

## Foreign Capital Flows and External Debt in Kenya: Evidence from the ARDL Bounds Testing Approach

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### **Abstract:**

**Background:** Kenya has relied so much on foreign debt to finance its fiscal budget. To date, this dependence on external resources has become entrenched in the funding of government projects and operations in the country which has led to an increase in the stock of foreign debt, raising concerns of its sustainability among policymakers and economists. On the other hand, Kenya's capital flows inflows have been on the decline in the past five years. This is despite the rise in capital inflows in other East African Community (EAC) countries. This has caught the attention of Kenya's administration which has pledged to increase the Nation's competitiveness. The soaring external debt and the drop in capital inflows in the last five years was the source of motivation for this study, with the main objective being: to investigate the effect of foreign capital flows on external debt in Kenya.

**Materials and Methods:** The study used time-series analysis employing the Autoregressive Distributed Lag estimation framework. External debt was regressed against the components of foreign capital flows namely, Foreign Direct Investment, foreign portfolio investment and reserve assets. Two moderating variables, fiscal balance and current account balance were included in the model. Data analysis was performed using Stata software.

**Results:** The study found evidence of a positive long-run nexus between FDI and external debt in Kenya. The study also found that foreign portfolio investment proliferates external debt in the short-run but diminishes it in the long-run. Reserve asset was found to cause external debt to increase in the short-run but reduce in the long-run

**Conclusion:** Generally, the study found capital flows to be beneficial in the long-run and fundamentally injurious in the short-run. The study, therefore, recommends that the government should focus on policies that are anchored on long-term goals.

**Key Word:** Foreign Capital Flows; External Debt; Foreign Direct Investment, Reserve Asset, Foreign Portfolio Investment, ARDL

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Date of Submission: 02-06-2020

Date of Acceptance: 17-06-2020

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### **I. Introduction**

In the last three decades, foreign capital flows have become a substantial source of investment for economies across the globe. The distribution of the flows is, however, not congruent across all economies as high and middle-income ones have a higher concentration<sup>1</sup>. The last decade has seen more foreign capital flowing into developing economies compared to the previous decades. African countries have been more beneficiaries of foreign capital with the degree of flow varying from one country to another. Zambia in 2007 for instance, recorded a 75 per cent foreign capital stock to Gross Domestic Product (GDP) Ratio, while other countries such as Tanzania, Cameroon, Uganda and Gambia foreign capital inflows was 30 percent of GDP in the same year<sup>2</sup>. The flows have continued to be steady even in recent years especially in Sub-Saharan Africa and by extension the East African countries. The steady flow has been attributed to investment in Information, Communication and Technology, as well as the establishment of Special Economic Zones in a number of East Africa nations such as Ethiopia and Rwanda<sup>3</sup>.

Capital flows are vital ingredients to the growth of the economies due to their contribution to capital formation by triggering spillover of new knowledge and technology, assisting the formation of human capital and building a competitive trade environment. These factors eventually lead to the economic prosperity of these nations and become strong instruments for poverty alleviation<sup>4</sup>. Vast literature has however, presented foreign capital flows as highly volatile forms of flows compared to other kind of international flows. This situation is particularly more rampant in emerging and developing economies than developed economies<sup>5,6,7,8</sup>. The higher volatility among developing countries is as a result of their high propensity to accumulate imbalances that

gradually generate more persistent macroeconomic shocks<sup>9</sup>. Other causes of higher volatility in developing countries stem from the quality of institutions and robustness of macroeconomic policies<sup>6</sup>.

The ramification of such volatility on various macroeconomic variables and economic growth is palpable. Developing and least developing countries tend to have a higher capital flow that are almost the same size as the economy specifically the Foreign Direct Investment (FDI) projects<sup>2</sup>. This situation makes them heavily dependent on these projects leading to fewer diversifications. Capital flows volatility impacts the majority of poor households through various conduits. For example, large foreign capital flows inflows are associated with the appreciation of the exchange rate and increase in domestic credits, which encourage the importation of products and causes inflationary pressures<sup>10</sup>. The inflationary pressures affect real wages as the poor households' expenditure raises relative to their income. This induced consumption is manifested more on necessities than luxury products and is more rampant on poor than non-poor households<sup>11</sup>.

