



**Republic of Kenya**

**MINISTRY OF FINANCE**

**Medium Term  
Debt Management Strategy**

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**2010/11 – 2012/13**

**June 2010**

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# Table of Contents

	Page No.
Foreword .....	4
Acknowledgement .....	5
List of Abbreviations .....	6
Executive Summary .....	8
<b>I. GENERAL OBJECTIVE OF DEBT MANAGEMENT IN KENYA ..</b>	<b>12</b>
<b>II. OVERVIEW OF 2009 MTDS .....</b>	<b>13</b>
<b>III. KEY DEVELOPMENTS SINCE THE 2009 MTDS .....</b>	<b>14</b>
<b>IV. CHARACTERISTICS OF THE EXISTING DEBT PORTFOLIO ....</b>	<b>19</b>
<b>V. 2010 MTDS: KEY ASSUMPTIONS FOR THE ANALYSIS .....</b>	<b>26</b>
<b>VI. OUTCOMES OF ANALYSIS OF STRATEGIES.....</b>	<b>37</b>
<b>VII. DEBT SUSTAINABILITY .....</b>	<b>44</b>
<b>VIII. IMPLEMENTING THE 2010 MTDS .....</b>	<b>46</b>
<b>IX. CONCLUSION.....</b>	<b>47</b>
<b>APPENDIX I: ANALYZING THE COST-RISK TRADE-OFF UNDER ALTERNATIVE SCENARIOS .....</b>	<b>48</b>

## FOREWORD

The *2010 Medium Term Debt Strategy (MTDS)* is a versatile public debt management tool linked to the medium term fiscal framework that contains prudent revenue projections and planned expenditures consistent with Kenya's economic recovery effort. It recognizes the cost and risk tradeoffs in setting sustainable borrowing limits, ensuring that debt is serviced under a wide range of shocks without risk of default.

Government fiscal stance for FY2010/11 is stated in the Budget Policy Statement (BPS) Paper laid before Parliament in March 2010, and the *2010 Medium Term Debt Strategy* has been prepared to guide financing of the budget deficit. The strategy seeks to address the terms of new borrowing, including the appropriate mix between domestic and external debt. The MTDS will therefore be an annual publication released together with the *Annual Budget*, integrated into Government's decision making and will be widely disseminated.

The Government has continued to make remarkable steps towards improving public debt management. The current legislations assign the legal authority to borrow, purpose of borrowing and accountability mechanism. Debt portfolio management has been facilitated through a reliable and accurate recording of public debt and close monitoring of critical debt indicators. The latest results on Debt Sustainability Analysis indicate that Kenya's public debt is sustainable over the medium term.

In conclusion, I wish to reiterate Government commitment to promote transparency and accountability in public financial management. The publication of the *2010 Medium Term Debt Strategy* is a critical tool for informed policy decisions, avoiding onerous debt burden and other fiscal vulnerabilities and improvement in investor relations including development partners.



**HON. UHURU KENYATTA, EGH, MP**  
**DEPUTY PRIME MINISTER AND MINISTER FOR FINANCE**  
**JUNE 2010**

## ACKNOWLEDGEMENT

The *2010 Medium Term Debt Strategy* prepared by the Ministry of Finance outlines the Government preferred strategy to guide debt management operations in FY2010/11. 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.

Kenya will exhaust all avenues of access to concessional external resources before considering 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 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 *2010 Medium Term Debt Strategy* seeks to slow down the uptake of domestic borrowing not to ‘crowd-out’ the private sector, the engine of growth for Vision 2030. Treasury bonds issuance will be biased towards medium to long tenors to create liquidity around benchmark bonds, lowering the cost of borrowing.

The design and implementation of an MTDS requires high level of skilled human resource. I wish therefore to thank the Commonwealth Secretariat, International Monetary Fund and the World Bank for the effective capacity building programs extended to staff in the Ministry of Finance and the Central Bank of Kenya on public debt management. The Government will continue to partner with similar institutions to strengthen capacity in financial management in the public sector.

The *2010 Medium Term Debt Strategy* has been prepared jointly by staff of the Debt Management Department, Economic Affairs Department and External Resources 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**  
**PERMANENT SECRETARY/ TREASURY**  
**JUNE 2010**

## 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	Kenya Shilling denominated debt
EAC	East African Community
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 Government published in June 2009 the first formal Medium Term Debt Strategy MTDS (*2009 MTDS*) covering three financial years FY2009/10-FY2011/12. The key drivers for that strategy 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, *2009 MTDS* envisaged a significant reliance on domestic debt to meet the central Government budget financing requirement.

The outcome for FY2009/10 has been a deviation from the stated strategy in that more domestic debt has been contracted than planned. This partly reflects an increase in the primary deficit following revenue shortfall occasioned by the slowdown in the anticipated economic recovery, non realization of the programmed privatization receipts and substantial additional expenditure to mitigate the effects of the prolonged drought experienced in early 2009. The contraction of relatively more domestic debt than planned led to a marginal increase in interest costs due to a sharp decline in domestic interest rates since the turn of the calendar year. The average implied interest rate rose marginally by only 0.2 percent of GDP (to 6.1 percent) in FY2009/10 relative to FY2008/09. Despite the slight deviation in the strategy, the *2009 MTDS* has significantly helped in improving the level of refinancing risk in the domestic debt portfolio. The average time to maturity is projected to increase from 3.8 years to 5.5 years and the proportion of domestic debt to be refinanced within 12 months projected to fall from 40 percent as of end December 2008 to 28 percent as of end June 2010.

Overall, the domestic debt market responded positively to the Government domestic borrowing plans in FY2009/10. The borrowing plan was frontloaded to finance the economic stimulus projects. In particular, investors in Government securities have welcomed the increased supply of longer-tenor Treasury Bonds and the introduction of a 364-day Treasury bill, and the continued issuance of “Infrastructure Bonds” (IFBs) which has

proven popular, particularly with retail investors. These factors, coupled with other improvements in market infrastructure - particularly the concentration on building benchmark bonds, reopening existing issues on a regular basis, 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 *2009 MTDS* did successfully achieve a reduction in refinancing risk, managing this remains a priority for the *2010 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 current low interest rate environment might only be a short term phenomenon, thus posing a significant risk to containing the 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 *2009 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.

Given those issues, the Government evaluated the performance of four alternative strategies relative to *2009 MTDS* (“S1”). These included a strategy envisaging an aggressive switch to external official sector borrowing, accompanied by an aggressive lengthening of maturities in the domestic market (“S3”). 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 (“S2” with a continued bias toward medium-term debt and “S4” with a bias away from medium-term borrowing toward shorter - and longer - term debt) and one envisaging that Kenya taps the international capital markets to substitute for any shortfall in official sector borrowing (“S5”).

The Government focused on two key indicators – ratio of interest to GDP (interest/GDP) and ratio of NPV of Debt to GDP (NPV of Debt/GDP). As anticipated, S3 outperforms all other strategies, while S1 underperforms all other strategies. Both S2 and S4 demonstrated similar results; however, a closer examination of other indicators suggests that refinancing risk would be higher under S4. In addition, S4 could not accommodate significant amounts of IFBs in new issues, thus the potential risk of losing the retail investor base. In terms of interest/GDP, S5 entails a higher cost but lower risk than S2 or S4; 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 issue 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.

This analysis was repeated under two alternative scenarios - one assuming the realization of significant contingent liabilities, and the other assuming significant direct investment in the energy sector. Contingent liabilities are becoming increasingly relevant given the high number of requests for guarantees and the future challenge of Public Private Partnerships (PPPs). Overall, these scenarios lead 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 a contingent liability shock, 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.

The Government will seek to disseminate widely the *2010 MTDS* and develop an associated borrowing plan, which will support internal monitoring of the strategy and also domestic market development.

The Government shall 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 shall 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. Finally, the monitoring of guarantees and other contingent liabilities will be enhanced, focusing initially on monitoring those entities that have benefitted most.

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

1. The objective of debt management in Kenya is to finance the Government financing requirements at the least cost with a prudent degree of risk. Additionally, it aims at facilitating Government's access to financial markets as well as supporting development of a well functioning vibrant domestic debt market.
2. In June 2009, the Debt Management Department (DMD) of the Ministry of Finance (MoF) prepared and published a formal debt management strategy, the *2009 MTDS* which outlined the Government targeted MTDS for the period FY2009/10-FY2011/12. The *2009 MTDS* was the Government's first formal and explicit strategy and was an important step forward in enhancing transparency of the Government's debt management decisions. The stated intention was to update the strategy regularly, presenting it on an annual basis with the budget documents.
3. The *2009 MTDS* guided the Government debt management operations over FY2009/2010. The strategy sought to balance cost and risk of public debt and took account of demand constraints. 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 a debt strategy, the publication of the MTDS is provided for in Section 4 of the proposed External Loans and Credits Regulations to be gazetted by the Minister for Finance.

