IMPACT OF RISING PUBLIC DEBT IN KENYA ON FOREIGN EXCHANGE RATE

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ABSTRACT

Kenya is a growing nation with a continuous increase in its public expenditure. To meet its budget requirement, the Kenyan governments have resorted into heavy borrowing both internally and externally. While the activities taken by the governments may stimulate domestic economy, the large debt may lead to reduced foreign investments. The external debt payments may involve demand for foreign currency, and if the debt is beyond the production capacity of the country it may lead to inflation. If inflation is high, the debt will be serviced with cheaper real dollars affecting the counties exchange rate. However, a country's currency exchange rate is an important determinant of its economic health as it plays an important role in a country's trade, which is critical to its development. It is towards this back borne that this paper keenly evaluated how the rising public debt in Kenya affects its foreign exchange rate. Monthly secondary data over a study period of 18 year (2001 to 2018) was to show the effect using a trend analysis and a time series regression model. The study scope was justified by the quick increase in the country's external debt over the past few years. The study found that foreign public debt is positively related to the foreign exchange rate in Kenya. It is therefore important for the government to model the funding of the fiscal deficit by use of a healthy foreign debt that does not affect its foreign exchange rate adversly.

__Key words:__ Kenya; Foreign Public Debt; Foreign Exchange Rate.

INTRODUCTION

Globally, countries have accepted budget deficits as normal, leading to heavy borrowing. This is not only a trend for both the developing and developed nations. For example, the USA has accumulating huge debt to a ratio of debt to GDP of 107%. Japan has the highest debt to GDP ratio which stands at 239% however, over 90% of Japan's debt is domestic (World Economic Forum, 2018). The debt in Kenya has grown over time to KES 4.5 trillion which is 57% of the country's GDP.

In Kenya, by end of year 2017, the ratio for the foreign to domestic debt was 48:52 of the total public debt (CBK public debt numbers 2017). This rate of the debt is growing so quickly that, statistics show that the amount of public debt held has doubled in the last four years only. This trend becomes worrying as economists join the political class in wondering if the country's debt is becoming unsustainable. Sustainability enhances confidence that the country is able to pay back borrowed funds and interest thereon. This confidence attracts foreign investment and boost countries currency exchange rate. Though debt inflows spur economic growth, debt payments may also have a negative impact on the economy (Elbadawi et al., 1997). Unsustainable foreign debt repayments will negatively affect the exchange rate and lead to depletion of foreign exchange reserves.

Increase in the public expenditure coupled with low capital formation in many developing countries, has resulted to huge deficit which are expensive to service (Saheed, Sani & Idakwoji, 2015). The problem arises when ratio of debt to GDP is high. When the GDP of a country is low, and the level of deficits is high, that state is more likely to default on the loan repayment (Ndikumana & Boyce 2003). While developing counties have traditionally focused on foreign debt (Ugo 2008) the indirect effect on its economic development should be well monitored.

The big question therefore is the growing rate of debt in Kenya affecting its interest rate. Use of different currencies requires an exchange rate to convert one currency to another, for international trade and investment. The exchange rate is how many units of one currency is exchanged for a unit of another currency (Jomo A, Obwogi J & Kiptui M. 2019). Currency value is given all the times in terms of another currency and there are two ways of expressing the exchange rate; a direct or indirect. Thus the exchange rate is quoted on spot rate for trade to take place within two business days (Suranovic, 2010).

An Exchange rate regime is either fixed or floating, in Kenya there is a flexible exchange rate managed floating with no predetermined exchange rate path regime. Kenya has gone through several developments regarding the exchange rate regime. From 1960 to1970s, fixed exchange rate was maintained then pegged to the US dollar till 1974. This resulted to an erratic movement of nominal exchange rate relative to dollar, this depreciated the shilling by 14% in a span of 7years (1974-1981). Regime changed by crawling peg at the end of 1982 till 1990. Then a dual exchange rate system was embraced that lasted until October 1993. After several devaluations, there was abolishing of the official exchange rate allowing the shilling to float (Jomo A, Obwogi J & Kiptui M. 2019).

There has been a continuous trend of exchange rate fluctuations in Kenya. Since the 1980s, the foreign exchange rates have been on a downhill trend until the 21st century when it achieved relative stability due to economic and political transformation (Odera 2015). Under floating exchange rate regime, the external imbalances are reflected in the exchange rate movement rather than the reserve movement (Njuguna, 2000). In floating regime of exchange rate, the currency appreciates when its value rises in terms of another and depreciates when its value falls in terms of another currency (Suranovic, 2010).

