

THE RELATIONSHIP BETWEEN EXTERNAL DEBT PORTFOLIO IN KENYA AND FINANCIAL RISK IN REPAYMENT

¹MR. HUSBORN OSORO KENYANYA, ²DR. AMBROSE JAGONGO,
³MR. JOHN M. GITARI

¹Accounting and Finance Department, Kenyatta University

²Senior Lecturer, Accounting and Finance Department, Kenyatta University

³Accounting and Finance Department, Kenyatta University

Abstract: The objective of this is to examine the relationship between external debt portfolio in Kenya and financial Risk in repayment. The study has four objectives; To examine the relationship between bilateral external debts and financial risk, To examine the relationship between multilateral external debts and financial risk, To examine the relationship between commercial banks external debts and financial risk and To examine the relationship between supplier credit external debts and financial risk. The study involves a collection of secondary data regarding the public debt from the IMF, World Bank and The National Treasury. The study period is from the year 2000 to the year 2017. The study shall only use secondary data which shall be empirically analyzed to assess the relationship between the variables. The researcher shall use E-views and Stata Software to facilitate the analysis and presentation of data. The findings shall assist economists and financial advisors to advise the Kenyan government on the right portfolio of external debt to be held.

Keywords: External Debt, Financial Risk, World Bank, IMF, Bilateral Debts, Multilateral Debt, Public Debt, Debt Servicing.

I. INTRODUCTION

1. Background Information:

The rate at which Kenya's public debt has been rising over the past years has been debated in most macroeconomic outlook discussions with regard to its likely impact on the economy. Among the organizations that have been largely concerned include the Kenyan citizens, World Bank, the International Monetary Fund (IMF), the African Development Bank (AfDB), as well as the global credit rating agencies. For instance, Moody's Credit Rating Agency has been publishing various reports on the way in which too much borrowing of external public debts may be adverse to the economy.

External debt problem in Sub-Saharan African started initially in the form of difficulty in servicing external loans in accordance with terms and conditions specified in the original loan contract. Drouin (1989) claim 27 out of 44 Sub Saharan African countries had payments arrears hence debt financing and rescheduling were adopted to resolve the problem. Whilst this strategy seemed to relieve debtor countries of debt service burden in the short run, it led to continual postponement of debt into the future without finding the fundamental structural defect of their economies that causes the problem. This method persisted until 1990s where debt levels of majority of countries in the region were pronounced unsustainable.

Kenya's Current Debt Statistics:

According to the treasury reports for 2018, the level of public debt to GDP ratio is estimated for the fiscal year 2017/18 to reach about 53.0% though this varies from a report given by the IMF of about 56.2% for the same period. This level is above the recommended level of 50% beyond which it is considered to be too high as it becomes unmanageable. The level has been rising steadily by an average rate of 1/5 on an annual basis. For instance by 2017, the debt level was Kshs 4.6 trillion having risen from Kshs 3.8 trillion in the year 2016 (See Appendix 1.,).

According to reports by the Cytonn Investments, in a period of five years interval, in the 5-years from 2013 – 2017, the y/y average growth rate of Kenya's total debt burden was 21.3%, up from the 2008-2012 5-year average of 15.1%, and the 2003-2007 5-year average of 5.9%; indicating that public debt has been growing at an increasing rate over the years. On contrary, the increase in debt level is far too high when compared with the growth of GDP averaging about 5.5% over the years. Hence, there is a growing concern of the huge debts capability of resulting in economic shocks that could negatively decline GDP growth rate in Kenya.

The country's appetite for debt has been fueled by the government's increased development expenditure for such projects as the Standard Gauge Railway (SGR) and infrastructure whose expected economic growth returns are long-term. It is also as a result of huge budget deficit that has been widening as the government falls short of its targeted revenue collection over the years. However, this budget deficits have been mainly plugged by a higher proportion of external debts than the used of domestic debts.

