# THE UNITED REPUBLIC OF TANZANIA MINISTRY OF FINANCE



## MEDIUM TERM DEBT MANAGEMENT STRATEGY

**JUNE, 2011** 

# **Table of Contents**

TAB	BLE OF CONTENTS	II
LIST	T OF TABLES	
LIST	T OF FIGURES	111
ACR	RONYMS AND ABBREVIATIONS	IV
EXE	ECUTIVE SUMMARY	v
1.0	INTRODUCTION	1
2.0	OBJECTIVES AND SCOPE OF THE MTDS	1
3.0 E	EXISTING DEBT MANAGEMENT STRATEGY AND DEBT PORTFOLIO	2
3.	.1 Debt Management Strategy	2
	.2 STRUCTURE OF EXISTING DEBT PORTFOLIO	
	3.2.1 External Debt	3
	3.2.2 Domestic Debt	5
	.2 Cost and Risk of the Existing Debt Portfolio	
3.	.3 Contingent Liabilities	11
4.0	SOURCES OF FINANCING	12
4.	.1 External Financing	13
	4.1.2 Trend of External Financing	
	4.1.3 Medium Term Financing Assumptions	
	4.1.4 Specific Assumptions for Financing Strategies	
-	.2 DOMESTIC FINANCING	
5.0 B	BASELINE MACROECONOMIC ASSUMPTIONS AND KEY RISK FACTORS	19
	.1 Baseline Macroeconomic Assumptions	
	.2 Baseline Macroeconomic Assumptions	
5.	.3 PRINCIPAL RISKS TO THE BASELINE	
	5.3.1 Output Risks	
	5.3.2 Balance of Payments Risks	
	5.3.3 Fiscal Risks	23
6.0 (	COST-RISK ANALYSIS OF ALTERNATIVE DEBT MANAGEMENT STRATEGIES	25
6.	.1 Baseline Pricing Assumptions	25
	6.1.1 External Sources	
	6.1.2 Domestic Sources	
	5.2 DESCRIPTION OF SHOCK SCENARIOS	
	DESCRIPTION OF ALTERNATIVE DEBT MANAGEMENT STRATEGIES	
6.	.4 Cost-risk Analysis of Alternative Debt Management Strategies	30
7.0 I	INSTITUTIONAL ARRANGEMENTS AND OTHER ISSUES OF IMPLEMENTATION	35
	.1 Institutional Arrangements	
	.2 DEVELOPING A BORROWING PLAN	
7.	.3 DISSEMINATING, MONITORING AND REVIEWING THE STRATEGY	36
7.4 V	WAY FORWARD	37
	CONCLUCION	

# **List of Tables**

Table 1: Composition of marketable and non marketable securities (June 2010)	5
Table 2: Average Time to Re-fixing and Maturity for Selected African Countries	8
Table 3: Cost-Risk Analysis as end June 2010	10
Table 4: Description of Alternative External Financing Strategies	16
Table 5: Composition of Domestic Financing	18
Table 6: Macro-risks and Implications for Debt-Management Strategy	24
Table 7 Description of Alternative Strategies	30
Table 8: Cost-Risk Analysis under Different Strategies (NDF 1.5% of GDP)	31
Table 9: Maximum Risks under Different Scenarios as at end of 2013/14	
Table 10: Cost-Risk Analysis under Different Strategies (NDF = 1.5% of GDP)	35
List of Figures	
Chart 1: Total Debt Portfolio by Source as at end of June, 2010	3
Chart 2: External Debt Composition by Creditor Category as at end of June, 2010	
Chart 3:External Debt Portfolio by Creditor as at end of June, 2010	5
Chart 4: Domestic Debt by Holder Category as at end of June, 2010	6
Chart 5: Currency Composition of Existing Debt Portfolio	7
Chart 6: Debt Portfolio by Interest Type as at end June, 2010	8
Chart 7: Repayment Profile of External and Domestic Debt (TZS million)	
Chart 8: Debt Portfolio by Instrument Type as at end June, 2010	12
Chart 9: Disbursement of Loans and Grants	
Chart 10: Comparative Yield Curves for Some African Countries - January, 2011	26
Chart 11: Forward Yield Curves for Treasury Bills and Bonds (June, 2010)	
Chart 12: Exchange Rate Projection: Baseline and 15 Per cent Depreciation in 2012	
Chart 13: Baseline Interest Rate Projection: Interest Rate Shock in 2012	
Chart 14: Cost-Risk Analysis under Different Financing Strategies	32
Chart 15: Amortization Profile under Different Strategies (as of end FV2012/13)	2.4

#### ACRONYMS AND ABBREVIATIONS

ACCGEN Accountant General's Department

AfDB African Development Bank
ATM Average Time to Maturity
ATR Average Time to Refixing

BADEA Arab Bank for Economic Development in Africa

BOT Bank of Tanzania

CS-DRMS Commonwealth Secretariat Debt Recording and Management System

DSA Debt Sustainability Analysis
EAC East African Community
ECA Export Credit Agency

EFD External Finance Department
EIB European Investment Bank
EMBI Emerging Markets Bond Index
ESF Exogenous Shock Facility
FDI Foreign Direct Investment

FY Financial Year

GDP Gross Domestic Product GFC Global Financial Crisis

IDA International Development Assistance

IFAD International Fund for Agricultural Development

IMF International Monetary Fund LIBOR London Interbank Offered Rate

MEFMI Macroeconomic and Financial Management Institute of Eastern and

Southern Africa

MOF Ministry of Finance

MTDS Medium Term Debt Strategy

MTEF Medium-Term Expenditure Framework

NDF Net Domestic Financing

NDMC National Debt Management Committee

NDS National Debt Strategy NPV Net Present Value

NSGPR National Strategy for Growth and Poverty Reduction

OPEC Organization of Petroleum Exporting Countries

PAD Policy Analysis Department
PSI Policy Support Instrument
SDR Special Drawing Right

SMEs Small and Medium-Sized Enterprises
ST FX Short Term Foreign Currency Debt
TDMC Technical Debt Management Committee

TZS Tanzanian Shilling
USD United States Dollar

## **Executive Summary**

Tanzania's legal framework defines debt management objectives as: meeting the government financing requirements at minimum cost while taking into account the associated risks, developing domestic financial markets and ensure sustainability of the debt portfolio.

The current strategy is to limit net domestic financing to 1 per cent of GDP, while maximizing concessional sources of external borrowing. However, due to the appetite of speeding up development, the Government seeks to borrow from non-concessional sources starting in the FY 2010/11. Reflecting this strategy, the existing debt portfolio is characterized by a high proportion of concessional debt, and a high share of external debt in the total debt stock (71 per cent). While this is favorable from a cost perspective, such a portfolio implies high exposure to exchange rate risk.

In developing alternative Medium-Term Debt Management Strategies, the baseline macroeconomic projections assumed a gradual recovery from the slowdown in 2008 caused by the Global Financial Crisis. In this case, GDP growth is expected to rebound from 6.0 percent to 7.0 per cent in 2010 and remain above 7.0 per cent. Revenue is projected to increase to about 16.3 per cent of GDP in 2010/11 and remain above 17 per cent translating into decline of deficit to around 5 per cent of GDP in line with the Government's commitment to bring down total debt to GDP ratio. This is expected to allow the growth of credit to private sector at an annual rate of 20 per cent while gross official reserves remain within the range of 4 to 5 months of imports. These projections are consistent with the overall macroeconomic framework and the EAC macroeconomic convergence criteria.

Taking into account the overall background, the performance of a number of alternative debt management strategies under different interest and exchange rate shock scenarios was assessed. Strategies examined differed in their shares of external sources of financing while fixing Net Domestic Financing at 1 per cent of GDP. The considered sources of external financing are concessional multilateral, semi-concessional bilateral, 10-year Eurobond, 7-year syndicated loan, and Export Credit Agency guaranteed commercial bank loans. On the other hand, a fixed

instruments composition of domestic financing consistent with the objective to elongate maturity structure was assumed.

Assessment of cost and risk was done on five alternative debt management strategies namely: syndicated loan of USD 180 million; Eurobond of USD 180 million; Eurobond of USD 450 million; limited multilateral and bilateral loans; and maximization of concessional financing in 2011. These strategies were assessed under four scenarios: interest rate shock, exchange rate shocks of 15 per cent and 30 per cent depreciation of local currency against the major currencies, and a combination of interest and exchange rate shocks.

The resultant cost and risk characteristics of the alternative debt management strategies suggest that given the NDF limit agreed with the IMF, maximization of concessional financing remains superior and the most expensive strategy is the one which increases the use of international capital markets for financing through issuance of Eurobond. Strategy five that maximizes concessional financing produced the lowest costs as measured in terms of nominal and NPV of debt-to-GDP (39 per cent and 26.5 per cent, respectively), interest payment-to-GDP (1.1 per cent), and implied interest rate of 3.1 per cent. The strategy also reduces the refinancing risk and exposure to interest rate risk even when subjected to both interest and exchange rate shocks. Given limited access, conditionalities and unpredictability of concessional financing, strategy five may not be feasible amid the Government's appetite to speed up development, particularly in infrastructure.

The issuance of USD 180 million syndicated loan in 2011/12 strategy ranks second in favorability and could be considered a viable alternative to Strategy five. All debt costs and risks indicators rank second after those of concessional borrowing. The strategy also ranks second in minimizing risks resulting from interest and exchange rate shocks.

