

# **Medium Term Debt Management Strategy**

**2012/13 – 2014/15**

**June 2012**

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## FOREWORD

The Government borrowing requirement and the level of public debt has been consistent with the overall fiscal framework supporting macro-economic stability for sustainable growth over the medium term. It is anchored on the *Medium Term Debt Strategy* (MTDS) revised annually and tabled in Parliament as part of the documents supporting Budget Estimates.

The Government debt management objective remains two-fold: to raise resources through borrowing to meet central government budgetary requirements at minimum cost and prudent level of risk; and to promote the development of domestic debt markets.

The purpose of the *2012 MTDS* is to guide central government borrowing in the financial year 2012/13 while providing a path for sustainable level of debt over the medium term. The MTDS evaluates both costs and risks of various scenarios and recommends an optimal debt management strategy for implementation during the financial year. In FY 2012/13, the Treasury will implement measures to simplify and disseminate information in the *2012 MTDS* through easily accessible channels to ensure wider outreach and understanding by the general public.

The institutional arrangement for public debt management will be reviewed to enable the Treasury execute its mandate effectively and efficiently under the Constitution of Kenya, 2010. The implementation of the Constitution requires enormous amount of resources, part of which will be sourced through borrowing. It is therefore important to closely monitor the burden of public debt both at the National and at County Government level so as not to undermine economic growth.

As we implement the Constitution of Kenya, 2010, it is important that both the burden of and benefit from public borrowing is

equitably shared between the present and future generations. Indeed, it is one of the key principles of public finance under Article 201 of the Constitution of Kenya, 2010. Going forward, it is therefore expected that County Governments' fiscal strategies will be geared towards maintaining a sustainable level of debt.



**HON. ROBINSON NJERU GITHEE, EGH, MP**  
**MINISTER FOR FINANCE**  
**June 2012**

## ACKNOWLEDGEMENT

The preferred borrowing and debt strategy in the FY2012/13 is outlined in the *2012 MTDS*. The strategy is informed by a fiscal policy supportive of macro-economic stability and growth. The existing public debt portfolio and alternative borrowing mix are carefully evaluated and taking into account the need to develop a vibrant domestic debt market, an optimal strategy is presented.

Government's domestic borrowing program performed dismally in the first half of 2011/12 but significantly recovered in the third quarter. The Government therefore sought alternative source of funding by way of a 2 year syndicated loan of up to Ksh. 52 billion, equivalent to USD600 million. Apart from providing funding for the budget the loan will ease pressure on domestic interest rates, boost foreign exchange reserves and hence pressure on the Kenya shilling. Consistent with positive economic outlook, the *2012 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 the medium term tenors to create liquidity around benchmark bonds and lower the cost of borrowing.

On the external borrowing, the Government continued to prefer loans extended on concessional terms, that is, those with minimum grant element of more than 35 percent to be consistent with the debt borrowing policy. Borrowing on commercial terms will be on exceptional circumstances. A cautious approach will be adopted in the issuance of Government loan guarantees to minimize the level of contingent liabilities and maintaining the level of public debt within sustainable levels.

Let me take this opportunity to acknowledge the staff of the Debt Management Department, Ministry of Finance who were involved in the preparation of the *2012 MTDS*. Specifically, the core team for the MTDS led by Mr. Charles Kairu comprising of Racheal

Njoroge, Bernard Gibet and Denis Okungu under the guidance of  
Mr. John Murugu - Director, Debt Management Department.

A handwritten signature in red ink, appearing to be 'JK h2', is centered on the page.

**JOSEPH K. KINYUA, CBS**  
**PERMANENT SECRETARY/ TREASURY**  
**June 2012**



## 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
PV	Net Present Value
PV	Present Value
NSE	Nairobi Securities Exchange
NSSF	National Social Security Fund
PFM	Public Financial Management
PFMR	Public Financial Management Reforms
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 *2011 MTDS* were a desire to minimize overall cost by issuing medium term debt to reduce cost associated with longer dated securities and to further develop and deepen the domestic debt market. Consequently, *2012 MTDS* envisages a less uptake of domestic debt than in previous years to meet the Central Government budget-financing requirement.

The Government also highlighted the need to minimize the degree of foreign exchange rate risk exposure associated with the external debt portfolio by borrowing more concessional debt, while maintaining a limited window for borrowing on commercial terms to minimize costs and refinancing risks. The *2012 MTDS* emphasizes that 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.

The *2011 MTDS* reaffirmed Government's commitment in realizing its objectives in the domestic debt market. In the first half of 2011/12, the domestic debt market was characterized by high interest rates, under-subscription of government securities offered at the auctions and near absence of secondary trading of Treasury Bonds. As at December 2011, out of the targeted domestic borrowing of Ksh. 87 billion, only Ksh. 12 billion (14 percent) had been realized.

Despite the slight deviation in the level of domestic borrowing, the thrust of the *2011 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 5.9 years to 6.0 years and the proportion of domestic debt to be refinanced within 12 months fell from 18 percent as of end June 2011 to 17 percent as of end June 2012.

Although *2011 MTDS* successfully achieved a reduction in refinancing risk, managing this risk remains a priority for the *2012 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.

The rapid growth of domestic debt and sharp rise in interest rates on government securities poses major risk on debt sustainability. To mitigate these risks. There is need to explore the possibility of a switch from domestic to external debt. However, there is also a concern that a sudden and aggressive shift from domestic debt could risk reversing some of the gains that previous debt strategies have achieved in terms of market deepening. 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 PV of Debt/GDP would exceed the ceiling of 40 percent in the event of shocks. This risk is real given the steep depreciation of the shilling witnessed in 2011 when the Shilling weakened to exchange at a historic low of Ksh 107 per USD in mid-October 2011.

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 on exceptional basis and will be biased towards projects with high-expected risk-adjusted rates of return including critical infrastructure that would otherwise not be undertaken due to lack of concessional financing. However, the US\$ 600 million syndicated facility was accommodated within the ECF window to substitute for domestic borrowing. 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 *2011 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”). Apriori, 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, 3 alternative 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 PV of Debt to GDP (*PV 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 *PV of Debt/GDP* is considered, “S5” becomes less attractive, and aggravates the risk of breaching the 40 percent ceiling. This strategy exposes the portfolio to relatively high exchange rate and refinancing risks. Whereas these risks could be mitigated by use of a sinking fund, this approach has cost implications.

The 2012 MTDS presents “S2” as the **optimal strategy** after 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 strategy comprises of the following actions:

- **65%** net domestic borrowing and **35%** net external borrowing to finance the central government budget;
- Domestic borrowing will be on medium term. Indeed, the 2012 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 **26%** on concessional terms, **4%** on semi concessional terms while **5%** will be contracted on commercial terms;
- **Issuance of the Euro Bond remains an option during the year** depending on developments in the international markets. Proceeds may be used to retire the 2-year syndicated external commercial loan contracted during the financial year 2011/12.

The Government is committed to maintain debt within sustainable levels. Under the current three-year Extended Credit Facility (ECF) arrangement with the International Monetary Fund (IMF), the Government intends to raise real GDP to 7 percent, lower the public debt to GDP ratio to below 45 percent and maintain inflation at 5 percent over the medium term.

Consistent with the principles of public finance in the Constitution of Kenya, 2010, the Government will seek to widen outreach of the *2012 MTDS*. A domestic borrowing plan anchored on government cash flow requirements will be developed for implementation, monitoring and evaluation. The Government will also actively monitor the key macroeconomic indicators and interest rates against those assumed in the analysis. Any significant and sustained change will trigger the need for revision of 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.

Availability of comprehensive and accurate information on a regular basis is critical in managing investors' sovereign risk assessment and the cost of debt. The Government will seek to publish public debt information on a regular basis to enhance transparency on debt management in accordance with best international practice.

The Government will continue to strengthen capacity in public debt management. The debt recording system will be upgraded, additional skilled staff posted to DMD while training in debt management techniques scaled up.

## **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 2011, Ministry of Finance (MoF) through the Debt Management Department (DMD) prepared and published a formal debt management strategy, the *2011 MTDS* which outlined the Government Medium Term Debt Strategy for the period FY2011/12-FY2013/14. The *2011 MTDS* was the Government's third 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 Minister for Finance.
3. The *2011 MTDS* guided the Government debt management operations in the FY2011/12. 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 has been provided for under the Public Financial Management Bill, 2011.

