DISCUSSION POINTS

1. COMPONENTS OF THE SOVEREIGN BALANCE SHEET

2. FINANCIAL ASSETS AND LIABILITIES AND IMPACT ON RISK MINIMIZATION

3. STRUCTURE OF A COUNTRY’S ASSETS AND LIABILITIES AND IMPACT ON VULNERABILITY TO DEBT CRISIS
1. COMPONENTS OF SOVEREIGN BALANCE SHEET

The GFSM 2001 Overall Framework:

\[
\text{Net worth} = \text{Nonfinancial assets} + \text{Change in net financial worth} - \text{Financial assets} - \text{Liabilities}
\]

\[
\text{Change in net worth} = \text{Revenue} - \text{Expense}
\]

\[
\text{Change in net financial worth} = \text{Holding Gains and Losses in Assets & Liabilities} + \text{Other Economic Flows in Assets & Liabilities}
\]

\[
\text{Closing Balance Sheet} = \text{Opening Balance Sheet} + \text{Transactions} + \text{Other Economic Flows}
\]
1. COMPONENTS OF SOVEREIGN BALANCE SHEET

Definition: Financial Instrument

- Any **contract**;
- That gives rise to a **financial asset** of one entity;
- **And** a **financial liability** of another;
- **Or equity** instrument of another.

**Financial Asset:**

- Cash;
- An **equity** instrument of another entity;
- Contractual right to:
  - Receive cash or another financial asset from another entity; or
  - To exchange financial assets or a financial liability under conditions that are potentially **favourable**.
1. COMPONENTS OF SOVEREIGN BALANCE SHEET

**Definition: Financial Liabilities:**

Contractual obligation:
- to deliver cash or another financial asset to another entity; or
- to exchange financial assets or financial liabilities under conditions that are potentially unfavourable

**Definition: Equity**

- Contract;
- Evidences residual interest in the assets of an entity;
- After deducting all liabilities.
- Own equity instruments, not FI
1. COMPONENTS OF SOVEREIGN BALANCE SHEET

MEASUREMENT

• Financial instruments are generally either recognised at cost, amortised cost or fair value
• International private sector standards encourages fair value
• IPSAS has developed Financial instruments standard
• Currently varying degrees of disclosure and adherence to international best practice.
1. COMPONENTS OF SOVEREIGN BALANCE SHEET

RISK DISCLOSURE CURRENTLY ENCOURAGED IN INTERNATIONAL STANDARDS:

• Users to be able to evaluate nature and extent of risks arising from financial instruments &
• How managed by the entity
• Relate generally to credit, liquidity and market risk

Qualitative information
Disclose for each type of risk:
  – Exposures and how they arise
  – Objectives, policies and processes for managing risk and methods to measure risk
1. COMPONENTS OF SOVEREIGN BALANCE SHEET

RISK DISCLOSURE CURRENTLY ENCOURAGED IN INTERNATIONAL STANDARDS:

Quantitative information
For each type of risk disclose:

– Quantitative disclosure about the risk
– Don’t need to disclose if risk is immaterial
– Disclose concentrations of risk (e.g. counterparty, currency, market)
1. COMPONENTS OF SOVEREIGN BALANCE SHEET

THE SOUTH AFRICAN CONSOLIDATED BALANCE SHEET

- SA prepares consolidated set of central government accounts that includes the debt of national government
- Currently based on a modified cash principle
- Debt generally recognised at cost
- Guarantees to public sector intuitions included in disclosure notes (off balance sheet)
1. COMPONENTS OF SOVEREIGN BALANCE SHEET

CHALLENGES IN WITH THE SOVEREIGN BALANCE SHEET IF COMPARED TO THE PRIVATE SECTOR:

- Framework: Cash or Accrual basis
- Lack of clear definition of sovereign balance sheet
- Incomplete reporting
- Hurdles to consolidate all public sector balance sheets – impact on risk management
- Use of derivatives to manage risks (interest, exchange rates, inflation, credit) – reputational risk
- Valuation and accounting framework for measurement
FINANCIAL ASSETS & LIABILITIES: IMPACT ON RISK MINIMIZATION AND DIVERSIFICATION
2. FINANCIAL ASSETS AND LIABILITIES

Whilst closely linked, the objectives of managing the assets and liabilities are seldom coordinated.

