



Relationship between Budget Deficit and Current Account Balance in Kenya

Ayatta Perpetuah Akinyi, Dr Robert Odunga and Dr Gordon Opuodho

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*¹Perpetuah Akinyi Ayatta, ²Dr Robert Odunga & ³Dr Gordon Opuodho

¹Graduate Student, Department of Human Resource Development, Jomo Kenyatta University

²Department of Human Resource Development, Jomo Kenyatta University
³School of Economics

Department of Human Resource Development, Jomo Kenyatta University

*E-mail of the Corresponding Author: perpetuah.avatta@gmail.com

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Abstract

As a rule of thumb, current account deficit should not exceed 5% of GDP. If it exceeds, it must raise concerns about its sustainability. In Kenya, current account balance deficit increased to 10.5% of the GDP by 2014 and 8.3% in 2015. Unsustainable current account deficits are a potential recipe for a currency crisis and current account reversal which have negative implications on macroeconomic stability of a country. The purpose of this study is to examine the effect of budget deficits on current account deficits in Kenya. The specific objectives were to establish relationship between budget deficits on current account deficits in Kenya, to find out the short term or a long run relationship among the variables and to identify direction of the causality. The study was guided Keynesian Theory and Ricardian theory. An explanatory research design was adopted. The study covered the period of 1970 to 2017. The study used data from secondary sources including WDI, KNBS and Economic Surveys. Descriptive statistics such as mean and standard deviation was used to perform data analysis. EVIEWS was used in the analysis. Autoregressive Distributed Lag model was used to estimate the best model. The speed of adjustment towards long run equilibrium was 44.6484% implying that the system will get back to long run equilibrium at the speed of 44.6484%. The study concluded that budget deficit have a significant long run effect on Current account deficit and also Current account deficit have a significant long run impact on Budget deficit. The study concluded that there exist a short run relationship between budget deficit and current account balance. For Kenya to progress the study advocates for favorable current account balance by reducing persistent deficits and achieving current account balance sustainability, several policy options should be applied. Deliberate export oriented approaches through product diversification and international trade promotion to ensure that our products can be competitive in the international markets. For Kenya to progress the study advocates for favorable current account balance by reducing persistent

deficits and achieving current account balance sustainability, several policy options should be applied. Stability in exchange rate and low inflation are critical in ensuring productivity growth.

Kew words: *budget deficits, causality, current account deficits.*

1.1 Introduction

Budget deficits and current account deficits are a mirror of the economic well-being of a country. High budget deficits are associated with high rates of inflation (Oladipo, & Akinbobola, 2011), reduced national savings, public debt crises, current account deficits (Calderon et al., 2000), reduced national investment (Krugman, 1979), and reduced credit access, among others. A current account deficit may be a reflector of competition problems where imports exceed exports, a productive-growing economy where investments exceed savings or a poor fiscal policy where savings are low or are as a result of temporary shocks in the economy. Like the budget deficit, current account deficit may lead to currency account reversals (Osakwe and Verick, 2007), currency crisis (Edwards, 2002), run down of foreign exchange reserves and external debts (Njoroge et al., 2014). Most countries have registered persistent budget deficits and current account deficits. This has raised concern among Governments, policymakers and researchers about their sustainability with varying measures been undertaken to mitigate against any negative effects emanating from them (Akbas, Senturk & Sancar, 2013).

Persistent fiscal and current account deficits are a major policy concern, irrespective of whether the country affected is developed or developing (Nkuna, 2013). This is because large fiscal deficits may lead to crowding-out of private investment if they cause interest rates to rise. Similarly, large current account deficits could lead to a decline in competitiveness, a transfer of wealth to foreign nationals and a depletion of foreign exchange reserves, possibly triggering a currency crisis (Banday & Aneja, 2016). The public budget deficit measures the ability of the government in borrowing the finance of its expenditures. The increase in current account position encourages the government to spend more causing the budget deficit to increase (Farah & Farzinvash, 2009).

From the traditional open-economy macroeconomic perspective, there are three main reasons to expect a positive relationship between the fiscal deficits and the current account fiscal deficits (Merza, Alawin & Bashayreh, 2012). First, an increase in the fiscal deficits may induce an increase in the interest rate that causes capital inflows and an appreciation of the exchange rate, with unfavorable effects on the current account. Second, an increase in the fiscal deficits may lead to an increase in the demand for imports, causing a worsening of the current account (El-Namrouty & Saidam, 2015). And third, a worsening of the current account deficit will reduce tax revenue and thus increase the fiscal deficits. In contrast to the traditional Keynesian view, the Ricardian equivalence hypothesis of Barro (1974, 1989) argues that the fiscal deficits and the current account deficits are unrelated.

Persistent current account imbalances in many developing countries, Africa, Asia, South America, and recently in the US have excited considerable interest among economists and policymakers seeking to have a clear understanding of the role and importance of current account imbalances in macroeconomic issues (Farah & Farzinvash, 2009). It is evident that a lot of countries, both developed and developing, have run persistent large current account deficits which have been followed by severe crises, economic slowdowns and contagion effects. A

nation has a current account deficit if the sum of its net exports, foreign income and current transfers is negative (Kaupartisas, 2005). Central to the debate is the sustainability of those deficits. The question is whether a country's current account imbalances are justifiable and be considered as structurally normal and sustainable or whether there is need for fundamental policy shifts to correct them and evade crises.

Rich countries such as the USA and Euro region recorded high current account deficits while China and Germany recorded highest current account surpluses for the last ten years (Aloryito, Senadza & Nketiah-Amponsah, 2016). In China, the surpluses are attributed to high savings due to absence of social safety nets (health and retirement insurance) while in the USA; current account deficits are primarily driven by private savings which are low and are largely financed from Foreign Direct Investments, equity and local currency government bonds, as opposed to borrowing from commercial banks and budget deficits (Chinn & Ito, 2008).

In the Eurozone, current account deficits are associated with low savings, and are largely financed by fairly stable foreign direct investment inflows although there is an increasing shift from this financing to borrowing from foreign banks (Blecker, 2016). Possible explanations given for the low savings include; individuals are more optimistic about the future, there are well-developed safety nets and retirement plans unlike other regions such as Asia, businesses register low profits due to overvalued exchange rates, consumer loans are increasingly available and a large retired population (Akgay, Alper & Ozmucur, S. (2018). In overall, the need for precautionary saving is low. Investments in the region are however considered normal as compared to other emerging countries (Magazzino, 2012). Government deficits which are associated with low national savings are low and in countries where they are high, they are related with low current account deficits (Shelburne, 2008).

It is noted in some countries that there is a relationship from one direction between the budget deficit and current account. Therefore, some countries have a direct positive relation between the budget deficit and the current account deficit, and the direction of the relationship from budget deficit to the current account. These countries are like Iran (Zamanzadeh, and Mehrara, 2011), Jordan (Mdanat, and Shotar, 2009), and Lebanon (Neaime, 2008). This proves the Keynesian proposition hypothesis. In other countries, the relation is negative but in the same direction, which means that every increase in the budget deficit reduces the current account deficit (increase in budget deficit increases the current account). This means that an increase in budget deficit has positive effects on current account. For example, there is a study conducted on 88 non-oil countries (Advanced, emerging and low-income countries) (Abbas, Bouhga-Hagbe, Fatás, Mauro, and Velloso, 2011). Nevertheless, some other studies have shown that the relationship is also in one direction, but this time the contrary, i.e. the current account is affecting the budget deficit, and not vice versa. This does not match Keynesian proposition. For example, it is found in Kuwait that increase in the budget deficit is caused by a decrease of trade account deficit (the largest component in the current account), (Merza, Alawin, and Bashayreh, 2012), and so do in Pakistan (Rauf, and Qayyum Khan, 2011).

