Meeting of the IMF Government Finance Statistics Advisory Committee
Washington, D.C.

Practical Methodological Issues in the Valuation of Stock Positions in Financial Assets

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Practical Methodological Issues in the Valuation of Stock Positions in Financial Assets

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Questions for Discussion
Evaluating Net Financial Worth and Net Debt requires understanding the actual value of the government’s financial assets.

Most governments own policy-related debt securities, loans, and equity to support strategic corporations or help particular industries.

….but, amounts reported / presented sometimes reflect political economy considerations rather than GFS/SNA and IPSAS guidance.

Shortcomings in the amount and quality of the information may limit their analytical usefulness for GFS financial balance sheet.

Is further work needed to (i) develop a better understanding of the obstacles and opportunities, and (ii) provide guidance and recommendations on common problematic areas?
A robust financial balance sheet as prerequisite for fiscal analysis, including debt sustainability analysis (DSA) and intersectoral balance sheet analysis (BSA).

While advanced economies generally report financial balance sheets, progress among developing and emerging economies remains slow.

Among the approximately 130 countries reporting annual GFS to STA, 66 countries reported stock positions in financial assets. Several countries are providing data for either budgetary or consolidated central government.
Reporting Financial Assets for the GFSY: Instruments

Composition of general government financial assets, by instrument, 2007-2017
Percentage of total financial assets

- Currency and deposits
- Debt securities
- Loans
- Equity and investment fund shares
- OAR, IPSG, FD&ESO, MG&SDRs

Countries: Australia, Brazil, Canada, Japan, Norway, Peru, Russian Federation, Switzerland, United Kingdom, United States, Uruguay
Metadata on valuation of FA refers to financial assets generally, not to specific instruments, should this metadata be made more granular? Cambodia example.....
## Metadata on Valuation of Financial Assets: Cambodia

Current status in the database:

**Nominal Value**

<table>
<thead>
<tr>
<th>Balance of Payments Account</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Nominal Value

- **Financial assets [621+622]**
  - **2014**: 6,264,496.0
  - **2015**: 8,805,877.9
  - **2016**: 11,134,415.3
  - **2017**: 13,668,046.6

### Acquisition Cost

- **Currency and deposits [6212]**
  - **2014**: 3,336,849.9
  - **2015**: 5,195,428.3
  - **2016**: 7,134,562.8
  - **2017**: 9,007,211.3

- **Debt securities [6213]**
  - **2014**: 8,273.5
  - **2015**: 8,273.5
  - **2016**: 8,273.5
  - **2017**: 8,273.5

- **Loans [6214]**
  - **2014**: 2,470,809.4
  - **2015**: 2,920,850.0
  - **2016**: 3,517,090.2
  - **2017**: 4,255,232.6

- **Equity and investment fund shares [6215]**
  - **2014**: 0.0
  - **2015**: 5,046.3
  - **2016**: 10,316.1
  - **2017**: 27,668.1

- **Insurance, pension, and standardized guarantee schemes [6216]**
  - **2014**: 0.0
  - **2015**: 5,046.3
  - **2016**: 10,316.1
  - **2017**: 27,668.1

- **Financial derivatives and employee stock options [6217]**
  - **2014**: 0.0
  - **2015**: 5,046.3
  - **2016**: 10,316.1
  - **2017**: 27,668.1

- **Other accounts receivable [6218]**
  - **2014**: 447,028.2
  - **2015**: 376,279.4
  - **2016**: 464,172.8
  - **2017**: 569,651.1

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Should GFS metadata seek better disclosure of the valuation base(s) used by national compilers?
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Challenges in Valuing Financial Assets – Loans and Equity

Difference between financial investments and expenses

- **Financial assets represent a claim** and entitle the holder to receive an agreed sum at an agreed date

  Need to identify an effective claim in case of loans or equity injections

- **Policy lending has a different motivation** from commercially motivated lending

  “Overall fiscal balance” as a supplementary fiscal indicator

- Authorities not always keen to adopt GFS definitions “for policy purposes”

  All lending is considered recoverable and investment-related
Challenges in Valuing Financial Assets - Loans

Government loan portfolio contains a number of nonperforming loans

GFSM 2014 identifies Nonperforming Loans as those for which:

(i) payments of principal and/or interest are past due by three months (90 days) or more; or
(ii) interest payments equal to three months (90 days) interest or more have been capitalized (reinvested to the principal amount) or payment has been delayed by agreement; or
(iii) evidence exists to reclassify a loan as nonperforming even in the absence of a 90-day past due payment, such as when the debtor files for bankruptcy.