- Main objective of **sovereign liability** management = ensure financing of the budget at lowest possible cost and acceptable level of risk.

- Main objective of **sovereign asset** management = ensure cash balances meet commitments and maximise purchasing power of long-term capital given level of risk.

- Economic vs accounting classification
- Value of assets and liabilities depends on which accounting measure is used (fair value, historical cost, etc)
- Non-financial assets and liabilities are generally NOT included in the Sovereign balance sheet (consistent with IMF’s GFSM) (example Fixed assets, Inventory, etc)
2. FINANCIAL ASSETS AND LIABILITIES

A) FINANCIAL ASSETS
Definition: Cash, residual interest in another entity, or the contractual right to receive cash/fin asset or exchange financial assets/liab at favourable conditions
Sovereign Balance sheet includes:
- Cash and deposits
- Securities
- Shares and equity
- Reserves
- Financial Assets & derivatives
- Monetary Gold and foreign reserves

B) FINANCIAL LIABILITIES
Definition: Contractual obligation to deliver Cash/fin asset or exchange fin asset/liab at potential unfavourable conditions
Sovereign Balance sheet includes:
- Loans – current and non-current
- Financial liabilities & derivatives
- Pension Liabilities
- Contingent liabilities and guarantees
- Bank overdrafts and payables
2. FINANCIAL ASSETS AND LIABILITIES

RISK MINIMIZATION FACTORS:

**Government Liabilities management**
- a) Debt level and cost of debt
- b) Access to funding and debt structure
- c) Contingent liabilities (guarantees and other off-balance sheet liabilities)

**Government Asset management**
- a) Ability to collect taxes
- b) Minimising liquidity and credit risk
- c) Maximising returns on investments

Depth of capital market
2. FINANCIAL ASSETS AND LIABILITIES

a) Debt level and cost of debt

Factors underpinning the sovereign’s debt burden are:

- Debt relative to GDP
- Interest costs relative to government revenue
- Debt structure and funding access
b) Access to funding and debt structure

The following factors influence investors in a country’s debt:
- Percentage of debt to GDP
- Significant exposure to exchange rate movements and refinancing risk
- % of debt denominated in another currency and average maturity shorter than 3 years
- Non-residents hold consistently large % of debt
- Large share of country’s banking sector is exposed to government via loans, securities, guarantees
- Economic policy and sustainable, credible economic growth
- Monetary policy credible and effective
2. FINANCIAL ASSETS AND LIABILITIES

c) Contingent liabilities (guarantees and other off-balance sheet liabilities)

Historically governments have used outstanding debt as the source of total liabilities.
Governments actually undertakes a number of explicit functions that results in contingent liabilities for them.
The debt management strategy of government should therefore include an understanding of the magnitude and nature of potential draws on the budgetary resources from these contingencies.
Regardless of legal requirement, governments may be forced into provide funding, example natural disaster, terrorist attacks.
Privatization of infrastructure projects has also become a significant source of exposure, example construction of roads, where government had to step in to fund the companies set up to provide infrastructure.
Governments should put in place a framework to monitor these.
### 2. FINANCIAL ASSETS AND LIABILITIES

#### Government Exposures to Contingent liabilities

<table>
<thead>
<tr>
<th>Source</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicit legal liabilities</td>
<td>• Public debt</td>
</tr>
<tr>
<td></td>
<td>• Employee and veteran benefits payable</td>
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<tr>
<td></td>
<td>• Accounts payable</td>
</tr>
<tr>
<td></td>
<td>• Insurance claims payable</td>
</tr>
<tr>
<td>Explicit financial commitments</td>
<td>• Undelivered orders</td>
</tr>
<tr>
<td></td>
<td>• Long-term leases</td>
</tr>
<tr>
<td></td>
<td>• Obligations under long-term contracts</td>
</tr>
<tr>
<td>Explicit financial contingencies</td>
<td>• Government loan and credit guarantees</td>
</tr>
<tr>
<td></td>
<td>• National insurance programs (bank deposits, crop, flood, etc.)</td>
</tr>
<tr>
<td>Expectations for spending stemming from potential / moral claims</td>
<td>• Future benefits under social insurance</td>
</tr>
<tr>
<td></td>
<td>• Purchase of capital assets may result in future maintenance</td>
</tr>
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<td></td>
<td>• Bailout of large institutions to reduce losses from default (banks, state owned entities)</td>
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<td></td>
<td>• Disaster relief – catastrophes such as earthquakes, hurricanes, terrorist attacks</td>
</tr>
</tbody>
</table>
2. FINANCIAL ASSETS AND LIABILITIES