A major concern arising is the volatility of the exchange rate in Kenya which has seen trends of weakening and strengthening of the shilling against major global currencies. This is a key concern in monetary policy achievement of price stability and economic growth objectives (Kibiy J. & Nasieku T. 2016). The exchange rate volatility affects the economy through domestic price determination, trade flows and competitiveness of domestic industries in the international market (Odera, 2015).

Statement of the Problem

The Kenyan government has resorted into heavy borrowing both internally and externally. This has led to the countries debt rapidly increasing over the last four years to KES 4.5 trillion in 2017/2018 financial year. This is 57% of the country's GDP according (CBK report 2017). While the activities taken by the governments may stimulate domestic economy, the large debt may lead to reduced foreign investments. If the debt is beyond the production capacity of the country it may lead to inflation, this results to high debt servicing cost affecting the counties exchange rate (Gokhale et al., 2013).

Much has been said on the effect of public debt on the exchange rate. Amongst, Saheed et al. (2015) found that foreign debt, foreign reserves and debt servicing are significant in explaining changes in the exchange rate. Further Odera (2015) in a study done in Kenya documented that foreign public debt has a negative and significant effects on the exchange rate, whilst the interest rate had a positive significant impact on the exchange rate. On the other hand, Kibiy J. & Nasieku T. (2016) finds out that the money supply contributed majorly to the volatilities of the three exchange rates namely: KES/USD, KES/EUR & KES/JPY. However they argued that inflation had an insignificant though positive effect on the Yen. This finding was contradicted by Irungu (2017) who argued that inflation had a significant negative relationship to exchange rate. It is against this back

borne that this paper keenly evaluated the effect foreign public debt in Kenya on the exchange rate.

LITERATURE REVIEW

Theoretical Literature

Classical Theory of Public Debt

Classical economists discussed the issue of public debt at length. Most classical economists who advocated for minimum state intervention in the economy were against governments borrowing funds for consumption and expenditure. They argue that public borrowing is unproductive since capital is consumed and lost but also the annual interest payments burdened nation. Adam Smith argues that governments have only three roles to play; protection of members of society from injustice and oppression, establishing and maintaining certain public works and certain institutions. According to Smith, these public works should be self-sustaining and supported to those who use them, thus eliminating the need to acquire public debt. Classical economists specifically pointed out issues on sustainability of public debt. David Ricardo referred debt as one of the worst sources of funds invented to afflict a nation. Ricardo pointed out that the annual interest transfer is the burden of debt.

The classical theory on public debt was criticized on the grounds that not all government expenditure is unproductive. Therefore, public borrowing is not always a burden to the country.

Asset (portfolio) market approach

Exchange rate is used in the international market to compare the prices of goods and services. It also compares the returns of foreign investments to the return of domestic assets. In 1970 the monetary approach to balance of payment was the main focus, with attention on international trade flows as primary determinant of the exchange rate. Due to financial liberalization the financial assets have far exceeded the trade in goods and services.

In some instances, countries with trade surplus have seen their currencies depreciate while those with trade deficit have seen their currency appreciate, this necessitated Paul R. Krugman to devise a new approach; the asset or portfolio approach, it establishes the relation between interest rates and exchange rate, with risk and liquidity as the two main attributes. Investors prefer holding assets with a high expected rate of return. This approach on foreign exchange determination emphasizes financial markets for assets while the traditional view, exchange rate gets adjusted to equilibrate the trade in international market.

The similarity between exchange rate and other assets prices in highly organized markets have a common general approach to analyze the behavior of such asset prices. This model as applied in exchange rate, show that that the current exchange rate is related to the prevailing and future conditions that can affect the exchange rate market. The model show that the exchange rate at time *t* that yields equilibrium in foreign exchange market is affected not only by factors of supply and demand but also by the rate at which the exchange rates change. This is a determinant of domestic and the foreign investments moving either into or out of foreign investment depending with their expectations of the exchange rate movement.

This approach is more appropriate to explain the offshore investments on the government issued securities especially the infrastructure bonds and consequently affecting the exchange rate.

A change in the current exchange rate is caused by a change in the future expectations of exchange rate. This can be either a fall or a rise in the expectation which similarly cause a fall or a rise of the current exchange rate.

