



**Republic of Kenya**

**MINISTRY OF FINANCE**

**Medium Term  
Debt Management Strategy**

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# Table of Contents

Page No.

<b>FOREWORD.....</b>	<b>4</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>5</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>7</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>9</b>
<b>I. GENERAL OBJECTIVE OF DEBT MANAGEMENT IN KENYA.....</b>	<b>14</b>
<b>II. OVERVIEW OF 2010 MTDS .....</b>	<b>15</b>
<b>III. KEY DEVELOPMENTS SINCE THE 2010 MTDS .....</b>	<b>16</b>
<b>IV. CHARACTERISTICS OF THE EXISTING DEBT PORTFOLIO .....</b>	<b>21</b>
<b>V. 2011 MTDS: KEY ASSUMPTIONS .....</b>	<b>27</b>
<b>VI. OUTCOMES OF ANALYSIS OF STRATEGIES.....</b>	<b>38</b>
<b>VII. DEBT SUSTAINABILITY .....</b>	<b>44</b>
<b>VIII. IMPLEMENTING THE 2011 MTDS .....</b>	<b>46</b>
<b>IX. CONCLUSION .....</b>	<b>47</b>
<b>APPENDIX I: ANALYSIS OF THE COST – RISK TRADEOFF UNDER AN ALTERNATIVE SCENARIO .....</b>	<b>48</b>

## FOREWORD

Public borrowing and the level of public debt has been consistent with the overall fiscal framework aimed at ensuring macro-economic stability over the medium term. It is anchored on the macro-economic projections in the official documents including Budget Outlook Paper and Budget Policy Statement. The borrowing is further informed by the *Medium Term Debt Strategy* (MTDS) which is tabled in Parliament as part of the Budget Documents for consideration and approval together with the annual Budget Estimates.

The *2010 MTDS* has guided the borrowing in the 2010/11 financial year while the *2011 MTDS* will be tabled in Parliament in June 2011 to guide borrowing in the financial year 2011/12. The MTDS tool evaluates cost and risks of various scenarios to reach an optimal strategy that is implemented in the course of the year. Measures are being taken to simplify and disseminate the document to ensure it is well understood by the general public.

As we embark on implementing the new Constitution, it is important that the burden of public borrowing is equitably shared between the present and future generations. This is one of the key principles of public finance in Article 201 of the Constitution of Kenya, 2010. Going forward, it is expected that County Governments' fiscal strategies will be guided by the principles of public finance to ensure that public debt remains within sustainable levels.



**HON. UHURU KENYATTA, EGH, MP**  
**DEPUTY PRIME MINISTER AND MINISTER FOR FINANCE**  
**JUNE 2011**

## ACKNOWLEDGEMENT

The *2011 MTDS* prepared by the Ministry of Finance outlines the Government preferred strategy to guide debt management operations in FY2011/12. The MTDS seeks to balance the cost and risk of both the existing public debt portfolio and alternative borrowing mix. In addition, the strategy incorporates initiatives to develop a vibrant domestic debt market.

As part of the reforms to establish the Debt Management Department, capacity building has been an overriding priority. The department has a core technical team that has been trained in public debt management. For instance, at the initial stages, the MTDS was being prepared by the World Bank and the IMF staff but now the core team is able to prepare the document with the World Bank and the IMF providing quality assurance.

The implementation of the new Constitution will necessitate review of institutional framework for public debt management to enable the Ministry of Finance to deliver on the expanded mandate of ensuring prudent borrowing by both the National and County Governments, as well as tracking contingent liabilities that will arise with the implementation of devolved governance structures.

Kenya is currently under a three-year Extended Credit Facility arrangement with the International Monetary Fund and is implementing a wide range of economic and financial policies. The program is designed to help rebuild Kenya's international reserves, by supporting the conditions for sustainable growth while preserving macroeconomic stability. The program's main objectives are: i) to raise real GDP to 7 percent; ii) bring the public debt to GDP ratio to below 45 percent over the medium term; and iii) keep inflation under 5 percent.

With regard to external borrowing, the Government prefers concessional external financing while maintaining a limited window for borrowing on commercial terms to minimize costs and refinancing risks. Financing on non-concessional terms will be highly restricted to projects with high expected risk-adjusted rates of return including critical infrastructure that would otherwise not be undertaken due to lack of concessional financing.

A cautious approach will be adopted in the issuance of Government loan guarantees to minimize the level of contingent liabilities. Consistent with positive economic outlook, the *2011 MTDS* seeks to slow down the uptake of domestic borrowing not to ‘crowd-out’ the private sector, the engine of growth for *Kenya Vision 2030*. Treasury Bonds issuance will be biased towards short to medium term tenors to create liquidity around benchmark bonds and lower the cost of borrowing.

The *2011 MTDS* has been prepared by the staff of the Debt Management Department at the Ministry of Finance in consultation with Central Bank of Kenya. I wish to express my sincere gratitude to the core team involved in its preparation namely: John Murugu (Director, Debt Management), Harun Sirima (Deputy Director), Charles Kairu, Racheal Njoroge and Dunstone Ulwodi.



**JOSEPH K. KINYUA, CBS**  
**PERMANENT SECRETARY/ TREASURY**  
**JUNE 2011**

## LIST OF ABBREVIATIONS

ADB	African Development Bank
ADF	African Development Fund
ATM	Average Time to Maturity
BoP	Balance of Payments
BPS	Budget Policy Statement
CBK	Central Bank of Kenya
CBR	Central Bank Rate
CPI	Consumer Price Index
CPIA	Country Policy and Institutional Assessment
CS-DRMS	Commonwealth Secretariat Debt Recording and Management System
DGIPE	Department of Government Investment and Public Enterprises
DMD	Debt Management Department
DSA	Debt Sustainability Analysis
DX	Domestic currency denominated debt
EAC	East African Community
ECF	Extended Credit Facility
EEC	European Economic Community
EIB	European Investment Bank
EMBI	Emerging Markets Bond Index
ePROMIS	Electronic Projects Monitoring Information System
ESF	Exogenous Shock Facility
ERD	External Resources Department
FDI	Foreign Direct Investment
FLSTAP	Financial and Legal Sector Technical Assistance Project
FX	Foreign currency denominated debt

FY	Financial Year
GDP	Gross Domestic Product
IDA	International Development Association
IFB	Infrastructure Bond
IFC	International Finance Corporation
IMF	International Monetary Fund
IPO	Initial Public Offer
ISB	International Sovereign Bond
Ksh	Kenya Shilling
LIC	Low Income Country
MEFMI	Macroeconomic and Financial Management Institute of Eastern and Southern Africa
MoF	Ministry of Finance
MTDS	Medium Term Debt Strategy
NPV	Net Present Value
NSE	Nairobi Stock Exchange
NSSF	National Social Security Fund
PFM	Public Financial Management
PFMR	Public Financial Management Reforms Project
PPP	Public Private Partnerships
SDR	Special Drawing Rights
SOE	State Owned Enterprise
US	United States
USD	United States Dollars



## Executive Summary

The key drivers for the *2010 MTDS* published in June 2010 were a desire to minimize refinancing risk by lengthening the maturity profile of the domestic debt portfolio and to develop the domestic debt market further. The Government also highlighted the need to minimize the degree of foreign exchange rate risk exposure associated with the external debt portfolio. Consequently, *2010 MTDS* envisaged a significant reliance on domestic debt to meet the Central Government budget financing requirement.

The revised Budget for the financial year 2010/11 reflected a desire for more domestic borrowing beyond the level stated in the *2010 MTDS*. This was due to an increase in the primary deficit following revenue shortfall occasioned by the slowdown in economic growth and the need to finance additional expenditure to mitigate the effects of the prolonged drought experienced in early 2010. The level of domestic debt was below target and the average interest cost declined from 6.2 percent to 4.9 percent due to a decline in domestic interest rates during the financial year 2010/11. Despite the slight deviation in the level of domestic borrowing, the thrust of the *2010 MTDS* remained unchanged and significant improvement in the level of refinancing risk was observed in the domestic debt portfolio. The average time to maturity increased from 4.6 years to 5.9 years and the proportion of domestic debt to be refinanced within 12 months fell from 28 percent as of end June 2010 to 18 percent as of end June 2011.

Overall, during implementation, there was a low uptake of domestic borrowing. The effort to build-up benchmark bonds through new issues, reopening of existing issues on a regular basis and issuance of “Infrastructure Bonds” (IFBs) has been relatively successful. These factors, coupled with other improvements in market infrastructure, particularly, the introduction of an automated trading system to facilitate settlement of trades, and horizontal repo agreements on Delivery versus Payments (DvP) - have resulted in increased market activity and liquidity.

Although *2010 MTDS* did successfully achieve a reduction in refinancing risk, managing this remains a priority for the *2011 MTDS*. Active debt management operations to smooth the refinancing profile, along with efforts to maintain a wider investor base have been instrumental in

mitigating potential fiscal shocks, such as, impact of drought on food security, realization of contingent liabilities, or shortfall in revenues, the country continues to face.

Despite these positive developments, the Government is concerned about the pace of increase in domestic debt to unsustainable levels. It is of the view that domestic debt should not crowd out the private sector in the credit market, an engine of economic growth and development. **It is also noted that the low interest rate in an environment of rising inflation may not be sustained, thus posing a significant risk to cost of debt.** Both these considerations suggest a switch away from a reliance on domestic to external resources. However, there is also a concern that a sudden and aggressive shift away from domestic debt could risk reversing some of the gains that *2010 MTDS* has achieved in terms of market deepening and liquidity. In addition, while increasing the exposure to exchange rate risk would have a relatively limited budgetary impact in the short-term, it would aggravate the risk that the main fiscal anchor, the NPV of Debt/GDP would exceed the ceiling of 40 percent in the event of shocks. This would in turn trigger overall external vulnerabilities.

With regard to external borrowing, the Government prefers concessional external financing while maintaining a limited window for borrowing on commercial terms to minimize costs and refinancing risks. Financing on non-concessional terms will be highly restricted to projects with high expected risk-adjusted rates of return including critical infrastructure that would otherwise not be undertaken due to lack of concessional financing. A cautious approach will be adopted in the issuance of Government loan guarantees to minimize the level of contingent liabilities.

Given those issues, the Government evaluated the performance of four alternative strategies relative to *2010 MTDS* (“S1”). These included a strategy envisaging an aggressive switch to external official sector borrowing, accompanied by lengthening of maturities in the domestic market (“S2”). A priori, this strategy was expected to have very attractive cost and risk characteristics. However, given the potential challenges in achieving the target level of external borrowing (that is, new disbursements), a range of possible contingent strategies were also considered - two envisaging relatively more domestic debt (“S3” with a

continued bias toward medium-term debt and “S4” with a bias away from short term debt to longer - term debt) and a strategy that proposes access to the international capital markets to substitute for any shortfall in official sector borrowing (“S5”).

