Medium-Term Debt Management Strategy:
- Why is it important
- And what is it?

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OUTLINE

1. Why and what (intuition/motivation)
2. Foundations and definitions
3. Steps of an MTDS
4. Summary / Conclusions
Why an MTDS?

Think of you getting into a sail boat; you face two alternatives regarding your “sailing away” adventure:

• Go anywhere the tides and winds take you; just be ready to react to avoid rocks and shallow waters (“survival on a day to day basis”);

• Know where you want to go (your final destiny) and have a defined itinerary (how to get there); be prepared to adjust your itinerary when necessary if and when circumstances change (“have a medium term strategy”).
Note: plans are made subject to constraints (navigation skills, weather conditions and forecast, ship size, etc.)
Why an MTDS?

- “Asian debt spreads widen on bank woes…”
  (Reuters, March 2)
- “Philippines eyes more local bond sales…”
  (FT, March 2)
- “Korean bonds are hot sellers for foreigners…”
  (The Korean Herald, March 3)

Under these continuously changing “sea conditions”, what does the debt manager do? Better be prepared (have a contingency plan at hand) than not.
What is an MTDS?

A plan consisting of:

- **Objective(s)** = what we want to achieve (where we want to go) within the next 3-5 years

- An **itinerary or navigation chart (strategy)** on how we are going to get there (the best way to do it)

- In choosing the strategy (roadmap) we take into account binding restrictions, costs and risks involved
What is public debt management?

• “Public debt management is the process of establishing and implementing a strategy for managing debt to achieve the government’s financing, risk, cost objectives and other goals, such as developing the domestic debt market”

  *Guidelines for Public Debt Management: IMF/World Bank, 2001*

• Sovereign debt management is distinct from fiscal policy
  – Fiscal policy determines the level of public debt;
  – Public debt management involves its composition, i.e. exposure to market risks.
What is an MTDS?

- A framework to fully assess relevant **costs** and **risks** associated with a **government’s desired composition of debt**.

- It is a document that describes the **plan** that the government intends to implement to achieve this composition.

- Medium-term planning horizon of the government (usually 3-5 years).
Motivation (1)

- Post IDA perspective
  - Graduation from IDA leads to higher cost of borrowing and new borrowing opportunities
- MTDS aims to help fully assess relevant costs and risks of new financing
- MTDS designed to improve debt management in LICs and MICs
- All these concerns apply squarely in the current circumstances of greater market volatility and uncertainty (rough seas)
Motivation (2)

• The principal benefit of an MTDS: It can help a country “avoid expensive (deadly) mistakes.”
  – Improves evaluation of cost-risk tradeoff
  – Improves risk measurement and management

• Facilitates policy coordination

• Facilitates domestic debt market development
Motivation (3)

- Good debt management creates more room to maneuver at a time of crisis:
  - **Thailand and Chile**: reduced external exposure and debt levels in recent years → can now pursue fiscal expansion and finance it at low cost.
  - **Brazil**: Management of overall government debt (and sound fiscal management) led to decline in federal public debt, allowing more room for crisis response.

Brazil: Debt/GDP ratios

NPSD=net public sector debt; GGGD=gross general government debt; FPD=federal public debt
Motivation (4)

• Debt structures also dampen or amplify the magnitude of external shocks
  – A portfolio with a high proportion of *short-term debt* is highly vulnerable to rollover risk and liquidity squeeze.
  – Recognition of *contingent liabilities* (both explicit, such as guarantees, and implicit, such as financial sector bailouts) is pro-cyclical, so these need to be carefully managed.
  – *Derivatives* (such as currency and interest rate swaps) are useful, but as the ongoing financial crisis has showed, they are a two edge sword and must be used within an appropriate risk management framework.
Motivation (5): Two LACs

External debt stocks (% of exports of goods, services and income; 1995 = 100)

Source: Global Development Finance 2008, the World Bank Group
The Foundations for the MTDS

- Cost/Risk Analysis
  - Constraints
  - Information on cost and risk
- Debt Management Strategy Development
  - Consistency/constraints, e.g. sustainability
  - Information on cost and risk
  - Initiatives
  - Demand constraints
- Macroeconomic Framework
- Debt Market Development
Definitions

**Strategy**: choose an “optimal” debt portfolio; the one that – given government’s preferences – strikes a balance between cost and (downside) risk.