Balance of payments (BOP) approach

This is one of the structural models of exchange rate determination theory, where the domestic price of a foreign currency is determined just like the price of any commodity through the law of supply and demand. The flow of the foreign currency both inward and outward is created by international transaction. The supply and demand of the foreign currency arise form BOP related flows, that is, trade in goods and services, portfolio investment and direct investments. The exchange rate will move to respond to BOP imbalance and therefore restore the BOP to equilibrium. The BOP tracks all financial flows crossing the boarders of a country during a given period of time. The imports crate a negative financial inflow (positive financial outflow) while the exports on the other hand creates a positive financial inflow (negative financial outflow), all inflows are credits and outflows are debits to the BOP.

The BOP has the following 3 accounts namely; the current account, capital and financial account and the official reserve account. The current account records the balance of goods and services in export and imports, the capital account includes short-term and long-term capital transactions i.e. Direct investments, portfolio investment and capital flows, the financial account has all transactions that involves changes of ownership in an economy for the foreign financial assets and liabilities. The official reserves account reflects the net change in government's international reserves; it has two components; one that show the change in holding of foreign reserves by the central bank and a second that show change in net borrowing of the central bank from other foreign central banks.

The monetary approach of BOP takes into account the capital account together with the current account and small official reserve account. A current account surplus equals capital account deficit. When a current account is in deficit, it shows either a country is accumulating debt or running down the current foreign assets stock. When the current account is in surplus, then the country is either repaying debt or building up its stock of foreign assets. A current

account deficit means that the country is moving liquidity out of the international system, and thus from the international financial system it's a net borrower of funds.

In a fixed exchange regime if the central bank supplies more money than required in domestic market the prices of the domestic goods will increase due to the excess money chasing few goods and services since the output is fixed in the short run, and foreign goods and services become relatively cheaper, therefore, the excess money leaves the county as capital outflows. This process continues till the domestic price equates the world prices through arbitrage following the Law of one price in purchasing power parity theory.

On the other hand, in a flexible rate regime, the investors are keener on the return for their investment and thus the capital account depending on the interest rate deferential. If the BOP is at the equilibrium, an increase in domestic interest rates relative to world prices will attract inflows from investors as they look to lock in the higher return, demand for the domestic currency increase resulting to domestic currency appreciation. The appreciation brings back the BOP to the equilibrium as the foreign goods and assets will become relatively cheaper than domestic goods and assets. Therefore, under flexible exchange rate regime, the exchange rate appreciates or depreciates to equilibrate the BOP.

The Ricardian Equivalence Theory

Ricardo was of the opinion that the primary burden to a society is when a country wastes public resources regardless of whether the source of the funds was taxes or debt. He stated that expenditures of the government are mainly to sustain unproductive workers Robert (1942). He also argues that servicing foreign debt affects the exchange rate since it requires repayment in foreign currency. More so, poorly performing loans create high demand for foreign currencies and increases exchange rates

(Saheed et al., 2015). This is because these loans do not generate foreign currency inflows in to the country.

The Ricardian Equivalence Theory which is also known as Barro-Ricardo proposition, which was advanced by David Ricardo in the 19th century and revised by Professor Robert Barro. This theory proposed that debt funded government spending in attempt to stimulate an economy is ineffective in changing aggregate demand. This was supported by the explanation that the public would not increase spending but they would save in anticipation of future increases in tax that will be used to settle the debt (Bernheim, 1987). This argument was hinged on the argument that an individual's consumption is based on the lifetime present value of after tax-income.

Ricardo's views on debt and government spending have been criticized extensively. A modern argument that supports government spending funded through debt, argues that high levels of public spending acts as a stabilizer to a fluctuating economy. During recession, public spending eases the burden of falling household incomes. Furthermore, falling household incomes means that less tax is collected by the government. Public expenditure mitigates the risk of a downturn in the business cycle during recessionary times. Governments are able to undertake this stabilization role since they can maintain the level of expenditure by borrowing to meet the tax revenue shortfall (Churchman, 2001).

Empirical Literature

Foreign Debt and Foreign Exchange Rate

The level of public debt has also been associated with the proportion of economic growth, interests, and foreign exchange rates. Foreign debt is among the significant variables that cause exchange rate to be volatile over short period as well as long period of time (Fida, Khan and Sohali, 2012).

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Foreign debt is a significant variable in Kenya. Previously, the country has relied heavily on concessionary loans and budget deficit support from development partners abroad. According to data from central Bank of Kenya, foreign debt stands at 51% of total debt as at April 2018 statistics. Even though the proportion of foreign debt compared to domestic debt has been on the decline, it still is a significant variable and in this section, we review empirical literature on it.

