulation. He supports more on increasing demand than supply over a short run in an economy.

Keynes explains further that there some inducing factors that could limit demand which are low wages and poor business conditions since there will be limited full employment and reduced capital investment respectively. Government boosts its government expenditure levels by purchasing equipments at lower prices for production of goods and services. In times of when the economy is under-performing, the government should undertake deficit spending while the economy is over-performing, the government should undertake surplus spending.

Keynes debates against the idea that economy will self-regulate by Bartle & Korosec, R. L. (2003) and that the prices will eventually reach at its optimal. He argues that this is a theory perspective and not a practical one due to the fact that economy is thus influenced by various drivers that boosts or retard its growth. He criticized the idea of citizens' savings for future usage. He argues that when saving is present, money is limited to circulate in the economy. He explains further that there exists a component of Multiplier Effect that explains that when the government increases its government expenditure in the economy while individuals willing spending their extra income instead of saving, business activities and GDP will increase.

The Multiplier Effect does explain the ability of consumers to buy goods and services. This is explained that when one individual spends money, the same money becomes income for another individual. Hence becomes a cycle that stimulate the growth of the entire economy. Keynes argues that lowering interest rates in investment and repayment rates of debts would stimulate growth in short run and not long run (Keynes,1936).

This theory faces criticism by Ayres, R. U. (2013) in the sense that when the government increases its expenditure in the economy, it will increase spending of individuals. However, this will lead to demand-pull inflation since there will be high demand of goods and services but there lacks supply. The resultant will be that there will be scarcity of consumption by the individuals and prices will tend to rise making unaffordability. Hence this theory is applicable in short-run mostly rather than long term. Also, when the government spending rate is more than government revenue generating activities rate, it will lead to accumulation of debt in the economy mostly when the government finances using interest-bearing bonds.

In relation to the extant literature, this theory is relevant since the cost of living by individuals will improve in the short run when the government spends more into the economy. This is by the fact that the demand will increase. This is evident that the government expenditure as a fiscal policy by the government do have an inverse relationship with cost of living of individuals. It means that when the government expenditure increases, the cost of living decreases improving the standard of living of individuals.

2.2.2 Dual Gap Theory

According to this theory proposed by Susan (1972) states that there exists two gaps in the economy that ought to be filled through financing .One of the very first Gap is the balance between savings and investments in the economy. For a country to achieve the objective of wealth equality among persons especially in developing countries, there must be the urge to start their economic activities with low incomes as they invest much. Their activities are possible when the financing is with the help of the developed countries inform of grants. In addition, these developing countries can trade within other countries to earn surplus. The second Gap arises between exports and imports.

In this theory, it argues that government revenue generating activities such as savings and investment will lead to improvement of growth of an economy. A country can raise its revenues by using internal sources such as taxes and fees. This could be not be possible for developing countries since they have low cash flows. Hence they can depend on external complementary goods and services. The investment levels will be increased when a country invests in projects with high returns.

This theory faces criticism in the sense that for the developed countries, there has been no concern on raising revenue since it is assumed that they are performing optimally. On the other hand, there could lack balance between savings and investment since the two variables cannot balance at the same time. Moreover, a country can face international risks while transacting with foreign countries.

Chenery & Bruno (1972) researched on the economic growth in Nigeria. They used the Dual Gap Theory in the sense that a savings gap arises when the domestic savings rate is less than the investment required to achieve the growth target. The economy can achieve the target growth rate by filling this savings gap with foreign aid. Similarly, a fixed relationship is postulated between targeted foreign exchange requirements and net export earnings. If net export earnings fall short of foreign exchange requirements, a foreign exchange gap appears which can be filled by foreign aid.

Romer (1990) and Aghion & Howitt (1992), argues that this approach seeks to link FDI flows to the relationship between international trade, technological change and growth. In conjunction with the extant literature, the theory is relevant since it explains that investments will boost the economic level of a country. When there exists projects that yield returns, an individual standard of living will improve. This is because there will be stream of income cash flows that will sustain him or her.

2.2.3 Debt Overhang Theory

This theory was developed by Stewart Myres in 1977 explaining the reason for the companies not utilizing debt as a financing method inspite of the fact that the interest are tax-deductible.

The main reason is that there is possibility that future debt implications is greater than the benefits derived from the utilization of the services. This means that the repayments rates will drain out the benefits derived from investment thus discouraging the investors due to low returns.

He further explains that the debt crisis can be caused by other external factors that deter growth of the economy. Such as poor management of balance of payments, foreign interest rates rise and oil shocks. When the government does not have a smooth flow of income, it will cause uncertainties on the investors' confidence on the projects (Krugman, 1988).

Under this theory, Myres (1977) argued that positive Net Present Values projects could be not be undertaken since the investors are aware that the benefits derived will be used to settle on the future obligations. Cohen (1993) supports the theory by stating that it is not debt level but the debt service that cause failure in investments. In addition, he argues that the type of an organization in terms of managerial powers can determine the level of burdeness. With a good institution, the actual burden can be lower than a bad institution.

Cohen (1993) argues that a country that has ever had a financial crisis compared with one that has never had a financial crisis does have a negative perspective on the debt financing method. This would limit the level of investments could be achieved in a country. Hence we conclude that the perspective of an entity towards debt, organization size, purpose of debt determines the attitude towards debt.

Pattillo et al. (2004) however concluded that the effects of external debt are felt majorly via total factor productivity and investment. While many studies paid specific attention to under developed countries, others focus on relatively low income economies. In all of these studies however debt overhang is understood to be the adverse additional effects of debt accumulation on economic growth which strongly reduces macroeconomic performance of an economy through deterrence resulting from the fear of future tax burden and macroeconomic volatility.

The adverse effects of foreign loans on investment, economic growth and development have been reemphasized by Were (2001), where she substantiates the presence or otherwise of the debt overhang phenomenon in Kenya. Additionally, however interest and administrative charges

do not seem to adversely impact on economic growth but rather end up with another negativity in the form of crowding out effects on investment. Fosu (1999) was of the belief that in spite of the seemingly small and negligible impact on investment rate it is probable that foreign borrowing may negatively affect economic development via decreasing the capital output. This argument is in the same direction with the proposition of Hameed et al. (2008); where they argued and confirmed that the debt maintenance cost has adverse effects on the resultant output of principal and labor which ultimately leads to a decline in economic growth in Pakistan.

In relation to our extant literature, the debt level should be determined and planned by the managerial to ensure its debt service is favourable. Moreover, the level should be maintained at a certain point to ensure that there exists break-even point of returns and costs of servicing. The theory explains that debt financed internally is much better than external due to the cost of servicing in the long run than short run.

2.2.4 Distribution Theory.

This theory was developed by **Thomas** Philips (1871) argued that the income distribution among the owners of factors of production should be accounted for accordingly. He examined main three proponents in regards to this theory. First, the theory looked in the ranges of income of persons, their discrepancies and determinants of income level. Secondly, what are the wages influencers of a country and Thirdly, what factors affect the rent and profits. The theory argued that income is not distributed equally inspite the economy growing. The main reason is that differences in ability to acquire wealth among persons and political interferences.

The theory was supported by the theory of Optimal Tax Theory that stipulates that an effective tax system is one that should maximize an individual wealth by been able to manage resources. Tax revenue should aim at fund public projects as well as redistribution of income from rich to poor. However, Mostly the tax revenue policy is not always the case of equality but does distort human behavior due to the fact that personal disposable income falls drastically.

Adam Smith argues that a good tax system should be proportionate to persons' income, determined rate and easy administration process by the officers. In relation to the extant literature, the distribution theory does argue for the government revenue policy as a form of fiscal policy to ensure that the cost of living of persons is improved. It elaborates more by stating that the policy

would be more effective when certain conditions have been adhered to. They does include: The government should ensure that the officials should be accountable when given the mandate to distribute resources among persons. Another one is that persons should be educated on various ways to acquire wealth through public seminars by the government.

Frank H. Knight (1921) introduced the distinction between risk, which can be insured for and thus treated as a regular cost of production, and uncertainty, which cannot. In a free enterprise economy, the willingness to cope with the uninsurable has to be remunerated, and thus it is a factor of production. A second way of accounting for profits is to explain them as a premium for introducing new technology or for producing more efficiently than one's competitors. This dynamic element in profits was stressed by Joseph Schumpeter (1911). In this view, prices are determined by the level of costs in the least progressive firms; the firm that introduces a new product or a new method will benefit from lower costs than its competitors. A third source of profits is monopoly and related forms of market power, whether deliberate as with cartels and other restrictive practices or arising from the industrial structure itself. Some economists have developed theories in which the main influence determining distributive shares is the relative "degree of monopoly" exerted by various factors of production, but this seems a bit one-sided. Finally, there are profits arising from general increases in total demand caused by a certain kind of inflationary process when costs, especially wages, lag behind rising prices. Such is not always the case in modern inflations.

2.3 Empirical Review

Empirical review outlines the past studies that have been conducted locally and internationally with respect to the cost of living. The review of previous studies helps in informing the current study as well as positioning the study in literature as shown below:

2.3.1 Government Expenditure and Cost of living in Kenya

M' Amanja and Morrissey (2005) did research on the effect of fiscal policies of a country on the economic growth in terms of private investment using co-integration analysis and error correction Model. They found out that increase of government expenditure leads to increase of

private investment and growth of the economy at whole. Another findings in the same study was that, government borrowings does drain the economy growth because it leads increase of waste of resources in paying the interests rates. They argued that if a country was to borrow with the aim of boosting private sector more than public sector, the borrowing policy could benefit an individual hence increase of private investment. Kimani (2005) goes further to explain that budget deficits mostly arises due to a government not utilizing its resources in the most profitable sectors that would high returns by Vector-auto regressions method . In different perspective of the same study, the government borrowings in a country could arise due to competition of various sectors in an economy that have a replication effect on the foreign market. When the foreign market is deprived, the interest rates goes up causing huge burden in a country.

Putunoi and Mutuku (2013) researched on government expenditure on the economic growth of Kenya annual time series data for the period 1963 to 2008. He measured the economic growth in terms of GDP rate. He concentrated on only government expenditure in terms of government investment, physical infrastructure, education, health care, public debt servicing, economic affairs, general administration and services, defence, public order and national security, and government consumption using vector auto-regression estimation technique.