## **II. OVERVIEW OF 2009 MTDS**

### **a) Rationale for 2009 MTDS**

5. The 2009 MTDS recommended a shift in the composition of debt towards long term domestic debt over the medium term to minimize both cost and risk in the debt portfolio. The relevant considerations that influenced the 2009 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 2009 MTDS was to meet the net financing of the Government with 30 percent official sector concessional external financing and 70 percent domestic financing. The objective the borrowing strategy for the domestic market was to lengthen the maturity profile by achieving a 30:70 ratio of Treasury Bills to Treasury Bonds. In addition, 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 2009 MTDS also envisaged no issuance of an international sovereign bond during the financial year 2009/10. The net external borrowing would remain at 2 percent of GDP while net domestic borrowing would be 4.3 percent of GDP.

### III. KEY DEVELOPMENTS SINCE THE *2009 MTDS*

#### a) Domestic Market Development

7. Since the development of *2009 MTDS* in June 2009, there have been a number of important developments in the domestic debt market. Activity in the horizontal repo market has begun to pick up, particularly around a number of key Initial Public Offers (IPOs) where market participants have needed liquidity. This performance has encouraged greater confidence in the mechanism and has enhanced the perception of liquidity in the market. In addition, the Government has begun to re-open bonds more frequently, helping to establish them as true benchmarks and encouraging greater liquidity. These two factors have also been supported by the introduction of a new Automated Trading System (ATS) which allows market participants to use the Nairobi Stock Exchange (NSE) trading system to enter matched trades for settlement. This has helped reduce settlement times to T+3 and resolved one of the issues raised by investors. In addition, the corporate sector, in particular KenGen, had followed the Government's lead and has begun to issue infrastructure bonds (IFBs) to help fund particular investment projects in the energy sector. In terms of primary operations, the Government had moved to a system whereby the coupon rate would be determined in the auction rather than pre-set<sup>1</sup> and it appears to be working well.

8. Overall, market reaction to *2009 MTDS* was very positive. Market participants welcomed the focus on benchmark bonds and the steps taken to lengthen the maturity of domestic debt. The enhanced liquidity in the market has helped meet that greater supply of longer-dated paper with more demand, with the 5-year tenor proving popular with both the commercial banks and institutional investors. In addition, the newly introduced 364-day Treasury bill is proving very popular. Changes in the methodology for calculating the Consumer Price Index (CPI), and an accommodative monetary stance, have seen a significant decline in interest rates in the domestic market over the course of the year.

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

9. The Government has taken some important steps in highlighting the existence of a formal and explicit debt management strategy. For example, the key highlights were communicated to the Parliamentary Committees on Budget and Public Accounts. Overall, *2009 MTDS* has proven useful in helping guide discussions within the public sector, for example, with other line ministries, on what new debt should be contracted. The fact that it is clearly based on some substantive analysis has enhanced its credibility so that it is not just seen as an *ad hoc* Treasury position. While this has been an important step in increasing transparency, there is still some way to go in increasing awareness of the strategy. In that context, the Government recently organized a workshop on domestic debt for the media during which the *2009 MTDS* was presented. It is hoped this will improve the coverage of the *2010 MTDS* when it is presented.

10. Developments in the external sector have not been as positive. The Government has seen new commitments coming in on harder terms, that is, closer to the 35 percent minimum threshold on concessionality rather than to IDA terms. The fact that the Government has self-imposed a 35 percent minimum grant element on new external official sector borrowing, rather than it being a requirement under an IMF/World Bank program, is proving a challenging negotiating point with creditors. Going forward, this perceived weakness in the negotiating position could prove a challenge to the credibility of future MTDS.

11. 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 is a form of indirect guarantee of investment returns for foreign investors. This second form of guarantee would be even more challenging to capture effectively within the MTDS framework.

12. The Government had also been considering the possibility of accessing the international capital markets. In this context, the *2009 MTDS* proved useful in providing a very clear basis for engagement. Nevertheless, given the improvement in international market conditions and in the context of increased investment in the energy sector, this has remained a point of informal discussion. In particular, there has been

some informal discussion on the possibility of issuing a sovereign bond, guaranteed by a third party AAA-rated entity, although this might come with some unwanted “strings attached”. 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.

13. Progress has been mixed on other fronts. On the positive side, the fibre optic link between CBK and MoF is in place, enabling both institutions to access the same debt database. In addition, currently there are amendments to both the Regulations associated with the External Loans and Credit Act and Internal Loans Act that will give more prominence to the MTDS and to the overall management of public debt. In addition, 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).

**b) Implementation and Impact of 2009 MTDS**

14. The Government successfully implemented the 2009 MTDS borrowing 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 is consistent with the strategy. By end June 2010, the share of foreign to domestic debt is projected to reach 50 percent, a marginal increase relative to 49 percent at end FY2008/09. In addition, the refinancing risk associated with short-term domestic debt is reduced markedly as the average time to maturity is projected to be 5.5 years by end June 2010.

15. During implementation, there was a high uptake of domestic debt partly as a consequence of underperformance of revenues while expenditures increased due to unforeseen contingencies to mitigate against drought and floods. As a result, the net domestic borrowing rose to 5.1 percent of GDP from the planned 4.3 percent of GDP.

16. The increased uptake of domestic debt means cost of new borrowing was higher than targeted. However, the cost was partly mitigated by declining interest rates in the domestic market and the shift in the portfolio mix in favour of domestic debt reduced exposure to exchange rate risk (cost-risk trade off). Tables 1(a) and 1(b) summarize the outcome and impact of implementing the *2009 MTDS*.

**Table 1(a): Impact of Implementing the 2009 MTDS**

MTDS 2009	Net borrowing (KSH bn)		Net borrowing (% of GDP)	
	FY 2009/10		FY 2009/10	
	Target	Projected outturn	Target	Projected outturn
Total net borrowing (Ksh bns)*	160	176	6.3%	7.1%
Domestic (net)           70%	110	126	4.3%	5.1%
External (net)           30%	50	50	2.0%	2.0%

\* Note these targets are equivalent to a gross borrowing target of 85% for domestic and 15% for external debt.

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

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

	<b>FY08/09</b>	<b>FY09/10*</b>
<b>Portfolio composition</b>		
Domestic	49%	50%
External	51%	50%
<b>Refinancing risk</b>		
Average time to maturity (years)	8.3	8.9
Average time to maturity domestic (years)	3.8	5.5
% of domestic debt falling due within 12 months	40%	28%
<b>Cost</b>		
Average interest rate**	5.9%	6.1%

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\* Projected portfolio as of end-June 2010

\*\* Provisional

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

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

17. At June 2010, the total stock of public debt is projected to be Ksh 1,055 billion or 42.6 percent of GDP in nominal terms. In addition, the structure of the debt portfolio will change to 50 percent foreign and domestic debt from 51 and 49 percent respectively (Table 2(a), 2(b) and Figure 1, Chart 1). The change in the debt portfolio is consistent with the 2009 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 2009**

	USD billion	Ksh Million	Percent of GDP	Share of total debt	Weighted average interest rate (%)
External debt	7.0	537.4	23.3	51	1.7
Domestic debt (net)	6.8	518.5	22.5	49	10.3
<b>Total debt</b>	<b>13.8</b>	<b>1,055.9</b>	<b>45.8</b>	<b>100</b>	<b>5.9</b>

