



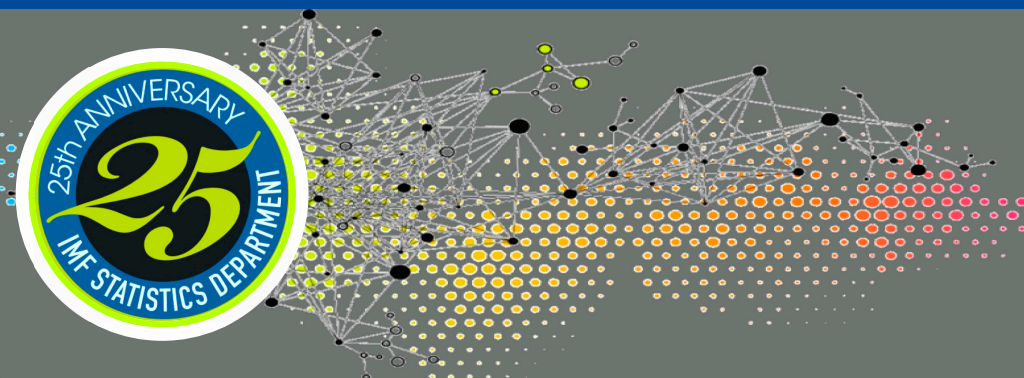
STATISTICS

# Overview of the Updated 2019 *FSIs Guide*

NOVEMBER 6-7, 2019

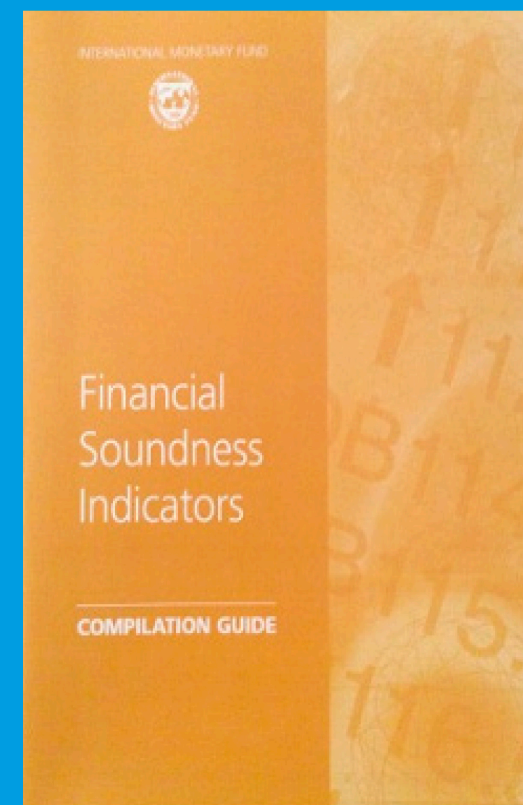
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# Outline

- Motivation for Updating the *Financial Soundness Indicators (FSIs) Compilation Guide (FSIs Guide)*
- Main Changes in the *FSIs Guide*
- List of FSIs: Before and After
- FSIs Reporting by AMF Members
- Concentration and Distribution Measures



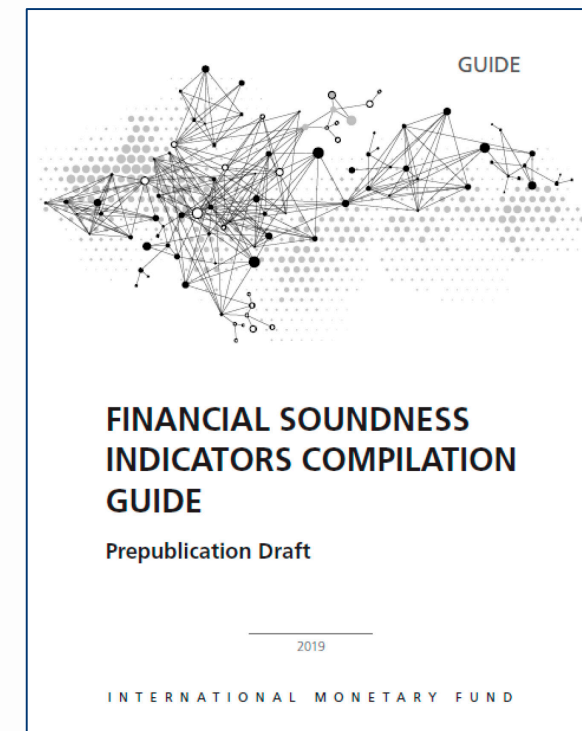
# Motivation for Updating the IMF's *FSIs Guide*