Palaic, et al. (2017) analyzed the impact of exchange rate depreciation on foreign debt in Croatia. They empirically analyzed monthly data on gross foreign debt and nominal exchange rate using Johansen cointegration approach to test existence of cointegration among the variables. The results pointed to existence of statistically significant positive effect of nominal exchange rate on foreign debt. Thus, increase in Croatia's external indebtedness considering that foreign debt is mostly denominated in foreign currency, is unfavorable.

In Sub-Saharan African (SSA) countries, Greene J. (1989), in his study on the external debt problem in SSA, he finds out that the countries continue to face a very serious growing external debt problem. The ratio of external debt to GDP had raised 3 folds since 1980, this confirms that the debt problem has been there for decades and still continues to pose a challenge in the present time.

Public debts and private assets, explaining the capital flight from sub Saharan African counties; they argue that external borrowing is significant and positively related to capital flight (Ndikumana & Boyce 2003). They have explored other factors; interest rate differential, inflation, exchange rate appreciation, fiscal policy indicators, financial development, and indicators of the political environment and governance. The results showed that external borrowing is the most important determinant of capital flight. In the period 1970 -1996 for every

dollar roughly 80 cent that flowed in the region as foreign loan flowed out as capital flight in the same year, suggesting debt –fueled capital flight; thus, calling for reforms on both creditors and debtors, to promote responsible lending and accountable debt management.

Nwanne and Eze (2015) in their study assessing the effect of external debt servicing and receipts on exchange rate in Nigeria, the variables used are; Naira exchange rate, external public debt receipts and the public debt servicing as proxy of external debt servicing. They applied analytical techniques of ordinary least square (OLS) and co-integration test. The results showed that, external debt receipts positively and significantly affect the value and exchange rate of naira while debt servicing affects negatively the value and naira exchange rate. Governments should always strive to secure external loans tied to production-based project for financing.

A study by Sene (2004) examined the relationship between external debt and the equilibrium real exchange rate for developing countries. The researcher used the Reinhart-Rogoff Model and discovered that debt overhang leads to real exchange rate appreciation in the long run.According to Kibiy J. & Nasieku T. (2016) interest rates, inflation, external public debt and money supply as determinants of exchange rate volatility in Kenya shilling against world major currencies.

METHODOLOGY

A quantitative research design was adopted in this study. Monthly secondary data for the foreign USD against the Kenyan shilling and foreign public debt the period covering the 2001-2018 was used for analysis using a time series model.

Time series regression model specification

$FX = \beta_0 + \beta_1 FD + \varepsilon$

Where

FX is Foreign Exchange Rate is the dependent variable; calculated as the standard deviation of the

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moving average logarithm of foreign exchange rate of the US dollar against the Kenya shilling.

FD- Foreign Public debt is the explanatory variable in this model, it is also a cumulative debt sourced outside the country at a certain point in time. It is the monthly data in million Kenyan shillings.

Table 1: Descriptive statistics

	Foreign exchange	Foreign Debt
Mean	0.014674	974098.1
Median	0.008374	787192.0
Maximum	0.117221	2357226
Minimum	0.000389	396564.0
Std. Dev.	0.019349	571891.8
Skewness	2.874007	1.053361
Kurtosis	12.69005	2.918846
Jarque-Bera	698.1517	24.44673
Probability	0.000000	0.000005
Sum	1.937010	1.29E+08
Sum Sq. Dev.	0.049045	4.28E+13
Observations	426	

As shown on Table 1, the test statistics is a chi-square distribution for skewness and kurtosis. The test was carried out against the null hypothesis of normal distribution, whereby the values of skewness showed that the variables were not all normally distributed since their values disperse from zero 1.038099 and -0.41684 for foreign debt, and foreign exchange rate volatility respectively. The Kurtosis values showed that some variables were above or below the kurtosis range of normal distribution. Foreign exchange volatility kurtosis exceeded the 3 and therefore was peaked (leptokurtic) relative to normal distribution, while the foreign public debt is flat (platykurtic) relative to the normal distribution.

The Jarque Bera test was distributed as chi-square with 2 degree of freedom. The probability in absolute terms; 0.000000, 0.000005, for the foreign exchange rate and foreign public debt respectively. Therefore, the null hypothesis of normal distribution was rejected at 5% significance level. The interpretation of these statistics was that the distribution of variables was not normal.