In selecting the optimal strategy, the Government considered two key indicators – ratio of interest payments to GDP (*interest/GDP*) and ratio of NPV of Debt to GDP (*NPV of Debt/GDP*). As anticipated, S2 outperforms all other strategies, while S1 outperforms S3, S4 and S5. The refinancing risk was higher under S4. The strategy could not accommodate significant amounts of long term domestic debt, thus the potential risk of losing the retail investor base. In terms of *interest/GDP*, S5 entails a higher cost but lower risk than S3. This reflects the relatively longer-tenor of debt involved. However, once *NPV of Debt/GDP* is considered, S5 becomes less attractive, and aggravates the risk of breaching the 40 percent ceiling. This strategy would also change the nature of exchange rate exposure - assuming a bullet repayment by introducing the risk of a “sudden stop”. While these risks could be mitigated by use of a sinking fund structure, it would further escalate the costs.

Taking into account both cost and risk considerations, the need to develop the domestic debt markets and the feasibility of implementing the strategy over the medium term, the *2011 MTDS* proposes **Strategy S2** as the **optimal strategy**. The strategy entails:

- **70%** net domestic financing and **30%** external financing;
- The domestic borrowing will be on medium term basis. The *2011 MTDS* considered the macro-economic and domestic market environment and **recommends a shift in the composition of debt towards medium term domestic debt over the medium term.**
- External borrowing will comprise of **20%** on concessional terms, **7%** on semi concessional terms while **3%** will be contracted as a syndicated bank loan;
- There will be **no issuance of the Euro bond during the year** as developments in the international markets are monitored.

This analysis was repeated under an alternative scenario which assumed infrastructure investment for development of county governments through a syndicated commercial loan. Overall, this scenario leads to an

increased level of the cost and risk indicators. In particular, the *NPV of Debt/GDP* clearly breaches the ceiling in the event of this financing, suggesting that, in this case, the budgeted primary balance would need to be adjusted. However, the relative performance of the strategies, and consequently the preferred strategy, does not change.

Kenya is currently under a three-year Extended Credit Facility (ECF) arrangement with the International Monetary Fund (IMF) and is implementing a wide range of economic and financial policies. The programme is designed to help rebuild Kenya's international reserves, by supporting the conditions for sustainable growth while preserving macroeconomic stability. The programme's main objectives are: i) to raise real GDP to 7 percent; ii) bring the public debt to GDP ratio to below 45 percent over the medium term; and iii) keep inflation at 5 percent.

The Government will seek to disseminate widely the 2011 MTDS and develop an associated borrowing plan, which will support internal monitoring of the strategy and also domestic market development. The Government will also actively monitor the key macroeconomic indicators and interest rates against those assumed in the analysis. Any significant and sustained change would indicate the need to revise the strategy. The underlying cost-risk analysis also identifies a range of risk indicators consistent with the adopted strategy. These provide a set of strategic targets against which the portfolio will be assessed on a regular basis to ensure the strategy remains on track.

The Government will publish some of these portfolio indicators on a regular basis to ensure further transparency on debt issues. Enhancing information on debt and its associated risks is a key imperative for debt managers as the availability of quality and timely information is an important factor in managing investors' sovereign risk assessment, and consequently the cost of debt.

Going forward, the Government will focus on developing the capacity to monitor these key portfolio risks more frequently. This will require some significant analysis of data produced by the debt recording system. Building expertise in this area is an important component of ensuring that

MTDS can be updated on a regular basis. In addition, the Government will take steps to enhance access and the predictability of external official sector borrowing.

## **I. GENERAL OBJECTIVE OF DEBT MANAGEMENT IN KENYA**

1. The principal objective of Government debt management is to meet the Central Government financing requirements at the least cost with a prudent degree of risk. The secondary objective is to facilitate Government's access to financial markets and support development of a well functioning vibrant domestic debt market.

2. In June 2010, Ministry of Finance (MoF) through the Debt Management Department (DMD) prepared and published a formal debt management strategy, the *2010 MTDS* which outlined the Government Medium Term Debt Strategy for the period FY2010/11-FY2012/13. The *2010 MTDS* was the Government's second formal and explicit strategy and was an important step towards enhancing transparency of the Government's debt management decisions. The MTDS is updated annually and presented to Parliament as part of the Budget Documents by the Deputy Prime Minister and Minister for Finance.

3. The *2010 MTDS* guided the Government debt management operations over FY2010/2011. The strategy sought to balance cost and risk of public debt while taking into account Central Government financing needs. In addition, the strategy incorporated initiatives to develop the domestic debt market, seek new funding sources, support macroeconomic stability and achieve debt sustainability.

4. To institutionalize the production of the debt strategy, the publication of the MTDS will be provided for under an Act of Parliament envisaged in the Constitution of Kenya, 2010

## **II. OVERVIEW OF 2010 MTDS**

### **a) Rationale for 2010 MTDS**

5. The *2010 MTDS* recommended a shift in the composition of debt towards medium to long term domestic debt over the medium term to minimize both cost and risk in the debt portfolio. The relevant considerations that influenced the *2010 MTDS* were based on the need to reduce exchange rate exposure, and reduce refinancing exposure in the domestic market, while containing the cost of debt.

### **b) Description of Strategy**

6. The principal objective of the *2010 MTDS* was to meet the net financing of the Central Government in the following manner: 25 percent by way of official sector concessional external financing and 75 percent domestic financing. Specifically, concessional external financing was to be limited to loans with a minimum grant element of 35 percent. Domestic borrowing strategy sought to lengthen the maturity profile of domestic debt portfolio to reflect a ratio of 30:70 in the form of Treasury Bills to Treasury Bonds. In addition, Treasury Bond issues were limited to Benchmark Bonds with maturities of 2, 5, 10, 15 and 20 years in order to build liquidity around them to accelerate domestic debt market deepening and achieve stability. The *2010 MTDS* also envisaged no issuance of an international sovereign bond during the financial year 2010/11. The net external borrowing would remain at 3.0 percent of GDP while net domestic borrowing would be 3.8 percent of GDP.

### III. KEY DEVELOPMENTS SINCE THE 2010 MTDS

#### a) Domestic Market Development

7. Since the development of *2010 MTDS* in June 2010, there have been a number of important developments in the domestic debt market. The horizontal repo market was relatively active, a reflection of increased market confidence and enhanced liquidity. In addition, the Government continued to re-open specific Treasury Bonds more regularly to establish them as true Benchmark Bonds and to encourage secondary trading. These two factors have also been supported by the continued use of the Automated Trading System (ATS) which allowed market participants to use the Nairobi Stock Exchange (NSE) trading system to enter matched trades for settlement. This helped reduce settlement time to T+3 and removed a bottleneck that has been of major concern to investors. In addition, the corporate sector followed the Government's lead and issued corporate bonds to fund their expansion programs. In terms of primary auctions, the Government moved to adopt a new system where the coupon rate is determined in the auction rather than pre-set<sup>1</sup> before the bids are received.

8. Overall, market reaction to *2010 MTDS* was positive. Market participants welcomed the focus on Benchmark Bonds and the steps taken to lengthen the maturity of domestic debt. The market became relatively more liquid and helped meet the Government financing needs, with the 364-day Treasury Bill and 5-year tenor being the most popular instruments to both commercial banks and institutional investors. In the meantime, an accommodative monetary stance has been associated with a significant decline in interest rates in the domestic market.

9. The Government has taken some important steps in highlighting the existence of a formal and explicit debt management strategy. For instance, the MTDS was posted on the Ministry of Finance website, circulated to key institutions and reported in the print media. Overall, *2010 MTDS* has proven useful in helping guide discussions within the public sector and also with potential financiers, on the amount and preferred terms of new borrowing. The fact that it is clearly based on robust analysis has enhanced its credibility so that it is not just seen as

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<sup>1</sup> This is similar to the approach used in the US.



an *ad hoc* Government position. While this has been an important step in increasing transparency, there remains a concern over dissemination of the debt strategy.

#### **b) External Financing**

10. With regard to external borrowing, the Government prefers concessional external financing while maintaining a limited window for borrowing on commercial terms to minimize costs and refinancing risks. Financing on non-concessional terms will be highly restricted to projects with high expected risk-adjusted rates of return including critical infrastructure that would otherwise not be undertaken due to lack of concessional financing. A cautious approach will be adopted in the issuance of Government loan guarantees to minimize the level of contingent liabilities.

11. Kenya is currently under a three-year Extended Credit Facility (ECF) arrangement with the International Monetary Fund (IMF) and is implementing a wide range of economic and financial policies. The programme is designed to help rebuild Kenya's international reserves, by supporting the conditions for sustainable growth while preserving macroeconomic stability. The program's main objectives are: i) to raise real GDP to 7 percent; ii) bring the public debt to GDP ratio to below 45 percent over the medium term; and iii) keep inflation at 5 percent.

12. Performance of net external financing has been below target. The Government has seen new external commitments entered on relatively harder terms, that is, closer to the 35 percent Grant Element threshold. However, following the new arrangement with the IMF under the Extended Credit Facility (ECF), the Government position will be stronger in negotiating higher concessionality levels with creditors.

13. The Government had also been considering the possibility of accessing the international capital markets. In this context, the *2010 MTDS* proved useful in providing a very clear basis for engagement. In addition, the potential for an international sovereign bond to act as a benchmark for the corporate sector is also an issue that comes up from time to time. It is however, not clear whether there would be substantial demand from the corporate sector for such access, particularly as the domestic market has proven that it is an effective mechanism for providing longer-dated funds for investment through corporate IFBs.

### **c) Guarantees**

14. The Government has also seen a strong increase in the demand for guarantees. These are taking two forms - both the typical loan guarantee, for which, there is already a clear legal framework in place, as well as under the PPP program which requires some form of indirect guarantee to private sector investment in the partnership. The demand for explicit guarantees is likely to increase under the new Constitution which provides for county borrowing only under Central Government guarantee. The implicit guarantees under the PPP arrangement would raise contingent liability levels and will have implications on debt sustainability.

### **d) Institutional Framework**

15. Under the Constitution of Kenya, 2010, a new legislation governing the operations of public borrowing and guarantees needs to be in place on or before the new devolved government is in place. The new debt management legislation is part of the proposed Public Financial Management Law. Securing timely information on new disbursements under external loans remains a challenge, with DMD continuing to rely on information from creditors, which creates a lag in recording. The Government hopes this will improve once the electronic Project Monitoring Information System (ePROMIS), implemented by External Resources Department (ERD), is linked to the Commonwealth Secretariat Debt Recording Management System (CS-DRMS). A process to establish the level of contingent liabilities is ongoing under the Department of Government Investment and Public Enterprises (DGIPE). Additionally, the anticipated implementation of devolved governance system is likely to result in increased level of contingent liabilities as county liabilities are taken into account.

