

Effect of External Debt on Inflation in Kenya

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ABSTRACT

Many developing countries often acquire external debts to address their budget deficits. In Kenya, the government has over time accumulated large stocks of external debt to facilitate the provision of the essential public services and promote infrastructural development. Kenya's external debt has been increasing, recorded at 36.4 per cent of gross domestic product as at 2022. Despite the increased external borrowing in Kenya, investment target levels have not reached the levels envisaged in the Kenya Vision 2030 development blueprint. The inflation rate has also increased over time, beyond the set threshold of 5 per cent of gross domestic product. The specific objective of this study was to investigate the effect of external debt on inflation in Kenya. The non-Ricardian Theory of Public Debt and Quantity Theory of Money were the foundations of the relationship between external debt and inflation. A descriptive research design was utilized to examine the relationship among the study variables. Annual time series data on the mentioned variables for the years 1990 to 2022 was collected using the structured data collection checklist from Kenya National Bureau of Statistics, the World Bank and International Monetary Fund websites. The research utilized the Autoregressive Distributed Lag Model. STATA software was used for data analysis. Diagnostic tests were done to ascertain that linear regression assumptions were adhered to. To test for the stationarity of data, Augmented Dickey-Fuller test was used where interest rate, GDP growth rate, exchange rate and the dummy variable were stationary at level whereas money supply, tax, external debt and inflation were stationary at first difference. The coefficient of external debt (0.4043) in the model was positive and significant, implying that 1 percentage increase in external debt would increase inflation by 0.4043 per cent. The p-value of the coefficient was 0.009. The model was a good predictor of inflation with an R^2 value of 0.9973. The study recommends a robust system of debt management and mechanism to regulate the acquisition and utilization of the borrowed funds towards the earmarked projects. The study results may guide the policy makers as they formulate the fiscal and monetary policies to promote investment, while controlling inflation rate. The investors may also learn about the potential risk and benefits of investing in the country.

Key words: External Debt, Inflation, Investment

INTRODUCTION

External debt is a tool that is utilized by nations to bridge the gaps existing in the Budget. Through external borrowing, Kenya can finance public projects, including infrastructural programs and the provision of public services. According to the Keynesian perspective, the surge in external debt would increase aggregate demand through higher disposable income, creating a greater wealth effect and thus generating inflationary pressures in the short run (Jawaid et al., 2013). Even though external debt can bolster economic growth, unsustainable external debt in the country can pose a risk to the economic prosperity and development of the country (Abbas et al., 2018). According to Abimbola et al. (2019), the impact of the relationship between external debt and inflation on economic growth was positive. Thus, their study recommended that countries monitor their debt level when sourcing funds for investment to ensure there is no debt crisis in the future. When a country has a huge external debt, its capacity to repay it could be compromised.

Additionally, the high external debt may reduce the cost of debt repayment, especially if inflation is unanticipated. However, if there is currency depreciation, this will increase the amount repayable (Navarro-Ortiz and Sapena, 2020). The inflation data in Kenya between 1990 and 2022 has shown fluctuations, both

increases and decreases. These changes are attributed to the diverse economic factors that have influenced the macroeconomic function of the economy. In the early 1990s, Kenya experienced an increase in inflation trends, recorded at 18.90 per cent in 1992. The major cause of the uptrend is political disruption, rooted corruption, inadequate economic policies and mismanagement of public funds Nalyanya et al. (2020). There ensued a depreciation of the Kenyan shilling, coupled with inflationary pressure.

Moreover, Kenya also grappled with the undulating oil prices, which affected import expenditures and thus caused inflation. According to Ndolo (2023), the government formulated policy reforms and restructured the political aspects, which caused a declining effect on inflation. Kenya's external debt has been increasing, at 36.4 per cent of gross domestic product as of 2022. Despite the increased external borrowing, the inflation rate in Kenya has persistently been higher than the set threshold of 5 per cent of GDP, standing at 7.65 in 2022. Therefore, this study aimed to investigate the effect of external debt on inflation in Kenya.

