



STATISTICS

Webinar on the Implementation of 2019 FSI Guide

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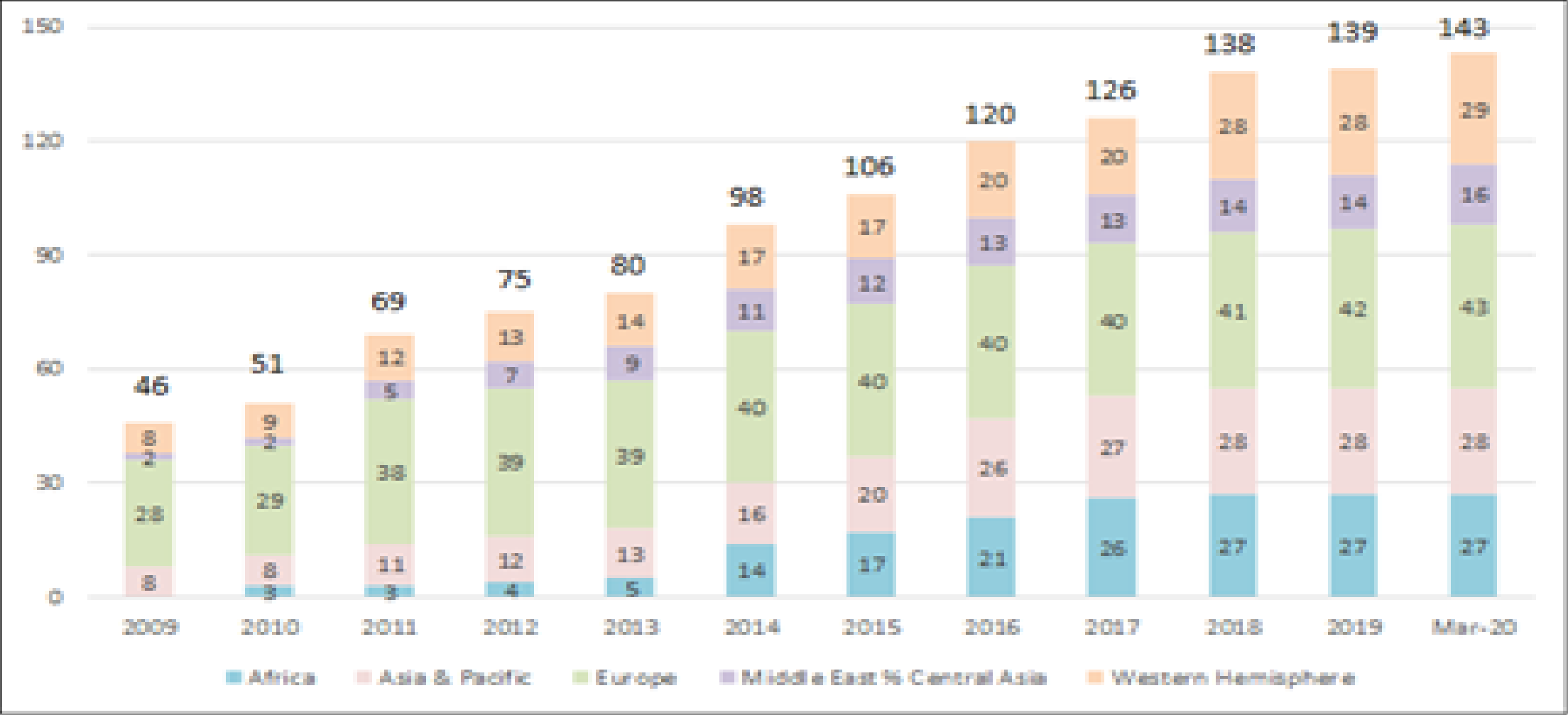
24 November 2020

Overview

- The State of Play
- Factors behind the FSI Update
- FSI: Before and After
- Concentration and Distribution Measures
- Structure of new report forms
- The Migration



Stay of Play: Number of FSI reporters



Why a new FSI Guide?

The global financial crisis

- a recognition of the need to improve our tools to track macro-financial vulnerabilities

The crisis led to reforms in regulatory and accounting standards

- Regulation (Basel III Accord)
- Accounting (IFRS 9)
- And a recognition of the need for/to
 - ▶ indicators to better gauge DT buffers vs. expected and unexpected losses
 - ▶ develop new FSIs for Other Financial Corporations (shadow banking)
 - ▶ strengthen the FSIs for NonFinancial Corporations and Households

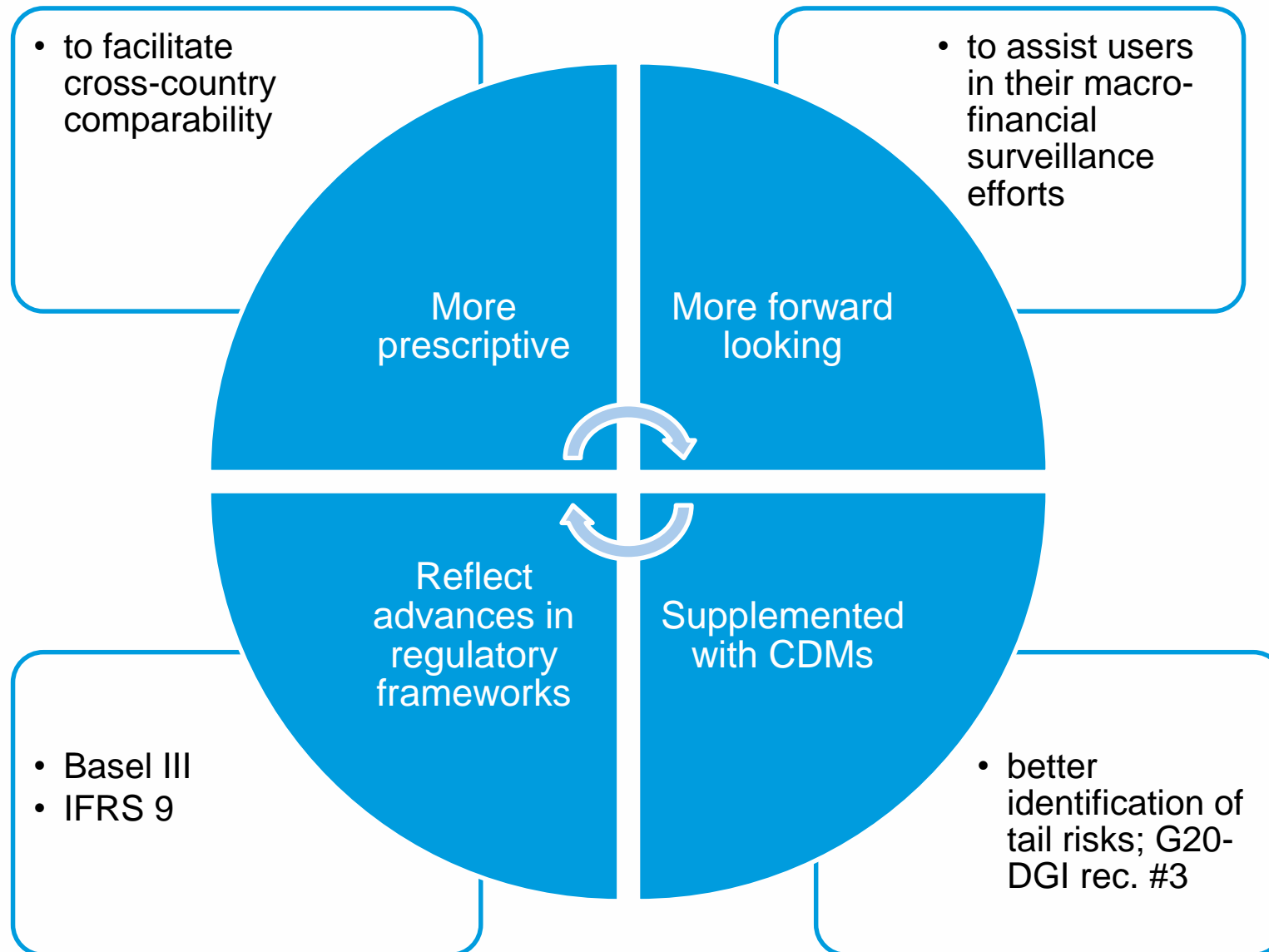
Why a new FSI Guide?

The G20 Data Gaps Initiative (DGI) => monitoring financial risks a priority.

- Recommendation #2:
 - ▶ called for a revision of the list of FSIs

- Recommendation #3:
 - ▶ called for the IMF to investigate CDM for selected FSIs

Main changes



FSIs: Before and After

The Current List of FSIs:

- 12 core FSIs for DTs
- 13 additional FSIs for DTs

- 2 additional FSIs for OFCs

- 5 additional FSIs for NFCS
- 2 additional FSIs for Households
- 2 additional FSIs for Market liquidity
- 4 additional FSIs for Real Estate Markets

The Revised List of FSIs: 18 Core and 35 Additional

- 17 core FSIs for DTs
- 1 core FSI for Real Estate Markets
- 12 additional FSIs for DTs

- 10 additional FSIs for OFCs
 - ▶ 2 OFC sectors
 - ▶ 4 Insurance corporations
 - ▶ 2 Pension funds
 - ▶ 2 Money market funds

- 7 additional FSIs for NFCS
- 3 additional FSIs for Households
- 3 additional FSIs for Real Estate Markets

FSIs for DTs: Before and After

Core FSIs for DTs

Four new FSIs

- CET1 capital to risk-weighted assets
- Provisions to nonperforming loans
- Liquidity coverage ratio
- Net stable funding ratio

One FSI moved from the additional to the core set

- Capital to assets (renamed as Tier 1 capital to asset)