Results further suggest that, issuance of a Eurobond of USD 450 million under strategy three produces the highest cost and exposes the country to higher interest and exchange rate risks. The strategy produces nominal and NPV of debt-to- GDP (39.3 per cent and 28.4 per cent, respectively), interest payment-to-GDP (1.2 per cent), and implied interest rate of 3.5 per cent. The robustness check of the strategies was also assessed with the NDF increased to 1.5 per cent

of GDP consistent with long-term objective to reduce external dependence. Increasing domestic financing tends to raise proportionately financing costs while reducing exchange rate risk exposures across all strategies. Raising the NDF has no impact on the choice of the strategy but is associated with crowding out effects.

Analysis of medium term debt indicators suggests that Strategy five dominates all other strategies in terms of cost and risk indicators. However due to limited access, conditionalities and unpredictability of concessional financing, strategy five may not be feasible amid the Government's appetite to speed up development spending. This necessitates a limited non concessional borrowing in which strategy one appears to be the most feasible.

#### 1.0 Introduction

- 1. The Government of Tanzania through the Ministry of Finance in collaboration with the IMF, World Bank and MEFMI conducted a workshop to develop the Medium Term Debt Management Strategy (MTDS) from 18th January to 28th January, 2011, as a part of PSI Structural Benchmarks for Financial Year 2010/11. The objective of the workshop was to develop the MTDS for the country. The workshop brought together participants from key institutions responsible for managing the national debt (MTDS National Team); namely the Ministry of Finance, Bank of Tanzania, Planning Commission of President's Office, and Ministry of Finance and Economic Affairs of Zanzibar.
- 2. The tool employed evaluates the cost and risks of alternative debt management strategies, given a set of assumptions on the macroeconomic and market environment. The exercise benefited also from training sessions on the strategy development based on a quantitative analysis of cost and risk for the alternative debt management strategies.

# 2.0 Objectives and Scope of the MTDS

3. The objective of Tanzania's debt management is clearly highlighted in the Government Loans, Guarantees and Grants Act No. 30 of 1974 as amended in 2004 and the National Debt Management Strategy published in 2002. The objectives of the Tanzania's debt strategy is to meet the Government financing requirements at the lowest possible cost with a prudent degree of risk, and development of the domestic financial markets. This is stated in the Governments Loans, Guarantees and Grants Regulations of 2004 which categorizes objectives of debt management into primary and secondary. Primary objectives are (i) to ensure the financing needs of the Government are met and (ii) to minimize borrowing costs for the Government. The secondary objectives are (i) to support development of domestic financial markets (ii) to ensure sustainability of debt burden, and (iii) to minimize debt related risks.

4. In view of above, the two major issues arise; How much to borrow? And where to borrow? The former is answered by the Debt Sustainability Analysis (DSA) (in this case done in 2010) while the later is attempted by the MTDS. This means, MTDS essentially guides the borrowing pattern of the government to safeguard the debt sustainability status. The time horizon of the MTDS analysis is four years, starting from fiscal year 2010/11 through 2013/14. This is in line with the country's Medium-Term Expenditure Framework (MTEF). The MTDS analysis covered public external and domestic debt excluding guarantees/contingent liabilities and arrears<sup>1</sup>.

#### 3.0 Existing Debt Management Strategy and Debt Portfolio

#### 3.1 Debt Management Strategy

- 5. Currently, there is no formal quantitative debt management strategy with analysis of cost and risk trade-offs, although the debut MTDS 2009 conducted by IMF and World Bank was the first attempt at developing an annual debt management strategy based on medium term analysis of costs and risks. Debt management in Tanzania is guided by the 2002 qualitative strategy.
- 6. The 2002 debt management strategy seeks to maximize concessional external borrowing. Regulation 5, as amended in 2008, of the Government Loans, Guarantees and Grants Act No. 30 of 1974 as amended in 2004, specifies that external loans shall be contracted with grant element of not less than 35 per cent. Borrowing on less than 35 per cent is only envisaged in exceptional cases like state of emergency. Domestic debt strategy has included rolling over principal amount, while developing the domestic financial markets.
- 7. However, without prejudice to the debt management strategy of maximizing concessional borrowing, in 2010/11 the government decided to borrow from commercial

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<sup>&</sup>lt;sup>1</sup> Contingent liabilities are excluded from debt stock. Arrears are also excluded in the debt stock because of inability to determine with certainty future cash flows. In calculating the risk indicators, the stock of arrears are excluded from the analysis in order to eliminate the positive bias that this assumption may create. However, inclusion of arrears raises the ratio of debt to GDP to 39.1 per cent as at end of June, 2010.

sources, specifically for infrastructure development. The commercial borrowing was also taken into account while setting the IMF Policy Support Instrument (PSI) benchmarks.

#### 3.2 Structure of Existing Debt Portfolio

8. Total public debt has been growing over the past five years following a decline in 2006 caused by upfront cancellation of about USD 3 billion debt in the framework of Multilateral Debt Relief Initiative. As at end of June 2010, total public debt was TZS 9,550,275 million (USD 6,854.4 million), equivalent to 31.5 per cent of GDP. Out of the total debt, External debt was TZS 6,787,460 million constituting 71 per cent of total debt, whereas domestic debt stood at TZS 2,762,815 million (Chart 1).

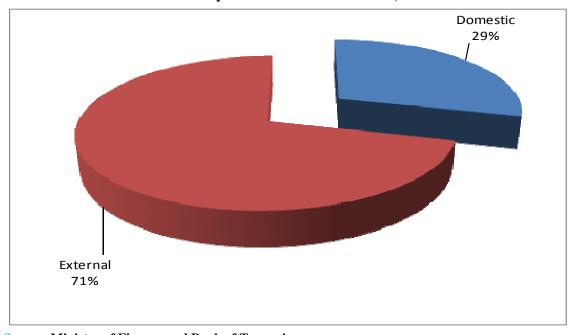


Chart 1: Total Debt Portfolio by Source as at end of June, 2010

**Source:** Ministry of Finance and Bank of Tanzania

#### 3.2.1 External Debt

9. For the past two decades, concessional multilateral loans have been the major source of external financing. This has resulted in the majority of external debt (85.9 per cent) being from multilateral sources followed by bilateral debt which accounted for 11.5 per cent,

whereas commercial and export credits constituted 2.6 per cent as at end of June 2010 (**Chart 2**).

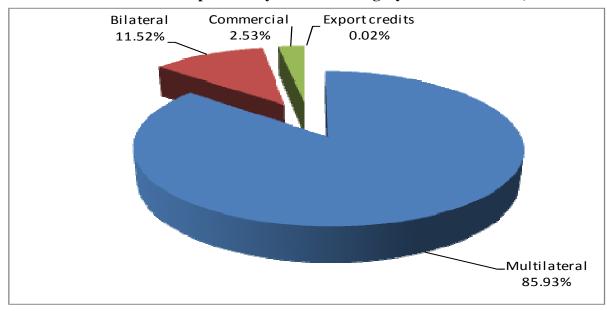


Chart 2: External Debt Composition by Creditor Category as at end of June, 2010

Source: Ministry of Finance and Bank of Tanzania

- 10. The loans from the International Development Association (IDA) and the African Development Bank Group (AfDB), which are highly concessional, dominated the external debt portfolio, accounting for 50.7 per cent and 14.2 per cent, respectively. International Monetary Fund (IMF) loans, used solely for Balance of Payments support accounted for 6.3 per cent. Other multilateral sources consisting of the European Investment Bank (EIB), International Fund for Agriculture Development (IFAD), Nordic Development Fund, OPEC fund and Arab Bank for Economic Development in Africa (BADEA) constituted 5.8 per cent.
- 11. The major bilateral creditors were Japan and Brazil whose debt constituted 5.0 per cent and 4.3 per cent, respectively. Other bilateral creditors altogether accounted for 8.8 per cent whereas others (export credit and commercial) constituted 5.0 per cent (**Chart 3**).

Other bilat Others Other mult 8.84% 4.96% AfDB 5.79% 14.22% Japan 4.97% Brazil. 4.25% IMF 6.25% . IDA 50.73%

Chart 3: External Debt Portfolio by Creditor as at end of June, 2010

Source: Ministry of Finance and Bank of Tanzania

#### 3.2.2 Domestic Debt

12. Domestic debt comprises marketable and non-marketable securities. Marketable securities consist of Treasury bills (35, 91, 182, 364-days) and Treasury bonds (2, 5, 7 and 10-years), whereas non-marketable securities comprise special bonds and stocks. The 364 and 182-days Treasury bills are issued for both financing and liquidity management purposes whereas the 35 and 91-days Treasury bills are issued solely for liquidity management purposes (**Table 1**).

Table 1: Composition of marketable and non marketable securities (June 2010)<sup>2</sup>

Name of Instrument	Amount in TZS - millions	Per cent of Total
Treasury Bills	285,022.15	10.32
Treasury Bonds	1,375,345.44	49.78
Stocks	257,886.65	9.33
Special Bonds	844,560.30	30.57
Total	2,762,814.54	100.00

Source: Ministry of Finance and Bank of Tanzania

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<sup>&</sup>lt;sup>2</sup> The T Bills include only those issued for budget financing and not for liquidity management.