LITERATURE REVIEW

The theories reviewed in the study were the Non-Ricardian Theory of Public Debt and the Quantity Theory of Money. Inflation is commonly regarded as a monetary situation and is controlled by the operations of the financial authorities. According to Friedman (1968), when the government implements expansionary economic policies, there is an increase in the real output capacity of the economy and the general price level, especially in the short run. However, the only variable that will keep increasing in the long run is the general price level. Recently, research has shown that, apart from inflation being a monetary issue, it is also a feature of the fiscal phenomenon, where the fiscal variables affect the stability of general prices within the economy. The studies by Eita et al. (2021) and Musgrave (2017) are fundamental in explaining the existing interaction between fiscal and monetary policies and delineating the relationship between public debt and inflation. Therefore, apart from controlling the amount of money being supplied to the economy there are other aspects that are involved in mitigating inflationary pressures.

The focal point for the theoretical views on the relationship between inflation and public debt is based on the explanation given by the Ricardian and non-Ricardian approaches to price level determination. Depending on how effectively the government budget deficit can be addressed, the interaction between the real value of the price level and the debt can be based on the Ricardian or non-Ricardian approach. If the satisfaction of the government budget constraint for the general price level is based on endogenously determined monetary and fiscal policy variables, then it is Ricardian policy (Barro, 1974). The Ricardian policies are based on the assumption that Ricardian Equivalence holds, which asserts that fiscal policies do not influence wealth effects. Therefore, according to Barro (1974), monetarists' view on inflation is the basis for the Ricardian equivalence. This perspective of the monetarists is that government debt does not significantly affect the economy's price level; therefore, government bonds are not components of net wealth.

On the other hand, the non-Ricardian policy asserts that the constraint on the intertemporal government budget is an insatiable equilibrium at each price level. Non-Ricardian policies need to be in tandem with the Ricardian Equivalence Theorem's assumption that fiscal policy cannot generate wealth. On the contrary, when government bonds increase in value, the lifetime budget of households is affected. Flodén et al. (2021) assert that the economy's fiscal aspects influence the price level by creating wealth, which affects consumption demand. In the Keynesian view, when the government implements fiscal policy, that is, by reducing taxes or increasing debt acquisition, this may increase aggregate demand through high disposable income, hence creating a positive wealth effect in the short run, which may lead to inflationary pressures (Olusola et al., 2022). The relationship between public debt and inflation, as discussed by Cham (2023), is based on the interaction between fiscal and monetary policies, which implies that controlling the price level does not solely depend on money supply control. However, the Fiscal Theory of the Price Level asserts that fiscal authority can influence inflation regardless of monetary policy. Kia and Jafari (2020) state that when the government is set to meet the debt obligations without a tax increase or printing money, it can pay the old debt by obtaining a new debt. Effectively, contriving over the debt obligation can generate inflation, irrespective of the monetary policies the financial authority implements (Kia and Jafari, 2020).

A Polish mathematician originally coined the Quantity Theory of Money theory called Nicolaus Copernicus in

1517, and later, the theory was popularized by economists Anna Schwartz and Milton Friedman. This followed the publication of their book, "A Monetary History of the United States, 1867–1960," in 1963. The quantity theory of Money asserts that the general price level of goods and services is proportional to the volume of money supply within the economy. Therefore, according to the theory, if the amount of money is doubled in the economy, the price levels would also reflect double figures. This implies that the consumers of the goods will need to pay twice as much to obtain the same quantity of goods and services. The rise in price levels will eventually cause inflation levels to increase. Many studies have employed the Quantity Theory of Money to understand and explain the relationship between money in the economy and inflation. The Quantity Theory of Money equation is often expressed as follows:

$$MV = PY$$

Where M denotes the nominal quantity of money, Y represents real transactions or physical output per period, and V represents the corresponding money velocity. An American economist named Irving Fisher is one of the key contributors to the development of the Quantity Theory of Money. The economist's work on "The Purchasing Power of Money", published in 1911, significantly contributed to the foundation of the theoretical dynamics involving changes in money supply and variations in price level. According to Fisher, the changes in money supply would cause proportional variations in the price level, where there is constant money velocity and real output in the economy. This implies that an increase in the money supply would cause a rise in prices, whereas a decrease in the money supply could lead to a lower price level.