FSIs for DTs: Before and After

Additional FSIs for DTs

One additional

- Credit growth to the private sector

One deletion

- Net open position in equities to capital

A Closer Look

FSIs for DTs: Before and After

Balance Sheet
14. Total assets (= 15 + 16 = 23 + 31)
15. Nonfinancial assets
16. Financial assets (= 17 through 22)
17. Currency and deposits
18. Loans (after specific provisions) (= 18.i – 18.ii)
i. Gross loans ¹
i.i. Interbank loans ²
i.i.i. Resident
i.i.ii. Nonresident
i.ii. Noninterbank loans
i.ii.i. Central bank
i.ii.ii. General government
i.ii.iii. Other financial corporations
i.ii.iv. Nonfinancial corporations
i.ii.v. Other domestic sectors
i.ii.vi. Nonresidents ³
ii. Specific provisions ³
19. Debt securities ¹
20. Equity and investment fund shares
21. Financial derivatives ¹
22. Other financial assets ¹
23. Liabilities (= 28 + 29 + 30)
24. Currency and deposits
i. Customer deposits
ii. Interbank deposits ²
ii.i. Resident
ii.ii. Nonresident
iii. Other currency and deposits
25. Loans
26. Debt securities
27. Other liabilities
28. Debt (= 24 through 27)
29. Financial derivatives and employee stock options
30. General and other provisions
31. Capital and reserves
32. Balance sheet total (=23 + 31 = 14)

FSIs for DTs: Before and After

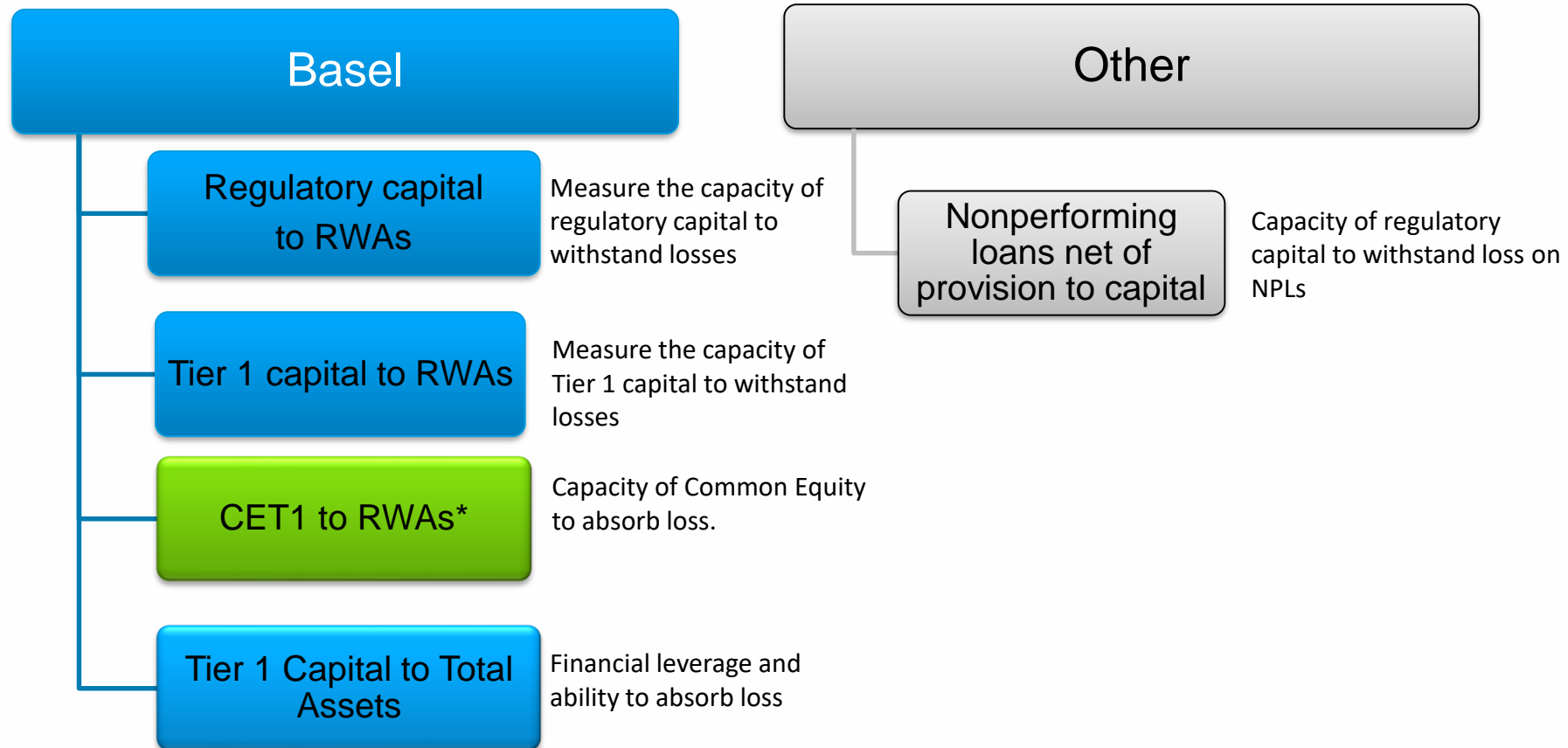
Memorandum Series
Other series required to calculate FSIs:
Supervisory-based series
33. Tier 1 capital less corresponding supervisory deductions ⁴
34. Common Equity Tier 1 (CET1) capital less corresponding supervisory deductions ⁴
35. Additional Tier 1 (AT1) capital less corresponding supervisory deductions ⁴
36. Tier 2 capital less corresponding supervisory deductions
37. Tier 3 capital
38. Other supervisory deductions ⁵
39. Total regulatory capital (= 33 + 36+ 37- 38)
40. Risk-weighted assets
41. Basel III total exposure measure
42. High-quality liquid assets
43. Total net cash outflows over the next 30 calendar days
44. Available amount of stable funding
45. Required amount of stable funding
46. Large exposures
Series that provide a further analysis of the balance sheet:
47. Liquid assets
48. Short-term liabilities
49. Nonperforming loans
50. Residential real estate loans
51. Commercial real estate loans

52. Geographic distribution of loans ⁶
(i) Domestic economy
(ii) Advanced economies
(iii) Emerging market and developing economies
ii.i. Emerging and developing Asia
ii.ii. Emerging and developing Europe
ii.iii. Latin America and the Caribbean
ii.iv. Middle East and Central Asia
ii.v. Sub-Saharan Africa
53. Foreign currency loans
54. Foreign currency liabilities
55. Net open position in foreign currency for on-balance-sheet items
56. Total net open position in foreign currency
57. Credit to the private sector
58. Loan concentration by economic activity
59. Reference lending rates
60. Reference deposit rates
61. Highest interbank rate
62. Lowest interbank rate
Data series for compiling FSIs: ROA and ROE
63. Annualized net income before taxes
64. Annualized net income after taxes
65. Average total assets
66. Average capital and reserves

FSIs for DTs: Before and After

Capital Adequacy

Analytic value: a gauge of the robustness of financial institutions to withstand shocks to their balance sheets



* New FSI

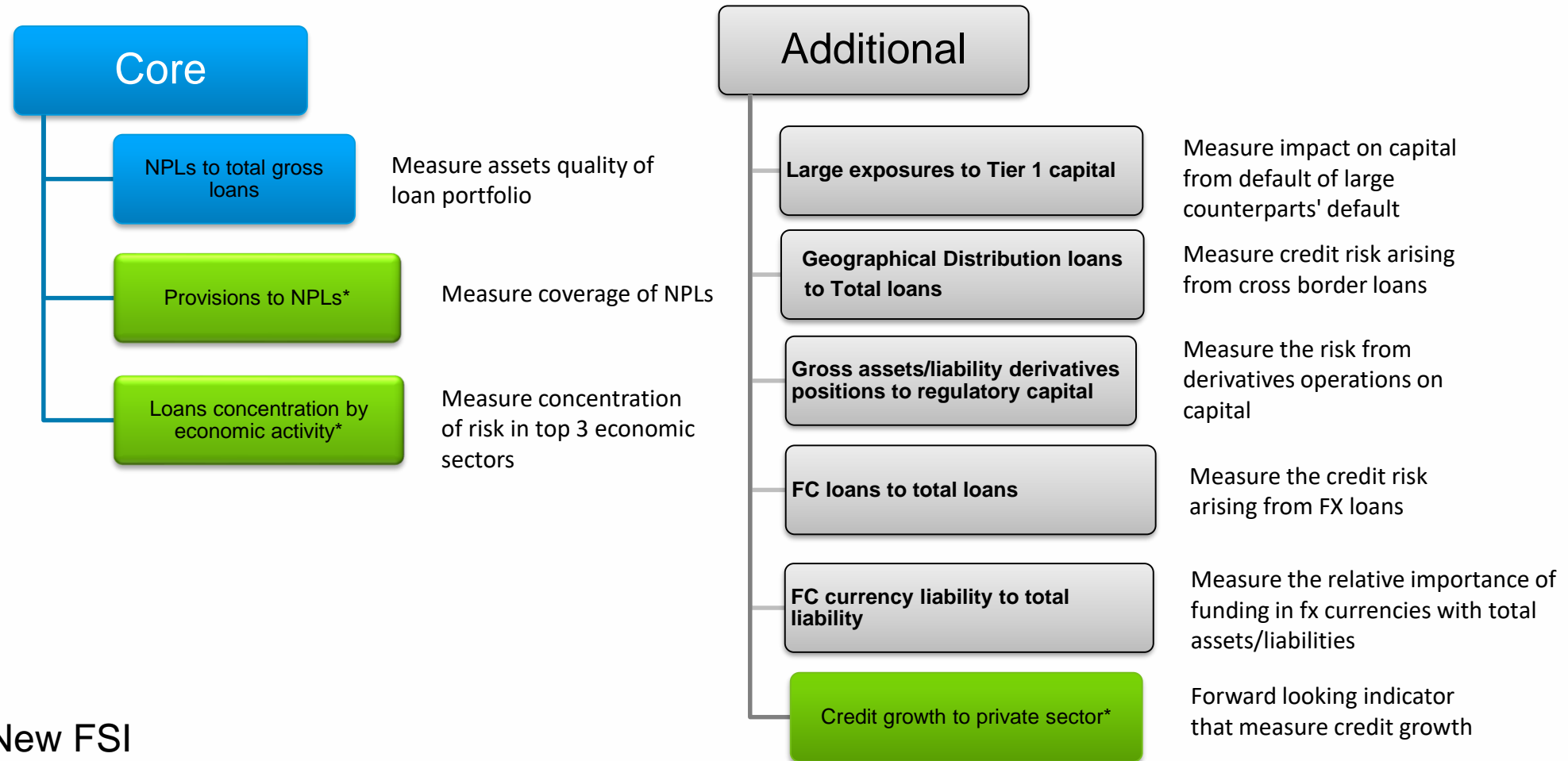
FSIs for DTs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
Core			
Capital	Regulatory capital to risk-weighted assets	Regulatory capital to risk-weighted assets	<ul style="list-style-type: none"> • Numerator: No change • Denominator: No change
	Regulatory Tier 1 capital to risk-weighted assets	Regulatory Tier 1 capital to risk-weighted assets	<ul style="list-style-type: none"> • Numerator: No change • Denominator: No change
		CET-1 capital to risk-weighted assets	<ul style="list-style-type: none"> • New FSI • Numerator: CET1 • Denominator: Risk-weighted assets
	Capital to assets	Tier-1 capital to assets	<ul style="list-style-type: none"> • Numerator: Tier 1 capital • Denominator: No change • For country implementing Basel III leverage ratio, denominator is total Basel III's exposure measures
	Nonperforming loans net of provisions to capital	Nonperforming loans net of provisions to capital	<ul style="list-style-type: none"> • Specific provisions are defined as provisions on NPLs. • Provision on performing loans should be reported in general and other provisions on the liability side of the balance sheet. • Numerator: No change • Denominator: Total regulatory capital