From the graph shown in Appendix 1 (Figure 1.1) on Kenya's external public debt, it is clear that it has been rising since the year 2000 when it was about Ksh. 0.4 trillion to a high of about Ksh. 2.3 trillion in the year 2017. The debt level started rising rapidly from the year 2010 when it was about Ksh. 0.5 trillion with an average gain of about Ksh. 0.5 trillion per fiscal year to a high of about Ksh. 2.3 trillion in the year 2017. The Treasury has also reported that it shall continue to borrow as it needs funds for development expenditure as well as funding of the budget deficit. This has been widely condemned by the IMF and the African Development Bank (AfDB) who are not convinced that the GDP growth rate is in line with the debt servicing level.

The problem of huge external borrowings by Kenya is the ability to meet its payment obligations as and when they fall due. This is the current situation that Kenya is facing as the external public debts obligations with long terms maturity period are to mature this year. Many economists at the African Development Bank (AfDB) have warned the treasury of the preparedness of the government in meeting such obligations in such a borrowing frenzy.

According to reports by the government, the National Treasury is factoring in the budget Ksh658.2 billion (\$6.3billion) which shall be used to repay its loans for the current fiscal year 2017/18 alone. This is more than a quarter of its tax revenues, representing the largest public expenditure item in Kenyan history. This shows that a continued and rapid expected maturity levels of the debts may lead to financial distress for the economy. Therefore, the composition of the public debt especially external debt is crucial in determining the risk exposure of huge debts. Based on AfDB reports, the current budget deficit is about 10% of the GDP which is at an alarming rate as the government consumption is expanding rapidly while the tax revenues targets are never met or at least obtain shortfall.

According to reports by the International Monetary Fund (IMF), Kenya's debt to real GDP ratio is estimated to have increased from 39.2 % in 2013 to 53% in 2017. This indicates that Kenya's GDP growth level is not sufficient to service its own debts. From the graph in the appendix section, the public debt to GDP ratio in 2012 was 38.2% and has been rising till it reached about 55.2% in the year 2016 (Figure 1.2). The debt is still on the rise. From the graph on Kenya's total debt service to revenue in the appendix section, in 2012 it was about 16.5% which has been growing over the years to a high of about 34% in the year 2017. This is way beyond the threshold of 22% according the World Bank's Country Policy and Institutional Assessment Index (CPIA). The Kenyan government has been borrowing too much in violation of the CPIA as from 2015 when the total debt service to revenue was about 24.6% as well as 2016 when it was about 32% (Appendix 1, Figure 1.3). This has raised a lot of concern by the IMF and the World Bank and other international bodies that have been lending the government funds as they fear that the government may not be able to service its debts should the trend continue.

China whose loan to Kenya stands at Sh520 billion as at December 2017 is the biggest lender, compared to Japan that has lent the government Sh82.5 billion while the loan from France stands at Sh62.3 billion. The government has also borrowed heavily from the banking sector, taking advantage of the 4% rate cap on interest rates that had been

implemented in the year 2016. It has been blamed by the IMF for having reduced the rates just to borrow more later on thereby reducing the investments in private sector as much of the funds are only lent to the government as it is considered to be more secure than other loans.

Most studies on external debt and economic growth were much focused on identifying mechanisms through which external debt affects economic growth. Anyanwu (1994) for instance, explained that huge debt accumulation discourages private investment for fear of higher taxes to repay the debt in the future. Moreover, other debt-induced macroeconomic turbulences in the domestic economy may also hinder economic growth. The current studies that have been done to date, have been based on effect of external debt on economic growth and none so far has been done with regard to the relationship between external debt structure and debt servicing. Therefore, the current study shall be able to fill this existing gap by focusing also in Kenya to assess the ability of debt servicing of the debt.

1.2 Statement of the Problem:

The issue of Kenya's ever growing appetite for external debt to finance its budget deficits has been raising concerns in the public. Also, according to reports by the Treasury, in 2018, the level of public debt to GDP ratio is estimated for the fiscal year 2017/18 is reach about 53.0% though this varies from a report given by the IMF of about 56.2% for the same period. This level is above the recommended level of 50% beyond which it is considered to be too high as it becomes unmanageable.