Although there is extensive literature on external debt and inflation, the findings are inconclusive. Inflation is considered a fiscal issue because of its potential to affect the level of government expenditure, revenue and the stability of the state's budgetary function. When the government implements expansionary fiscal policies, such as tax cuts and increases in government spending, there could be an increase in aggregate demand, which can cause demand-pull inflation. On the other hand, contractionary fiscal policies that are implemented to check inflation levels can affect overall economic growth and development. Internal debt can also finance fiscal deficits, which may cause inflationary pressures due to inadequate financial management of borrowed resources. According to Raza et al. (2023), implementing fiscal policies can affect inflation expectations, influencing wage and price-setting within the economy. Blanchard (2019) indicates the importance of a coordinated approach to controlling inflation between fiscal and monetary policies, illustrating the significance of policymakers observing supply-side and demand-side economic behavior. Therefore, it is crucial to implement a proper fiscal management system to maintain the stability of prices in the economy and foster sustainable macroeconomic growth.

Inflation is considered a fiscal issue because of its potential to affect the state's budgetary function. When the government implements expansionary fiscal policies, such as tax cuts and increases in government spending, there could be an increase in aggregate demand, which can cause demand-pull inflation. On the other hand, contractionary fiscal policies being implemented to check inflation levels can affect overall economic growth and development. External debt can also finance fiscal deficits, which may cause inflationary pressures due to inadequate financial management of borrowed resources. Based on research by Gumata and Ndou (2017), implementing fiscal policies can affect inflation expectations, influencing wage and price-setting behavior within the economy.

The empirical literature showed the positive and negative effects of debt on inflation, as discovered in past studies. Musgrave (1949) and Phelps (1973) pioneered the research on the relationship between debt and inflation. According to Musgrave (1949), who studied the relationship between public debt and inflation, if during a certain period the private holders of securities from the government decide to liquidate all or a part of their portfolios, and if the only buyers were the fiscal authorities, then there would be an increase in the volume of bank credit. With such an increase, there would not be an immediate connection with the economy's needs, and therefore, extreme inflationary pressures would exist. On the other hand, Phelps (1973) argues that based on the public finance approach to inflation, the source of inflation should be the Central Bank, while the Treasury is left to adjust compensation procedures for government deficits.

Ekinci (2016) discovered a negative correlation between deficit financing and inflation in Turkey by

examining the relationship between external debt and inflation using a basic linear regression model. This study utilized the consumer and producer price indices to measure inflation, with external borrowing as the key independent variable. Contrastingly, Reinhard et al. (2011) studied the effect of debt level on macroeconomic variables. The study considered the 2007–2009 global financial crises that caused debt accumulation. The study results indicated that the debt levels in Spain, Iceland, the UK, and the United States rose to 75 per cent between 2007 and 2009, a 20 per cent increase. The net findings indicated that as the debt level increased, a surge in the price level, interest rates, and expenditures denoted a positive effect of external debt on inflation. Mweni, Kiprop, and Otieno (2012) also conducted a study using secondary data to examine the impact of external borrowing on inflation in Kenya and discovered a positive correlation between external debt and inflation.

Da Veiga et al. (2014) investigated the effect of public debt on inflation and economic growth across 52 African economies from 1950 to 2012. The study findings indicated that public debt limits affect economic growth and are exhibited negatively. From a debt-level perspective, inverted U behavior based on the relationship between economic growth and public debt has a less positive effect on inflation. Karakaplan (2009) discovered similar findings in the study on the conditional effects of external debt on inflation. The study used panel data between 1960 and 2004, and the research findings showed that debt has less impact on inflation across well-developed financial markets.