FSIs for DTs: Before and After

Asset Quality

Analytic value: a measure of risks to deposit takers' solvency arising from asset quality impairment



* New FSI

FSIs for DTs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
Core			
Asset Quality	Nonperforming loans to total gross loans	Nonperforming loans to total gross loans	<ul style="list-style-type: none"> • Numerator: No change • Denominator: No change
		Provisions to nonperforming loans	<ul style="list-style-type: none"> • New FSIs • Specific provisions are defined as provisions on NPLs. • Provisions on performing loans should be reported in general and other provisions on the liability side of the balance sheet. • Numerator: Specific provisions • Denominator: NPLs
	Sectoral distribution of loans	Loan concentration by economic activity	<ul style="list-style-type: none"> • Replaced by FSI on loan concentration by economic activity • Economic activity is defined as per United Nation's International Standard Industrial Classification of All Economic Sector Activities (ISIC). • Numerator: Loans to the top 3 economic sectors • Denominator: Gross loans to nonfinancial corporations

FSIs for DTs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
	Additional		
Asset Quality	Large exposures to capital	Large exposures to capital	<ul style="list-style-type: none"> • Large exposures are defined as per BCBS's framework • Numerator: All credit exposures to single or group of related borrowers after deduction of credit mitigants that exceed 10 percent of Tier 1 capital • Denominator: Tier 1 capital
	Geographical distribution of loans	Geographical distribution of loans	<ul style="list-style-type: none"> • Numerator: WEO regional country classification • Denominator: No change
	Gross asset position in financial derivatives to capital	Gross asset position in financial derivatives to capital	<ul style="list-style-type: none"> • Numerator: No change • Denominator: Total regulatory capital
	Gross liability position in financial derivatives to capital	Gross liability position in financial derivatives to capital	<ul style="list-style-type: none"> • Numerator: No change • Denominator: Total regulatory capital

FSIs for DTs: Before and After

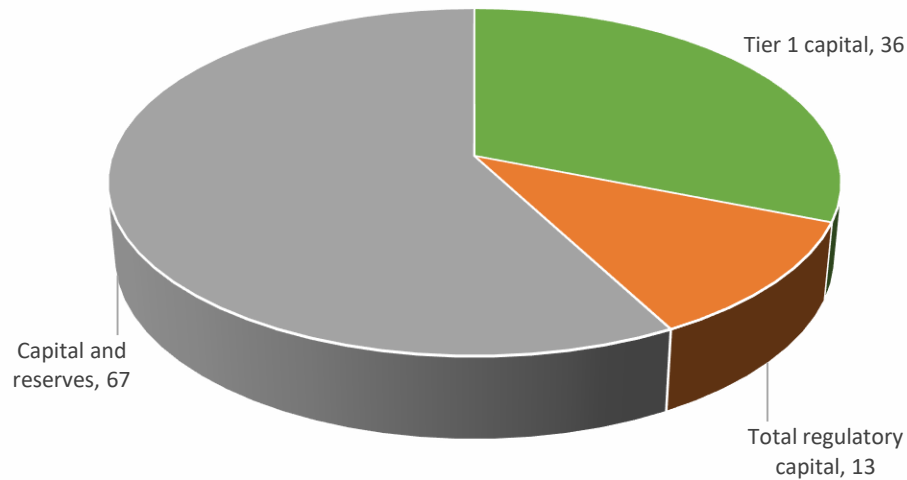
	2006 FSI Guide	2019 FSI Guide	Main Changes
Additional			
Asset Quality	Customer deposits to total (noninterbank) loans	Customer deposits to total (noninterbank) loans	<ul style="list-style-type: none"> • Numerator: No change • Denominator: No change
	Foreign-currency denominated loans to total loans	Foreign-currency denominated loans to total loans	<ul style="list-style-type: none"> • Numerator: No change • Denominator: No Change
	Foreign-currency denominated liabilities to total liabilities	Foreign-currency denominated liabilities to total liabilities	<ul style="list-style-type: none"> • Numerator: No change • Denominator: No change
		Credit growth to private sector	<ul style="list-style-type: none"> • New FSI • Credit to private sector is defined as loans and debt securities to nonfinancial corporations • Calculated as the 12 months growth in credit to private sector