The level of external debt has been rising steadily by an average rate of 1/5 on an annual basis. For instance by 2017, the debt level was Ksh. 4.6 trillion having risen from Ksh 3.8 trillion in the year 2016. Reports by the International Monetary Fund (IMF) have claimed that Kenya's debt to real GDP ratio is estimated to have increased from 44% in 2013 to 53% in 2017. This indicates that Kenya's GDP growth level is not sufficient to service its own debts. The World Bank, IMF and the public at large is complaining and even issuing statements to the government demanding that the government should limit borrowing too much external debt which is at the moment considered to have exceeded the recommended level. The fear is that the government may not be able to sustain the debt servicing associated with such external debts.

The current studies that have been done to date, have been based on effect of external debt on economic growth and none so far has been done with regard to the relationship between external debt structure and debt servicing. Therefore, the current study shall be able to fill this existing gap by focusing also in Kenya to assess the ability of debt servicing of the external debt. An understanding of the effect of how the debt structure affects the sustainability of repayment/ debt servicing shall be useful to economists, policy developers and the government to understand how well to structure the external debts to ensure that the debt levels are sustainable and minimize risks of default in repayment as much as possible.

1.3 Research Objectives:

1.3.1 General Objective:

To establish the relationship between external debt portfolio and financial risk in repayment.

1.3.2 Specific Objectives:

- i.** To examine the relationship between bilateral external debts and financial risk in repayment.
- ii.** To examine the relationship between multilateral external debts and financial risk in repayment
- iii.** To examine the relationship between commercial banks external debts and financial risk in repayment
- iv.** To examine the relationship between supplier credit external debts and financial risk in repayment

1.4 Research Hypotheses:

H₀₁: There is no relationship between bilateral external debts and financial risk in repayment.

H₀₂: There is no relationship between multilateral external debts and financial risk in repayment.

H₀₃: There is no relationship between commercial bank external debts and financial risk in repayment

H₀₄: There is no relationship between supplier credit external debts and financial risk in repayment

1.5 Scope of the Study:

The current study is focused on all external debt stocks borrowed by the Kenyan government from the fiscal year 2000 to 2017. The period shall enable the researcher to capture evidence on the relationship between the external debt category and financial risks.

1.6 Significance of the Study:

Given that developing countries are largely relying on external debts to finance their ever growing budget deficits, the current study shall provide a critical review to the Kenyan government and Treasury on debt management framework that can be adopted to avoid difficulties in meeting their payment obligations as and when they fall due. External debt has been debated by various stakeholders including the media and therefore this study shall provide a detailed analysis of the right external debt mix portfolio that shall ensure low financial risks in the long run. This shall provide some light to the economists and committees that advise the government on public debt matters and other financing arrangements.

II. LITERATURE REVIEW

2.1 Theoretical Review:

2.1.1 Debt Overhang Theory:

According to Kaminsky and Pereira (1996), debt overhang usually happens when the actual value of a country's external debt is lower than the repayments needed as and when they fall due. This theory explains that the burden of external debts in a country can slow down domestic investments thereby leading to a reduced rate of growth of the economy (Effendi, 2001). It can therefore be noted that any kind of extra earnings generated from foreign exchange markets have to be handed over to foreign creditors. On the same note, credit rationing is more disincentive to investments than debt overhang (Borenzstein, 1990).

For all overhang debt situations, it has always been observed that the anticipated present value of future returns is lower than the expected returns (Krugman, 1988). Kenya, just like all other developing countries, should decide on whether it should obtain additional finance from the foreign countries or cancel any additional demands for external debts. According to Krugman, (1988), the need for additional financing may lead to the creation of an option value for the creditors. In case there arise an improvement in the country's repayment expectations, there would be no need of writing down any claims. On the other hand, the same may end up in rewarding of creditors more than the benefits of the country. In such a situation, it means that Kenya is likely to impose more taxes in the domestic economy in order to service the external debts hence improving its repayment ability. This of course discourages investments in the economy as investors try to avoid high taxes.

2.2 Need for External Debt:

External debt as a source of finance is preferred to the printing of money and taxation on the grounds of political expediency. Government may borrow funds in order to postpone the undertaking of any urgent structural changes which may be painful in the short run but still be of tremendous benefits in the long run. The postponement of immediate policy implementation may promote the interest of some well-connected players in the economy. On the contrary, Rodrik (1999) asserts that policy interactions in an economy, economic shocks and management of conflicts as well as institutions do play a crucial role in explaining of debt accumulation and macroeconomic performance. The tendency to avoid adjustment costs incurred in the short run may lead to continued negative consequences for future growth and equity. Thus when government, for instance, reneges on the needed immediate reforms it exacerbates the negative implications of debt accumulation.

