LINKAGES BETWEEN DEBT SUSTAINABILITY AND DEBT MANAGEMENT STRATEGIES

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Data for 2016 and 2017 are forecasted based on draft of 2017 budget law.
What is the debt sustainability for MAC?

Public debt can be regarded as sustainable when the primary balance needed to at least stabilize debt under both the baseline and realistic shock scenarios is economically and politically feasible, such that the level of debt is consistent with an acceptably low rollover risk and with preserving potential growth at a satisfactory level.

DSA can be improved in MACs in these areas.

i) realism of baseline assumptions;

(ii) risks associated with the debt profile (financing structure);

(iii) analysis of macro-fiscal risks;

(iv) vulnerabilities related to the level of public debt;

(v) coverage of fiscal and public debt aggregates.
An MTDS is a plan that the government intends to implement over the medium-term in order to achieve a desired composition of the government debt portfolio, which captures the government’s preferences with regard to the cost-risk tradeoff.

It operationalizes country authorities’ debt management objectives—e.g., ensuring the government’s financing needs and payment obligations are met at the lowest possible cost consistent with a prudent degree of risk.

An MTDS has a strong focus on managing the risk exposure embedded in the debt portfolio—specifically, potential variations in the cost of debt servicing and its impact on the budget. In particular, an MTDS identifies how cost and risk vary with the composition of the debt.
### RA Government Debt Management Benchmark Indicators in 2017-2019

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Refinancing risk</strong></td>
<td></td>
</tr>
<tr>
<td>Average Time to Maturity (ATM)</td>
<td>8-11 years</td>
</tr>
<tr>
<td>Share of government bonds maturing in coming year in the stock of government bonds</td>
<td>Max 20%</td>
</tr>
<tr>
<td><strong>Interest rate risk</strong></td>
<td></td>
</tr>
<tr>
<td>Share of fixed rate debt in the stock of debt</td>
<td>Min 85%</td>
</tr>
<tr>
<td><strong>Exchange rate risk</strong></td>
<td></td>
</tr>
<tr>
<td>Share of domestic debt in the stock of debt</td>
<td>Min 20%</td>
</tr>
</tbody>
</table>
As cost indicators for a debt portfolio are used

- **Interest payments per unit of debt**-3.9%,
- **The nominal interest cost-to-nominal government revenues ratio**-6.3%,
- **The nominal interest cost-to-nominal GDP ratio**-1.5%.

<table>
<thead>
<tr>
<th>Risk measures</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed rate debt/total debt (%)</td>
<td>89.5</td>
</tr>
<tr>
<td>Share of debt refixing the interest rate in 1 year (%)</td>
<td>14.4</td>
</tr>
<tr>
<td>Average time to refixing (year)</td>
<td>8.4</td>
</tr>
<tr>
<td>Debt maturing in 1 year (%)</td>
<td>4.0</td>
</tr>
<tr>
<td>ATM (year)</td>
<td>9.7</td>
</tr>
<tr>
<td>Foreign currency debt/total debt (%)</td>
<td>85.6</td>
</tr>
<tr>
<td>Foreign currency current debt/foreign exchange reserves (%)</td>
<td>23.2</td>
</tr>
</tbody>
</table>
Cost and Risk Indicators of the government debt of Armenia at the end of 2015

Currency composition of debt

2000: 91.7% SDR, 8.3% USD, 0.0% EUR
2015: 85.6% SDR, 14.4% USD, 0.0% EUR

- Government debt denominated in local currency (AMD)
- Government debt denominated in foreign currency

Refinancing profile


- Government domestic debt, bln dram
- Government external debt, bln dram

JPY, 6.1%
AED, 0.2%
CNY, 0.5%

USD, 43.8%
SDR, 41.7%
EUR, 7.7%

JPY, 10.0%
AED, 0.2%
CNY, 0.5%
GBP, 4.7%
EUR, 23.3%
USD, 61.3%
The financing profile can pose risks to debt sustainability for market-access countries. Debt structure characteristics—maturity, currency composition, and the creditor base—can inform the assessment of debt sustainability.

- **A high share of short-term debt at original maturity, which may reflect the inability of certain sovereigns to issue long-term debt, and a high share of debt held by non-residents increases vulnerability to rollover and interest rate risks.**

- **A high share of foreign currency-denominated debt increases vulnerabilities to exchange rate adjustment and can put pressure on foreign exchange reserves.**

- **The nature of the creditor base—for example, whether it is diversified, reliable, captive, domestic, or foreign—also matters for rollover risk.**

- Debt distress events have typically been preceded by an increase in the shares of short-term debt and foreign currency-denominated debt and by an increase in external financing needs, which increase pressure on existing foreign exchange reserves.

- Bond spreads also tend to increase before debt distress episodes, although fluctuations in spreads may be related to a number of underlying factors associated with country-specific macroeconomic fundamentals and political risk, as well as other factors related to global financial conditions and investors’ preferences.
Distinctions between DSA and strategy

<table>
<thead>
<tr>
<th></th>
<th>DSA</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Fiscal policy</td>
<td>Debt Management</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Macroeconomic policy Department</td>
<td>Debt Management Department</td>
</tr>
<tr>
<td>Focus</td>
<td>Debt burden</td>
<td>Debt structure</td>
</tr>
<tr>
<td>Instrument</td>
<td>Primary balance</td>
<td>Cost and Risk</td>
</tr>
</tbody>
</table>

Common assumptions

- Projections of macroeconomic variables, including the future path of the primary balance,
- For projections of disbursements, it is recommendable to contact key creditors in order to receive information on their lending strategies,
- Not only the level of new borrowing, but also its terms affect a country’s debt sustainability. The source of debt structure and terms is the strategy.
MTDS in Armenia is based on these rules defined by the law on Public Debt

- Government debt as at December 31 of the year in question shall not exceed 60% of GDP of the previous year.

- Where Government debt as at December 31 of the year exceeds 50% of GDP of the previous year, the state budget deficit of the next year shall not exceed 3% of the annual average GDP for the previous three years.

- Government debt management strategy is included in the Medium Term Expenditures Framework (MTEF) according to the Law on Public Debt.

- The Ministry of Finance drafts and represents the annual budget law based on MTEF.
### Armenia Public DSA Risk Assessment

#### Heat map

<table>
<thead>
<tr>
<th>Debt level 1/</th>
<th>Real GDP Growth Shock</th>
<th>Primary Balance Shock</th>
<th>Real Interest Rate Shock</th>
<th>Exchange Rate Shock</th>
<th>Contingent Liability shock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross financing needs 2/</td>
<td>Real GDP Growth Shock</td>
<td>Primary Balance Shock</td>
<td>Real Interest Rate Shock</td>
<td>Exchange Rate Shock</td>
<td>Contingent Liability shock</td>
</tr>
<tr>
<td>Debt profile 3/</td>
<td>Market Perception</td>
<td>External Financing Requirements</td>
<td>Change in the Share of Short-Term Debt</td>
<td>Public Debt Held by Non-Residents</td>
<td>Foreign Currency Debt</td>
</tr>
</tbody>
</table>

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.
Armenia Public DSA Risk Assessment

Debt Profile Vulnerabilities
(Indicators vis-à-vis risk assessment benchmarks)

- Lower early warning
- Upper early warning

- Bond Spread over U.S. Bonds: 516 bp
- External Financing Requirement: 7%
- Annual Change in Short-Term Public Debt: 0.3%
- Public Debt Held by Non-Residents: 87%
- Public Debt in Foreign Currency: 87%