### **e) Implementation and Impact of 2010 MTDS**

16. The Government successfully implemented the *2010 MTDS* domestic borrowing segment through issuance of Treasury Bills and Treasury Bonds. The envisaged evolution of the debt portfolio from short to long term in the ratio of 30:70 has been achieved and surpassed and is consistent with the strategy. Furthermore, by end June 2011, the provisional share of foreign to domestic debt is 57 percent, compared to 54 percent the previous year. In addition, the refinancing risk

associated with short-term domestic debt has fallen with the average time to maturity at 5.9 years from 4.6 years in June 2010.

17. During implementation, there was a low uptake of domestic borrowing and underperformance of revenues while expenditures increased due to unforeseen contingencies to mitigate against drought and fuel prices. As a result, the net domestic borrowing fell to 3.7 percent of GDP from the planned 4.5 percent of GDP.

18. It is anticipated that the cost of domestic debt in the form of interest payments will decrease on account of the decreased uptake of domestic debt and declining interest rates in the domestic market in the first half of financial year 2010/11. Furthermore, the shift in the portfolio mix in favour of domestic debt reduced the overall debt portfolio exposure to exchange rate risk (cost-risk trade off). Tables 1(a) and 1(b) summarize the outcome and impact of implementing the 2010 MTDS.

**Table 1(a): Impact of implementing the 2010 MTDS**

MTDS 2010	Net borrowing (KSH bn)		Net borrowing (% of GDP)	
	FY 2010/11		FY 2010/11	
	Target	Projected outturn	Target	Projected outturn
Total net borrowing (Ksh bns)*	163	141	5.9%	5.1%
Domestic (net) 75%	125	103	4.5%	3.7%
External (net) 25%	38	38	1.4%	1.4%

\* Note these targets are equivalent to a gross borrowing target of 75% for domestic and 25% for external debt.

*Source: Ministry of Finance and IMF/WB estimates*

**Table 1(b): Characteristics of the Debt Portfolio**

	<b>FY09/10</b>	<b>FY10/11*</b>
<b>Portfolio composition</b>		
Domestic	54%	57%
External	46%	43%
<b>Refinancing risk</b>		
Average time to maturity (years)	8.9	8.4
Average time to maturity domestic (years)	4.6	5.9
% of domestic debt falling due within 12 months	28%	18%
<b>Cost</b>		
Average interest rate**	6.2%	4.9%

\* Projected portfolio as of end-June 2011

\*\* Provisional

*Source: Ministry of Finance and IMF/WB estimates*

#### IV. CHARACTERISTICS OF THE EXISTING DEBT PORTFOLIO

19. At June 2011, the provisional stock of public debt is Ksh 1,348 billion or 48.8 percent of GDP in nominal terms. In addition, the structure of the debt portfolio is *projected* to change to 43 percent foreign and 57 percent domestic debt from 46 and 54 percent respectively (Table 2(a), 2(b) and Figure 1, Chart 1). The change in the debt portfolio is consistent with the 2010 MTDS. Overall, while the short-term budgetary impact of any exchange rate shock may be minimal given the nature of external debt (mainly concessional and amortizing), the main fiscal anchor - the *NPV of Debt/GDP* - remains vulnerable to exchange rate movements.

**Table 2(a): External and Domestic Debt, End June 2010**

	USD Billion	Ksh Billion	Percent of GDP	Share of total debt	Weighted average interest rate (%)
External debt	6.9	565.4	22.2	46	1.3
Domestic debt (net)	8.1	660.3	25.9	54	10.4
<b>Total debt</b>	<b>15.0</b>	<b>1,225.7</b>	<b>48.1</b>	<b>100</b>	<b>6.2</b>

*Source: Ministry of Finance and IMF/WB estimates*

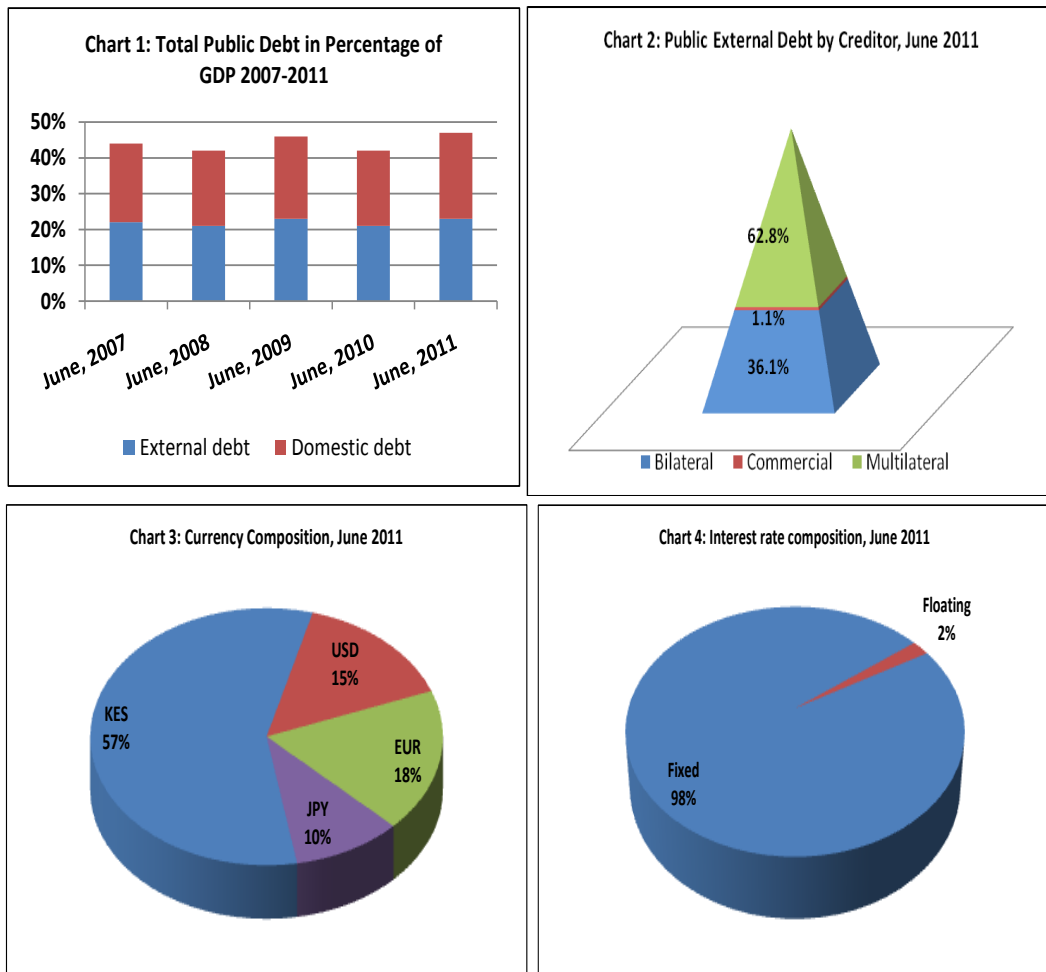
**Table 2(b): Provisional External and Domestic Debt, June 2011**

	USD Billion	Ksh Billion	Percent of GDP	Share of total debt	Weighted average interest rate (%)
External debt	7.2	582.8	21.1	43	1.2
Domestic debt (net)	9.5	765.1	27.7	57	7.8*
<b>Total debt</b>	<b>16.7</b>	<b>1,347.9</b>	<b>48.8</b>	<b>100</b>	<b>4.9</b>

*\* Excludes the interest paid on the overdraft facility at CBK*

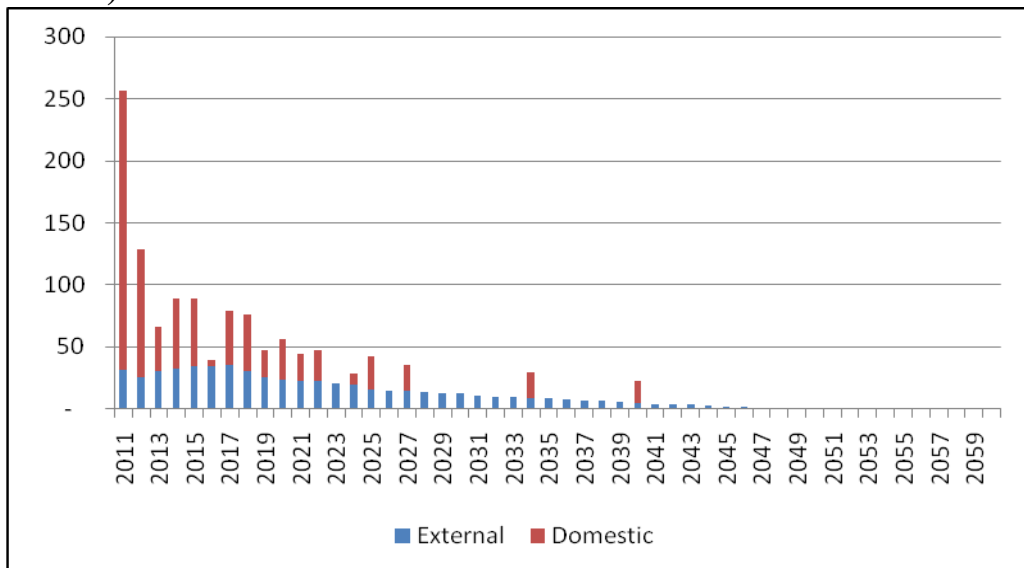
*Source: Ministry of Finance and IMF/WB estimates*

**Figure 1: Evolution and Composition of Total Public Debt**



Source: Ministry of Finance and Central Bank of Kenya

**Figure 2: Total Debt Repayment Profile, End-June 2011 (Ksh billion)**



Source: Ministry of Finance and Central Bank of Kenya

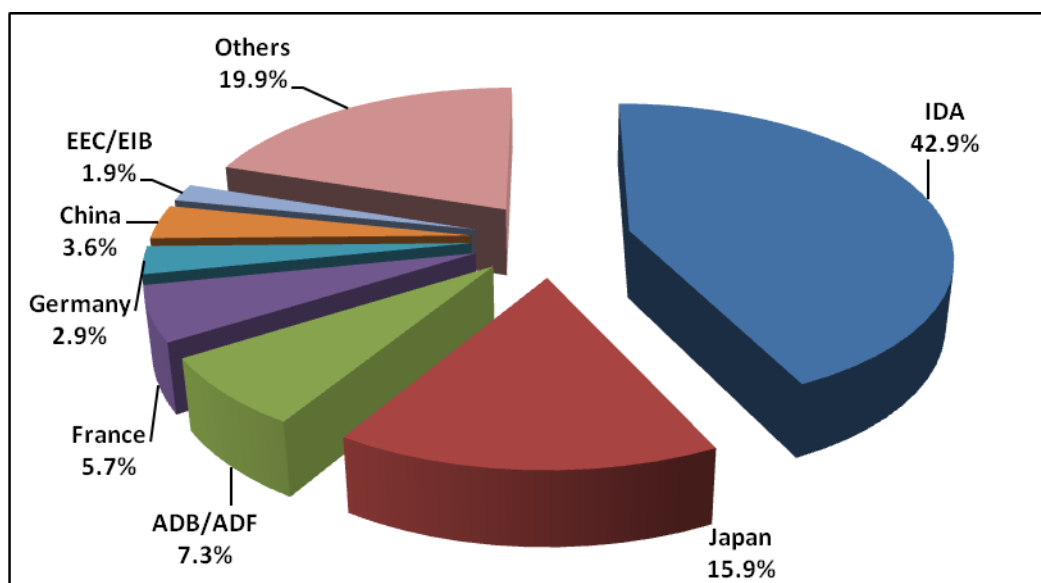
20. The main external sources of financing are multilateral and bilateral creditors. Multilateral concessional debt amounts to 63 percent of total external debt while bilateral creditors account for 36 percent. Commercial debt (100 percent in dispute) represents 1 percent of total public external debt (Figure 1, Chart 2).