According to Mitchell (2005), government expenditure is the total spending by local, county and national government in future investment, acquisitions or transfer payments. Mitchell (2005) in a study on the impact of government spending on economic performance focusing on the developed countries found that large government as measured by the level of spending is not conducive for economic performance of a state. It was evidence from the results that government spending has a positive relationship on the cost of living due to more money being in circulation when running large government as compared to leaner ones.

A study conducted by Landau (1983) determining the relationship between government expenditure and cost of living where 27 less developed countries (LDCs) were sampled and employed the use of panel data to generate ordinary least squares (OLS) found that productive expenditure is inversely proportional to the cost of living while consumption expenditure has a positive relationship on the cost of living.

The effect of government expenditure is contradictory as explained by the classical and Keynesian approach. The Keynesian economists argue in favour of government expenditure indicating that it influences the cost of living through increased production and thus low price for the goods and services. On the other hand, classical economists, points that increased government revenue takes resources from the private sector which is productive and puts the resources to the unproductive public sector and thus deter progress leading to increased cost of living (Gorodnichenko, 2010).

According to Johansson (2011), the only way the government expenditure influences the cost of living is when the government reduces the tax rates thus lowering the cost of doing business which automatically have an impact on the prices of goods. Government expenditure have however attracted attention from various scholars who in their undertaking found contradicting results regarding the relationship between government expenditure and the cost of living.

Studies by Turati (2009), Topera (2013), Talub and Aboyomi (2011) as well as Wang (2011) found a significant positive relationship between public expenditure and economic growth while having a negative relationship on cost of living. In a country that is still developing, government expenditure is very crucial since it provides for funds in the economy that boosts economic growth. The money that flows in can be used in providing and support public and private amenities to the country. These amenities include education facilities, health facilities, recreation facilities, industries promotion, research and other support activities (Bhatia, 2002).

Expenditure on the public activities does a great impact on the developing a country since it does boost a staggered operations in an economy. The main focus is on the government expenditure being allocated in most profitable sectors to boost the economy and not just having huge sum of government expenditure. Gemmell and Kneller (2001) studied the impact of government spending on the growth of European countries in long run. The study found that different public spending impact the long run growth differently where all expenditure show positive significant relationship apart from consumption and social security that showed negative or zero effects on the long run growth. This is an indication that priority in government allocation and expenditure is a key factor in enhancing the economic growth of a country.

The government expenditure policy affects the cost of living positively and negatively. According to International Budget Partnership (IBP), there was evidence that most of the expenses fall into re-current expenditures such as health and education. The problem in regards to this, is that the expenditure is not fully productive to the economy since there is neglection of the capital expenditures such as transport and communication system. IBP recommends that these re-current expenditures should be cut off at a certain level for Break-even. Also it was noted in Kenya, that government emphasize on incurring expenditures on unnecessary expenses such as high remuneration and allowances to the top management. Thus this has an impact on the common Mwanachi in terms of not having high purchasing power due to the fact that there is low money circulation in the economy.

Mandl (2008) suggested that expenditure utilized in productive projects will improve the cost of living of citizens in a country. If the government will spend on human capital development, such as training forums and health will improve a person and can be able to perform well in each task. Once a person has performed well in her or her work, they can be promoted and thus increasing on his or her disposable income. Paternostro (2005) explained that the government spending policy effects on cost of living is not very clear since there exists limitations in assessing the equity and growth aspects in an economy. The reason of these limitations is due to the delays that the funds are dispersed to the target person or department. There exists a lot of intermediate channels that cause non-optimal distribution of funds and thus this causes the level of money supply to be low. He further explains that in terms of growth, the economy lacks proper ways of accounting of these benefits and costs that comes with government spending policy in the economy. Mismanagement of funds causes funds to be allocated in non-productive sectors in the economy thus a cost of living will rise. Moreover, as Afonso (2005) explain that the relationship of government spending on cost of living can be adverse in the sense that the accounting sector will use limited data to account and thus this inhibits the effectiveness.

Adu and Ackah (2015) investigated the relationship of economy growth and government spending in the span of 1970-2010 using a model. They argued that the growth of the economy will be measured by the low cost of living of individuals. Then study found out that in the long and short run, government capital expenditures does have a negative effect on the cost of living. The reason behind this is that the government funds will be utilized in maintenance of such

capital goods which are a bit expensive compared to recurrent expenditure. Under the recurrent expenditure, the rate of growth is high in the long-run than in the short-run since the benefits will thus be visible after a long-time. They argued that cost of living will reduce or increase by 0.6% when a capital or recurrent expenditure or increase by 1% while cost of living will increase by 0.3% in the long-run.

Bleaney (2001) looked on government spending on cost of living in the span of 1970-1995 in various 22 countries and found out that expenditures used in productive projects enhance standard of living while those spent on non-productive projects will not enhance standard of living. Aschauer (1989) looked into the relationship of government expenditure on the cost of living in USA from 1949-1985 and found out that non-military public capital stock is useful in growth while military public capital stock is a detrimental to productivity in an economy. Barro (1989) did a research in 120 countries identified that public consumption is not useful for growth since this is an expense while the public investment is useful since this is an income.

Study by Tchereni, Sekhampu, and Ndovi, (2013) as well as Shannon and Tippett, (1975) found a significant positive relationship between public expenditure and economic growth while having a negative relationship on cost of living. In a country that is still developing, government expenditure is very crucial since it provides for funds in the economy that boosts economic growth. The money that flows in can be used in providing and support public and private amenities to the country. These amenities include education facilities, health facilities, recreation facilities, industries promotion, research and other support activities (Ekpo & Omoruyi, 2013). Expenditure on the public activities does a great impact on the developing a country since it does boost a staggered operations in an economy. The main focus is on the government expenditure being allocated in most profitable sectors to boost the economy and not just having huge sum of government expenditure.

A key idea to grasp in the study is that for government expenditure policy to be effective at its utmost is that it should be well planned for and so we should concentrate more on distinguishing social and private sectors. The social sectors include recreation services while private sectors are education services. With this, the expenditure will be able to narrow down to infact industries for example in the economy which have potential to expand. For example: Infact industries does create opportunity to create job opportunities that will improve the cost of living of individuals.

Rosto and Musgrave identified a development model that identified that public expenditure is a necessity for growth in an economy. It explains that as public expenditure increases, the private investment will increase to since the private utilities shall be met. Argues more that in this model, the state will be sufficient in making decisions on behalf of public that is of good interests.

There exists findings by Landau (1986) that stated that the government usage and spending rates do have a relationship with the economic growth of a country. He explains that the government usage do have a declining impact on the GDP level thus economic decline. This is because the government will consume a lot of funds in funding expenses of a country. The government expenditure on the other hand, will thus improve economic growth in the sense that the flow of funds will be increased and there shall be money in circulation that is spent by the people. Landau (1986) concluded that the improvement of economic growth did not translate to improvement of social welfare of individuals.

Paternostro, Rajaram and Tiongson, (2007) researched on the relationship between government spending and economic growth in particular functionality of a specific sector in the economy under 115 countries. He found out that government spending does have a positive impact on the economic growth in particular the countries that are developing. On the contrary, the total government expenditure has a negative impact on the overall economic growth of a country. Gacanja, (2012) researched on the relationship between government expenditure and cost of living of an individual in 62 countries within a period of 1962- 1985 and concluded that spending on non-productive projects, it will not lead to the improvement of cost of living.

Devarajan, Lewis and Robinson, (1993) concluded that the growth of economy is dependable on the functional units spent on using 14 OECD countries. He noted that money spent on health, transport and communication have positive impacts whereas spending on education and defense did not have a positive impact. Josaphat and Oliver (2000) examined the impact of government spending on economic growth in Tanzania for a period of 1965- 1996 using time series data for 32years. In conjunction with a researcher Gacanja they came up with a model that broke government spending into different units such as physical investment, consumption investment and human investment. He found that the physical investment did drained the economy while the

consumption expenditure increased the growth of the economy. For human investment, it was irrelevant in the economy growth.

Nordhaus, (2005) researched on effects of government expenditures between years 1970-1980 on 30 developing countries on growth mainly with the focus of dividing the expenditures into current and capital which was opposite to the idea of Josaphat (2000). Among the findings in this study was that government capital expenditures had a positive relationship with the economic growth of those countries while current expenditures did negative relationship. Nordhaus narrowed on down on the sectoral expenditures and found that education sector did have a large impact on the growth of the economy simply because knowledge translates to human capital. For the other sectors like transport, communications did have a short-run benefit to the economy and mostly they did not survive in cases of budget deficits. Furthermore the private investment had a positive impact on GDP. In Azerbaijan, the economy experienced a short-term oil boom and a research was done by Junko and Vitali (2008) to examine on how increasing government expenditures could impact the entire economy. It was found that the oil prices kept increasing leading to improvement of the economy growth.

According to Afonso and Jalles, (2013), the only way the government expenditure influences the cost of living is when the government reduces the tax rates thus lowering the cost of doing business which automatically have an impact on the prices of goods. A few studies report positive and significant relation between government spending and economic growth while several others find significantly negative or no relation between an increase in government spending and growth in real output. An extensive review of literature, presented in the next section, will clearly indicate that empirical evidence on the effect of government spending on economic growth is at best mixed.

In contrast, studies by scholars such as Kollias, Manolas and Paleologou (2004) found insignificant relationship between government expenditure and the cost of living, in addition to previous studies by Tchereni, Sekhampu and Ndovi (2013) whose result indicated that government expenditure increases the cost of living and thus lowers the economic growth of the country. This study did not differentiate the different types of government expenditure and therefore not adequate to inform the study, the findings of the study will in addition to the

findings compare with other studies whose scholars focused on the usage of the funds by the government.

According to Sen and Lerman (2007), government expenditure has been used by the government as a monetary policy tool to deal with macro-economic challenges such as cost of living, inflation, cost of production as well as the interest rate. When the government increases the level of recurrent expenditure then it only benefits a few who are probably employed and thus does not influence the cost of living while increasing development expenditure is related to the stabilization of the economy and the creation of more opportunities for the vulnerable population. Increase in recurrent expenditure will raise the inflationary levels thus increasing the prices of the general commodities and therefore increasing the cost of living of the ordinary citizens (Musgrave, 2004).