The reversal effect of capital flows has the opposite effect on the economy. A sudden drop in capital flow creates a financial shock that leads to an acute exchange rate devaluation making imports more expensive and thus reducing the purchasing power of households especially poor-ones<sup>12</sup>. On the macro-level, devaluation of the exchange rate as a result of plummeting capital flows is likely to take a toll on the nation's external debt profile, including the debt itself, debt servicing and public debt management. The sudden reduction of capital flow is likely to increase external debt and lead to increased service debt obligation<sup>13</sup>.

### **1.1 Components of Foreign Capital Flows**

Foreign capital Flows refers to the transfer of financial assets between residents of one country with residents of other countries. It takes a variety of forms and is categorized into three main components, namely, Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI) and Reserve Asset Flows<sup>3</sup>. Foreign Direct Investment (FDI) is the transfer of capital stock from an investor country to a host country<sup>14</sup>. According to the World Bank, Foreign direct investment (FDI) is an investment from a party in one country into a business or corporation in another country with the intention of establishing a lasting interest. Foreign direct investment can be made by obtaining a permanent interest or by expanding one's business into a foreign country.

Foreign Portfolio Investment (FPI) is the entry of funds into a country where foreigners deposit money in a country's bank or make purchases in the country's stock and bond markets<sup>15</sup>. The main difference between FDI and FPI is the lasting interest where investors passively hold securities from a foreign country. Reserve assets on the hand refer to the foreign currencies held by a country's central bank. They can be used in settling of liabilities when need be. Governments hold foreign exchange reserve to meet external debt obligations, to increase confidence that domestic currency is backed by foreign currency as well as to reduce the vulnerability of local currency to shocks especially in the face of liquidity constraint<sup>16</sup>.

### **1.2 Foreign Capital Inflows in Kenya**

Most developing countries use foreign direct investment inflows as a source of capital for their industrialization because foreign direct investors usually place a long-term commitment to host nations. Further, foreign capital inflows have a significant contribution to a host country's fixed capital formation<sup>17</sup>. For instance, Kenya's fixed capital formation was about 21 per cent of Gross Domestic Product where foreign capital inflows accounted for about 7 per cent<sup>18</sup>.

The quest for liberalization made the Kenyan economy to undergo an immense transformation in the early 90's. The wake of structural adjustment programs prompted the government to push for various reforms and policies to promote integration and opening up of the economy. Among the policies instituted included among others, encouragement of FDIs, technology inflows, opening up the capital market to foreign portfolio equity and investment and increasing foreign exchange reserves<sup>19</sup>. In the first decade after Kenya liberalized its trade, Kenya recorded an unprecedented influx of capital inflows. However, in the last decade especially after the 2008/2009 financial crisis, Kenya's capital flow has been marked with periods of surges and slowdowns<sup>3</sup>.

The degree of variation in the inflows varies among the capital flow components. For instance, foreign direct investment inflows have been on the decline in the past five years. This is despite the rise in FDI inflows to other East African Community (EAC) countries. Data from the United Conference on Trade and Development shows that Kenya is among the counties that have attracted less FDI inflows in the last three years, with a sharp drop of 36 per cent to Ksh 40.7 billion in 2017 even as inflows to East African rose by 13 per cent.

On the same note, other components of foreign capital inflow namely, foreign portfolio investment and reserve assets have also recorded dismal performance. Foreign portfolio equity in the last 10 years has been on a fluctuating trend, averaging USD 238 million, while recording an all-time high in 2014 with USD 3772.260 million and a low of USD -123.637 million in the period<sup>20</sup>.

Stocks of reserve assets have also been on a downward trend. According to a 2018 report by the Kenya National Bureau of Statistics, Kenya has been using a greater part of its reserve assets to finance external debt. In June 2018 Kenya's forex reserve fell to USD 8.62 billion, from USD 9.04 billion, in the same period in 2017. A total of USD 413 million worth of forex reserves was used to service external debt. Figure 1.1 presents the

trend for Foreign Portfolio Investment (FPI), Foreign Direct Investment (FDI) and Foreign exchange reserve is presented<sup>20</sup>.