## II. OVERVIEW OF *2011 MTDS*

### a) Rationale for *2011 MTDS*

5. The *2011 MTDS* recommended a gradual shift in the composition of debt towards more external debt and less uptake of domestic debt over the medium term to minimize both cost and risk in the debt portfolio. The relevant considerations that influenced the *2011 MTDS* were based on the need to reduce refinancing risk exposure in the domestic debt, while containing the cost of debt.

### b) Description of Strategy

6. The strategy presented in the *2011 MTDS* recommended to finance the budget deficit of 7.5 percent of GDP was as follows: 30 percent by way of net external borrowing, mainly concessional while allowing for a limited window for non-concessional borrowing, and 70 percent net domestic borrowing.

7. In the strategy, concessional external borrowing was limited to loans with a minimum grant element of 35 percent. Proceeds from non-concessional loans would be limited to critical projects with high expected risk-adjusted rates of return, preferably infrastructure projects that otherwise would not be undertaken due to lack of concessional financing.

8. 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. While 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, issuance was to concentrate more on the 5 and 10 year maturities to reduce cost associated with longer dated securities.

9. The *2011 MTDS* also envisaged no issuance of euro-bond during the financial year 2011/12.

10. In summary, the budget deficit was to be financed through both net external financing amounting of 3.7 percent of GDP and net domestic financing of 3.8 percent of GDP.



### **III. KEY DEVELOPMENTS SINCE THE *2011 MTDS***

#### **a) Development in the Domestic Debt Market**

11. The government has continued to pursue the twin objectives of developing a deep and liquid domestic market since the development of the first MTDS in June 2009. The development of the *2011 MTDS*, reaffirmed the government's commitment in realizing its objective of deepening the domestic debt market. In the first half of 2011/12, the domestic market was characterized by rising inflation and high interest rates that led to revenue shortfalls and constrained domestic borrowing. As at December 2011, out of the targeted domestic borrowing of Ksh. 87 billion, only Ksh. 12 billion (14 percent of the total) had been realized. The volatility in the domestic debt market was characterized by under-subscription of Treasury bills and Treasury Bonds and sharp rises in interest rates. In addition, the Shilling weakened to exchange at a historic low of Ksh 107 per USD in mid-October 2011 compared to an average of Ksh. 80 per USD in October 2010 while inflationary pressures were evident.

12. Arising from these challenges, issuance of Government securities was concentrated on the short end, mainly Treasury Bills and 1 and 2 year Treasury Bonds. The poor performance for longer dated maturities was demonstrated by the dismal performance of the Infrastructure Bond which, despite having a Diaspora component, remained on tap for five months, October, 2011 to February, 2012.

13. In response to these challenges, the government revised downward its net domestic borrowing requirement from Kshs 119.5 billion (3.8 percent of GDP) to Kshs 92.7 billion (2.8 percent of GDP) and considered externalizing the balance through the proposed \$600 million syndicated loan facility.

14. The Government enhanced its outreach in the dissemination of a formal debt management strategy. For instance, the *2011 MTDS* was posted at the Ministry of Finance website and circulated to the various key institutions in the public and private sectors. Issues ranging from the amount to be borrowed, preferred terms of new borrowing and the effects on the country's debt sustainability status are clearly brought out as a way of ensuring transparency and credibility of the information presented.

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

15. The Government policy on external borrowing is to be analyzed in light of the ever-changing domestic and international macroeconomic conditions. In the *2011 MTDS*, the Government's preference for the concessional external financing and

provision of a limited window for borrowing on commercial terms to minimize costs and refinancing risks was informed by rising inflation in the domestic market, which led to the sharp depreciation of the local currency resulting to high external debt servicing. Financing on non-concessional terms continues to be 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.

16. To support Government's economic and financial reforms, Kenya entered into a three-year Extended Credit Facility (ECF) arrangement with the International Monetary Fund (IMF). The program aims at boosting the level of official foreign exchange reserves while supporting efforts for a gradual fiscal adjustment over a three-year horizon. The government intention under this ECF program is: 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 while maintaining a floating rate regime.

17. Performance of external financing, on a net basis, 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 for 'soft' loans. However, the Government position to negotiate better terms with external financiers improved following the ECF arrangement with the IMF.

18. The Government had also been considering the possibility of accessing the international capital markets. In this context, the *2011 MTDS* proved useful in providing a very clear basis for engagement. The potential for a Euro Bond to act as a benchmark for the corporate sector for such access is a major consideration, in addition to the domestic market, which has proven that it is an effective source for providing longer-dated funds for investment through corporate IFBs.

19. A 2 year commercial banks syndicated loan facility of up to Ksh 52 billion (about USD 600 million equivalent) was negotiated as an alternative source of financing the budget following the low uptake of Government securities by investors. It is expected that the foreign currency inflows associated with the proposed borrowing will ease pressure on domestic interest rates, add to the official foreign exchange reserves position and reduce pressure on the Kenya shilling exchange rate. The Government plans to issue a Euro Bond to retire the loan.

### **c) Guarantees**

20. The energy sector has been the primary driver for the rise in contingent liabilities in form of government guarantees. The government, in collaboration with its development partners has increased its efforts towards promotion of Public Private Partnership arrangements (PPP) in the energy sector and encouraged use of non-state guarantees from multilateral agencies like MIGA to minimize the level of explicit guarantees to maintain public debt within sustainable levels.

21. The demand for explicit guarantees is likely to increase in the medium term as the country embarks on implementing devolved system of governance under the Constitution of Kenya, 2010. However, it is expected that county governments will exercise fiscal restraint in the management of county budgets.

22. The Public Financial Management Bill, 2012 proposes to establish the National Debt Management Office at the National Treasury with the primary responsibility of managing public debt operations. It is envisaged that this department will be adequately staffed, equipped and supported with new IT systems to efficiently execute its mandate. In the meantime, notable progress has been achieved in public debt reform area over the past year. Specifically, the implementation of the electronic Project Monitoring Information System (ePROMIS) by the External Resources Department (ERD) of the Ministry of Finance, the continued upgrade of the Commonwealth Secretariat Debt Recording Management System (CS-DRMS) will greatly assist in enhancing the quality and timeliness of information flow on public debt. A process to establish the level of contingent liabilities, as well as a World Bank funded management mechanism under the Public Private Partnership framework is ongoing under the Department of Government Investment and Public Enterprises (DGIPE).

### **d) Implementation and Impact of 2011 MTDS**

23. The Government implemented the *2011 MTDS* domestic borrowing plan by issuing Treasury Bills and Treasury Bonds. Due to the low uptake of government securities, domestic debt financing of the budget deficit was revised to 1.9 percent of GDP from the planned 3.8 percent of GDP as shown in Table 1(a).

24. By end June 2012, the provisional share of foreign to domestic debt is projected at 48 percent, compared to 51 percent the previous year. In addition, the refinancing risk associated with short-term domestic debt has fallen with the average time to maturity at 6.0 years from 5.9 years in June 2011 as indicated in Table 1(b).

25. Government's decision to substitute domestic borrowing by way of a USD 600 million (Ksh 52 billion) syndicated external loan, combined with austerity measures resulted in net external financing falling to 3.0 percent of GDP from the planned 3.7 percent of GDP as shown in Table 1(a).

26. Whereas, there was low uptake of domestic borrowing, it is projected that interest payments on domestic debt will increase on account of sharp rise in interest rates in the domestic debt market particularly in the first half of the financial year 2011/12. In addition, the shift in the portfolio mix in favour of external debt increased the overall debt portfolio exposure to exchange rate risk (risk-cost trade off).

27. Tables 1(a) and 1(b) summarize the outcome and impact of implementing the *2011 MTDS*.

**Table 1(a): Impact of implementing the 2011 MTDS**

MTDS 2011	Net borrowing (Kshbn)		Net borrowing (% of GDP)	
	FY 2010/11		FY 2010/11	
	Target	Projected outturn	Target	Projected outturn
Total net borrowing (Ksh bns)*	237	160	7.5%	4.9%
Domestic (net)	120	62	3.8%	1.9%
External (net)	117	98	3.7%	3.0%

\* Note these targets are equivalent to a gross borrowing target of 70% for domestic and 30% for external debt.