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

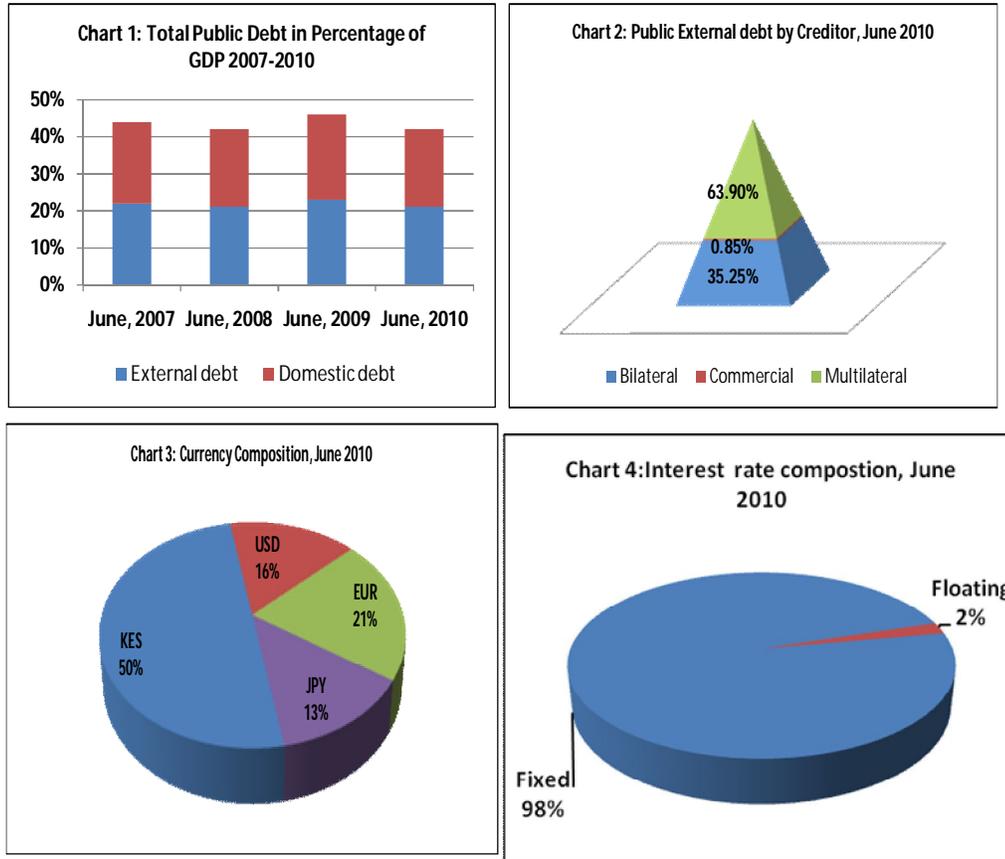
**Table 2(b): External and Domestic Debt, Projected to end-June 2010**

	USD billion	Ksh Million	Percent of GDP	Share of total debt	Weighted average interest rate (%)
External debt	6.9	525.8	21.2	49	1.3
Domestic debt (net)	7.0	529.4	21.4	50	10.8*
<b>Total debt</b>	<b>13.9</b>	<b>1,055.2</b>	<b>42.6</b>	<b>100</b>	<b>6.1</b>

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

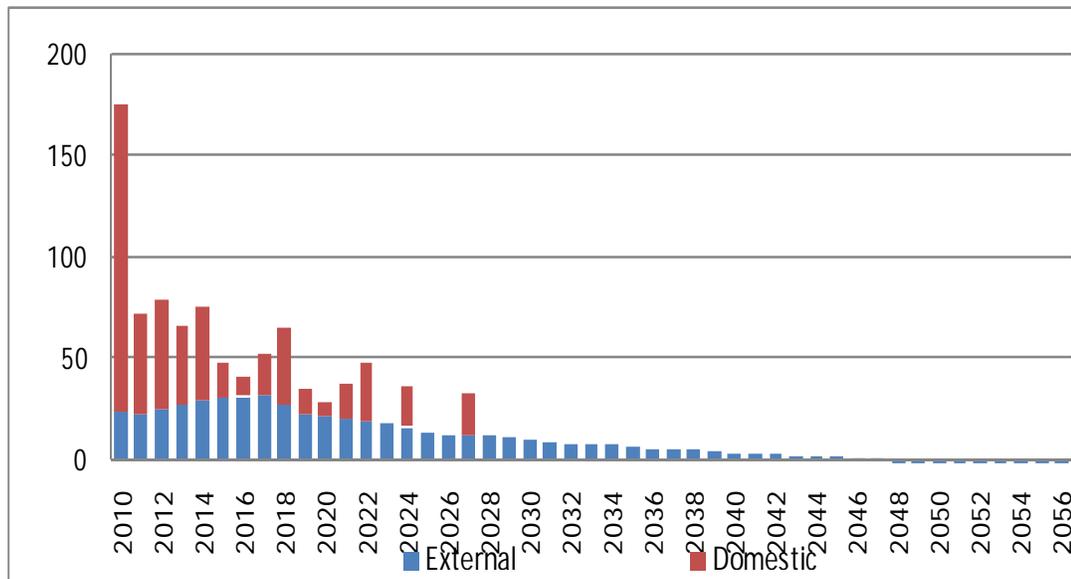
*Source: Ministry of Finance and IMF/WB estimates*

**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 2010 (Ksh billion)**



Source: Ministry of Finance and Central Bank of Kenya

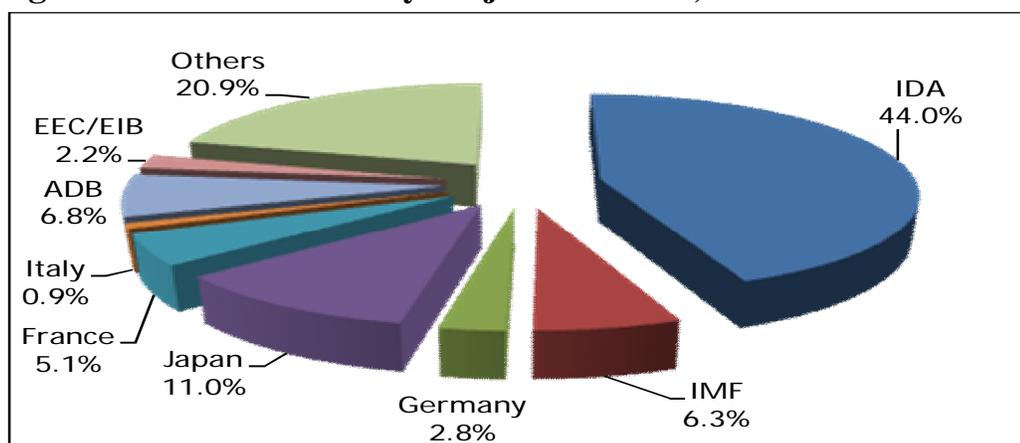
18. The main external sources of financing are multilateral and bilateral creditors. Multilateral concessional debt amounts to 64 percent of total external debt while bilateral creditors account for 35 percent. Commercial debt (100 percent in dispute) represents less than 1 percent of total public external debt (Figure 1, Chart 2).

19. The currency composition of external debt is also relatively unchanged. The largest share of foreign debt remains denominated in Euros (21 percent of total debt), with the USD, and the Japanese Yen accounting for 16 and 13 percent respectively (Figure 1, Chart 3). 50 percent of total debt is denominated in the Kenya Shilling.

20. 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).

21. IDA, ADB/ADF, IMF and EEC/EIB are the main multilateral creditors. They account for on average over 90 percent of the outstanding multilateral debt as at end June 2010 as shown in Figure 3. IDA is the single biggest source of external resources, accounting for over 70 percent of the outstanding multilateral debt. The multilateral share of total external debt has increased due to a disbursement of Ksh 16.3 billion (USD 209 million) from the International Monetary Fund (IMF) under the Exogenous Shock Facility (ESF) for Balance of Payments (BoP) support. In terms of bilateral creditors, Japan, France and Germany are the main creditors accounting for 72 percent of the bilateral debt. Japan is the largest bilateral donor, accounting for over 49 percent of the bilateral debt.

**Figure 3: External Debt by Major Creditors, End June 2010**



*Source: Ministry of Finance*

22. Table 3 highlights the 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 agreement and the table demonstrates the hardening of terms for new external commitments.

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

Terms	June 2009	June 2010
Interest rate (%)	1.1	1.4
Maturity (Years)	33.1	30.5
Grace period (Years)	7.8	6.1
Grant Element (%)	57.0	45.0

*Source: Ministry of Finance*

23. Refinancing risk remains significant, but manageable. The Average Time to Maturity (ATM) of the total debt portfolio is 8.9 years up from 8.6 years at end June 2009, with that of the domestic debt portfolio at 5.5 years up from 3.7 years (Table 4). The average maturity profile for external debt has declined to 11.8 years from 12.9 years. Nevertheless, an inspection of the repayment profile indicates that there is some significant refinancing and rollover risk, with over 28 percent of the domestic debt stock maturing in the next 12 months.