13. Tanzania's domestic debt market is underdeveloped and is dominated by few participants with commercial banks holding 50.9 per cent of securitized debt. The relatively low risk in Government securities as compared to private sectors as well as the expansion of the banking sector explains the dominance of commercial banks in the securities market. Bank of Tanzania ranked the second holding 25.5 per cent followed by pension funds at 14.8 per cent (Chart 4).

Insurance Funds
5.4%

Pension Funds
14.8%

Central Bank
25.5%

Commercial Banks
50.9%

Chart 4: Domestic Debt by Holder Category as at end of June, 2010

Source: Ministry of Finance and Bank of Tanzania

#### 3.2 Cost and Risk of the Existing Debt Portfolio

14. The existing debt management strategy has influenced the composition of public debt portfolio. The proportion of external debt was the largest constituting 71 per cent of total public debt as at end of June, 2010, which partly reflects the government's debt strategy of limiting net domestic debt issuance. The share of concessional debt was 61 per cent of total debt or 86 per cent of external debt. The large share of external debt, and particularly concessional borrowing, in the debt portfolio lowered the overall cost and risk of the debt.

That is why; the overall debt portfolio carries an average interest rate of 2.86 per cent per annum.

15. The existing portfolio entails significant exposure to exchange rate fluctuations as 71 per cent is denominated in foreign currency (Chart 5). This represents potential risk given the historical trend of TZS depreciation against major foreign currencies. In addition, the consequence of this risk exposure may increase with the pace of capital account liberalization that may perpetuate exchange rate volatility. Furthermore, any adverse shocks in the terms of trade will aggravate the exposure to exchange rate risks.

Local 28.9%

Foreign 71.1%

**Chart 5: Currency Composition of Existing Debt Portfolio** 

Source: Ministry of Finance and Bank of Tanzania

16. Exposure to interest rate fluctuations appears to be not severe with the average time to re-fixing (ATR) of the overall portfolio being relatively long at 15.2 years. This reflects the negligible amount of floating rate instruments in the portfolio, at only 7 per cent (Chart 6).

variable rate 7%

fixed rate 93%

Chart 6: Debt Portfolio by Interest Type as at end June, 2010

Source: Ministry of Finance and Bank of Tanzania

17. The Average Time to Maturity (ATM) of the overall portfolio for the existing debt is 15.7 years. The long ATM (19.97 years) of the external debt portfolio emanates from the dominance of concessional financing. The ATM of 5.15 years for the domestic debt portfolio is partly due to the presence of long maturities of the non-marketable instruments. On average, the Tanzania's debt has relatively longer maturity compared to some African countries which reflects the fact that the country has been a borrower from IDA-only for the past two decades. Table 3 compares Tanzania's debt cost and risks indicators with few selected African countries.

Table 2: Average Time to Re-fixing and Maturity for Selected African Countries

	Cape Verde	Zambia	Kenya	Ghana	Tanzania
Average Time to Refixing (ATR) years	12.5	6.7	8.3	7.8	15.2
Average Time to Maturity (ATM) years	12.6	6.9	8.3	8.0	15.7

Source: IMF

18. The proportion of the portfolio to be refinanced within the next 12 months is not particularly large, standing at 8.0 per cent, although for domestic debt, the proportion was 25.6 per cent reflecting a rollover risk in FY2010/11 (**Table 4**). In addition to the refinancing risk in the next 2 years, the repayment profile also indicates larger amount of repayment obligation in 2018 and 2019, which coincide with redemption of 10-year special bonds issued in 2008 to bail out key sectors amid the global financial crisis (**Chart 7**). The nature of the repayment profile calls for efforts to smoothen and manage refinancing risk. Table 4 summarizes cost and risk indicators of Tanzania's debt as at end of June 2010 and the related projections for the next 30 years.

900,000 800,000 700,000 ■ Total Domestic ■ Total External 600,000 500,000 400,000 300,000 200,000 100,000 2016 2018 2026 2028 2036 2010 2014 2024 2022

Chart 7: Repayment Profile of External and Domestic Debt (TZS million)

Source: Ministry of Finance and Bank of Tanzania

19. Overall analysis of the existing portfolio suggests that reduction of exchange rate exposure and smoothening of the repayment profile over the medium term constitute key drivers for the choice of MTDS. This fortune can materialize in the virtue of well developed domestic and regional financial markets which can help tap the financing resources in domestic currency and at relatively cheaper costs and risks.

Table 3: Cost-Risk Analysis as end June 2010

Risk Indicators		External debt	Domestic debt	Total debt
Amount (in millions	of TZS)	6,787,460	2,762,815	9,550,275
Nominal debt as % C	GDP .	22.4	9.1	31.5
NPV as % of GDP		12.3	9.1	21.4
Cost of debt	Weighted Average Interest (IR) (%)	0.4	8.9	2.9
Dafinancina viale	ATM (years)	19.97	5.15	15.7
Refinancing risk	Debt maturing in 1yr	0.9	25.6	8.0
	ATR (years)	19.34	5.07	15.2
Interest rate risk	Debt refixing in 1yr	6.2	25.6	11.8
	Fixed rate debt as % of total debt	94.5	89.7	93.1
	FX debt as a % of total debt			71.1
FX risk	ST FX debt as % of reserves			1.2

**Source: Ministry of Finance and Bank of Tanzania** 

#### 3.3 Contingent Liabilities

Treatment of guarantees also merits some consideration because applications for new guarantees have been increasing, implying greater exposure to contingent liabilities risks. The theoretical description of contingent liabilities in terms of definition, composition, measurement and their implication for the choice of the debt strategy has been summarized in **Box 1** below.

Box 1. Contingent liabilities; Definition, composition, measurement and their implications for the choice of the debt strategy.

**Definition:** Contingent liabilities are obligations that arise from a particular discrete event(s) that may or may not occur. **Forms of existence:** Contingent liabilities can either be explicit or implicit. Explicit Contingent liabilities are contractual financial arrangements that give rise to conditional requirements-that is the requirement becomes effective if one or more stipulated conditions arise- to make payments of economic value. Some remarkable forms include (i) An institution (i.e. central government) guaranteeing payment to the third party (i.e. public and private sector entities (development banks)) (ii) An obligation to provide funds-such as line of credit, which once advanced creates claim (iii) Commitment to compensate another party for losses-such as exchange rate guarantees.

Contrarily, Implicit Contingent liabilities do not arise from legal or contractual source but are recognized after a condition or event is realized. These are obligations that may be recognized when the cost of not assuming them could be unacceptably high. The key examples consist of (i) Default of sub national government and public entity on nonguaranteed debt and other obligations (ii) Liabilities clean up in entities under privatization (iii) Banking failure (support beyond state insurance (iv) Investment failure of a guaranteed pension fund, employment fund or social security fund (social protection of small investors) (v) Default of central bank on its obligations (foreign exchange contracts, currency defense, balance of payments stability) (vi) Bailouts following a reversal in private capital flow (v) Environmental recovery or disaster relief.

Measuring Contingent liabilities: Despite their importance in macroeconomic assessment, implicit contingent liabilities are often more difficult to measure than explicit contingent liabilities. Also, the dissemination of information on implicit contingent liabilities can incite moral hazards for the reason that "the central government will intervene in the virtue of insolvency". As a result, the focus has always been on the quantification of the later (explicit contingent liabilities), for which a number of approaches are evolving: One style for instance, recommended by IMF in a narrow range of contingent liabilities, is to record all such contingent liabilities as they are created with an accrual-based reporting system, at full face value or maximum potential loss.

Why measure contingent liabilities: The measurement help assess with certainty the financial position of an economy and various institutional sectors within the economy. This stems from the fact that you cannot manage well the debt portfolio if you are unable is to know its size with sincerity, a likely outcome in the face of inadequate documentation of contingent liabilities.

**Implications for the choice of the debt strategy:** The choice of the optimal strategy through the MTDS tool is influenced by the loan types (in individual debt strategies) and their associated costs and risks. If contingent liabilities get involved in the analysis (as current liabilities), are likely to reshuffle/change the allocation structure of the debt instruments (loan types) and implicitly the costs, risks and the optimal choice.

# 4.0 Sources of Financing

21. In analyzing financing strategies, 590 external and domestic loans recorded in the debt database as at end of June, 2010 have been aggregated into ten instruments according to their contractual terms consistent with the MTDS analytical tool. These instruments are: multilateral concessional, semi-concessional fixed rate, semi-concessional floating rate, syndicated loans, 10-year sovereign bonds<sup>3</sup>, guaranteed commercial bank loans – ECAs, Treasury bills, and 2, 7, and 10-year Treasury bonds. Chart 8 shows composition of existing portfolio as at end of June, 2010 by Instruments.

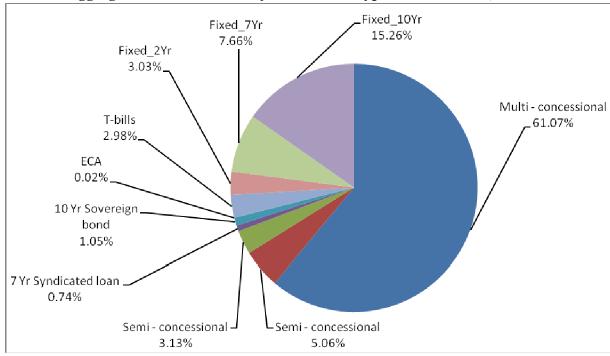


Chart 8: Aggregated Debt Portfolio by Instrument Type as at end June, 2010

Source: Ministry of Finance and Bank of Tanzania

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<sup>&</sup>lt;sup>3</sup> In the existing portfolio, there are no sovereign bonds and syndicated loans issued, however, instruments with such characteristics have been grouped as sovereign bonds and syndicated loans for analytical purposes.