FSIs for DTs: Before and After

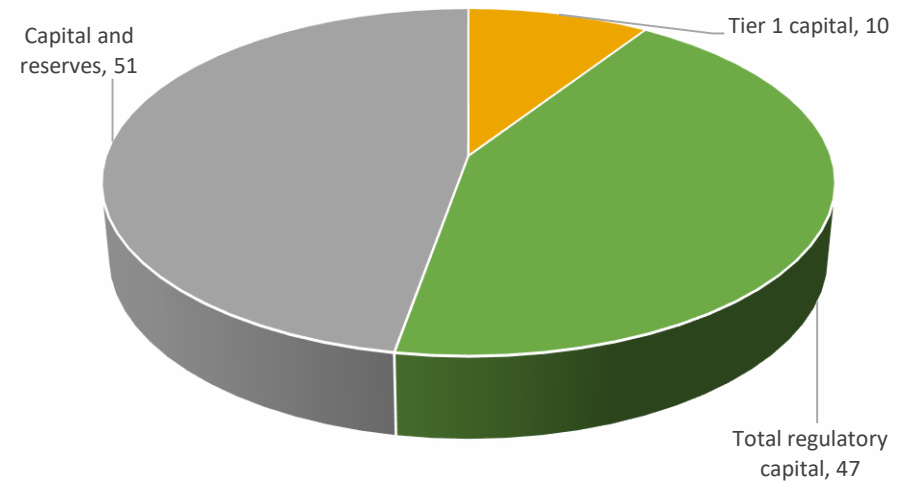
Capital Adequacy

Green indicates prescribed choice of denominator in 2019 FSI guide

Capital to assets



NPLs net of provision to capital

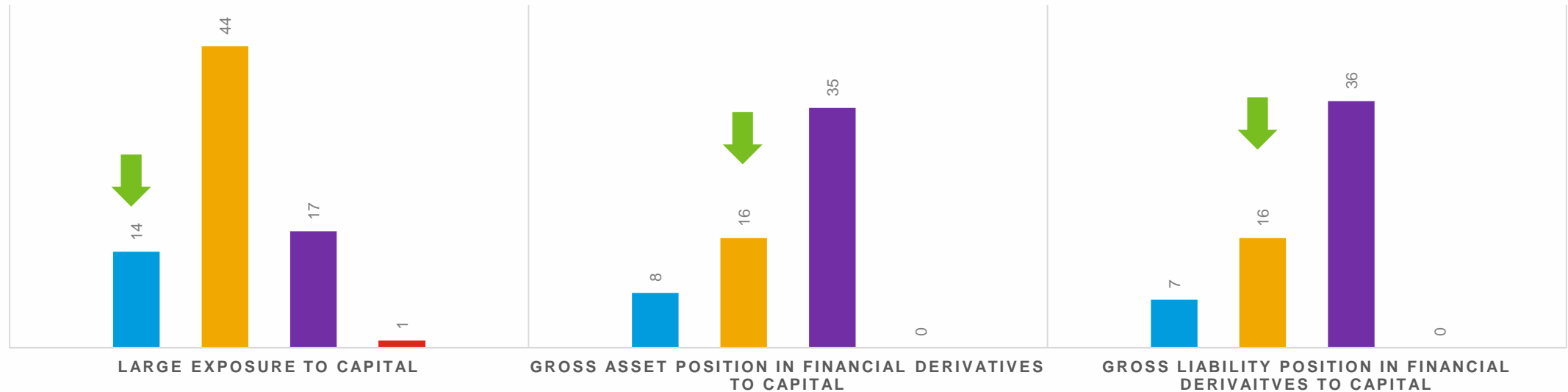


Number refers to number of countries

FSIs for DTs: Before and After

Asset Quality

Green arrow indicates prescribed choice of denominator in 2019 FSI guide



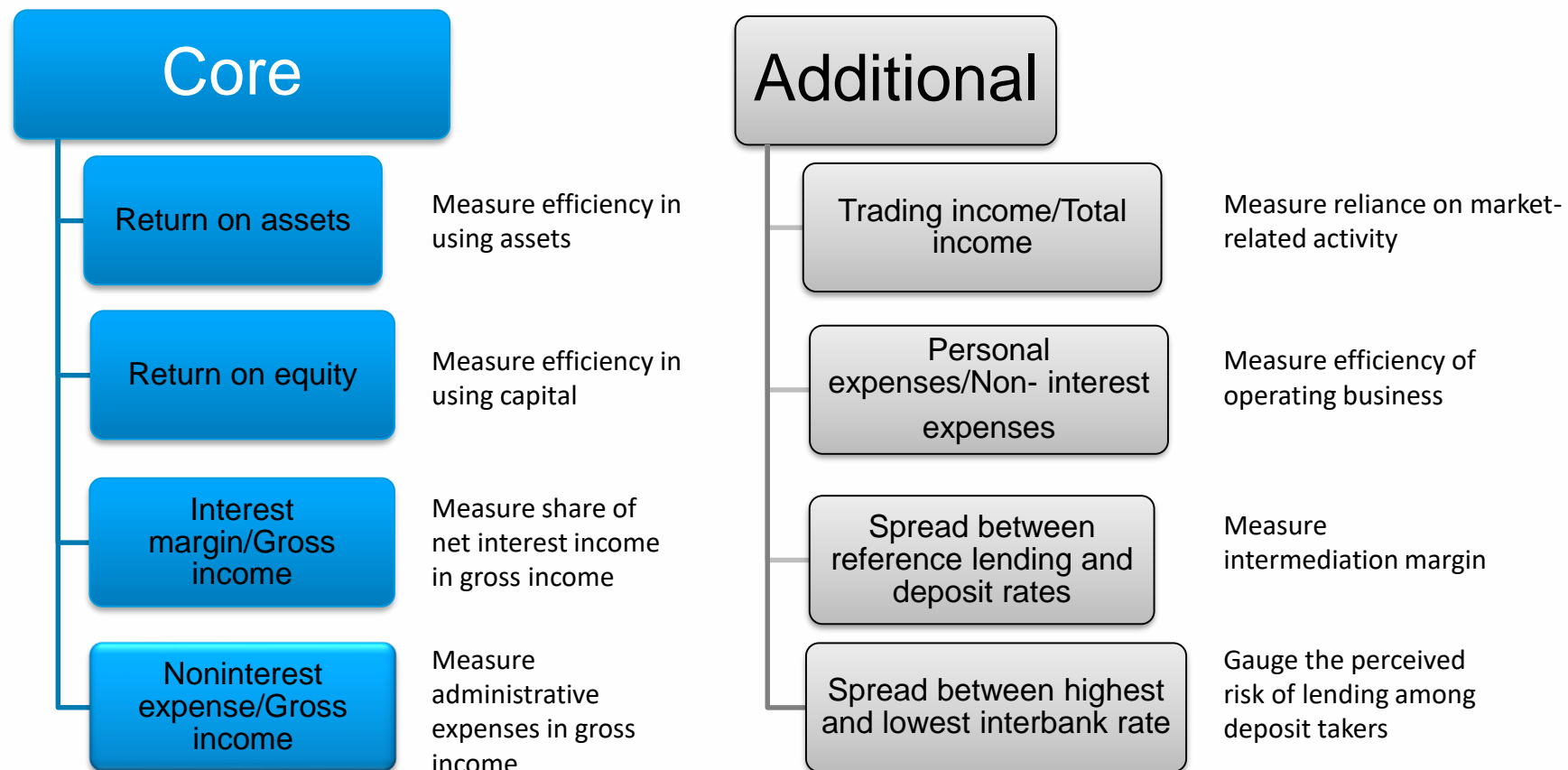
■ Tier 1 capital ■ Total regulatory capital ■ Capital and reserves ■ Narrow capital and reserves

Number refers to number of countries

FSIs for DTs: Before and After

Earnings and profitability

Analytic value: viability and efficiency of financial intermediation by DTs.



FSIs for DTs: Before and After

Income and Expense Statement*
1. Interest income ¹
i. Gross interest income
ii. Less provisions for accrued interest on nonperforming assets
2. Interest expense ¹
3. Net interest income (= 1 - 2)
4. Noninterest income
i. Fees and commissions receivable ¹
ii. Gains or losses on financial instruments
iii. Prorated earnings
iv. Other income ¹
5. Gross income (= 3 + 4)
6. Noninterest expenses
i. Personnel costs
ii. Other expenses
7. Provisions (net)
i. Loan loss provisions
ii. Other financial asset provisions
8. Net income before taxes (= 5 - (6 + 7))
9. Income tax
10. Net income after taxes (= 8 - 9)
11. Other comprehensive income (loss) net of tax
12. Dividends payable
13. Retained earnings (= 10 - 12)



~~Extraordinary items deleted~~

*Income and expense statement is reported from beginning of the calendar year to the end of the reporting period.

FSIs for DTs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
Core			
Earnings and profitability	Return on assets	Return on assets	<ul style="list-style-type: none"> • Extraordinary items have been phased out in the income and expense statement • Numerator: Net profit before tax (Annualized) • Denominator: No change - Average total assets
	Return on equity	Return on equity	<ul style="list-style-type: none"> • Extraordinary items have been phased out in the income and expense statement • Numerator: Net profit after tax (Annualized) • Denominator: Average capital and reserves
	Interest margin to gross income	Interest margin to gross income	<ul style="list-style-type: none"> • Gross Income and expense statement needs to be reported on a cumulative basis from beginning of the calendar year to end of the reporting period • Numerator: No change • Denominator: include extraordinary profits, if any
	Non-interest expenses to gross income	Non-interest expenses to gross income	<ul style="list-style-type: none"> • Gross income is adjusted for extraordinary item if positive while noninterest expenses is adjusted for extraordinary item if negative • Income and expense statement needs to be reported on a cumulative basis from beginning of the calendar year to end of the reporting period • Numerator: include extraordinary losses, if any • Denominator: include extraordinary profits, if any

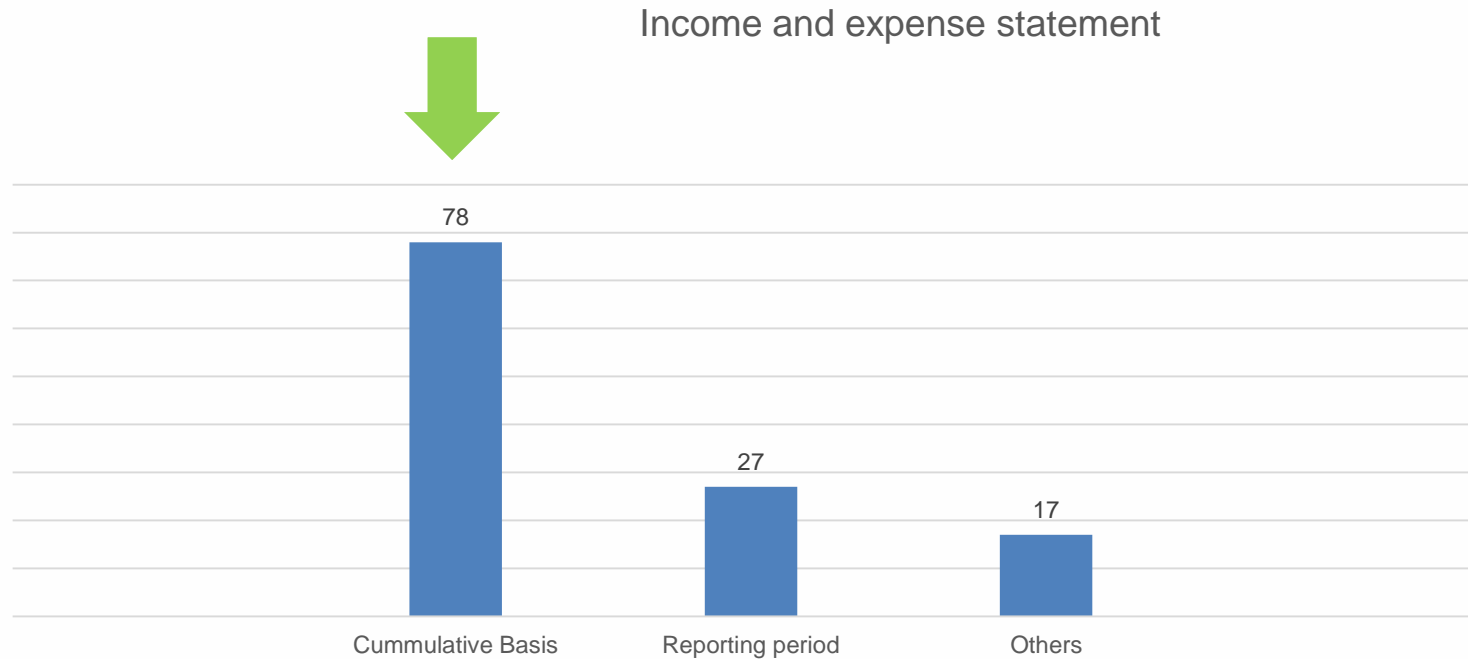
FSIs for DTs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
Additional			
Earnings and profitability	Trading income to total income	Trading income to total income	<ul style="list-style-type: none"> Income and expense statement needs to be reported on a cumulative basis from the beginning of the calendar year to the reporting period Numerator: No change Denominator: include extraordinary profits, if any
	Personnel expenses to non-interest expenses	Personnel expenses to non-interest expenses	<ul style="list-style-type: none"> Income and expense statement needs to be reported on a cumulative basis from the beginning of the calendar year to the reporting period Numerator: No change Denominator: include extraordinary losses, if any
	Spread between reference lending and deposit rates	Spread between reference lending and deposit rates	<ul style="list-style-type: none"> No change but numerator and denominator need to be reported separately
	Spread between highest and lowest interbank rate	Spread between highest and lowest interbank rate	<ul style="list-style-type: none"> No change but numerator and denominator need to be reported separately