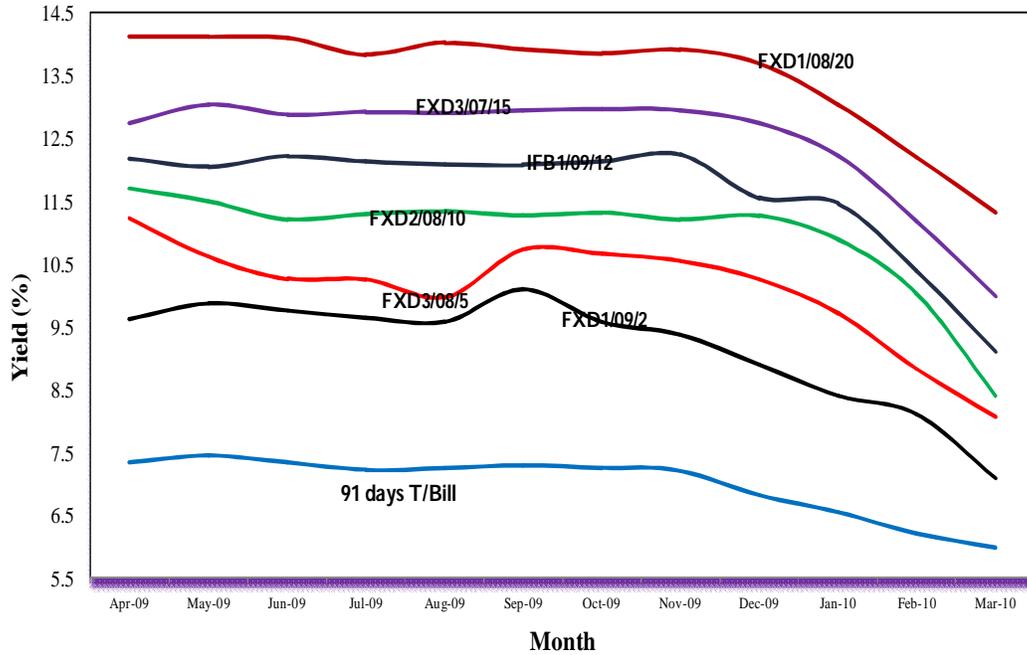
**Table 4: Cost and Risk Considerations of Debt Portfolio, End June 2010**

<b>Characteristics of Existing Portfolio</b>	<b>Ex ante Risks</b>	<b>Ex ante Cost</b>
<b>Currency composition</b> (FX = 50%; DX=50%)		
External, mostly concessional	Exchange rate risk	Low
Domestic	No exchange rate risk	High
<b>Maturity profile (ATM = 8.9 years)</b>		
External, mostly concessional (ATM =11.8 years)	Low refinancing risk	Low
Domestic (ATM = 5.5 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*

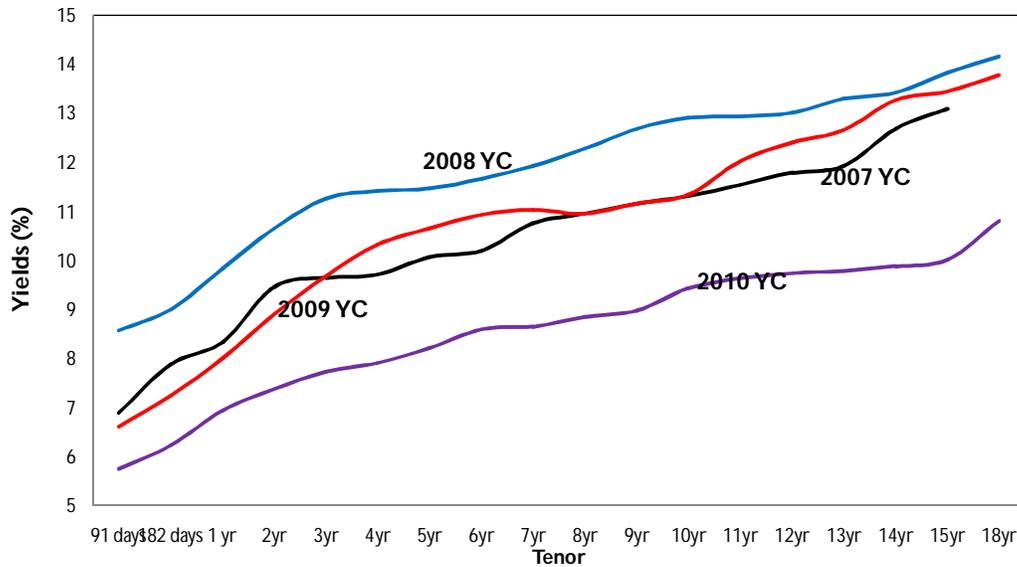
24. The average interest rates on Government securities (91-day Treasury Bill and benchmark Treasury Bonds) have declined significantly leading to a shift in the yield curve (Figures 4 and 5). This is due to increased liquidity and the resolutions of the Monetary Policy Committee to lower the Central Bank Rate (CBR). The declining interest rates have not been reflected in cost of domestic debt due to a hike in the amounts of domestic debt issued under 2009 MTDS. It is however anticipated that the current low rates will be reflected in lower costs of debt issued in this period of declining interest rates.

**Figure 4: Trend in Domestic Interest Rates in 2009/10**



Source: Central Bank of Kenya

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



Source: Central Bank of Kenya

25. Overall, the portfolio composition suggests that reducing refinancing risk in the domestic debt portfolio should remain a priority for the MTDS going forward. In addition, although the extent of exchange rate risk is partially mitigated by the nature 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. 2010 MTDS: KEY ASSUMPTIONS FOR THE ANALYSIS**

### **a) Objectives and Scope**

26. The Government's debt management objectives remain appropriate. In the 2009 MTDS, the stated Government objectives for debt management strategy were reducing the refinancing risk, while taking due account of costs. In the 2010 MTDS update, the Government shall continue pursuing the same broad objectives through the diversification of external sources of financing and further lengthening of the average time to maturity of the domestic debt portfolio.

27. The scope of the analysis of 2010 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 119.6 million or 1.7 percent of total public and publicly guaranteed (PPG) external debt.<sup>2</sup> The scope also includes any external borrowing for Balance of Payments support, such as that received from the IMF under the Exogenous Shock Facility, which is treated as central Government debt.

### **b) Macroeconomic Environment and Risks**

28. The macroeconomic framework underpinning the MTDS is consistent with projections included in the March 2010 Budget Policy Statement (2010 BPS). With improved forecast of the global economy, the budget deficit and external balance are expected to improve compared to 2009. The medium term outlook for FY2010/11-FY2012/13 assumes that growth of the local economy will increase from 3.6 percent in FY2009/10 to reach 6.4 percent in FY2012/13 and the overall budget deficit is projected to decline from 7.0 percent of GDP in FY2009/10 to 3.5 percent of GDP in FY2012/13. Inflation is expected to remain at around 5 percent, and the exchange rates to remain stable. Balance of Payments is expected to return to surplus from FY2010/11 due to improvements in exports, remittances and FDI compared to 2009. Gross international reserves are assumed to reach the East African Community (EAC) target of 4 months of imports by FY2012/13 (Table 5).

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<sup>2</sup> Total guaranteed debt amounts to USD 439.2 million.

**Table 5: Baseline Macroeconomic Assumptions**

<b>Baseline macroeconomic assumptions</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>
Real GDP growth (%)	4.3	2.1	3.6	4.9	6.0	6.4
Inflation (average, %) <sup>3</sup>	18.5	12.7	7.1	5.0	5.0	5.0
Exchange rate (e.o.p, Ksh per USD)	64.6	76.3	81.6	77.8	79.2	80.0
<b>External Sector</b>						
Current account (% of GDP)	-5.8	-7.0	-6.3	-5.6	-4.5	-3.7
Exports value, goods and services	25.8	26.4	24.5	24.5	24.7	25.1
Imports value, goods and services	38.2	40.1	36.6	35.2	34.0	33.3
Gross official reserves (months of next year's imports)	3.5	2.9	3.0	3.2	3.6	4.0
<b>Central government budget</b>						
Overall balance (in billions of Ksh)	-68	-96	-173	-188	-155	123
Overall balance (% of GDP)	-3.5	-4.4	-7.0	-6.8	-5.0	-3.5
Total revenue and grants (in billions of Ksh)	454	508	618	729	810	914
Total revenue and grants (% of GDP)	23.2	23.3	25.0	26.4	26.1	26.1
Total expenditure and net lending (in billions of Ksh)	535	676	602	792	946	1038
Total expenditure and net lending (% of GDP)	27.4	27.7	32.0	33.2	30.5	29.6
Primary deficit (in billions of Ksh)	20.1	43.9	110.2	113.1	65.0	22.3
Primary deficit (% of GDP)	1.0	2.0	4.5	4.1	2.1	0.6
Nominal GDP (Market prices, in billions of Ksh)	1,953	2,176	2,475	2,767	3,102	3,510

*Source: Ministry of Finance*

29. Financing needs are determined by the primary deficit, interest costs and principal payments. Under the baseline macroeconomic assumptions, the primary deficit is expected to rise from Ksh 110.2 billion in FY2009/10 to Ksh 113.1 billion in FY2010/11 and decrease thereafter to Ksh 22.3 billion by FY2012/13. The 2010 MTDS will guide the borrowing mix to close the financing gap.