**Following the global financial crisis there was a recognition of the need to improve tools to track macro-financial vulnerabilities**

- The crisis led to reforms in
  - ▶ Regulation (Basel III Accord)
  - ▶ Accounting (IFRS 9)
- also reflected in 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 (CDM) for selected FSIs
- and a recognition of the need for/to
  - ▶ FSIs to better gauge deposit takers buffers vs. expected and unexpected losses
  - ▶ develop new FSIs for Other Financial Corporations (nonbank financial institutions)
  - ▶ strengthen the FSIs for Non Financial Corporations and Households

# 2019 *FSIs Guide*: Status Update

- Prepublication version released in April 2019 on the IMF.org website (<https://www.imf.org/~media/Files/Data/2019/fsicg2019-prepublication-final-042519.ashx>)
- Revamping IMF training courses on FSIs
- Background work on implementing new report forms etc.
- Final proofreading ongoing



# Main Changes in the 2019 *FSIs Guide*

More prescriptive and more forward looking

Reflects advances in the regulatory framework  
(Basel III)

Accounting practices updated to reflect the IFRS 9

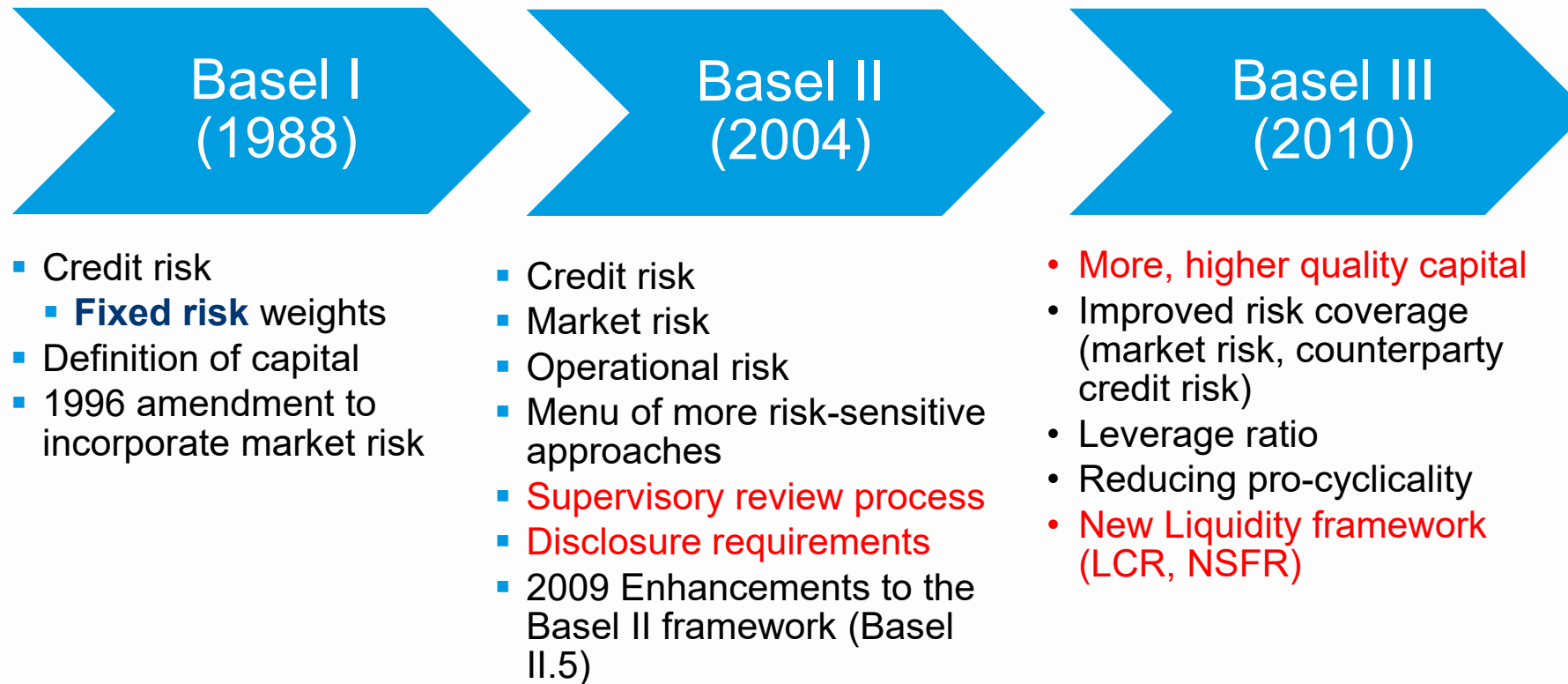
Revised list of FSIs (18 core and 35 additional)