FSIs for DTs: Before and After

Earnings and profitability

Green arrow is consistent with the 2019 FSI Guide

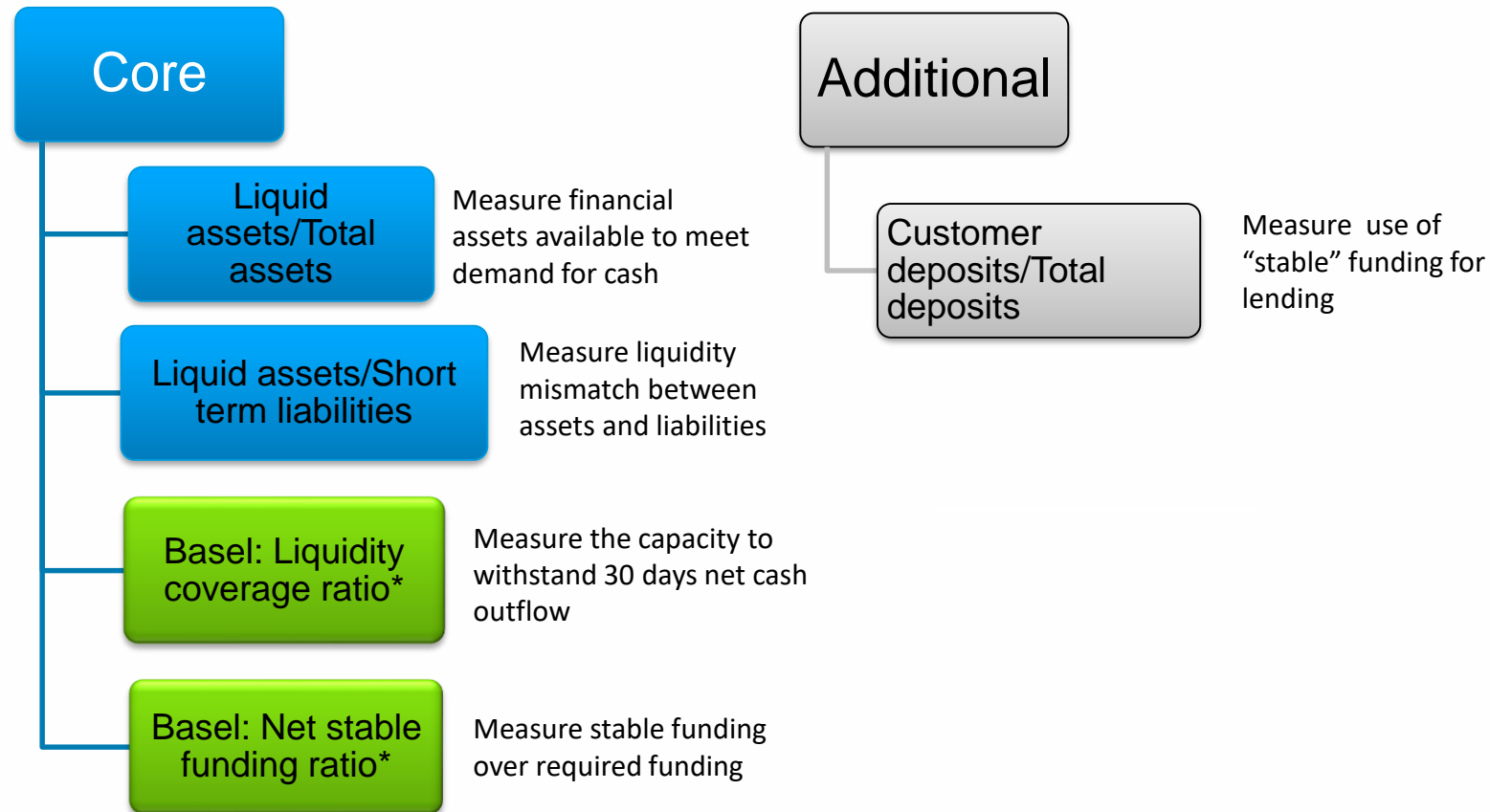


Number refers to number of countries

FSIs for DTs: Before and After

Liquidity

Analytic value: a gauge of deposit takers' ability to meet expected and unexpected demands for cash



* New FSI

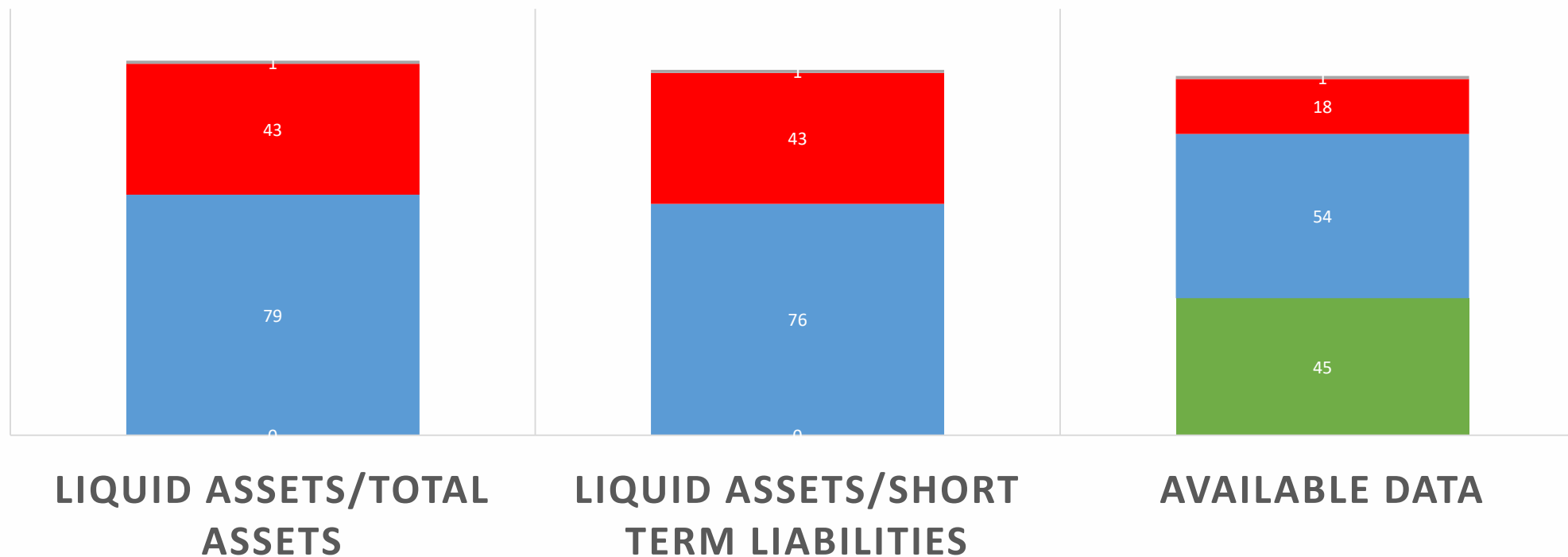
FSIs for DTs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
Core			
Liquidity	Liquid assets to total assets	Liquid assets to total assets for all DTs	<ul style="list-style-type: none"> • Apply for all deposit-takers • The 2019 FSI Guide does not differentiate between core and broad measure of liquidity • Numerator: Broad measure of liquidity assets • Denominator: No change
	Liquid assets to short term liabilities	Liquid assets to short term liabilities for all DTs	<ul style="list-style-type: none"> • Apply for all deposit-takers • The 2019 FSI Guide does not differentiate between core and broad measure of liquidity • Numerator: Broad measure of liquid assets • Denominator: Short term liabilities are defined as all liabilities with a maturity of not more than 90 days
		Liquidity Coverage Ratio	<ul style="list-style-type: none"> • New indicator for DTs under Basel III • Numerator: HQLA • Denominator: Net cash outflows
		Net Stable funding Ratio	<ul style="list-style-type: none"> • New indicator for DTs under Basel III • Numerator: Available amount of stable funding • Denominator: Available amount of required funding
	Customer deposits total deposits		<ul style="list-style-type: none"> • Numerator: No change • Denominator: No change