30. The macroeconomic outlook carries substantial uncertainty. In particular, the May 2009 joint World Bank-IMF LIC Debt Sustainability Analysis (DSA) highlights the sensitivity of Kenya's debt sustainability to shocks to economic growth. Lower growth will negatively affect the primary deficit through both lower revenue collection and increased

<sup>3</sup> Up to 2007/08, change in the CPI Index overestimated

outlays to protect the most vulnerable. Overall, growth will depend on the pace of global economic growth and the impact of the continued Economic Stimulus Programme.

31. Development needs also put pressure on the budget. Increased investment in infrastructure might require an increase in the level of guarantees. This increase in contingent liabilities would represent a significant increase in risk to the current debt burden.<sup>4</sup> The expected approval of a Bill to regulate PPPs would also have implications for Government's contingent liabilities in the future.

32. Overall, the nature of macroeconomic risks has not changed relative to the analysis undertaken in 2009. 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.

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

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<sup>4</sup> A survey of contingent liabilities in SOEs was started in 2008 but has not yet been completed.

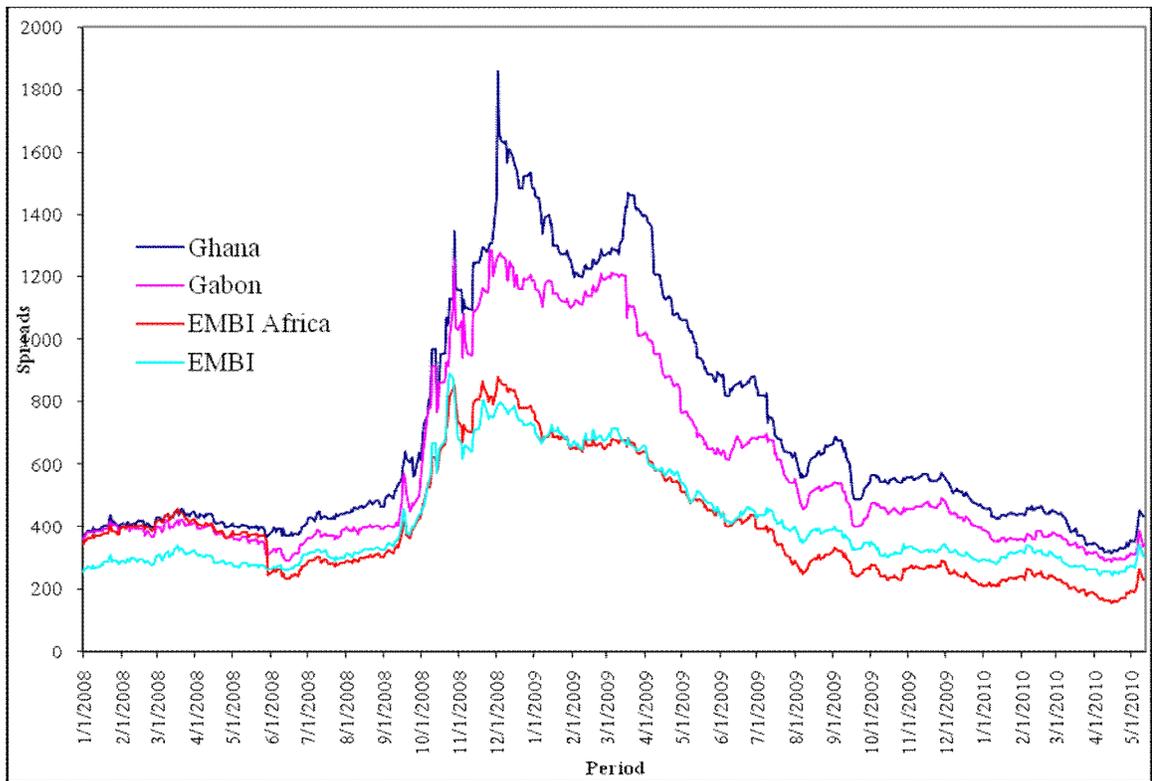
**Table 6: Macro-Risks and Implications for Debt Management Strategy**

		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
Capital spending aid dependent	Growth volatility		DX/FX	Improve relationship with donors, improve absorptive capacity and implementation efficiency
Contingent liabilities	Debt level increase	Market	DX/FX	Create fiscal space, and strengthen overall PFM framework
<b>Monetary Risks</b>				
High inflations	Impede market development, higher interest costs			Increase credibility of monetary policy, improve monetary operational framework, monetary transmission mechanism to reduce inflation premium
Negative real interest rate	Impact real money investors, and deposit growth			Diversify economy, and explore the possibility of commodity hedge
<b>Natural Disasters</b>				
	Growth volatility	Market	DX/FX	

### c) Potential Financing Sources

34. 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 its 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 suggest that investors are likely to increase their focus on issues relating to fiscal transparency, quality of statistics and effectiveness of public financial management and expenditure controls. These are areas of continued weakness, suggesting that Kenya may face relatively higher costs than a peer group analysis would suggest. In addition, any decisions on issuance are likely to be postponed until the near-term political uncertainty relating to the new constitution has been resolved.

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



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

35. In terms of domestic debt, the market has continued to develop through FY2009/10. 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 2010 BPS, in the domestic market.

#### **d) Future Financing and Pricing Assumptions**

##### *External sources*

36. The following pricing assumptions for different external sources of financing underlie the 2010 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 30 years and a 10-year grace period.<sup>5</sup> These loans are denominated in Euros and USD.<sup>6</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 points. A 5-year bond is expected to have a spread of 410 basis points<sup>7</sup>.

37. The **net external borrowing** for financial year 2010/11 is **3.0 percent of GDP** and expected to decline to 1.8 percent of GDP in the financial year 2012/13.

### *Domestic market sources*

38. 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

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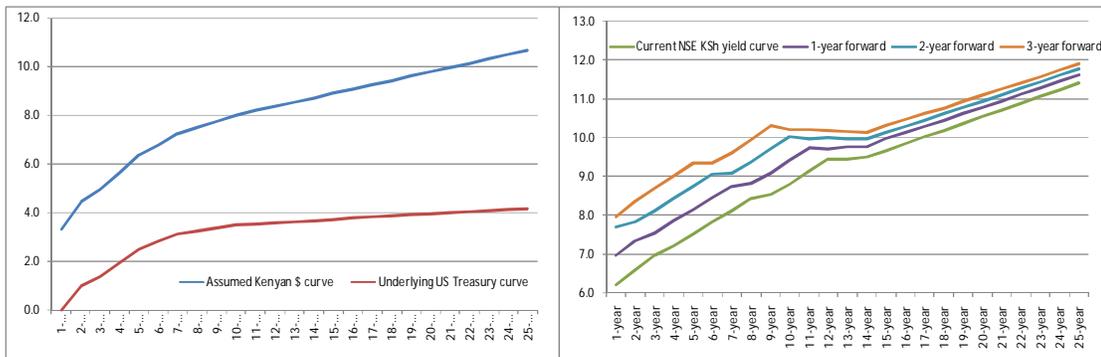
<sup>5</sup> These terms are consistent with loans that have been contracted since 2007 from bilateral sources.

<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 *2009 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 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.

other risk effects. This premium is identified by determining the necessary premium required to fit today’s observed yield curve.<sup>8</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*

39. 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.

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

41. **Net domestic borrowing** for financial year 2010/11 is **3.8 percent of GDP** and is expected to fall to 1.8 percent of GDP in the financial year 2012/13.

### e) Description of Stress Scenarios

42. 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

<sup>8</sup> The NSE yield curve is taken as the basis for the current Ksh curve.

interest rate shock to be applied to the Kenya shilling interest rates was determined on the basis of the past 10 years, which includes a period when interest rates declined (and increased) sharply. Consequently, the implied annual deviation of interest rates is quite large at over 2 percent<sup>9</sup>. For the purposes of the analysis, we assume that shocks materialize in FY2010/11, and are sustained through the remainder of the simulation horizon<sup>10</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 interest rates on long-term bonds increase proportionally less, with the interest rate of the bond with the longest maturity (20 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 FY2010/11.
- 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>11</sup>

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<sup>9</sup> However, it appears that there were no particular structural factors that would argue for excluding that particular period from the analysis.