Source: Ministry of Finance and IMF/WB estimates

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

	FY10/11	FY11/12*
<b>Portfolio composition</b>		
Domestic	51%	48%
External	49%	52%
<b>Refinancing risk</b>		
Average time to maturity total debt (years)	8.4	8.3
Average time to maturity domestic debt (years)	5.9	6.0
% of domestic debt falling due within 12 months	18%	17%
<b>Cost</b>		
Average interest rate**	5.2%	5.8%

\* Projected portfolio as of end-June 2012

\*\* Provisional

Source: Ministry of Finance and IMF/WB estimates

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

28. The stock of public debt is projected at Ksh 1,507 billion or 46 percent of GDP in nominal terms as at end June 2012. In addition, the structure of the debt portfolio is projected to change to 52 percent external debt and 48 percent domestic debt from 49 and 51 percent, respectively (Table 2(a), 2(b) and Figure 1, Chart 1). The change in the debt portfolio is consistent with the *2011 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 *PV of Debt/GDP* - remains vulnerable to exchange rate movements.

**Table 2(a): External and Domestic Debt, End June 2011**

	USD Billion	Ksh Billion	Percent of GDP	Share of total debt	Weighted average interest rate (%)
External debt	8.0	722.9	26	49	1.0
Domestic debt (gross)	8.5	764.2	28	51	9.2
<b>Total debt</b>	<b>16.5</b>	<b>1,487.1</b>	<b>54</b>	<b>100</b>	<b>5.2</b>

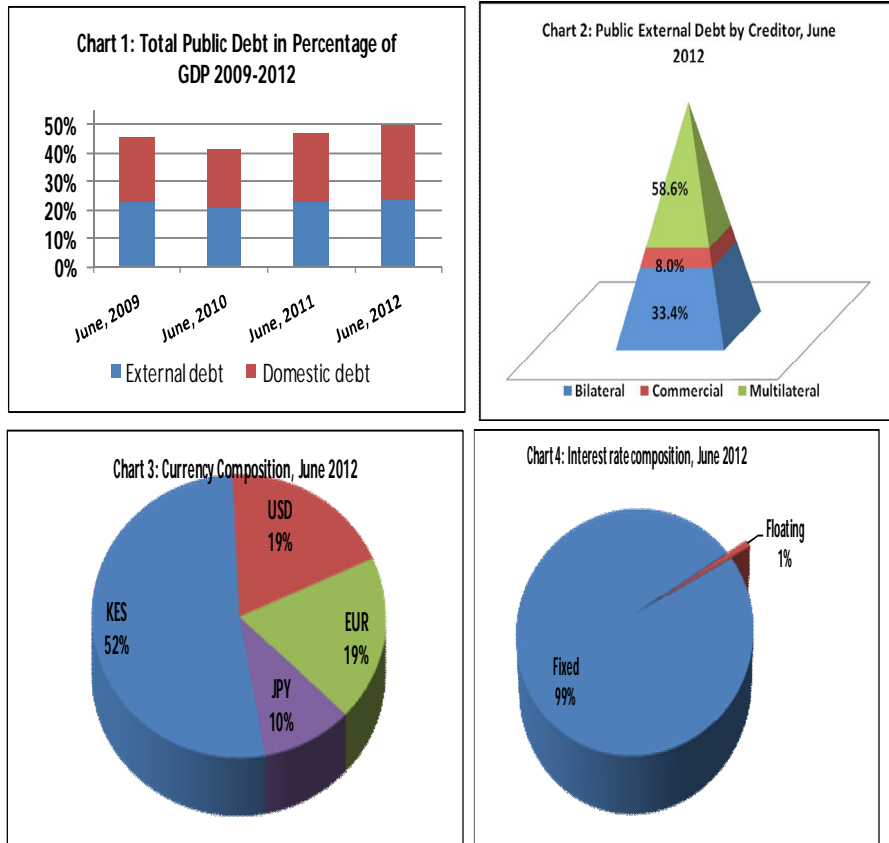
*Source: Ministry of Finance and IMF/WB estimates*

**Table 2(b): Projected External and Domestic Debt, June 2012**

	USD Billion	Ksh Billion	Percent of GDP	Share of total debt	Weighted average interest rate (%)
External debt	8.8	790.4	24	52	1.1
Domestic debt (gross)	8.0	716.6	22	48	10.8
<b>Total debt</b>	<b>16.8</b>	<b>1,507.0</b>	<b>46</b>	<b>100</b>	<b>6.3</b>

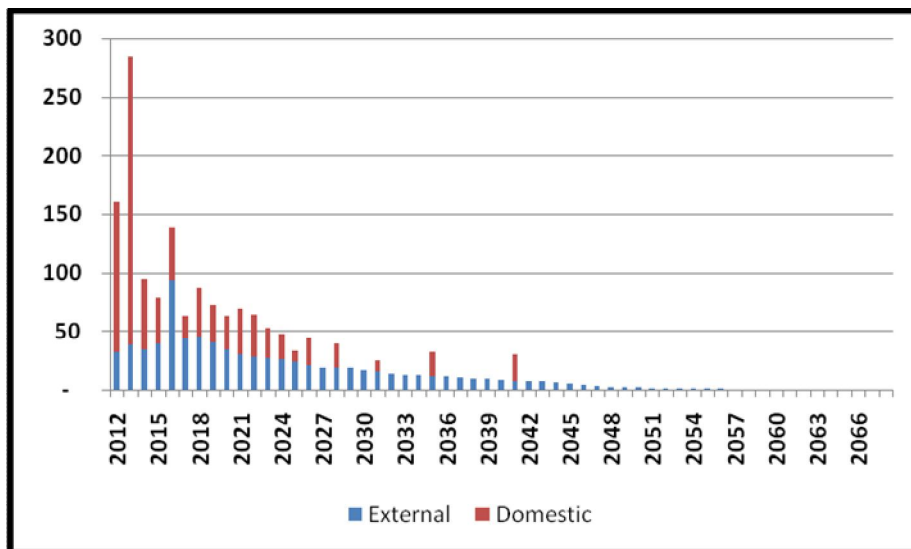
*Source: Ministry of Finance and IMF/WB estimates*

**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 2012 (Ksh billion)**



Source: Ministry of Finance and Central Bank of Kenya

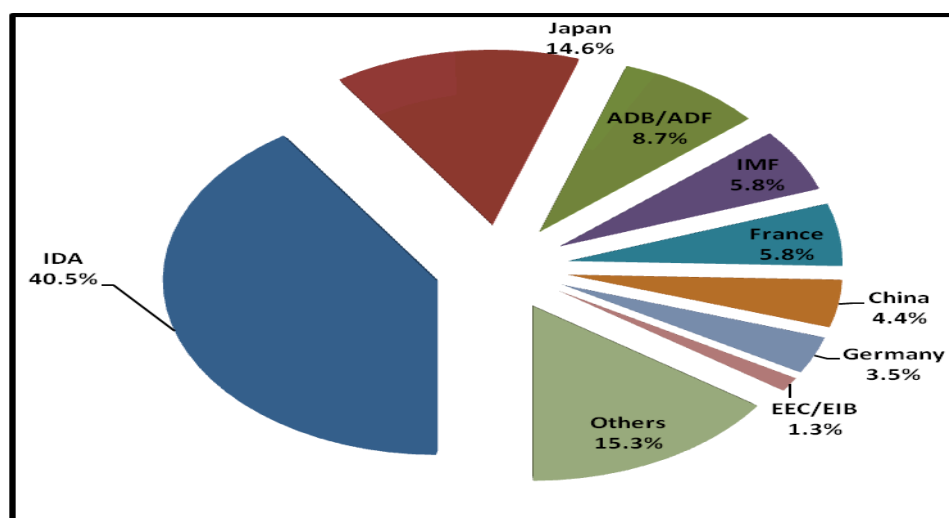
29. The main external sources of financing are multilateral and bilateral creditors. Multilateral concessional debt amounts to 59 percent of total external debt while bilateral creditors account for 33 percent. Commercial debt, which includes a medium term syndicated loan, represents 8 percent of total public external debt (Figure 1, Chart 2).

30. The currency composition of external debt is also relatively unchanged. The largest share of foreign debt remains denominated in Euro and USD (19 percent of total debt each), with the Japanese Yen accounting for 10 percent (Figure 1, Chart 3). Kenya Shilling denominated debt accounts for 52 percent of total debt.

31. The interest rate composition of total debt also remains relatively unchanged with 99 percent of the debt being on fixed interest rates (Figure 1, Chart 4).

32. IDA, ADB/ADF and EEC/EIB are the main multilateral creditors as shown in Figure 3, accounting for 86 percent of outstanding multilateral debt as at end June 2012. IDA is the single biggest source of external resources, accounting for 69 percent of outstanding multilateral debt. In terms of bilateral creditors, Japan, France, China and Germany are the main creditors accounting for 79 percent of bilateral debt. Japan is the largest bilateral donor, accounting for 44 percent of bilateral debt.