### **1.3 Statement of the Problem**

The relatively high level of Kenya's external indebtedness and rising debt burden may have severe implications on the country's development and debt sustainability<sup>21</sup>. Kenya has relied on foreign debt to finance its fiscal budget. To date, this dependence on external resources has become entrenched in the funding of government projects and operations in the country which has led to an increase in the stock of foreign debt, raising concerns of its sustainability. Researchers working on the external debt issue have reached conclusions that excessive debt can reduce the resources available for investment and social spending. It also decreases the credibility of the country concerned with potential donors and investors<sup>22</sup>.

Debt has long been a significant problem for both the individual and the state in general. Today, the weight of public debt has returned to the center of the concerns of politicians and citizens<sup>23</sup>. Therefore, ensuring a debt ratio that is not detrimental to a nation's economy has become a primary goal or almost a golden rule for all states. Debate on debt issues has become fundamental because over-indebtedness can expose a country to the risk of slowing down its growth in the long term and its ability to develop rapidly and effectively combat the various ills such as poverty that can undermine the country<sup>23</sup>.

Economic studies have focused on the effects of external debts on various macroeconomic and microeconomic variables; however, little is known on the possible determinants of this excessive external debt. Additionally, among the studies conducted, the identification of explanatory factors for external indebtedness has produced varied results based on studies, methodology, countries, and authors. Among the explanatory factors identified to have influenced external debt is foreign capital flows and in some studies its components. Several studies have linked capital flows components to bilateral debts procured by many developing countries that come with conditions that may require the financier to invest or take contracts on crucial projects in the borrowing country<sup>24, 25, 26</sup>.

In Kenya however, there are few studies conducted on the components of foreign capital flows and External debt nexus, and all of these studies have only focused on the effect that External debt has on FDI<sup>14, 27</sup>. No study has attempted to investigate whether foreign capital flows or any of its component influences external debt, yet literature has pointed out that capital flows volatility is likely to adversely affect debt and debt servicing. This study, therefore, sought to fill this knowledge gap by investigating the effect of foreign capital flow on external debt in Kenya. Secondly, the study attempted to provide a more comprehensive analysis by putting into consideration foreign capital flow and its components as opposed to focusing on a specific type of capital flow in isolation from others.

## **II. Material And Methods**

### **2.1 Research Design**

A Research design is how data collection and analysis is structured to answer the research hypothesis by use of empirical evidence<sup>28</sup>. This research employed the Descriptive Research Design in an attempt to address the research problem. Descriptive research is adopted in situations where the researcher is keen on finding out the state of affairs as they exist<sup>29</sup>. Additionally, descriptive design aids in the disciplined gathering and analysis of data which is presented in a systematic manner giving a clear illustration of the characteristics of the phenomenon under study<sup>30</sup>. Further, the nature of descriptive design helps in the provision of a valid and accurate analysis of the variables in the study exploring links between the concepts and saving on time and cost when undertaking the study.

### **2.2 Population**

Population is a distinct set of elements, people, events or a group of items that are being studied. The area of the study is Kenya<sup>30</sup>. The study covers the period between 1980 and 2018. The study will use published data from the statistical abstract of the Kenya National Bureau of Statistics, Economic survey, and world development indicators, the central bank of Kenya, as well as other credible and authentic sources.

### **2.3 Data Collection Procedure**

All the data used in the study came from secondary sources. Annual time series data for Kenya will be used from 1980 to 2018. The researcher obtained the information from the websites of the respective organisations. In particular, data on FDI was collected from the World Development Indicator, this is because FDI is always reported by the host nation and the investing country, and the website contains data from both countries. External debt was collected from the International debt statistics, Foreign portfolio investment was collected from World Development Indicator, Foreign exchange reserve data was sourced from the Central Bank of Kenya database as they are the custodian of foreign reserve and local currency<sup>31</sup>. Fiscal Balance data

was sourced from Kenya Revenue Authority because this is the agency responsible for collecting revenue and measure it against how it is spent. Finally, current account balance data was sourced from the World Integrated Trade Solution website, as it contains the records of foreign transactions of every country including exports and imports.