Manuel et al. (2019) studied the impact of fiscal deficit on inflation in Namibia between 2002 and 2017. The study utilized the Autoregressive Distributed Lag Model. The results showed a significant relationship between external debt, debt servicing, and inflation in the short and long term. Positive results were obtained by Aimola and Odhiambo (2021) in a study on the effect of public debt on inflation in Ghana using the autoregressive distributed lag (ARDL) model. Additionally, Mochama (2016) surveyed the impact of public debt, trade, and monetary policy on the inflation rate in Kenya and obtained similar findings. The study utilized annual time series data received from the World Bank. It concluded that there is a significant relationship between foreign debt, debt servicing, and inflation in the short and long term.

The study by Essien et al. (2016) investigated the effect of borrowing by the public sector on prices, output levels, and interest rates in Nigeria. The Vector Autoregressive model was used, and the Granger causality test was done. The study findings showed that the external debt level and domestic debt across the applied period did not significantly impact the price level and output level. However, the study on the impact of inflation on economic growth in Nigeria by Ezeanyeji and Ejefobihi (2015) between 1991 and 2013 revealed that inflation had affected economic growth negatively in Nigeria.

Gathendu (2021) examined the impact of external debt on inflation in Kenya, Tanzania, and Uganda. The study utilized annual panel data from the World Bank. The study used the VECM to explain the relationship between external debt and inflation. The results demonstrated a positive effect of external debt on inflation, asserting that money growth played an explanatory role within the function. This study, however, aims to determine the impact of external debt on inflation by analyzing the time series data specifically for Kenya.

Arisa (2020) used the structural vector auto regression model to determine the influence of external debt on inflation and exchange rates in Kenya. The findings show that a shock in the external debt-to-GDP ratio within one standard deviation can hurt inflation for four quarters, which gradually recovers later. Therefore, in Kenya, an increase in external debt leads to inflation. These findings also agree with a study by Mweni, Oketch, and Njuguna (2016) on the effect of external debt on the inflation rate in Kenya (1972–2012), which used the macroeconomic debt growth model.

METHODOLOGY

The study used a descriptive research design to identify and explain the trends and patterns in the relationship between external debt and inflation in Kenya. The autoregressive distributed lag model was used to determine the effect of external debt on inflation in Kenya. This econometric tool is key in handling different order integrations. Additionally, the ARDL model captures both the short run and long run dynamics of the relationship between the study variables. The ARDL incorporates the error correction mechanism which

adjusts the short run dynamics to ensure convergence to the long run equilibrium, which enhances analysis of time series data. Yearly time series data on inflation, exchange rate, external debt, GDP growth rate, interest rate, public investment, money supply and tax for the years 1990 to 2022 was collected using the structured data collection checklist from the Kenya National Bureau of Statistics and the World Bank. The study used the dummy variable (D1) to account for the structural breaks in Kenya. The years when there were structural breaks were represented by 1, and the years when there were no structural breaks, the value that represented the phenomenon was 0. Diagnostic tests such as heteroscedasticity, multicollinearity, and autocorrelation were done to ascertain that linear regression assumptions were adhered to, and Stata software was used for data analysis. Interest rate, GDP growth rate, exchange rate, and the dummy variable were stationary at level, while other variables were stationary at first difference.

To achieve the objective, the research utilized the non-Ricardian model and the Quantity Theory of Money Model. The model below displays the relationship between external debt, inflation, and the government Budget constraint. Let:

D be the level of external debt.

G be public investment.

T be taxes.

M be the money supply.

P be the price level (inflation).

Y be the real GDP Growth.

The government budget constraint can be represented as: $G - T = \frac{\partial D}{\partial t} + rD$

Where:

r is the interest rate on external debt.

$\frac{\partial D}{\partial t}$ is the change in external debt over time.