21. The currency composition of external debt is also relatively unchanged. The largest share of foreign debt remains denominated in Euros (18 percent of total debt), with the USD, and the Japanese Yen accounting for 15 and 10 percent respectively (Figure 1, Chart 3). Kenya Shilling denominated debt accounts for 57 percent of total debt.

22. The interest rate composition of total debt also remains relatively unchanged with 98 percent of the debt being on fixed rates (Figure 1, Chart 4).

23. IDA, ADB/ADF and EEC/EIB are the main multilateral creditors as shown in Figure 3. On average, they account for 85 percent of the outstanding multilateral debt as at end June 2011. IDA is the single biggest source of external resources, accounting for 70 percent of the outstanding multilateral debt. In terms of bilateral creditors, Japan, France, Germany and China are the main creditors accounting for over 80 percent of the bilateral debt. Japan is the largest bilateral donor, accounting for 46 percent of the bilateral debt.

**Figure 3: External Debt by Major Creditors, End June 2011**



*Source: Ministry of Finance*

24. Table 3 highlights the average cost characteristics of new external commitments. The Government's external borrowing policy specifies a grant element of at least 35 percent as the main criteria for approval of loan agreements and the table demonstrates the hardening of terms for new external commitments in 2010, occasioned by borrowing on terms very close to the 35 percent minimum concessionality particularly for the energy sector.

**Table 3: Average Terms for New External Loans**

Terms	June 2009	June 2010	June 2011
Interest rate (%)	1.2	1.2	0.8
Maturity (Years)	38.8	33.9	32.9
Grace period (Years)	8.3	7.5	8.9
Grant Element (%)	59.9	53.0	59.2

*Source: Ministry of Finance*

25. Refinancing risk remains significant, but manageable. The Average Time to Maturity (ATM) of the total debt portfolio is 8.4 years down from 8.9 years at end June 2010, with that of the domestic debt portfolio at 5.9 years up from 4.6 years (Table 4). The average maturity profile for external debt has declined marginally to 11.7 years from 11.8 years. Nevertheless, an examination of the repayment profile indicates that there is significant refinancing and rollover risk, with 18 percent of the domestic debt stock maturing in the next 12 months.

**Table 4: Cost and Risk Considerations of Debt Portfolio, End June 2011**

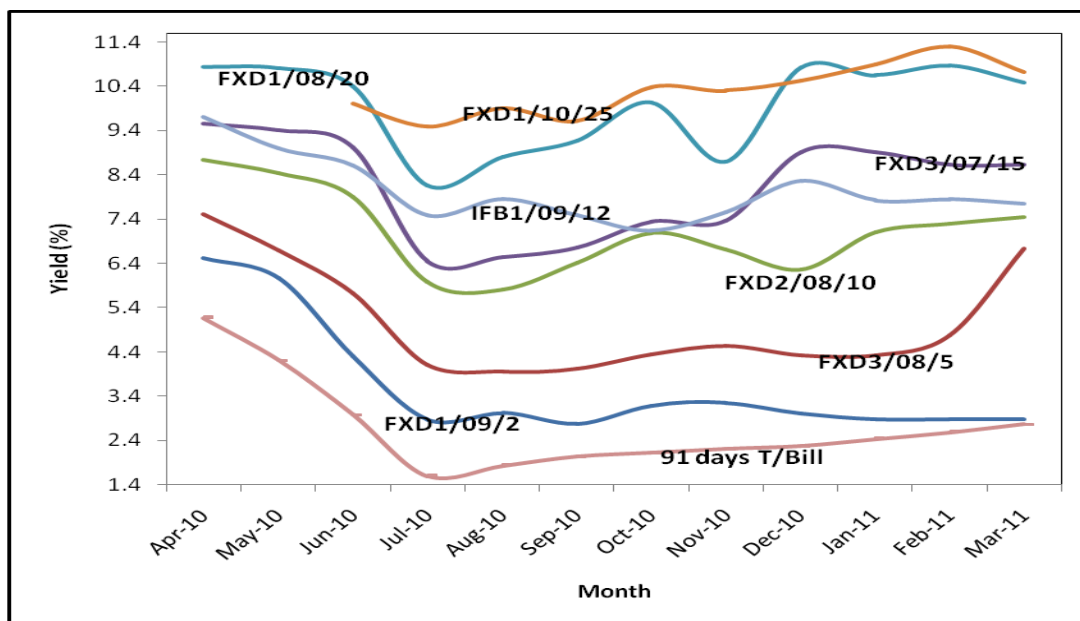
Characteristics of Existing Portfolio	Ex ante Risks	Ex ante Cost
<b>Currency composition</b> (FX = 43%; DX=57%)		
External, mostly concessional	Exchange rate risk	Low
Domestic	No exchange rate risk	High
<b>Maturity profile (ATM = 8.4 years)</b>		
External, mostly concessional (ATM =11.7 years)	Low refinancing risk	Low
Domestic (ATM = 5.9 years)	Medium refinancing risk	High
<b>Interest rate composition</b> (Fix=98%; Float=2%)		
	Low interest rate risk	

*Source: Ministry of Finance and Central Bank of Kenya*



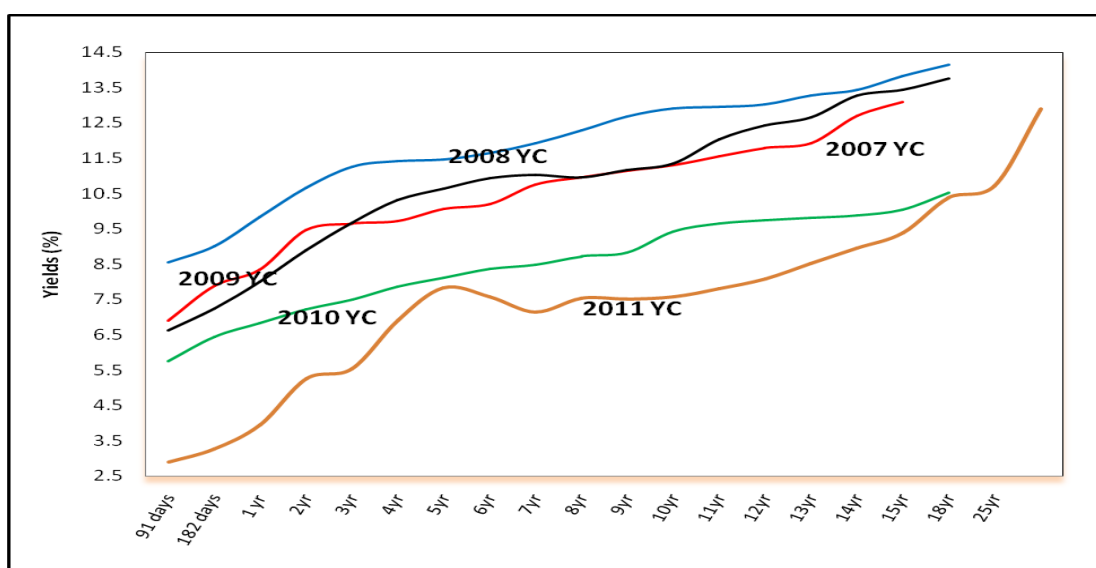
26. The average interest rates on Government securities (91-day Treasury Bill and Benchmark Treasury Bonds) declined significantly in the first half of the financial year (Figure 4) leading to a shift in the yield curve (Figure 5), but the trend reversed during the second half of the year. The declining rates were due to increased liquidity and the resolutions of the Monetary Policy Committee to lower the Central Bank Rate (CBR).

**Figure 4: Trend in Domestic Interest Rates in 2010/11**



*Source: Central Bank of Kenya*

**Figure 5: Evolution of the Yield Curve**



*Source: Central Bank of Kenya*

27. Going forward, the composition of the debt portfolio suggests that reducing refinancing risk should remain a priority for the MTDS. In addition, although the extent of exchange rate risk is partially mitigated by the currency composition of external debt, given the sensitivity of the *NPV of Debt/GDP* to exchange rate shocks, this suggests that the overall proportion of external debt should be carefully monitored. In particular, the assessment of the likely impact, and consequently, the relative importance of reducing exchange rate exposure, would change if the nature of external borrowing were to change (for example, if new debt was contracted on a bullet basis with shorter maturities).

## V. 2011 MTDS: KEY ASSUMPTIONS

### a) Objectives and Scope

28. In the *2011 MTDS* update, the Government will continue pursuing the same broad objectives of funding the Central Government Budget while maintaining a prudent level of risk and taking account of costs. This will be achieved through the diversification of external sources of financing and further lengthening of the average time to maturity of the domestic debt portfolio.

29. The scope of the analysis of *2011 MTDS* is based on the combined Central Government debt and publicly guaranteed debt serviced by the Government. Guaranteed debt currently serviced by the Government amounts to USD 112.8 million or 1.5 percent of total public and publicly guaranteed (PPG) external debt.<sup>2</sup>

### b) Macroeconomic Environment and Risks

30. The macroeconomic framework underpinning the MTDS is consistent with projections included in the *2011/12 Budget Policy Statement (2011 BPS)*. With an optimistic forecast of the global economy, the budget deficit and external balance are expected to improve compared to 2010. The medium term outlook for FY2011/12-FY2013/14 assumes that growth of the local economy will increase from 5.4 percent in FY2010/11 to reach 6.5 percent in FY2013/14 and the overall budget deficit is projected to decline from 5.9 percent of GDP in FY2010/11 to 3.7 percent of GDP in FY2013/14. Inflation is expected to remain at around 6 percent, and the exchange rates to remain stable. Balance of Payments is expected to return to surplus from FY2011/12 due to improvements in exports, remittances and FDI compared to 2010. Gross international reserves are assumed to reach the East African Community (EAC) target of 4 months of imports by FY2013/14 (Table 5).

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<sup>2</sup> Total guaranteed debt amounts to USD 505.9 million (at end March 2011).