#### 4.1 External Financing

22. Potential sources of external financing available for the country can be categorized into multilateral, bilateral, syndicated loans, sovereign bonds and guaranteed commercial bank loans -ECAs. Multilateral loans are generally concessional, characterized by low fixed rate (0.75 per cent), long tenor (40 years) and long grace period (10 years). Bilateral loans are usually semi-concessional with both fixed and variable interest rates, and average maturity of 20 years including grace period of 5 years. Commercial (Syndicated) loans bear fixed or floating market interest rates, short to medium-term in nature, and involve significant transaction costs. Sovereign bond constitutes a possible window in future for the country although they are resource intensive to launch. The interest rate (fixed or variable) for sovereign bonds depends on market liquidity condition and borrower country credit rating. Guaranteed commercial bank loans - ECAs bears fixed or floating market rates, medium term in nature, and tied to specific projects.

#### **4.1.2 Trend of External Financing**

23. Tanzania receives external financing in the form of general budget support, basket and project funds. During the period 2001- 2008, disbursements recorded an increasing trend, owing to improved macroeconomic environment and good cooperation with development partners (Chart 9). The major development partners were the multilateral institutions constituting 90 per cent of external financing of which IDA contributed 62 per cent, and the remaining 10 per cent from bilateral donors. The inflows from 2001 to 2010 show that on average, 57 per cent of the financing was in the form of grants while the remaining 43 per cent was loans. However, since 2008/09 the amount of external resources in the form of grants has been declining partly due to the impacts of global financial crisis.

2,000 Grants Loans 1,800 **USD M** 1,600 1,400 1,200 1,000 800 600 400 200 2001/02 2002/03 2003/04 2005/06 60/800 2009/10 2003/04 70/900

Chart 9: Disbursement of Loans and Grants

Source: Debt Sustainability Analysis (DSA) 2010

#### **4.1.3 Medium Term Financing Assumptions**

- 24. Going forward, the Government will continue to access concessional program and project loans from both multilateral and bilateral sources. However, concessional and semi-concessional financing are inadequate and are subject to unpredictability of disbursements, financial conditionality, and tied to specific projects and suppliers. Given such situation, the Government will consider semi-concessional and non-concessional financing including tapping the syndicated loan market. In addition, Tanzania is planning to issue an international sovereign bond to finance infrastructure projects. The issuance plan will be preceded by country rating. Procedure for accessing the international capital markets are summarized in Box 2.
- 25. External sources will continue to finance a bigger proportion of budget deficit in the medium term given the relatively low level of development in the domestic financial market and the policy to minimize crowding out the private sector. External financing is determined by Net Domestic Financing fixed at 1 per cent of GDP, availability of concessional sources and non-concessional limited to USD 525 million for the financial year 2010/2011, USD 525 million for the financial year 2011/2012 and USD 450 million for the financial year 2012/2013. However, sensitivity test is conducted in

the second case by raising the NDF to 1.5 per cent of GDP to enable assessment of cost and risk associated with consistent reduction in external dependence.

#### 4.1.4 Specific Assumptions for Financing Strategies

- 26. **Strategy I Syndicated Loan (~USD 180 million in 2011):** In the medium term, the multilateral concessional financing are projected to constitute 70 per cent of external financing in 2010, thereafter will decline to 60 per cent, bilateral (fixed and floating rate) and syndicated financing increases from 6 per cent and 12 per cent to 18 per cent and 15 per cent, respectively. Guaranteed commercial banks loans will decline from 12 per cent to 7 per cent. In the medium term, sovereign bonds will not be issued.
- 27. **Strategy II Eurobond (~USD 180 million in 2011) II:** The Government is considering issuing a Eurobond amounting to USD 179 million to international capital markets in 2011 equivalent to 18 per cent of the external financing. With an exception of syndicated loans that will not be issued in the same year, other financing sources will remain as in strategy I. The strategy will weigh costs associated with sovereign bonds against those of syndicated loans.
- 28. **Strategy III Eurobond (~ USD 450 million in 2011):** The strategy assesses costs associated with increasing the magnitude of Eurobonds to the amount of USD 446 million, equivalent to 45 per cent of external financing. The increase in Eurobond issuance is in place of concessional multilateral financing that is not predictable with precision. With an exception of syndicated loans and ECAs that will not be issued in the same year, other categories of debt will remain as in strategy II.
- 29. **Strategy IV-Limited Multilateral and Bilateral:** Assumes a case where multilateral and bilateral sources of financing are limited with their contribution being 55 per cent and 10 per cent, respectively, relatively lower than other strategies. Financing from syndicated loans and ECAs loans will increase to 25 per cent and 10 per cent

respectively of external financing. Sovereign bonds will not be issued to facilitate assessment of the impact of syndicated loans and ECAs on debt portfolio in the medium term.

30. **Strategy V - Maximizing Concessional Financing:** This is in line with recent trend of financing from concessional multilateral and bilateral sources and projections<sup>4</sup> also show that gross external financing from these sources is feasible at least in the medium term. Under this scenario, there will be no non-concessional borrowing. **Table 5** summarizes alternative External Financing Strategies.

**Table 4: Description of Alternative External Financing Strategies** 

-											0									
Strategy	Strategy Syndicated loan (USD 180 mil., 2011)				Eurobond (USD 180 mil., 2011)			Eurobond (USD 450 mil., 2011)			Limited multilateral and bilateral				Maximizing concessional financing					
2010 2011 2012 2013			2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013		
Multi - concessional	70%	60%	60%	60%	70%	60%	60%	60%	70%	38%	60%	60%	70%	55%	55%	55%	70%	80%	85%	85%
Semi - concessional	5%	10%	12%	12%	5%	10%	12%	12%	5%	10%	12%	12%	5%	5%	5%	5%	5%	10%	12%	12%
Semi - concessional	1%	5%	6%	6%	1%	5%	6%	6%	1%	7%	6%	6%	1%	5%	5%	5%	1%	10%	3%	3%
7 Yr Syndicated loan	12%	18%	15%	15%	12%	0%	15%	15%	12%	0%	15%	15%	12%	25%	25%	25%	12%	0%	0%	0%
10 Yr Sovereign bond	0%	0%	0%	0%	0%	18%	0%	0%	0%	45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ECA	12%	7%	7%	7%	12%	7%	7%	7%	12%	0%	7%	7%	12%	10%	10%	10%	12%	0%	0%	0%
Total External	Total External 100% 100% 100% 100%				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

<sup>&</sup>lt;sup>4</sup> Although concessional multilateral and bilateral sources are favorable in terms of costs and risks, they may not help in speeding up desired development towards attainment of Millennium Development and Development Vision 2025 Goals. Concessional sources are subjected to longer delays, some are costly during the negotiations, approvals and conditions precedent to withdrawals.

#### Box 2. Accessing International Markets by First Time Issuers: Key Considerations

Accessing international capital markets can bring a number of benefits. It can help (i) diversify financing sources thus helping to mitigate financing risk; (ii) it can supplement domestic savings, facilitating the execution of the government's desired budget and reducing the risk of crowding out; (iii) it can allow the maturity structure of the debt to be lengthened, particularly where domestic markets are relatively underdeveloped; (iv) closer international market monitoring can enhance the commitment to the macroeconomic reform process; and (v) it can provide a pricing benchmark, facilitating the private sectors' access. However, it also carries some significant risks, in particular, refinancing risk can be significant especially where countries are vulnerable to sharp shifts in terms of trade or exchange rate shocks and /or where the size of the bond is large relative to export revenues.

The successful issuance of an international sovereign bond will depend on a number of key factors, including some preconditions such as having established a track record of good economic performance and where the macroeconomic outlook is relatively stable. The external environment also needs to be supportive, with significant investor interest and risk appetite in evidence. More specifically, when considering the design of a debut issue, careful consideration needs to be given to the following factors. Poor choices in these areas have led to some common mistakes by first time issuers:

Use of proceeds – issuers benefit where there is a clear and explicit plan for the use of proceeds. This could include balance sheet operations, such as repaying or restructuring Paris Club debt or resolving debt in arrears; financing of specific purposes; or general government purposes. While the latter provides the greatest flexibility to the issuer, until the issuer has established a track record with the market, it is likely to prove the most expensive, and riskiest in terms of ensuring sufficient revenues will be generated in the future to cover repayment.

Context within an overall debt management strategy – ideally, the issuer would be able to present the issuance of an international bond within the context of an overall debt management strategy, indicating that there has been due account taken of the risk implications. This would generate confidence in the issuer's ability to manage the risks involved.

Size of the issue – This should be clearly linked to the identified use of the proceeds. Countries should seek to minimize any potential cost of carry by only borrowing what they believe can be absorbed within a reasonably short time frame. If issuers have a clear view on how much they will need overall within the next 1-2 years, then some consideration should be given to whether to divide this total into more than one bond issue, say by re-opening the first issue. In making this decision, the key tradeoffs are that larger bond sizes are more liquid, which can be appealing for investors. Minimum size for liquidity is likely to be of the order of \$100-150 million. However, everything else equal, a larger-size issue increases the rollover or refinancing risk. In addition, borrowing more than can be readily absorbed increases the cost of carry. Finally, market perception might be that the size of the initial issue is too large relative to the size of the issuer's economy, raising questions about future debt sustainability; this perceived additional risk could outweigh the liquidity benefits.