<sup>10</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.

<sup>11</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.

- 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**

43. The analysis compares a number of alternative strategies with 2009 MTDS. In particular, this analysis assesses the relative performance of a strategy aiming to maximize external concessional financing (corresponding to Strategy 3 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 2 and 4) or the issuance of an international sovereign bond (Strategy 5) to meet the expected Government gross financing needs.

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

- Strategy 1 (S1. 2009 MTDS).* This is the preferred strategy of the 2009 MTDS, which has been implemented in the past year. It assumes that 15 percent of the gross financing needs would be met by external borrowing, mainly from concessional creditors, and 85 percent on the domestic market, mainly through Treasury Bonds.
- Strategy 2 (S2. Medium-term domestic borrowing).* Concessional resources may fall short of the amount expected under Government's preferred strategy (S3 below). External and domestic borrowing would amount to 25 percent and 75 percent of gross financing needs respectively. The concentration of issuance with 5- and 10-year maturities assumes significant increase of issuance of Infrastructure Bonds (IFBs) with 8-year maturity is maintained.
- Strategy 3 (S3. More official external borrowing).* This strategy maximizes external financing, assuming 35 percent of gross

financing needs are met through these sources. Domestic borrowing would decrease to 65 percent of Government gross financing needs. This strategy assumes more domestic debt issued at 15- and 20-year maturities, in line with market needs and consistent with objective of lengthening maturities.

- d. *Strategy 4 (S4. Less medium-term domestic borrowing)*. It assumes external and domestic borrowing in the same proportion as in S2 (25 percent external and 75 percent domestic), but medium-term domestic debt is cut back, implying less issuance of IFBs compared to S2, but with relatively more short-term (to help contain costs) and more long-term (in line with market feedback).
- e. *Strategy 5 (S5. International Sovereign Bond (ISB))*. As in S2, it assumes that concessional resources of the quantum required under S3 would not be realized. Under this strategy, the Government would issue an international bond<sup>12</sup> as an alternative to increasing domestic borrowing.

45. 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>12</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>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>S5</b>
		<b>2009</b>	<b>Medium-term</b>	<b>More</b>	<b>Short-term</b>	
<b>New debt</b>		<b>MTDS</b>	<b>domestic</b>	<b>official</b>	<b>domestic</b>	<b>ISB</b>
<b>Domestic</b>	<b>Domestic</b>	<b>85%</b>	<b>75%</b>	<b>65%</b>	<b>75%</b>	<b>65%</b>
	Treasury bills (change in stock)	9%	8%	3%	11%	3%
	2-year	17%	11%	7%	15%	7%
	5-year	26%	19%	13%	11%	13%
	10-year	17%	19%	13%	15%	13%
	15-year	9%	9%	10%	15%	10%
	20-year	9%	9%	20%	8%	20%
<b>External</b>	<b>External</b>	<b>15%</b>	<b>25%</b>	<b>35%</b>	<b>25%</b>	<b>35%</b>
	Semi-concessional	5%	8%	12%	8%	12%
	Concessional	10%	17%	23%	17%	15%
	10-year ISB	0%	0%	0%	0%	9%

Note: S2 and S4 are equivalent apart from the presumed split of domestic instruments.

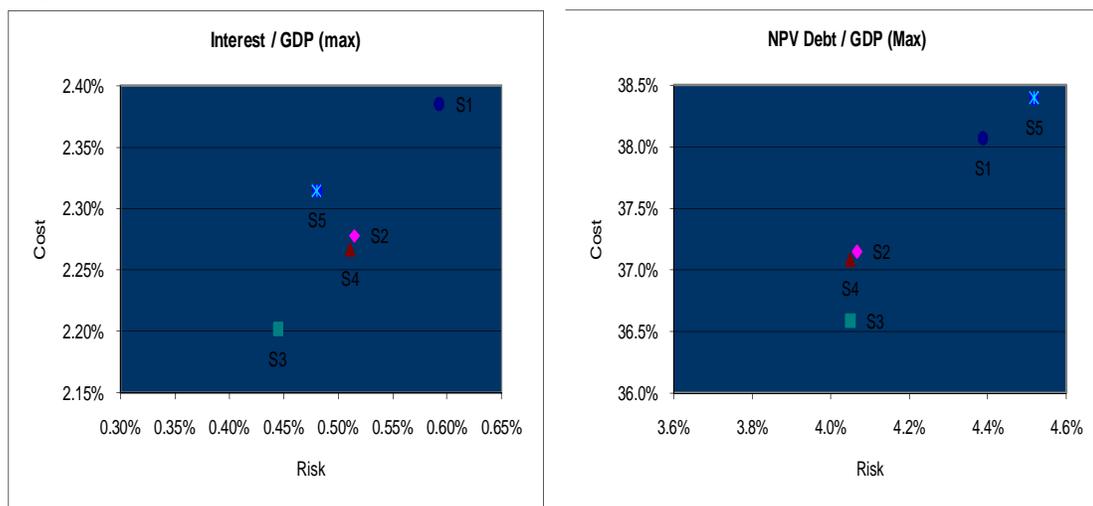
## VI. OUTCOMES OF ANALYSIS OF STRATEGIES

46. 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	2.39%	2.28%	2.20%	2.27%	2.31%
Parallel shift in yield curve (2 std. deviations)	0.59%	0.51%	0.44%	0.51%	0.48%
Flattening of yield curve	0.36%	0.27%	0.17%	0.27%	0.18%
Extreme devaluation of exchange rate (30%)	0.10%	0.10%	0.09%	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)	0.31%	0.27%	0.24%	0.27%	0.26%
<b>NPV of Debt/GDP (%)</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>S5</b>
Baseline scenario	38.07%	37.15%	36.59%	37.08%	38.40%
Parallel shift in yield curve (2 std. deviations)	4.39%	4.07%	4.05%	4.05%	4.52%
Flattening of yield curve	1.71%	1.34%	0.87%	1.21%	0.91%
Extreme devaluation of exchange rate (30%)	4.06%	4.02%	4.00%	4.02%	4.08%
Devaluation of exchange rate by 2 std. deviations	1.54%	1.53%	1.52%	1.53%	1.55%
Combination shock (1 std deviation)	2.90%	2.74%	2.73%	2.73%	2.97%

**Figure 8: Cost-Risk Tradeoffs**



47. As anticipated, the strategy assuming the largest amount of official sector external borrowing (S3) 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 (2009 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 S2 and S4) or accessing the international capital markets (S5).

48. However, there is a clear trade-off between S2, S4 and S5 in terms of interest/GDP. Given the relatively greater weight of shorter maturity debt in S2, S4, these strategies are less costly but more risky. However, when NPV of Debt/GDP is considered, S2 and S4 are 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 in the portfolio relative to official sector financing, which also argues against choosing S5.

49. The relative ranking of strategies was also considered in the context of two alternative macroeconomic scenarios. One scenario reflected the potential scale of direct Government financing needed to support the proposed energy projects. Here it is assumed that this would require USD 1 billion of additional expenditure over three years. However, it was also assumed that there would be specific external financing secured for these projects in advance before approval. Consequently, an adjustment was made for this presumed pipeline of debt (that is, the strategies described in Table 4 were applied to the total financing requirement net of this expenditure). Overall, this increases the proportion of external financing in each strategy by around 5 percent, but does not change the relative performance of the strategies (Appendix I). Consequently, S3 would remain the preferred strategy, with the tradeoff between S2, S4 and S5 as above.

50. The second scenario involved the implications of a materialization of several significant contingent liabilities. Again, this is potentially relevant in the context of ongoing discussions on the energy sector. Under this

scenario, contingent liabilities of 10 percent of GDP are realized in FY2010/11.<sup>13</sup> Again, while this changes the level of debt considerably, it does not change the relative performance of the strategies. However, in this case, the feasibility of implementation becomes even more challenging (Appendix I).