FSIs for DTs: Before and After

Liquidity indicators

■ Core and Broad ■ Broad ■ Core ■ Unknown

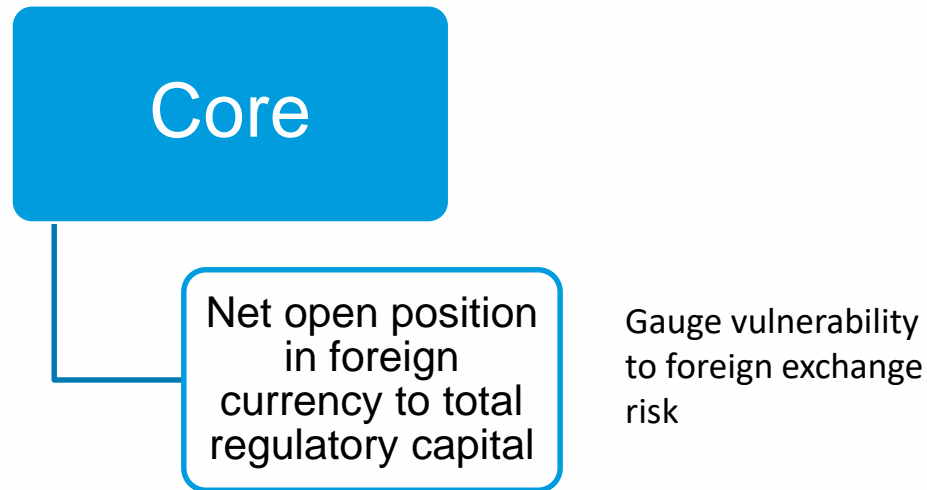


Number refers to number of countries

FSIs for DTs: Before and After

Sensitivity to Market Risk

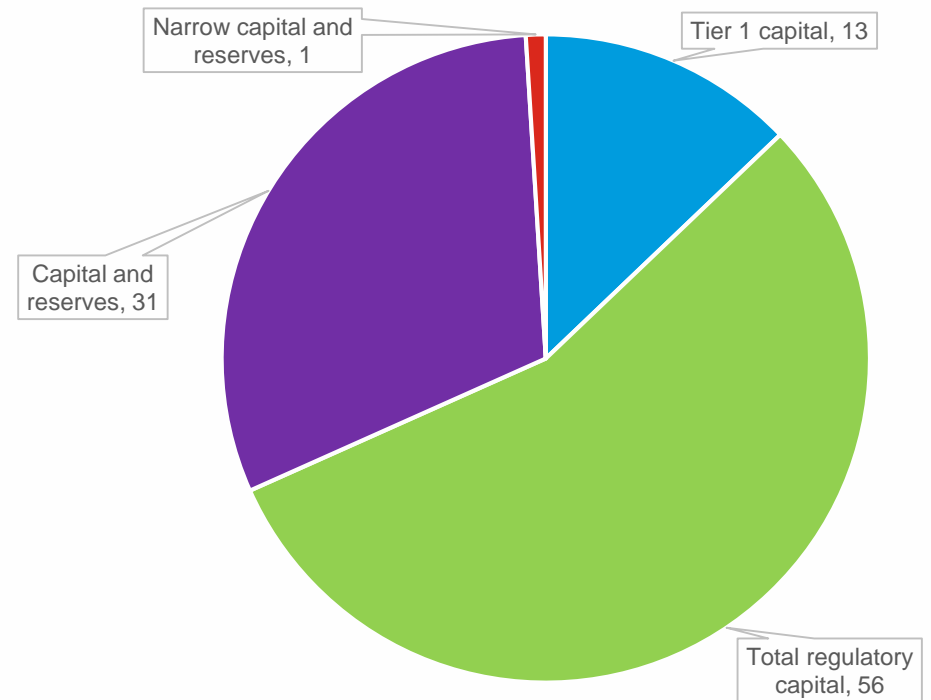
Analytic value: a measure of exposures to market risk



- Deleted from the list of additional FSIs:
Net open position in equity to capital

Green indicates prescribed choice of denominator in 2019 FSI guide

Net open position in foreign exchange to capital



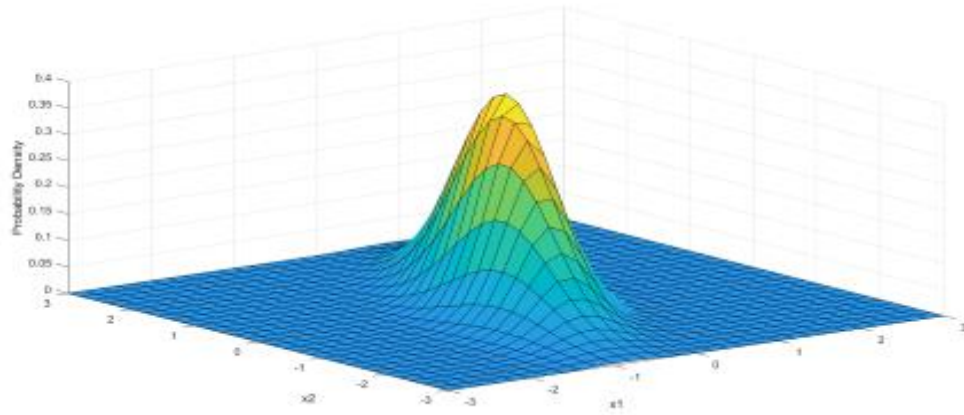
Number refers to number of countries

FSIs for DTs: Before and After

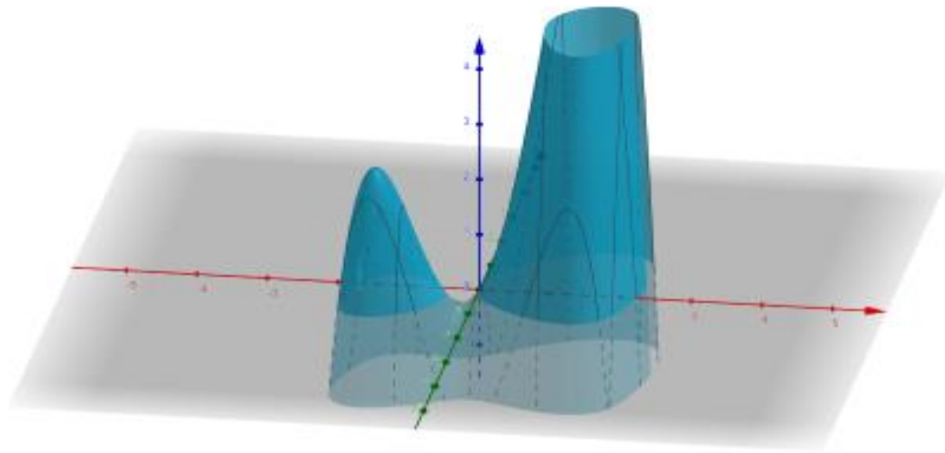
	2006 FSI Guide	2019 FSI Guide	Main Changes
Sensitivity to Market Risks	Core		
	Net open position in foreign exchange to capital	Net open position in foreign exchange to capital	<ul style="list-style-type: none"> Numerator: No change, but the preferred approach is to use on- and off-balance measure. Denominator: Total regulatory capital
	Additional		
	Net open position in equities to capital		<ul style="list-style-type: none"> Deleted

Concentration and Distribution Measure

Background: Motivation



- Sectoral FSIs are weighted averages of bank by bank FSIs.



- Average FSIs may hide variations that could endanger the entire financial system.
- Data for highly capitalized deposit takers could offset the data for undercapitalized deposit takers.

CDMs

- **Recommendation II-3 of the Data Gaps Initiative**

- ▶ The IMF to investigate the possibility of regular collection of CDMs for FSIs. G-20 economies to support the work of the IMF.

- **Background**

- ▶ 2014 pilot project: confirmed feasibility of data collection
- ▶ 2017 FSI Workshop: confirmed usefulness and countries' support to the data provision, as additional costs are minimal assuming...
- ▶ FI developed a data compilation tool, in response to countries' request
- ▶ 2017 meeting of the FSI Reference Group provided insights to the selection of FSIs for which CDMs would be reported, with an emphasis on preserving confidentiality of individual reporters

CDMs for Selected Core FSIs for DTs

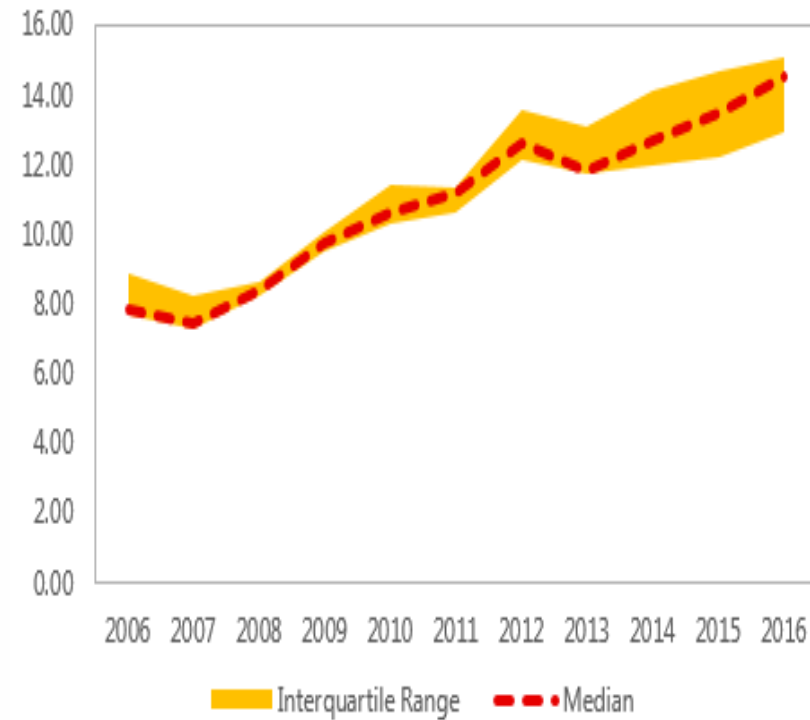
- For Concentration, the Guide recommends
 - ▶ The Herfindahl Index
- Various ways to measure dispersion, including variance, standard deviation and quartiles.
- The Guide recommends
- Weighted Quartiles
 - ▶ First Quartile (weighted)
 - ▶ Second Quartile (weighted)
 - ▶ Third Quartile (weighted)
- Weighted Standard Deviation
- Weighted Skewness
- Weighted Kurtosis

CDMs for Selected Core FSIs for DTs

- Solvency Indicator (capital adequacy)
 - ▶ Tier 1 capital to risk-weighted assets
 - ▶ NPLs net of specific provisions to capital
- Asset Quality
 - ▶ NPLs to total gross loans
 - ▶ Provisions to NPLs
- Profitability
 - ▶ Return on assets (ROA)
 - ▶ Return on equity (ROE)
- Leverage
 - ▶ Tier 1 capital to total assets

CDMs: An Example

Figure 12.3 Weighted Quartiles for Selected French Banks' Capital Adequacy Ratios (2006–2016)



Source: Fitch Connect and IMF staff calculations.

FSIs for OFC, NFC and household sectors and real estate market: Before and after

Additional FSIs for OFCs

- **OFCs' assets to total financial assets**
- **OFCs' assets to gross domestic products**
- **OFC breakdown:**
 - ▶ Money market funds (2 new indicators),
 - ▶ Insurance Corporations (4 new indicators),
 - ▶ Pension Funds (2 new indicators), and
- **Modification to the existing FSIs for OFCs:**
 - ▶ “OFC assets as percent of total financial system assets”:
This indicator will be produced for the OFC sector as a whole and for each defined subsector: (i) MMFs; (ii) ICs; and (iii) PFs.
 - ▶ “OFC assets as percent of GDP”:
This indicator will be produced for the OFC sector as a whole and for each defined subsector:
(i) MMFs; (ii) ICs; and (iii) PFs.