Structure of the bond – The maturity and currency structure of the bond should be considered carefully given the overall risk exposure of the total debt portfolio and taking into account the macroeconomic vulnerabilities faced by the country. It may be prudent to consider adopting an amortizing structure if possible to mitigate future refinancing risk, while this may not be the preferred structure from an investor's perspective that is less of a concern if the issuer is likely to be an infrequent issuer going forward. Note that the authorities indicated in the 2010 Debt Sustainability Analysis that they would consider establishing a sinking fund to meet the repayment obligation; this would effectively create a synthetic amortizing bond.

Choice of lead manager – The country will need to hire a lead manager for the issue. First time issuers might find it advantageous to hire at an earlier stage pure financial advisors to help develop the issuance strategy, obtain ratings, and select the lead manager. The choice of lead managers should be based on a competitive process, with choice not solely driven by the question of fees but also on the basis of a more qualitative assessment, covering issues such as the lead manager's specific plans to market and distribute the new bonds, including an evaluation of their placement power; the commitment of the lead manager to provide market support after issuance; and whether there are attractive underwriting provisions on offer.

**Legal issues** - The issuer needs to decide the various legal issues, and non-financial terms which enter into the formal bond documentation, including the choice of underlying law that the bonds will be subject to; whether it will be a global or Eurobond, and what form of collective action clause to include. These decisions should be taken after discussion with legal and financial advisors.

**Investor relations** – Before going to the market, the issuer needs to have a clear plan with respect to how they are going to generate investor demand and how, going forward, they will keep investors informed. Such a strategy could include plans to undertake non-deal road shows, establishing a website and publishing relevant information on the macroeconomic and financial position of the country, including regularly updated information debt portfolio statistics. Regular and timely publication of a debt management strategy should be a key performance criterion for debt management going forward.

#### **4.2 Domestic Financing**

- 31. Government policy on domestic debt management is to borrow consistently at the lowest possible cost and a prudent degree of risk from domestic financial markets without causing undue effects on monetary policy and financial sector development. According to the National Debt Strategy (NDS) 2002, implementation of the domestic debt management policies includes among others: rolling over maturing principal, while paying interest through domestic revenue; financing of the budget deficit through marketable instruments; and smoothening redemption profile.
- 32. To minimize crowding out private sector, NDF is fixed at 1 percent of GDP consistent with PSI benchmark. The main strategy is to lengthen the maturity of domestic instruments gradually by reducing the share of 2 and 5-year bond and increasing the share of 7 and 10-year bonds. The proportion of Treasury bills is maintained at 17 per cent of gross domestic financing. This strategy will base on the following assumptions: financing will be through marketable instruments, stocks and special bonds will be rolled over using 7 and 10-year bonds, and Treasury bills will be rolled over. **Table 6** shows medium-term composition of domestic financing.

**Table 5: Composition of Domestic Financing** 

Instrument Type	2010	2011	2012	2013
T-bills	17%	17%	17%	17%
2-Year bonds	17%	17%	13%	13%
5 & 7 - Year bonds	44%	44%	40%	40%
10-Year bonds	21%	21%	30%	30%
Total	100%	100%	100%	100%

#### 5.0 Baseline Macroeconomic Assumptions and Key Risk Factors

#### **5.1 Baseline Macroeconomic Assumptions**

- 33. The MTDS for 2011 is consistent with the overall macroeconomic framework, and reflects the inter-linkages and feedback effects between the MTDS and the macroeconomic framework. This section describes the medium term baseline macroeconomic assumptions underlying the analysis.
- 34. Determining the baseline assumptions was done in co-ordination across key institutions (Ministry of Finance, President's Office Planning Commission and Bank of Tanzania). Based on the preliminary macroeconomic assumptions at the beginning of the budget cycle, iterations were carried out to come up with initial set of macroeconomic forecasts and targets to be incorporated in the MTDS. It is expected that this process will be repeated in each year's budget cycle to ensure that the MTDS is consistent with the latest medium term macroeconomic assumptions.

#### **5.2** Baseline Macroeconomic Assumptions

- 35. Tanzania's macroeconomic performance has improved substantially over the past five years with sustained high rates of growth and relatively low inflation. The real GDP grew at an annual average of 7.3 per cent between 2004 and 2008 before slowing down to 6.0 per cent in 2009 following the effects of the global financial crisis (GFC). The Government has taken policy measures to stimulate economic activity and the GDP growth is expected to rebound to 7.0 per cent in 2010 and remain above 7.0 per cent in the medium term.
- 36. Inflation had risen to double digits and remained high in 2008/09 due to food supply shortage in some parts of the country and the neighboring countries. Following good weather and a bumper harvest in the 2009/10 crop season, food supply

improved, leading to a downward trend in inflation from 12.2 per cent in December 2009 to 5.6 per cent in December 2010. The annual average inflation has also slowed to 5.5 per cent in 2010 from 12.1 per cent in 2009 and is expected to remain around 5.0 per cent in the medium term.

- 37. The impact of global financial crisis has affected Government revenue collection, hence increased budget deficit. Thus, Government spending was re-aligned with resource availability without jeopardizing public service delivery. Revenue is projected to increase to about 16.3 per cent of GDP in 2010/11 and remain above 17 per cent in the medium term following Government efforts to strengthen domestic resource mobilization.
- 38. In 2010/11 the overall deficit including grants is projected at 7.0 per cent of GDP primarily reflecting the Government's plan to scale up spending to build up infrastructure as well as maintaining social gains particularly in health and education. The deficit will be financed through domestic borrowing of 1.0 per cent and the balance from foreign concessional and non-concessional loans. In the medium term, the deficit is projected to decline to around 5 per cent of GDP in line with the Government's commitment to bring down total debt to GDP ratio. This is also consistent with the EAC macroeconomic convergence criteria.
- 39. During 2010/11, monetary policy was directed towards maintaining an appropriate level of liquidity in the economy to contain inflation and provide enough room for recovery of credit to the private sector. Annual growth of credit to the private sector picked up to 20 per cent in 2010, after having slowed to the lowest rate of 9.6 in 2009. This reflects the signs of recovery of banks' confidence in lending to the private sector after the global financial crisis. Monetary policy target have been set to allow credit to the private sector to grow at an annual rate of 22 per cent in the year ending June 2011. In the medium term, the macroeconomic framework provides room for the bank credit to the private sector to grow at around 20 per cent per annum a pace sufficient to support the projected growth of economic activity. Credit flow is also

projected to improve as the government continues to implement the Second Generation Financial Sector Reforms.

- 40. The decline in global demand caused by the GFC, coupled with reduced private foreign financial inflows had led to deterioration in the current account balance in 2008 and 2009. Nonetheless, the decrease in the import bill caused by the general decline in commodity prices in the world market, and the disbursement of ESF loan and allocation of SDRs kept the gross official reserves growing during that period. This helped to maintain confidence and stability in foreign exchange market where, after the initial panic induced depreciation of the shilling in the last quarter of 2008, the exchange rate remained fairly stable for the whole of 2009 and most part of 2010.
- In 2010, overall balance of payments registered a surplus of USD 369.8 million, compared with a surplus of USD 366.2 million recorded in the preceding year. This development was mainly on account of capital transfers and foreign borrowing. Nevertheless, the current account deficit widened by 11.8 per cent to USD 2,405.8 million, following a rise in the value of goods imported that outweighed the increase in the value of exports of goods and services. The Gross official reserves remained strong closing at USD 3,947.9 million at the end of 2010, up from USD 3,552.5 million recorded at the end of 2009. Similarly, gross foreign assets of banks increased to USD 1,060.9 million from USD 985.8 million in the same period.
- 42. Going forward, export receipts are projected to be driven mostly by mining, tourism, manufacturing, and transportation. Imports are projected to grow in line with the GDP and price movements in major sources of Tanzania's imports. As economic environment continues to improve, FDI is expected to be an increasing source of BOP financing. Further, the projected monetary and fiscal developments will leave gross official reserves within the range of 4 to 5 months of imports of goods and services in line with the EAC convergence criteria.

#### **5.3 Principal Risks to the Baseline**

#### **5.3.1 Output Risks**

43. The economy is susceptible to natural disasters particularly droughts and/or floods. Drought impacts agriculture which accounts for about 27 per cent of GDP and reduces hydropower generation, which in turn affects manufacturing, trade and repair and particularly Small and Medium-Sized Enterprises (SMEs). The inadequate short rains in the last quarter of 2010 have caused power rationing in December 2010 and January 2011. If the long rains also become inadequate, it may have significant consequences in economic activity particularly in agricultural production, manufacturing and SMEs. The Government efforts to develop irrigation infrastructure and diversify the sources of power generation is expected to mitigate such risks in the medium to long-term. In addition, diversification of financing sources, and deepening of domestic financial market are expected to enhance the flexibility of the government to respond to such shocks.

#### **5.3.2** Balance of Payments Risks

Tanzania's current account deficit. In addition, many of the country's primary exports especially tea, coffee, cotton, sisal and cashew nuts are vulnerable to weak external demand and lower world prices. Meanwhile, the budgetary difficulties in Europe caused by debt crisis, coupled with the impact of the GFC in the developed economies may reduce the budgetary transfers and increase borrowing needs. Overall, this may imply a substantial increase in exchange rate risks which points to the need to explore more avenues of borrowing in domestic currency to mitigate such pressure. However, exchange rate depreciation is likely to be correlated with the increase in the domestic nominal interest rate, which could increase the costs of domestic financing.