**Table 5: Baseline Macroeconomic Assumptions**

<b>Baseline macroeconomic assumptions</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
Real GDP growth (%)	2.1	4.1	5.4	5.7	6.3	6.5
Inflation (average, %)	11.3	5.7	6.4	9.1	6.0	5.0
Exchange rate (e.o.p, Ksh per USD)	77.2	81.9	81.0			
<b>External Sector</b>						
Current account (% of GDP)	-6.6	-7.4	-8.5	-7.9	-7.2	-6.3
Exports value, goods and services	24.6	25.4	28.3	28.2	27.2	26.8
Imports value, goods and services	37.3	38.8	42.5	41.4	39.3	37.7
Gross official reserves (months of next year's imports)	3.1	3.2	3.1	3.2	3.6	3.8
<b>Central government budget</b>						
Overall balance (in billions of Ksh)	-82	-174	-163	-170	-168	-148
Overall balance (% of GDP)	-3.6	-7.1	-5.9	-5.3	-4.7	-3.7
Total revenue and grants (in billions of Ksh)	508	618	721	824	939	1,055
Total revenue and grants (% of GDP)	23.3	25.2	26.2	25.9	26.2	26.3
Total expenditure and net lending (in billions of Ksh)	602	792	884	995	1,106	1,203
Total expenditure and net lending (% of GDP)	27.7	32.2	32.0	31.3	30.8	30.0
Primary deficit (in billions of Ksh)	34.2	109.5	90.7	85.4	69.5	57.3
Primary deficit (% of GDP)	1.6	4.5	3.3	2.7	1.9	1.4
Nominal GDP (Market prices, in billions of Ksh)	2,238	2,458	2,762	3,184	3,589	4,012

*Source: Ministry of Finance*

31. Financing needs are determined by the primary deficit, interest costs and principal payments/redemptions. Under the baseline macroeconomic assumptions, the primary deficit is expected to drop from Ksh 90.7 billion in FY2010/11 to Ksh 85.4 billion in FY2011/12 and decrease further to Ksh 57.3 billion by FY2013/14. The 2011 MTDS provides guidance on the borrowing mix to close the financing gap.

32. The macroeconomic outlook carries substantial uncertainty. In particular, the January 2011 joint *World Bank-IMF LIC Debt Sustainability Analysis (DSA)* highlights the sensitivity of Kenya's debt sustainability to shocks in economic growth. Lower growth will negatively affect the primary deficit through both lower revenue collection and increased outlays to protect the most vulnerable. Overall, growth will depend on the pace of global economic growth,

drought and international fuel prices that impact negatively on revenues and hike expenditure demands.

33. Increased investment in infrastructure might require an increase in the level of guarantees while the implementation of the new Constitution may need the Government to take over liabilities of counties. This increase in contingent liabilities would represent a significant increase in risk to the current debt burden.<sup>3</sup> The expected approval of a Bill to regulate PPPs as well as the envisaged implementation of a superannuation pension scheme for the civil service from July 2011 will also have implications for Government's contingent liabilities in the future.

34. Overall, the nature of macroeconomic risks has not changed relative to the analysis undertaken in 2010. Consequently, the implications for the desired direction of the MTDS remain similar, that is, maintain a diversified source of investors and creditors and manage the amortization profile so that fiscal shocks (for example, the impact of drought on the budget) can be absorbed, and manage the external exposure of the portfolio taking into account the vulnerability to Balance of Payments shocks.

35. The principal risks to the baseline are summarised below in Table 6.

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<sup>3</sup> A survey of contingent liabilities in SOEs was started in 2008 but has not yet been completed. Additionally, a Taskforce is expected to be set up to establish the extent of contingent liabilities under a devolved government system, while payments under the Public Service Superannuation Scheme (PSSS) are treated as contingent liabilities. GOK indemnity (USD 45 million or Ksh 3.7 billion) to IDA for guarantee to Kenya Railways has also been recorded as a contingent liability.

**Table 6: Macro-Risks and Implications for Debt Management Strategy**

Implications for Debt Strategy Preferences				
Macroeconomic Factors	Impact	Target source	Currency	Other comments
<b>Balance of Payment Risks</b>				
Terms of trade shock	Exchange rate	Domestic	DX	Improve market capacity
FDI/Private capital flow volatility	Exchange rate	Domestic	DX	Improve market capacity
Remittance dependence	Exchange rate	Domestic	DX	Improve market capacity
Tourism receipts dependence	Exchange rate	Domestic	DX	Improve market capacity
Low foreign exchange reserves	Exchange rate		FX	Diversify trading partners
<b>Fiscal Risks</b>				
Potential volatility (revenues)	Expenditure volatility	Market	DX/FX	Create fiscal space, prioritize expenditure and improve efficiency Improve relationship with donors, improve absorptive capacity and implementation efficiency
Capital spending aid dependent	Growth volatility		DX/FX	
Contingent liabilities	Debt level increase	Market	DX/FX	Create fiscal space and strengthen overall PFM framework
<b>Monetary Risks</b>				
High inflation	Impede development, interest costs	market higher		Increase credibility of monetary policy, improve monetary operational framework and monetary transmission mechanism to reduce inflation premium
Negative real interest rate	Impact real investors and growth	money deposit		
<b>Natural Disasters</b>				
Natural Disasters	Growth volatility	Market	DX/FX	Diversify economy and explore the possibility of commodity hedge

### c) Potential Financing Sources

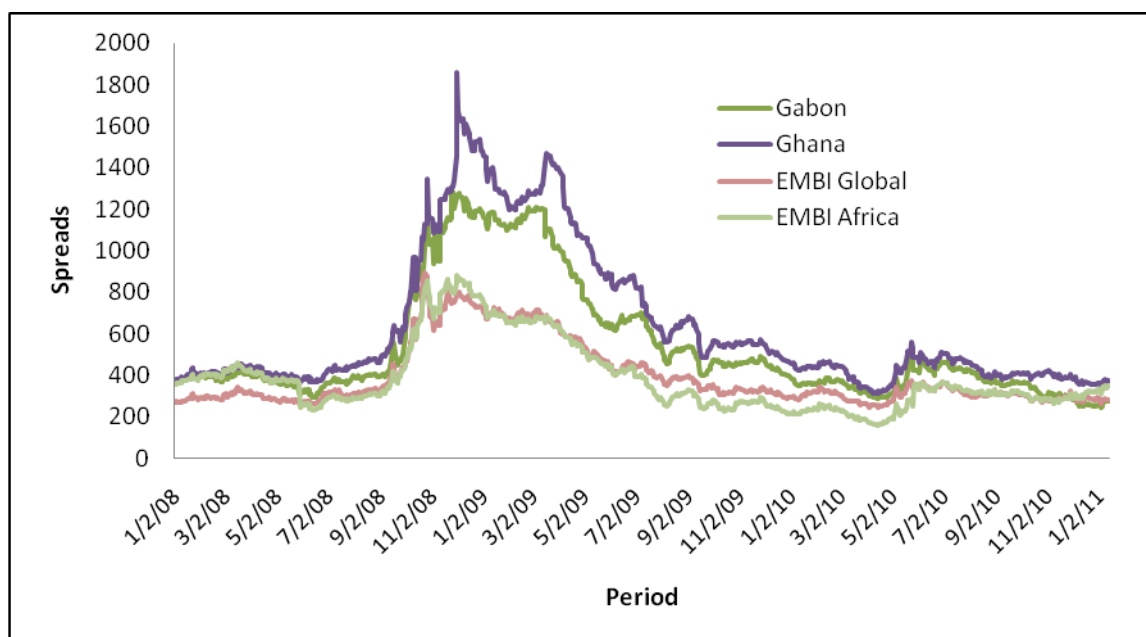
36. The Government intends to continue prioritizing external financing on concessional terms. However, it is noted that it's facing increasingly hardened terms on new bilateral loans, with new loans often contracted on terms very close to the lower limit of 35 percent grant element. The potential to issue an international bond remains, particularly given the general recovery in international market conditions (see Figure 6). However, recent events elsewhere<sup>4</sup>, political uncertainty related to general elections in 2012 and investors increasing focus on issues relating to fiscal transparency, quality of statistics and effectiveness of public financial management and expenditure controls suggest Kenya may face relatively higher costs than a peer group analysis would suggest. The prevailing domestic interest rates therefore suggest the

<sup>4</sup> Senegal, considered Kenya's peer issued a USD 500 million sovereign bond in May 2011 at 8.75 percent p.a.

Government would get relatively cheaper funding from domestic sources.

37. In the absence of concessional financing, the Government will maintain non-concessional financing including guarantees at USD 700 million for the year 2011/12 in accordance with the IMF Extended Credit Facility (ECF) arrangement.

**Figure 6: Performance of Peer Debut Sovereign Bond Issues**



*Source: Ministry of Finance and IMF/WB estimates*

38. In terms of domestic debt, the market has continued to develop through FY2010/11. The increased borrowing needs have been almost entirely met through domestic borrowing. However, the Government recognizes that the pace of increase of domestic debt may not be sustainable and could crowd out the private sector as economic conditions improve and liquidity is withdrawn from the market. In particular, the Government considers that it would not be possible to meet any additional infrastructure investment needs, over and above those identified in *2011 BPS*, in the domestic market.

## d) Future Financing and Pricing Assumptions

### *External sources*

39. The following pricing assumptions for different external sources of financing underlie the *2011 MTDS*.

- Concessional external loans are priced at a fixed rate of 0.75 percent, with a 40-year tenor and a 10-year grace period. These loans are assumed to be denominated in SDR.
- Semi-concessional loans are assumed to be contracted from official creditors or export credit agencies. These loans have a fixed interest rate of 2.5 percent, a maturity of 20 years including a 5-year grace period.<sup>5</sup> These loans are denominated in Euros and USD.<sup>6</sup>
- In the absence of concessional financing, the Government will maintain non-concessional financing including guarantees at USD 700 million for the year 2011/12 for investment projects that demonstrate revenue streams and high social returns in accordance with the ECF arrangement. These loans have market-based terms and are denominated in Euros and USD.<sup>7</sup>
- Accessing the international capital market is priced off the assumed effective yield curve, which is based on the underlying forward US Treasury curves plus an assumed credit spread. The analysis assumes that international capital markets could be accessed if concessional resources fall below target. Alternatively, domestic borrowing could increase. The international sovereign bond would have a maturity of 10 years, with a bullet repayment. The credit spread is set at 450 basis

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<sup>5</sup> These terms are consistent with loans that have been contracted in the last one year from bilateral sources.

<sup>6</sup> A review of instruments indicated that it would be useful to include a semi-concessional fixed rate loan - with terms consistent with those secured on recent bilateral external debt - to the choices available in the analysis. This replaces the floating rate instrument considered in *2010 MTDS*. There have been no new floating rate loans contracted since 2003 and overall these instruments represent a marginal share of the portfolio. Consequently, losing this instrument should not significantly affect the analysis.

<sup>7</sup> These terms are consistent with loans contracted for the energy sector in the last one year.