In Palestine, public finance relies mainly on customs, duties and taxes imposed on imports, whereas revenues generated from customs (clearance) account for more than 56% of the total current revenue (El-Namrouty & Saidam, 2015). In contrast, the salaries and wages account for 57% of the total public current expenditure, and there are approximately 90% of salaries and wages spent on imports (PMA, 2003, and 2012). This refers to the contribution of government

spending which increases imports and degrees of interdependence between the Palestinian public finances and external trade (the largest component of the current account). Lack of government policies led to an increase of imports at the expenses of GDP (Maitah & Ali, 2010). That caused the increase of trade balance deficit, larger current account and chronic deficit of the public budget. Palestinian public budget has suffered from deficit during the study period (1996-2012). The fiscal and current account deficits of most countries in Sub-Saharan Africa (SSA) appear relatively large or have been widening over the past several years in the face of positive output growth and steady decline in inflation (MF, 2013).

Africa has experienced persistent current account and budget deficits (Egwaikhide, 1997). Current account deficits are mainly attributable to the trade deficit emanating from low /falling export primary commodity prices compared to prices of imports, and relatively low national savings compared to national investments leading to a financing gap that is financed from external capital inflows (Osakwe & Verick, 2007). Others causes of current account deficits include slow growth trend across the globe, foreign exchange volatility and high external indebtedness to ease the budgetary pressure (Egwaikhide, Oyeranti, Ayodele & Tchokote, 2002). Similarly, budget deficits and public debt recorded in the region are attributable to poor budgetary administration, investments in infrastructure projects and other sectors such as education. In Malawi, the current account balance, which predominates the behaviour of Malawi's balance of payments, has been in persistent deficits since the late 1970s. These deficits have been widening over time, with over 15% average of GDP for the past decade, and hit a low record of 26% of GDP in 2006 (Reserve Bank of Malawi, 2007). In Malawi, donor budget support accounts for about 60% of the total budget a scenario that has an adverse effect on accounts account balance (Nkuna, 2013).

In Sierra Leone, the fiscal balance, trade balance and current account have been in deficit since the early 1970s. Moreover, net-foreign-assets was positive over the period 1970-1975 was negative in all the years from 1976 to 2005 (Calderon, Chong & Loayza, 2002). Furthermore, while the nominal exchange rate depreciated continuously from the early 1980s through the 2000s the real exchange rate appreciated continuously in the first half of the 1980s and was fluctuating between the second half of the 1980s and the end of the 1990s (Korsu, 2006). It depreciated continuously over the period 2000 and 2005, a period of high budget deficit as a ratio of GDP but lower growth of money supply in comparison with the 1980s through the 1990s.

Kenya like most developing nations has experienced growing budget deficits. Studies by Gichuki (2013) and Moyi (2013) and Mukras et al., (2013) indicate that yearly current account deficits exceeded the 5% of GDP international cap of sustainability. The deficits are attributable to; Kenya been a net importer of goods and services, her overreliance on agricultural produce (tea, coffee, horticulture sectors) which is vulnerable to low prices and weak external demand (Kariuki, 2009), fluctuating prices of international crude oil and lack of sufficient capital inflows to offset the current account deficit and budget deficits (Mutuku, 2013) among others. Persistent budget deficits, on the other hand, are attributable to the uptake of key development projects with huge capital outlays, repayment of debt, low revenue collection, a limited tax base, devolution, cross-border security operations and inability to control expenditure among others. Details on the current account and budget positions are given in the subsections figure 1.1 and 1.2.

Budget deficits can either be financed domestically, externally or through seignorage. Domestic financing takes the form of issuance of government securities to the private sector and the public through the commercial banks while external financing is largely in form of loans from development partners. The use of seignorage is one of last resort and is generally frowned upon as its use is an indicator of a poor state of an economy (Agenor and Montiel, 2008).

Figure 1.1 indicates that Kenya has historically recorded persistent budget deficits. The economic crisis of the 1980s coupled with financial indiscipline and inability to control expenditure may have contributed to the worsening of the budget deficits during this period, while the repayment of domestic and foreign debts in the early 1990s may have contributed to high deficits (Swamy, 1994). During the mid-1990s, the government paid more attention to the implementation of economic reforms (such as budget rationalization, retrenchments of civil servants) spearheaded by World Bank and IMF as part of the conditions that were to be met before advancement of loans.

This contributed to the slight improvement of the fiscal position. The budget deficit continued to grow from 2000 to ease budgetary pressure emanating from low revenue collection, establishment of the County Governments, implementation of key development projects in the transport sector, power generation and distribution, free primary education, security operations in Somalia, mitigation of drought and other key flagship projects contained in the Kenya Vision, 2030.

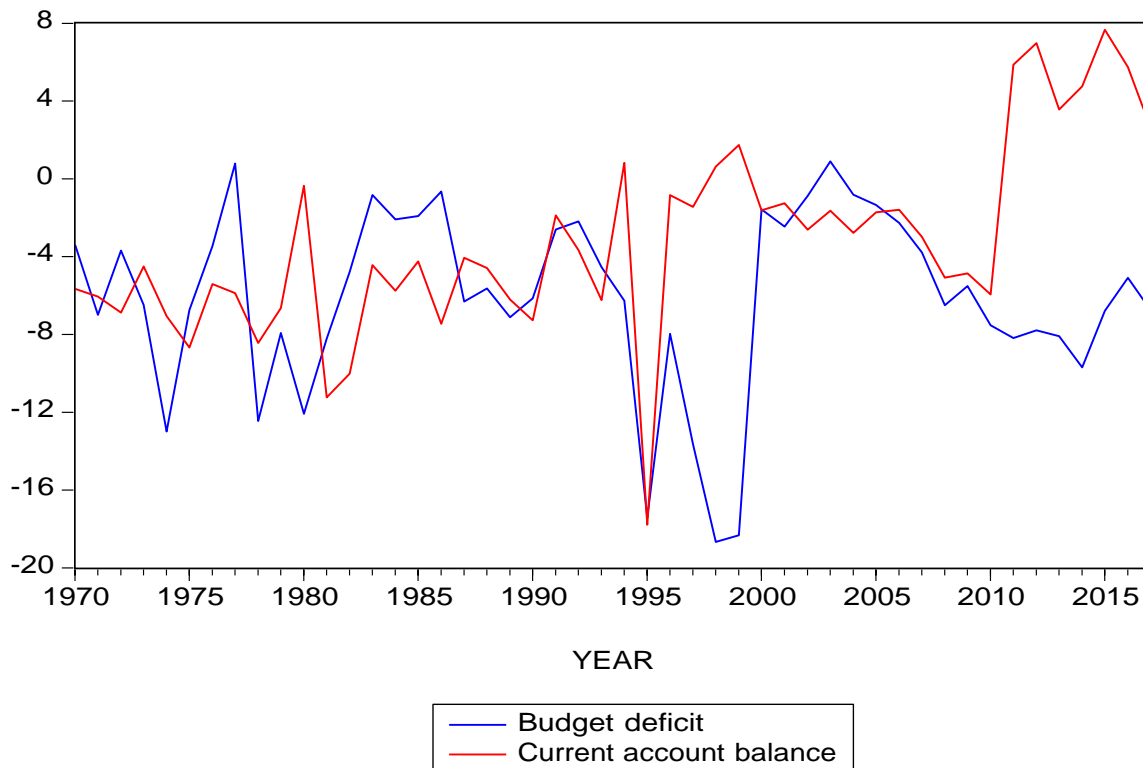


Figure 1 Trend of Current Account Balance/Budget Deficit in Kenya (1970 to 2017)

As shown in Figure 1.1 above, current account deficits are observed for the whole period. The trade reforms introduced from the 1970s to 1990s with the aim of export diversification and

expansion to new markets were marked with piecemeal implementation, policy reversals and a lack of commitment by the Government. This did not yield the anticipated results. This may have contributed to the persistence of the deficit. The worsening of the deficit in the early 1990s is attributed to the suspension of aid by most development partners (Swamy, 1994), while the improvement of the current account deficits in the rest of the 1990s and 2004 was attributed to improved export earnings arising from improved commodity prices and improved net tourism earnings (Republic of Kenya, Economic Surveys (various issues). The improvement of the current account balance observed in 1998 and 1999 was attributed to improved tourism earnings and higher export volumes (Economic Survey, 2000). The decline of the current account deficit from 2005 to date was attributed to increase in merchandise trade deficit due to high import bills, effects of post-election violence in 2007, global financial crisis in 2008, low tourism earnings and falling export prices relative to those of imports (Republic of Kenya, Economic Surveys: 2006-2016).