# 45. The Government's promotion of value addition for exports of mineral and agricultural products through the implementation of 'Kilimo Kwanza' initiative

<sup>&</sup>lt;sup>5</sup> "Kilimo Kwanza" is the Swahili phrase which means "Agriculture First". It is Tanzanian's new agricultural drive meant to inspire investment in agriculture as a catalyst for the country's industrial revolution.

and mineral policy respectively is expected to help reduce the severity of the Tanzania's export price fluctuations in the world market.

#### **5.3.3 Fiscal Risks**

46. The government's fiscal position is vulnerable to many risks including the balance of payments and output risks. In addition, the country's dependence on donor resources poses a risk to the budget. The large amount of contingent liabilities, both outstanding and those in the pipeline, represent a significant risk to the government budget. There is a risk associated with increasing borrowing without scaling up investment particularly in infrastructure development. In overcoming these risks, the government will diversify the financing sources and increase market capacity to help absorb such shocks. Furthermore, the government will continue strengthening the overall public financial management in order to contain the increase of contingent liabilities.

#### **5.3.4 Monetary Risks**

- 47. The fluctuations in world oil and food prices pose risks to inflation. In addition, if the balance of payments risks materialize, a sharp depreciation of the exchange rate would lead to an increase in inflation. The occurrence of drought and/or floods in the country may lead to high inflation that cannot be contained by monetary policy.
- 48. As the growth of bank credit recovers, there is a risk for interest rates to pick up, hence increasing the cost of Government borrowing from domestic sources in the medium term. In mitigating these risks, the Government will continue to implement prudent monetary policy with the aim of reducing the volatility in the exchange and interest rates. The summary of the macroeconomic risks and their implication for medium-term debt management strategy is summarized in **Table 6**.

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

Macroeconomic Factors	Risk Exposure								
Macrocconomic ractors	(risk level)	Implication for Debt Management							
	(risk ievei)								
Output Risks:		-To improve food storage facilities in order							
Natural disasters (especially	-medium	to reduce food importation.							
drought and floods)		-expansion of the irrigation systems to							
		overcome drought.							
<b>Balance</b> of payments									
Risks:									
-Exchange rate risk	-Medium	-Reduce debt in foreign currency							
-FDI volatility	-High	-Encourage domestic investors							
		-increase reserve coverage							
-Decline in tourism receipts	-High	-encourage domestic tourism							
Fiscal Risks:									
-Revenues volatility	-medium	-Reduce debt in foreign currency							
		-Improve domestic revenue collection							
		-Diversification of financing sources							
-Donor dependence	-high	-improve absorptive capacity							
		-diversify the economy to increase							
		economic growth.							
-Contingent liabilities	-medium	-Increase domestic revenues							
		-strengthen the overall public financial							
		management framework in order to control							
		the scale of explicit contingent liabilities.							
		-maintain smooth debt profile servicing.							
Monetary Risks:	11								
-Inflation	-medium	-reduce rollover risk							
		-increase credibility of monetary policy							

## 6.0 Cost-Risk Analysis of Alternative Debt Management Strategies

#### **6.1 Baseline Pricing Assumptions**

#### **6.1.1 External Sources**

- 49. For the purposes of medium-term analysis, the following pricing assumptions were considered.
- i. All future multilateral concessional loans are priced at a fixed rate of 0.75 per cent, with a 40-year tenor and 10-year grace period. The assumptions are in line with IDA financing terms.
- ii. Semi-concessional financing are assumed to be sourced from both traditional (e.g. Japan and France), and emerging (e.g. China, India and Korea) bilateral creditors. Two types of borrowing on semi-concessional basis are considered, that is, fixed rate loans available at an interest rate of 1.5 per cent, and variable rate loans priced at LIBOR plus 200 basis points. Both fixed and variable rate loans have maturity of 20-years including 5-year grace period. Broadly, this reflects the current composition of the debt portfolio.

Access to the international capital market is assumed to be in USD and priced on the underlying forward US Treasury-yield plus a credit spread of 500 basis points for a 10-year bond. This reflects current market conditions for a B-rated credit. At current US Treasury yields, this would imply an overall yield of around 9 per cent during 2010/11. Note that while spreads remain at elevated levels relative to those at which Ghana and Gabon secured<sup>6</sup>, the overall impact is offset by the fact that underlying Treasury yields are relatively low. Selected EMBI Global Sovereign Spreads (bps)-Africa are illustrated in **Chart 10**.

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<sup>&</sup>lt;sup>6</sup> The spread for Ghana and Gabon have been favoured by recent discovery of oil reserves.

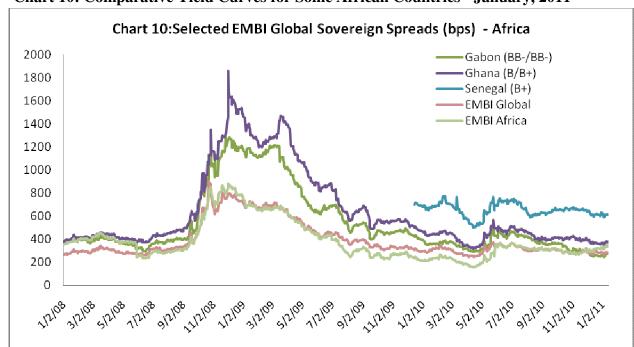


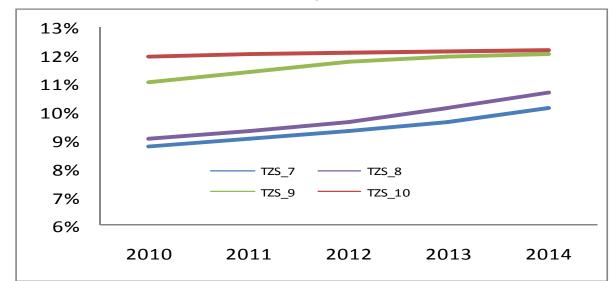
Chart 10: Comparative Yield Curves for Some African Countries - January, 2011

Source: IMF

- iii. Syndicated loans are assumed to be on the basis of a 7-year fixed rate loan, priced at US Treasury yield plus an assumed credit spread of 400 basis points. With the January 2011 US Treasury yields, it would imply an overall yield of 6.6 per cent during 2010/11.
- iv. To speed up development, the Government will also consider guaranteed commercial banks loans, popularly termed as 'ECAs'. The ECAs are assumed to be priced at US Treasury yield plus a risk spread of 4 per cent. The ECAs also are subjected to insurance premium, which raises the effective interest rate.

#### **6.1.2 Domestic Sources**

50. The absence of an active secondary market means that the current TZS yield curve does not provide a robust basis for determining forward curves. Instead, the future TZS yield curves are determined based on the existing maturities of the Government securities (Chart 11). The resultant curve is then adjusted for a premium, which can be assumed to capture liquidity, inflation risk and other risks.

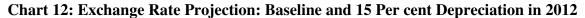


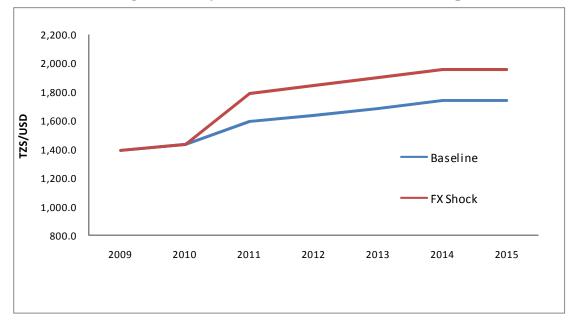
**Chart 11: Forward Yield Curves for Treasury Bills and Bonds (June, 2010)** 

Source: Ministry of Finance and Bank of Tanzania

#### **6.2** Description of Shock Scenarios

- 51. The robustness of the alternative debt management strategies was assessed under four alternative stress scenarios based on interest and exchange rate shocks. The magnitude of the shocks was informed by the historical performance of Tanzanian interest and exchange rates over the last ten years. An extreme scenario was also incorporated to capture the potential volatility of the exchange rate that may occur once capital account is fully liberalized and/or significant negative terms of trade shocks. It was assumed that, shocks materialize in FY 2010/11, and that all shocks are sustained throughout the simulation period.
- 52. **Scenario 1: A 15 per cent devaluation of the domestic currency** against all other currencies in 2012 (**Chart 12**). This would be consistent with historical occurrences in the foreign exchange market in the country.





- 53. **Scenario 2: A 30 per cent devaluation of the domestic currency** against all other currencies in 2012. This would be consistent with extreme event, for instance, there are significant deterioration of terms of trade or capital reversals under liberalized capital account.
- 54. Scenario 3: A rise in yield curves for all the instruments except for concessional multilateral and semi-concessional bilateral with fixed interest rate. Semi-concessional bilateral (with floating rate), syndicated loans, guaranteed commercial bank loans, and five to ten years Treasury bonds have their yield shocked up by 2 per cent. The yields for the short-term instruments mainly, Treasury bills and 2-year bonds were shocked up by 3 per cent. A greater shock of 5 per cent is applied on sovereign bonds. The scenario is designed to reflect the fact that longer-term yields are generally less volatile than short-term yields. The impact of this shock is illustrated in **Chart 13**.