**Cost**: Annual interest payments as a % of nominal GDP.

**Risk**: Deviations in the cost from baseline scenario following a shock; it is an assessment of how sensitive the cost is to a possible shock. (Note: Differs from the standard definition of risk associated with volatility of the underlying variable.)

**Analysis**: Examine how cost and risk may interact for different portfolios of debt (different strategies).
Measurement of Risk

Baseline Scenario

Risk Scenario 1

Cost

Time

Cost_{baseline}

Cost_1, x

Risk_{1, x}
Example of selection

Medium Term Debt Management Strategy (MTDS)
MTDS Toolkit

• **Guidance Note**: a step-by-step “how-to” guide on the process of developing and implementing an MTDS

• **Scenario Analysis Model**: spreadsheet-based analytical tool to help compare alternative strategies under different scenarios for future market rates (accompanied by a User’s Guide)

• **A template** for strategy documentation
Medium Term Debt Management Strategy (MTDS)

8-step approach

Step 1: Identify objectives & scope
Step 2: Identify cost & risk of existing debt
Step 3: Identify potential funding sources
Step 4: Identify baseline projections & risks – fiscal, monetary & market
Medium Term Debt Management Strategy (MTDS)

8-step approach

Step 5: Review key structural factors

Step 6: Identify cost risk trade-off for alternative debt management strategies

Step 7: Review implications for macroeconomic policies & market

Step 8: Recommend MTDS for approval

Go back to step 4 if needed
MTDS pilot countries (2008): Bangladesh (02), Ghana (03), Cameroon (04), Nicaragua (07) and Moldova (09)

In general, all five had characteristics considered representative of LICs:

- Concessional borrowing makes up a significant portion of debt portfolio
- Aid inflows are uncertain – commitments vs. disbursements
- Domestic debt markets are underdeveloped
- Domestic debt portfolio was predominately short-term
- Domestic debt included central bank paper
- In most cases debt management strategies existed, but were not well integrated into overall policy mix
Designing an MTDS: 8 steps

- Objectives and scope of the MTDS
- Cost and risk of existing debt
- Potential sources of finance
- Medium-term macro-policy and market environment
- Broad structural factors and risks
- Analysis of alternative debt management strategies
- Review with fiscal, monetary and market authorities
- Propose and approve MTDS
I. Identify objectives for public debt management and scope of the strategy

**OBJECTIVES**

- **Example 1 - LIC**: Minimize costs given prudent degree of risks, develop domestic capital markets and maintain debt at sustainable levels.

- **Example 2 – ECA (Poland)**: Minimize debt servicing costs over a long time horizon with accepted limitations regarding the level of the following risks: (i) refinancing, (ii) exchange rate, (iii) interest rate, (iv) state budget liquidity and (v) other such as credit and operational risks.

- **Example 3 – LAC (Brazil)**: Expansion of the investor base.

**SCOPE**

- Total domestic and external central government debt
- Debt of general government or wider public sector
- Contingent liabilities
II. Analyze the cost and risk of the existing debt

Objective

- Identify outstanding debt and its composition
- Calculate basic cost and risk indicators for the actual debt portfolio

Table 2: Interest rate and refinancing risk, end 2007

<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>External</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest rate risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate re-fixing within 1 year</td>
<td>100%</td>
<td>24%</td>
<td>47%</td>
</tr>
<tr>
<td>Average time to refixing, years</td>
<td>1.0</td>
<td>8.8</td>
<td>6.4</td>
</tr>
<tr>
<td><strong>Refinancing risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt maturing in 1 year</td>
<td>38%</td>
<td>8%</td>
<td>17%</td>
</tr>
<tr>
<td>Average time to maturity</td>
<td>6.8</td>
<td>9.4</td>
<td>8.6</td>
</tr>
</tbody>
</table>