**Figure 3: External Debt by Major Creditors, End June 2012**



*Source: Ministry of Finance*

33. Table 3 highlights the average cost characteristics of new external commitments. The guidelines on external borrowing require that new



loans should have a Grant Element of at least 35 percent. Table 3 demonstrates the hardening of terms for new external commitments in 2012, occasioned by borrowing on terms very close to the 35 percent minimum concessionality particularly for the energy sector, as well as the market determined terms on the USD 600 million, 2 year syndicated commercial loan (LIBOR + 4.75 percent p.a., plus an arrangement fee of 2.8 percent).

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

<b>Terms</b>	<b>June 2011</b>	<b>June 2012*</b>
Interest rate (%)	0.8	1.8
Maturity (Years)	26.6	23.1
Grace period (Years)	8.1	7.1
Grant Element (%)	69.8	60.6

*\*Provisional*

*Source: Ministry of Finance*

34. Refinancing risk in the debt portfolio remains significant but within tolerable limits. The Average Time to Maturity (ATM) of the total debt portfolio is 8.3 years down from 8.4 years at end June 2011, with that of the domestic debt portfolio at 6.0 years up from 5.9 years (Table 4). The average maturity profile for external debt has declined to 11.3 years from 11.7 years, consistent with the hardening of terms on new external commitments. A close examination of the repayment profile indicate significant level of both refinancing and rollover risk with 17 percent of the domestic debt stock maturing in the next 12 months.

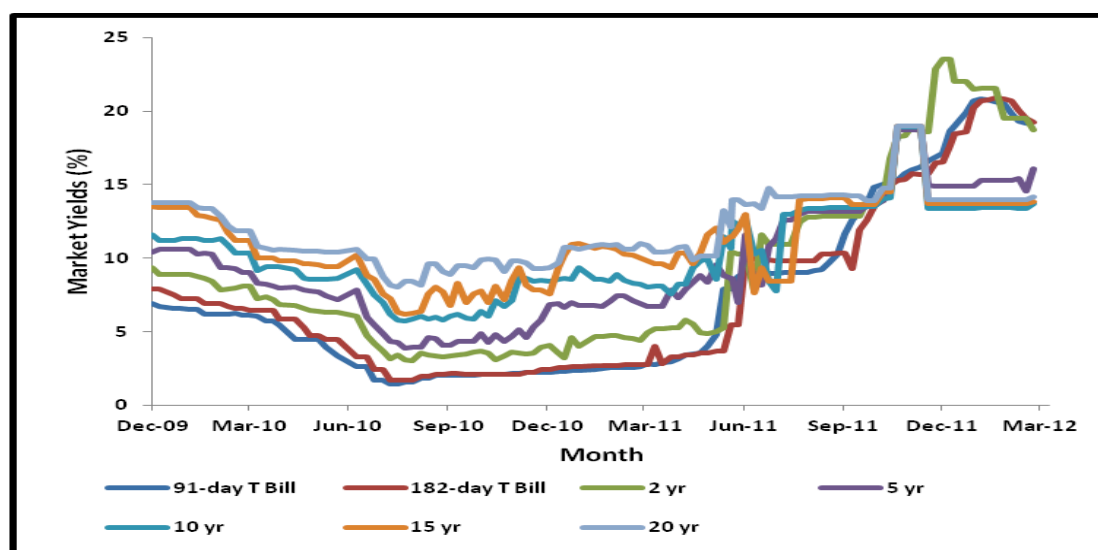
**Table 4: Cost and Risk Considerations of Debt Portfolio, End June 2012**

Characteristics of Existing Portfolio	Ex ante Risks	Ex ante Cost
<b>Currency composition</b> (FX = 48%; DX=52%)		
External, mostly concessional	Exchange rate risk	Low
Domestic	No exchange rate risk	High
<b>Maturity profile (ATM = 8.3 years)</b>		
External, mostly concessional (ATM =11.3 years)	Low refinancing risk	Low
Domestic (ATM = 6.0 years)	Medium refinancing risk	High
<b>Interest rate composition</b> (Fix=99%; Float=1%)		
	Low interest rate risk	

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

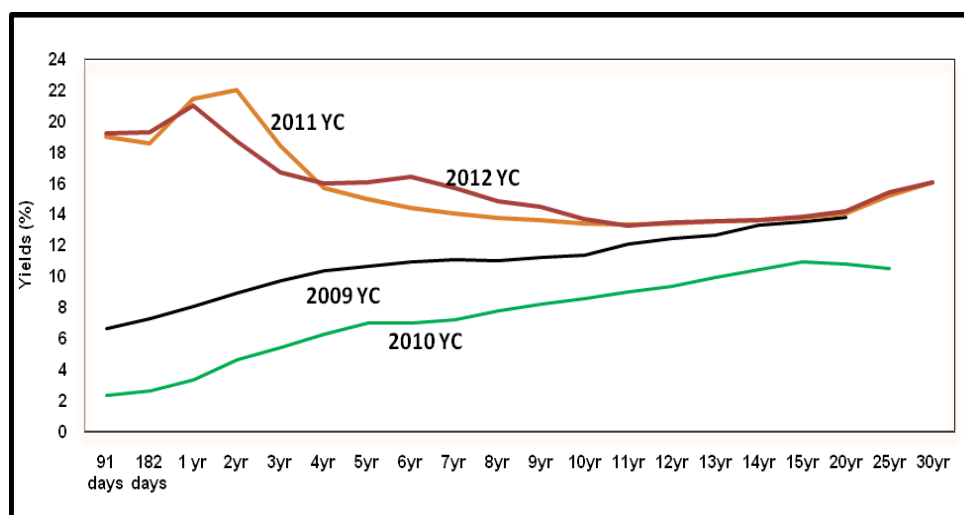
35. The average interest rates on Government securities (91, 182 and 364 day Treasury Bills and Benchmark Treasury Bonds) increased significantly in the first half of the financial year (Figure 4) leading to a shift in the yield curve (Figure 5), but the trend reversed during the second half of the year.

**Figure 4: Trend in Domestic Interest Rates in 2011/12**



*Source: Central Bank of Kenya*

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



*Source: Central Bank of Kenya*

36. **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 PV 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, as is the case with the USD 600 million, 2-year bullet payment syndicated commercial external loan).

## V. 2012 MTDS: KEY ASSUMPTIONS

### a) Objectives and Scope

37. In the 2012 MTDS, the Government will continue pursuing the same broad objectives of funding the Central Government Budget while maintaining a prudent level of risk taking account of costs. This will be achieved through the diversification of external sources of financing and further lengthening the average time to maturity of the domestic debt portfolio.

38. The scope of the analysis of 2012 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 100.1 million or 1.1 percent of total public and publicly guaranteed (PPG) external debt.<sup>1</sup>

### b) Macroeconomic Environment and Risks

39. The macroeconomic framework underpinning the MTDS is consistent with projections included in the 2012/13 Budget Policy Statement (2012 BPS). The medium term outlook for FY2012/13-FY2014/15 assumes a real GDP growth to increase from 4.8 percent in FY2011/12 to 6.3 percent in FY2014/15 and the overall budget deficit to decline from 4.9 percent of GDP in FY2011/12 to 3.5 percent of GDP in FY2014/15. Inflation is expected to decline from 16.0 percent in FY2011/12 to 5.0 percent in FY2014/15, and the exchange rates to remain stable. The current account deficit is expected to decline gradually from about 11.1 percent of GDP in 2011/12 to 6.1 percent of GDP in 2014/15. The relatively higher interest rates and investor confidence with expected successful General Elections will support both the capital and financial account. Gross international reserves are assumed to reach the East African Community (EAC) target of 4 months of imports by FY2014/15 (Table 5). The risk to the medium-term outlook include further weakening in global economic growth, unfavorable weather conditions and rise in international oil prices.

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<sup>1</sup> Total guaranteed debt amounts to USD 504.69 million (at end March 2012).