2.3.2 Government Revenue and Cost of living in Kenya

According to organizational economic cooperation and development, OECD (2008), defined government revenue as all the monies received by a government to fund both its recurrent and development budget. The revenue consist of both tax and non-tax revenue such as legal fees, grants as well as both internal and external borrowings (Illyas & Siddiqi, 2010). On the other side, tax is a compulsory payment by the tax payers to the government for no service in return (Omotoso, 2011). Non tax revenue comprise of all other sources that are not compulsory such as sale of state properties etc.

Tax revenue is the main source of government revenue and is charged directly and others indirectly on the citizens of a nation, direct tax include; personal income tax, corporate tax, while indirect tax consist of value added tax (VAT), custom duty, excise duty (Chaudhry & Munir, 2010). Ahmed (2010), pointed out that government revenue is directly proportional to the standards of living if prudently utilized. In this case, the government policies and the understanding of economics plays a critical role in the management of the cost of living. The need for tax revenue is un disputable due to the global significance it has attracted on the economic development irrespective of the national differences (Oboh & Isah, 2012).

All the changes in the economic sphere can be traced back to the changes in the tax system, the government has the responsibility to use the tool at its disposal in order to achieve economic stability and growth one of which is indicated by affordable cost of living. The government can use taxation to restrict business activities of a given nature depending on the economic objective such as exploration of natural resources (Ogunmuyiwa,2011). In addition, taxation can be used to protect the domestic businesses and help them grow by increasing the import tariffs, in this aspect the government will reduce the amount of tax revenue collected at the borders but increase the income generation of its people which will create local employments and thus lower the cost of living as it will be at affordable levels to the normal citizens (Nordhaus, 2005).

The government use taxation policies as social tool to ensure equitable distribution of resources which is aligned towards the reduction of the cost of living in the society, the government collects revenue depending on the ability to pay and use the funds in providing social services regardless of the much that the individual tax payers contributed to the total government revenue (Jhingan, 2003). Government revenues generated in the local vicinity does face various risks such as technology, economic and political due to the nature of the systems established and had an agreement that the taxoms put in place for taxes should be adhered to (Shannon & Tippett, 1975).

Bartle (2003) examined for a period 1960-1970 that the major source of revenues in an economy is taxes and not a particular taxes such as property taxes. He further stated that five states did increased their property taxes and partly led to increased of revenues. Kumar and Woo (2010) looked at the reliance of inter-government revenues in 1965-1977 and found out that the reliance does hinder the local governments to generate revue optimally in their country .examined revenue patterns and local reliance on intergovernmental aid from 1965 to 1977.

A study by Kumar (2010) on the trends of government revenue conducted between 1964 - 1987 found that the role of public sector expanded significantly in most economies thus higher appetite for more revenue. Additionally, the study found that the role of government is financed mainly by taxes. The need to increase government revenue calls for frequent review of the tax system, rates and structure in order to fund the government operations, it however increases the cost of living as the burden is shifted to the taxpayers.

Jepkemboi (2008) conducted a study of macroeconomic determinants of tax revenue share in Kenya. The study was conducted between 1970 and 2005 and found that government revenue have consistently grown while the imbalance between revenue and expenditure resulted in large fiscal deficits which are financed through alterations of the existing tax system or through exploration of new non-tax sources such as public debt.

Another study by Gacanja (2012), on the effects of tax revenue on cost of living in Kenya where the study aimed at exploring the conflicting arguments by economists where a group of scholars argue against taxation others argue in the favour of taxation in as far as the cost of living is concerned. The study found a positive relationship between tax revenue and the economic growth and an inverse relationship between tax revenue and the cost of living. It was revealed that the government should however change tactics in the way of increasing more tax revenue i.e desist from increasing the rates but rather widen the base.

In addition, the government is cautioned to take advantage of the linear relationship so that the citizens can be relieved off the high cost of living. Study by Illyas and Siddiqi (2010) pertaining to the effects of revenue gap on the cost of living between 1980 - 2008 in Pakistan found a significant positive relationship between the revenue gap and cost of living.

Sen and Lerman, (2007) states that when the income tax decreases, the disposable income of an individual will thus increase but now the government revenues will decline. This means that government revenue policy will not contribute to improvement of cost of living of an individual optimally. The other side of the tax revenue on wages of workers in various organization is that when the tax rates will increase, the employers will be forced to decline the salaries of employees since they were forced to pay their dues to the government. When the wages of a worker declines, their cost of living will be high since they will not be able to meet their short-term obligations and also they cannot purchase different commodities.

(Cruces, Galiani, & kidyba, 2010) states more of the theory of Pettinger in that when the tax rates are declined by the government will reduce employment rates in a country since the levels of revenues will decline. Hence they suggest that the tax rates as a source of government revenues should be determined at a fixed rate that will adjust the purchasing power of consumers. Ndovi (2013) states that another form of government revenue is VAT. This tax is on

the commodities and services. He argues that when the VAT amount is increased, the prices of the goods and services will increase hence the consumer will have low purchasing power. The solution to this is that the government revenue generated due to the VAT, should be reciprocated to the salaries and wages of the workers in various organization. This will enable consumers to be able to such goods and services at such stated prices. He argues that when VAT is increased, this portray high quality of such goods and commodities to the outside country while exporting. When there is high demand of money in the economy due to the low tax revenues, there seems will be increase of prices of goods and services. This causes inflation gap which is the difference in income between different consumers (Ilyas & Siddiqi,2010). The inflation can be due to high demand and cost. For demand-pull inflation, this is caused by high demand of goods and services while the cost-pull inflation is due to high cost of production of goods and services.

Nyamongo, (2012) did a research in Pakistan and India comparing their taxes rates in the year 1999-2009 using regression model. It was noted that in Pakistan, the government tax revenues was mostly generated from indirect taxes while in India, tax revenues is mostly generated from direct taxes. For indirect taxes, the burden is not directly on the pockets of individuals while for the direct taxes, the burden is directly on the pockets of consumers. Amir stated that the different types of taxes does have different impacts on cost of living.

Hence the government should implement an appropriate government revenues policy to enhance a low cost of living of individuals. Njuru , Ombuki, Wawire and Okeri, (2013) argued that when the tax revenues are increased, employees will be forced to look for informal jobs that do not pay taxes in order to have high purchasing power. The effect of this, is that there could be increase of crimes in a country and hence the government revenues policy will have failed in its effectiveness in contributing to the growth of an economy. At the long-run, huge sums of money will not be accounted hence revenues will decline. On the other hand, the cost of living will have improved individually.

Cruces, Galiani and kidyba (2010) states that citizens of a country expects that when the government raises the tax rates, it has enough revenue to undertake other various social security programmes. These social programs tend to boost the purchasing power of individuals. This will lead to improvement cost of living. Putunoi and Mutuku, (2013) did a research on the effect of government revenues on the cost of living and found out that the gross income does change

much when the income tax rates increases. This means that as much tax rates are increased, the wages of individuals are not increased at all making the consumers of goods and services hard to purchase. On the other hand, the change in income tax rates is not significant to changes to the income of an individual. This means that when the gross income does increase or decrease, the tax rates.

All the changes in the economic sphere can be traced back to the changes in the tax system, the government has the responsibility to use the tool at its disposal in order to achieve economic stability and growth one of which is indicated by affordable cost of living. The government can use taxation to restrict business activities of a given nature depending on the economic objective such as exploration of natural resources (Samuelson, 2005). In addition, taxation can be used to protect the domestic businesses and help them grow by increasing the import tariffs, in this aspect the government will reduce the amount of tax revenue collected at the borders but increase the income generation of its people which will create local employments and thus lower the cost of living as it will be at affordable levels to the normal citizens (Nordhaus, 2005).

The government use taxation policies as social tool to ensure equitable distribution of resources which is aligned towards the reduction of the cost of living in the society, the government collects revenue depending on the ability to pay and use the funds in providing social services regardless of the much that the individual tax payers contributed to the total government revenue (Jhingan, 2003). Government revenues generated in the local vicinity does face various risks such as technology, economic and political due to the nature of the systems established and had an agreement that the taxoms put in place for taxes should be adhered to (Shannon & Tippett, 1975).

Bartle (2003) examined for a period 1960-1970 that the major source of revenues in an economy is taxes and not a particular taxes such as property taxes. He further stated that five states did increased their property taxes and partly led to increased of revenues. Bowman and Lovell (1981) looked at the reliance of inter-government revenues in 1965-1977 and found out that the reliance does hinder the local governments to generate revue optimally in their country examined revenue patterns and local reliance on intergovernmental aid from 1965 to 1977.

With time, some beneficial taxes theories emerged in various Research for example Hettich and Winder which stated that various tax systems arose naturally due to the way politics of an economy. In those countries, there are tax competitions in the states and does result in tax basis. (Hettich & Winder,1984). The implication of this finding is that the structure of local government revenue is not a purely local decision. Sub-national governments' revenue structures exhibit some similarities and comparable trends in the evolution of their revenues. According to Business statistics states that the government revenue declined in three years since 2016 onwards by shs185billions.

The main reason behind this was lack of proper tax administration and economic shocks. The taxman does not perform his or her duties diligently failing to collect revenues. Due to this, the prices of goods and services goes high creating low purchasing power. Inflation rates on the other hand, averaged 6.5 per cent against target of 5.8 per cent in the review period while the shilling averaged 102.33 units against US Dollar, weaker than a forecast of 94.5 units forecast. The implication is that the cost of living is so high.

2.4.3 Public Debt and Cost of living in Kenya

According to Njuru, Ombuki, Wawire, and Okeri, (2013), the fiscal difficulties were attributed to uncontrolled government expenditures and un-innovative tax system that failed to satisfy the increasing government demands. During this time, the government sourced funding from both domestic and foreign borrowings in order to finance the then increasing fiscal deficit (Muriithi, & Moyi, 2003).

The government abolished the sales tax introduced in the early 70's in order to adopt the Value Added Tax system that was anticipated to have a higher revenue potential than the former

(Mureithi & Moyi, 2003). Margit (2012), argued that governments that seek sustainability and stability of their economy should focus on fiscal adjustments that are based on growth of tax revenue sources that reduction on spending. The realization of macro-economic goals is aligned towards the fiscal policy of a state and thus not automatic (Olawumni & Ayinla, 2007).

Kiptui (2005) looked on the effect of the fiscal policies on the investment rate from 1972-1999 by using Error correction model and co- integration analysis. He concentrated on the private investment which measures on the economic growth of a country since it is affected by the fiscal policies of a country. In this study, Kiptui identified the fiscal policy instruments include budget deficits, government consumption expenditure, tax burden and public debt.