Added FSIs for OFCs (nonbank financial institutions),  
nonfinancial corporations (NFCs) and households

Guidance provided on Islamic finance (Annex 7.4)

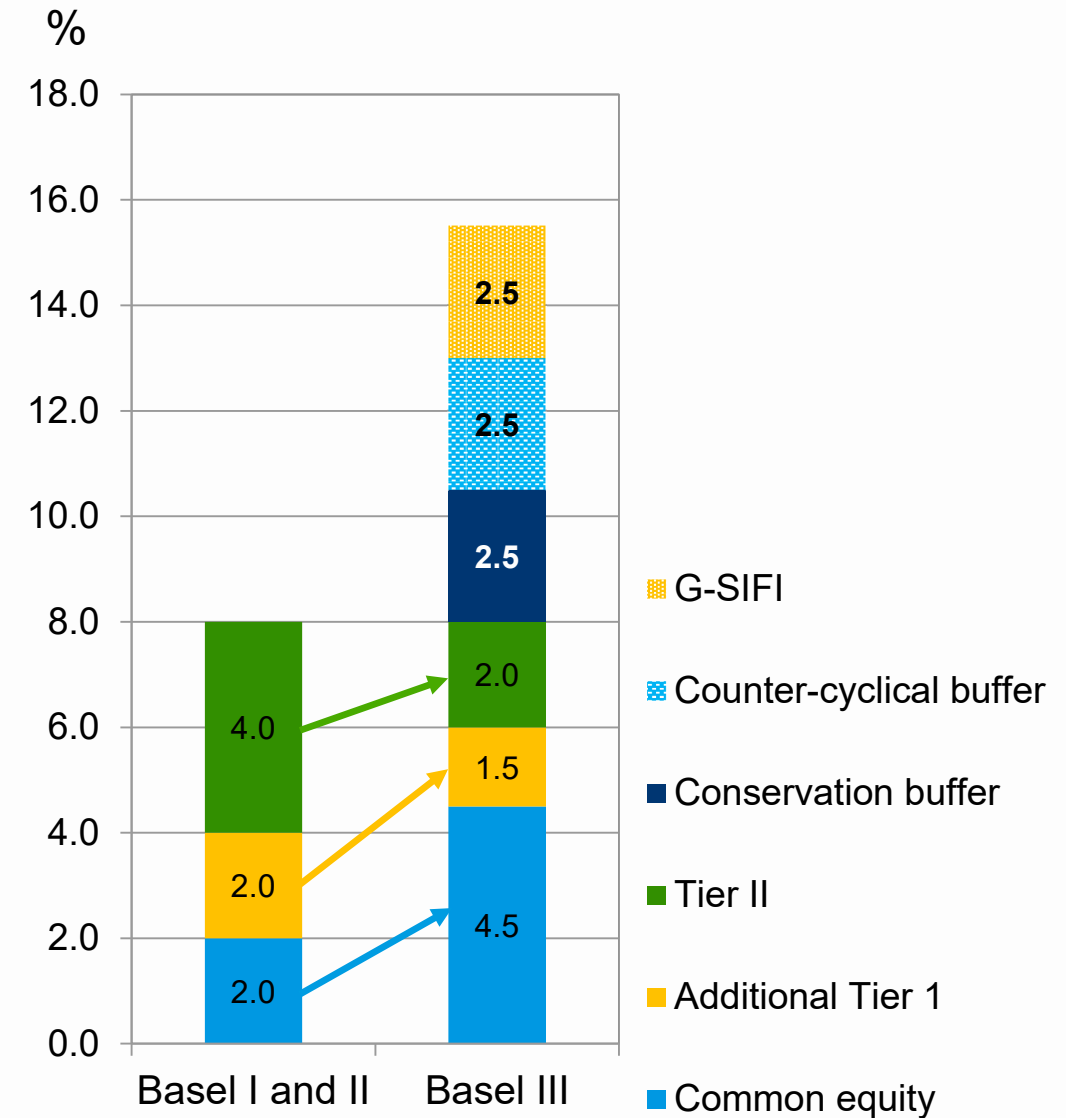
# From Basel I to Basel III

**Objective:** to establish uniform international requirements regarding minimum capital, contributing to financial stability, and avoiding regulatory arbitrage



