



FINANCIAL SOUNDNESS  
INDICATORS COMPILATION  
GUIDE



STATISTICS

# Webinar on the Implementation of 2019 FSIs Guide

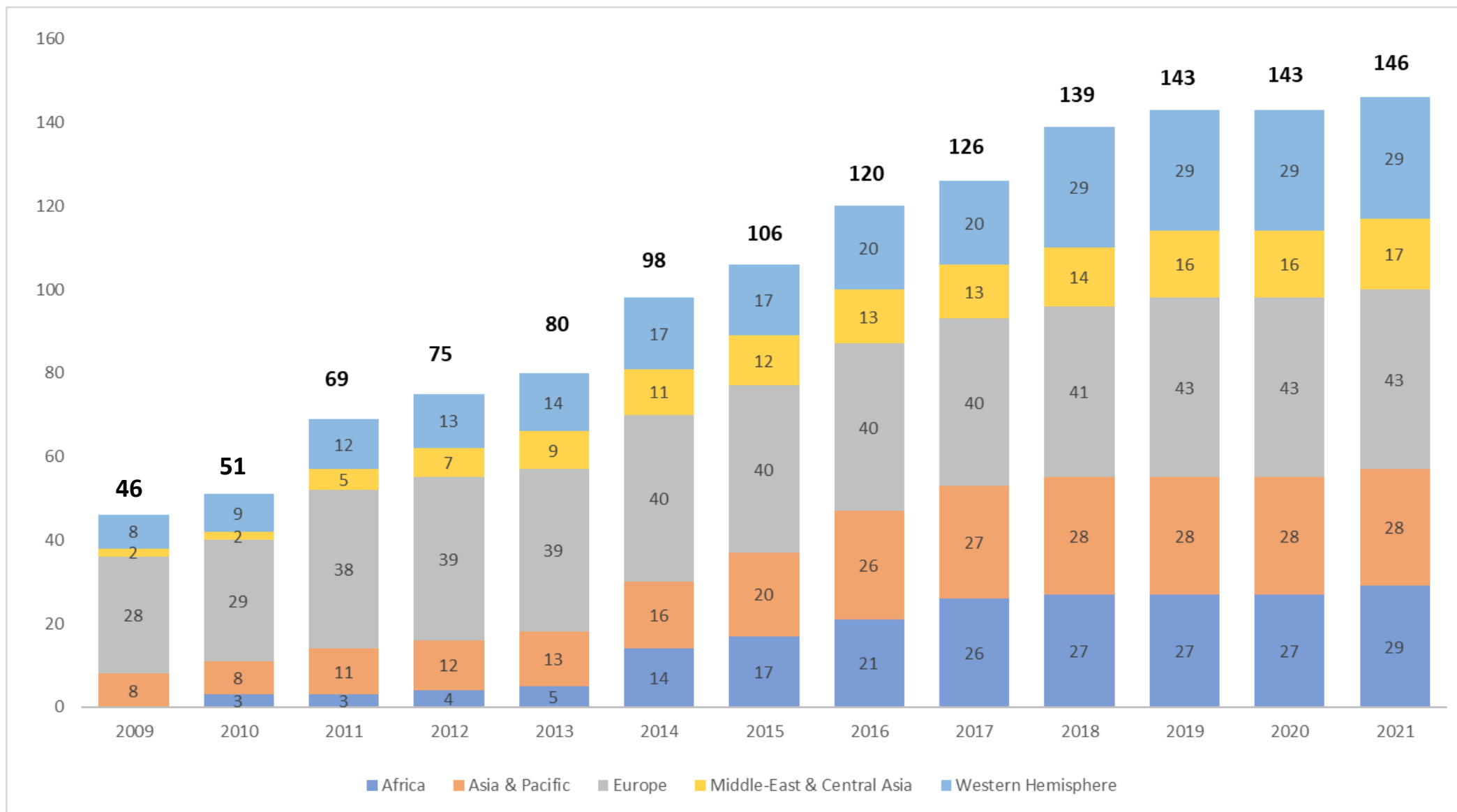
JANUARY 25, 2021

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# Webinar Agenda

- **Motivation for the update of the FSIs Guide**
- FSIs for DTs: Before and After
- Concentration and Distribution Measures
- FSIs for Other Sectors
- New Report Forms and Migration

# Stay of Play: Number of reporters of Financial Soundness Indicators (FSIs) data



# Why a New FSIs 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 deposit takers (DTs) buffers vs. expected and unexpected losses
  - ▶ develop new FSIs for Other Financial Corporations (shadow banking)
  - ▶ strengthen the FSIs for Non-Financial Corporations and Households

## Why a New FSIs Guide? (contd.)

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 Concentration and Distribution Measures (CDMs) for select FSIs

Finally, in December 2019, the Financial Soundness Indicators Compilation Guide (*2019 FSIs Guide*) was published.

# Webinar Agenda

- Motivation for the update of the FSIs Guide
- **FSIs for DTs: Before and After**
- Concentration and Distribution Measures
- FSIs for Other Sectors
- New Report Forms and Migration

# FSIs: Before and After

|                                     | Before                   | After                    |
|-------------------------------------|--------------------------|--------------------------|
| Deposit-takers (DTs)                | 12 core<br>13 additional | 17 core<br>12 additional |
| Other Financial Corporations (OFCs) | 2 additional             | 2 additional             |
| • Money market funds (MMFs)         |                          | 2 additional             |
| • Insurance corporations (ICs)      |                          | 4 additional             |
| • Pension funds (PFs)               |                          | 2 additional             |
| Nonfinancial corporations (NFCs)    | 5 additional             | 7 additional             |
| Households (HH)                     | 2 additional             | 3 additional             |
| Real Estate Markets                 | 4 additional             | 1 core<br>3 additional   |
| Market Liquidity                    | 2 additional             |                          |
| Total                               | 12 core<br>28 additional | 18 core<br>35 additional |



# FSIs for DTs: Before and After

## Core FSIs for DTs

Four new FSIs

- Common Equity Tier 1 (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 discontinuation

- Net open position in equities to capital

# A Closer Look

# FSIs for DTs: Before and After

| Income and Expense Statement*                                    |
|--|
| 1. Interest income   |
| i. Gross interest income   |
| ii. Less provisions for accrued interest on nonperforming assets |
| 2. Interest expense  |
| 3. Net interest income (= 1 - 2)                                 |
| 4. Noninterest income  |
| i. Fees and commissions receivable                               |
| ii. Gains or losses on financial instruments                     |
| iii. Prorated earnings   |
| iv. Other income   |
| 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**

**\*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

| Balance Sheet  |
|--|
| 14. Total assets (= 15 + 16 = 23 + 31)                 |
| 15. Nonfinancial assets                                |
| 16. Financial assets (= 17 through 22)                 |
| 17. Currency and deposits <sup>1</sup>                 |
| 18. Loans (after specific provisions) (= 18.i – 18.ii) |
| i. Gross loans   |
| i.i. Interbank loans <sup>2</sup>                      |
| 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                                  |
| ii. Specific provisions <sup>3</sup>                   |
| 19. Debt securities <sup>1</sup>                       |
| 20. Equity and investment fund shares                  |
| 21. Financial derivatives <sup>1</sup>                 |
| 22. Other financial assets <sup>1</sup>                |
| 23. Liabilities (= 28 + 29 + 30)                       |
| 24. Currency and deposits                              |
| i. Customer deposits                                   |
| ii. Interbank deposits <sup>2</sup>                    |
| 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  |
|--|
| <b>Other series required to calculate FSIs:</b>  |
| Supervisory-based series   |
| 33. Tier 1 capital less corresponding supervisory deductions <sup>4</sup>                      |
| 34. Common Equity Tier 1 (CET1) capital less corresponding supervisory deductions <sup>4</sup> |
| 35. Additional Tier 1 (AT1) capital less corresponding supervisory deductions <sup>4</sup>     |
| 36. Tier 2 capital less corresponding supervisory deductions                                   |
| 37. Tier 3 capital   |
| 38. Other supervisory deductions <sup>5</sup>  |
| 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  |
| <b>Series that provide a further analysis of the balance sheet:</b>                            |
| 47. Liquid assets  |
| 48. Short-term liabilities   |
| 49. Nonperforming loans  |
| 50. Residential real estate loans  |
| 51. Commercial real estate loans   |