Additional FSIs for OFCs: MMFs

- **Sectoral distribution of investments**

- ▶ Indicates the risk-profile of MMF investments by identifying different types of debtors, provides information on the exposure of these debtors to MMFs as a funding source, and captures a financial link between MMFs and DTs.
- ▶ Moreover, changes in the distribution would also capture MMFs' asset reallocations based on yields and/or risk perception.

- **Maturity distribution of investments**

- ▶ Aims at assessing the level of liquidity by monitoring the asset maturity of the following time intervals: 1-30 days; 31-90 days; and more than 90 days

Additional FSIs for OFCs: Insurance Comp.

The following new indicators for ICs will be added as additional FSIs:

- **Shareholders' equity to invested assets**
 - ▶ Measures the level of capital that is available to meet actual or potential losses from ICs' investments. This is provided separately for life and non-life insurance

- **Combined ratio (non-life insurance only)**
 - ▶ Measures the profitability of a given year's insurance underwriting, calculated as the sum of net incurred losses and underwriting expenses divided by net earned premiums. For non-life insurers operating in a healthy market this ratio should be less than 100.

- **Return on equity (ROE—life and non-life) and Return on assets (ROA—life only):**
 - ▶ Leading indicators for solvency problems,
 - ▶ The ROE measures ICs' efficiency in using their capital,
 - ▶ The ROA measures ICs' efficiency in using their assets.

Additional FSIs for OFCs: Pension Funds

The following new indicators for PFs will be added as additional FSIs:

- **Liquid assets to estimated pension payments in the next year**
 - ▶ This liquidity indicator assesses the adequacy of liquid assets to cover future pension payments.
- **Return on Assets**
 - ▶ This earning and profitability indicator measures the efficiency of PFs in using their assets.

Additional FSIs for NFCs

- **Additions**

- ▶ External debt to equity
- ▶ Foreign currency debt to equity
- ▶ Total NFC debt-to-GDP
- ▶ Earnings to interest expenses

- **Deletions**

- ▶ Net foreign exchange exposure to equity
- ▶ Number of bankruptcy proceedings initiated

Additional FSIs for Households

- **The Rationale:**

- ▶ The household sector is another key counterpart sector of the financial sector.

- **Addition**

- ▶ Households debt to gross disposable income

2006 FSI Guide	2019 FSI Guide	Main Changes
Household debt to GDP	Household debt to GDP	<ul style="list-style-type: none"> • No change
Household debt service and principal payments to income	Household debt service and principal payments to income	<ul style="list-style-type: none"> • No change
	Household debt to household disposable income	<ul style="list-style-type: none"> • New FSI • Numerator: House debt • Denominator: Household disposable income

FSIs for Real Estate Markets

- **The Rationale:**

- ▶ Real estate assets are a major element of the wealth of the private sector. To support monitoring the direct exposure to risks arising from real-estate-related lending

- **Additions:**

- ▶ Residential real estate prices (upgraded to core)
- ▶ Commercial real estate prices (No change)

2006 FSIs Guide	2019 FSIs Guide	Changes
Residential real estate prices	Residential real estate prices	• Upgraded to the list of core FSIs
<i>Commercial real estate prices</i>	Commercial real estate prices	• No change
Residential real estate loans to total loans	Residential real estate loans to total loans	• No change
Commercial real estate loans to total loans	Commercial real estate loans to total loans	• No change

Additional FSIs for Market Liquidity: Before and After

Current List of FSIs	Updated List of FSIs	Changes
Average bid-ask spread in the securities market		Deleted
Average daily turnover ratio in the securities market		Deleted

The Rationale:

These two indicators on market liquidity are readily available from commercial sources in most countries on high frequency.

FSI Reporting: Before and After

Current FSI report forms

FS1
(Institutional
coverage)

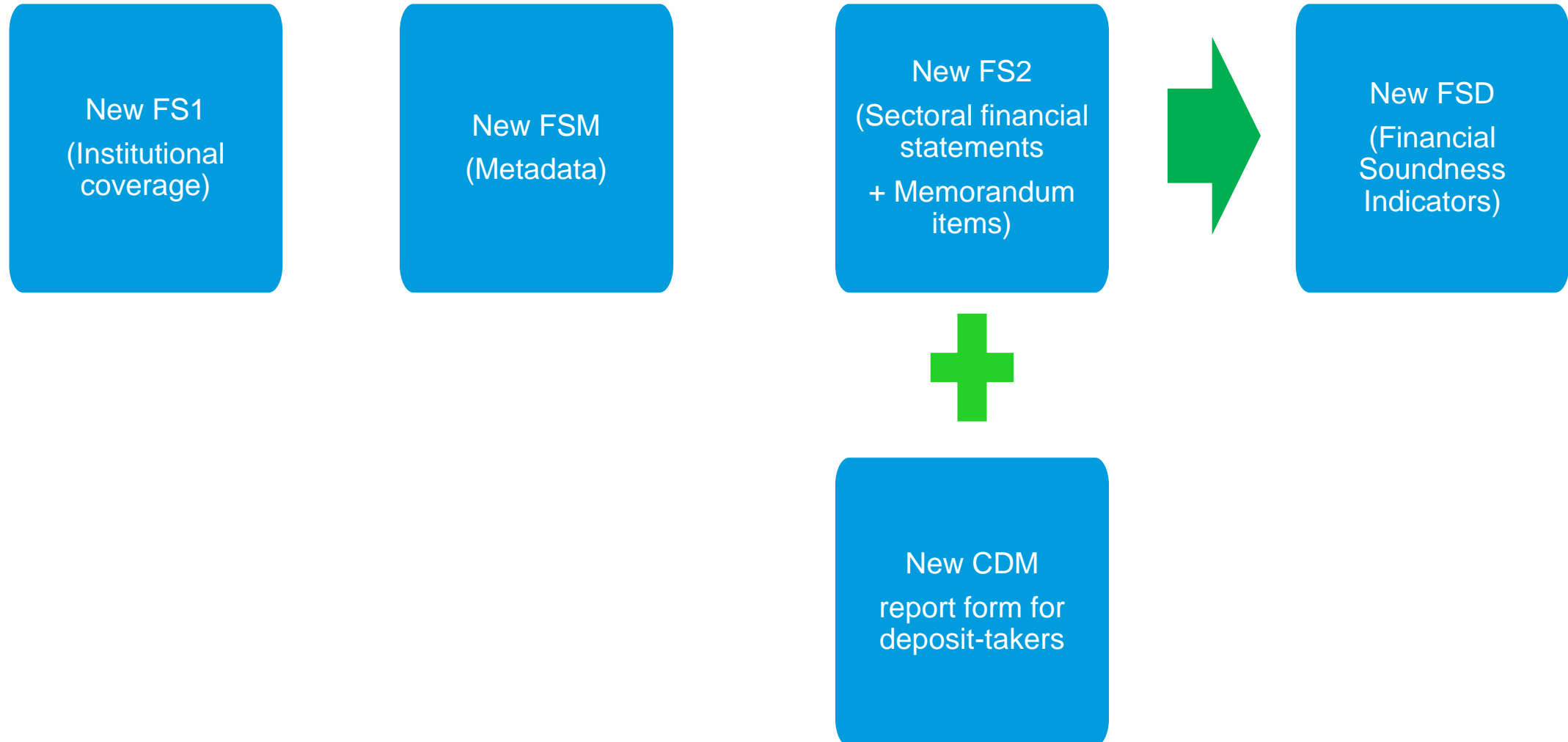
FSM
(Metadata)

FS2
(Sectoral financial
statements
+ Memorandum
items)

FSD
(Financial
Soundness
Indicators)

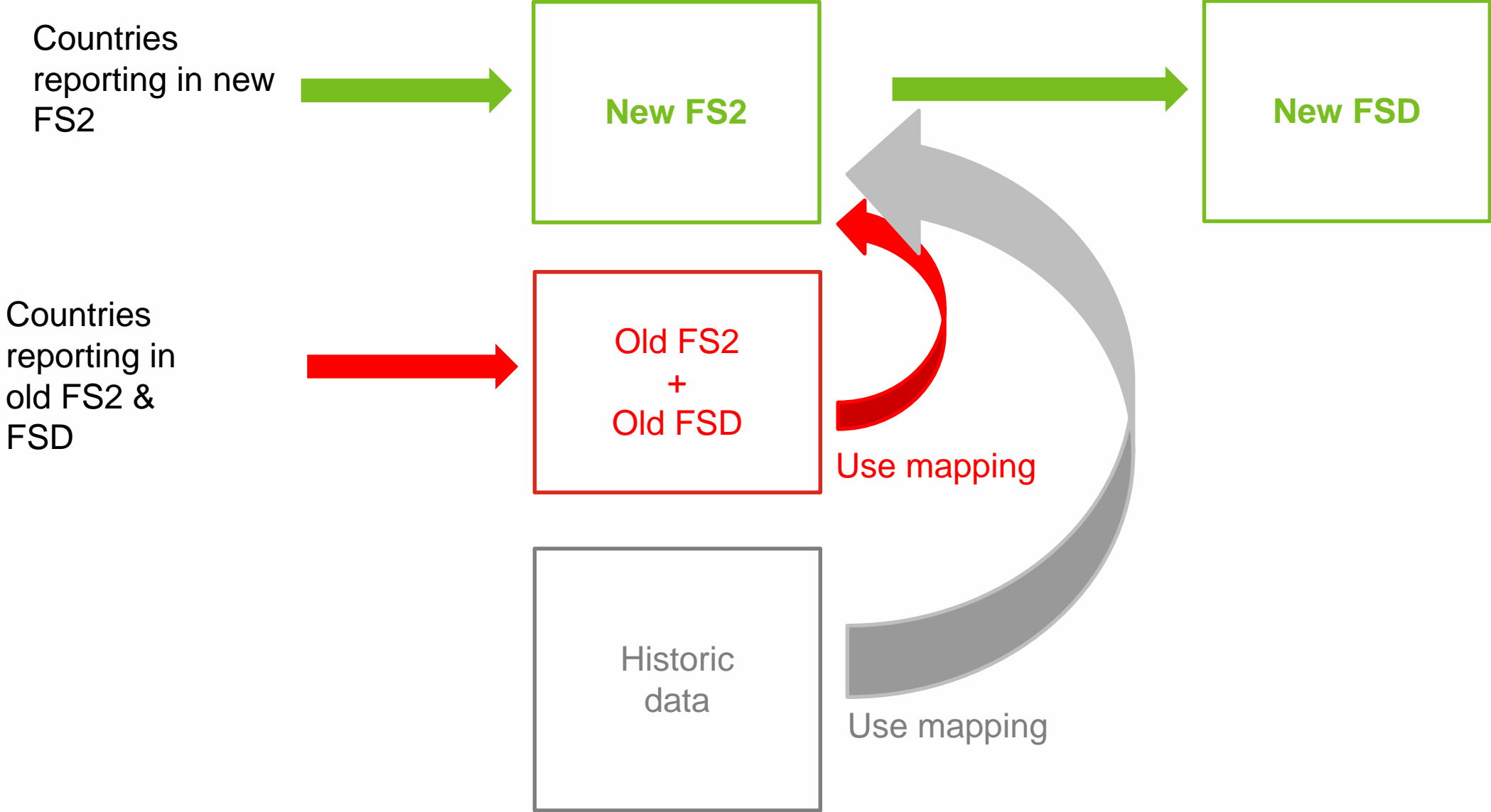
New FSI report forms

The objective is to derive the FSIs from underlying financial statements (FSIs) for all countries