# Basel III—More, Higher Quality Capital

- Capital definitions strengthened
- Tier 3 eliminated
- Common equity requirement increased from 2 to 4.5 percent
- Tier 1 capital requirement increased from 4 to 6 percent
- New 2.5 percent common equity “capital conservation buffer”
- New 0 to 2.5 percent discretionary “counter-cyclical buffer”
- Additional 1 to 2.5 percent Common Equity Tier 1 (CET1) buffer for Global Systemically Important Financial Institutions (G-SIFIs)



Source: 2019 *FSIs Guide* and Basel Committee on Banking Supervision.

# Accounting Principles Updated to Follow the IFRS 9

The *FSIs Guide* now defers to IFRS on main accounting principles (IFRS 9 Financial Instruments, effective from January 2018, replacing IAS 39)

- IFRS 9 valuation—all financial assets valued at fair value or amortized cost
- Recoding gains and losses under IFRS
  - ▶ Gains and losses from a change in the fair value of a financial asset or liability are recorded
    - ◆ through Profit and Loss:
      - A separate reported item in the income and expense statement (line 4(ii) in Table 5.1)
      - Used to calculate the FSI “Trading Income to Total Income”
    - ◆ through “Other Comprehensive Income”
      - A separate item in the FSI income statement (line 11 in Table 5.1)



# The Revised List of FSIs—18 Core and 35 Additional FSIs

The list of FSIs has been expanded to better cover nonbank financial institutions and nonfinancial corporations; five FSIs are dropped.

Before	After
<b>Core FSIs</b> <ul style="list-style-type: none"><li>▪ 12 core FSIs for deposit takers (DTs)</li></ul> <b>Encouraged FSIs for DTs</b> <ul style="list-style-type: none"><li>▪ 13 core FSI for Real Estate Markets</li></ul> <b>Encouraged FSIs for OFCs</b> <ul style="list-style-type: none"><li>▪ 2 additional FSIs for OFCs</li></ul> <b>Other Encouraged FSIs</b> <ul style="list-style-type: none"><li>▪ 5 encouraged FSIs for NFCS</li><li>▪ 3 encouraged FSIs for Households</li><li>▪ 2 encouraged FSIs for Market Liquidity</li><li>▪ 3 encouraged FSIs for Real Estate Markets</li></ul>	<b>Core FSIs</b> <ul style="list-style-type: none"><li>▪ 17 core FSIs for DTs</li><li>▪ 1 core FSI for Real Estate Markets</li></ul> <b>Additional FSIs for DTs</b> <ul style="list-style-type: none"><li>▪ 12 additional FSIs for DTs</li></ul> <b>Additional FSIs for OFCs</b> <ul style="list-style-type: none"><li>▪ 10 additional FSIs for OFCs</li></ul> <b>Other Additional FSIs</b> <ul style="list-style-type: none"><li>▪ 7 additional FSIs for NFCS</li><li>▪ 3 additional FSIs for Households</li><li>▪ 3 additional FSIs for Real Estate Markets</li></ul>

# Core FSIs for DTs: Before and After

Current List of FSIs	Updated List of FSIs
<b>Capital Adequacy</b>	
Regulatory capital to risk-weighted assets	Regulatory capital to risk-weighted assets
Regulatory Tier 1 capital to risk-weighted asset	Regulatory Tier 1 capital to risk-weighted assets
Nonperforming loans net of provisions to capital	Nonperforming loans net of provisions to capital
	<i>Common Equity Tier 1 capital to risk-weighted assets [new]</i>
	<i>Tier-1 capital to assets [moved from encouraged to core]</i> <i>Basel III leverage ratio [for Basel III]</i>
<b>Asset Quality</b>	
Nonperforming loans to total gross loans	Nonperforming loans to total gross loans
Sectoral distribution of loans to total loans	Sectoral distribution of loans to total loans
	<i>Provisions to nonperforming loans [new]</i>
<b>Earnings and Profitability</b>	
Return on assets	Return on assets
Return on equity	Return on equity
Interest margin to gross income	Interest margin to gross income
Non-interest expenses to gross income	Non-interest expenses to gross income