Moreover, the decision to choose external borrowing is also explained using the dual-gap theory. This theory states that investment is a function of saving, and therefore, the level of domestic saving in developing countries is insufficient for generating the level of investment that is required for growth and development. It is hence prudent for economies to solicit additional finances from abroad which can be used to complement domestic resources. Todaro and Smith (2006) argue that the external borrowing phenomenon for developing countries is not uncommon at their early stage of development given that domestic capital is inadequate for investment. Ajayi and Khan (2000) stated that the principle that should guide debt contractual agreements hinges primarily on the cost and benefit evaluation of economic activities. It requires that a country should borrow from external sources if the rates of returns on such funds are greater than the cost

of borrowing them. If foreign borrowing increases the debt service capacity of the borrowing economy more than the addition to debt burden, then such borrowing becomes desirable. Strict compliance with this principle will help countries to expand production with the aid of external savings.

The problem with over-relying on printing of money is that it leads to high inflation. Debt financing is also useful in helping an economy meet its urgent spending needs while frequent fluctuations of tax rates can create economic uncertainty and thereby induce deadweight loss.

2.3 External Debt Burden and Debt Servicing:

Loans from abroad could become a burden on the borrowing nation if it fails to raise sufficient resources from current production to fulfil its debt service obligations. The difficulties encountered in servicing debts is a reflection of the economy's debt burden. This can be measured in terms of the country's current national income that is committed to financing previously contracted loans (Ogunlana, 2005). This is also when the debt servicing often becomes onerous and the economy devotes large amounts of national income channeled towards servicing which then implies that debt service burden on such country is huge. Conversely, when debt service obligations absorb a small proportion of national income, the external debt becomes less burdensome. Currently, the role of external debts versus domestic borrowing still remains comparatively understudied in connection to economic crises. According to Reinhart and Rogoff (2009), they take up this theme when discussing the literature at large, but also in the case of Greece. The same debate has focused on debt sustainability, contagion effects, the need for reforms and the associated political and economic problems (Zettelmeyer et al., 2013). The fact that the debt crisis is very much an external debt crisis has been largely overlooked. This concurs with Gros (2013) and Sinn (2014), who argue that the crisis in periphery Europe is not so much a crisis of public debt, but rather a crisis of external debt. The reason for such crisis emanates from all problems that come with an external crisis. In particular, the sudden stops, balance sheet effects and cross-border disputes may also jeopardize the relationships between creditors and debtors.

In this regard, the analysis in Eichengreen et. al. (2014), which compares the Eurozone crisis to Latin America's lost decade in the 1980s, is exactly on point. External debt is an implication that important risks stand in contrast to various calls to unravel the "deadly embrace" between governments and domestic banks, mainly by reducing the home bias in sovereign debt holdings (Reichlin and Garicano, 2014).