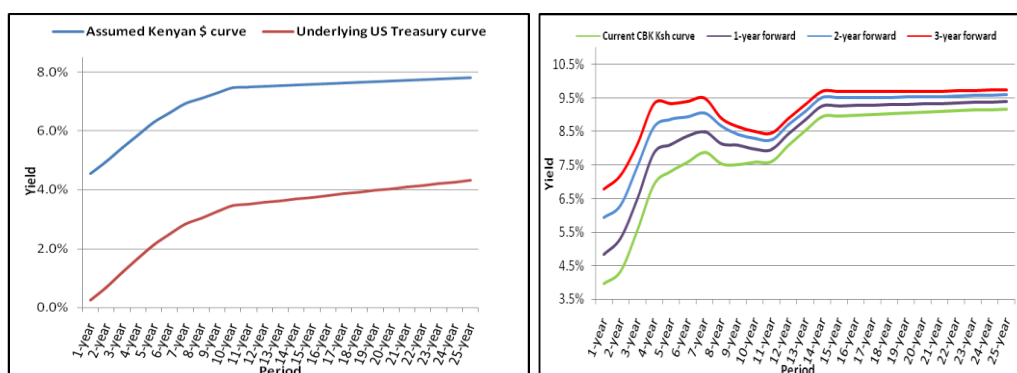
points. A 5-year bond is expected to have a spread of 400 basis points<sup>8</sup>.

40. The **net external borrowing** for financial year 2011/12 is **1.9 percent of GDP** and expected to rise to 2.5 percent of GDP in the financial year 2013/14.

### *Domestic market sources*

41. The pricing of new domestic borrowing is based on the underlying forward US Treasury curves. The assumed credit premium is taken into account, and the anticipated inflation differential is used to adjust for the exchange rate differentials. This is then adjusted for an additional risk premium, which can be assumed to capture liquidity, inflation risk, and other risk effects. This premium is identified by determining the necessary premium required to fit today's observed yield curve.<sup>9</sup> The applicable Ksh curves are shown in Figure 7.

**Figure 7: Assumed USD and Ksh Yield Curves**



*Source: Ministry of Finance and IMF/WB estimates*

42. Domestic borrowing will be undertaken through issuance of Treasury Bills and Treasury Bonds at the ratio of 30:70. This will ensure that the maturity structure of the existing portfolio is lengthened to minimize refinancing risk.

43. In addition, Treasury Bonds will be issued around Benchmark Bonds of 2, 5, 10, 15 and 20 year tenors to build liquidity.

<sup>8</sup> These spreads compare with the current peer issuers' secondary market trading spreads and spreads on recent first issuance for bonds of 10- and 5-years maturity.

<sup>9</sup> The CBK yield curve is taken as the basis for the current Ksh curve.

44. **Net domestic borrowing** for financial year 2011/12 is **3.5 percent of GDP** and is expected to fall to 1.2 percent of GDP in the financial year 2013/14.

#### e) Description of Stress Scenarios

45. The robustness of each alternative strategy is assessed on the basis of the baseline scenario for interest and exchange rates. While a number of standard shocks are generally applied in the context of the DSA, it is important to also consider what might constitute a typical shock in the Kenya-specific context. To determine the appropriate size of these shocks, the historical performance of the relevant exchange and short-term interest rates in the relevant markets was considered. In particular, the size of the interest rate shock to be applied to the Kenya shilling interest rates was determined on the basis of the past 10 years, which includes periods when interest rates declined (and increased) sharply. Consequently, the implied annual deviation of interest rates is quite large at over 2 percent<sup>10</sup>. For the purposes of the analysis, we assume that shocks materialize in FY2011/12, and are sustained through the remainder of the simulation horizon<sup>11</sup>:

- Scenario 1: *Upward shift of the Ksh yield curve*. The cost of borrowing at all tenors increases by two standard deviations (equivalent to a 4.5 percent interest rate increase) calculated on the basis of the historical change in the interest rates on Treasury Bills.
- Scenario 2: *Flattening of the Ksh yield curve*. This scenario corresponds to the impact of a switch in the monetary policy stance, which would increase short term rates, but where the market's longer-term expectations remain unchanged (that is, inflation expectations remains anchored to the 5 percent target). In this scenario, the interest rate of the 364-day Treasury Bill increases by two standard deviations, as in Scenario 1, but

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<sup>10</sup> However, it appears that there were no particular structural factors that would argue for excluding that particular period from the analysis.

<sup>11</sup> Basically, this presumes that the baseline macroeconomic outlook and financing assumptions are highly uncertain. A more specific risk scenario could be considered on the basis of known future events, such as an election. The quantification of the shocks reflects the historical standard deviation over the last 10 years, except for Scenario 3 where an extreme shock to the nominal exchange rate is simulated.

interest rates on long-term bonds increase proportionally less, with the interest rate of the bond with the longest maturity (30 years) unchanged from the baseline scenario.

- Scenario 3: *Extreme depreciation of the Ksh.* The Ksh depreciates by 30 percent vis-à-vis the other currencies in FY 2011/12.
- Scenario 4: *Country-specific depreciation of the Ksh.* The Ksh depreciates by two standard deviations of the percentage change of the historical nominal exchange rate vis-à-vis other currencies.<sup>12</sup>
- Scenario 5: *A combination of previous Scenarios 1 and 4.* In this scenario, the Ksh depreciates by one standard deviation vis-à-vis the other three currencies, while all interest rates increase by one standard deviation at all maturities. This reflects the likelihood that interest rates would likely react to an external shock that affects the exchange rate.

#### **f) Description of Alternative Financing Strategies**

46. The analysis compares a number of alternative strategies with *2010 MTDS*. In particular, this analysis assesses the relative performance of a strategy aiming to maximize external concessional financing (corresponding to Strategy 2 below). However, in light of the possibility of significant shortfall in external disbursements, as experienced in the recent past, the analysis also evaluates the costs and risks associated with alternative strategies that assume relatively higher domestic borrowing (Strategy 3 and 4) or the issuance of an international sovereign bond (Strategy 5) to meet the expected Government gross financing needs.

47. The candidate strategies are described below and in Table 7.

- a. *Strategy 1 (S1. 2010 MTDS).* This is the preferred strategy of the *2010 MTDS*, which has been implemented in the past year. It assumes that 25 percent of the gross financing needs would be met by external borrowing, mainly from

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<sup>12</sup> This shock corresponds to a 10 percent depreciation vis-à-vis the Euro and the USD and a 15 percent depreciation vis-à-vis the Yen.

concessional creditors, and 75 percent from the domestic market, mainly through Treasury Bonds. The concentration of issuance with 5- and 10-year maturities assumes a significant initiative to reduce cost of domestic debt associated with longer dated securities.

- b. *Strategy 2 (S2. More external borrowing)*. External and domestic borrowing would amount to 30 percent and 70 percent of gross financing needs respectively. The concentration of issuance with 5- and 10-year maturities assumes the initiative to reduce cost of domestic debt associated with longer dated securities is maintained.
- c. *Strategy 3 (S3. Medium term domestic debt)*. This strategy maximizes domestic borrowing, assuming 75 percent of gross financing needs are met through these sources. External financing would decrease to 25 percent of Government gross financing needs. This strategy also assumes more domestic debt issued at 5- and 10-year maturities.
- d. *Strategy 4 (S4. More domestic borrowing)*. It assumes domestic borrowing would amount to 80 percent while 20 percent of the gross financing needs would be met by external borrowing, from concessional, semi-concessional and non-concessional creditors.
- e. *Strategy 5 (S5. International Sovereign Bond (ISB))*. Under this strategy, the Government would issue an international bond<sup>13</sup> as an alternative to increasing domestic borrowing.

48. *Under all strategies*, it is assumed that about one third of all official sector external borrowing is on less concessional terms, in line with recent experiences.

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<sup>13</sup>Issued in USD, with 10-year maturity and bullet repayment, carrying a spread of 450 basis points, see section d above on future financing pricing assumptions.

**Table 7: Alternative Debt Management Strategies**

	<b>2010 MTDS S1</b>	<b>More external debt S2</b>	<b>Medium term domestic debt S3</b>	<b>More domestic debt S4</b>	<b>ISB S5</b>
<b>New debt</b>					
<b>Domestic</b>	<b>75%</b>	<b>70%</b>	<b>75%</b>	<b>80%</b>	<b>65%</b>
Treasury bills (change in stock)	8%	8%	8%	8%	3%
2-year	11%	12%	11%	12%	7%
5-year	19%	16%	22%	19%	13%
10-year	19%	18%	17%	20%	13%
15-year	9%	8%	9%	12%	10%
20-year	9%	8%	8%	9%	20%
<b>External</b>	<b>25%</b>	<b>30%</b>	<b>25%</b>	<b>20%</b>	<b>35%</b>
Semi-concessional	8%	7%	5%	5%	8%
Concessional	17%	20%	17%	13%	13%
5-year syndicate	0%	3%	3%	3%	3%
10-year ISB	0%	0%	0%	0%	11%

## VI. OUTCOMES OF ANALYSIS OF STRATEGIES

49. The performance of the five alternative strategies was assessed under the five identified market stress scenarios in terms of their relative cost and risk. Consideration focuses on performance in terms of the cost-risk tradeoff reflected in two key indicators, that is, *interest/GDP* and *NPV of Debt/GDP*. The former is relevant as it indicates the amount of resources required to service the debt and which is, consequently, not available for other uses; the latter is relevant as the Government has set an overall ceiling of 40 percent of GDP for the NPV of debt. The results of this cost-risk tradeoff are shown in Table 8 and Figure 8.

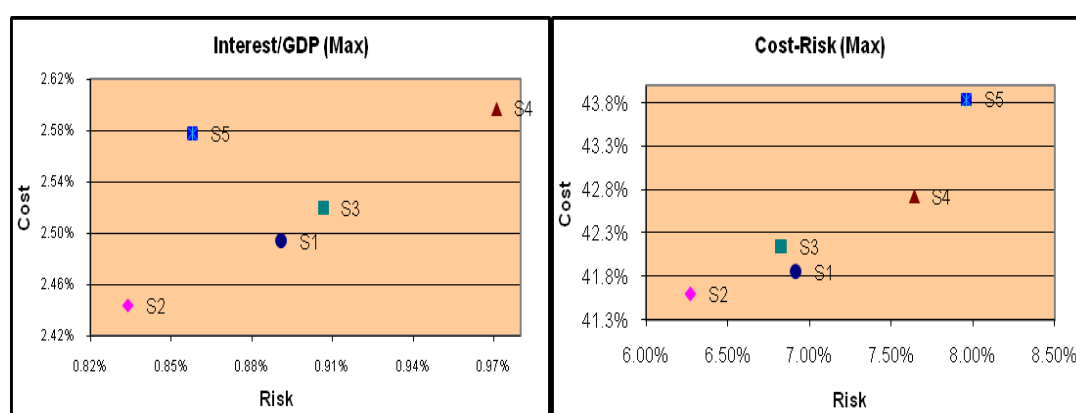
**Table 8: Cost-Risk Tradeoffs**

<b>Interest/GDP (%)</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>S5</b>
Baseline scenario	2.49%	2.44%	2.52%	2.60%	2.58%
Parallel shift in yield curve (2 std. deviations)	0.89%	0.83%	0.91%	0.97%	0.86%
Flattening of yield curve	0.49%	0.46%	0.49%	0.53%	0.40%
Extreme devaluation of exchange rate (30%)	0.10%	0.10%	0.10%	0.10%	0.10%
Devaluation of exchange rate by 2 std. deviations	0.04%	0.04%	0.04%	0.04%	0.04%
Combination shock (1 std deviation)	0.32%	0.30%	0.33%	0.35%	0.31%

<b>NPV of Debt/GDP (%)</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>S5</b>
Baseline scenario	41.85%	41.60%	42.15%	42.73%	43.84%
Parallel shift in yield curve (2 std. deviations)	6.92%	6.27%	6.83%	7.64%	7.96%
Flattening of yield curve	3.24%	2.90%	3.19%	3.56%	3.19%
Extreme devaluation of exchange rate (30%)	4.21%	4.20%	4.22%	4.25%	4.29%
Devaluation of exchange rate by 2 std. deviations	1.59%	1.59%	1.59%	1.60%	1.62%
Combination shock (1 std deviation)	3.05%	2.86%	3.04%	3.31%	3.44%

**Figure 8: Cost-Risk Tradeoffs**



50. As anticipated, the strategy assuming the largest amount of official sector external borrowing (S2) has the most beneficial cost and risk attributes. This suggests that the Government should target an increase in the amount of external official sector borrowing relative to S1 (2010 MTDS). However, given the potential challenges in achieving this strategy in practice, it is prudent to consider what the appropriate contingency should be in the event that there is a shortfall in disbursements. In that context, the choice is between relatively more domestic borrowing (as represented by S3 and S4) or accessing the international capital markets (S5).