### 2.4 Model Specification

Based on the review of empirical and theoretical literature, the study uses a time series analysis to estimate the effect of FDI on external debt in Kenya. The advantage of this approach is that it gives the researcher a large data point, increasing the degrees of freedom and reducing collinearity among explanatory variables, hence improving the efficiency of econometrics estimates. Secondly, the time-series also reduces and sometimes even eliminates estimation bias<sup>32</sup>.

Based on the theoretical and empirical review of literature, external debt is a function of foreign direct investment, foreign portfolio investment, reserve assets, fiscal balance, and current account balance. Accordingly, the empirical model is specified as:

$$ED_t = \beta_0 + \beta_1 FDI_t + \beta_2 FPI_t + \beta_3 RA_t + \beta_4 FB_t + \beta_5 CAB_t + \mu_t \quad 3.1$$

Where  $ED_t$  is external debt,  $FDI_t$  is foreign direct investment,  $FPI_t$  is foreign portfolio equity,  $RA_t$  is a foreign exchange reserve,  $FB_t$  is fiscal balance,  $CAB$  current account balance,  $\mu_t$  is the stochastic error term, while  $\beta_1, \beta_2, \beta_3, \beta_4,$  and  $\beta_5$  are partial slope coefficients.

To be able to measure the long-run and short-run effects the study uses Autoregressive Distributed Lag Analysis developed by<sup>36</sup>. The model is ideal in estimating time-series variables in a single equation as opposed to other methods like Vector Autoregressive and Vector Error-correction models that estimate the variables in simultaneous equations<sup>33</sup>. The other feature that has endeared ARDL model to econometricians is its ability to make cointegration of non-stationary series equal to the error-correction process<sup>34</sup>. Equation 3.1 is thus re-parameterized into an ARDL equation in the form:

$$\Delta ED_t = \alpha_0 + \sum_{j=1}^n b_j \Delta ED_{t-j} + \sum_{j=0}^n c_j \Delta FDI_{t-j} + \sum_{j=0}^n d_j \Delta FPI_{t-j} + \sum_{j=0}^n e_j \Delta RA_{t-j} + \sum_{j=0}^n f_j \Delta FB_{t-j} + \sum_{j=0}^n g_j \Delta CAB_{t-j} + \delta_1 ED_{t-1} + \delta_2 FPI_{t-1} + \delta_3 RA_{t-1} + \delta_4 FB_{t-1} + \delta_5 CAB_{t-1} + \epsilon_t \quad 3.2$$

Where:

$\Delta$  denotes the first difference operator. The parameters  $\delta_i$  are the long-run multipliers,  $b_j,$  to  $g_j$  function as the short-run dynamic coefficients, while  $\epsilon_t$  is the white noise errors.

## III. Result

This chapter contains data analysis, presentation of results and interpretation of findings. Data presented include test for unit root, cointegration test and regression results. The chapter also contains discussion of results based on reviewed literature.

### 3.1 Unit Root Test

The unit root is a problem that is mainly faced by time-series data. It refers to a situation where the mean and variance of the variable are not consistent over time and thus makes the data non-stationary. If ignored and data is regressed, it is likely to result in spurious estimates<sup>35</sup>. The study used Augmented Dickey-Fuller and Phillips Perron tests to diagnose for unit root.

FDI, Foreign Portfolio Investment, fiscal balance and current account balance were found to be stationary in levels. External debt and reserve asset, on the other hand, were found to be non-stationary in levels and had to be differenced once to become stationary. ARDL model requires the variables to be either integrated of order zero or integrated of order one even though the data is estimated in levels<sup>33</sup>. It can, therefore, be concluded that all the variables in the dataset have met this condition. Results are as displayed in Table no 1.