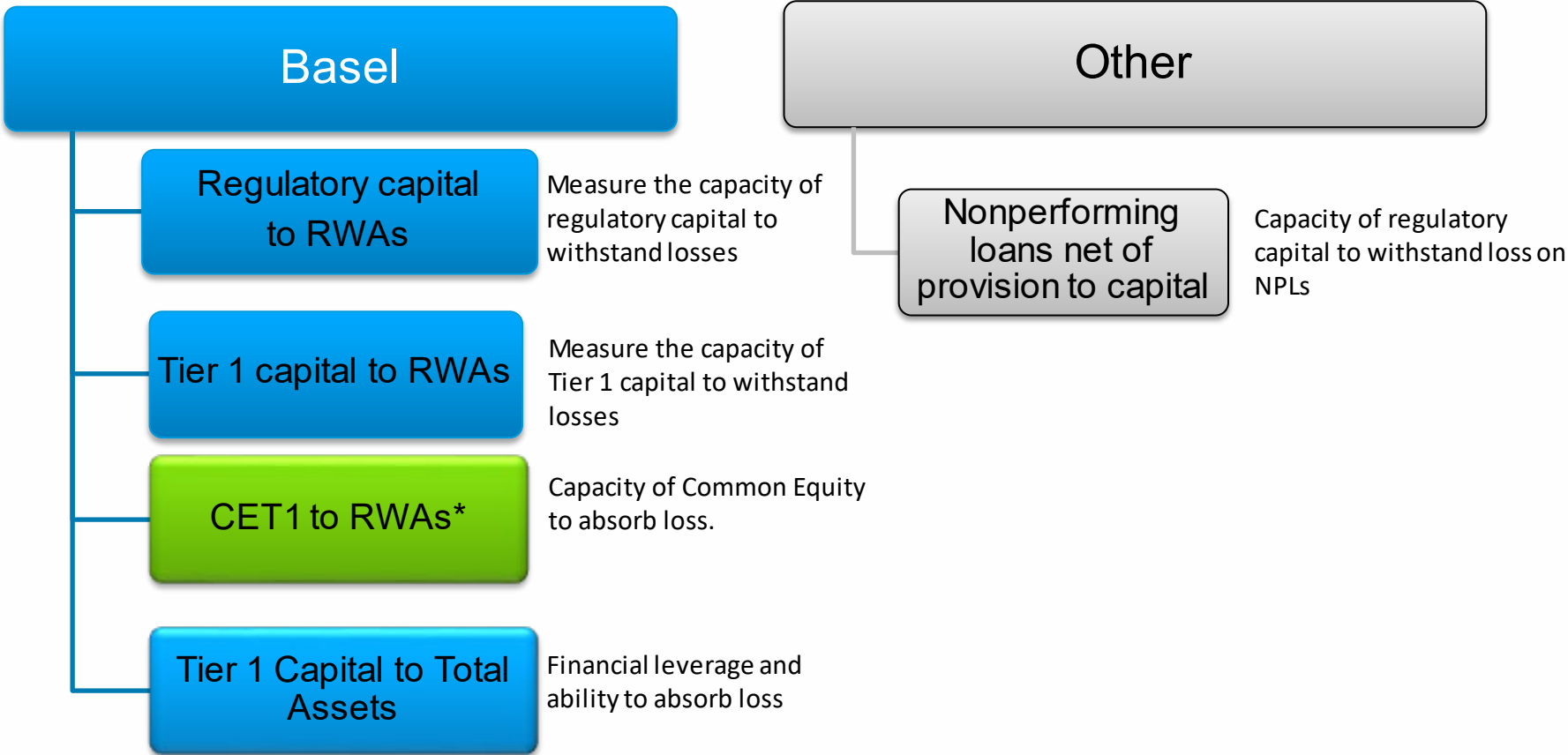
|  |
|--|
| 52. Geographic distribution of loans <sup>6</sup>                    |
| (i) Domestic economy   |
| (ii) Advanced economies  |
| (iii) Emerging market and developing economies                       |
| iii.i. Emerging and developing Asia                                  |
| iii.ii. Emerging and developing Europe                               |
| iii.iii. Latin America and the Caribbean                             |
| iii.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  |
| <b>Data series for compiling FSIs: ROA and ROE</b>                   |
| 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

## Capital Adequacy: Core

| 2006 FSI Guide                                    | 2019 FSI Guide                                    |  |
|---|---|--|
| Regulatory capital to risk-weighted assets        | Regulatory capital to risk-weighted assets        | <ul style="list-style-type: none"> <li>Numerator: No change</li> <li>Denominator: No change</li> </ul>   |
| Regulatory Tier 1 capital to risk-weighted assets | Regulatory Tier 1 capital to risk-weighted assets | <ul style="list-style-type: none"> <li>Numerator: No change</li> <li>Denominator: No change</li> </ul>   |
|   | CET-1 capital to risk-weighted assets*            | <ul style="list-style-type: none"> <li>Numerator: CET1</li> <li>Denominator: Risk-weighted assets</li> </ul>   |
| Capital to assets                                 | Tier-1 capital to assets                          | <ul style="list-style-type: none"> <li>Numerator: Tier 1 capital</li> <li>Denominator: Total assets or Basel III's exposure measures</li> </ul>                  |
| Nonperforming loans net of provisions to capital  | Nonperforming loans net of provisions to capital  | <ul style="list-style-type: none"> <li>Numerator: Specific provisions (defined as provisions on NPLs).</li> <li>Denominator: Total regulatory capital</li> </ul> |