51. Overall, as was the case in 2009, 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.*

52. 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 relative to S4 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 (2010/11-2012/2013)				
	S1	S2	S3	S4	S5
<b>Cost indicators (average over simulation)</b>					
Average interest rate	5.7%	5.6%	5.5%	5.5%	5.6%
Interest / Revenues	9.2%	9.0%	8.8%	9.0%	9.1%
<b>Risk indicators (end simulation horizon)</b>					
% DX in debt portfolio	59%	53%	49%	53%	49%
ATM (years)	9.7	10.8	12.2	11.0	11.5
% of debt refinancing within 12 months	8.8%	7.6%	6.1%	9.1%	6.9%
% of DX debt refinancing within 12 months	11.7%	10.6%	8.4%	13.5%	8.3%
Short-term external debt / Reserves	6.4%	6.4%	6.4%	6.4%	6.4%
<b>Implied net borrowing (% of GDP) (average over simulation)</b>					
Net domestic borrowing	3.6%	2.7%	2.0%	2.6%	2.1%
Net external borrowing	0.5%	1.3%	2.0%	1.4%	2.0%

<sup>13</sup> This is the scale of the shock often considered in the DSA.

53. Other factors may also be relevant if the Government were to consider tapping the international capital markets. Recent events elsewhere suggest that investors may pay particular attention to issues of fiscal transparency and quality of overall expenditure management. In that context, overall strengthening of public financial management and expenditure frameworks, coupled with continued improvements in data quality and transparency, could be important preconditions if Kenya is to secure best pricing on any issue. In addition, the investors' risk appetite may also be affected by any residual political uncertainty, which suggests that the optimal time for an issue might be following the 2012 general elections.

54. 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, S3 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 more than a third (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>255</b>	<b>318</b>	<b>544</b>	<b>427</b>	<b>809</b>
Official sector borrowing (US\$ mn)	255	318	544	427	415
International capital market securities (US\$ mn)	-	-	-	-	394
<b>Domestic borrowing (Ksh mn)</b>	<b>228,417</b>	<b>194,258</b>	<b>159,267</b>	<b>202,348</b>	<b>161,619</b>
Money market instruments	22,842	19,426	7,963	30,352	8,080
Short-term bonds (2-year)	45,683	29,139	15,927	40,470	16,160
Medium-term bonds (5 - 10 years)	114,208	97,129	63,707	70,822	64,660
Long-term bonds	45,683	48,565	71,670	60,704	72,719
<b>Implied net borrowing (annual average)</b>					
<b>Foreign borrowing (US\$ mn)</b>	<b>188</b>	<b>498</b>	<b>765</b>	<b>532</b>	<b>901</b>
Official sector borrowing (US\$ mn)	188	498	765	532	507
International capital market securities (US\$ mn)	-	-	-	-	394
<b>Domestic borrowing (Ksh mn)</b>	<b>111,221</b>	<b>84,884</b>	<b>62,504</b>	<b>82,011</b>	<b>64,805</b>
Money market instruments	(42,639)	(44,128)	(47,849)	(40,320)	(47,784)
Short-term bonds (2-year)	11,824	1,174	(7,168)	8,660	(6,935)
Medium-term bonds (5 - 10 years)	96,353	79,274	45,851	52,966	46,805
Long-term bonds	45,683	48,565	71,670	60,704	72,719

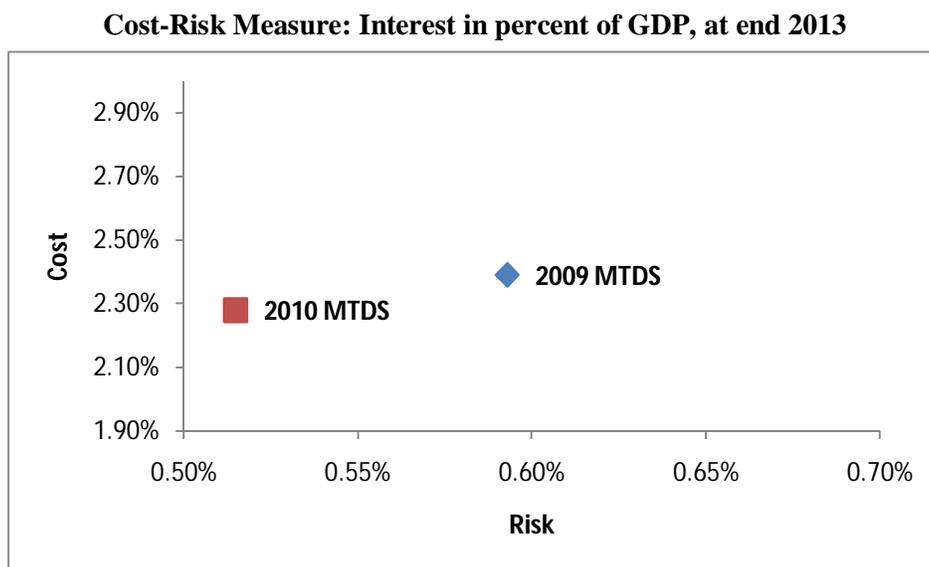
55. In conclusion, taking into account both risk and cost trade-offs, the implied quantity of gross borrowing, the need to develop the domestic debt market and ability to implement the strategy, the 2010

***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 *2009 MTDS* is less favorable going forward compared to the *2010 MTDS*.

**Table 11: Cost and Risk Analysis: 2009 MTDS vis-à-vis 2010 MTDS: Interest/GDP ratio**

Scenarios	Strategies	
	2009 MTDS	2010 MTDS
	(Interest in percent of GDP at end-2013)	
Baseline	2.39%	2.28%
Stress test 1: Parallel shift in yield curve	2.98%	2.79%
Stress test 2: Flatter yield curve	2.74%	2.55%
Stress test 3: 30% exchange rate devaluation	2.49%	2.37%
Stress test 4: 2 std deviation devaluation	2.42%	2.32%
Stress test 5: Combination shock	2.70%	2.55%
Change under parallel shift in yield curve	0.59%	0.51%
Change under flatter yield curve	0.36%	0.27%
Change under 30% exchange rate devaluation	0.10%	0.10%
Change under 2 std deviation devaluation	0.04%	0.04%
Change under combination shock	0.31%	0.27%
Maximum under stress	0.59%	0.51%

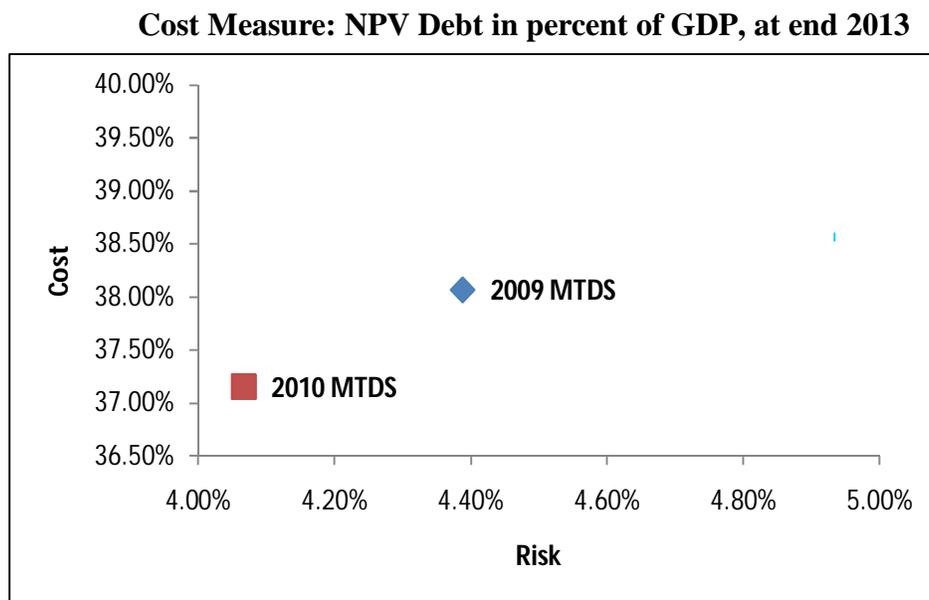
**Figure 9: Cost and Risk Analysis: 2009 MTDS vis-à-vis 2010 MTDS**



**Table 12: Cost and Risk Analysis: 2009 MTDS vis-à-vis 2010 MTDS: NPV Debt/GDP ratio**

Scenarios	Strategies	
	2009 MTDS	2010 MTDS
	(NPV of Debt in percent of GDP at end-2013)	
Baseline	38.07%	37.15%
Stress test 1: Parallel shift in yield curve	42.45%	41.21%
Stress test 2: Flatter yield curve	39.77%	38.49%
Stress test 3: 30% exchange rate devaluation	42.13%	41.17%
Stress test 4: 2 std deviation devaluation	39.61%	38.68%
Stress test 5: Combination shock	40.96%	39.88%
Change under parallel shift in yield curve	4.39%	4.07%
Change under flatter yield curve	1.71%	1.34%
Change under 30% exchange rate devaluation	4.06%	4.02%
Change under 2 std deviation devaluation	1.54%	1.53%
Change under combination shock	2.90%	2.74%
Maximum under stress	4.39%	4.07%

**Figure 10: Cost and Risk Analysis: 2009 MTDS vis-à-vis 2010 MTDS**



## VII. DEBT SUSTAINABILITY

56. The two recent Debt Sustainability Analyses (DSAs) carried out under the joint World Bank-IMF debt sustainability framework and the Centennial Group Holdings conclude that Kenya's risk of debt distress remains moderate. 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.