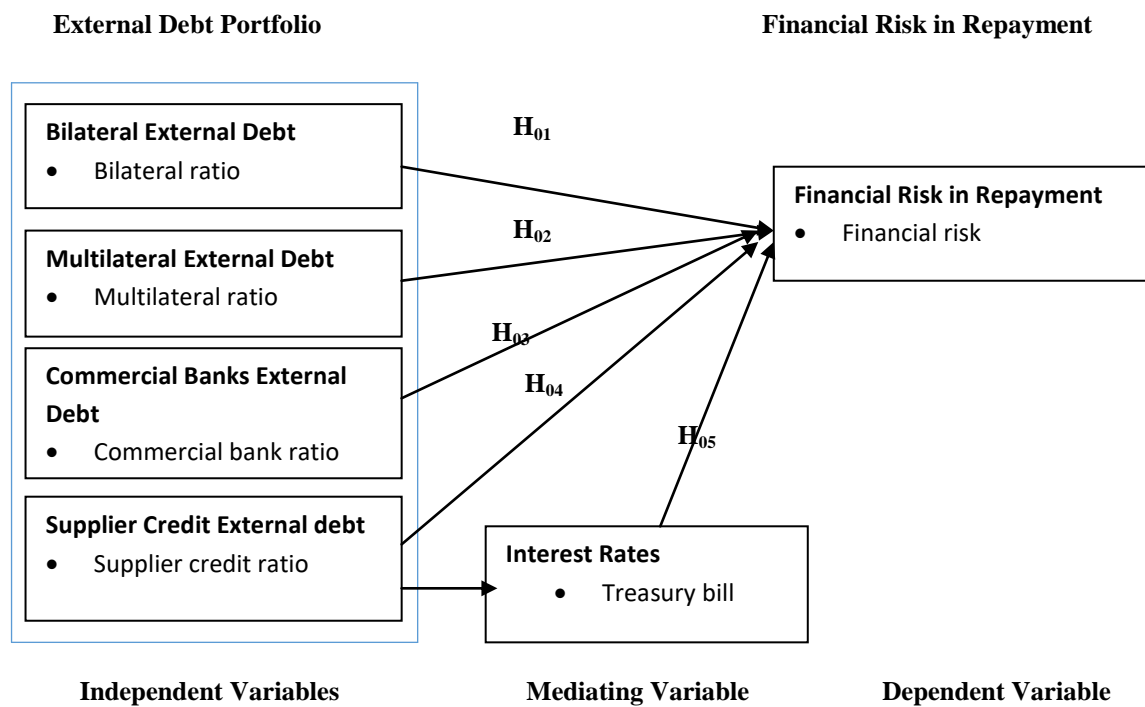
2.4 Empirical Studies:

According to Adam and Bevan (2005), there are interaction effects do exist between budget deficits and debt stocks. The study explains that high debt levels exacerbate adverse impacts of an economy with huge budget deficits. This was observed after a simple theoretical model in which the government budget constraint was integrated with debt financing. The study concluded that, when there is an increase in government expenditure that is financed through increased tax rate, the economy may still have better growth as long as the level of public debt is still low.

The accumulation of public debt can also affect economic growth through the long-term period's interest rates which may be very high especially in cases of huge budget deficits. This can result in crowding out effect affecting the private investment sector. This may end up in dampened output growth in the economy. According to Elmendorf and Mankiw (1999), whenever public financing is too high, there needs to be a better yield on the sovereign debts which will ensure that the funds flow from the private sector to the public sector. Though the empirical findings relating to public debt and long-term interest rates are quite diverse, many of such studies have found out that huge public debt and budget deficits are likely to result in higher long-term interest rates on sovereign debts as well as yield spreads.

In another study, Diamond (1965) assessed the effect of taxes on the capital stock and then differentiated public external debts and internal debts. The study then concluded that, through the impact of taxes needed to finance the interest payments, all categories of public debt eventually reduce the available lifetime consumption of taxpayers, as well as their saving, and thus the capital stock. In addition to this, the study contends that internal debt may end up in further reduction of the capital stock arising from the substitution of government debt for physical capital in individual portfolios. Moreover, research studies on the external debt-economic growth relationship differ in their methodologies, time period covered and geographical location as well as their findings and conclusions. These dissimilarities suggest an ensuing controversy in the literature about the relationship between external debt and economic growth. Therefore, there is a need for further empirical investigation into the subject matter as all these empirical studies have only provided some explanation on the relationship between external debt and economic growth in Sub-Saharan Africa.

2.5 Conceptual Framework:



Source (Author, 2018)

III. RESEARCH METHODOLOGY

3.1 Research Philosophy:

Research philosophy is basically focused on the source of information, the nature as well as the actual development of knowledge (Saunders et al., 2009). According to Kothari (2004) research design is the method used in the collection, analysis and interpretation of data. The current study applies a correlational research design using a time series model (Brailsford, 1996). The researcher shall undertake an empirical study that adopts an exploratory research design which shall use quantitative data from the World Bank, IMF and The National Treasury on external debts statistics for the period years 2000 to 2017.