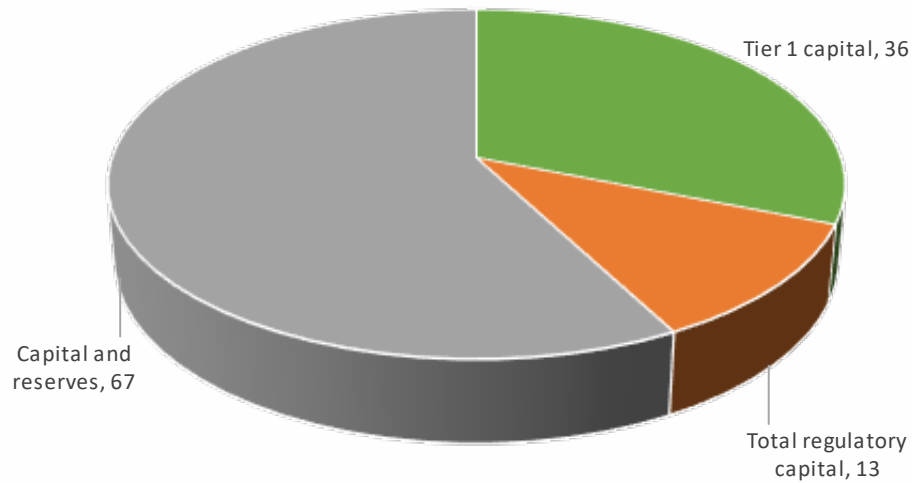
\* New FSI

# FSIs for DTs: Before and After

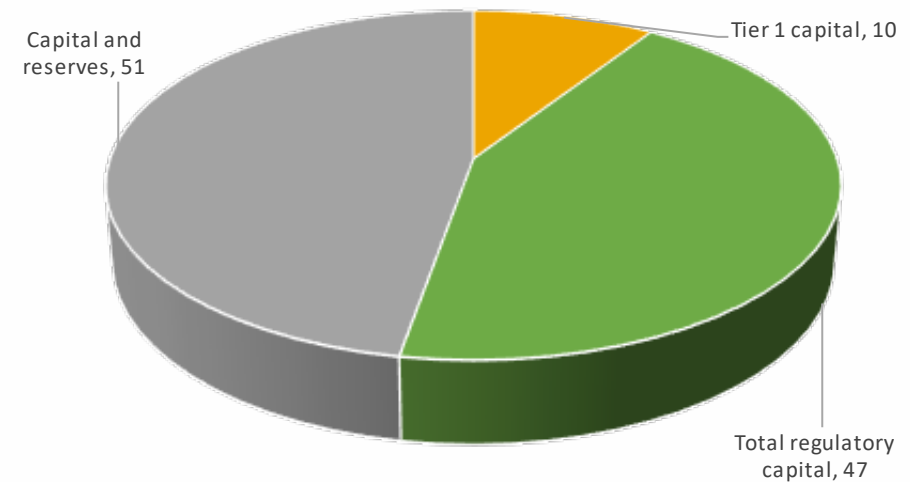
## Capital Adequacy

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

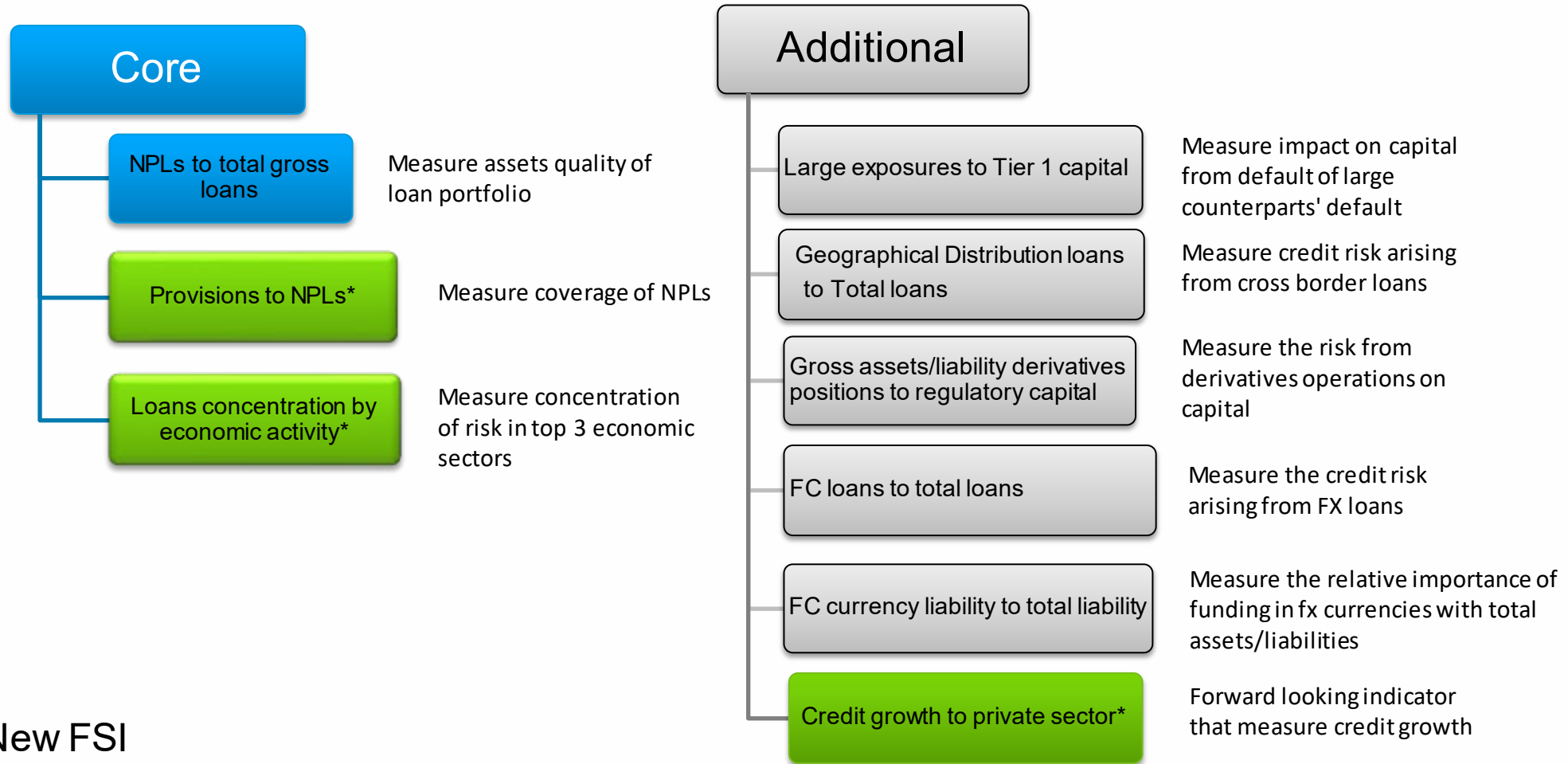




# FSIs for DTs: Before and After

## Asset Quality

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



\* New FSI



# FSIs for DTs: Before and After

## Asset Quality: Core

| 2006 FSI Guide                           | 2019 FSI Guide                           | Main changes  |
|--|--|---|
| Nonperforming loans to total gross loans | Nonperforming loans to total gross loans | <ul style="list-style-type: none"><li>• Numerator: No change</li><li>• Denominator: No change</li></ul>   |
|  | Provisions to nonperforming loans*       | <ul style="list-style-type: none"><li>• Numerator: Specific provisions (defined as provisions on NPLs).</li><li>• Denominator: NPLs</li></ul>   |
| Sectoral distribution of loans           | Loan concentration by economic activity* | <ul style="list-style-type: none"><li>• Replaced FSI on loan concentration by economic activity</li><li>• Numerator: Loans to the top 3 economic sectors as per United Nation's International Standard Industrial Classification of All Economic Sector Activities (ISIC)</li><li>• Denominator: Gross loans to nonfinancial corporations</li></ul> |

\* New FSI

# FSIs for DTs: Before and After

## Asset Quality: Additional

| 2006 FSI Guide   | 2019 FSI Guide   | Main changes   |
|--|--|--|
| Large exposures to capital                                   | Large exposures to capital                                   | <ul style="list-style-type: none"> <li>Numerator: All credit exposures to single or group of related borrowers after deduction of credit mitigants exceeding 10 percent of Tier 1 capital (as defined in the BCBS's framework)</li> <li>Denominator: Tier 1 capital</li> </ul> |
| Geographical distribution of loans                           | Geographical distribution of loans                           | <ul style="list-style-type: none"> <li>Numerator: WEO regional country classification (October 2019)</li> <li>Denominator: No change</li> </ul>  |
| Gross asset position in financial derivatives to capital     | Gross asset position in financial derivatives to capital     | <ul style="list-style-type: none"> <li>Numerator: No change</li> <li>Denominator: Total regulatory capital</li> </ul>  |
| Gross liability position in financial derivatives to capital | Gross liability position in financial derivatives to capital | <ul style="list-style-type: none"> <li>Numerator: No change</li> <li>Denominator: Total regulatory capital</li> </ul>  |