One of the findings was that a huge amount of debt borrowed by the government leads to decline of investment in the long run since there must incur interest rates payments. The second finding was that the budget deficits leads to decline of private investment. The reason behind this is that budget deficits results to decline of public revenue in the economy. The third finding was that government expenditure had a positive effect on private investment. This is because government expenditure does boost the income flow in the economy hence a common Mwananchi can be able to purchase goods and pay for services. In relation to my study, Kiptui's study is related since it shows relationship of fiscal policies on the investment rates which they do measure cost of living indirectly. We conclude that there exists mixed results in the study.

According to Makau (2008), public debt refers to all the borrowed funds by both the county government and national government. The government choose between creating money and borrowing from either the internal sources or the external sources, however, the option of creating money does not solve much of the economic problems since it ends up causing hyperinflation which lowers the purchasing power of money and thus increasing the cost of living as opposed to borrowing (Martin, 2009).

A study by Putunoi and Mutuku (2013) on the impact of domestic debt on the Kenyan economic growth between 2000-2010 where the study employed use of Engle- granger residual based and

vector auto regression tests, they found that expansion of domestic debt is positively and significantly related to the long run growth of the economy.

Maana (2008), conducted a study on the impact of domestic debt on Kenya's economic conditions including the cost of living between 1996 and 2007, the study incorporated the use of Barro growth regression model and found that domestic debt has a negative but not significant relationship on cost of living. Another study by Kemal (2001) focusing on the effects of debt accumulation on the growth and poverty in Pakistan found that both domestic and external debt have adverse effects on the poor. This is due to the cost of financing the debt whose burden is shifted to the citizens thus increasing the cost of living.

Public debt is only inversely proportional to the cost of living when the public debt is effectively managed in order to spur the drivers of the economy. If not well managed, a lot of funds will be used to service past debts and therefore not able to finance development projects in the country (Ayres,2013).This indicates the cyclical effects of more public debt without taking into consideration the management and usage of the borrowed funds.

Previous scholars have entirely focused on external debts for two reasons, where first internal borrowing involves the circulation of the same resources in the country and therefore not much anticipated economic effects while secondly, external debt can lead the country to debt vulnerabilities resulting from debt servicing challenges (Paternostro, Rajaram,& Tiongson, (2007)

According to Putunoi and Mutuku, (2013), the government must prudently assess its ability to pay the borrowed amount as well as the loan obligations. Assuming the government is able to repay the loan and it will be prudently managed then can use public debt as a monetary policy where it increases the level of internal borrowing so as to reduce the amount of money in circulation which reduces the level of inflation. This in turn lowers the cost of living of the citizens since the prices of general commodities goes down.

Additionally, external borrowing increases the amount of money in circulation thus raising inflationary levels which increases the cost of living. It also makes the local currency loose value

since there is high demand for dollars used in loan repayment, this leads to foreign exchange loss to importers and therefore increases the cost of doing business and thereby increase the cost of living (Tiongson, (2007).

According to International Monetary Fund, 2016 the financial debt statistics has risen to 50 percentage points since the world financial crisis. Ndovi, (2013) researched on the effect of debt levels for 61 developing countries over the period 1996-1998 on the economic growth and the findings were high levels does decline the growth due to the high cost of servicing. He also found out that private investment did have appositive impact on the economic growth.

Schclarek (2004) found out that in 59 developing countries over 1970-2002, there exists a negative relationship between debt and growth while in advanced economies, there is no focusing on a panel of 59 developing and 24 advanced countries over the period 1970–2002, concludes that, for developing countries, there is a negative relation between debt and growth, but he does not find any significant relation between government debt and economic growth in advanced countries. Also, the results show that investments and exports have a positive contribution to GDP growth. Sen (2007) studied the impact of debt on economic growth of Argentina, Brazil, Columbia, Venezuela, Mexico, China, India, Indonesia, Philippines, Korea and Thailand. He found out that the debt levels does have negative effects in Asian Countries. Misztal (2010), examined a number of EU Member States over the period 2000–2010, concluded that when the debt levels by 1%, the GDP rates will fall by 0.3%.

Anyanwu and Erhijakpor (2004) looked on the effect of debt levels on the economy in Nigeria for the period 1970–2003 and found out a negative effect. El-Mahdy and Torayeh (2009) investigated the debt and growth relationship for Egypt's economy using data spanning 1981–2006 and the study revealed a robust negative relationship between debt and growth. Misztal, (2010) evaluated the effect of debt on Nigeria's economic growth from 1970–2007. The results revealed a weak and insignificant relationship between debt and growth. Kilding, A. E. (2015) investigated the effect of the public debt on economic growth of Bangladesh for the period 1980–2012 and found no impact of debt on economic growth. Tchereni (2013) analyzed the

effect of debt on Malawi's economic growth over the period 1975–2003. They reported a statistically insignificant negative relationship between debt and economic growth in Malawi.

The government debt policy is implemented on the fact that if the debt is used to pay wages or salaries in various organizations or is used to build projects. If it is used to pay wages, the consumers will have enough money to pay their bills hence their cost of living will improve. While if the debt is used in projects, this will be translated to consumers negatively since they will be forced to pay for their goods and services at high price due to the increase of tax rates. This policy is called debt consumption (Matiti, 2013).

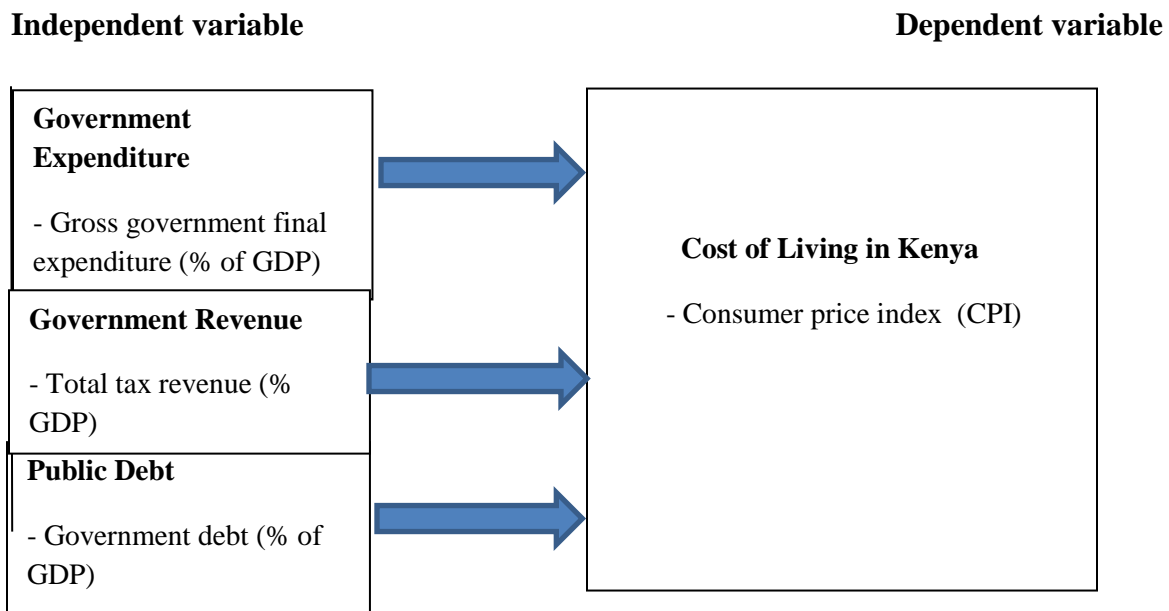
Ndovi, (2013) states that all form of debt repayments methods does have a negative effect on standard living of individuals. Inflation in a country will reduce the amount to be paid on debt due to the fact of depreciation of a unit of our own currency. This will benefit the country on financial burden while the citizens shall suffer. There exists a household debt mostly in the developed countries that does increase very fast in the last decade which was supported by a theory back in 2014. The theory stated by Czech that when the household debt does increase, the standard of living will improve tremendously. It states further that after a long-term, the families will have enough disposable income to repay their obligations and hence they will not be affected in any way. This will improve the cost of living of individuals. In short-run, when the government decides to increase demand of output in the economy, It will borrow funds to increase in production of goods and services into the economy. When the goods and services increases, the policy will raise individuals' incomes and thus improve cost of living. According to Keynesian theory (Friedman, 1998), the increase of aggregate demand of such goods and services will increase national income in the economy. This is because there shall be more money in circulation due to the increase of purchasing power on individuals.

Keynesian argues that increase of debt in an economy does create a disciplinary in budget process. The reason behind is that the government will be forced to undertake productive projects that will generate revenue that shall be able to repay the debt and not just wasting the resources. Drine, and Nabi, (2010) among others investigated on reducing taxes and borrowing debt over period of time and then boost on revenues by increasing on taxes. They identified that this act shall have effect on reducing on savings of individuals mostly the young generations. This will lead to transfer of resources to older generations that do not necessary need income

more than younger generations. We conclude that effect of debt burden is felt in the long-run in the economy.

2.4 Conceptual Framework

Conceptual framework is a schematic representation of the variables used in the study to outline possible courses of action or to present a preferred approach to an idea or thought. According to Bradley (2008), it shows an understanding of the relationship between independent variables and dependent variables. I.e Government expenditure, public debt as well as government revenue on the cost of living.



2.5 Summary of Literature Review

The chapter points out three theories of fiscal policies which include: cost of service theory, benefit received theory and dynamic theory of public spending, taxation and public debt. The theories are consistently built around the facets of fiscal policies on cost of living. Review of past studies have shown contradicting results pertaining to the effects of fiscal policy on the cost of living where some indicated significant relationships with negative and positive correlations while others found insignificant relationships between the various independent variables and the dependent variables. In addition the existing literature and majority of studies put much effort on

the effects of fiscal policies on other variables such as economic growth, employment, balance of trade etc. The study is therefore aligned towards bridging the existing gap in literature.

2.6 Operationalization of the Variables

Table 2.1: Operationalization of variables

Variables Name	Type of Variable	Formula	Measurement type
Cost of living	Dependent	$\frac{\text{Cost of basket in current year}}{\text{cost of basket in base year}} * 100$	RATIO
Government Expenditure	Independent	$\frac{\text{gross government expenditure}}{GDP} * 100$	RATIO
Government Revenue	Independent	$\frac{\text{Total government revenue}}{GDP} * 100$	RATIO
Public Debt	Independent	$\frac{\text{Total government debt}}{GDP} * 100$	RATIO

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focused on the methods that were employed in the conduct of the study, these methods entailed, research design, target population, sampling and sampling procedures, instrumentation, data collection, data analysis as well as the various types of test that confirms the validity and quality of the model in the proposed series of data.