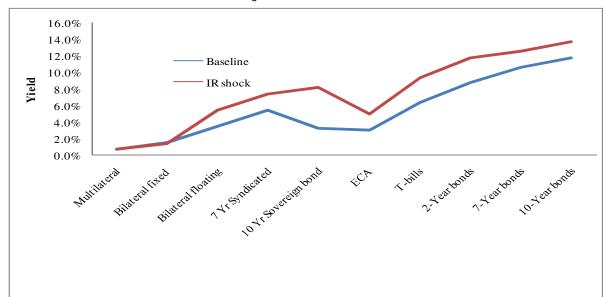


Chart 13: Baseline Interest Rate Projection: Interest Rate Shock in 2012

55. **Scenario 4 ("Combo"): A combined shocks scenario,** where changes in interest and exchange rates described in scenarios 2 and 3 are applied. The rationale for the combo shock is supported by economic literature, whereas a shock on exchange rate transmits to domestic financial sector through prices.

#### 6.3 Description of Alternative Debt Management Strategies

The cost and risk analysis of the existing debt portfolio and the assessment of the nature of macroeconomic vulnerabilities facing Tanzania suggest that reducing the level of external exposure and refinancing risk in the domestic portfolio would be desirable. In addition, diversifying financing sources would help mitigate some of the potential fiscal shocks facing the economy. However, these considerations come amid the greater appetite to speed up development towards attainment of millennium development goals and the 2025 Development Vision as outlined in the National Strategy for Growth and Poverty Reduction (NSGPR) which requires huge funding. Traditionally, the country has been depending very much on concessional financing, a channel that may not be adequate given the timeframe of the development objectives.

57. Taking account of those considerations, five alternative debt management strategies were considered. The principal difference in the strategies is on the sources of external borrowing while domestic issuance composition remains the same in all strategies. To achieve the objective of elongating maturity structure, relatively more of 10-year bonds will be issued. Under the five strategies, NDF is fixed at 1per cent of GDP consistent with the PSI benchmark while external sources finance the remaining budget deficit. **Table 8** shows medium term financing sources by instruments category.

**Table 7: Description of Alternative Strategies** 

Strategy	Syndicated loan (USD 180 mil., 2011)			Eurobond (USD 180 mil., 2011)			Eurobond (USD 450 mil., 2011)			Limited multilateral and bilateral				Maximizing concessional financing						
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013
Total External	66%	67%	64%	64%	66%	67%	64%	64%	66%	67%	64%	64%	66%	67%	64%	64%	66%	67%	63%	63%
Multi - concessional	46%	40%	38%	38%	46%	40%	38%	38%	46%	25%	39%	39%	46%	37%	35%	35%	46%	53%	54%	54%
Semi - concessional	3%	7%	8%	8%	3%	7%	8%	8%	3%	7%	8%	8%	3%	3%	3%	3%	3%	7%	8%	8%
Semi - concessional	1%	3%	4%	4%	1%	3%	4%	4%	1%	5%	4%	4%	1%	3%	3%	3%	1%	7%	2%	2%
7 Yr Syndicated loan	8%	12%	10%	10%	8%	0%	10%	10%	8%	0%	10%	10%	8%	17%	16%	16%	8%	0%	0%	0%
10 Yr Sovereign bond	0%	0%	0%	0%	0%	12%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ECA	8%	5%	4%	4%	8%	5%	4%	4%	8%	0%	4%	4%	8%	7%	6%	6%	8%	0%	0%	0%
Total Domestic	34%	33%	36%	36%	34%	33%	36%	36%	34%	33%	36%	36%	34%	33%	36%	36%	34%	33%	37%	37%
T-bills	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Fixed_2Yr	6%	6%	5%	5%	6%	6%	5%	5%	6%	6%	5%	5%	6%	6%	5%	5%	6%	6%	5%	5%
Fixed_7Yr	15%	15%	15%	15%	15%	15%	14%	15%	15%	15%	14%	14%	15%	15%	15%	14%	15%	15%	15%	15%
Fixed_10Yr	7%	7%	11%	11%	7%	7%	11%	11%	7%	7%	11%	11%	7%	7%	11%	11%	7%	7%	11%	11%

58. To assess the cost of reducing external exposure, the five strategies were assessed by increasing NDF to 1.5 per cent of GDP. For all strategies, domestic issuance composition remains the same as in the first case. The rationale for such a strategy is to assess the potential impact of reducing access to external sources of financing. This would be consistent with the objective of reducing external dependence.

#### 6.4 Cost-risk Analysis of Alternative Debt Management Strategies

59. The performance of these five strategies was assessed under the macroeconomic baseline and risk scenarios identified above. A number of cost and risk indicators were considered. For example, the performance of each strategy in terms

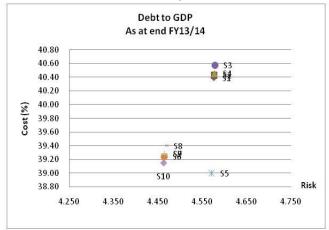
of debt-to-GDP, interest-to-Revenue and NPV of debt-to-GDP as shown in **Table 9**.

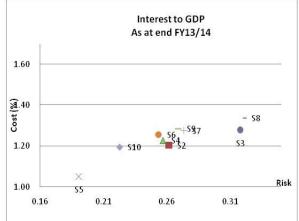
Table 8: Cost-Risk Analysis under Different Strategies (NDF 1.5% of GDP)

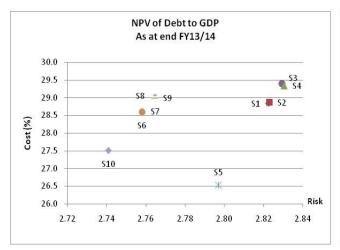
Cost and	Cost and Risk Indicators					2013	
Cost and	RISK HIGHCATOIS	Current	S1	<b>S2</b>	<b>S3</b>	<b>S4</b>	S5
Nominal debt as % of GDP		31.5	39.1	39.2	39.3	39.2	39.00
NPV as % of GDP		21.4	27.8	27.9	28.4	28.3	26.5
Implied interest rate (%)		2.9	3.3	3.3	3.5	3.4	3.1
Refinancing risk	ATM External Portfolio (years)	20.0	18.2	18.3	17.8	17.6	19.9
	ATM Domestic Portfolio (years)	5.2	5.3	5.3	5.3	5.3	5.3
	ATM Total Portfolio (years)	15.7	15.3	15.4	15.1	14.9	16.7
	Debt maturing in 1 yr (%)	8.0	4.3	4.0	3.9	4.5	3.9
Interest rate risk	ATR (years)	15.2	14.67	14.79	14.47	14.15	16.24
	Debt refixing in 1yr (%)	11.8	15.6	13.9	13.5	18.7	9.4
	Fixed rate debt as % of total	93.1	87.0	88.7	89.1	84.0	93.2
FX risk	FX debt as % of total	71.1	77.6	77.6	77.7	77.6	77.5
	ST FX debt as % of reserves	1.2	5.2	4.3	4.2	5.7	4.2

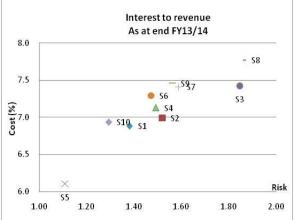
60. Analysis of medium term debt indicators suggests that Strategy five dominates all other strategies in terms of cost and risk indicators (Chart 14). Based on resultant costs, the strategy that maximizes concessional external borrowing is the most desirable – ceteris paribus. This result is more pronounced when measured in terms of nominal and NPV of debt-to- GDP, and interest payments-to-GDP. In addition, the strategy reduces the refinancing risk as it elongates average time to maturity of both external and total debt portfolio and reduces exposure to interest rate risk by raising the proportion of debt with fixed interest rate.

Chart 14: Cost-Risk Analysis under Different Financing Strategies









# 61. Analysis of risk indicators under different scenarios also favours Strategy Five. While maximum risk<sup>7</sup> generated by combined shocks on interest rate and exchange rate measured in terms of debt-to-GDP is the same across all strategies, the NPV of debt-to-GDP and interest payments risk indicators favours are relatively low under strategy five. This is consistent with the fact that, concessional multilateral loans bear low and fixed interest rates (Table 10).

<sup>&</sup>lt;sup>7</sup> Maximum risk is a difference between maximum cost indicator under different scenarios and the baseline.