\* New FSI



# FSIs for DTs: Before and After

## Asset Quality: Additional

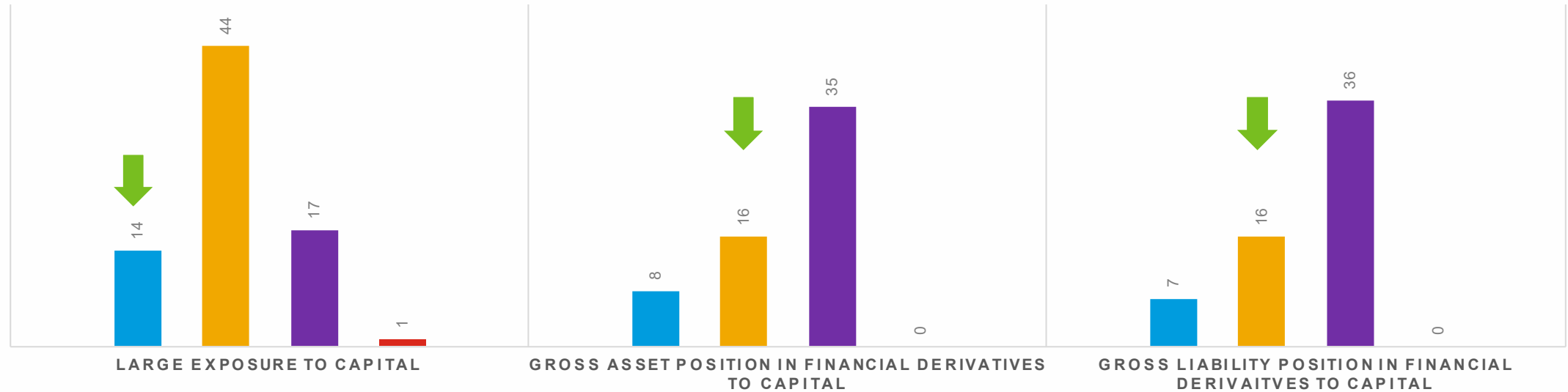
| 2006 FSI Guide  | 2019 FSI Guide  | Main changes   |
|---|---|--|
| Foreign-currency denominated loans to total loans             | Foreign-currency denominated loans to total loans             | <ul style="list-style-type: none"> <li>• Numerator: No change</li> <li>• Denominator: No Change</li> </ul>   |
| Foreign-currency denominated liabilities to total liabilities | Foreign-currency denominated liabilities to total liabilities | <ul style="list-style-type: none"> <li>• Numerator: No change</li> <li>• Denominator: No change</li> </ul>   |
|   | Credit growth to private sector*                              | <ul style="list-style-type: none"> <li>• Credit to the private sector includes gross loans extended by DTs to the private nonfinancial sector, plus debt securities issued by private NFCs and held by DTs. The data should be compiled on a domestic consolidated basis. The private sector comprises private NFCs, HHs, and NPISHs.</li> <li>• Calculated as the 12 months growth in credit to private sector</li> </ul> |

\* New FSI

# FSIs for DTs: Before and After

## Asset Quality

Green arrow indicates prescribed choice of denominator in 2019 FSI guide

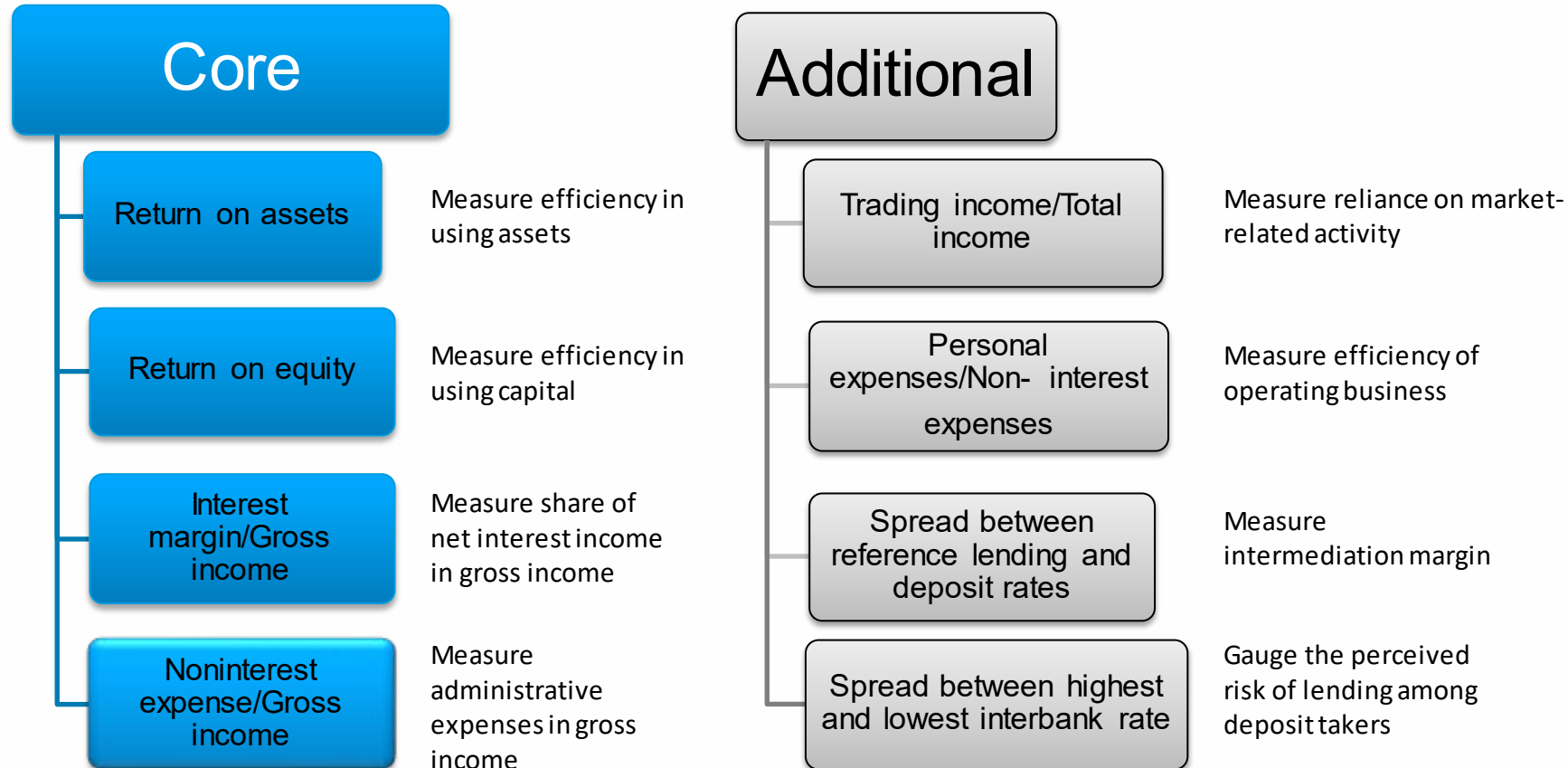


■ Tier 1 capital   ■ Total regulatory capital   ■ Capital and reserves   ■ Narrow capital and reserves

# FSIs for DTs: Before and After

## Earnings and profitability

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



# FSIs for DTs: Before and After

## Earnings and profitability: Core

| 2006 FSI Guide                        | 2019 FSI Guide                        | Main changes   |
|---------------------------------------|---------------------------------------|--|
| Return on assets                      | Return on assets                      | <ul style="list-style-type: none"> <li>• Extraordinary items have been phased out in the income and expense statement</li> <li>• Numerator: Annualized Net profit before tax</li> <li>• Denominator: Average total assets (No change)</li> </ul> |
| Return on equity                      | Return on equity                      | <ul style="list-style-type: none"> <li>• Numerator: Annualized Net profit after tax</li> <li>• Denominator: Average capital and reserves</li> </ul>  |
| Interest margin to gross income       | Interest margin to gross income       | <ul style="list-style-type: none"> <li>• Numerator: No change</li> <li>• Denominator: include extraordinary profits (if any)</li> </ul>  |
| Non-interest expenses to gross income | Non-interest expenses to gross income | <ul style="list-style-type: none"> <li>• Numerator: include extraordinary losses (if any)</li> <li>• Denominator: include extraordinary profits (if any)</li> </ul>  |