**Table 5: Baseline Macroeconomic Assumptions**

<b>Baseline macroeconomic assumptions</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>
Real GDP growth (%)	4.1	5.0	4.8	5.5	5.9	6.3
Inflation (average, %)	5.5	6.9	16.0	9.8	6.3	5.0
Exchange rate (e.o.p, Ksh per USD)	76.7	82.5	86.9			
<b>External Sector</b>						
Current account (% of GDP)	-7.4	-10.8	-11.1	-8.7	-7.3	-6.1
Exports value, goods and services	25.4	27.8	27.0	24.9	24.7	24.5
Imports value, goods and services	38.8	44.3	43.2	37.8	35.9	34.1
Gross official reserves (months of next year's imports)	3.1	3.0	3.6	3.7	3.9	4.0
<b>Central government budget</b>						
Overall balance (in billions of Ksh)	-156.5	-125.9	-160.2	167.4	-166.6	-171.7
Overall balance (% of GDP)	-6.4	-4.5	-4.9	-4.3	-3.8	-3.5
Total revenue and grants (in billions of Ksh)	568.8	686.3	838.1	984.8	1,119.6	1,265.6
Total revenue and grants (% of GDP)	23.1	24.8	25.4	25.4	25.5	25.7
Total expenditure and net lending (in billions of Ksh)	725.3	811.9	998.4	1,152.1	1,286.2	1,437.3
Total expenditure and net lending (% of GDP)	29.5	29.3	30.3	29.8	29.3	29.2
Primary deficit (in billions of Ksh)	93	49.7	73.6	70.2	59.8	66.2
Primary deficit (% of GDP)	-3.8	-1.8	-2.2	-1.8	-1.4	-1.3
Nominal GDP (Market prices, in billions of Ksh)	2,458	2,773	3,295	3,867	4,383	4,916

*Source: Ministry of Finance*

40. Debt 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 73.6 billion in FY2011/12 to Ksh 70.2 billion in FY2012/13 and decrease further to Ksh 66.2 billion by FY2014/15. The 2012 MTDS guides on the optimal borrowing mix to close the resource gap in the budget.

41. The macroeconomic outlook carries substantial uncertainty. In particular, the November 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.

42. 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>2</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 2012 will also have implications for Government's contingent liabilities in the future.

43. Overall, the risk profile on the existing debt portfolio has not changed since June 2011. Thus, the thrust of the *2012 MTDS* is similar to *2011 MTDS*: - to maintain a diversified source of financiers, prudently manage the debt amortization profile to absorbed fiscal shocks (for example, the impact of drought on the budget), and manage the external exposure of the portfolio taking into account the vulnerability to balance of payments shocks.

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

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<sup>2</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 market development, higher 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 money deposit growth			
<b>Natural Disasters</b>				
Natural Disasters	Growth volatility	Market	DX/FX	Diversify economy and explore the possibility of commodity hedge

### c) Potential Financing Sources

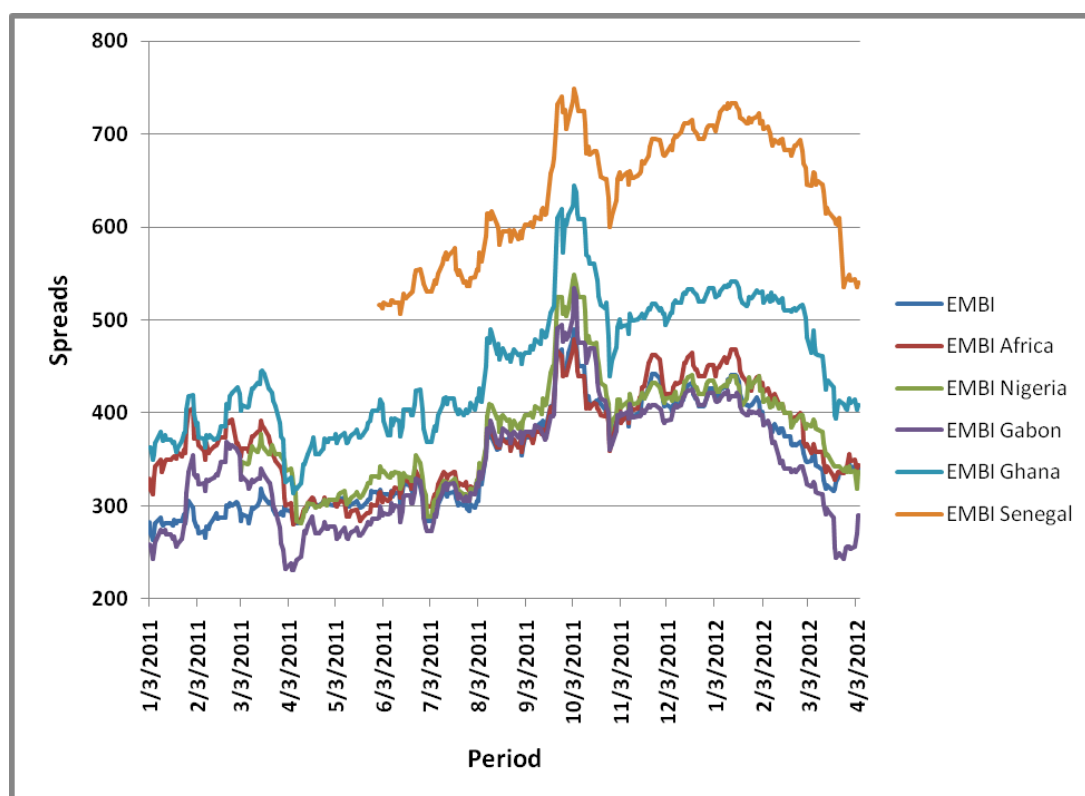
45. Official sources remain the preferred option for the Government to source external financing on concessional terms. It has been observed that borrowing terms have increasingly hardened, with new loans often contracted on terms very close to the 35 percent Grant Element threshold for ‘soft’ loans. Under the current ECF arrangement supported by the IMF, the Government is expected to access better terms from both multi- and bilateral creditors.

46. The Government may consider issuing a Euro Bond in the medium term given the narrowing of spreads for emerging markets sovereign bonds (see Figure 6)<sup>3</sup>. The 2012 MTDS takes into account this

<sup>3</sup> Senegal, considered Kenya’s peer issued a USD 500 million sovereign bond in May 2011 at 8.75 percent p.a. However, the recent margin of 4.75 percent p.a. above LIBOR for the 2 year syndicated loan for Kenya suggests a sovereign bond may be priced lower than the current peer levels.

financing option with timing of Euro Bond placement preferable after the General Elections. The size of non-concessional borrowing including guarantees is set at a maximum USD 1,300 million for the year 2012/13. This amount is consistent with ceiling set under the current IMF supported ECF economic and financial program to safeguard debt sustainability levels.

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



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

47. On domestic borrowing, the Government will seek to issue medium to long term debt securities to lengthen the maturity structure of debt, and thus reducing the underlying refinancing risk. The issuance program will be biased towards Benchmark Bonds. The effort to shift towards longer dated instruments supports development of the yield curve for government debt securities and the overall growth of domestic debt market.

48. The uptake of domestic debt will be reduced to cut-back on rises in interest costs and the rapid growth of the debt stock. This action is consistent with the strategy to shift the portfolio towards external debt



dominance and also to safeguard debt sustainability over the medium term.

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

##### *External sources*

49. The following pricing assumptions underlie the *2012 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>4</sup> These loans are denominated in Euros and USD.<sup>5</sup>
  - In the absence of concessional financing, the Government will maintain non-concessional financing including guarantees at USD 1,300 million for the year 2012/13 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>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 to retire the syndicated commercial loan, or if concessional resources fall below target. Alternatively, domestic borrowing could increase. The international sovereign bond

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<sup>4</sup> These terms are consistent with loans that have been contracted in the last two years from bilateral sources.

<sup>5</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. 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>6</sup> These terms are consistent with loans contracted for the energy sector in the last two years.

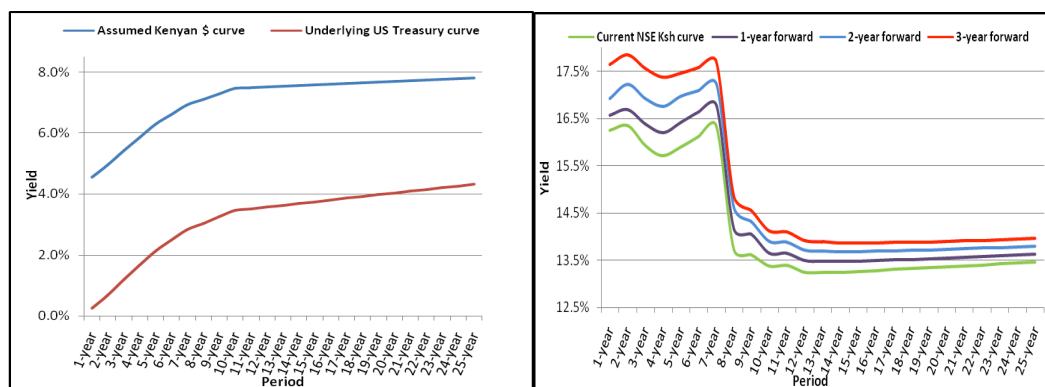
would have a maturity of 10 years, with a bullet repayment. The credit spread is set at 400 basis points. A 5-year bond is expected to have a spread of 350 basis points<sup>7</sup>.