Best practices for dealing with Government Contingent risks:

a) Establish direct control over these contingencies
   - Establish policies and procedures for budget, monitoring and controlling
b) Develop risk management systems
   - Improved techniques for probability and risk focussed
c) Increase transparency
   - Identify and improve understanding – raise awareness
d) Possible “audit” of exposures
   - Assessing country’s long-term fiscal sustainability
e) Reporting exposures in Financial statements
   - Publishing supplemental information on fiscal exposures would improve transparency
f) Review of long-term budgetary implications
   - Identify best practices for identifying, measuring and reporting of exposures
STRUCTURE OF A COUNTRY’S ASSET & LIABILITY POSITION AND HOW IT IMPACTS ON DEBT CRISIS.
3. VULNERABILITY TO DEBT CRISIS

As a result of monetary crisis affecting several emerging market economies, the study of vulnerability has become a priority. Countries should be aware of these indicators and have monitoring abilities.

**Vulnerability Indicators:**

a) Indicators of external and domestic debt
   - Debt maturity profiles, sensitivities, debt repayment capacity
b) Indicators of reserves adequacy
   - Assessment of ability to avert liquidity crises
c) Financial Soundness indicators
   - Assess strengths and weaknesses of countries’ financial sectors, market risks, etc
3. VULNERABILITY TO DEBT CRISIS

A) INDICATORS FOR DEBT

- DEBT BALANCE / DOMESTIC REVENUES
  Measures indebtedness and payment capacity
- DEBT SERVICE COST / DOMESTIC REVENUES
  Measures government’s ability to service debt. Debt service = capital and interest
- INTEREST COST / GDP
  Show burden of interest
- DEBT BALANCE / GDP
  Measures level of indebtedness and position to repay
- DURATION OF DEBT
  Interest rate sensitivity

Rating agencies also have methodologies to closely monitor.
## 3. VULNERABILITY TO DEBT CRISIS

<table>
<thead>
<tr>
<th>Vulnerability Indicator</th>
<th>International Debt Relief *</th>
<th>International Monetary Fund **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Service /income</td>
<td>28%-63%</td>
<td>25%-35%</td>
</tr>
<tr>
<td>Debt PV/income</td>
<td>88%-127%</td>
<td>200%-300%</td>
</tr>
<tr>
<td>Interest/income</td>
<td>4.6%-6.8%</td>
<td>7%-10%</td>
</tr>
<tr>
<td>Debt/GDP</td>
<td>20%-25%</td>
<td>25%-30%</td>
</tr>
<tr>
<td>Debt/Income</td>
<td>92%-167%</td>
<td>90%-150%</td>
</tr>
</tbody>
</table>

** International Monetary Fund, Foreign Affairs Department: Technical Note “Vulnerability Indicators”, April 30, 2003 and several research documents.
3. VULNERABILITY TO DEBT CRISIS

Examples of weaknesses of the government’s balance sheet

1. Mexico (‘94-’95)

   Loss of confidence in economic potential and payment capacity. Debt managers did not properly incorporate weakening economic fundamentals into debt strategy. Peso devalued, economy collapsed and debt service charges increased.

   Sound and appropriate risk management could have guided debt managers, more credible and transparent information was needed.

2. Southeast Asian Crisis (1997)

   Huge reversal of capital flows, had unprecedented growth just before crisis. Outdated banking rules, poor risk management and supervision, unhedged foreign currency exposure – fundamentals deteriorated, withdrawal of credit lines, run on banks

   Must focus on private sector and other obligations as well (banks, etc).

   Private sector balance sheet can impact on government
3. VULNERABILITY TO DEBT CRISIS


After breakdown of soviet union, numerous challenges. Government borrowed extensively with debt service cost totalling almost half of tax revenues. Difficulty rolling over debt, then defaulted on debt, too much short term debt.

Sound risk management procedures and extending maturity of debt could have assisted. Monitor market risks and impact on country.

Role of vulnerability indicators:

- Early warning of problems – even though based on past events, give indication of future
- Foresee incoming market shocks and stress in market place
- Overall sense of well-being of country and robustness
QUESTIONS?