3.2 Research Design

According to Koothari (2003), a research design is the glue that holds all the elements of a study together. This study employed the use of descriptive research design. Descriptive research design is concerned with finding out the what, where and how of a phenomenon (Cooper &Schindler, 2003). Descriptive research design is preferred because it enables the researcher to gather in-depth information regarding the variables of the study which includes: government revenue, government expenditure as well as the public debt on cost of living.

3.3 Target Population

Target population in statistics is the specific population about which information is desired. A population is a well-defined or set of people, services, elements and events, group of things or households that are being investigated (Ngechu, 2004). The study targeted the Kenyan economy where the relevant data was gathered (see in Appendix 1 below). This is Narrowed down to a common Mwananchi. The data pertaining to the consumer price index, government expenditure, government revenue and public debt were retrieved from the World Bank database as well and Kenya National Bureau Of Statistics.

3.4 Data Collection Method

The study employed the use of secondary data in order to answer the research questions. Data from 1963 to 2017 pertaining to the variables being studied was retrieved from the World Bank and central bank database and used in the analysis so as to explore the effects overtime. The nature of the data was time series data set which calls for various statistical tests to validate and ensure that the model output generated is the best.

3.5 Data Analysis

The Quantitative data was analysed by using econometrics models to find out the effect of dependant variables on the independent variable. Long-term correlation among variables was determined by using the Johansen's Test for Cointegration. These are test that are aimed at determining the effectiveness of the best model that suited the data being analysed. The study used unit root tests which were aimed at testing presence or absence of stationarity.

3.5.1 Analytical Model

The data was Multivariate Time series to elaborate on the relationship of Public debt, Government expenditure and Government revenue on the cost of living. The threshold of significance was determined at 0.05 significance instead of 0.01 due to the fact of accuracy. Mean value and standard deviation as descriptive statistics were used. These helped in determining the optimal point when the dependant variables tend to explain the independent variable altogether. To determine the effect of debt, expenditure and revenue policy on cost of living in Kenya, The below model was estimated:

$$COL_t = f(GE_t, GR_t, PD_t)$$

3.5.2 Preliminary Tests

The first step in these tests was to conduct Unit root test in order to check for the stationarity status of the data series. This was enhanced through the use of Dickey Fuller test and the criteria was that there was unit root in the data series and therefore we accepted the null hypothesis since test-statistic was less than the absolute value of the critical value. Therefore the series was further de-trended through first difference. Also the series was non stationary at the first test since the mean and auto-covariances did depended on time. The series ought to be differenced the second time which the series was stationary.

H₀: Y_t is a random walk

H₁: Y_t is stationary

3.5.3 Correlogram and Trend Plots

After the second differencing, the Time Series Plot and Correlogram Plot was drawn to confirm the stationarity after using Dicker Fuller Test. The plot clearly indicated that there was no prediction of the occurrences of the variables and there lacked a trend.

3.5.4 Correlation Analysis

Once the series was determined stationary, the dependant variables were measured within their relationship affecting each other. This analysis helped in determining how strength is the changes of one variable in relation to another variable. This helped to understand that the series need to be intergrated.

3.6 Diagnostic Test

3.6.1 Testing for Cointegration

Cointegration is the combination of series which in our case the series was multivariate that are not stationary after the first differencing and cancels out the state. The regression of the equation would not be appropriate since it would have caused a problem. The series was tested for cointegration to determine whether to use Vector Correction Model or Vector Autoregressive Model. The test that was used for cointegration was the Johansen Test. The criteria used to determine whether the series was cointegrated as below:

H0: Absence of cointegration= The p-value of the series < than 0.05

H1: Presence of cointegration= The p-value of the series > than 0.05

Trend Plots and Correlograms were used to confirm the cointegration aspect too for the series.

$$Y_t = B_0 + B_1x_1t + B_2x_2t + B_3x_3t + \dots + B_kx_k + e$$

Where:

Y =Independent variable(Cost of living)

X1, X2, X3 =Dependent variables(Public debt, government expenditure and government revenue)

B0, B1, B2, B3 =Intergrating Vectors.

E= Error term

The series has one contergration equation since at this level, its p-value was >0.05

3.6.2 Lag Selection

Optimal Lag Selection was determined by using sequential modified LR Test of likelihood, final prediction error, Akaine information criterion, Schwarz information criterion and Hannan-Quinn information criterion. The criteria that determined the optimal Lag is one that had the minimum Akaine Information (AIC) and BIC. Hence the series was cointegrated at lag 2.

3.6.3 Fitting of VECM Model

Having determined that there existed a cointegration equation in the research variables, the researcher, determined the parameters of the cointegration equation using Vector Error Correction model. This model helped in correcting deviations of series from the equilibrium in short run as they respond to their respective shocks.

In the research, the output was deemed fit since the Chi square was less than 0.05 in all variables. This meant that each coefficient means that Long-run relationship among the dependant variables. While fitting a VECM Model by Johansen (1995), the study was concerned with four parameters of interest which were: Parameters in the cointegration equation, adjustment coefficients and short run coefficients.

3.6.4 Granger Causality

Granger Causality is a process in multivariate time series analysis, that helped in determining whether the variables had a causal relationship. A series X_t is said to Granger cause a series Y_t if past values of X_t can help predict future values of Y_t taking into account lag dependence of Y_t . Similarly it is possible for Y_t to Granger cause X_t . In the presence of cointegration and the first order cointegration, the granger causality was determined based on the output of VECM Model. A single error correction term was included in the causality.

The criteria that was used to determine if the variables cause the other variables is at:

T-statistics > t-critical

OR

P-value < 0.05

In this study, three sets of variables as below did Granger cause each other since their T-statistics was greater than T-critical.

Government Expenditure and cost of living variables

Government Revenue and Government Debt variables.

Government Revenue and Government Expenditure variables.

3.7 Post-Estimation Tests

Once the cointegration equation and the granger causality is determined, the model was checked on its specifications.

3.7.1 Impulse Response Tests

Impulse response function tracks the response of variables in a model to shocks applied each variables error term. The Impulse response tests (IRT) were used to examine the effectiveness interventions. Example: Policy Changes and Macroeconomic policies. The shocks were normally introduced on one error while holding other factors constant. In the study, the responses were

Evident that the shocks of dependant variables led to greater significant change in the independent variables.

3.7.2 Variance Decomposition Test

This test explained the information that each variable in the relationship revealed the forecast error variance of each dependant variable explained by the external shocks (Hatemi, 2014). It helped in quantifying the change of one variable caused by a shock of the other variable.

The study was evident that the shocks or changes of dependant variables did cause a change on the independent variables.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction

This chapter outlined the study output from the analyzed data collected from the World Bank it aimed at ensuring that the users are able to understand the study on the effects of fiscal policy on the cost of living in Kenya. The data was analyzed by use of STATA 12 software and presented by use of the tables, charts ,graphs as well as the different stata tests output.

4.2 Descriptive Statistics

These are the tests that briefly describe coefficients of certain set of data either as a sample or population. These tests are used to measure central tendency and spread. The central tendency include mean. Mean is the measure of average return standard deviation is the measure of deviations from the mean while kurtosis is the measure to describe the distribution of data around the mean which is measured by the tailness. When the data sets have high kurtosis tend to have heavy tails while low kurtosis tend to have low kurtosis. Skewness is a descriptive test that is used to measure symmetrical nature of data sets. If the data is symmetrical, it looks the same to the left and right of the centre point.

Table 4.1 below, explains that the Consumer Price Index has the highest mean while government expenditure and government revenue has the lowest mean. This meant that CPI values kept on deviating from the mean so fast and that are volatile to changes on economic changes. While the government debt does not change as much to changes to economic policies.

In relation to Skewness and kurtosis, the customer price index was the highest while government debt was the second and third one was both government revenue and government expenditure. The meant of this is that government debt does have great impact on the cost of living while the cost of living have huge variations over the years. The dependant three variables are platykurtic since their levels are less than 3. Therefore, the three variables clearly explains the depedant variable.

Table 4.1: Descriptive Statistics

	Mean	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
CPI	27.24422	140.9142	0.741244	38.38065	1.592884	4.486425
GOVERNMENT_DEBT	21.41381	35.00000	11.80493	5.785711	0.489912	2.777918
GOVERNMENT_EXP	16.15652	19.80338	11.47088	2.010408	-0.27606	2.419995
GOVERNMENT_REV	16.55464	20.49433	11.47088	1.970485	-0.52652	3.175877

4.2. Trend Analysis

This is a measure that is used to determined movement of set of data in whether they do have a relationship or not. Trend could be having upward or downward movement. In this study, a trend

analysis helped to determine the trends of government expenditure, government revenue and public debt in relation to public debt. This helped in forecasting future trend of the variables and perform comparative analysis.

According to Figure 4.1 below, the Consumer Price Index has an upward trend while the government revenues, debt and expenditure had a downward trend. This meant that the CPI increased when the government decides not to distribute resources to the citizens, increasing on the public debt and reducing on the re-distribution of the revenue into the economy.

The government debt tended to have a greater impact on the cost of living more than the government revenue and government expenditure. The reason is that public debt does have create huge burden on consumers by increasing on cost of services and goods to increase on revenue that will be used to pay obligations. Also there was the probability that the government borrows and finance unprofitable projects that do not yield enough returns. This is in accordance to a study by (Pattilo, 2004).