50. The **net external borrowing** for financial year 2012/13 is **1.6 percent of GDP** and expected to rise to 2.0 percent of GDP in the financial year 2014/15.

### *Domestic market sources*

51. 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 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>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*

52. Domestic borrowing will be 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.

<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.

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

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

54. **Net domestic borrowing** for financial year 2012/13 is **2.8 percent of GDP** and is expected to fall to 1.5 percent of GDP in the financial year 2014/15.

#### e) Description of Stress Scenarios

55. 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>9</sup>. For the purposes of the analysis, it is assumed that shocks materialize in FY2012/13, 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

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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.

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 (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 2012/13.
- 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>
- 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**

56. The analysis compares a number of alternative strategies with 2011 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.

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<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.

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

a) *Strategy 1 (S1. 2011 MTDS)*. This is the preferred strategy in 2011 MTDS, which has been implemented in the past year. It assumes that 30 percent of the gross financing needs would be met by external borrowing, mainly from concessional creditors, and 70 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 35 percent and 65 percent of gross financing needs respectively. There is concentration of issuance of more concessional debt to reduce the refinancing risk associated with external debt.

c) *Strategy 3 (S3. Medium term domestic debt)*. This strategy maximizes domestic borrowing, assuming 70 percent of gross financing needs are met through these sources. External financing would decrease to 30 percent of Government gross financing needs. 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.

d) *Strategy 4 (S4. More domestic borrowing)*. It assumes domestic borrowing would amount to 75 percent while 25 percent of the gross financing needs would be met by external borrowing, from concessional and semi-concessional creditors.

e) *Strategy 5 (S5. International Sovereign Bond (ISB))*. Under this strategy, the Government would issue an international bond<sup>12</sup> as an alternative to increasing domestic borrowing, and to retire the 2-year syndicated commercial loan.

58. 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 400 basis points. See section d above on future financing pricing assumptions.

**Table 7: Alternative Debt Management Strategies**

		<i>2011 MTDS</i>	<b>More external debt</b>	<b>Medium term domestic debt</b>	<b>More domestic debt</b>	<b>ISB</b>
<b>New debt</b>		<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>S5</b>
<b>Domestic</b>		<b>70%</b>	<b>65%</b>	<b>70%</b>	<b>75%</b>	<b>65%</b>
	Treasury bills (change in stock)	8%	8%	10%	11%	12%
	2-year	12%	11%	7%	13%	10%
	5-year	16%	17%	23%	18%	12%
	10-year	18%	12%	13%	14%	12%
	15-year	8%	8%	8%	10%	10%
	20-year	8%	8%	9%	9%	10%
<b>External</b>		<b>30%</b>	<b>35%</b>	<b>30%</b>	<b>25%</b>	<b>35%</b>
	Semi-concessional	7%	4%	4%	4%	9%
	Concessional	20%	26%	22%	16%	11%
	2-year syndicate	3%	5%	5%	5%	5%
	10-year ISB	0%	0%	0%	0%	10%

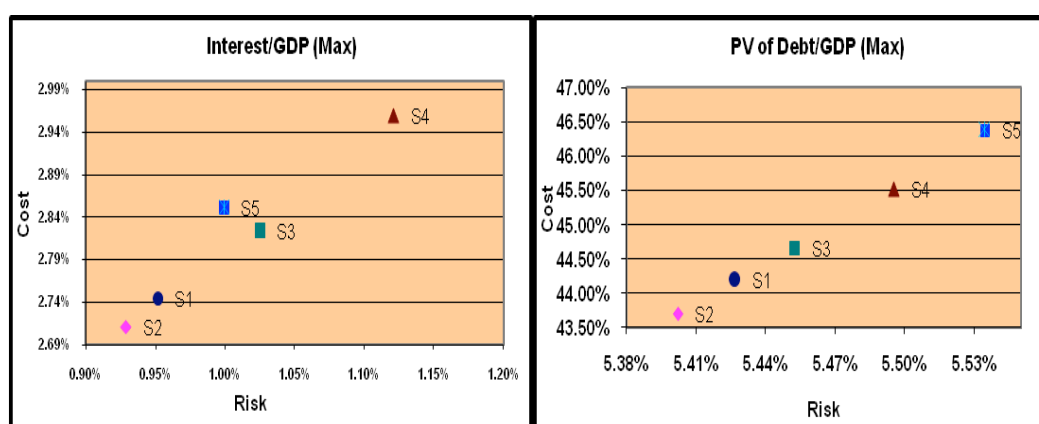
## VI. OUTCOMES OF ANALYSIS OF STRATEGIES

59. 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 PV 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 PV 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	2.74%	2.71%	2.82%	2.96%	2.85%
Parallel shift in yield curve (2 std. deviations)	0.95%	0.93%	1.03%	1.12%	1.00%
Flattening of yield curve	0.28%	0.27%	0.29%	0.33%	0.26%
Extreme devaluation of exchange rate (30%)	0.13%	0.13%	0.14%	0.14%	0.14%
Devaluation of exchange rate by 2 std. deviations	0.05%	0.05%	0.05%	0.05%	0.05%
Combination shock (1 std deviation)	0.27%	0.26%	0.28%	0.31%	0.29%
<b>PV of Debt/GDP (%)</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>S5</b>
Baseline scenario	44.19%	43.70%	44.67%	45.51%	46.37%
Parallel shift in yield curve (2 std. deviations)	2.69%	2.51%	3.48%	4.55%	3.72%
Flattening of yield curve	0.94%	0.89%	1.09%	1.17%	0.85%
Extreme devaluation of exchange rate (30%)	5.43%	5.40%	5.45%	5.50%	5.53%
Devaluation of exchange rate by 2 std. deviations	2.01%	2.00%	2.02%	2.04%	2.05%
Combination shock (1 std deviation)	2.83%	2.78%	2.98%	3.16%	3.22%

**Figure 8: Cost-Risk Tradeoffs**



60. 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 (2011 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).

61. 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 increased uptake of medium to long-term domestic debt. However, when PV 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.

62. 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. It is assumed that USD 884.2 million (Ksh 75 billion)<sup>13</sup> will be required to finance additional expenditures over the next 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 2 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.

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<sup>13</sup> This is derived by maintaining the level of Debt to GDP at 43 percent of GDP over the medium term as envisaged in the Budget Policy Statement, 2012.



63. 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.*

64. A range of other key indicators (Table 9) were also closely analyzed. The results consider S2 as the most optimal strategy that effectively mitigates refinancing risk. This risk has become increasingly relevant for debt managers in light of the continued turmoil in the recent global debt crisis. In addition, S2 will likely have a higher success rate of execution given the bias towards issuance of medium-term domestic securities - a highly preferred term structure by local investors (Table 10, S1).

**Table 9: Other Key Indicators**

	Simulation Horizon (2012/13-2014/2015)				
	S1	S2	S3	S4	S5
<b>Cost indicators (average over simulation)</b>					
Average interest rate	6.6%	6.5%	6.7%	6.9%	6.7%
Interest / revenues	10.0%	9.9%	10.2%	10.4%	10.2%
<b>Risk indicators (end simulation horizon)</b>					
% DX in debt portfolio	45%	45%	47%	50%	45%
ATM (years)	11.4	11.6	11.2	10.7	10.8
% of debt refixing within 12 months	10.8%	10.8%	10.5%	11.9%	11.4%
% of DX debt refinancing within 12 months	10.8%	10.8%	10.5%	11.9%	7.9%
Short-term external debt / reserves	14.2%	14.2%	14.2%	14.2%	14.2%
<b>Implied net borrowing (% of GDP) (average over simulation)</b>					
Net domestic borrowing	2.47%	2.37%	2.86%	3.38%	2.8%
Net external borrowing	1.59%	1.68%	1.24%	0.81%	1.4%

65. 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 2013 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 the Kenyan Government 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.