Trend Analysis

Figure 1 showed the trend of the monthly foreign exchange rate in Kenya over a period of 18 years. As shown in the figure, the foreign exchange rate in KES against the USD had not been stable but had been moving up and down. From the figure, it was clear that the KES to USD rate had been moving within a lover board of 62 in 2009 and an upper board of 102 in the year 2018. Its worth noting that the rate was low in 2007 and 2008 irrespective of the instability that was in the country as a result of the election violence. The trend steadily grew between 2011-2015 with peak period recorded in 2016. Thereafter, from

2016, the trend had been stable with very minimal fluctuations at an average 102 KES/USD.

Figure 2 showed the projected forecast of the rate in the next 5 years from 2018 to 2023. This forecast was guided by the previous 18 years data. The figure showed that the rate would continue to increase steadily up to a maximum of 110 KE/USD holding all other factors constant.
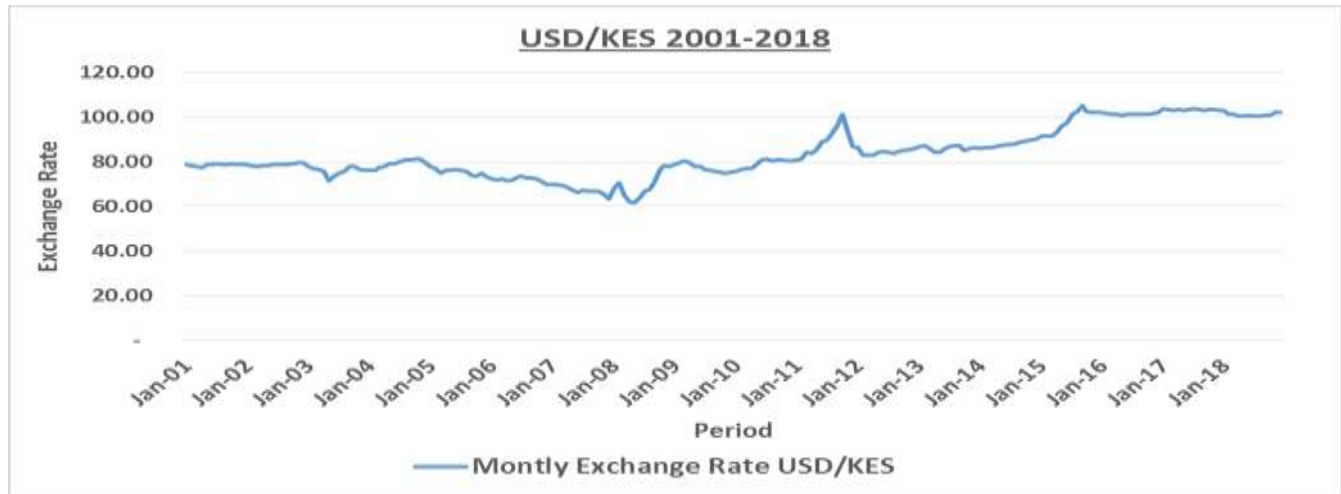

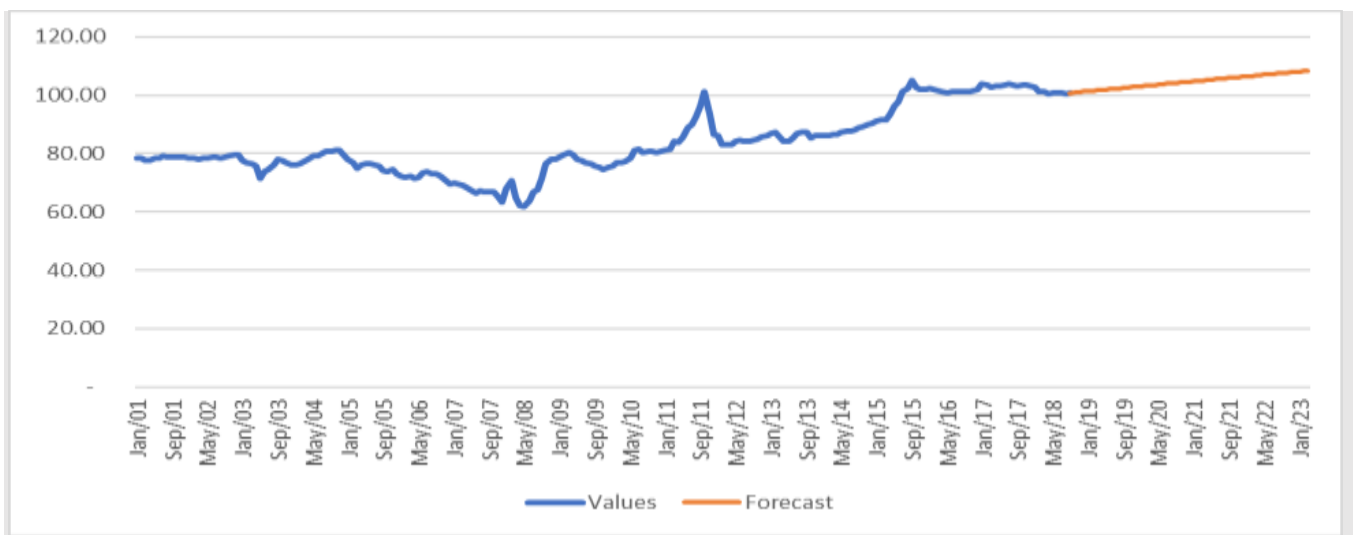*Figure 1: Monthly Foreign Exchange Rate*