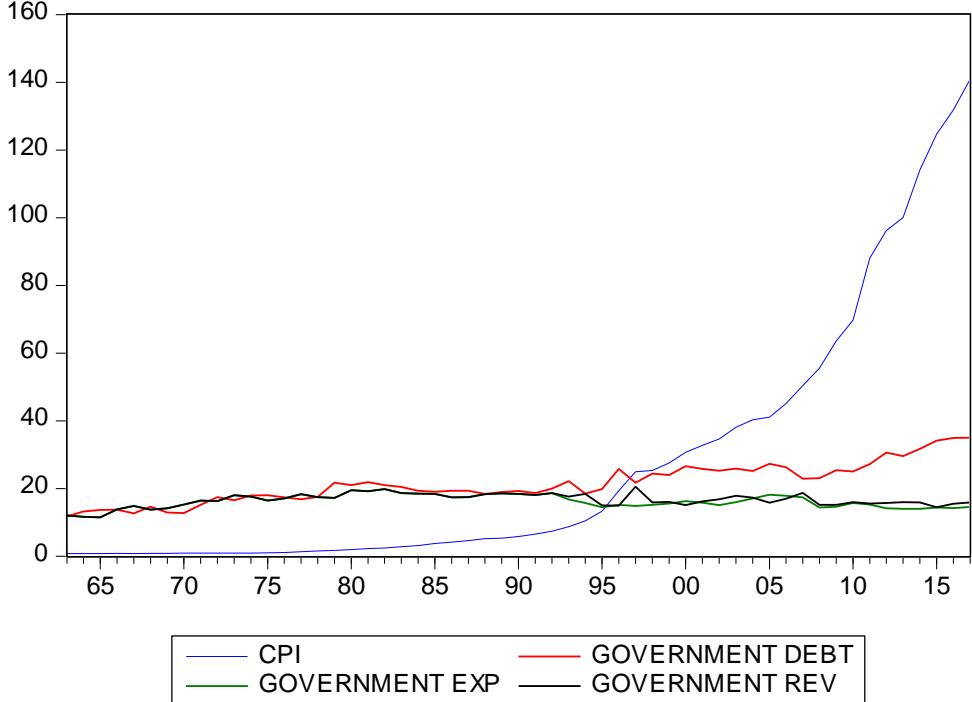
Public debt is only inversely proportional to the cost of living when the public debt is effectively managed in order to spur the drivers of the economy. If not well managed, a lot of funds will be used to service past debts and therefore not able to finance development projects in the country (Ayres, 2013). The government revenue and expenditure did have the same downward trend. This meant that they both have the same impact on the cost of living hence they should be encouraged by the government to be increased to improve standard of living.

In accordance to Mitchelle (2005) states that when the revenue by the government revenue is increased, there exists a positive impact on the cost of living. In relation to a study by Aschauer (1989) who supports that government spending policy does have a positive effect on investment. Due to this, individuals can be in a position to invest in various sectors of investment schemes. The cost of living of such individual will eventually improve tremendously.

The studies of Paleologou (2004) found insignificant relationship between government expenditure and the cost of living, in addition to previous studies by Tchereni and Sekhampu (2013) whose result indicated that government expenditure increases the cost of living and thus lowers the economic growth of the country.

The findings are in conjunction with the study of Afonso and Jalles, (2013), who stated that the only way the government expenditure influences the cost of living is when the government reduces the tax rates thus lowering the cost of doing business which automatically have an impact on the prices of goods.

Figure 4.1: Trend Analysis



4.3 Correlation Analysis

This is an analysis that explained the strength of the relationship among the variables. This helped the researcher to identify the most influential dependant variable on the independent variable. The more strength a relationship is, the higher the correlation coefficient while the more weaker a relationship is, the lower the correlation coefficient. This analysis do not measure the causal effect of one variable on the other since it is a weaker measure.

As per Table 4:1 below, the government debt and CPI has a very strong positive correlation with each other. This meant that the government debt had a very strong influential on the increasing cost of living among individuals. When the government debt increased, automatically the cost of

living will increase. In accordance to a study by Tiongson, (2007) stated that external borrowing increased the amount of money in circulation thus raising inflationary levels which increases the cost of living. It also made the local currency loose value since there was high demand for dollars used in loan repayment, this lead to foreign exchange loss to importers and therefore increased the cost of doing business and thereby increased the cost of living.

In addition, International Monetary Fund, (2016) found out that the financial debt statistics had risen to 50 percentage points since the world financial crisis. Ndovi, (2013) researched on the effect of debt levels for 61 developing countries over the period 1996-1998 on the economic growth and the findings were high levels did declined the growth due to the high cost of servicing.

From the Table 4:1 below, both government revenue and government expenditure do have negative relationship with cost of living. This means that when the two variables increases, the cost of living of an individual will improve. In accordance with Ahmed 2010), pointed out that government revenue was directly proportional to the standards of living if prudently utilized. In this case, the government policies and the understanding of economics played a critical role in the management of the cost of living.

In support of the findings, Cruces, Galiani and kidyba (2010) stated that citizens of a country expected that when the government raises the tax rates, it had enough revenue to undertake other various social security programmes. These social programs tend to boost the purchasing power of individuals. This will lead to improvement cost of living. Putunoi, and Mutuku, (2013) did a research on the effect of government revenues on the cost of living and found out that the gross income did change much when the income tax rates increased.

According to Johansson (2011), the only way the government expenditure influenced the cost of living is when the government reduced the tax rates thus lowered the cost of doing business which automatically did have an impact on the prices of goods. Government expenditure have however attracted attention from various scholars who in their undertaking found contradicting results regarding the relationship between government expenditure and the cost of living. Aschauer (1989) found out that government spending policy did have a positive effect on

investment. Due to this, individuals could be in a position to invest in various sectors of investment schemes. The cost of living of such individual will eventually improve tremendously.

Table 4:1 Correlation Analysis

	CPI	GOVERNMENT_DEBT	GOVERNMENT_EXP	GOVERNMENT_REV
CPI	1			
GOVERNMENT_DEBT	0.878774	1		
GOVERNMENT_EXP	-0.35682	-0.046760028	1	
GOVERNMENT_REV	-0.18709	0.08900017	0.852785764	1

4.4 Unit Root Test

This is test that was used to determined whether the series was stationary or not. Augmented Dickler Fuller Test was used to determine the stationarity. The criteria that was used for stationarity was that:

- I. Mean and variance are constant. This meant that the series do not change with time. $(X_t) = u_t$.
- II. Covariances between any two periods of a certain series is determined by lags and not time.
- III. The series should have covariance equal to zero to establish a white noise process.

As per Table 4.2 below, in the first level the series is not stationary since the T-stastics is less than T-critical for each variable. The series was stationary after the First difference since the series T-stastics is more than T-critical. This means that Government debt, government expenditure and government revenue are integrated of order one at 5% significance level.

Table 4:2 Unit Root Testing

Level Series	Test Statistic	1% Critical Value	5% Critical Value	10% Critical Value
lnCPI	0.288080	-3.55747	-2.91657	-2.59612

GOVERNMENT_DEBT	-0.574888	-3.55747	-2.91657	-2.59612
GOVERNMENT_EXP	-2.378907	-3.55747	-2.91657	-2.59612
GOVERNMENT_REV	-3.574769	-3.55747	-2.91657	-2.59612
First Differences				
lnCPI	-3.645435	-3.56002	-2.91765	-2.59669
GOVERNMENT_DEBT	-9.494359	-3.56002	-2.91765	-2.59669
GOVERNMENT_EXP	-6.820750	-3.56002	-2.91765	-2.59669
GOVERNMENT_REV	-8.643205	-3.56002	-2.91765	-2.59669

4.5 Testing For Cointegration

The series was not stationary at the first stationary hence this fact made the series not to have OLS method since the results could be vague and not valid. The cointegration analysis became the most framework for estimation, inference and interpretation of the data. This method helped in determining long term relationship of the dependant variables and independent variables.

As per the Table 4:3 below, there existed one cointegration equation at 5% significance level. This output informed the choice of VECM Model which helped in accounting for the dynamic changes among the cointegrated variables since they were not stationary at the first level.

Table 4:3 Johansen Cointegration Test

Unrestricted Cointegration Rank Test (Trace)

Hypothesized	Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.533622	57.68660	47.85613	0.0046

At most 1	0.223341	17.26042	29.79707	0.6208
At most 2	0.069617	3.864443	15.49471	0.9142
At most 3	0.000754	0.039993	3.841466	0.8415

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

4.6 Lag Selection

The optimal lag selection was done by using Akaike Information Criterion, SBIC, SHQ. The decision was to choose the lag that did have the lowest value. As shown by Table 4.4 below, the optimal lag of unrestricted VAR model was 2 since it had the lowest values and also denoted by most of *. Since the VECM Model lag is always less than the VAR Model by one degree of freedom. Therefore the VECM model was fitted using one lag.

Table 4:4 Optimal Lag Length Selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-336.7643	NA	23.31567	14.50061	14.65807	14.55986
1	-136.9890	357.0451	0.009392	6.680385	7.467682*	6.976650
2	-108.8268	45.53891*	0.005687*	6.162844	7.579978	6.696121*
3	-91.96775	24.39185	0.005707	6.126287	8.173259	6.896577
4	-79.97902	15.30477	0.007318	6.296979	8.973789	7.304281
5	-60.53831	21.50886	0.007228	6.150566	9.457213	7.394880

6	-38.67920	20.46385	0.006991	5.901243	9.837727	7.382568
7	-20.40968	13.99368	0.008901	5.804667	10.37099	7.523005
8	8.760476	17.37796	0.008631	5.244235*	10.44039	7.199585

4.7 VEC Granger Causality Testing

In the presence of cointegration equation and first order, granger causality was based on the VECM Model. The single error correction term was included in each variable relationship. The error correction term meant the speed of adjustment of the cointegrated variables within themselves over long run relationship Equilibrium. As per the Table 4:5 below, both government debt and government revenue policy did have a faster adjustment towards the equilibrium evidenced by 2.519** and 4.631** while government expenditure did have a slower rate of adjustment evidenced by -1.427. This means that their equations tend to co-intergrated with each other to enable stationarity.

For the granger causality at 5% significance level: It was found out that Government Expenditure did has granger causality with CPI evidenced by 7.26**, Government Revenue has granger causality with Government Expenditure evidenced by 9.23** and Government Revenue did have granger causality with Government Debt evidenced by 21.53*. The economic implications for these findings are that: The fluctuations of the past values of government expenditure in the economy could be able to predict the fluctuations of government revenue trend in future, the fluctuations of the past government debt levels could be able to predict the fluctuations of government revenue trend in future and Fluctuations of the past CPI trends could be able to predict future government expenditure levels in the economy. The Government revenue did not granger cause with any other variables hence it did not have any cointegration relationship.