3.2 Data Source and Scope:

This study shall use secondary data obtained from the World Bank especially World Development Indicators, IMF, The Treasury in Kenya and publications by the KNBS. The external debt portfolio is categorized into bilateral, multilateral, commercial and supplier creditors according to the amount of external debt. The study covers a time period of 17 years (2000-2017) which captures the past, long-term impacts of external debt in the current economy in terms of financial risks associated with external borrowing.

3.3 Empirical Model Specification:

The study employs dynamic panel regression model in estimating the effect of external debt on financial risk in repayment by the Kenyan government. The regression model is as follows.

$$FR_t = \alpha + \beta_1 X_1 t + \beta_2 X_2 t + \beta_3 X_3 t + \beta_4 X_4 t + \mu$$

Where **FR** represents Financial Risk, **X₁** =Bilateral ratio, **X₂** =Multilateral ratio, **X₃**=Commercial bank ratio, **X₄**=Supplier credit ratio, **μ** represents the stochastic error term, **α, β** are the parameters to be estimated, **t** stands for a particular time.

IV. CONCLUSION

The issue of external debt has been debated by various stakeholders including the IMF, World Bank and the National Treasury as well as the media and therefore this study shall provide a detailed analysis of the right external debt mix portfolio that shall ensure low financial risks in the long run. This shall provide some light to the economists and committees that advise the government on public debt matters and other financing arrangements.

REFERENCES

- [1] Adam, C. and D. Bevan (2005), "Fiscal deficits and growth in developing countries", *Journal of Public Economics*, Vol. (4), pp. 571-597.
- [2] Admati, R. and Pfleiderer, P. (1988). A theory of intraday patterns volume and price variability. *Review of Financial Studies*, 1, 3-40.
- [3] Ajayi, S. and Khan, M. (2000). *External Debt and Capital Flight in Sub-Saharan Africa*. IMF.
- [4] Choi, I. (2001). Unit Root Tests for Panel Data. *Journal of International Money and Finance*, 20 (2): 249-272.
- [5] Cohen, D. (1993). Low investment and large LDC debt in the 1980s, *American Economic Review*, 83(3): 4-37
- [6] Diamond, P. (1965), "National Debt in a Neoclassical Growth Model", *American Economic Review*, 55 (5), pp. 1126-1150.
- [7] Effendi, N. (2001). *External Debt and Growth of Developing Countries*. A Published Ph.D Thesis at the University of Oklahoma, Oklahoma, USA.
- [8] Elbadawi, A., Benno, J., Ndulu, C., and Njuguna, N. (1996). *Debt overhang and economic growth in Sub-Saharan Africa*, In Zubair Iqbal and Ravi Kanbur (Eds.), *External finance for low-Income Countries* (49-76), IMF.
- [9] Hjertholm, P. (1997). *An Enquiry into the Fiscal Dimensions of External Debt: The Case of sub-Saharan Africa*. Red Series No. 43. Copenhagen: Institute of Economics, University of Copenhagen. Ph.D. dissertation.
- [10] Hoffman, B. and Reisen H. (1991). *Some Evidence on Debt-Related Determinants on Investment and Consumption in Heavily Indebted Countries*. Welt Wirtschaftliches Archive 127(2): 280-297.
- [11] Mc Donald, D. (1982). *Debt Capacity and Developing Country Borrowing: A Survey of the literature*. IMF Staff Paper, 29 (4).
- [12] Salop, J. and Spittäler, E. (1980). *Why does the Current Account Matter?* IMF Staff Papers 27(1): 101-34.