66. 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 685 million a year; while under S1, this borrowing target is scaled down by USD 36 million (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>1,061</b>	<b>1,098</b>	<b>921</b>	<b>742</b>	<b>1,078</b>
Official sector borrowing (US\$ mn)	1,061	1,098	921	742	743
International capital market securities (US\$ mn)	-	-	-	-	335
<b>Domestic borrowing (Ksh mn)</b>	<b>270,367</b>	<b>265,861</b>	<b>285,146</b>	<b>321,036</b>	<b>281,341</b>
Money market instruments	29,871	32,301	37,509	45,005	46,329
Short-term bonds (2-year)	63,762	59,632	44,016	72,008	58,010
Medium-term bonds (5 - 10 years)	119,482	109,326	136,640	129,015	99,786
Long-term bonds	57,252	64,602	66,981	75,008	77,215
<b>Implied net borrowing (annual average)</b>					
<b>Foreign borrowing (US\$ mn)</b>	<b>648</b>	<b>684</b>	<b>508</b>	<b>329</b>	<b>665</b>
Official sector borrowing (US\$ mn)	648	684	508	329	330
International capital market securities (US\$ mn)	-	-	-	-	335.2
<b>Domestic borrowing (Ksh mn)</b>	<b>110,329</b>	<b>105,698</b>	<b>127,409</b>	<b>149,471</b>	<b>113,519</b>
Money market instruments	(38,268)	(37,535)	(36,401)	(32,639)	(32,589)
Short-term bonds (2-year)	(13,981)	(16,538)	(26,015)	(7,756)	(16,737)
Medium-term bonds (5 - 10 years)	105,326	95,170	122,484	114,858	85,629
Long-term bonds	57,252	64,602	66,981	75,008	77,215

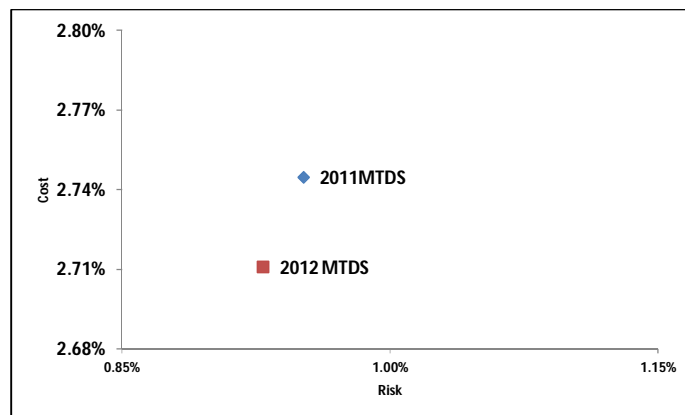
67. **In conclusion, taking into account both risk and cost trade-offs, the implied quantity of gross borrowing, the need to develop the domestic debt market and ability to implement the strategy, the 2012 MTDS proposes Strategy 2 (S2) as the most optimal strategy.** Indeed, the results of the cost and risk analysis (Tables 11 and 12; Figures 9 and 10) reveal that the 2011 MTDS is less favorable going forward compared to the 2012 MTDS.

**Table 11: Cost and Risk Analysis: 2011 MTDS vis-à-vis 2012 MTDS: Interest/GDP ratio**

Scenarios	Strategies	
	2011 MTDS	2012 MTDS
	(Interest in percent of GDP at end-2015)	
Baseline	2.74%	2.71%
Stress test 1: Parallel shift in yield curve	3.70%	3.64%
Stress test 2: Flatter yield curve	3.03%	2.98%
Stress test 3: 30% exchange rate devaluation	2.88%	2.84%
Stress test 4: 2 std deviation devaluation	2.79%	2.76%
Stress test 5: Combination shock	3.01%	2.97%
Change under parallel shift in yield curve	0.95%	0.93%
Change under flatter yield curve	0.28%	0.27%
Change under 30% exchange rate devaluation	0.13%	0.13%
Change under 2 std deviation devaluation	0.05%	0.05%
Change under combination shock	0.27%	0.26%
Maximum under stress	0.95%	0.93%

**Figure 9: Cost and Risk Analysis: 2011 MTDS vis-à-vis 2012 MTDS**

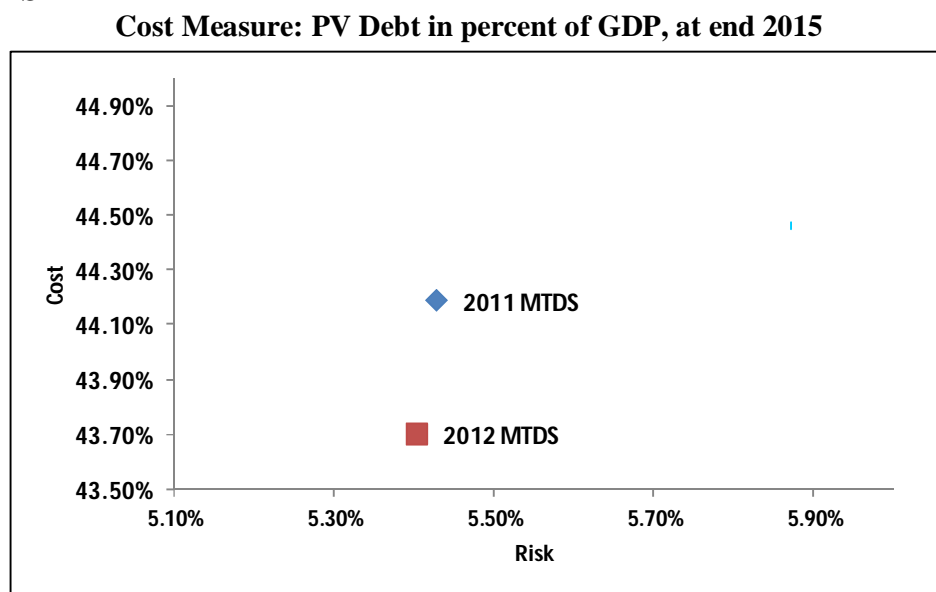
Cost-Risk Measure: Interest in percent of GDP, at end 2015



**Table 12: Cost and Risk Analysis: 2011 MTDS vis-à-vis 2012 MTDS: PV Debt/GDP ratio**

Scenarios	Strategies	
	2011 MTDS	2012 MTDS
	(PV of Debt in percent of GDP at end-2015)	
Baseline	44.19%	43.70%
Stress test 1: Parallel shift in yield curve	46.88%	46.21%
Stress test 2: Flatter yield curve	45.13%	44.60%
Stress test 3: 30% exchange rate devaluation	49.62%	49.11%
Stress test 4: 2 std deviation devaluation	46.20%	45.70%
Stress test 5: Combination shock	47.02%	46.48%
Change under parallel shift in yield curve	2.69%	2.51%
Change under flatter yield curve	0.94%	0.89%
Change under 30% exchange rate devaluation	5.43%	5.40%
Change under 2 std deviation devaluation	2.01%	2.00%
Change under combination shock	2.83%	2.78%
Maximum under stress	5.43%	5.40%

**Figure 10: Cost and Risk Analysis: 2011 MTDS vis-à-vis 2012 MTDS**



## VII. DEBT SUSTAINABILITY

68. The Joint World Bank-IMF Debt Sustainability Analysis (DSA) published on 23 November 2011 concludes that Kenya's debt is sustainable. The DSA compares debt burden indicators to indicative thresholds over a 20-year projection period. A debt-burden indicator that exceeds its indicative threshold suggests a risk of experiencing some form of debt distress. There are four ratings for the risk of external debt distress:

- *Low risk* - when all the debt burden indicators are well below the thresholds;
- *Moderate risk* - when debt burden indicators are below the thresholds in the baseline scenario, but stress tests indicate that thresholds could be breached if there are external shocks or abrupt changes in macroeconomic policies;
- *High risk* - when the baseline scenario and stress tests indicate a protracted breach of debt or debt-service thresholds, but the country does not currently face any repayment difficulties; or
- *In debt distress* - when the country is already having repayment difficulties.

69. Countries are classified into one of three policy performance categories (strong, medium, and poor) using the World Bank's *Country Policy and Institutional Assessment* (CPIA) index, which uses different indicative thresholds for debt burdens depending on the quality of a country's policies and institutions. Kenya is rated a medium policy country and as such is subject to the following thresholds:-

**Table 13: Debt sustainability thresholds**

	PV of Debt in percent of			Debt Service in percent of	
	GDP	Exports	Revenue	Exports	Revenue
Medium Policy Performer	40	150	250	20	30

### a) External debt sustainability

70. Under the baseline scenario, Kenya's debt ratios listed in Table 14 suggest that external debt is within sustainable levels for a country rated

as a medium performer. The debt sustainability indicators show that Kenya faces a low risk of external debt distress. This is attributed to the high level of concessionality of current external debt and the positive outlook in other macroeconomic indicators.