# FSIs for DTs: Before and After

## Earnings and profitability: Additional

| 2006 FSI Guide                                     | 2019 FSI Guide                                     | Main changes  |
|--|--|---|
| Trading income to total income                     | Trading income to total income                     | <ul style="list-style-type: none"> <li>Numerator: No change</li> <li>Denominator: include extraordinary profits (if any)</li> </ul> |
| Personnel expenses to non-interest expenses        | Personnel expenses to non-interest expenses        | <ul style="list-style-type: none"> <li>Numerator: No change</li> <li>Denominator: include extraordinary losses (if any)</li> </ul>  |
| Spread between reference lending and deposit rates | Spread between reference lending and deposit rates | <ul style="list-style-type: none"> <li>No change</li> <li>Both numerator and denominator need to be reported</li> </ul>             |
| Spread between highest and lowest interbank rate   | Spread between highest and lowest interbank rate   | <ul style="list-style-type: none"> <li>No change</li> <li>Both numerator and denominator need to be reported</li> </ul>             |



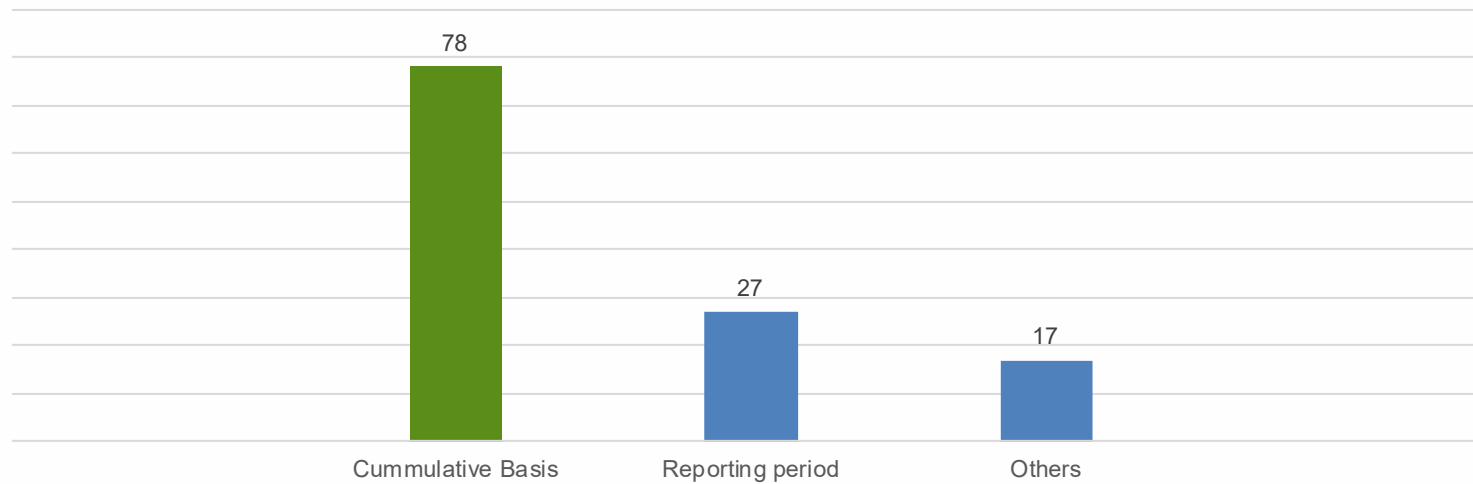


# FSIs for DTs: Before and After

Earnings and profitability

Green is consistent with the 2019 FSI Guide

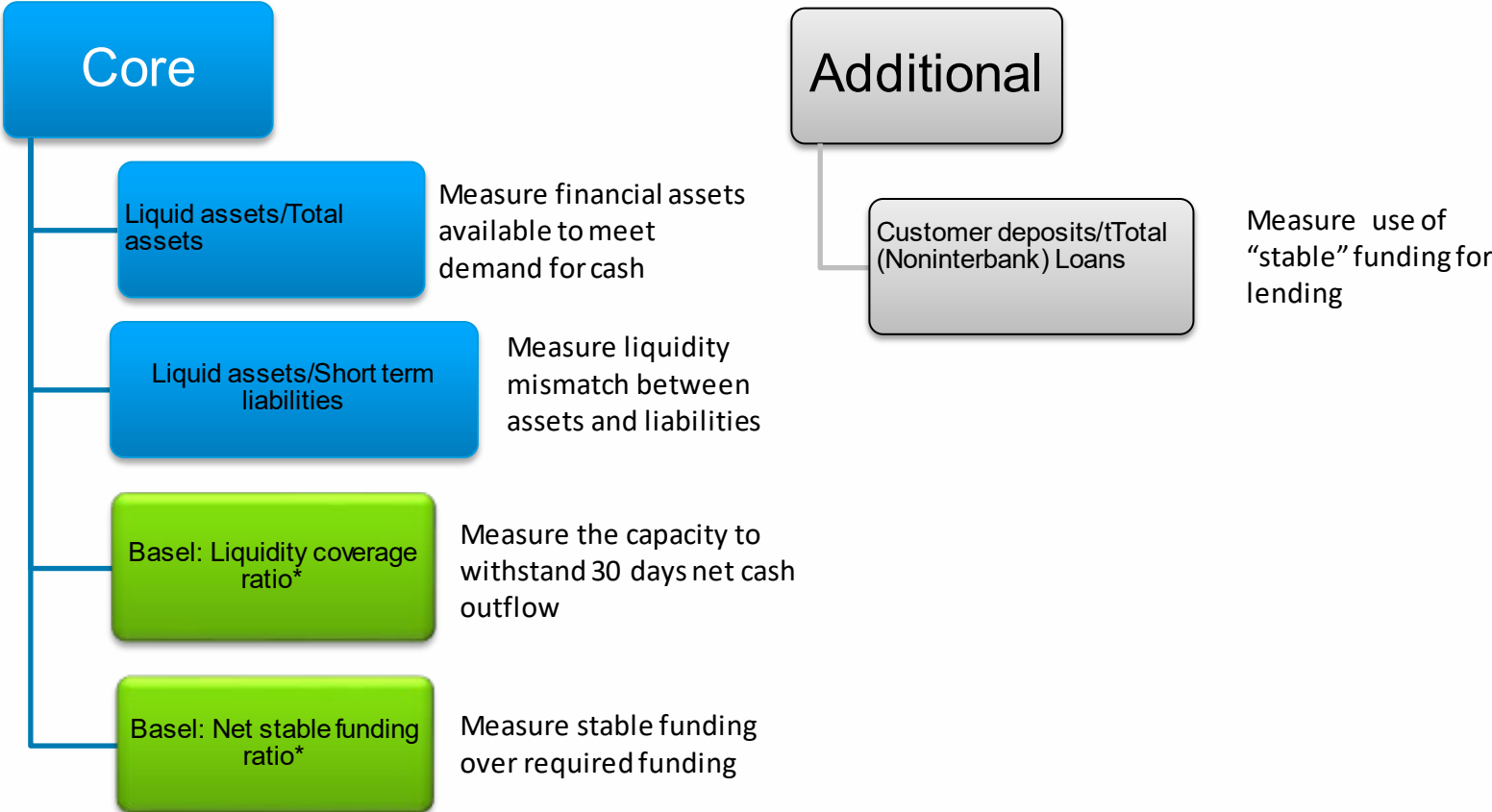
Income and expense statement



# 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

## Liquidity: Core

| 2006 FSI Guide                          | 2019 FSI Guide                                      | Main changes  |
|---|---|---|
| Liquid assets to total assets           | Liquid assets to total assets for all DTs           | <ul style="list-style-type: none"> <li>Numerator: <b>Broad measure of liquidity assets</b> (The 2019 FSI Guide does not differentiate between core and broad measure of liquidity)</li> <li>Denominator: No change</li> </ul>   |
| Liquid assets to short term liabilities | Liquid assets to short term liabilities for all DTs | <ul style="list-style-type: none"> <li>Numerator: <b>Broad measure of liquid assets</b> (The 2019 FSI Guide does not differentiate between core and broad measure of liquidity)</li> <li>Denominator: All liabilities with a maturity of not more than 90 days</li> </ul> |
|   | Liquidity Coverage Ratio*                           | <ul style="list-style-type: none"> <li>New indicator for DTs under Basel III</li> <li>Numerator: High Quality Liquid Assets (HQLA)</li> <li>Denominator: Net cash outflows</li> </ul>   |
|   | Net Stable funding Ratio*                           | <ul style="list-style-type: none"> <li>New indicator for DTs under Basel III</li> <li>Numerator: Available amount of stable funding</li> <li>Denominator: Available amount of required funding</li> </ul>   |