51. However, there is a clear trade-off between S3, S4 and S5 in terms of interest/GDP. Given the relatively greater weight of medium term domestic debt in S3, this strategy is less costly but more risky. On the other hand, S4 is more costly and risky due to the uptake of medium to long term domestic debt. However, when NPV of Debt/GDP is considered, S3 is also less risky given that a significant element of external borrowing is now exposed to interest rate risk. It is also important to recognize that the introduction of a bullet bond changes the nature of exchange rate risk of the portfolio relative to official sector financing, which also argues against choosing S5.

52. The relative ranking of strategies was also considered in the context of one alternative macroeconomic scenario. The scenario reflected the potential scale of direct Government financing needed to support the development of county infrastructure. Here it is assumed that this would require USD 160.5 million of additional expenditure over three years. Consequently, an adjustment was made for this presumed pipeline of debt (that is, the strategies described in Table 7 were applied to the total financing requirement net of this expenditure). Overall, this increases the proportion of external financing in each strategy by around 3 percent, but does not change the relative performance of the strategies (Appendix I). Consequently, S2 would remain the preferred strategy, with the tradeoff between S3, S4 and S5 as above.

53. Overall, there is relatively little difference between how each strategy performs. This is due to the fact that net new borrowing over this period is quite limited relative to the size of the existing debt portfolio. As a result, the characteristics of the existing portfolio

continue to dominate. *This suggests that other factors should have a more significant bearing on the ultimate decision.*

54. In that respect, it is useful to consider a range of other key indicators (Table 9). These indicators would support a slight bias in favor of S2 as it would be more effective in mitigating refinancing risk. This risk has become increasingly relevant for debt managers in light of the continued turmoil in sovereign debt markets. *In addition, S2 might be more feasible to implement given it would maintain a bias towards medium-term issuance, which is where current investor demand is concentrated* (Table 10, S1).

**Table 9: Other Key Indicators**

	Simulation Horizon (2011/12-2013/2014)				
	S1	S2	S3	S4	S5
<b>Cost indicators (average over simulation)</b>					
Average interest rate	5.4%	5.3%	5.4%	5.5%	5.5%
Interest / Revenues	8.8%	8.7%	8.9%	9.0%	9.0%
<b>Risk indicators (end simulation horizon)</b>					
% DX in debt portfolio	56%	53%	56%	59%	52%
ATM (years)	11.0	11.0	10.6	10.4	11.4
% of debt refinancing within 12 months	8.0%	8.3%	8.0%	8.3%	6.5%
% of DX debt refinancing within 12 months	10.8%	11.9%	10.8%	10.8%	8.7%
Short-term external debt / Reserves	5.5%	5.5%	5.5%	5.5%	5.5%
<b>Implied net borrowing (% of GDP) (average over simulation)</b>					
Net domestic borrowing	2.68%	2.15%	2.69%	3.19%	1.93%
Net external borrowing	1.49%	2.00%	1.49%	1.03%	2.34%

55. Other factors may also be relevant if the Government were to consider tapping the international capital markets. In Kenya's case the investors' risk appetite may be affected by any residual political uncertainty, which suggests that the optimal time for an issue might be following the 2012 general elections. In addition, investors' continued focus on issues relating to fiscal transparency, quality of statistics and effectiveness of public financial management and expenditure controls requires Kenya to strengthen public financial management and expenditure frameworks coupled with continued improvements in data quality and transparency if the country is to secure best pricing on any issue.



56. Finally, it is prudent to consider the implied quantities to be borrowed in each instrument type to assess the feasibility of any of the strategies. As designed, S2 requires the greatest amount of *net official* sector borrowing at an average of around USD 750 million a year; while under S1, this borrowing target is cut by about a quarter (Table 10).

**Table 10: Borrowing Quantities by Instrument**

<b>Implied gross borrowing (annual average)</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>S5</b>
<b>Foreign borrowing (US\$ mn)</b>	<b>471</b>	<b>512</b>	<b>411</b>	<b>328</b>	<b>770</b>
Official sector borrowing (US\$ mn)	471	512	411	328	388
International capital market securities (US\$ mn)	-	-	-	-	382
<b>Domestic borrowing (Ksh mn)</b>	<b>247,193</b>	<b>232,491</b>	<b>247,579</b>	<b>267,109</b>	<b>206,317</b>
Money market instruments	24,719	27,858	24,758	26,711	10,316
Short-term bonds (2-year)	37,079	39,465	37,137	40,066	20,632
Medium-term bonds (5 - 10 years)	123,596	111,555	128,741	130,883	80,464
Long-term bonds	61,798	53,614	56,943	69,448	94,906
<b>Implied net borrowing (annual average)</b>					
<b>Foreign borrowing (US\$ mn)</b>	<b>575</b>	<b>773</b>	<b>576</b>	<b>396</b>	<b>905</b>
Official sector borrowing (US\$ mn)	575	773	576	396	523
International capital market securities (US\$ mn)	-	-	-	-	382
<b>Domestic borrowing (Ksh mn)</b>	<b>93,640</b>	<b>75,903</b>	<b>93,785</b>	<b>111,292</b>	<b>69,087</b>
Money market instruments	(58,729)	(57,775)	(58,703)	(58,020)	(63,028)
Short-term bonds (2-year)	(4,637)	(3,101)	(4,808)	(2,631)	(14,865)
Medium-term bonds (5 - 10 years)	95,208	83,166	100,353	102,495	52,075
Long-term bonds	61,798	53,614	56,943	69,448	94,906

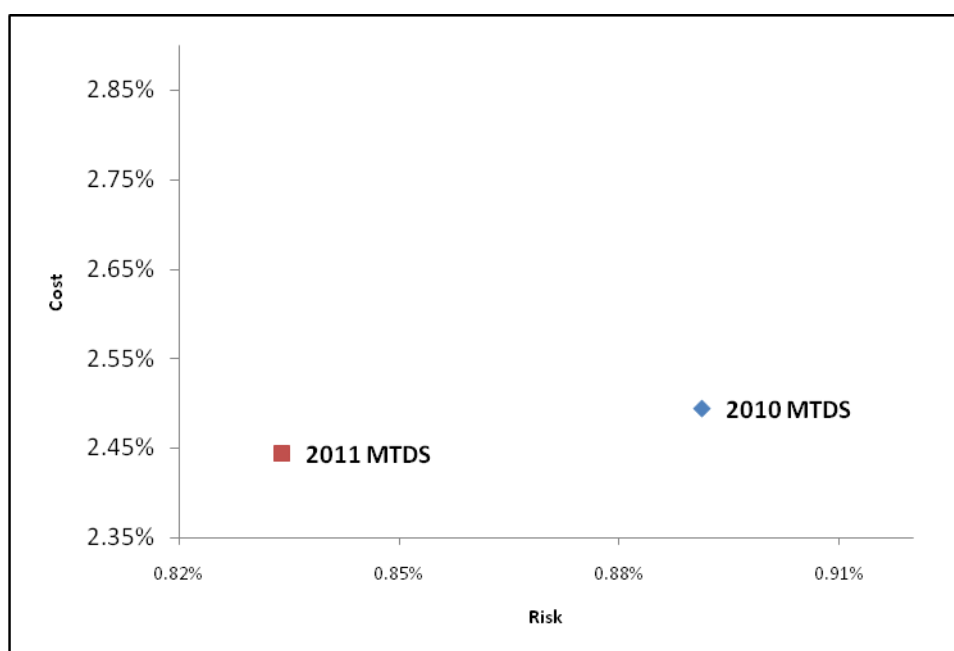
57. **In conclusion, taking into account both risk and cost trade-offs, the implied quantity of gross borrowing, the need to develop the domestic debt market and ability to implement the strategy, the 2011 MTDS proposes Strategy 2 (S2) as the most optimal strategy.** Indeed, the results of the cost and risk analysis (Tables 11 and 12; Figures 9 and 10) reveal that the 2010 MTDS is less favorable going forward compared to the 2011 MTDS.