The current account deficits in Kenya are attributed to deterioration in the visible trade account of the trade account, in the presence of invisible trade surpluses. The deterioration is a result of Kenya's overreliance in agriculture as a major foreign exchange earner, lack of diversification and expansion of export commodities. The deficits are largely financed from short-term flows and small capital account inflows, and borrowing from private sources (Mwega, 2007 & Swamy, 1994). Other causes include poor commodity prices and limited value addition on export commodities.

1.2 Statement of the problem

Economists are concerned about public budget, current account and balance of payments deficit since they influence economic growth. The deficit effects appeared negatively on economy such as inflation, deterioration of the purchasing power, deterioration in living standards, growth of internal and external debt, increase of the burden of debts services, which cause a strain and drain of reserves and foreign assets. This adversely affects the balance of payments and causes pressure on the international reserves.

As a rule of thumb, current account deficit should not exceed 5% of GDP. If it exceeds, it must raise concerns about its sustainability. In Kenya, current account balance deficit increased to 10.5% of the GDP by 2014 and 8.3% in 2015. Empirical evidence shows that there is an unsustainable current account deficit in Kenya (WDI, 2016). Unsustainable current account deficits are a potential recipe for a currency crisis and current account reversal which have negative implications on macroeconomic stability of a country.

High budget deficits worsen public debt and undermine economic growth due to its effects on domestic investments, inflation, creditworthiness, local currency among others. On the other hand, persistent current account deficits imply that a country is spending beyond its means. This means that the Government may have to borrow more (run higher budget deficits) to finance the revenue shortfall in exports. Although the IMF indicates that Kenya is at low risk of debt distress, there is growing concern about the country's ability to repay debt incurred to close the budget financing gap. Current account imbalances, historically was a concern of policy makers and public opinion in a number of countries. It is often argued that budget imbalances of the public sector are one of the important causes for the current account imbalances.

In addition, empirical studies indicate that the current account deficits are unsustainable in Kenya (Mutuku & Gichuki, 2013). So far, empirical work on the causal relationship between the current

account and fiscal policy has been rather inconclusive. Some empirical studies find that higher budget deficits lead to higher current account deficits; others prove the opposite or show no significant impact at all (Nickel and Vansteenkiste, 2008). At times, economic data supports the twin deficit hypothesis. Other times, the data does not.

Research on the relationship between the budget and current account deficits have yielded mixed results; a study by Sakyi and Opoku (2016) in Ghana established a negative long run relationship between the two, Egwaikhide (1997) established that budget deficits gave rise to current account deficit in Nigeria while Mumtaz and Munir (2016) established no relationship between the two deficits in India and Pakistan. The varied findings may be attributed to different use of econometric techniques (OLS), VAR, VAR GARCH), different type of data (quarterly, seasonal, panel or time series) or failure to incorporate shocks (structural breaks) in the time series data. There is need therefore to examine the effect of budget deficits on the current account balance.

1.3 Objectives of the Study

- i. To establish relationship between budget deficits on current account deficits in Kenya.
- ii. To find out the short term or a long run relationship among the variables.
- iii. To identify direction of the causality.

2.0 Literature Review

2.1 Ricardian theory

The Ricardian Theory suggests that there is no relationship between budget deficits and current account deficits. The Ricardian Theory claims the absence of any relationship between the current trade deficit and the budget deficit (Golub & Hsieh, 2000). This approach reveals that the budget deficit is a result of a tax cut which will have no effect on the national savings. Tax cut reduces public revenues and public saving. The decrease of the public saving enlarges the budget deficit (Caravale & Tosato, 2013). But, the decrease of the public saving will be matched by an equal increase in the private savings. So, the domestic savings will not be affected. That is because people will rationally presume that decreased tax (the budget deficit) will have to be paid for in the future (Casarosa, 1982). So, they will increase savings to pay for future increased burden. People know that taxes will go again to pay for the budget deficit so they save the extra money and they use it to pay for the future tax increases (Barro; 1989). The tax has simply been delayed, not actually taken away. If this were perfectly true, then the budget deficit would have no impact on anything because it would not change national savings. The Ricardian Theory reveals that the tax cut is a temporary procedure. The decrease of the public savings will be compensated for by an equal increase of private savings. The national saving will not be affected. Therefore, the budget deficit has no effect on the current trade deficit.

2.2 Keynesian Theory

Keynesian Theory suggests that budget deficits affect current account deficits directly and indirectly through the exchange rate. This proposition argues that there is a positive relationship between trade and budget deficits (Eichner & Kregel, 1975). In contrast to the first approach, the Keynesian Proposition confirms the existence of positive relationship between budget deficit and current account deficit (Okpanachi & Abimiku, 2007). Particularly, the twin deficits hypothesis states that a budget deficit leads to a current account deficit. And obviously a budget surplus will improve the current account deficit, while a budget deficit makes the government as a net borrower (Alkswani, 2000).

The twin deficits hypothesis states that a budget deficit will lead to a current account deficit. And obviously a budget surplus will improve the current account deficit (Blecker, 2016). If the budget is in deficit then the government is a net borrower. Total national savings are equal to the private plus the public savings (Lavoie, 2014). If the public is negatively saving, then the national savings will decrease. With a lower level of national savings, the interest rates should increase, which will lead to an increase in the exchange rate (Caverzasi & Godin, 2014). An increasing interest rate will make exports less attractive, and increase the attractiveness of imports, subsequently worsening the trade balance which is the major factor in the current deficit account variability. So, the budget deficit leads to increase in the current accounts deficits.

Under this approach, an act of expenditure generates income. Increases in government expenditure (budget deficit) increase domestic absorption (Mitchell, 2005). Assuming that aggregate supply (domestic output) remains unchanged, there will be importation of goods to fill the output gap arising from a rise in aggregate demand (Davidson, 2015). Ultimately, the increase in imports relative to exports will worsen the trade balance and lead to a rise in the current account deficit. The impact on the current account balance by the budget deficit is therefore direct. Mundell (1996) extended the Keynesian view by including two more variables namely the rate of interest and exchange rate. A rise in government expenditure pushes the local interest rate up relative to the rates in the international market (Woodford, 2011). The interest rate differential attracts capital inflows (foreign investments) from abroad thereby making the local currency attractive. This renders imports relatively cheaper when compared to exports thereby aggravating the current account deficit. The influence of the budget deficits on the current account deficits is therefore indirect.

2.3 Conceptual framework

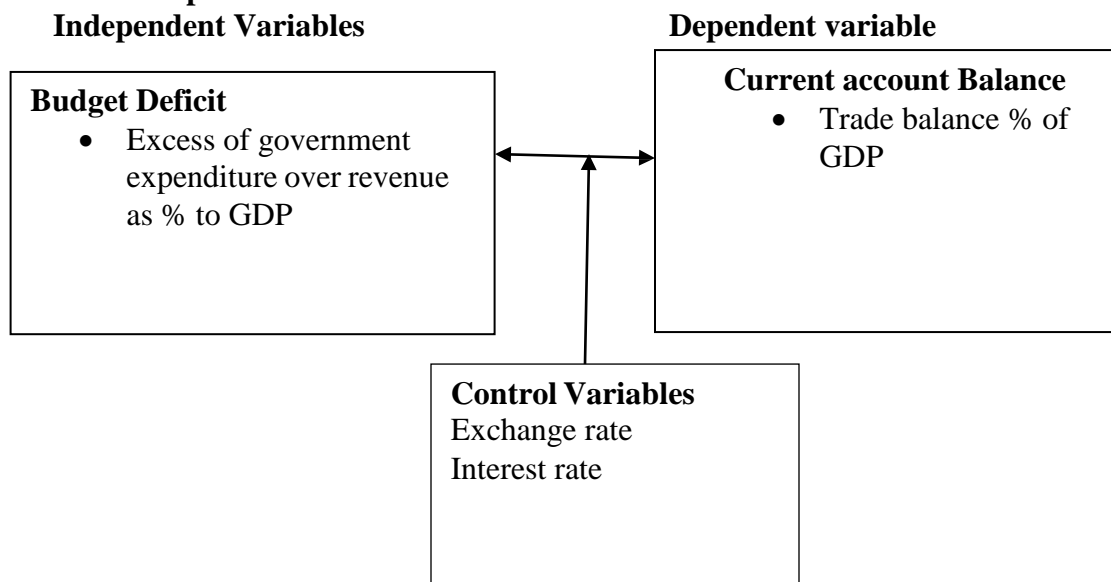


Figure 2: Conceptual Framework

3.0 Research Methodology

3.1 Theoretical Model

To clarify the relationship between fiscal deficits and the balance of trade, it is helpful to begin with some national income accounting identities (IMF, 2009). This research is based on the National Income identity equation shown below.

$$NI=Cp+Cg+Ip+Ig+X-M \dots\dots\dots 1$$

Where,

NI denotes National Income.