\* New FSI

# FSIs for DTs: Before and After

## Liquidity: Additional

| 2006 FSI Guide                                  | 2019 FSI Guide                                  | Main changes   |
|---|---|--|
| Customer Deposits to Total (Noninterbank) Loans | Customer Deposits to Total (Noninterbank) Loans | <ul style="list-style-type: none"><li>• Numerator: include all deposits placed by residents or nonresidents, except those placed by (resident and nonresident) financial corporations, central governments, and central banks</li><li>• Denominator: No change</li></ul> |

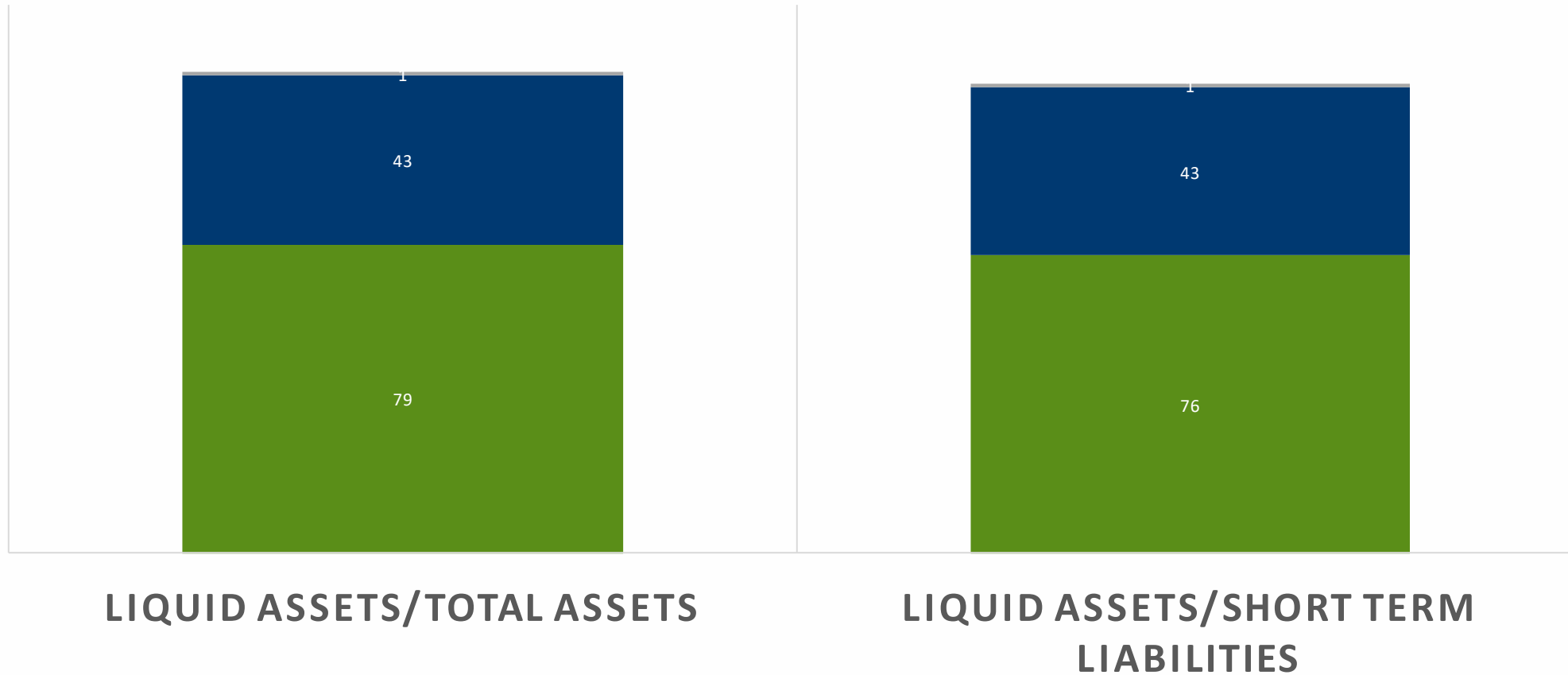
\* New FSI

# FSIs for DTs: Before and After

## Liquidity

Green indicates prescribed choice of denominator in 2019 FSI guide

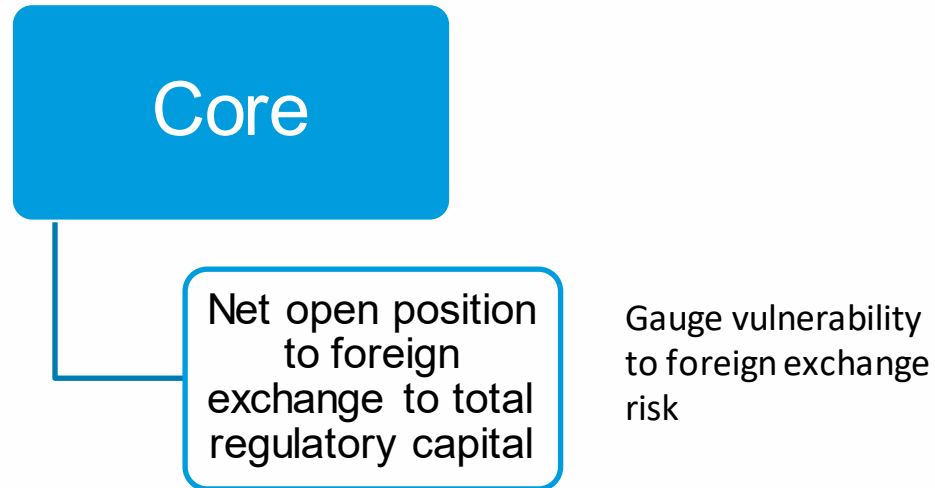
■ Broad   ■ Core   ■ Unknown



# FSIs for DTs: Before and After

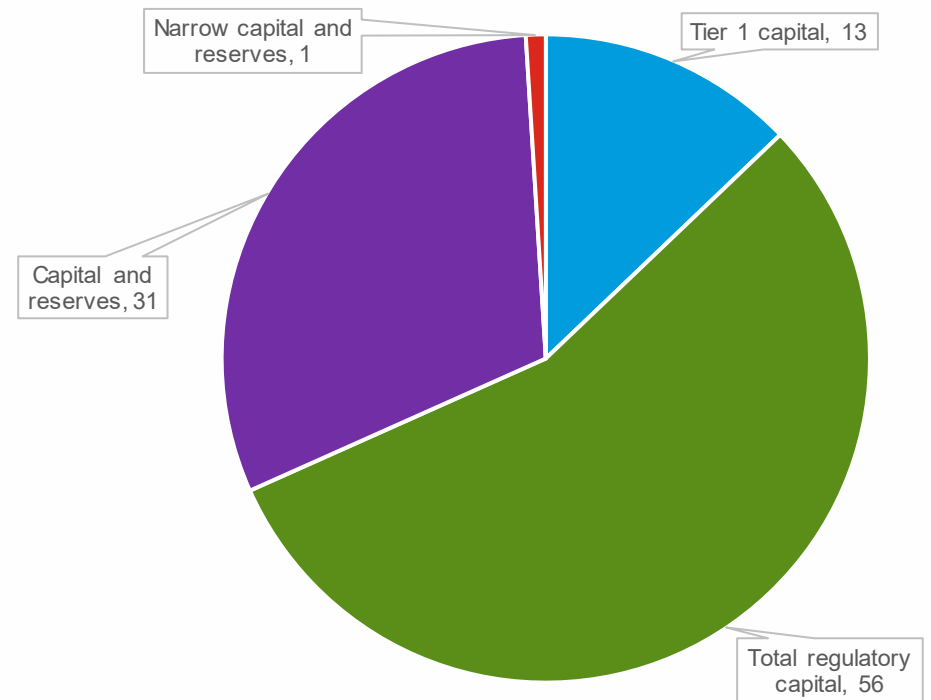
## Sensitivity to Market Risk

Analytic value: a measure of exposures to market risk



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

## Sensitivity to Market Risk: Core

| 2006 FSI Guide                                   | 2019 FSI Guide                                   | Main changes  |
|--|--|---|
| Net open position in foreign exchange to capital | Net open position in foreign exchange to capital | <ul style="list-style-type: none"><li>• Numerator: No change (Preferred approach is to use on- and off-balance measure).</li><li>• Denominator: <b>Total regulatory capital</b></li></ul> |

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

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# The story behind 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
  - ▶ 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: Indicators suggested in the Guide

- For concentration, the Guide recommends

## **The Herfindahl Index**

- Various ways to measure dispersion, including variance, standard deviation and quartiles. The Guide recommends:

## **Weighted Standard Deviation**

## **Weighted Quartiles**

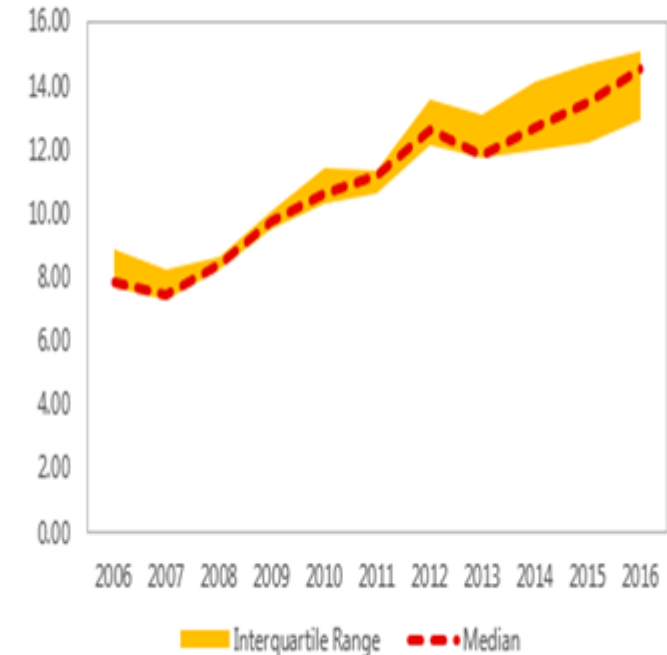
## **Weighted Skewness**

## **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

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

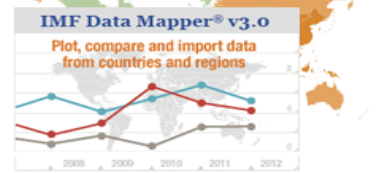


Source: Fitch Connect and IMF staff calculations.



# IMF 2019 FINANCIAL SOUNDNESS INDICATORS COMPILATION GUIDE (2019 FSI GUIDE)

## Data Tools



Available on the IMF iPad App



## The IMF 2019 Financial Soundness Indicators Compilation Guide (2019 FSI Guide)

The IMF *2019 Financial Soundness Indicators Compilation Guide (2019 FSI Guide)* updates the methodological guidance on the concepts and definitions, data sources and methods for the compilation and dissemination of financial soundness indicators. It includes new indicators to expand the coverage of the financial sector, including other financial intermediaries, money market funds, insurance corporations, pension funds, nonfinancial corporations, and households.