**Table 14: External debt sustainability**

Indicator (Threshold)	2010	2011	2012	2013	2014	2015	2020	2030
PV of debt-to-GDP ratio (40)	15.8	17.7	18.7	19.1	18.9	18.7	15.0	7.7
PV of debt-to-exports ratio (150)	58.5	57.0	65.3	68.9	73.4	76.4	76.5	43.5
PV of debt-to-revenue ratio (250)	66.1	72.2	76.2	76.6	75.4	75.8	62.0	32.3
Debt service-to-exports ratio (20)	4.0	3.8	4.2	4.2	4.7	4.8	5.1	3.9
Debt service-to-revenue ratio (30)	4.5	4.8	4.9	4.7	4.8	4.7	4.2	2.9

*Source: World Bank-IMF Debt Sustainability Analysis- Kenya (November 2011)*

### b) Public debt sustainability

71. Under the baseline scenario shown in Table 15, the PV of public debt-to-GDP, increases from 39.3 percent in 2011 to 40.3 percent in 2012 but gradually declines to 38.7 percent of GDP by 2014. In the long term, the PV of public debt-to-GDP is expected to decline to about 25 percent by 2031. Given Kenya's relatively strong revenue performance, the PV of public debt-to-revenue remains well below the threshold of 250 percent throughout the period of analysis. The debt service-to-revenue ratio consistently remains below the 30 percent threshold. Overall, the results from the DSA indicate that Kenya's public debt remain sustainable over the medium term.

**Table 15: Public debt sustainability**

Indicator (Threshold)	2010	2011	2012	2013	2014	2015	2020	2030
PV of public sector debt to GDP ratio (40)	38.5	39.3	40.3	39.9	38.7	37.9	34.70	25.6
PV of public sector debt-to-revenue ratio (250)	156.5	154.2	156.1	151.5	145.6	147.8	140.4	106.1
Debt service-to-revenue ratio (30)	25.5	21.9	24.5	23.5	21.6	21.5	20.0	15.5

*Source: World Bank-IMF Debt Sustainability Analysis- Kenya (November 2011)*

72. In Table 16, a worst-case scenario, a "borrowing shock" scenario is presented which assumes Government borrowing 10 percent of GDP in

FY2012/13. The results indicate that in the medium term, the debt burden indicators will breach one of the debt sustainability thresholds.

**Table 16: Sensitivity Analysis for Key Indicators of Public Debt**

<b>Indicator</b>	<b>Threshold</b>	<b>2011 ratios</b>	<i><b>Impact of 10% of GDP increase in borrowing in 2012 on debt indicators in 2015</b></i>
PV of Debt as % of GDP	40	39	48
PV of Debt as % of Revenue	250	154	180
Debt Service as % of Revenue	30	22	26

73. In the financial year 2012/13, the Government plans to borrow, on a net basis amount equivalent to **4.3 percent of GDP** to finance the budget. The net borrowing is expected to decline to 3.5 percent of GDP in FY2014/15.

74. The sustainability of Kenya's debt depends on macroeconomic performance and a prudent borrowing policy. Recourse to significant uptake of domestic debt financing could further increase the domestic interest rates, and put pressure on the debt sustainability position. In addition, non-concessional external financing carries an inherent foreign exchange risk, worsens the PV of debt and therefore increases the risk of debt distress. The borrowing envisaged under the *2012 MTDS* will be undertaken with caution taking these factors into account.

## VIII. IMPLEMENTING THE 2012 MTDS

75. The Government will prepare a borrowing plan to accompany the 2012 MTDS (Strategy 2) and meet the financing requirement for the financial year 2012/13. 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 through the *Market Leaders Forum*.

76. The 2012 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 revised.

77. Debt management strategy development needs a robust legal framework. The Government is preparing legislation governing both external and internal borrowing under the Public Financial Management Bill with provisions that are in line with the requirements of the Constitution of Kenya, 2010 and best international practice. In addition, the institutional arrangement for public debt management will continue to be strengthened taking into account the new system of devolved government. Comprehensive, accurate and timely information on public debt is critical in managing investors' sovereign risk assessment and the cost of debt. Public debt information will be published more regularly to enhance transparency on debt management in accordance with best international practice.

78. 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. The debt recording system will be upgraded, additional skilled staff posted to DMD while training in debt management techniques scaled up.



## IX. CONCLUSION

79. The *2012 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 2012/13, taking into account both cost and risk. The cost-risk trade-off of the *2012 MTDS* has been evaluated within the medium term context.

80. The debt strategy complements the DSA, a forward-looking framework concerned with long-term sustainability of debt. Whereas Kenya's current debt level is sustainable, it is imperative that the Government continues to implement prudent debt management practices and policies supported by sustained macro-economic stability.

81. The *2012 MTDS* has considered the current macro-economic environment both at the local and international scene and the related vulnerabilities. The recommended strategy is one that seeks a shift in the composition of debt towards medium term domestic debt over the medium term, and more uptake of external concessional debt.

82. This is the fourth time that the Government is formally presenting the Medium Term Debt Strategy to support the proposed Budget Statement and Estimates presented to Parliament. This initiative will be implemented and entrenched in legislation going forward with the aim of enhancing the transparency and accountability in public debt management.

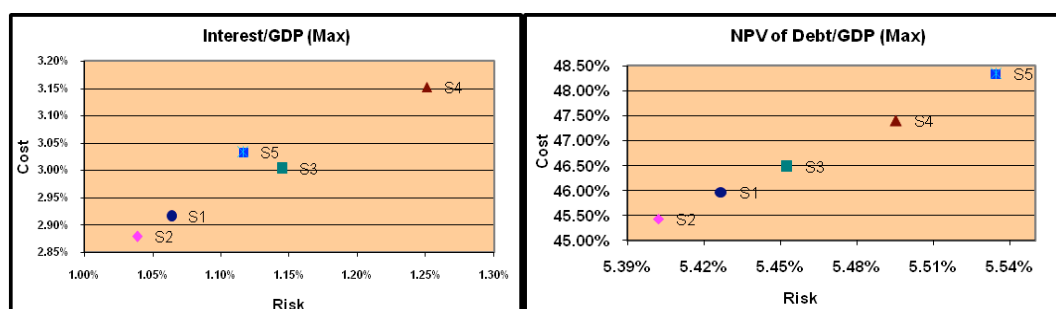
## APPENDIX I: ANALYSIS OF THE COST – RISK TRADE OFF UNDER AN ALTERNATIVE SCENARIO

### ■ FINANCING COUNTY GOVERNMENT INFRASTRUCTURE THROUGH DEBT FINANCING

1. Debt management strategies were evaluated on the basis of an alternative scenario which envisages financing of the infrastructure at the county government level through borrowing. In this scenario, an additional USD 884.2 million (Ksh. 75 billion)<sup>14</sup> in spending is spread over the three years of the simulation horizon with debt financing adjusted accordingly. However, given the onerous task of mobilizing these resources through the domestic market without crowding out the private sector, it is assumed that this expenditure is partly financed 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 2 percent. In particular, the proportion of external debt increases from 35 to 37 percent under S2, 30 to 32 percent under S3, 25 to 27 percent under S4, and from 35 to 37 percent under S5.

2. The impact of this change on the key cost and indicators is shown in Figure 12. Again, while all cost indicators shift upward, the relative ranking does not change. In addition, given the increase in the size of external debt stock, the indicators outlined in Table 9 would change as indicated in Table 14 below.

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



<sup>14</sup> This is derived by maintaining the level of Debt to GDP at 43 percent of GDP over the medium term as envisaged in the Budget Policy Statement, 2012.

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

	Simulation Horizon (2012/13-2014/2015)				
	S1	S2	S3	S4	S5
<b>Cost indicators (average over simulation)</b>					
Average interest rate	6.7%	6.6%	6.8%	7.0%	6.8%
Interest / Revenues	10.3%	10.2%	10.5%	10.8%	10.6%
<b>Risk indicators (end simulation horizon)</b>					
% DX in debt portfolio	46%	45%	48%	51%	46%
ATM (years)	11.5	11.7	11.2	10.7	10.8
% of debt refinancing within 12 months	10.8%	10.7%	10.4%	11.9%	11.3%
% of DX debt refinancing within 12 months	10.8%	10.7%	10.4%	11.9%	7.8%
Short-term external debt / Reserves	14.2%	14.2%	14.2%	14.2%	14.2%
<b>Implied net borrowing (% of GDP) (average over simulation)</b>					
Net domestic borrowing	2.92%	2.80%	3.34%	3.90%	2.92%
Net external borrowing	1.81%	1.90%	1.44%	0.96%	1.81%