Table 4:5 Summary of Granger Causality Tests based on VECM output

	Short Run Lagged Differences				
Dependent Variables	D(LCPI)	D(GOVT_DEBT)	D(GOVT_EXP)	D(GOVT_REV)	ECT _{t-1}

	Wald χ^2 Statistics				t-statistics
D(LCPI)		3.796782	3.050179	4.036748	0.325
D(GOVT_DEBT)	0.464994		5.933317	5.141095	2.519**
D(GOVT_EXP)	7.265003**	3.365692		1.645462	-1.427
D(GOVT_REV)	0.339126	21.53239**	9.232599**		4.631**

(**) denotes significance at the 5% level

4.8 Impulse Response Analysis

This analysis was used to determine the variation of a one variable to a shock of the other variable in a cointegrated equation. This helped to determine how an unplanned shock of one variable could affect the change of the other variable. In the study the impulse response analysis was determined by the use of analysis plots as per the Figure 4:5 below. The findings were that government debt was the variable with the highest aggregate responses to changes of the economy by mean of 2% followed by Government Expenditure of mean of 1% then lastly the government revenue of mean 0.5%.

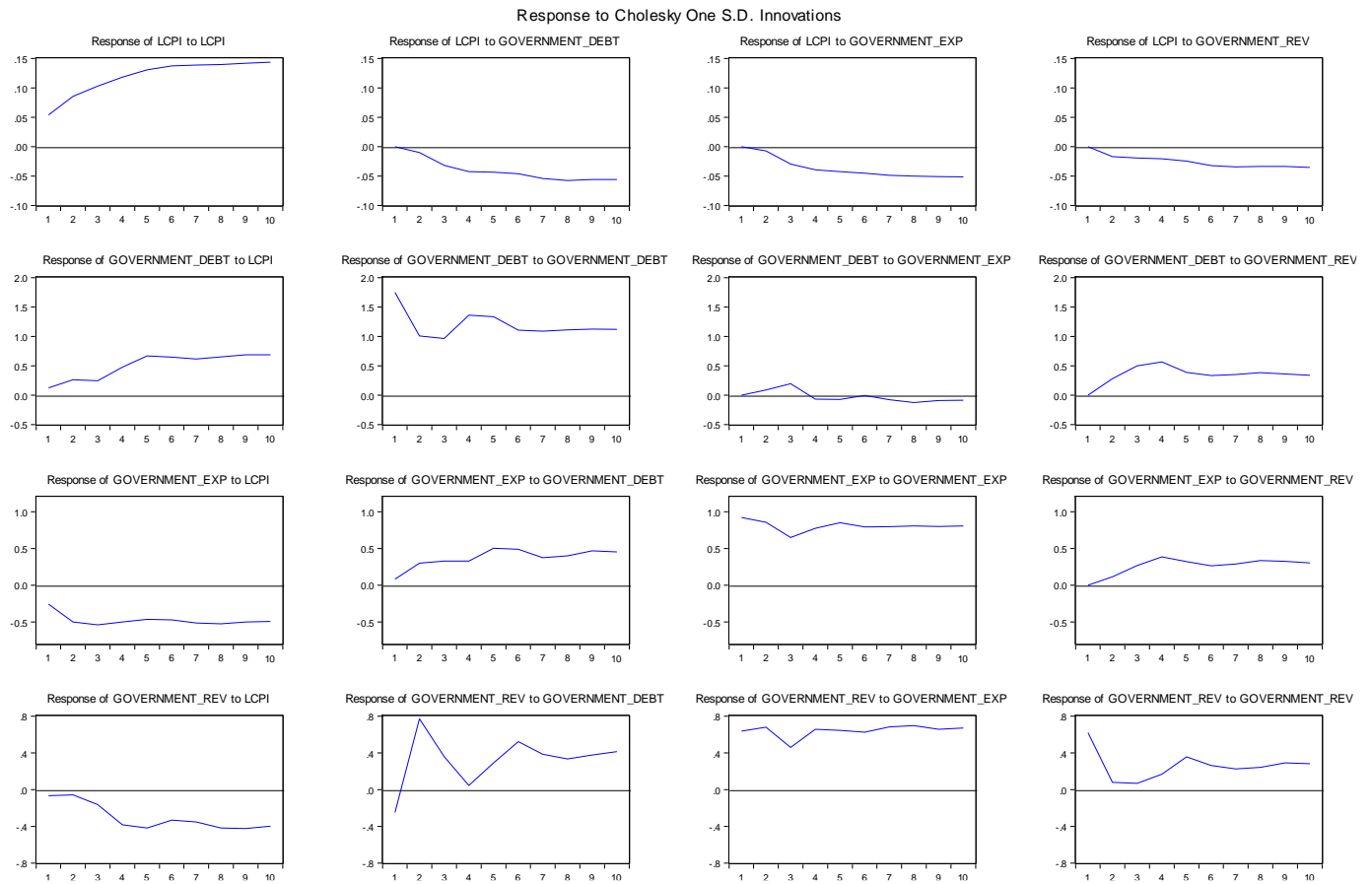
The fact of the highest response variable was the government debt by a mean of 2% being the highest target achieved was due to the fact that debt was associated with other macroeconomic factors such as increased variations of interest rates. While the government revenue variable did not have other factors that could cause greater changes in their levels in the economy. As per Figure 4:5 below, it is evident that each variable was responsive to its own shocks. In relation to cross shocks:

The CPI was more responsive to shocks of government debt more than shocks of government revenue and government expenditure. The Government debt was more responsive to shocks of CPI more than shocks of government revenue and government expenditure. The Government expenditure was more responsive to shocks of CPI more than shocks of government revenue and government debt.

The Government revenue was more responsive to shocks of government debt and government expenditure more than shocks of CPI. In conclusion, the shocks of government debt is most

influential to changes of the both dependant variables and independent variable. While the shocks of government revenue did have the least influential on to changes of the both dependant variables and independent variable.

Figure 4:5 Response of Variables to one Standard Deviation Innovations



4.9 Forecast Error Variance Decomposition

This analysis was used to determine the variance of the shocks of the variables over the long-run relationship. As per the Table 4:6 below, for all the variables, own shocks did have explanatory largest forecast error variance at each time horizon. This is evident in that at period 1, 100% of the CPI variance was attributed to its own shocks, 99.49% of the Government debt variance was attributed to its own shocks, 91.99% of the government expenditure variance was attributed to its own shocks and 44.83% of the government revenue was attributed to its own shocks. It was evident that the variance decomposition of CPI at time period 10 was the most influential on government debt by 10.07% than the government revenue and government expenditure by 3.87% and 8.55% respectively.

It was evident that the variance decomposition of government debt at time period 10 was the

most influential on CPI by 15.44 % while at period 3 was the most influential on government expenditure by 82.50% while at period 4 was the most influential on government revenue by 8.19%. It was evident that the variance decomposition of government expenditure at time period 4 was the most influential on CPI by 21.40 % while at period 10 was the most influential on government debt and government revenue by 13.58% and 7.10% respectively.

It was evident that the variance decomposition of government revenue at time period 10 was the most influential on CPI by 14.13% while at period 6 was the most influential on government debt by 25.50% while at period 8 was the most influential on government expenditure by 52.97%. Hence the government debt was the most influential on the other variables in the economy.

Table 4.:6 Decomposition of Sectoral Indexes' Forecast Error Variances

Variance Decomposition of LCPI:					
Period	S.E.	LCPI	GOVERNMENT DEBT T_DEBT	GOVERNMENT EXPENDITURE T_EXP	GOVERNMENT REVENUE T_REV
1	0.053954	100.0000	0.000000	0.000000	0.000000
2	0.103265	95.76529	0.957632	0.535874	2.741204
3	0.153558	88.36716	4.813569	4.011261	2.808008
4	0.203217	84.15713	7.109452	6.107330	2.626092
5	0.250203	82.66284	7.712589	6.911431	2.713139
6	0.294361	81.41355	8.025778	7.381118	3.179554
7	0.335281	79.86894	8.813101	7.797415	3.520547
8	0.372680	78.67513	9.521290	8.130484	3.673091

9	0.407316	77.98250	9.869830	8.385629	3.762039
10	0.439886	77.50261	10.07174	8.552932	3.872720

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Period	S.E.	LCPI	GOVERNMENT T_DEBT	GOVERNMENT T_EXP	GOVERNMENT T_REV
1	1.750295	0.507846	99.49215	0.000000	0.000000
2	2.056548	1.994699	95.96422	0.181368	1.859709
3	2.345447	2.611810	90.61765	0.825443	5.945098
4	2.809808	4.690761	86.47376	0.636045	8.199434
5	3.204471	7.935381	83.78406	0.539150	7.741408
6	3.466545	10.24911	81.75770	0.461104	7.532082
7	3.702486	11.72437	80.32371	0.449091	7.502826
8	3.940652	13.07449	78.85378	0.500076	7.571661
9	4.170946	14.36809	77.62900	0.493744	7.509166
10	4.386082	15.44468	76.69075	0.485917	7.378657

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Period	S.E.	LCPI	GOVERNMENT		
			T_DEBT	T_EXP	T_REV
1	0.957263	7.296907	0.704933	91.99816	0.000000
2	1.415324	15.89365	4.743490	78.71803	0.644830
3	1.701075	21.11473	7.010212	68.95289	2.922166
4	1.999734	21.54426	7.756829	64.89386	5.805047
5	2.299739	20.41030	10.64160	62.61529	6.332805
6	2.539010	20.22884	12.40053	61.10996	6.260666
7	2.750111	20.75051	12.40669	60.40002	6.442780
8	2.958982	21.07770	12.51933	59.56664	6.836328
9	3.156876	21.03745	13.17212	58.74244	7.047993
10	3.339626	20.99936	13.58734	58.30752	7.105786

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Period	S.E.	LCPI	GOVERNMENT		
			T_DEBT	T_EXP	T_REV
1	0.923131	0.531268	7.341120	47.28853	44.83908
2	1.383384	0.418435	34.23840	45.05699	20.28618
3	1.511607	1.529941	34.32801	46.95132	17.19073
4	1.701220	6.303711	27.16637	51.98737	14.54255

5	1.922852	9.685778	23.52747	51.96316	14.82359
6	2.130178	10.33236	25.15500	50.94342	13.56922
7	2.307295	11.13391	24.20886	52.15161	12.50562
8	2.480303	12.49740	22.74632	52.97849	11.77779
9	2.643252	13.58079	22.06162	52.78170	11.57589
10	2.800861	14.13239	21.81049	52.72836	11.32876

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter contains the findings from data analysis, the conclusions, recommendations together with suggestions for further studies.