CP and Ip denotes what is consumed and invested privately respectively,

Cg and Ig denotes what is consumed and invested by Government

X is value of exports, and

M is value of imports into the country

Under the Keynesian Expenditure framework, income generated is used for private consumption (CP), private saving (Sp) and for paying taxes (T), National Income can also be expressed as follows;

$$NI=Cp+SP+Ip+T\dots\dots\dots 2$$

By equating Equation 1 to Equation 2, we get;

$$Cp +Sp +T =CP +Cg +Ip +Ig +X - M\dots\dots\dots 3$$

By rearranging, it results into the following

$$(M-X)=(Ip-Sp) + (Ig+Cg-T)\dots\dots\dots 4$$

But Government expenditure (G) equals to what it invests (Ig + Cg), therefore,

$$(M-X)= (Ip-Sp) + (G-T)\dots\dots\dots 5$$

Where,

(M-X) is the current account deficit (CAD).

(Ip - Sp) denotes the private sector where private investments exceed Private savings (SP), and (G-T) is a budget deficit (BD).

From Equation 5, a current account deficit may be defined as the sum of private investments over savings and the budget deficit. A reduction in government expenditure and private investments would reduce the current account deficit. If investment and savings are identical, then;

$$CABt=BDt+ \epsilon t \dots\dots\dots 6$$

Where CABt is current account balance, BDt is Budget deficit and ϵt is a vector of other variables which affect the current account.

3.2 Empirical Model Specification

The model used in this study is based on the theoretical model above which shows that budget deficits influence current account deficits. Other determinants of current account balance applied in the literature include exchange rate and interest rate. Including these control variables in the model, the resulting specified equation is given as:

$$CABt=BDt+EXRt+IRt+GDPT+IFt \epsilon t\dots\dots\dots 7$$

Where CABt is current account balance, BDt is Budget deficit, EXRt is exchange rate, IRt is Interest rate, GDPT is gross deomestic product, IFt is Inflation and ϵt is a vector of other variables which affect the current account.

4.0 Data Analysis, Results and Discussions of Findings

4.1 Descriptive Statistics

This section provides results on measures of central tendency of variables in Table 1. The results show that the overall mean of current account balance from 1970 to 2017 was -6.152917. The minimum and the maximum of current account balance between the year 1970 and 2017 were -18.68000 and 0.890000 respectively. Its standard deviation was 4.682125 which indicated that current account balance varied throughout the measurement period. The Jarque-Bera test had a probability value of 0.015432 which imply that at 5% significance level the null hypothesis of normality of the data is rejected and the data is considered to be significantly from normal. However the data has a degree of skewness of -0.957809 and Kurtosis of 3.708325 which according to Kline (2011) is considered to be approximately normal. Kline (2011) suggests that skewness and kurtosis values that lie within a range of ≤ 3 and ≤ 10 respectively are considered to be approximately normal.

The overall mean of budget deficit (measured as Excess of government expenditure over revenue as % to GDP) was -3.216042. The minimum and the maximum of budget deficit from 1970 to 2017 were -17.78000 and 7.670000 respectively. Its standard deviation was 4.929635 which indicated that budget deficit varied throughout the measurement period. The Jarque-Bera test had a probability value of 0.580076 which imply that at 5% significance level the null hypothesis of normality of the data is accepted and the data is considered to be normal.

Table 1: Descriptive Statistics

	CAB	BD	EXCR	IR	INF	GDP
Mean	-6.152917	-3.216042	45.66135	6.801725	11.90455	4.543038
Median	-6.215000	-4.150000	53.74020	6.228857	10.13206	4.353389
Maximum	0.890000	7.670000	103.3739	23.70457	45.97888	22.17389
Minimum	-18.68000	-17.78000	7.001192	-8.009867	1.554328	-4.655447
Std. Dev.	4.682125	4.929635	33.56257	7.612631	8.094251	4.187530
Skewness	-0.957809	0.081450	0.124738	0.142904	1.887425	1.829927
Kurtosis	3.708325	3.719764	1.409614	2.639221	8.104327	9.356390
Jarque-Bera	8.342629	1.089193	5.183134	0.423697	80.60729	107.5964
Probability	0.015432	0.580076	0.074903	0.809087	0.000000	0.000000
Sum	-295.3400	-154.3700	2191.745	326.4828	571.4182	218.0658
Sum Sq. Dev.	1030.348	1142.161	52942.98	2723.751	3079.294	824.1642

The average mean exchange rate a control variable in the study was KES45.66135/1USD. The minimum and the maximum exchange rate from 1970 to 2017 were KES 7.001192/1USD and KES 103.3739/1USD respectively. Its standard deviation was 33.56257 which indicated that exchange rate varied throughout the measurement period. The Jarque-Bera test had a probability value of 0.074903 which imply that at 5% significance level the null hypothesis of normality of the data is accepted and the data is considered to be normal.

Interest rate another control variable in the study had mean of 6.801725. The minimum and the maximum interest rate from 1970 to 2017 were -8.009867 23.70457 respectively. Its standard deviation was 7.612631 which indicated that interest rate varied throughout the measurement

period. The Jarque-Bera test had a probability value of 0.809087 which imply that at 5% significance level the null hypothesis of normality of the data is accepted and the data is considered to be normal.

Gross Domestic product (GDP) had mean of 4.543038%. The minimum and the maximum GDP from 1970 to 2017 were -4.655447% and 22.17389% respectively. Its standard deviation was 4.187530 which indicated GDP growth varied throughout the measurement period. The Jarque-Bera test had a probability value of 0.000000 which imply that at 5% significance level the null hypothesis of normality of the data is rejected and the data is considered to be normal.

The average inflation rate from 1970 to 2017 was 11.90455. The minimum and the maximum inflation rate from 1970 to 2017 were 1.554328 and 45.97888 respectively. Its standard deviation was 8.094251 which indicated inflation varied throughout the measurement period. The Jarque-Bera test had a probability value of 0.000000 which imply that at 5% significance level the null hypothesis of normality of the data is rejected and the data is considered to be normal. The results of the descriptive are in line with the theoretical literature that the Current account balance is normally affected by the Budget deficit, the level of savings, balance of trade, inflation, exchange rate and gross domestic product.

4.2 Trend Analysis

Trend analysis was conducted for current account balance, budget deficit, exchange rate and interest rate. The trend lines are presented in the subsequent sections.

4.2.1 Current account balance and Budget Deficit

The study sought to establish the trend in the growth of current account balance and budget deficit in Kenya from 1970-2017. The trend line is as shown in the Figure 3.

