SOVEREIGN ASSET AND LIABILITY MANAGEMENT: HOW TO TAKE FINANCIAL ASSETS INTO ACCOUNT IN DESIGNING BORROWING STRATEGIES?

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Sovereign Asset and Liability Management:

How to take financial assets into account in designing borrowing strategies?

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The Importance of SALM Approach

- Substantial increase in sovereign financial assets
- Changes in composition of sovereign balance sheets
- Isolated management of sub-items
Main Components of General Government Balance Sheet

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
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</thead>
<tbody>
<tr>
<td>Cash invested</td>
<td>Payments Owing to Suppliers</td>
</tr>
<tr>
<td>PV of Future Fiscal Revenues</td>
<td>PV of Fiscal Expenditures</td>
</tr>
<tr>
<td>Foreign Exchange Reserves Held by the CB</td>
<td>Government Debt Stock</td>
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<tr>
<td>Sovereign Funds</td>
<td>PV of Contingent Liabilities</td>
</tr>
<tr>
<td>Investments in SOEs</td>
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<tr>
<td>Investments in Infrastructure</td>
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Sovereign Assets

- Financial Assets
  - Short-term
  - Long-term
- Non-financial Assets
Trends in Sovereign Financial Assets

- Many governments have more liquid (foreign) assets on their balance sheet than required for conventional foreign reserve management(*).
- The number of the wealth funds stands at more than 40 with the total amount of assets under management is estimated at around USD 2.6 trillion (**).

Trends in Sovereign Financial Assets

A large increase in level associated with a change in composition

A. Fiscal and current account surpluses
   • More return-oriented strategies
   • Mostly in foreign currency

B. Recent bail-out plans
   • ‘Toxic’ assets
   • Bank shares
   • Loans provided
Consideration of assets when making borrowing strategies

- Only cash type of assets
- Foreign currency assets
- Financial assets under DMOs management
- All financial assets
- Both financial and non-financial assets
Implications of sovereign assets for borrowing strategies

- Incorporating in borrowing requirement
- Matching financial characteristics
  - Maturity
  - Currency
  - Interest rate
- Smoothing Budget
- Increasing the net worth
Methods of approach for DMOs

- Integrating assets into borrowing strategy models – VaR, CaR
- Analysing financial characteristics
- Gap and duration analysis
- Scenario analysis, Stress tests
Practical Examples

- Aligning CB reserves in line with sovereign FX liabilities

- Issuing bonds indexed to/correlated with (part of) budget revenues
  - Inflation-linked bonds
  - Bonds indexed to SOE revenues
Some Constraints

- Different objectives of sovereign entities
  - i.e. possible differences in risk appetites
- Different methods of risk measurement
  - Market value based costs
  - Nominal cash-flow based costs
- Distinctive set of available instruments
- Mismatch in the size of assets and liabilities
Conclusions

- Increased role for integrated risk management: SALM
- Need to look for natural hedges in the sovereign balance sheet
- Scope of SALM should be carefully set
  - What assets and liabilities to include?