The model assumption is that public investment (G) and taxes (T) are exogenously determined. The change in external debt over time $\frac{\partial D}{\partial t}$ is equal to the fiscal deficit (G-T) minus the trade balance (exports minus imports). However, for simplicity, let's assume the trade balance is negligible in the short run. Another assumption is that the money supply (M) is determined exogenously by the central bank.

The quantity theory of money suggests that:

$$M * V = P * Y$$

Where:

V is the velocity of money (the rate at which money is exchanged in transactions).

P * Y represents nominal GDP.

Assuming velocity (V) is relatively stable in the short run, we can rewrite the quantity theory of money as:
 $M = P * Y$

Combining the government budget constraint and the quantity theory of money, we get:

$$G - T = \frac{\partial D}{\partial t} + rD = \frac{P*Y}{V}$$

Therefore,

$$INF(p) = f(G, D, T, M, Y, r) + \varepsilon_i$$

Where;

INF represents the price level (inflation).

D is the level of external debt.

G represents public investment

T represents taxes.

M represents the money supply.

Y represents the real GDP Growth.

r is the interest rate.

ε_i represents the error term

The empirical model that was estimated is;

$$\begin{aligned} \Delta INF_t = & \beta_0 + \sum_{i=1}^p \beta_1 \Delta EXT_{t-1} + \sum_{i=1}^q \beta_2 \Delta PUBINV_{t-1} + \sum_{i=1}^q \beta_3 \Delta TAX_{t-1} + \sum_{i=1}^q \beta_4 \Delta MSS_{t-1} \\ & + \sum_{i=1}^q \beta_5 \Delta INT_{t-1} + \sum_{i=1}^q \beta_6 \Delta EXCHRATE_{t-1} + \beta_7 \Delta GDR_{t-1} + \beta_8 D_1 + \mu_t \end{aligned}$$

EXT_{t-1} represents the lagged values of external debt.

$PUBINV_{t-1}$ represents lagged values of public investment.

INF_t represents the price level (inflation) at period t.

$EXCHRATE_{t-1}$ = lagged values of exchange rate

TAX_{t-1} represents the lagged values of tax.

GDR_{t-1} represents lagged values of GDP growth rate

INT_{t-1} represents lagged interest rate

MSS_{t-1} represents the lagged values of money supply.

D_1 = Dummy Variable for economic structural breaks in Kenya, represented by 1 and 0, which stands for the years before structural breaks and years after structural breaks respectively.

Δ Denotes the first difference operator of the variables.

Σ denotes the summation of multiple lagged terms

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ and β_8 are the coefficients of variable estimates.

ε = error term.

RESULTS

All the diagnostic tests were done, and the model was found fit for regression. The ARDL regression results were as follows;

Table: ARDL results for the Effect of External Debt on Inflation

Long-Run Coefficients				
Variables	Coefficients	Std. error	t-stats	Probability
ADJ (INF)	-2.5084	0.4216	-5.95	0.002
EXT	0.2063	0.6626	3.11	0.206
PUBINV	0.5450	0.0801	6.80	0.001
TAX	2.2113	0.6098	3.63	0.015
MSS	0.5734	0.1736	3.30	0.021
INT	-0.0893	0.0610	-1.46	0.203
EXCHRATE	0.0482	0.0130	3.70	0.014
GDR	0.1580	0.2672	0.60	0.576
D1	2.9812	0.5208	5.72	0.002
Short-Run Coefficients				
Variables	Coefficients	Std. error	t-stats	Probability
EXT	0.4043	0.0973	4.15	0.009
PUBINV	1.3672	0.3017	4.53	0.006
TAX	2.5316	0.7921	3.20	0.024
MSS	1.1508	0.2169	5.31	0.003
INT	-0.1133	0.1043	-1.09	0.327
EXCHRATE	-0.5865	0.1897	-3.09	0.027
GDR	0.6210	0.2986	2.11	0.089
D1	5.2398	0.8340	6.28	0.002
Constant	-9.4203	2.1224	-4.44	0.007
R-squared=0.9973				
Adj R-Squared= 0.9844				
Sample:	1990 - 2022	R-squared	0.9973	