Figure 2: Monthly Foreign Exchange Rate Forecast

Regression model analysis

The 18 years monthly observations were tested for a time series regression model using the following model specification tests.

Unit root test

The augmented dickey fuller (ADF) test was used to ascertain their stationarity properties for the monthly data on variables for the period 2001M1 to 2018M12.

The results of the ADF test revealed that foreign exchange rate was stationary while the foreign public debt was non-stationary but become stationary at first difference this is as shown in Table 2 and 3 respectively. None of the variables is stationary at second difference which is a prerequisite of using the ARDL model.

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Table 2: ADF at Level

At Level			Test critical values:		
VARIABLES	Prob.*	ADF test statistic	1% level	5% level	10% level
FXD	0.0000*	-7.82994	-4.029595	-3.444487	-3.147063
RSV	0.4490	-2.2661		-3.44449	-3.14706

Table 3: ADF at 1st difference

1st Difference			Test critical values:		
VARIABLES	Prob.*	ADF test statistic	1% level	5% level	10% level
FPD	0.0000*	-15.2177	-4.05339	-3.45584	-3.15371
RSV	0.0000*	-11.3338	-4.03016	-3.44476	-3.14722

ARDL Cointegration test

The test for cointegration showed that there was cointegration, ADRL bound test F-statistic is higher than the lower bound critical value of 3.602 and upper bound critical value of 4.787 at 1% significance level. The bound test results showed that there was a long run relationship between the variables.

ARDL Long Run Form and Bounds Test and ECM regression

The long run results showed how the independent variables related to the dependent variable as in tables 4. The foreign public debt had a positive coefficient. The bound test results showed that there was a long run relationship between the variables. The F statistic was 10.63100 which was above both the lower and upper bound respectively and are significant at 1% levels revealing that there was cointegration.

Table 4: ARDL Long Run Form and Bounds Test

Levels Equation Case 2: Restricted Constant and no Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FPD	0.529236	1.412207	0.374758	0.7086
C	6.895791	6.370024	1.082538	0.2814

EC
FXV = (0.5292*FPD + 6.8958)

The ECM regression in table 5 had the short run estimates and the coefficient of the error correction term. The coefficient was significantly negative confirming the cointegration and this is the speed of adjustment of variables towards the long run equilibrium.

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Table 5: ARDL Long Run Form and Bounds Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FPD	1.545000	1.361273	1.134967	0.2590

EC = FXV - (-5.1270*DPD + 1.5450*FPD -0.7071*DDS -0.0843*FDS + 3.5681
   *RSV + 5.1391)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	10.13370		Finite Sample: n=80	
K	4	10%	2.303	3.154
Actual Sample Size	119	5%	2.55	3.606
		1%	3.351	4.587

Heteroscedasticity Test

Testing the residual of the model for serial correlation using the Breusch-Godfrey serial correlation LM (Lagrange Multiplier) test, heteroscedasticity test using the Breusch Pagan-Godfrey test and stability diagnostic using recursive estimation; CUSUM test and CUSUM of square test, as presented below:

Table 6: Breusch-Godfrey Serial Correlation LM Test

F-statistic	0.389760	Prob. F(2,103)	0.6782
Obs*R-squared	0.893845	Prob. Chi-Square(2)	0.6396