**Table no 1: Unit Root Results**

es	Variabl	ADF Test Z(t)		PP test Z(t)		Order of Integration
		At level	First Difference	At level	First Difference	
	<b>External Debt</b>	-1.281	-6.166 ***	1.402	-6.171 ***	I (1)
	<b>Foreign Direct Investment</b>	-4.454**	-	4.450**	-	I (0)
	<b>Foreign Portfolio Investment</b>	-5.467***	-	5.44***	-	I (0)
	<b>Reserve Asset</b>	-2.076	-6.314***	2.103	-6.700***	I (1)
	<b>Fiscal Balance</b>	-	-	-	-	I (0)

<b>Current Account Balance</b>	5.688***	-	5.76***	-	I (0)
	3.035**	-	3.087**	-	

\*\*\* Coefficient is Significant at 1 per cent (2-tailed)

\*\* Coefficient is significant at 5 per cent (2- tailed)

### 3.2 Lag Selection

Before estimation, it is vital to determine the optimal length of lags in an ARDL model due to their sensitivity to length. The study used Akaike Information Criteria due to its suitability for smaller samples, that is, with less than 60 data points. From Table no 2 it can be inferred that the model should have a maximum lag length of 4 going by the Akaike Information Criteria (25.1604\*).

**Table no 2: Lag Selection Criteria**

Lag	LL	LR	df	P	FPE	AIC	HQIC	SBIC
0	-498.647				134561	28.8369	28.929	29.1036
1	-424.968	147.36	36	0.000	16146.1*	26.6839	27.3282*	28.5503*
2	-398.426	53.084	36	0.033	33553.8	27.2244	28.4209	30.6906
3	-347.966	100.92	36	0.000	25716	26.398	28.1468	31.464
4	-290.308	115.32*	36	0.000	30100.5	25.1604*	27.4615	31.8262

### 3.3 Cointegration Test

Bounds test for cointegration was conducted on the data to determine whether there is the existence of a long-run relationship among the variables. The null hypothesis of this approach states that there is no level relationship while the alternative hypothesis states that there is a level relationship. Using this method cointegration is established when the values of F and t are far from zero compared to the critical values for the variables that are integrated of order zero.

Table no 3 shows cointegration results obtained using Bounds cointegration approach. By focusing on critical values at 5 per cent level and variables integrated of order zero, the corresponding F-statistic value is 3.037 and the t-statistic -2.386. On the other hand, the F value is 4.132 and t value is -3.757. Comparing the critical values to the F and t values, it is established that the latter is far from zero than the critical values. The null is rejected and the study concludes that there exists a level relationship among the variables. This suggests that the model containing external debt, FDI, foreign portfolio investment, reserve asset, fiscal balance and current account balance exhibit a long-run relationship.

**Table no 3: Bounds Cointegration Test**

Test	10 per cent		5 per cent		1 per cent		P-value	
	1(0)	1(1)	1(0)	1(1)	1(0)	1(1)	1(0)	1(1)
<b>F statistic</b>	2.477	3.932	3.037	4.722	4.434	6.675	0.014	0.084
<b>t- statistic</b>	-2.448	-3.759	-2.836	-4.230	-3.639	-5.208	0.008	0.100

**F = 4.132**  
**t = -3.757**

**4.7 Regression Results**

An ARDL (1, 0, 2, 2, 2, 3) regression was estimated at levels data as per Akaike Information Criterion. ARDL regression yields both long-run and short-run coefficients.

Table no 4 displays results for summary statistics. The coefficient of determination of the entire model is 0.7414, this shows that 74.14% of the variation of changes in external debt is explained by changes in FDI, foreign portfolio investment, reserve asset, fiscal balance and current account balance while 25.15% is explained by other factors that are not captured in the model. The estimated model is thus a good fit.

**Table no 4: Results for Summary Statistics**

Sample: 1983 - 2018	Number of obs =	36
	R-squared =	0.7414
	Adj R-squared =	0.5474
Log likelihood = -114.9413	Root MSE =	7.9072

Table no 5 displays ARDL regression results. The speed of adjustment coefficient is -0.4121 and significant at 1% (P-value=0.001). This confirms the presence of long-run association that had been established previously by Bounds test. Specifically, the results illustrate that any deviation in the long-run will be stabilized at 41.2% adjustment rate per year<sup>36</sup>.