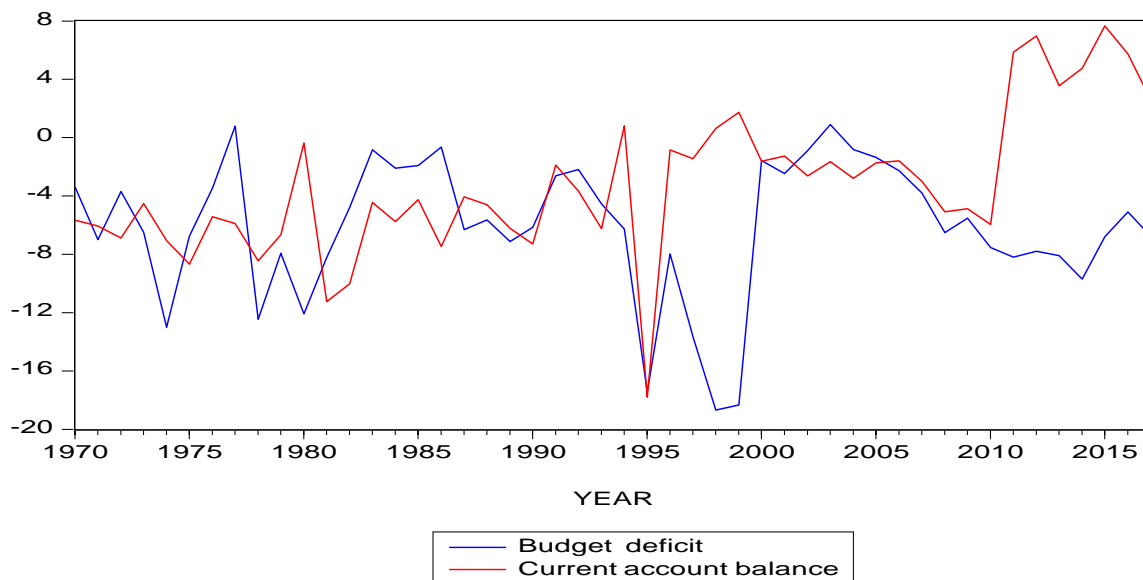


Figure 3: Trend of Current Account Balance and Budget Deficit in Kenya 1970- 2017

Figure 3 indicates that current account balance fluctuated sharply throughout the period. The trend line shows that current account balance was lowest in 1998 which could be attributed to decline trading between Kenya and other foreign countries as a result of terrorism attack. Current account balance improved in the year 2003 though it declined again in the subsequent years. The trade reforms introduced from the 1970s to 1990s with the aim of export diversification and expansion to new markets were marked with piecemeal implementation, policy reversals and a lack of commitment by the Government. This did not yield the anticipated results. This may have contributed to the persistent of the deficit. The trend line also indicates that budget deficit fluctuated sharply throughout the period. Budget deficit was high in 1995. However, budget deficit improved after 2010. The current account deficits in Kenya are attributed to deterioration in the visible trade account of the trade account, in the presence of invisible trade surpluses.

4.2.2 Exchange rate

The trend analysis result for exchange is presented in figure 4. Exchange rate was measured in terms of real values (real exchange rate). Results indicate that the general trend for exchange rate has been increasing steadily from the year 1970 to the year 2017. The trend line shows that exchange rate was lowest in 1980 and highest in 2016. The exchange rate dropped in 2007 and later rose steadily to highest in 2016. The exchange rate is effective and plays an important part in changing net export volumes hence current account balance. An adverse change in exchange rate can result to undesirable worsening of the current account. The results agree with Abugri (2006) who performed a study to determine whether selected macroeconomic indicators like exchange rates, interest rates, industrial production and money supply in four Latin American countries significantly explain market returns and found that country macroeconomic variables impact the markets at varying significance and magnitudes. The results are also in agreement with Mbithi and Mutuku (2017) who did a study on Current Account Deficit Dynamics in Kenya and an estimated long run co-integrating model revealed that real effective exchange rate significantly affect current account balance.

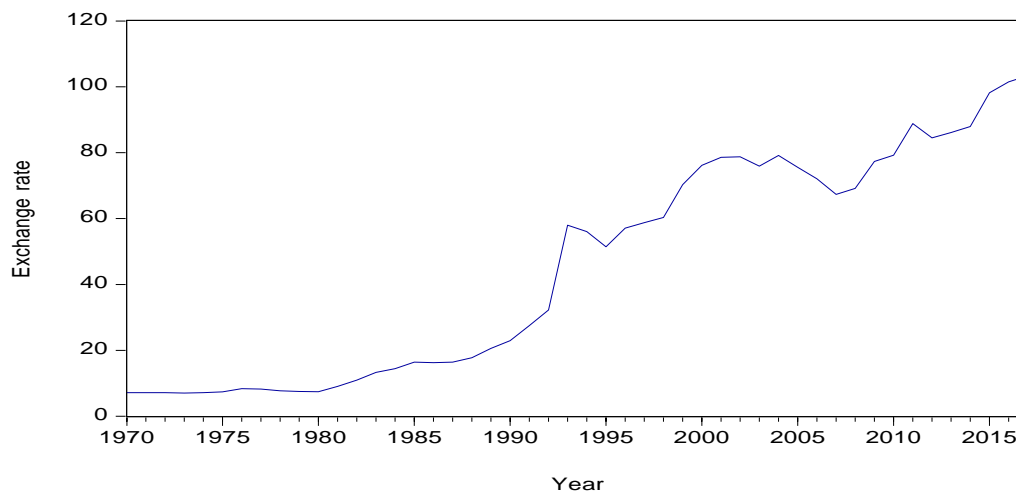


Figure 4: Exchange rate from 1970 to 2017

4.3.4 Interest rate

Figure 5 indicates the general trend for interest rate 1970 to 2017. The trend line shows that interest rate was highest before 1970. However, after 1970, interest rate declined sharply to the wake of 1976 before rising gradually. The results agree with Ener and Arica (2012) who did a study on the relationship between current account and interest rate and found that that there is a positive relationship between current account and real interest rate.

Changes in the interest rates have impact on balance of payment through real demand for money. The demand for real money reduces due to the fact that the rise in the interest rates would increase the cost of keeping the money. This encourages the purchase of domestic and foreign securities together with other domestic and foreign good purchase. Also, increased the interest rate encourages foreign capital inflows as well. The effects of these developments will depend on the amount of an increase in import and a decrease in export originated from a decreases demand for money together with the developments in the amount of foreign capital entering to the country.

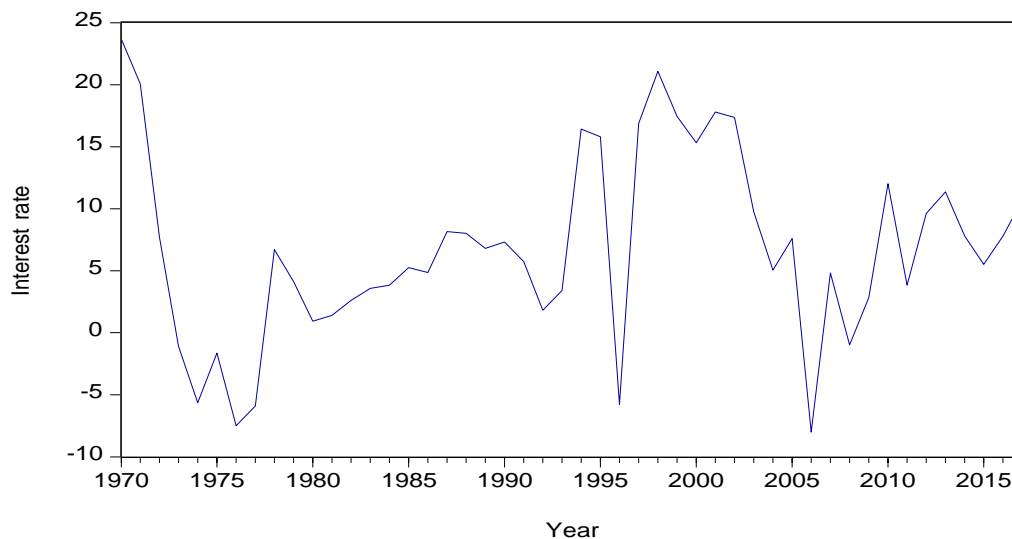


Figure 5: Exchange rate from 1970 to 2017

4.3.5 Gross Domestic product

Figure 6 indicates the general trend for gross domestic product from 1970 to 2017. The trend line shows that gross domestic product was highest in 1971. In 1971 and 1972 the gross domestic product grew by double digit but all the other years the rate was single digit change. However, after 1971, gross domestic product declined and kept rising and declining throughout the period. Economic growth leads foreign trade surplus, increases in real national income reel may lead to improvement in current account deficit. However, the impact of economic growth on current account deficit depends on the amount saved and spent from a country’s income increase. The results agree with Yurdakul and Ucar (2015) that there is relationship between current deficit and economic growth. Granger causality test reveals a unidirectional correlation from growth rate to current account deficit.