# Core FSIs for DTs: Before and After

Current List of FSIs	Updated List of FSIs
<b>Liquidity</b>	
Liquid assets to total assets	Liquid assets to total assets
Liquid assets to short term liabilities	Liquid assets to short term liabilities
	<i>Liquidity Coverage Ratio (LCR), for DTs under Basel III [new]</i>
	<i>Net Stable funding Ratio (NSFR) , for DTs under Basel III [new]</i>
<b>Sensitivity to Market Risk</b>	
Net open position in foreign exchange to capital	Net open position in foreign exchange to capital
<b>Real Estate Markets</b>	
Real estate prices <i>[encouraged]</i>	Residential real estate prices <i>[modified and moved from encouraged to core]</i>

# Additional/Encouraged FSIs for DTs: Before and After

Current List of FSIs	Updated List of FSIs
Capital to assets	<i>[moved from encouraged to core]</i>
Large exposures to capital	Large exposures to capital
Geographical distribution of loans	Geographical distribution of loans
Gross asset position in financial derivatives to capital	Gross asset position in financial derivatives to capital
Gross liability position in financial derivatives to capital	Gross liability position in financial derivatives to capital
Trading income to total income	Trading income to total income
Personnel expenses to non-interest expenses	Personnel expenses to non-interest expenses
Spread between reference lending and deposit rates	Spread between reference lending and deposit rates
Spread between highest and lowest interbank rate	Spread between highest and lowest interbank rate
Customer deposits to total (noninterbank) loans	Customer deposits to total (noninterbank) loans
Foreign-currency denominated loans to total loans	Foreign-currency denominated loans to total loans
Foreign-currency denominated liabilities to total liabilities	Foreign-currency denominated liabilities to total liabilities
<i>Net open position in equities to capital [deleted]</i>	<i>Credit growth to private sector [new]</i>

# Additional/Encouraged FSIs for OFCs: Before and After

Current List of FSIs	Updated List of FSIs
Assets to total financial system assets	Assets to total financial system assets (for total of OFCs and subsectors)
Assets to gross domestic products (GDP)	Assets to GDP (for total of OFCs and subsectors)
	<b>Money Market Funds</b>
	<i>Sectoral distribution of investments [new]</i>
	<i>Maturity distribution of investments [new]</i>
	<b>Insurance Corporations</b>
	<i>Shareholder equity to total invested assets (life and non-life insurance) [new]</i>
	<i>Combined ratio (non-life insurance only) [new]</i>
	<i>Return on assets (life insurance only) [new]</i>
	<i>Return on equity (life and non-life) [new]</i>
	<b>Pension Funds</b>
	<i>Liquid assets to estimated pension payments in the next year [new]</i>
	<i>Return on assets [new]</i>

# Additional/Encouraged FSIs for NFCs: Before and After

Current List of FSIs	Updated List of FSIs
Total debt to equity	Total debt to equity <i>External debt to equity [new]</i> <i>Foreign currency debt to equity [new]</i>
Return on equity	Return on equity
Earnings to interest and principal expenses	Earnings to interest and principal expenses
<b><i>Net foreign exchange exposure to equity [deleted]</i></b>	<i>Total debt to GDP [new]</i>
<b><i>Number of applications for protection from creditors [deleted]</i></b>	<i>Earnings to interest expenses [new]</i>

# Other Additional/Encouraged FSIs: Before and After

Current List of FSIs	Updated List of FSIs
<b>Households</b>	
Household debt to GDP	Household debt to GDP
Household debt service and principal payments to income	Household debt service and principal payments to income
	<i>Household debt to household disposable income [new]</i>
<b>Real Estate Markets</b>	
Real estate prices <i>[encouraged]</i>	Residential real estate prices <i>[modified and moved from encouraged to core]</i> <i>Commercial real estate prices [new]</i>
Residential real estate loans to total loans	Residential real estate loans to total loans
Commercial real estate loans to total loans	Commercial real estate loans to total loans
<b>Market Liquidity</b>	
<i>Average bid-ask spread in the securities market [deleted]</i>	
<i>Average daily turnover ratio in the securities market [deleted]</i>	

# Guidance on the Compilation of FSIs for Islamic Finance

The updated *FSIs Guide* provides guidance, for the first time, on how to map source data for Islamic DTs for compiling FSIs.