5.2 Summary

5.2.1 Findings on Government Expenditure on the Cost of Living

According to the study findings, consumer price index which is a measure of the cost of living did have an impact of government expenditure and vice versa. The study found out that when the small changes happened on the levels of expenditure in the economy by the government would affect the cost of living of an individual. This means that when the government expenditure increases, the cost of living would decrease as evident in Table 4:1 below.

Government expenditure influences positively cost of living is when the government increases money in circulation in the economy thus lowering the cost of doing business which automatically have an impact on the prices of goods. Government expenditure have however attracted attention from various scholars who in their undertaking found contradicting results regarding the relationship between government expenditure and the cost of living.

However, findings of other scholars are contradictory as explained by the classical and Keynesian approach. The classical economists argue in favour of government expenditure indicating that it influences the cost of living through increased production but high prices for the goods and services hence found inconsistent results to the study findings where positive relationship between government expenditure and cost of living was reported. However, the findings of the study is by in support if only the government expenditure is used in productive projects. Thus the study concluded that government expenditure did have negative relationship with cost of living.

5.2.2 Findings on Government Revenue on the Cost of Living

According to the findings, the government revenue variable did have an impact on cost of living negatively. As per the Table 4:1 below, illustrates that when the government increases on the revenue in the economy, the cost of living of an individual will decrease. Therefore, in this respect shorter revenue gap means reduction in the government revenue increases the revenue gap and thus increases the cost of living of the population.

The scholars explained their findings in the sense that a country that faces poor administration of revenue in terms of unequal income distribution will face revenue gaps automatically irrespective of fiscal stabilizers. The reason behind this is that when government utilizes non-tax revenues is when the cost of living will decline. Also the government should ensure that revenue is increased while widening up the growth.

According to the findings, government revenue is directly proportional to the standards of living if prudently utilized. In this case, the government policies and the understanding of economics plays a critical role in the management of the cost of living. The need for tax revenue is undisputable due to the global significance it has attracted on the economic development irrespective of the national differences.

5.2.3 Findings on Public Debt on the Cost of Living

As per the findings in Table 4:1, the public debt has positive relationship with cost of living. This means that when the debt levels are increased within the economy over long-run, the cost of living will be high. The main cause attributed to the findings is that the debt component comes with obligations to settle which drains the cash flows in the economy. Due to this reason, the country ought to increase prices of goods and services to cater for the interest expense payment.

The finding is statistically insignificant which is due to the government prioritization on the use of the borrowed funds. Public debt is only inversely proportional to the cost of living when the public debt is effectively managed in order to spur the drivers of the economy. If not well managed, a lot of funds will be used to service past debts and therefore not able to finance development projects in the country. This indicates the cyclical effects of more public debt without taking into consideration the management and usage of the borrowed funds.

Previous scholars have entirely focused on external debts for two reasons, where first internal borrowing involves the circulation of the same resources in the country and therefore not much anticipated economic effects while secondly, external debt can lead the country to debt vulnerabilities resulting from debt servicing challenges.

5.3 Conclusion

Government expenditure is the total amount of resources that is needed to run the state. Government expenditure has a negative relationship on the cost of living. The variance decomposition of the government expenditure, government revenue and public debt did have a high on the explanation of the changes of the cost of living on average. The VECM Model test from 1963-2017 was evident that the dependant variables did have statistically impact on the cost of living.

The government must make optimal decisions on the usage of the available resources. Despite the government having established expenditure control measures by use of the budget, there is still substantial amount of government resources that is either mis - used, embezzled or misappropriated. All this will influence the effect of expenditure on the cost of living and therefore the available controls need to be reinforced in an effort to ensure that budgeted resources are used prudently.

Government revenue policy implies that the more the revenue collected by the government, the lower the cost of living which is contradictory to the argument that when the government raises revenue through increased tax rates this increases the tax payer's burden thus increasing the cost of living. This means that the government must exhaust non tax sources of revenue in order to lower the cost of living of the citizens. This aspect of government revenue call for the state to act like a private entity in exploring new revenue sources that are sustainable without just focusing on the money by tax payers.

The public debt is the money borrowed by a state to support the financial budget for a given period of time, the government can borrow both from internal external sources. From the findings of the study, it is eminent that public debt influences the cost of living negatively where increase in public debt lowers the cost of living only in short-run. However, this study cannot be

complete without stating that the money borrowed should be directed to developmental projects and not to fund recurrent expenditure.

5.4 Recommendations

The government through the finance ministry should embark on the reconstruction of stringent measures that stipulates the usage of the available resources in the various government entities, these measures should then be adopted in the budget policy statement so that every person is responsible on the way they use public resources. In this regard, every coin from the public coffers will be put into use and the spilling effect will eventually lower the cost of living of the general citizens.

The Kenya revenue authority should engage financial experts in establishing new non-tax sources of government revenue. This calls for deeper understanding of the Kenyan economic sphere. Some of these sources include but not limited to exploration and exportation of the natural resources discovered in the Kenyan soil. This will enable the government to fund its projects at ease and thus lower the cost of living.

The government should have a policy to ensure the debt provision are provided by the financial institutions. These institutions should be have stringent rules and regulations on the amount of borrowing by the government to ensure that all debts have been paid promptly using the available resources.

5.5 Limitations of the research study

Majority of previous studies conducted pertaining to the fiscal policies were oriented towards the national development and growth of the country and not necessarily the cost of living, this resulted to challenges in getting sufficient reference materials though was complemented by through research. The researcher faced challenges in the analysis of the study using Stata 12 software though the challenge was positively perceived as it presented the researcher with an opportunity to learn more on the usage of the statistical software.

5.6 Suggestions for further research

Having focused on the effect of fiscal policies on the cost of living in Kenya, scholars, future researchers and academicians should aim at positioning their studies within the scope of fiscal policies but on different macroeconomic indicators such as the level of unemployment, cost of production. For example: To determine the effect of fiscal policies on the level of unemployment in Kenya.

Secondly, further research should be embarked on the effect of prudence management on the economic indicators so as to distinguish effect from different regimes. Thirdly, it's prudent to engage scholars in the causal effect of the dependent variables on the independent variables such as the effect of poverty on government revenue, public debt as well as government spending.

Fourthly, The field of research should be detailed and specific in the variables in terms of microeconomic. This means that variables such as expenditure effect on cost of living should look on usage and impact to individuals. Private investment is neglected more due to biasness of the economy, having more focus on public impact which do not portray true and accurate results in the findings.

Last but not least, there is need to review the past studies those that have been conducted more than ten years ago especially pertaining to the effect of macroeconomic variables such as public debt, cost of living, government expenditure and government revenue in order to update the study findings, this will help in changing the perceptions of future scholars and thus build the research endeavor positively.

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APPENDIX 1- DATA CAPTURE FORM

YEARS	GOVERNMENT EXP	CPI	GOVERNMENT REV	GOVERNMENT DEBT
1963	12.02860488	0.741244	12.02860488	11.80493182
1964	11.60011948	0.759457	11.60011948	13.17519473
1965	11.47088055	0.783133	11.47088055	13.69498542
1966	13.84917666	0.788596	13.84917666	13.76263012
1967	14.84287734	0.787813	14.84287734	12.6112031
1968	13.72926019	0.816006	13.72926019	14.58427987
1969	14.12994094	0.856923	14.12994094	12.89001076
1970	15.20731606	0.871998	15.20731606	12.72919267
1971	16.43467409	0.875196	16.43467409	15.11891873
1972	16.25746516	0.873695	16.25746516	17.43253456
1973	17.98028781	0.892816	17.98028781	16.48604837
1974	17.63220834	0.926566	17.63220834	17.89331663
1975	16.45223728	0.9806	16.45223728	17.97643066
1976	17.03591968	1.071612	17.03591968	17.33316621
1977	18.32539901	1.262465	18.32539901	16.82708448
1978	17.4601025	1.503851	17.4601025	17.50860261
1979	17.20522609	1.676027	17.20522609	21.71203036
1980	19.51476536	1.924431	19.51476536	20.9732641
1981	19.19577719	2.250271	19.19577719	21.81177808
1982	19.80337526	2.429828	19.80337526	21.00307985
1983	18.58875129	2.766558	18.58875129	20.43702436
1984	18.43303278	3.087563	18.43303278	19.32301155
1985	18.42165438	3.725661	18.42165438	18.98640335
1986	17.38183334	4.150304	17.38183334	19.33408457
1987	17.46029227	4.577126	17.46029227	19.31198823
1988	18.31956697	5.172452	18.31956697	18.41641773
1989	18.56875563	5.303537	18.56875563	18.92614283
1990	18.40578922	5.761639	18.40578922	19.22447875

1991	18.05660779	6.468302	18.05660779	18.65653235
1992	18.6424309	7.360236	18.6424309	19.95807259
1993	16.77134566	8.66902	17.6238629	22.15245024
1994	15.68227259	10.41015	18.40725046	18.49619644
1995	14.47996549	13.25549	14.96562051	19.83415589
1996	15.15492631	19.35021	14.93543728	25.81411778
1997	14.84292105	24.92586	20.49432528	21.68162611
1998	15.18056739	25.31329	15.84757514	24.35517783
1999	15.53615219	27.55708	16.06217213	23.96341678
2000	16.24996092	30.68807	15.05943408	26.56944193
2001	15.75329665	32.75106	16.15444222	25.75838277
2002	15.05429226	34.63163	16.83114396	25.2226867
2003	15.97291175	38.08787	17.83177478	25.85460183
2004	17.07799991	40.27358	17.29459984	25.15567522
2005	18.13131858	41.06347	15.76577221	27.28751603
2006	17.86006596	45.09413	16.97282036	26.27687547
2007	17.38021155	50.33589	18.67045922	22.888311
2008	14.3469988	55.52692	15.14146337	23.04496428
2009	14.62961147	63.55264	15.16190176	25.38061175
2010	15.67397942	69.75466	15.96360596	25.02161
2011	15.21447169	88.05816	15.54523138	27.22841511
2012	14.16324925	96.18956	15.73334431	30.57264326
2013	14.01163418	100	15.94768599	29.53767488
2014	13.98835667	114.0215	15.87837126	31.71072045
2015	14.33498566	124.7149	14.4576732	34.16301054
2016	14.19094409	131.8465	15.4567863	34.88653905
2017	14.49165369	140.9142	15.8683562	35