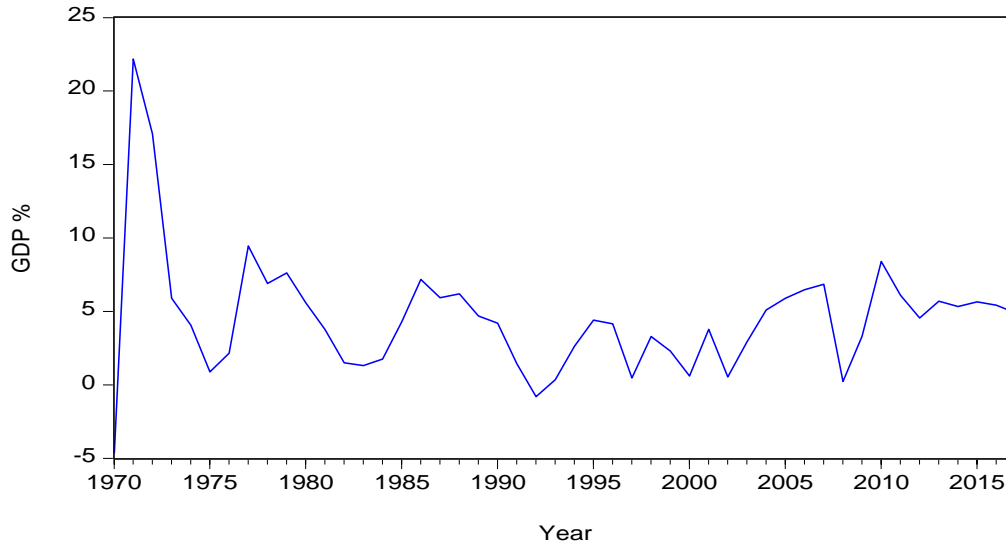


Figure 6: Gross Domestic product from 1970 to 2017

4.3.6 Inflation

Figure 7 indicates the general trend for inflation from 1970 to 2017. The trend line shows that inflation was highest in 1993. Across the years, inflation kept fluctuating. The increase in deficit of trade balance caused by rising imports can lead to higher domestic inflation level due to the impact of imported inflation on domestic price levels. The effect of current account is not limited to trade balance. The results agree with Alawin and Oqaily (2017) that that the increase in current account deficit affects domestic inflation negatively in the long run.

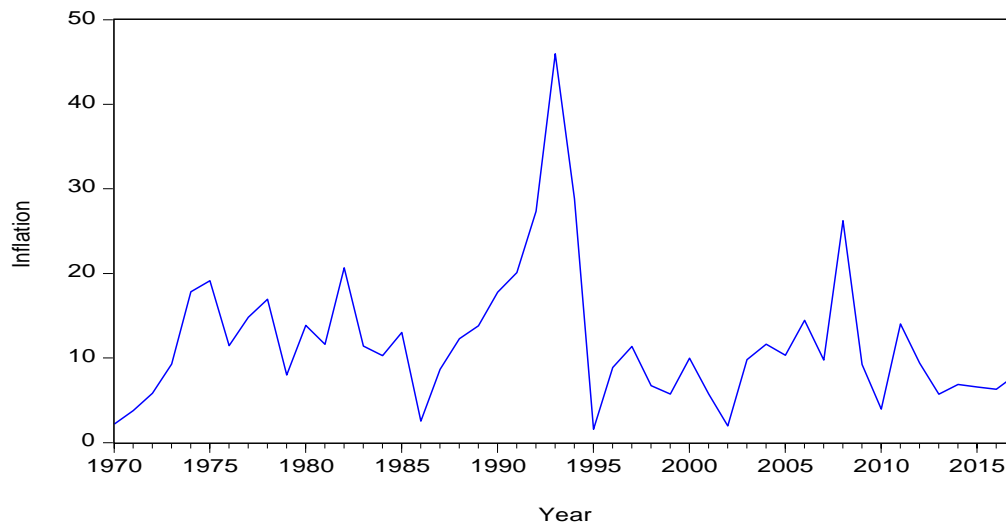


Figure 7: Inflation from 1970 to 2017

4.3 Diagnostic Tests

Prior to running a regression model diagnostic tests were conducted. The tests conducted in this case were the unit root tests test (Stationarity test), Heteroscedasticity test and Autocorrelation test. This is usually performed to avoid spurious regression results from being obtained.

4.3.1 Stationary test

Stationary test was conducted using Augmented Dickey-Fuller (ADF) method. Most economic variables are usually non-stationary in nature and prior to running a regression analysis. Unit root tests were thus conducted using the Augmented Dickey-Fuller (ADF) test to establish whether the variables were stationary or non-stationary. The purpose of this is to avoid spurious regression results being obtained by using non-stationary series.

Table 2: Unit Root Tests at Level

Variable name	ADF test	1% Level	5% Level	10% Level	Prob	Comment
Current account balance	-3.967218	-	-2.925169	-2.600658	0.0034	Stationary
Budget Deficit	-2.185171	-	-2.926622	-2.601424	0.2142	Non-stationary
Exchange rate	0.343944	-	-2.925169	-2.600658	0.9782	Non-Stationary
Interest rate	-4.213168	-	-2.925169	-2.600658	0.0017	Stationary
GDP	-5.494542	-	-2.925169	-2.600658	0.0000	Stationary
Inflation	-4.001603	-	-2.925169	-2.600658	0.0031	Stationary

Results in Table 2 indicated that current account balance, interest rate gross domestic product and inflation were stationary while other variables were budget deficit and exchange rate were non stationary (i.e. absence/presence of unit roots) at 1%, 5% and 10% levels of significance. Therefore, there was need for differencing budget deficit and exchange rate variables. For budget deficit and exchange rate, first differencing was applied to make the variables stationary. The non-stationary variable at the level were budget deficit and exchange rate. During the first difference, the budget deficit and exchange rate became stationary. The stationary results are presented in Table 3.

Table 3: Unit Root Tests at first difference

Variable name	ADF test	1% Level	5% Level	10% Level	Prob	Comment
Current account balance	-3.967218	-3.577723	-2.925169	-2.600658	0.0034	Stationary
D(Budget deficit)	-7.875529	-2.928142	-2.928142	-2.602225	0.0000	Stationary
D(Exchange rate)	-6.223859	3.581152	-2.926622	-2.601424	0.0000	Stationary
Interest rate	-4.213168	--3.577723	-2.925169	-2.600658	0.0017	Stationary
GDP	-5.494542	-3.577723	-2.925169	-2.600658	0.0000	Stationary
Inflation	-4.001603	-3.577723	-2.925169	-2.600658	0.0031	Stationary

4.3.2 Autocorrelation Test

Serial correlation tests were run in order to check for correlation of error terms across time periods. Serial/auto correlation is tested using the Breusch-Godfrey serial correlation LM test. The null hypothesis is that no first order serial /auto correlation exists. The p value of 0.7654 indicates that we do not reject the null hypothesis of no serial correlation and conclude that serial correlation does not exist. Data do not suffer from serial correlation which is desirable. These results are presented in Table 4.

Table 4: Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.184573	Prob. F(2,30)	0.8324
Obs*R-squared	0.534832	Prob. Chi-Square(2)	0.7654

4.3.3 Heteroscedasticity Test

Heteroscedasticity test was run in order to test whether the error terms are correlated across observation in the time series data. The error terms from a regression model must have a constant variance called Homoskedastic. And thus to ensure whether the residuals meet this criteria the study used the Breusch-Pagan test for Heteroskedasticity where the null hypothesis under this test is that residuals are Homoskedastic. If the p-value is >0.05 , there is constant variance. The null hypothesis was therefore not rejected at a critical p value of 0.05 since the reported value was 0.9478. Thus the data did not suffer from statistically significant heteroscedasticity as shown in Table 5.

Table 5: Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.411154	Prob. F(12,31)	0.9478
Obs*R-squared	6.041356	Prob. Chi-Square(12)	0.9140
Scaled explained SS	4.967695	Prob. Chi-Square(12)	0.9590

4.3.4 Lag selection criteria

The importance of lag length determination is demonstrated by Braun and Mittnik (1993) to show that estimates of a regression model whose lag length differs from the true lag length are inconsistent as are the impulse response functions and variance decompositions derived from the estimated model.