71% is foreign currency denominated
II. Analyze the cost and risk of the existing debt

Table 1: External and domestic debt characteristics, end 2007

<table>
<thead>
<tr>
<th></th>
<th>USD million</th>
<th>LX million</th>
<th>Percent of GDP</th>
<th>Share of total debt</th>
<th>Weighted avg. interest rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>External debt</td>
<td>757.1</td>
<td>8,555.0</td>
<td>16.0</td>
<td>69.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Domestic debt</td>
<td>331.7</td>
<td>3,748.0</td>
<td>7.0</td>
<td>30.5</td>
<td>21.1</td>
</tr>
<tr>
<td>Total debt</td>
<td>1,088.8</td>
<td>12,303.0</td>
<td>23.1</td>
<td>100.0</td>
<td>8.2</td>
</tr>
</tbody>
</table>
II. Analyze the cost and risk of the existing debt

• Debt to GDP is low at around 25 percent
• Domestic debt approximately 30 percent of total
• High share of debt denominated in foreign currencies
  • Long-term maturity structure of external debt provides some protection to budget in the short/medium term
• Exposure to **interest rate re-fixing** on domestic debt is very high
• Exposure to **refinancing risk** low on external debt but substantial for domestic debt
• A substantial share of its external borrowing is on concessional terms … concern as the country graduates from IDA
III. Potential sources of finance

Objective: Identify potential sources and analyze their characteristics. Determine the strategies that are feasible and desirable.

Issues to consider
- Concessional vs. commercial borrowing
- Domestic versus external (cost; risks)
- Access to international capital markets (when)
- Potential demand for government paper

BULGARIA: 2002 & 2005
Debt Structure Per Creditors

Source: MoF
IV. Medium Term Macro Policy and Market Environment

- **Objective**: Identify baseline (most likely) scenario for key fiscal and monetary policy as well as market variables (exchange rates, interest rates, etc.), the main risks associated to this (e.g. a 40 percent real exchange rate depreciation), and analyze the relevant constraints and implications for Debt Management.

![Effective Exchange Rates, Quarterly (00Q1=100)](chart.png)
V. Review of long-term structural factors

**Objective**
Review structural factors that might potentially influence the desired direction of the MTDS over the long-term

Longer-term structural factors could comprise:

- Commodity dependence and associated vulnerability to adverse developments in commodity prices;
- Possible longer-term trends in the real effective exchange rate due to medium term macro policies (i.e., macro stabilization; disinflation);
- Longer-term prospects of continued access to concessional finance because of country’s growth;
- Ongoing or planned financial and/or pension system reforms;
- Long-term inflationary trends.
VI. Assess and rank alternative debt management strategies on the basis of the cost-risk trade off

• Identify set of relevant alternative strategies;
• Assess, using the AT, their costs and risks.
• Rank them

Cost
(i/GDP)

Risk (max Δ from baseline after shocks)
VII. Review with Other Agencies/Market

*Objective:* Ensure that relevant feedback is provided by relevant or interested players

VIII. Propose and approve MTDS

*Objective:* Ensure that the preferred / chosen strategy is supported by the highest responsible authority
Summary

• MTDS is a framework to fully assess relevant costs and risks associated with a government’s desired composition of debt

• MTDS toolkit supports a structured approach to develop a medium term debt management strategy
  – Requires a clear description of the framework within which the strategy is developed, including objectives for debt management, macro-economic issues etc.
Summary

By enabling authorities to:

• Identify and monitor risks, even if financing choices are limited;
• Evaluate the cost and risk tradeoffs associated with different strategies;
• Facilitate coordination with fiscal and monetary authorities;

The MTDS allows governments to make informed choices on how its financing need can be met, taking into account constraints, costs and risks.