V. APPENDIX 1

1.1 Kenya's External Public Debt

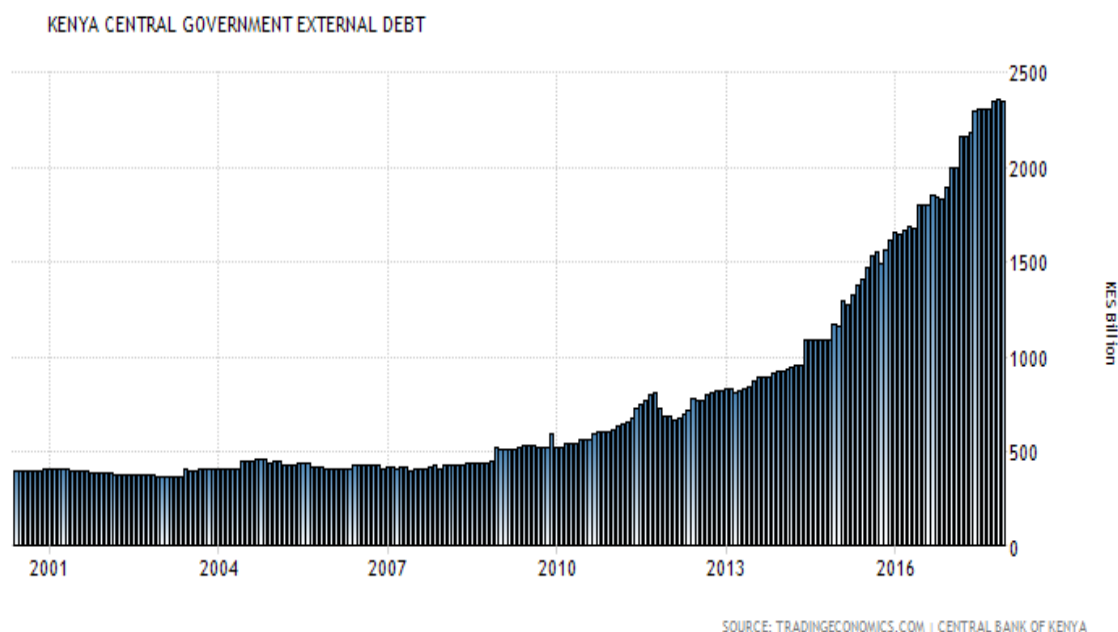


Figure 1.1: Graph on Kenya's External Public Debt

1.2 Kenya's Public Debt to Gross Domestic Product:



Figure 1.2: Graph on Kenya's Public Debt to Gross Domestic Product

1.3 Kenya's Total Debt service to Revenue:

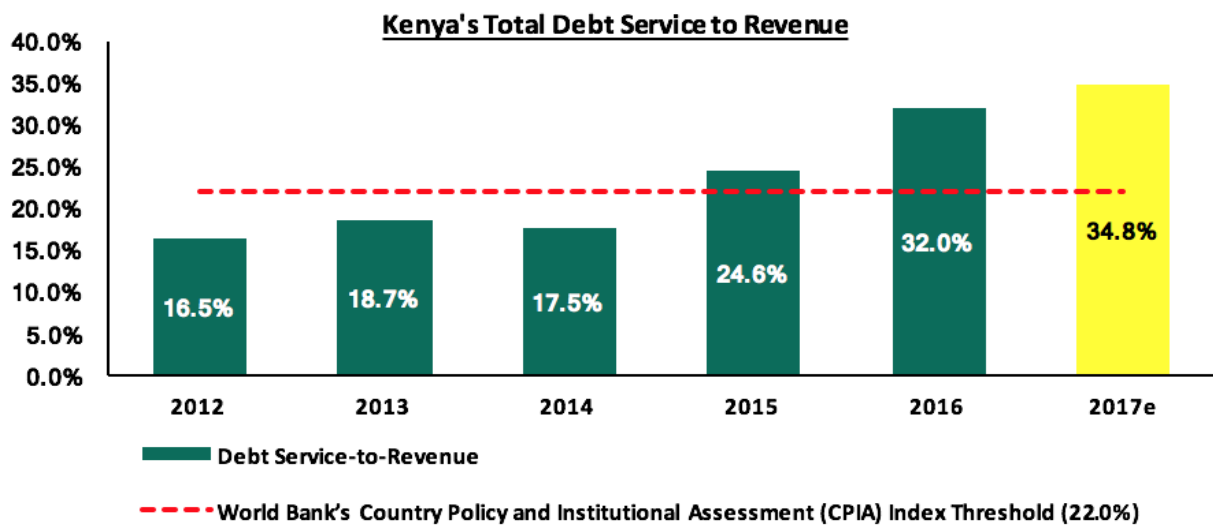


Figure 1.3: Graph on Kenya's Total Debt service to Revenue