Table 6: Lag selection criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-833.8526	NA	3.72e+09	39.06291	39.30866	39.15353
1	-703.9722	217.4742	47997219	34.69638	36.41662*	35.33075
2	-662.0481	58.49874*	40249056*	34.42084*	37.61558	35.59896
3	-631.6938	33.88379	68911236	34.68343	39.35266	36.40530

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

The Akaike Information Criterion (AIC) and Schwarz Bayesian information criterion were used to determine the optimal lag lengths for the model. Under the lag length criteria, we need to use the lag length that which is selected by most of the ‘lag length criteria’ which is named after the econometricians who developed them such as HQ, SIC, AIC, and LR. Generally, the lag length for which the values of the most of these lag length criteria are minimized (the smaller the value the better the value), indicated by the asterisk in the results output is selected as the optimal length. From the Lag selection criteria, it is evident that most selection criteria are saying lag 2. Therefore the study used 2 lags when conducting granger causality and autoregressive Distributed Models (ARDL).

4.4 Granger causality

After finding the variables are cointegrated and have a long run relationship between the variables, we employ Granger Casualty to find out the direction and causality among the variables, test and can find out that variable which is creating an imbalance in the economy. Table 7 shows Pairwise Granger Causality Tests. Bi-directional causality exists between current account balances (CAB) and Budget deficit (dBD). The results are in agreement with Banday and Aneja (2016) who carried out a study on how budget deficit and current account deficit are interrelated in Indian economy and established a causal relationship between the budget deficit and the current account. The Granger causality test clearly finds the existence of bidirectional relationship between the twin deficit variables. The results also agree with Merza, Alawin and Bashayreh (2012) who did a study on the relationship between current account and budget deficit in Kuwait and the causality test showed a direction of causality goes from current account to budget balance.

Uni-directional causality exists between exchange rate (EXR) and current account balance (EXD). The results agree with Urbanovský (2017) that a change in the current account balance Granger-causes a change in financial account balance. The results are also in agreement with Mbithi and Mutuku (2017) who did a study on Current Account Deficit Dynamics in Kenya and an estimated long run co-integrating model revealed that financial deepening in Kenya has no effect on the current account balance at 5%, 10% and 1% statistical significance levels.

Table 7: Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.	Decision	Causality
dBD does not Granger Cause CAB	43	4.73377	0.023	Reject Ho	Bi-directional causality
CAB does not Granger Cause dBD		2.81548	0.047	Reject Ho	Bi-directional causality
dEXR does not Granger Cause CAB	43	0.50404	0.7709	Reject Ho	Uni-directional
CAB does not Granger Cause dEXR		3.04888	0.0324	Do not reject Ho	Uni-directional
IR does not Granger Cause CAB	43	4.26174	0.0210	Reject Ho	Uni-directional
CAB does not Granger Cause IR		0.76232	0.5837	Do not reject Ho	Uni-directional
GDP does not Granger Cause CAB	43	2.42858	0.0408	Reject Ho	Uni-directional
CAB does not Granger Cause GDP		1.56090	0.1993	Do not reject Ho	Uni-directional
INF does not Granger Cause CAB	43	5.45199	0.0010	Reject Ho	Uni-directional
CAB does not Granger Cause INF		0.65009	0.6635	Do not reject Ho	Uni-directional
dEXR does not Granger Cause dBD	43	3.09185	0.0218	Reject Ho	Uni-directional
dBD does not Granger Cause dEXR		0.47592	0.7914	Do not reject Ho	Uni-directional
IR does not Granger Cause dBD	43	0.58354	0.7123	Do not reject Ho	No causality
dBD does not Granger Cause IR		1.87803	0.1259	Do not reject Ho	No causality
GDP does not Granger Cause dBD	43	0.38164	0.8576	Do not reject Ho	No causality
dBD does not Granger Cause GDP		0.36928	0.8658	Do not reject Ho	No causality
INF does not Granger Cause dBD	43	2.34257	0.0640	Do not reject Ho	No causality

dBd does not Granger Cause INF		1.18002	0.3406	Do not reject Ho	No causality
IR does not Granger Cause dEXR	43	0.61760	0.6872	Reject Ho	Uni-directional
dEXR does not Granger Cause IR		3.74593	0.0088	Do not reject Ho	Uni-directional
GDP does not Granger Cause dEXR	43	0.63976	0.6710	Do not reject Ho	No causality
dEXR does not Granger Cause GDP		0.81211	0.5498	Do not reject Ho	No causality
INF does not Granger Cause dEXR	43	0.91553	0.4835	Do not reject Ho	No causality
dEXR does not Granger Cause INF		0.91458	0.4841	Do not reject Ho	No causality
GDP does not Granger Cause IR	43	1.34409	0.2713	Do not reject Ho	No causality
IR does not Granger Cause GDP		0.44322	0.8149	Do not reject Ho	No causality
INF does not Granger Cause IR	43	4.15790	0.0051	Reject Ho	Uni-directional
IR does not Granger Cause INF		0.86111	0.5177	Do not reject Ho	Uni-directional
INF does not Granger Cause GDP	43	2.26357	0.0296	Reject Ho	Uni-directional
GDP does not Granger Cause INF		0.36969	0.8656	Do not reject Ho	Uni-directional

No causality exists between current account balance and interest rate (IR). The results contrast Ener and Arica (2012) who did a study on the relationship between current account and interest rate and found that there is a positive relationship between current account and real interest rate.

Uni-directional causality exists between exchange rate and (EXR) and Budget deficit (dBd). Further, Uni-directional causality exists between interest rate and (IR) and Budget deficit (dBd). It was also established that Uni-directional causality exists between interest rate and (IR) and exchange rate (dEXR). The results are Awe (2012) that when two or more time series are co-integrated, there must be either bi-directional or unidirectional Granger causality between them. Awe (2012) also found that bidirectional causality exists between Exchange Rate and Government Expenditure.

4.5 Autoregressive Distributed Lag model

The second objective of the study was to find out the short term or a long run relationship among the variables. To address this objective Autoregressive Distributed Lag models was used to test for long run relationship between and short run relationship. Since current account balance, interest rate, gross domestic product and inflation were stationary at level and budget deficit and exchange rate were stationary at first difference, there was no need of estimating Johansen cointegration.

The study therefore employed Autoregressive Distributed Lag models (ARDL) model. Autoregressive Distributed Lag (ARDL) approach to cointegration helps in identifying the cointegrating vector(s). That is, each of the underlying variables stands as a single long run relationship equation. If one cointegrating vector (i.e the underlying equation) is identified, the

ARDL model of the cointegrating vector is reparameterized into ECM. The reparameterized result gives short-run dynamics (i.e. traditional ARDL) and long run relationship of the variables of a single model. The re-parameterization is possible because the ARDL is a dynamic single model equation and of the same form with the ECM. Distributed lag Model simply means the inclusion of unrestricted lag of the regressors in a regression function.