**Table no 5: Estimated Long-run Coefficients Using the ARDL Approach**

	D.ED	Coef.	Std. Err.	t	P>t
<b>ADJ</b>					
	ED				
	L1.	-0.41211	0.109687	-3.76	0.001
<b>LR</b>					
	<b>Foreign Direct Investment</b>	10.710	5.6987	1.88	0.075
	<b>Foreign Portfolio Investment</b>	-19.2213	6.6643	-2.88	0.009
	<b>Reserve Asset</b>	-11.5484	1.9103	-6.05	0.000
	<b>Fiscal Balance</b>	2.4066	4.8842	0.49	0.628
	<b>Current Account Balance</b>	0.3749	1.4974	0.25	0.805

Table no 6 displays the short-run coefficients obtained using the Autoregressive Distributed Lag analysis.

**Table no 6: Estimated Short-run Coefficients Using the ARDL Approach**

<b>SR</b>					
<b>Foreign Portfolio Investment</b>					
	D1.	6.6251	2.2492	2.95	0.008
	LD.	3.0233	1.6162	1.87	0.076
<b>Reserve Asset</b>					
	D1.	4.5727	1.1240	4.07	0.001
	LD.	1.5059	1.1452	1.32	0.203
<b>Fiscal Balance</b>					
	D1.	-0.402	1.6092	-0.25	0.805
	LD.	1.2255	0.9411	1.3	0.208

<b>Current Account Balance</b>				
D1.	-0.8932	0.5207	-1.72	0.102
LD.	-0.0702	0.4648	-0.15	0.881
L2D.	0.5890	0.3625	1.62	0.120
_cons	53.663	13.3741	4.01	0.001

## IV. Discussion

### 4.1 Foreign Direct Investment and External Debt

The estimated long-run coefficient for FDI is 10.710 and statistically significant at the 10 per cent level (0.075). The findings reveal that a unit rise in FDI will result in a 10.710 unit rise in external debt stock. The findings do not agree with the theory of FDI orientation by<sup>37</sup> that postulates that FDI increase leads to a reduction in external debt through the BOP channel. The capital inflow as a result of FDI is bound to lead to an increased production capacity of the country and eventually translates to increased exports and low imports. This adjustment further does not necessitate a country to borrow to finance imports and thus this will result in decreased debts.

These results coincide with the assertions by<sup>5, 6, 7, 8</sup> that capital flows are highly volatile compared to other forms of international flows. This feature makes them prone to macroeconomic shocks that are likely to negatively impact external debt stock.

### 4.2 Foreign Portfolio Investment and External Debt

Results provided in Table no 6 reveal that there is a positive short-run relationship between Foreign Portfolio Investment and External debt in Kenya. The current coefficient for Foreign Portfolio Investment is 6.6251 and significant at 5% level (P-value=0.008), meaning that a unit increase in current foreign direct investment will lead to a proliferation in external debt by 6.651 units and vice-versa. The same results are obtained for the first lag which has a coefficient of 1.509 and significant at 10% (P-value= 0.0076). These results indicate that a unit increase in foreign portfolio investment in the current year will result in an increase in external debt in the following year by 1.509. These results disagree with the empirical findings because foreign portfolio investment is expected to have an inverse relationship with external debt<sup>29, 38</sup>. It is, however, worth noting that, the effect reduces from the current to the subsequent year.

The long-run relationship between foreign portfolio investment and external debt turned out as expected. The coefficient is negative (-19.2213) and statistically significant at 5% (P-value=0.009). These results mean that foreign portfolio investment negatively affects external debt in the long-run. A unit increase in foreign portfolio investment will lead to a 19.2213 unit reduction in external debts. These findings are in tandem with a priori and other empirical works. According to<sup>39, 40</sup> foreign portfolio investment is vital in reducing overreliance in external debt.

The difference in the signs of the long-run and short-run coefficients can be explained by the concept of time lags in economics. An economic action may take some-time for its economic consequences to be felt. In the short-run, foreign portfolio investment especially those that flow in terms of bond leads to increase in the debt stock this situation changes in the long-run due to the effects that it has in the economic development stimulation.