Two memorandum items to the GFS balance sheet are recommended (but not currently used):

(i) nominal value of nonperforming loans and
(ii) fair value of nonperforming loans, considered as a market-equivalent value.

In the absence of fair value data, may show nominal value less expected loan losses.
Valuation of Loans as Financial Assets: Mongolia

Ongoing TA has highlighted actual composition and value of loans as assets...

The stock position in loans largely (79%) consists of borrowed and on-lent funds, adjusted for nonperforming loans.

<table>
<thead>
<tr>
<th>Ending balance of on-lending</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Govt. owned enterprises</td>
<td>338.02</td>
</tr>
<tr>
<td>Non-performing</td>
<td>40.47</td>
</tr>
<tr>
<td>Performing</td>
<td>297.55</td>
</tr>
<tr>
<td>State (CG) owned enterprises</td>
<td>1,172.51</td>
</tr>
<tr>
<td>Non-performing</td>
<td>262.59</td>
</tr>
<tr>
<td>Performing</td>
<td>909.92</td>
</tr>
<tr>
<td>Private sector enterprises</td>
<td>659.15</td>
</tr>
<tr>
<td>Non-performing</td>
<td>294.63</td>
</tr>
<tr>
<td>Performing</td>
<td>364.52</td>
</tr>
<tr>
<td>Grand Total</td>
<td>2,169.68</td>
</tr>
<tr>
<td>Total Nonperforming loans</td>
<td>597.69</td>
</tr>
</tbody>
</table>

Currently missing Memorandum items in GFSY Questionnaire...
No observable market prices for unlisted shares and other equity positions

_GFSM 2014_ indicates that **Equity** may be subdivided into listed shares, unlisted shares, and other equity.

If no observable market prices, an estimate is required:

- information from the stock market on similar listed shares
- alternative methods as outlined in 2008 SNA:
  - recent transaction price, net asset value, present value/price to earnings ratios, book values reported by enterprises with macro-level adjustments by the statistics compilers, own funds at book value, and apportioning global value

*Should GFS metadata seek better disclosure of the valuation method(s) used by national compilers?*
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International Public Sector Accounting Standards

IPSAS 41 *Financial Instruments (August 2018)* - specific requirements for classifying, recognizing and measuring financial instruments

- At initial recognition an entity shall measure a financial asset at its fair value. In subsequent measurement an entity shall measure a financial asset at (i) amortized cost, (ii) fair value through net assets/equity, and (iii) fair value through surplus or deficit.

  Fair value: the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

IPSASB Consultation Paper *Measurement (April 2019)* - more detailed guidance on the implementation of commonly used measurement bases, and the circumstances under which these measurement bases will be used

*Relevance for eventual update of the GFSM 2014?*
International Valuation Standards (IVS)

The General Standards (IVS 101-IVS 105) and specific Asset Standard IVS 500 apply to valuation of financial instruments

- IVS 104 defines the following bases of value: Market Value, Market Rent, Equitable Value, Investment Value/Worth and Synergic Value. In addition, according to IVS 105, there are three principal valuation approaches: market approach, income approach, and cost approach.

- IVS 500 draws special attention to credit risk adjustments in valuing a financial instrument and proposes some factors that need to be considered, including counterparty risk, default protection arrangements, and other factors.

Relevance for eventual update of the GFSM 2014?
Additional Guidance for Valuing Nonperforming Loans and Unquoted Equity

Assessing nonperforming character of a loan

- financial analysis of the debtor
- amount, structure and use of government financial support over 3-5 years
- risk analysis

Determining net assets/equity

- limited availability and low quality of financial information
- necessary adjustments to source data

Relevance for eventual update of the GFSM 2014?
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Questions for the GFSAC Committee

Do members support:

1) enhancing the provision of metadata on financial assets aimed at improving time series data, including valuation bases for specific financial instruments?

2) adding two memorandum items for nonperforming loans (nominal value and fair/market value) to the Annual GFS Questionnaire, Table 6?

Do members have specific recommendations for countries seeking to establish the value of:

1) the government loan portfolio if it contains a substantial number of nonperforming loans?

2) positions in equity and investment fund shares for entities that are not on an active exchange?

3) policy lending in contrast to lending for investment?