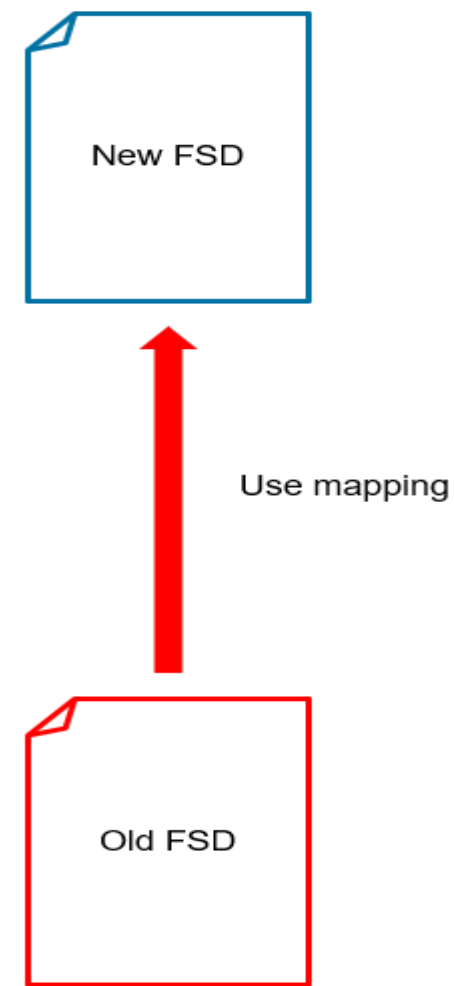
THE MIGRATION

Migration of historical data to the new report forms

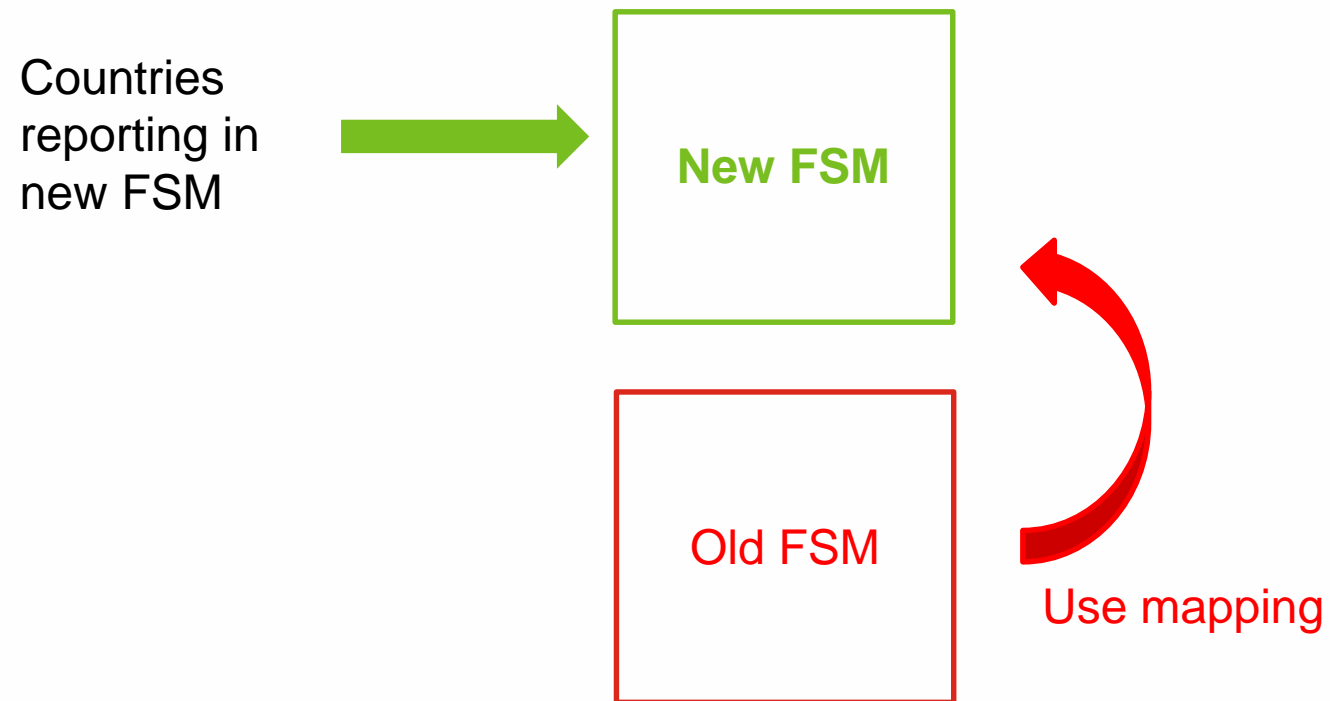


Migration of historical data to the new report forms

- There are currently 25 countries that report only FSD template
- The objective is to derive the FSIs from the underlying financial statements (FS2) for all countries
- A transition period will be provided to the FSD reporters to upgrade their reporting to new FS2.



Migration of old metadata to the new metadata



The way forward

Implementation of the new templates is expected to be completed in 2021/2022



Implementation of new templates is expected to start in 2021



Appendix

Additional FSIs for OFCs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
OFC and subsectors	OFCs' assets to total financial assets	OFCs' assets to total financial assets and subsectors	<ul style="list-style-type: none"> • Modified • Numerator: Total assets of OFC and subsectors: MMF, IC and PC • Denominator: Total financial system assets comprising DTs, MMF, IC, PF and other OFC subsectors (that is excluding total assets of central banks)
	OFCs' assets to gross domestic products	OFCs' assets to total financial assets and subsectors	<ul style="list-style-type: none"> • Modified • Numerator: Total assets of OFC and subsectors: MMF, IC and PC • Denominator: GDP (No change)
Money Market Funds		Sectoral distribution of investments	<ul style="list-style-type: none"> • New FSI • Numerator: sectoral distribution of investment • Denominator: Total investments
		Maturity distribution of investments	<ul style="list-style-type: none"> • New FSI • Numerator: Maturity of investments • Denominator: Total investments

Additional FSIs for OFCs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
Insurance Corporations		Shareholder equity to total invested assets	<ul style="list-style-type: none"> • New FSI • Numerator: Capital and reserves • Denominator: Total invested assets
		Combined ratio, for non-life insurance	<ul style="list-style-type: none"> • New FSI • Numerator: Net claims and underwriting expenses • Denominator: Net premium earned
		Return on assets, for life insurance	<ul style="list-style-type: none"> • New FSI • Numerator: Annualized Profit before tax • Denominator: Average total assets
		Return on equity, for life and non-life insurance	<ul style="list-style-type: none"> • New FSI • Numerator: Annualized Profit after tax • Denominator: Average capital and reserves

Additional FSIs for OFCs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
Pension funds		Liquid assets to estimated pension payments in the next year	<ul style="list-style-type: none"> • New FSI • Numerator: Liquid assets • Denominator: Estimated pension payments in the next year
		Return on assets	<ul style="list-style-type: none"> • New FSI • Numerator: Annualized Profit before tax • Denominator: Average total assets

Additional FSIs for NFCs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
NFCs	Total debt to equity	<i>Total debt to equity</i>	<ul style="list-style-type: none"> • Numerator: No change • Denominator: No change
		<i>Total external debt to equity</i>	<ul style="list-style-type: none"> • New FSI • Numerator: Total debt to nonresident • Denominator: Equity (Capital and reserves)
		<i>Total foreign currency debt to equity</i>	<ul style="list-style-type: none"> • New FSI • Numerator: Total foreign currency debt • Denominator: Equity (Capital and reserves)
	Return on equity	Return on equity	<ul style="list-style-type: none"> • Numerator: Profit after tax • Denominator: No change
	Earnings to interest and principal expenses	Earnings to interest and principal expenses	<ul style="list-style-type: none"> • Numerator: No change • Denominator: No change
		<i>Earnings to interest expenses</i>	<ul style="list-style-type: none"> • New FSI • Numerator: Earnings before interest and tax (EBIT) • Denominator: Interest expenses
	Net foreign exchange exposure to equity		<ul style="list-style-type: none"> • <i>Deleted</i>

Additional FSIs for NFCs: Before and After

	2006 FSI Guide	2019 FSI Guide	Main Changes
NFCs	Net foreign exchange exposure to equity		<ul style="list-style-type: none"> Deleted
	Number of applications for protection from creditors		<ul style="list-style-type: none"> Deleted
		<i>NFC debt to GDP</i>	<ul style="list-style-type: none"> New FSI Numerator: Total debt Denominator: GDP