57. The current debt-to-GDP ratio is low and debt sustainability is not a serious concern<sup>14</sup>. 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.

58. In Table 13, a worst case scenario, a "borrowing shock" scenario is presented which assumes Government borrowing 10 percent of GDP in FY2010/11. The results indicate that in the medium term (by FY2012/13), the debt burden indicators will breach two debt sustainability benchmarks.

**Table 13: Sensitivity Analysis for Key indicators of public debt**

	Benchmark	2010 <sup>15</sup>	Impact of 10% of GDP increase in borrowing in 2010 Debt indicators in 2013
NPV of debt as % of GDP	40	33	41
Revenue	240	149	180
Debt service as % of Revenue	30	26	31

<sup>14</sup> Kenya: Request for Disbursement under the Rapid-Access Component of the Exogenous Shock Facility, June 2009, IMF.

<sup>15</sup> Kenya: An Assessment of Macroeconomic and Debt Sustainability Prospects, 2010, Centennial Group Holdings.

59. In the financial year 2010/11, borrowing limit is set at 6.8 percent of GDP but expected to decline to 3.6 percent of GDP in FY2012/13.

60. 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 *2010 MTDS* will be undertaken with caution taking into account these factors.

## VIII. IMPLEMENTING THE 2010 MTDS

61. The Government will prepare a borrowing plan to accompany the 2010 MTDS (Strategy 2) and meet the financing requirement for the financial year 2010/11. 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.

62. The 2010 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.

63. Debt management strategy development needs a robust legal framework. The Government will seek to strengthen the present legislation governing both external and internal borrowing to set out 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.

64. Contingent liabilities have implications on debt sustainability levels. The importance of monitoring such liabilities is likely to become increasingly important given the increased demand for guarantees to be issued. Whereas an increase in contingent liabilities does not affect the choice of the 2010 MTDS (Strategy 2), the cost and risk indicators under the strategy worsen (Figure 11).

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 *2010 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 2010/11, taking into account both cost and risk. The cost-risk trade-off of the *2010 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 *2010 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 long term domestic debt over the medium term.**

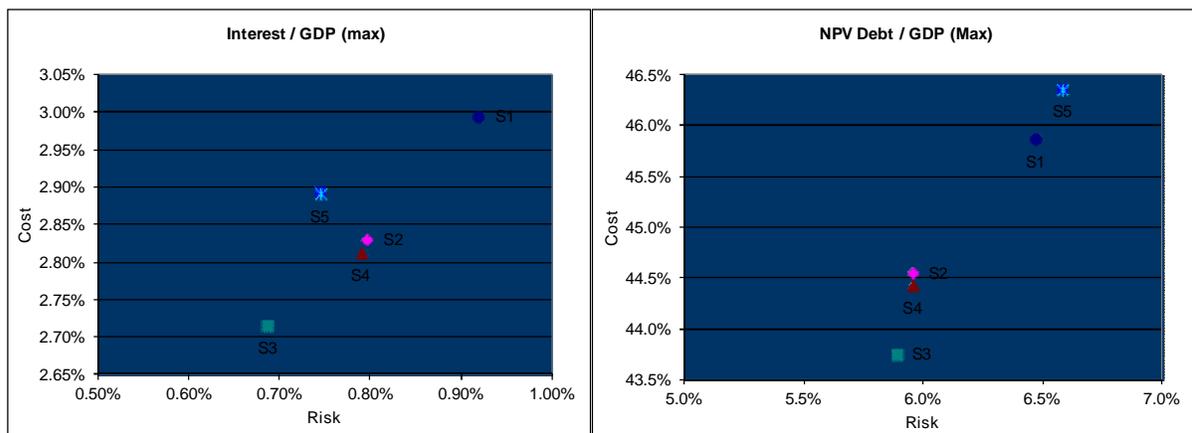
69. This is the second time that the Treasury is formally presenting the Medium Term Debt Strategy as part of the Budget. This initiative will be implemented going forward with the aim of enhancing the transparency of the borrowing process.

## APPENDIX I: ANALYZING THE COST-RISK TRADE-OFF UNDER ALTERNATIVE SCENARIOS

### ■ Contingent Liability Shock

1. The cost-risk analysis was also undertaken on the basis of two alternative macroeconomic scenarios. Under the first alternative scenario, we assume that contingent liabilities of 10 percent of GDP are realized in FY2010/11 and require immediate financing. This increases the gross financing requirement from Ksh 308 billion to Ksh 561 billion in FY2010/11. This shock is in line with the scale of the shock typically applied in the DSA.
2. The impact on the key cost and risk indicators is outlined in Figure 11 below. This clearly indicates that, while overall the cost indicators all shift up considerably, the relative ranking does not change.

**Figure 11: Cost and risk under a contingent liability shock**



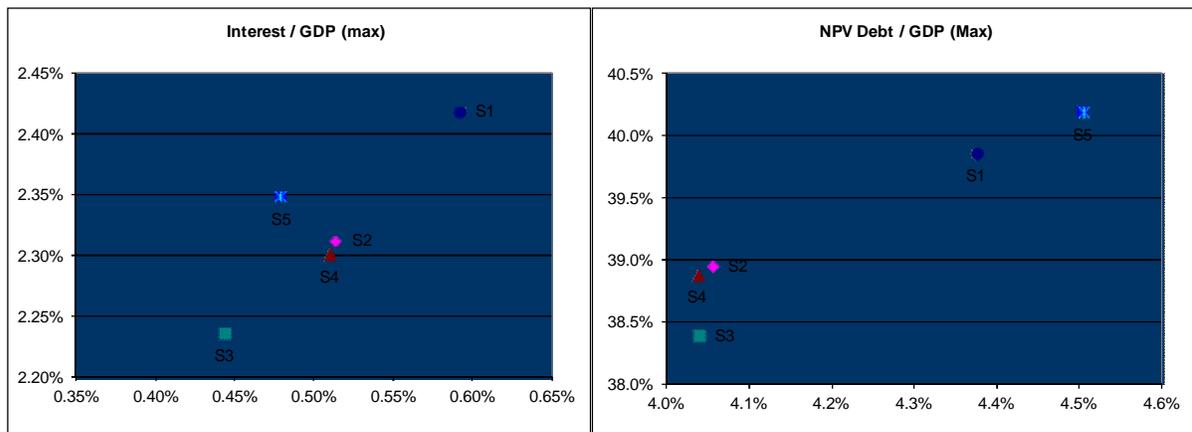
### ■ Enhanced Energy Spending

3. The performance of the strategies was also considered on the basis of an alternative scenario which envisages more infrastructure investment (for example, for the energy sector). In this scenario, an additional USD 1 billion 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 new semi-concessional bilateral debt. 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. In particular, the proportion of external debt increases from 15 to 22 percent under S1, 25 to 32 percent under S2 and S4, and from 35 to 41 percent under S3.

4. 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 extra energy spending**



**Table 14: Other Key Indicators under Extra Energy Spending**

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	<b>Simulation Horizon (2010/11-2012/2013)</b>				
	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>S5</b>
<b>Cost indicators (average over simulation)</b>					
Average interest rate	5.6%	5.5%	5.4%	5.5%	5.5%
Interest / Revenues	9.3%	9.1%	8.9%	9.1%	9.2%
<b>Risk indicators (end simulation horizon)</b>					
% DX in debt portfolio	56%	51%	46%	50%	47%
ATM (years)	10.1	11.1	12.5	11.3	11.8
% of debt refinancing within 12 months	8.4%	7.2%	5.8%	8.6%	6.5%
% of DX debt refinancing within 12 months	11.7%	10.6%	8.4%	13.5%	8.4%
Short-term external debt / Reserves	6.4%	6.4%	6.4%	6.4%	6.4%
<b>Implied net borrowing (% of GDP) (average over simulation)</b>					
Net domestic borrowing	3.6%	2.7%	2.0%	2.6%	2.1%
Net external borrowing	1.3%	2.1%	2.8%	2.2%	2.9%

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