Number of obs	33	Adj R-squared	0.9844
F (24, 5)	24.57		
Prob > F	0.0011	Log likelihood	-17.8683
		Root MSE	1.0752

Source: Author’s Computation

In the table, the long-run variable coefficients of external debt, public investment, tax, money supply, interest rate, exchange rate, GDP growth rate and dummy variable were 0.2063, 0.5450, 2.2113, 0.5734, -0.0893, 0.0482, 0.1580 and 2.9812 respectively. All the variable coefficients were statistically significant in the long run, except the coefficients for external debt, interest rate and GDP growth rate which had p-values; 0.206, 0.203 and 0.576 being greater than 0.05. The R-squared value was 0.9973, which implied that the explanatory variables accounted for 99.73 per cent of the total fluctuations in inflation. The F-statistic of the model (24.57), with the corresponding p-value of $0.0011 < 0.05$ implied that the model was fit for regression.

The model for the effect of external debt on inflation was thus presented as follows;

$$INF = -9.4203 + 0.2063EXT + 0.5450PUBINV + 2.2113TAX + 0.5734MSS - 0.0893INT + 0.0482EXCHRATE + 0.1580GDR + 2.9812D1 \quad (4.1)$$

The coefficient of external debt (0.4043) was statistically significant in the short run, with a p-value of 0.009, which is less than 0.05, but had no effect in the long run. Therefore, it implies that 1 per cent increase in external debt increases inflation by 0.4043 per cent. In the short run, the increase in external debt could inject money into the economy, through increased money supply, as the borrowed funds are used domestically. However, in the long run as the economy adjusts, the productive investments financed by the borrowed funds improve the overall economic productivity, checking inflation as the increased supply of goods and services meets demand. Additionally, the fiscal adjustments that may be implemented by the government through the introduction of new taxes and increases in existing taxes, as well as reduced government spending to meet the debt obligation, can reduce aggregate demand, causing lower inflation (Musgrave, 2017). The study results agreed with the findings obtained by Reinhart et al. (2011), who conducted a study on the effect of external debt on macroeconomic variables. The results indicated that the debt levels in Spain, Iceland, the UK, and the United States rose to 75 per cent between 2007 and 2009, which caused an increase in the price level. Contrasting findings were obtained by Ekinci (2016), who conducted a study on the relationship between external debt and inflation using a basic linear regression model. This research utilized the consumer and producer price indices as metrics for measuring inflation, with external borrowing as the key independent variable, and the findings were that external debt negatively affects inflation.

The interest rate coefficient in the long run (-0.0893) and in the short run (-0.1133) was statistically insignificant, with p-values 0.203 and 0.327, respectively, greater than 0.05, implying that there was no relationship. Similar results were obtained by Alexander (2020) in his study on the relationship between interest rates and inflation in South Africa.

The coefficient of public investment was statistically significant both in the long and short run. In the long run, the coefficient (0.5450) had a p-value of 0.001, less than 0.05. Therefore, 1 per cent increase in public investment increases inflation by 0.5450 per cent, while all other factors are constant. Through boosting the aggregate demand, public investment can cause an increase in inflation. For instance, when the government injects funds into the economy through development of infrastructure, provision of high quality education and other public projects, this can increase the demand for goods and services. Therefore, if the demand generated is greater than the productive capacity of the economy, the general prices of commodities would increase thereby causing inflation. Contrasting results were obtained by Arestis and Sawyer (2007), who studied the Impact of Public Investment on Economic Growth and Inflation.