### 4.3 Reserve Asset and External Debt

Findings in Table no 6 reveal that there is a positive short-run relationship between reserve asset and external debt. The short-run coefficient is 4.5727 and statistically significant at 1% (P-value=0.001). A unit increase in reserve asset will lead to a 4.5727 increase in external debt in the short-run. According to<sup>41</sup> international reserve increases short-term external debts until the period when the exchange rate appreciates. A high foreign reserve may create an impression that a country is good in debt management and therefore, make the country attractive for more debts to build up the reserve<sup>42</sup>.

As projected, the long-run coefficient of reserve asset is negative and statistically significant (beta = -11.5484, P-value=0.000). These results mean that in the long-run, a unit increase in reserve asset will lead to an 11.5484 units decrease in external debt and vice-versa. The findings conform to the three-gap model proposition that postulates that reserve asset is set to reduce the debt stock in the long-run because the extra foreign reserve accumulated can be used to service external debt and meet external debt obligation. Accumulation of international reserve especially through foreign exchange reserve is vital in financing mature long-term external debts and can especially come in handy in times of crisis<sup>43</sup>.

## **V. Conclusion**

From the foregoing findings and discussions, it can be concluded that the study has successfully met its main objective of investigating the effect of foreign capital flows on external debt in Kenya. The study had conceptualized that the main components of foreign capital flows namely, FDI, foreign portfolio investment and reserve assets negatively affect external debt in Kenya.

The conclusion drawn from the first objective that aimed to establish the effect of FDI on external debt, the study finds evidence of a positive long-run nexus between FDI and external debt in Kenya. Specifically, Increase in FDI in Kenya is likely to lead to a surge in external debts in Kenya in the long-run. The study had obtained a high standard deviation value for this variable in 39 years. The higher standard deviation could point to a possible case of volatility in FDI.

The second objective aimed to determine the effect of foreign portfolio investment on external debt. The study concludes that foreign portfolio investment proliferates external debt in the short-run. In the long-run, however, foreign portfolio investment positively affects external debt and thus it is vital in reducing overreliance in external debt.

The conclusion drawn from the third objective is that sought to examine the effect of reserve assets on external debt is that reserve asset causes external debt to increase in the short-run but in the long run it results in its reduction. Eventually, accumulation of international reserve, especially through foreign exchange reserve, is vital in financing mature long-term external debts.

## **VI. RECOMMENDATIONS**

Based on the findings of the study, the study found out that FDI flows in Kenya is relatively volatile, a situation that resulted in an increasing relationship with external debt in the long-run. A preponderance amount of literature has shown the benefits of FDI among them being a reduction in external debt. Failure of the study to find the evidence of a positive impact FDI on external debt and confirmation of high levels of volatility means that these drawbacks emanate from domestic policy issues. This study, therefore, recommends that the government should focus on policies that are geared towards creating a transparent, far-reaching and operational enabling environment for investment. This measure can be effectively carried out by focusing on rigorous macroeconomic and fiscal policies, together with exchange rate flexibility while at the same time curbing the risk associated with capital flow risks. These measures may also be vital in dealing with surges in inflows and disruptions in outflows.

Secondly, the study established that in the long-run foreign portfolio investment result in a significant reduction of external debt stock but a significant increase in the short-run. In light of these findings, it will be prudent for the government to strive in coming up with deliberate efforts to attract foreign portfolio investment. The policies should be formulated with a long-term view in mind to make the most of the beneficial impact of foreign portfolio investment on external debt. It is evident from the analysis that in the short-run foreign portfolio investment has a detrimental effect on external debt, therefore, policies that seek to attract it in the short-run should not be encouraged.

Finally, the study established that reserve asset is vital in lowering the long-term external debt burden, it was also found to be having high levels of volatility. There is a need to pursue policies that would lead to growth in reserve assets. Specifically, the central bank should strive to accumulate reserve assets and make them more liquid to be in a position to repay the debts and absorb shocks. There is a need to expand the avenues of collecting reserve assets and especially foreign reserves. These avenues should come from more stable official and market sources.

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Shem K. Buuri, et. al. "Foreign Capital Flows and External Debt in Kenya: Evidence from the ARDL Bounds Testing Approach." *IOSR Journal of Economics and Finance (IOSR-JEF)*, 11(3), 2020, pp. 53-61.