



STATISTICS

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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

SEPTEMBER 12, 2019

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Relevance of Financial Assets

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?

Financial Balance Sheets

Context.....

A robust financial balance sheet as prerequisite for fiscal analysis, including debt sustainability analysis (DSA) and intersectoral balance sheet analysis (BSA)

Experience.....

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

In terms of FY 2017

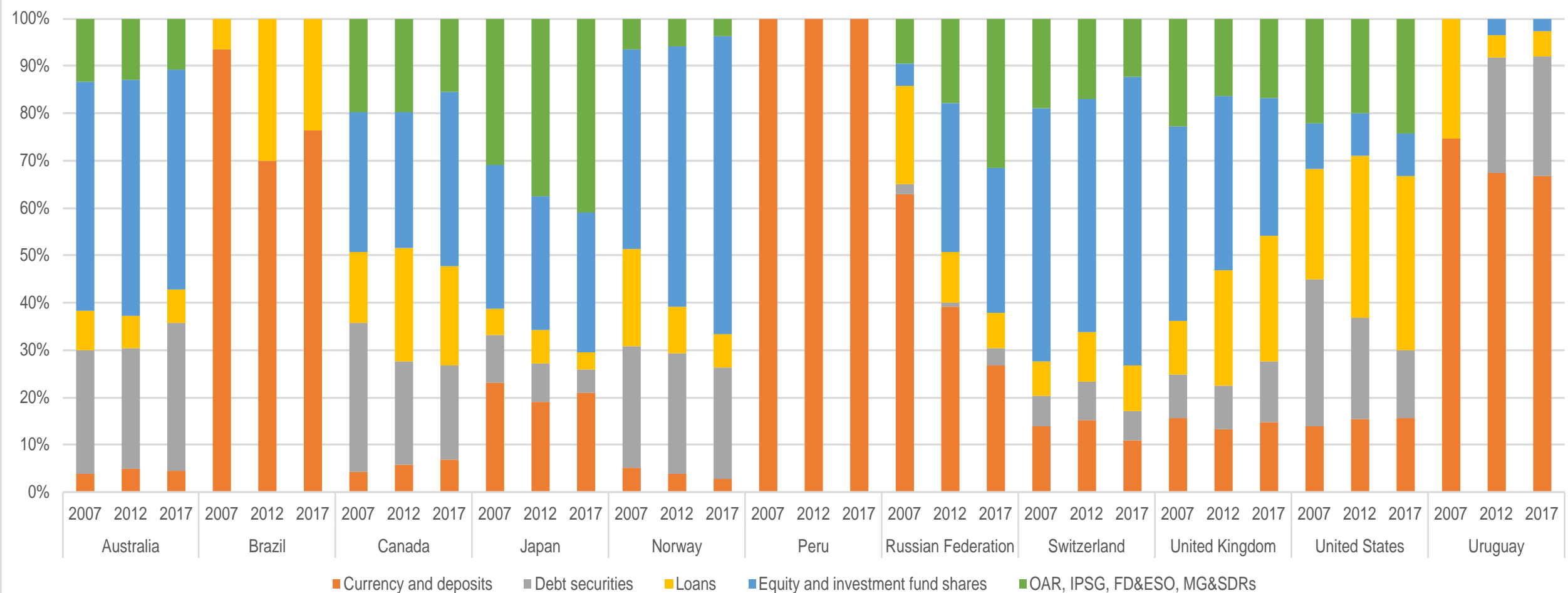
Among the approximately 130 countries reporting annual GFS to STA, 66 countries reported stock positions in financial assets

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



Reporting Financial Assets for the GFSY: Metadata on Valuation of Financial Assets, 2017

NATURE OF DATA AND ACCOUNTING PRACTICES	
Nature of the data (Actual / Final, Preliminary or Estimated)	<i>A, P, or E?</i>
Bases of recording: revenue (Table 1)	<i>CA or AC?</i>
Bases of recording: expense (Table 2)	<i>CA or AC?</i>
Bases of recording: investment in nonfinancial assets (Table 3)	<i>CA or AC?</i>
Bases of recording: financial transactions (Table 3)	<i>CA or AC?</i>
Bases of recording: Investment in nonfinancial assets (Table 3)	<i>GR or NT?</i>
Valuation of nonfinancial assets (Table 6)	<i>MV, HV, or BV?</i>
Valuation of financial assets (Table 6)	<i>MV, NV, or FV?</i>
Valuation of liabilities (Table 6)	<i>MV, NV, or FV?</i>

89 countries reported metadata on FA:

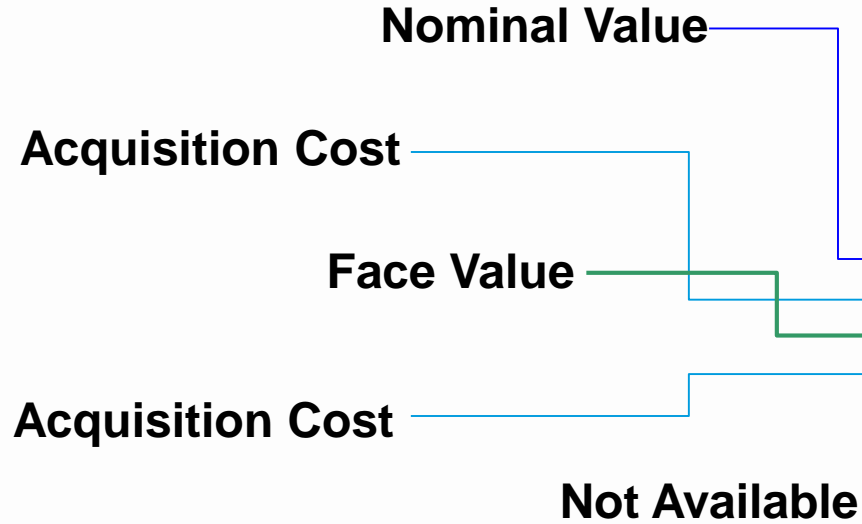
MV	NV	FV	NA
44	15	14	16
49%	17%	16%	18%

} valuation bases by subsectors of government

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



BALANCE SHEET ^{a/}		2014	2015	2016	2017
<i>Accounting method:</i>		<i>Non Cash</i>	<i>Non Cash</i>	<i>Non Cash</i>	<i>Non Cash</i>
62	Financial assets [621+622]	6,264,496.0	8,805,877.5	11,134,415.3	13,868,046.6
6201	Monetary gold and SDRs .....	...	...	...	...
6202	Currency and deposits [6212+6222]	3,338,384.9	5,495,428.3	7,134,562.8	9,007,211.3
6203	Debt securities [6213+6223]	8,273.5	8,273.5	8,273.5	8,273.5
6204	Loans [6214+6224]	2,470,809.4	2,920,850.0	3,517,090.2	4,255,232.6
6205	Equity and investment fund shares [6215+6225]	0.0	5,046.3	10,316.1	27,668.1
6206	Insurance, pension, and standardized guarantee schemes [6216+6226] .....	...	...	...	...
6207	Financial derivatives and employee stock options [6217+6227] .....	...	...	...	...
6208	Other accounts receivable [6218+6228]	447,028.2	376,279.4	464,172.8	569,661.1
621	Domestic	6,264,496.0	8,805,877.5	11,134,415.3	13,868,046.6
6212	Currency and deposits	3,338,384.9	5,495,428.3	7,134,562.8	9,007,211.3
6213	Debt securities	8,273.5	8,273.5	8,273.5	8,273.5
6214	Loans	2,470,809.4	2,920,850.0	3,517,090.2	4,255,232.6
6215	Equity and investment fund shares	0.0	5,046.3	10,316.1	27,668.1
6216	Insurance, pension, and standardized guarantee schemes .....	...	...	...	...
6217	Financial derivatives and employee stock options .....	...	...	...	...
6218	Other accounts receivable	447,028.2	376,279.4	464,172.8	569,661.1



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...

Mongolia		2016	2017	2018
		General Government	General Government	General Government
6	NET WORTH	-2,016.2	-2,075.7	4,101.4
61	Nonfinancial assets	11,037.6	11,893.5	18,785.8
62	Financial assets of which:	6,109.8	6,976.6	6,673.2
6202	Currency and deposits	1,934.6	2,717.4	2,020.5
6204	Loans	1,549.8	1,584.3	1,984.0
6205	Equity and investment fund shares	1,068.2	1,101.0	1,179.6
6208	Other accounts receivable	1,557.2	1,555.3	1,489.2
621	Domestic	5,708.0	6,362.8	6,353.9
622	Foreign	401.8	595.2	319.3
63	Liabilities of which:	19,163.6	20,945.8	21,357.6
6303	Debt securities	11,036.1	11,064.1	9,262.4
6304	Loans	7,555.9	9,316.8	11,326.1
6308	Other accounts payable	571.6	564.9	769.1
631	Domestic	6,532.3	4,074.4	2,392.8
632	Foreign	12,631.3	16,871.5	18,964.9
Memorandum items:				
6M2	Net financial worth [=62-63]	-13,053.8	-13,969.2	-14,684.4
6M3	Debt at market value	NA	NA	NA
6M3	Debt at nominal value	19,163.6	20,945.8	21,357.6
6M37	Net Debt at nominal value	14,122.0	15,088.8	15,864.0
6M8	Nonperforming loans at fair value	550.0	557.1	597.7
6M81	Nonperforming loans at market value	NA	NA	NA

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

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

Currently missing Memorandum items in GFSY Questionnaire

Challenges in Valuing Financial Assets - Equity



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 assets 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?*