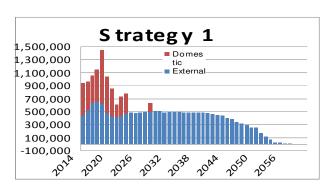
Table 9: Maximum Risks under Different Scenarios as at end of 2013/14

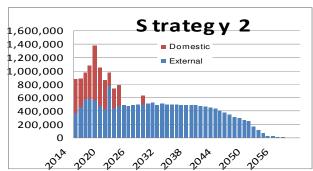
	Alternative Strategies												
Risk Indicators		NDF 1% of GDP						NDF 1.5% of GDP					
	S1	S2	S3	S4	S5	<b>S6</b>	S7	S8	S9	S10			
Debt-to-GDP	4.57	4.57	4.57	4.57	4.57	4.46	4.47	4.47	4.47	4.46			
Interest Payments-to-GDP	0.23	0.25	0.30	0.24	0.19	0.25	0.27	0.32	0.27	0.22			
NPV of Debt-to-GDP	2.82	2.82	2.83	2.83	2.80	2.76	2.76	2.76	2.76	2.74			
Interest payments-to-revenue	1.3	1.4	1.7	1.4	1.1	1.5	1.6	1.9	1.6	1.3			
Interest payments-to-total expenditure	0.9	1.0	1.2	0.9	0.7	1.0	1.1	1.2	1.0	0.9			

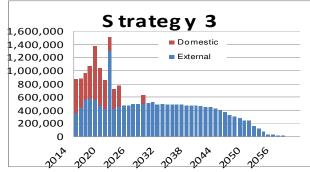
- 62. Given limited access, conditionalities and unpredictability of concessional financing, strategy five may not be feasible due to appetite to speed up development, particularly in infrastructure projects such as road networks, railway system and power generations which require heavy and prompt investments.
- 63. The issuance of USD 180 million syndicated loan in 2011/12 strategy one ranks second in favorability and could be considered a viable alternative to Strategy five. All debt costs and risks indicators rank second after those of concessional borrowing. The strategy also ranks second in minimizing risks resulting from interest and exchange rate shocks.
- 64. Strategy two that considers issuance of Eurobond of USD 180 million in 2011/12 in place of syndicated loan follows closely strategy 1. The strategy raises the same amount of financing as in strategy 1, only that Eurobond is market instrument and requires preparations. The Eurobond is relatively expensive compared to syndicated loan even before inclusion of hidden costs as indicated in Box 2.
- 65. Strategy 4 which assumes limited concessional multilateral and semi-concessional borrowing from bilateral sources is the second least desirable. The strategy is, however, the worst if vulnerability assessment is considered as measured by a ratio of short-term to official reserves that was 5.7 per cent. The strategy also maximizes exposure of the country to interest rate risk as the proportion of fixed rate debt (i.e. 84 per cent) is the lowest. The interest rate related risks are also high under the strategy.

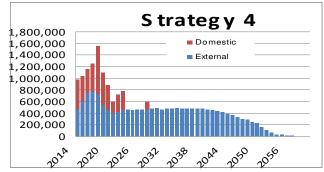
66. On almost all grounds, Strategy three, that increases size of Eurobond to USD 450 million, is the least desirable strategy to follow. The results suggest that, exploiting the envisaged USD 525 million from the non-concessional sources for financing entail higher costs and expose the country to exchange rate risks. The strategy, however, ranks second in raising proportion of debt with fixed interest rate, thus reducing the interest rate risks exposure (Chart 15).

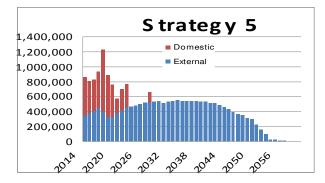
Chart 15: Amortization Profile under Different Strategies (as of end FY 2012/13)











- 67. To check for robustness, performance of the strategies was also assessed with the NDF increased to 1.5 per cent of GDP consistent with long-term objective to reduce external dependence. Increasing the NDF has the advantage of reducing exposure to foreign currency and the associated exchange rate risks. As shown in Table 11, increasing domestic financing tends to raise proportionately financing costs as measured by debt ratios across all strategies in addition to the crowding out effects.
- 68. However, given the overall objective to reduce overall external dependence it would be prudent to increase domestic financing over time by transforming the domestic debt market into a deep and reliable source of financing.

**Table 10: Cost-Risk Analysis under Different Strategies (NDF = 1.5% of GDP)** 

Cost and	Risk Indicators	FY2009	As at end FY2013							
Cost and	RISK HIGICATORS	Current	<b>S6</b>	S7	S8	S9	S10			
Nominal debt as % of GDP		31.5	39.2	39.3	39.4	39.3	39.15			
NPV as % of GDP		21.4	28.6	28.6	29.1	29.0	27.5			
Implied interest rate (%)		2.9	3.7	3.7	3.9	3.7	3.5			
Refinancing risk	ATM External Portfolio (years)	20.0	18.1	18.2	17.8	17.6	19.6			
	ATM Domestic Portfolio (years)	5.2	5.4	5.4	5.4	5.4	5.4			
	ATM Total Portfolio (years)	15.7	14.7	14.8	14.5	14.3	15.8			
	Debt maturing in 1 yr (%)	8.0	4.8	4.5	4.4	5.0	4.5			
Interest rate risk	ATR (years)	15.2	14.07	14.18	13.89	13.61	15.38			
	Debt refixing in 1yr (%)	11.8	14.9	13.4	13.0	17.5	9.6			
	Fixed rate debt as % of total	93.1	88.0	89.4	89.8	85.4	93.3			
FX risk	FX debt as % of total	71.1	72.6	72.6	72.6	72.5	72.4			
	ST FX debt as % of reserves	1.2	5.0	4.2	4.0	5.4	4.0			

# 7.0 Institutional Arrangements and Other Issues of Implementation

#### 7.1 Institutional Arrangements

69. The debt management function is spread across a number of administrative units. The Debt Section of the Policy Analysis Department (PAD) within the Ministry of Finance (MoF) is effectively the middle office with the responsibility for developing a debt strategy and coordinating debt sustainability analysis. The Public Debt Unit of the Accountant General's Department (ACGEN) is the back office with responsibility for debt data and initiating the debt servicing process. Some middle and back office

functions are also carried out by the Bank of Tanzania's (BoT) Debt Management Department. Finally, the front office function is split between the Financial Markets Department of the BoT and the External Finance Department (EFD) of MoF. The Treasury Registrar's Department of the MoF also has responsibilities in managing, public parastatals' debt, the on-lending of loans to state-owned enterprises and contingent liabilities.

70. The Government Loans Guarantees and Grants Act, of 1974 as revised in 2004 sets out the advisory role of the Technical Debt Management Committee (TDMC) and National Debt Management Committee (NDMC). The TDMC provides debt related technical advice to the NDMC, a body that advises the Minister for Finance. Under the current provisions, the NDMC is responsible for setting the debt management objective and determine the debt management strategy on an annual basis. The implementation of the strategy is monitored on a regular basis through regular reports prepared by PAD. The framework provides an appropriate framework for the effective development and monitoring of the MTDS.

#### 7.2 Developing a Borrowing Plan

To operationalize the strategy, the Government is developing a detailed borrowing plan that takes into account the likely timing of government cash flows throughout the fiscal year to accommodate potential funding pressures without compromising debt management objectives. The borrowing plan therefore takes account of the known market demand (or, for external borrowing, creditor availability), conditions, and should be adjusted when necessary. Overall, the government seeks to find an appropriate balance between meeting debt management objectives, increasing propoor expenditure and developing the domestic financial markets.

#### 7.3 Disseminating, Monitoring and Reviewing the Strategy

72. The existing legal framework defines a clear role for the TDMC and NDMC in the ongoing monitoring of the strategy. The MTDS is intended to facilitate regular production of debt portfolio reports that include key cost and risk indicators. The

underlying assumptions are also monitored to ensure that they remain valid. The strategy is subject to review in the event that there are significant changes in fiscal or market conditions relative to the baseline assumptions. Formally, the strategy will be reviewed at least once a year to determine whether key underlying assumptions remain valid. This will be supplemented by annual report on debt management activities for each preceding year.

#### 7.4 Way Forward

- 73. For sound preparation of routine MTDS, the Government is committed to undertake a number of specific actions including:
- i. The current-scattered databases maintained at ACGEN, BOT, External Finance Department and Treasury Registrar Departments will be unified and located at the ACGEN office. This stems from the fact that, the current recording arrangement is fragmented as some are recorded in the CS-DRMS maintained by ACGEN and BOT offices while contingent liabilities and donor related funding are recorded by the Treasury Registrar department and External Finance Department, respectively. As a starting point, the database stationed at the ACGEN and BOT have been validated to set a room for straightforward unification.
- ii. Building capacity to calculate and assess portfolio risk indicators by complementing the existing quarterly debt report with a new quarterly risk monitoring report. This also includes undertaking further training on the MTDS cost-risk analytical tool.
- iii. Monitoring the implementation of the existing debt management strategy through TDMC and NDMC, using the quarterly debt reports and risk monitoring reports as key inputs.
- iv. Ensuring availability of financial resources at relatively cheaper cost through the establishment of mutual funds, more retail participation in primary market and gradual liberalization of the capital account

v. To minimize unexpected costs of hidden contingent liabilities and other unanticipated fiscal risks, the precise measurement of the actual size of contingent liabilities is obligatory. In this regard, the government is committed to carry out a study with a deep focus on both explicit and implicit contingent liabilities which will establish its actual size.

#### 7.5 Conclusion

74. Tanzania's legal framework defines debt management objectives as: meeting the government financing requirements at minimum cost while taking into account the associated risks, developing domestic financial markets and ensure sustainability of the debt portfolio. In view of this, the analysis of medium term debt indicators suggests that strategy five (which maximizes concessional borrowing) dominates all other strategies in terms of cost and risk indicators. However due to limited access, conditionalities and unpredictability of concessional financing, strategy five may not be feasible amid the Government's appetite to speed up development spending. This necessitates a limited non concessional borrowing in which strategy one (which maximizes syndicated loans) appears to be the most feasible. To improve further, the government will work to develop the domestic and regional capital markets to broaden the investor base for Treasury bonds without crowding out private sector.