Table 7: Breusch-Pagan-Godfrey Heteroscedasticity Test

F-statistic	1.236166	Prob. F(13,105)	0.2647
Obs*R-squared	15.79538	Prob. Chi-Square(13)	0.2604
Scaled explained SS	8.113110	Prob. Chi-Square(13)	0.8362

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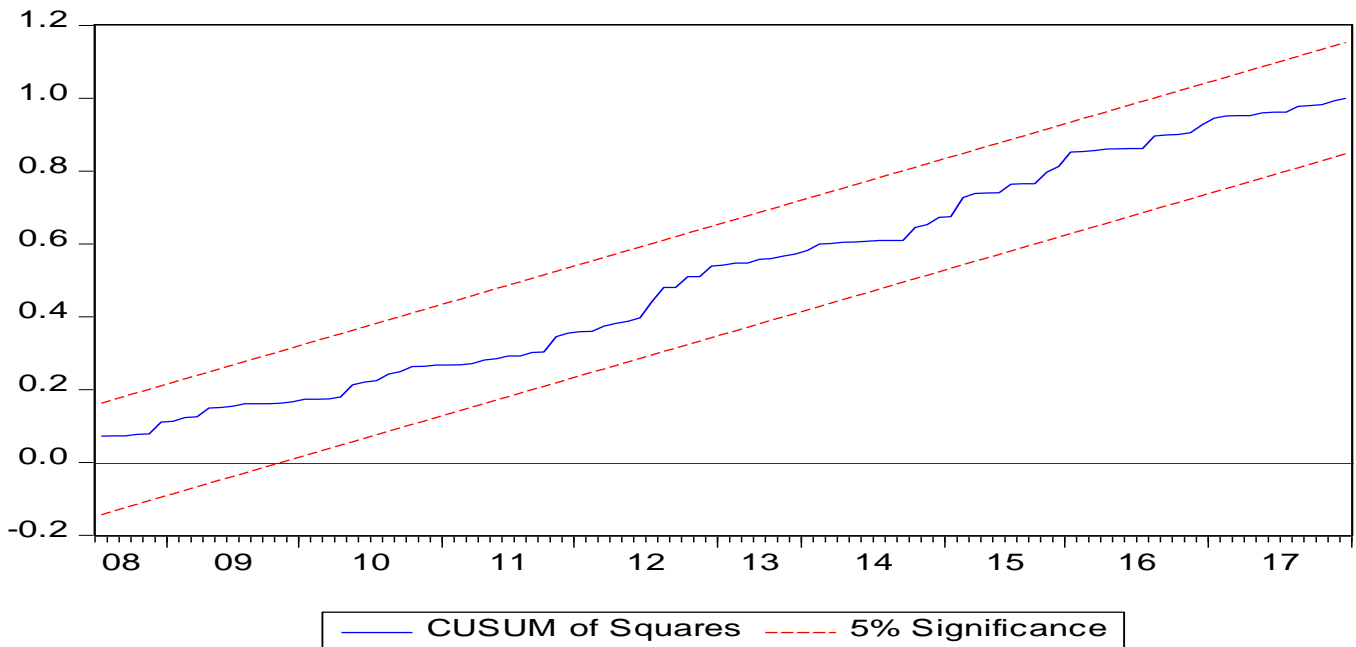
Figure 3: Stability diagnostic using recursive estimation

SUMMARY, CONCLUSION AND RECOMENDATIONS

The final model results indicated that a percentage change in the foreign public debt is associated with a 1.5450% change in the foreign exchange rate on average ceteris paribus in the long run. An increase in foreign public debt results to a 1.5450% increase in and foreign exchange rate volatility thus it has a positive but insignificant impact on foreign exchange rate.

The study concluded that the foreign public debt has an impact on the foreign exchange rate in Kenya. However, while the results showed that foreign public debt and foreign exchange rate in Kenya are positively related, this relationship was not statistically significant in both the short and long run.

The increase in foreign currency denominated debt leaves Kenya vulnerable to exchange rate risks and external shocks. It is also important to note that some foreign creditors dictate that the skilled labor and the raw materials have to be sourced from them before issuing loans, especially in the infrastructural projects. The income from such projects is repatriated back to the financing country rather than employing locals to improve local household incomes. The policy makers should therefore check keenly on the terms and conditions of such loans to avoid these vulnerabilities.