[Download PDF](#)

[Concentration and Distribution Measure \(CDM\) Tool](#)

### DISCLAIMER:

This Concentration and Distribution Measures (CDMs) tool, for selected Financial Soundness Indicators, is provided to member countries only for their convenience. A key objective of the tool is to facilitate comparability, reproducibility and interpretability of CDMs across the membership. However, individual countries remain solely responsible for their reported CDMs. The IMF makes no representation or warranty of any kind, express or implied, about the tool's completeness, accuracy, reliability, suitability or usability with every system.

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- **FSIs for Other Sectors**
- New Report Forms and Migration

# Additional FSIs for OFCs: Overview

- **OFCs' assets to total financial assets**

*This indicator will be produced for the OFC sector as a whole and for each defined subsector: (i) Money market funds (MMFs) ; (ii) Insurance Corporations (ICs); and (iii) Pension Funds (PFs):*

- **OFCs' assets to gross domestic product**

*This indicator will be produced for the OFC sector as a whole and for each defined subsector: (i) MMFs; (ii) ICs; and (iii) PFs.*

- **More FSIs for OFCs**

- ▶ MMFs: 2 new indicators,
- ▶ ICs: 4 new indicators,
- ▶ PFs: 2 new indicators

# 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 Corporations

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 Non-Financial Corporations

- **Current:**
  - Debt to equity
  - Return on equity
  - Earnings to interest and principal expenses
  
- **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**
  - ▶ Household 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"> <li>• No change</li> </ul>  |
| Household debt service and principal payments to income | Household debt service and principal payments to income | <ul style="list-style-type: none"> <li>• No change</li> </ul>  |
|   | Household debt to household disposable income           | <ul style="list-style-type: none"> <li>• New FSI</li> <li>• Numerator: House debt</li> <li>• Denominator: Household disposable income</li> </ul> |

# 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

| 2006 FSI Guide                               | 2019 FSI Guide                               | Changes                             |
|--|--|-------------------------------------|
| Residential real estate prices               | Residential real estate prices               | • Upgraded to the list of core FSIs |
| Commercial real estate prices                | 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.