Table 8: Autoregressive Distributed Lag model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.010978	0.797082	-0.013773	0.9891
D(CAB(-1))	0.012981	0.003898	3.333017	0.0023
D(BD(-1))	-0.300423	0.123227	-2.437964	0.0250
D(BD(-2))	-0.071436	0.172822	-0.413350	0.6821
D(EXCR(-1))	0.120697	0.158770	0.760199	0.4527
D(EXCR(-2))	-0.131136	0.028828	-4.548917	0.0030
D(IR(-1))	-0.059989	0.133887	-0.448061	0.6571
D(IR(-2))	0.059695	0.109249	0.546408	0.5886
D(GDP(-1))	-0.145630	0.058583	-2.485875	0.0247
D(GDP(-2))	-0.031597	0.136538	-0.231418	0.8185
D(INF(-1))	0.005027	0.001702	2.953584	0.0144
D(INF(-2))	-0.005185	0.102931	-0.050375	0.9601
ECT(-1)	-0.446484	0.193110	-2.312067	0.0274
R-squared	0.417321	Mean dependent var		-0.068889
Adjusted R-squared	0.198816	S.D. dependent var		4.835971
S.E. of regression	4.328624	Akaike info criterion		6.005228
Sum squared resid	599.5835	Schwarz criterion		6.527152
Log likelihood	-122.1176	Hannan-Quinn criter.		6.199796
F-statistic	1.909892	Durbin-Watson stat		2.042206
Prob(F-statistic)	0.071411			

ECT(-1) -0.446484 is speed of adjustment towards long run equilibrium. The guideline is that ECT (-1) should be negative and significant. From the results above ECT (-1) (-0.446484) is negative and significant (0.0274). The speed of adjustment towards long run equilibrium is 44.6484%. This implies that the all system will get back to long run equilibrium at the speed of 44.6484%. This implies budget deficit, exchange rate and interest rate, gross domestic product and inflation have influence on current account balance. The short run results indicate that the goodness of fit is satisfactory. This was supported by an R squared of 0.417321. This implies that 41.7% of variations in short run current account balance is explained by budget deficit, exchange rate and interest rate. The results are in agreement with Nkuna (2013) who did a study to examine the sustainability of current account in Malawi and the results reveal that for Malawi's current account to move towards a sustainable path, particular attention should be paid to the following factors: external debt, terms of trade, openness, real exchange rate, net foreign assets and growth. The short run coefficient of budget deficit at lag 1 was negative and

significantly related to current account balance ($\beta = -0.200328$, $p=0.0250$). However, the short run coefficient at lag 2 was negative but insignificantly related ($\beta = -0.071436$, $p=0.6821$). The results also agree with Osoro et al. (2014) the paper test the twin deficit hypothesis and empirical relationship between current account balance and budget deficit in Kenya from 1963-2012. The results showed a positive and significant relationship between budget deficit and current account.

The results with Banday and Aneja (2016) who carried out a study on how budget deficit and current account deficit are interrelated in Indian economy and established that budget deficit and current account balance have a long run association between each other and move with each other for a long period of time. The results also conger with El-Namrouty and Saidam (2015) who conducted a study on effects of budget deficit on current account in Palestine for the period 1996 – 2012) and found a positive relationship between public budget deficit and current account in the Palestinian Territories.

The short run coefficient of exchange rate at lag 1 was positive but insignificantly related to current account balance ($\beta = 0.120697$, $p=0.4527$). However, the short run coefficient of exchange rate at lag 2 was negative and significantly related ($\beta = -0.131136$, $p=0.003$). The results are in agreement with Mbithi and Mutuku (2017) who did a study on Current Account Deficit Dynamics in Kenya real effective exchange rate significantly affect current account balance. The results also agree with Wanjiru (2017) who did a study to examine the effect of the budget deficit on current account deficit in Kenya using time series data covering the period 1980-2015 where real Exchange rate was found to be negatively related to current account deficit and both had a significant effect. In the short run, both factors were negatively related to the current account deficit. However, the result findings contrast Farah and Farzinvas (2009) who did a study on the effect of budget deficit on current account deficit in Iran in the period of 1981-2012 and found that real exchange rate dose not significant effect on current account balance.

The short run coefficient of interest rate at lag 1 was negative and insignificant related to current account balance ($\beta = -0.059989$, $p=0.6571$). However, the short run coefficient of interest rate at lag 2 was positive and insignificantly related ($\beta = 0.059695$, $p=0.5886$). The results agree with Spiro (1997) study on the effect of the current account balance on interest rates in Canada and found that current account balance on interest rates are cointegrated, and through vector error correction a significant relationship was established between the two variables. Locally, the results agree with Mwangi (2014) who did a study to establish the determinants of current account balance in Kenya and established that 17.97% was explained by exchange rate. Higher interest rates lead to hot money flows and an appreciation of the exchange rate. This makes exports more expensive and imports cheaper. This tends to worsen the current account. The short run coefficient of gross domestic product at lag 1 was negative and significantly related with current account balance ($\beta = -0.145630$, $p=0.0247$). The short run coefficient of gross domestic product at lag 2 was negative and insignificantly related ($\beta = -0.031597$, $p=0.8185$). The short run coefficient of inflation at lag 1 was negative and significantly related to current account balance ($\beta = 0.005027$, $p=0.0144$). However, the short run coefficient at lag 2 was negative but insignificantly related ($\beta = -0.005185$, $p=0.9601$).

5.0 Conclusion

The empirical results indicate that budget deficit and current account deficit have significant long run and short run relationship in Kenya. The study concluded that budget deficit has a significant relationship with current account deficit. A rise in budget deficits leads to rise in current account deficits. An expansionary budget leads to increased income ultimately resulting in increase in aggregate demand for domestic and imported goods that leads to improved current account balance. Control variables like exchange rate and interest rate do affect the budget deficit and current account deficit in Kenya.

The study concluded that budget deficit have a significant long run effect on Current account deficit and also Current account deficit have a significant long run impact on Budget deficit. The results of Granger causality show the bidirectional results between the two variables. Granger causality relationship between budget deficit and current account deficit, it is both current account deficit and budget deficit which have a bidirectional causality relationship between each other. The study also concluded that bi-directional causality exists between exchange rate and current account balance, no causality exists between current account balance and interest rate, uni-directional causality exists between exchange rate and budget deficit, uni-directional causality exists between interest rate and Budget deficit while uni-directional causality exists between interest rate and exchange rate.

The study concluded that the error correction term was negative and significant in the long run equilibrium. The speed of adjustment towards long run equilibrium was 44.6484% implying that the system will get back to long run equilibrium at the speed of 44.6484%. This implies budget deficit, exchange rate and interest rate, gross domestic product and inflation have influence on current account balance.

6.0 Policy Implications

For Kenya to progress the study advocates for favorable current account balance by reducing persistent deficits and achieving current account balance sustainability, several policy options should be applied. Stability in exchange rate and low inflation are critical in ensuring productivity growth.

The current account deficit in Kenya is unsustainable. It has dominantly depicted a persistent deficit for the period running from 1970-2015. The deficit has driven external debt upwards, increased pressure on exchange rate and now puts Kenya at a risk of current account reversals. For Kenya to progress the study advocates for favorable current account balance by reducing persistent deficits and achieving current account balance sustainability, several policy options should be applied.

Deliberate export oriented approach through product diversification, international trade promotion to ensure that our products can be competitive in the international markets. Stability in exchange rate is critical in ensuring productivity growth in attracting foreign direct investments.

Kenyan Government operates in fiscal deficits, thus leading to current account deficits. Fiscal measures that would limit excessive government expenditures should be put in place to be in harmony with revenue generation. This requires prudent government consumption and viable taxation policies that will ensure wide taxation base and increased revenue collection.

The study results indicated that budget deficit and real exchange rate play an important role in the current account deficit and therefore necessary for the government to put in place measures

to correct the current account deficit problem which has been unfavorable from 196 to date. The policy implication is that policymakers should always ensure that they avoid excessive budgets because this leads to borrowing which results to deteriorating current account deficit. This study recommends of restrained budgets which can be financed domestically through taxation and domestic borrowing.

Kenya needs a proper fiscal and monetary policy mix. These policies are Key in managing business cycles by smoothing economic growth process. Monetary policy can be used to ensure exchange rate stability while fiscal policy can be used inform of tariffs on luxury imports to enforce expenditure switching patterns among consumers.

Exchange rate was found to have a strong significant relationship with current account deficit. This study recommends that policymakers should ensure proper management of the exchange rate; they should ensure they devalue and depreciate the local currency to make the exports competitive in the global market. This way more exports can be achieved hence addressing the problem of current account deficit. Improving export competitiveness: The government needs to improve Kenyan good competitiveness in world markets though reducing taxes on inputs for exportable goods and subsidizing exporting industries.

There is need for the for the government to control exchange rate and interest rate as their decrease will stimulate investment in the country which positively affect the balance of payment in the country.

Our investigation of the interest rates led to the conclusion that there exists a strong and positive relationship between the real interest rate and the current account balance. This finding is important for the policymakers since policymakers having the aim of struggling with the current account deficits may achieve this by decreasing the real interest rates.

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