REFERENCES

Bernheim B. D., (1987) Ricardian Equivalence: An evaluation of Theory and Evidence. *NBER Working Paper No 2330.*

Central Bank of Kenya, impact of interest arte capping in Kenyan economy, March 2018.*Central bank Kenya [KE https://www.centralbank.go.ke/statistics/government-finance-statistics/*]

Central Bank of Kenya, Nineteenth Bi-Annual Report of the Monetary Policy Committee. *Issued under the Central Bank of Kenya Act, Cap 491 October 2017 https://www.centralbank.go.ke/uploads/monetary_policy_reports/907887845_19th%20MPC%20REPORT%20-%20October%202017.pdf*

Churchman N. (2001) Ricardo and Modern Public Debt Theory. In: David Ricardo on Public Debt. Studies in the History of Economics. *F Palgrave Macmillan, London.*

Elbadawi, I. A., J. B. Ndulu, and N. Ndung'u (1997). "Debt overhang and economic growth in Sub-Saharan Africa". *In Zubair Iqbal and Ravi Kanbur (Eds.), External finance for lowIncome Countries (49-76), IMF.*

Fida B.A., Khan M.M. and Sohali M.K. (2012). Analysis of Exchange rate Fluctuations and External Debt; Empirical Evidence for Pakistan. *African Journal of business management Vol 6(4), 1760-1768. Science and Education Publishing.*

Greene J. (1989). The External Debt Problem of Sub-Saharan Africa. *Staff Papers (International Monetary Fund), Vol. 36, No. 4 (Dec., 1989), pp. 836-874.Palgrave Macmillan Journals on behalf of the International Monetary Fund*

Gokhale S.M & Ramana J.V. (2013) Causality between Exchange Rate and Foreign   Exchange Reserves in the Indian Context *Global Journal of Management and Business Research Volume XIII Issue VII Version I* Online *2013* ISSN: 2249-4588 & Print ISSN: 0975-5853

Irungu E.N (2017). Factors that Influence Volatility in the Foreign Exchange Rate in Kenya. United States International University Africa. *http://erepo.*usiu*.ac.ke/bitstream/handle/11732/3326*

Kenya Government, June 2003. Economic Recovery Strategy for Wealth and Employment Creation 2003-2007. *Ministry of Planning and National Development.*

Kenya's Public debt status 2009 An Overview of The Current Status, Insights And Public Awareness report. A report by the Kenya Debt Relief Network. (KENDREN) Http://Www.Kendren.Org/Fileadmin/Pdf_Reports/The_State_Of_Kenyas_Debt_Report_2008.Pdf

Kibiy J. & Nasieku T. (2016).Determinants of Exchange Rate Volatility of the Kenyan Shilling against World Major Currencies. *International Journal of social sciences and information technology Vol.II, No. IX (Oct., 2016), 2412-0249.*

Krugman.R.P & Obstfeld M. (2003). *International Economics: theory and policy,* 6th Pearson Education, Inc. Boston USA.

Ndikumana, L. & Boyce, J. K., (2003). Public debts and private assets: explaining capital flight from Sub-Saharan African countries. *World Development*, *31(1), 107-130.* *https://scholarworks.umass.edu/econ_workingpaper?*

Njuguna, S.N. (2000). Monetary and Exchange Rate Policy in Kenya. *African Economic Research Consortium; United Nations Public administration Networks* *http://unpan1.un.org/intradoc/groups/public/documents/IDEP/UNPAN003896.pdf*

Nwanne,T.F.I and Eze O.R 2015. Assessing the effect of external debt servicing and receipts on exchange rate in Nigeria*. International journal of economics and finance Vol.7 (9) 1916-9728.*

Odera, Q. A. (2015). An Analysis on the Effect of External Public Debt on Exchange Rate Volatility in Kenya. *http://erepository.uonbi.ac.ke/handle/11295/95259*

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The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

Reinhart C.M. and Rogoff K. S., (2009). "The Aftermath of Financial Crises," *American Economic Review, American Economic Association, vol. 99(2), pages 466-72.*

Saheed, Z. S., Sani, I. E., & Idakwoji, B. O. (2015). Impact of public external debt on exchange rate in Nigeria*. International Finance and Banking*, 2(1), 15-26.

Sene, B. (2004). The Impact of Debt Overhang on Equilibrium Real Exchange Rate in Developing Countries: A Theoretical Model. *EURISCO Working Paper, No. 04-17. http://dx.doi.org/10.2139/ssrn.640481*

Ugo, P. (2008) Domestic and external Public Debt in Developing Countries. *(UNCTAD) Discussion Papers// United Nations Conference on Trade and Development (UNCTAD/OSFG/DP/2008/3).*

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The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com