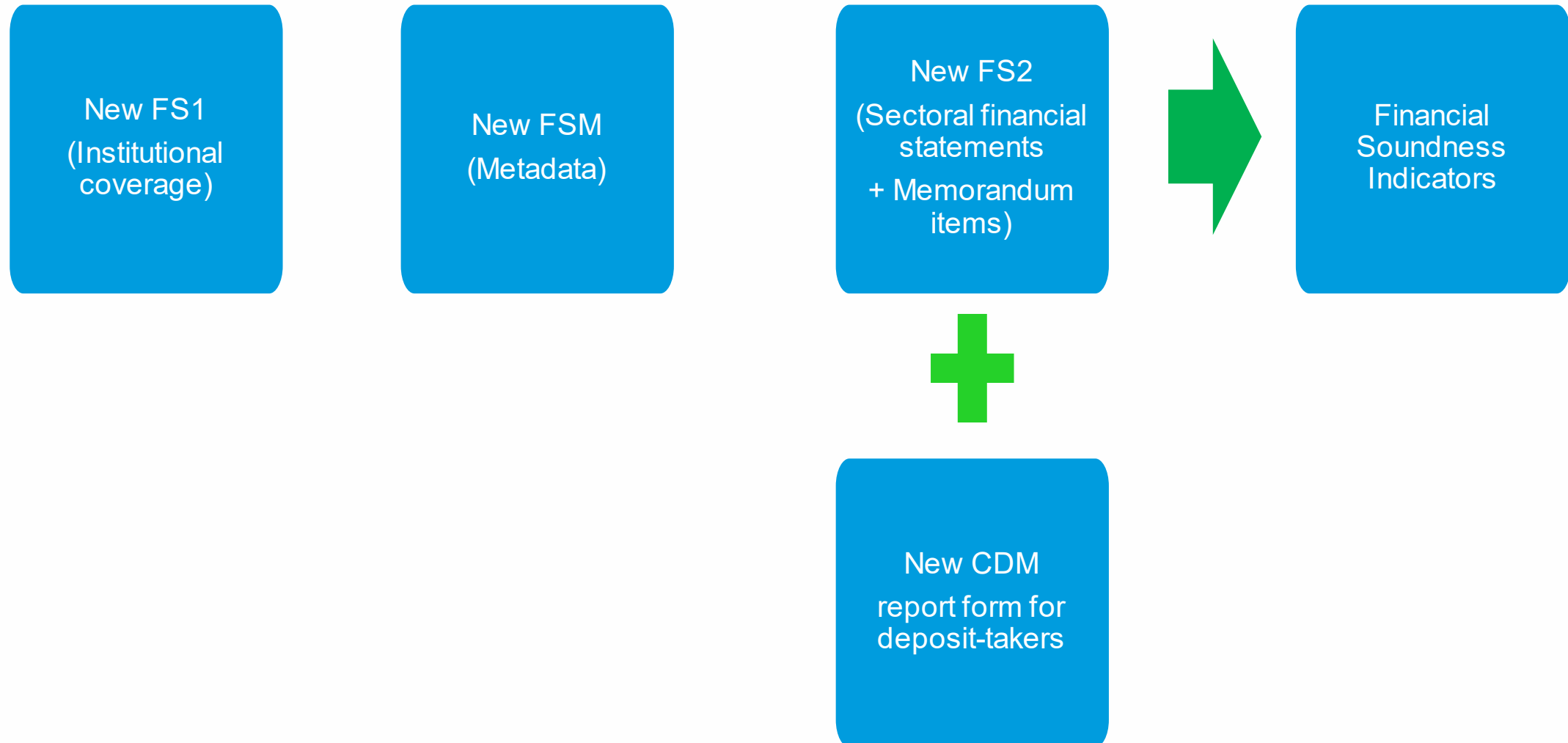
# Webinar Agenda

- Motivation for the update of the FSIs Guide
- FSIs: Before and After
- Concentration and Distribution Measures
- FSIs for Other Sectors
- **New Report Forms and Migration**



# New FSI report forms

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



# The way forward

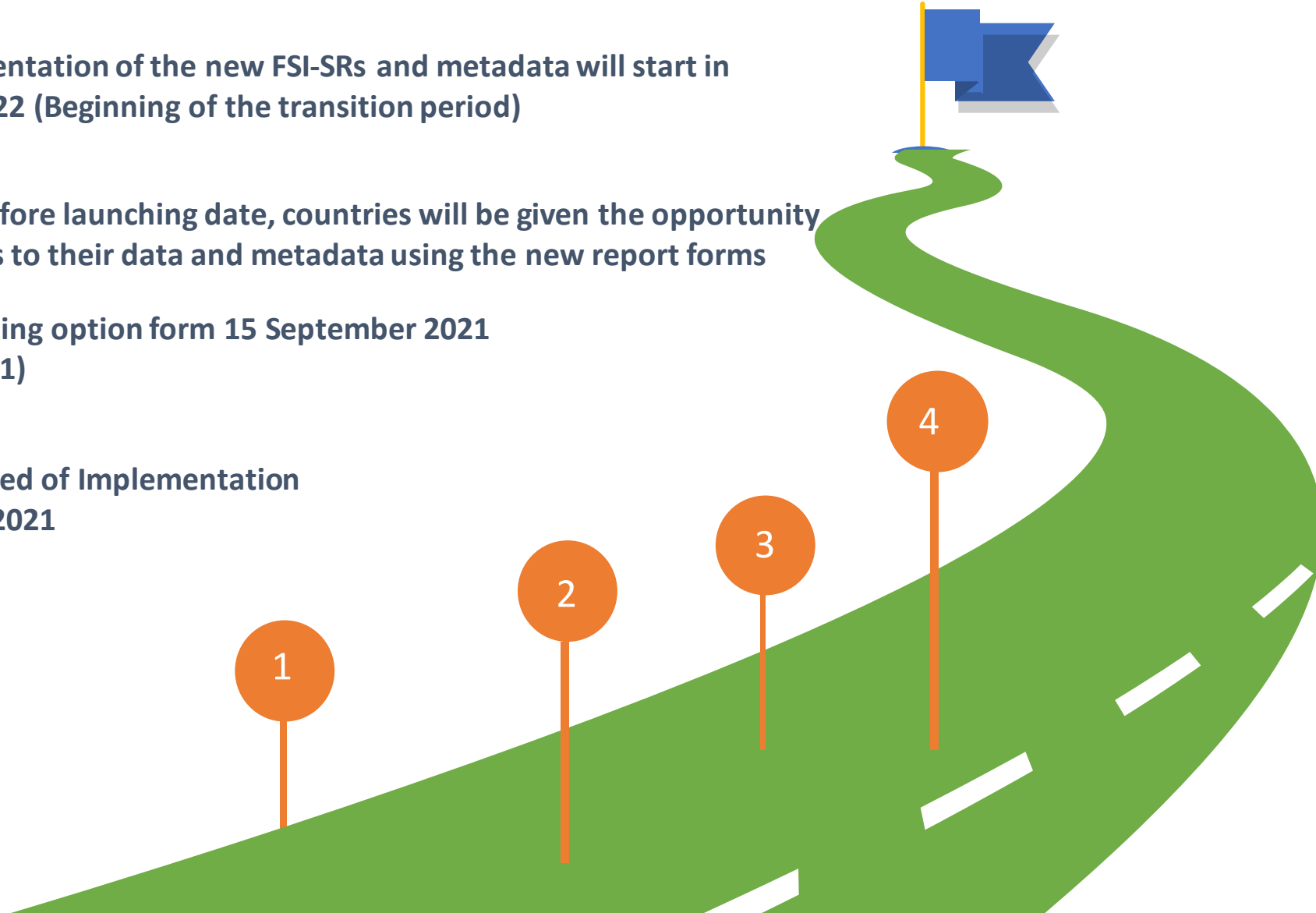
New FSI report forms are implemented (End of transition period in December 2022)

4. Implementation of the new FSI-SRs and metadata will start in January 2022 (Beginning of the transition period)

3 Two weeks before launching date, countries will be given the opportunity to make changes to their data and metadata using the new report forms

2. Deadline for returning option form 15 September 2021 (extended till end-2021)

1. Countries were informed of Implementation of new templates in July 2021





# Appendices

# Additional FSIs for OFCs: Before and After

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

# Additional FSIs for OFCs: Before and After

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

# 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"> <li>• New FSI</li> <li>• Numerator: Liquid assets</li> <li>• Denominator: Estimated pension payments in the next year</li> </ul> |
|               |                | Return on assets   | <ul style="list-style-type: none"> <li>• New FSI</li> <li>• Numerator: Annualized Profit before tax</li> <li>• Denominator: Average total assets</li> </ul>         |

# Additional FSIs for NFCs: Before and After

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

# 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"> <li>Deleted</li> </ul>  |
|      | Number of applications for protection from creditors |                        | <ul style="list-style-type: none"> <li>Deleted</li> </ul>  |
|      |  | <i>NFC debt to GDP</i> | <ul style="list-style-type: none"> <li>New FSI</li> <li>Numerator: Total debt</li> <li>Denominator: GDP</li> </ul> |