**Table 11: Cost and Risk Analysis: 2010 MTDS vis-à-vis 2011 MTDS: Interest/GDP ratio**

Scenarios	Strategies	
	2010 MTDS	2011 MTDS
	(Interest in percent of GDP at end-2014)	
Baseline	2.49%	2.44%
Stress test 1: Parallel shift in yield curve	3.38%	3.28%
Stress test 2: Flatter yield curve	2.98%	2.90%
Stress test 3: 30% exchange rate devaluation	2.59%	2.54%
Stress test 4: 2 std deviation devaluation	2.53%	2.48%
Stress test 5: Combination shock	2.81%	2.75%
Change under parallel shift in yield curve	0.89%	0.83%
Change under flatter yield curve	0.49%	0.46%
Change under 30% exchange rate devaluation	0.10%	0.10%
Change under 2 std deviation devaluation	0.04%	0.04%
Change under combination shock	0.32%	0.30%
Maximum under stress	0.89%	0.83%

**Figure 9: Cost and Risk Analysis: 2010 MTDS vis-à-vis 2011 MTDS**

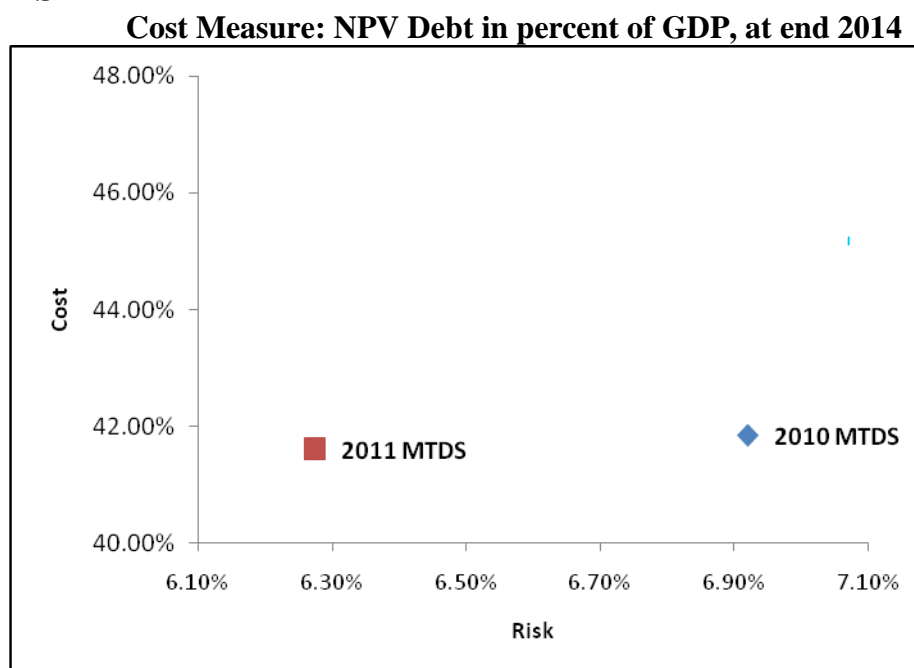
**Cost-Risk Measure: Interest in percent of GDP, at end 2014**



**Table 12: Cost and Risk Analysis: 2010 MTDS vis-à-vis 2011 MTDS: NPV Debt/GDP ratio**

Scenarios	Strategies	
	2010 MTDS	2011 MTDS
	(NPV of Debt in percent of GDP at end-2014)	
Baseline	41.85%	41.60%
Stress test 1: Parallel shift in yield curve	48.77%	47.87%
Stress test 2: Flatter yield curve	45.09%	44.50%
Stress test 3: 30% exchange rate devaluation	46.06%	45.80%
Stress test 4: 2 std deviation devaluation	43.44%	43.18%
Stress test 5: Combination shock	44.90%	44.46%
Change under parallel shift in yield curve	6.92%	6.27%
Change under flatter yield curve	3.24%	2.90%
Change under 30% exchange rate devaluation	4.21%	4.20%
Change under 2 std deviation devaluation	1.59%	1.59%
Change under combination shock	3.05%	2.86%
Maximum under stress	6.92%	6.27%

**Figure 10: Cost and Risk Analysis: 2010 MTDS vis-à-vis 2011 MTDS**



## VII. DEBT SUSTAINABILITY

58. The recent Debt Sustainability Analysis (DSA, January 2011) carried out under the joint World Bank-IMF Debt Sustainability Framework (DSF) concludes debt sustainability indicators have deteriorated somewhat, reflecting a projected faster debt accumulation over the medium term. However, Kenya remains at low risk of external debt distress. Debt sustainability is assessed in relation to policy-dependent debt burden thresholds. Kenya is classified as a medium performer in terms of quality of its policies and institutions as measured by a three year average of Kenya's score on the World Bank's Country Policy and Institutional Assessment (CPIA) index.

59. Under stress tests using different scenarios which consider significant fall in real GDP, rise in primary balance, 30 percent depreciation in the Kenya shilling and 10 percent of GDP increase in borrowing, Kenya's level of debt remain within sustainable levels.

In Table 13, a worst case scenario, a "borrowing shock" scenario is presented which assumes Government borrowing 10 percent of GDP in FY2011/12. The results indicate that in the medium term (by FY2013/14), the debt burden indicators will breach one debt sustainability benchmark, the *NPV of Debt/GDP*.

**Table 13: Sensitivity Analysis for Key Indicators of Public Debt**

	Benchmark	2011 <sup>14</sup>	Impact of 10% of GDP increase in borrowing in 2011 on debt indicators in 2014
NPV of debt as % of GDP	40	40	52
Revenue	250	161	181
Debt service as % of Revenue	30	23	26

60. In the financial year 2011/12, borrowing limit is set at **5.4 percent of GDP** and expected to decline to 3.7 percent of GDP in FY2013/14.

<sup>14</sup> Kenya: Joint IMF/World Bank Debt Sustainability Analysis, January 2011.

61. Caution is warranted to ensure that the favorable public debt situation persists over the medium-term. Larger recourse to domestic debt financing could further increase the domestic interest rates, and put pressure on this position. Recourse to non-concessional external financing could also prove difficult and may increase the risk of debt distress. The borrowing envisaged under the *2011 MTDS* will be undertaken with caution taking into account these factors.

## VIII. IMPLEMENTING THE 2011 MTDS

62. The Government will prepare a borrowing plan to accompany the *2011 MTDS (Strategy 2)* and meet the financing requirement for the financial year 2011/12. The borrowing composition assumed in the MTDS analysis together with the Government cash flow plan provides the basis for the projected annual borrowing plan. The Government will communicate the borrowing plan to the market participants.

63. The *2011 MTDS* provides a clear set of assumptions and some information on key risk parameters that are associated with the Strategy (S2) (Table 9). These provide the basis on which the implementation of the strategy will be monitored and reported. If there is a significant and sustained deviation in the outturn relative to that assumed in the MTDS analysis, the strategy will be reviewed and possibly revised.

64. Debt management strategy development needs a robust legal framework. The Government is in the process of strengthening the legislation governing both external and internal borrowing to be set out under an Act of Parliament envisaged in the Constitution of Kenya, 2010. The legislation will set the long-term debt management objective that should drive the debt management strategy. In addition, the relative responsibilities of the Treasury and the CBK in Government debt management will be clarified through an Agency Agreement.

65. Continued collaboration with partners, such as the US Treasury, the IMF, the World Bank, IFC, MEFMI and the Commonwealth Secretariat will be encouraged in developing the Government and corporate bond markets and capacity building in debt management.

## IX. CONCLUSION

66. The *2011 MTDS* is a robust framework for prudent debt management. It provides a systematic approach to decision making on the appropriate composition of external and domestic borrowing to finance the budget in the financial year 2011/12, taking into account both cost and risk. The cost-risk trade-off of the *2011 MTDS* has been evaluated within the medium term context.

67. The debt strategy complements the Debt Sustainability Framework which is concerned with long-term sustainability of debt. Whereas Kenya's current debt level is sustainable, long-term debt sustainability depends on a number of factors such as real GDP growth, sound macro-economic policy mix, including prudent debt management.

68. The *2011 MTDS* has considered the macro-economic, and global and domestic market environment and related vulnerabilities and **recommends a shift in the composition of debt towards medium term domestic debt over the medium term.**

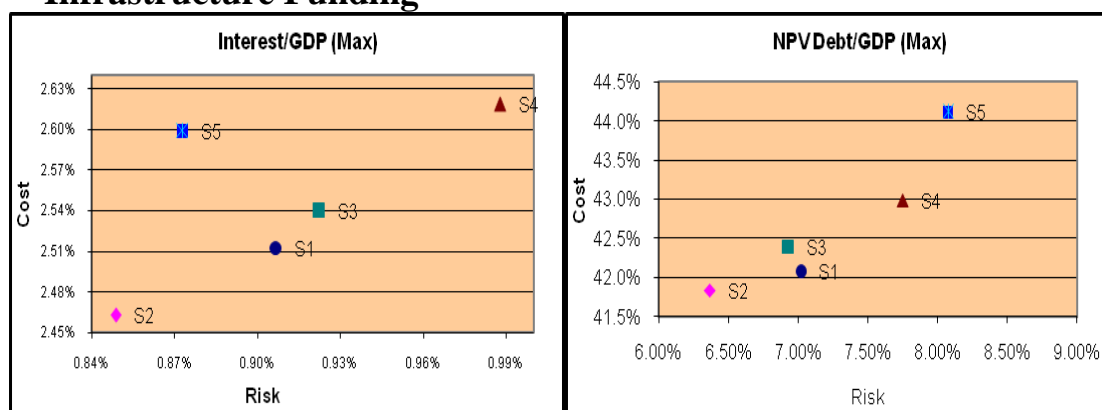
69. This is the third time that the Treasury is formally presenting the Medium Term Debt Strategy as part of the Budget. This initiative will be implemented and entrenched in legislation going forward with the aim of enhancing the transparency of the borrowing process.

## APPENDIX I: ANALYSIS OF THE COST – RISK TRADEOFF UNDER AN ALTERNATIVE SCENARIO

### ■ DEVELOPMENT OF COUNTY GOVERNMENT INFRASTRUCTURE

1. The performance of the strategies was also considered on the basis of an alternative scenario which envisages infrastructure investment (for example, for the development of county governments). In this scenario, an additional USD 160.5 million in spending is spread over the three years of the simulation horizon, increasing the financing requirement accordingly. However, given that the Government considers that it would be challenging to meet this through the domestic market, it is assumed that this extra spending is offset by a committed pipeline of a syndicated loan under commercial terms. In this case, the strategies described in Table 7 are applied to the financing requirement net of this committed debt. Consequently, the final strategy implemented would incorporate a relatively higher proportion of external debt of around 3 percent. In particular, the proportion of external debt increases from 30 to 33 percent under S2, 25 to 28 percent under S3, 20 to 23 percent under S4, and from 35 to 38 percent under S5.
2. The impact of this change on the key cost and indicators is outlined in Figure 12. Again, while overall the cost indicators all shift up considerably, the relative ranking does not change. In addition, given the increase in the quantity of external debt, the indicators outlined in Table 9 would change as indicated in Table 14 below.

**Figure 12: Cost and Risk under County Government Infrastructure Funding**





**Table 14: Other Key Indicators under County Government Infrastructure Funding**

	Simulation Horizon (2011/12-2013/2014)				
	S1	S2	S3	S4	S5
<b>Cost indicators (average over simulation)</b>					
Average interest rate	5.4%	5.3%	5.4%	5.5%	5.5%
Interest / Revenues	8.9%	8.8%	8.9%	9.1%	9.0%
<b>Risk indicators (end simulation horizon)</b>					
% DX in debt portfolio	56%	53%	56%	59%	52%
ATM (years)	11.0	11.1	10.6	10.4	11.4
% of debt refinancing within 12 months	8.0%	8.3%	8.0%	8.3%	6.6%
% of DX debt refinancing within 12 months	10.8%	11.9%	10.8%	10.7%	8.7%
Short-term external debt / Reserves	5.5%	5.5%	5.5%	5.5%	5.5%
<b>Implied net borrowing (% of GDP) (average over simulation)</b>					
Net domestic borrowing	2.78%	2.24%	2.79%	3.30%	2.02%
Net external borrowing	1.53%	2.04%	1.53%	1.06%	2.40%