The coefficient of tax was statistically significant both in the long run and in the short run. In the long run, the coefficient of tax (2.2113) had a p-value of 0.015, which is less than 0.05. This implies that 1 per cent rise in tax would lead to a 2.2113 per cent increase in inflation, holding other factors constant. With the rise in taxes, especially in the form of VAT or sales tax, the salespeople normally shift the additional costs to the buyers in terms of higher prices, causing inflation. Additionally, demand-pull inflation, especially when the government uses the tax revenue for expenditure on public projects, can stimulate aggregate demand. The high demand, especially in a situation of near-full employment can push prices up, causing inflation. Moreover, in case of tax hikes, consumers and businesses may adjust commodity prices and wages preemptively, contributing to inflation.

The coefficient of money supply was statistically significant both in the long and short run. The long-run coefficient (0.5734) had a p-value of 0.021, less than 0.05. This implies that 1 per cent increase in money supply increases the inflation rate by 0.5734 points. The increase in money supply in the economy boosts consumers' spending ability and pushes up aggregate demand, causing an increase in prices when output does not increase proportionately. This can also happen if the rate at which the money supply increases is higher than the economy's productivity rate. Moreover, a high rise in money supply causes domestic currency depreciation, which makes imports more expensive, leading to imported inflation. Gatawa et al. (2017) found similar results in their study on the impact of money supply and inflation on economic growth in Nigeria.

The coefficient of exchange rate in the long run and the short run is statistically significant. The long-run coefficient had a p-value of 0.027, less than 0.05 in the short-run. This implies that 1 per cent increase in exchange rate decreases inflation by 0.5865 per cent, holding other factors constant. The value of the currency and the prevailing exchange rate affect inflation in that when the currency depreciates; imports become expensive. Since the costs of importing the goods eventually affect the domestic price level, a weak currency can cause inflation. Similar results were obtained by Omankhanlen (2011) in his study on the effect of exchange rate and inflation on foreign direct investment and its relationship with economic growth in Nigeria.

The GDP growth rate coefficient was not statistically significant in the long run. However, in the short run, it was statistically significant in that the GDP growth rate coefficient (0.6210) had a p-value of 0.089, which is less than a 10 per cent level of significance. This implies that 1 per cent increase in GDP growth rate increases the inflation rate by 0.6210 percentage. As the GDP of a country grows, the aggregate demand may increase, which normally would cause a healthy economic situation if the increase in aggregate demand is associated with an increase in output, thereby checking on inflation. However, inflationary pressure might be generated if the demand increases while production does not. The study conducted by Saymeh and Orabi (2013) on the effect of inflation on economic growth in Jordan agrees with the findings.

The dummy variable (2.9812) that proxies the structural breaks was statistically significant both in the long and short run, with a p-value of 0.002, less than 0.05. Therefore, economic shocks positively influence the level of inflation within the economy. This is because when there are geo-political issues, such as war between Ukraine and Russia, the fuel prices may increase, leading to cost-push inflation. Additionally, when there is post-election violence or tribal clashes, there might be reduced agricultural productivity within the economy, causing shortages. Food prices would, therefore, increase, hence inflation. The coefficient of the speed of adjustment (-2.5084), which shows the speed at which the economic disequilibrium is being corrected, is statistically significant, with a p-value of 0.002, which is less than 0.05. This implies that the speed of adjustment of the error caused by economic shocks was high.

CONCLUSION

The research findings on the objective; the effect of external debt on inflation, were positive and significant. Therefore, the study concludes that external debt affects inflation positively; thus, an increase in external debt increases inflation.

RECOMMENDATIONS

Based on the study's findings, it is recommended that:

Since external debt increases inflation, it should therefore, once obtained, be properly utilized in productive investments to check the level of inflation and enhance macroeconomic stability. Thus, policymakers should design policies whereby the acquisition of external debt is based on the ability of the government to repay the debt without affecting the sustainability of economic growth over time. Therefore, the government should formulate and implement a comprehensive debt management strategy that would regularly monitor and assess the debt sustainability. Furthermore, the government should diversify the sources of funds and also promote the domestic savings to reduce excessive reliance on external debt. Additionally, by reducing the budget deficit and rightly prioritizing the government expenditures, fiscal discipline would be enhanced thereby mitigating the inflationary impact of external debt.

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