- **Annex 7.4 Islamic Deposit Takers and Financial Soundness Indicators of the FSIs Guide** describes the business model of Islamic DTs (IDTs) and how Islamic financial instruments differ from the conventional ones.
- The annex provides detailed guidance on how to map balance sheets and income statements of IDTs to the standard FSIs templates, so that FSIs for financial sectors with IDTs could be compiled. (See Tables 7A.1 and Box 7.3 in Annex 7.4.)
- The provided guidance draws on the *Revised Compilation Guide on Prudential and Structural Islamic Financial Indicators* (2011) of the Islamic Financial Services Board and the IMF's *Monetary and Financial Statistics Manual and Compilation Guide* (2016)



# Reporting of FSIs by Members of the Arab Monetary Fund (AMF)

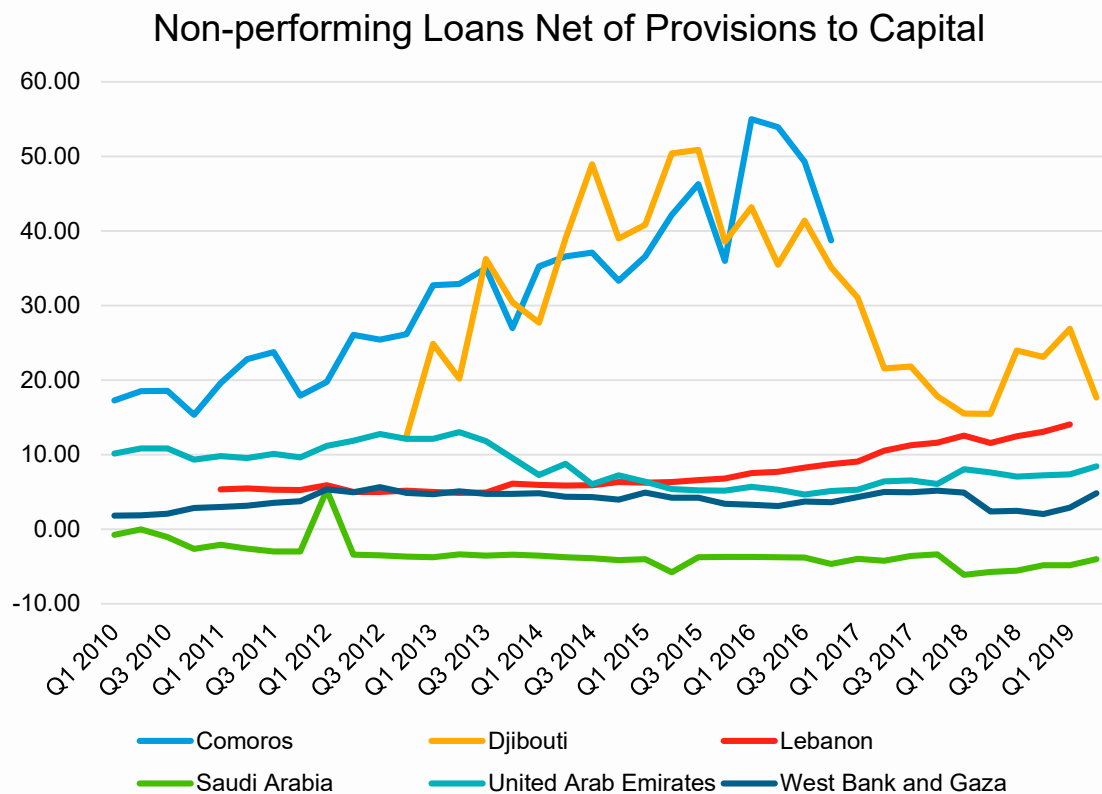
Eight AMF members out of 22 report FSIs to STA for disseminating on the IMF FSIs website:

AMF member	FSI Reporter	Number/Frequency of Reported Core FSIs/Latest Data	Number/Frequency of Reported Other FSIs for DTs/Latest Data	Number/Frequency of Reported Other FSIs/Latest Data
Algeria	Yes	11/A/2018	3/A/2018	2/A/2018
Comoros <sup>1</sup>	Yes	11/M (some Annual) /2016-M12	N/A	N/A
Djibouti	Yes	12/Q/2019-Q2	7/Q/2019-Q2	N/A
Kuwait	Yes	12/Q/2019-Q1	8/Q/2019-Q1	N/A
Lebanon	Yes	11/Q/2019-Q1	8/Q/2019-Q1	N/A
Saudi Arabia	Yes	13/Q/2019-Q2	8/Q/2019-Q2	2/Quarterly/2019-Q2
United Arab Emirates	Yes	13/Q/2019-Q2	N/A	N/A
West Bank and Gaza	Yes	12/Q/2019-Q2	6/Q/2019-Q2	4/Quarterly/2019-Q2

Note: A=annual; Q=quarterly; M=monthly  
Source: IMF FSIs online database.

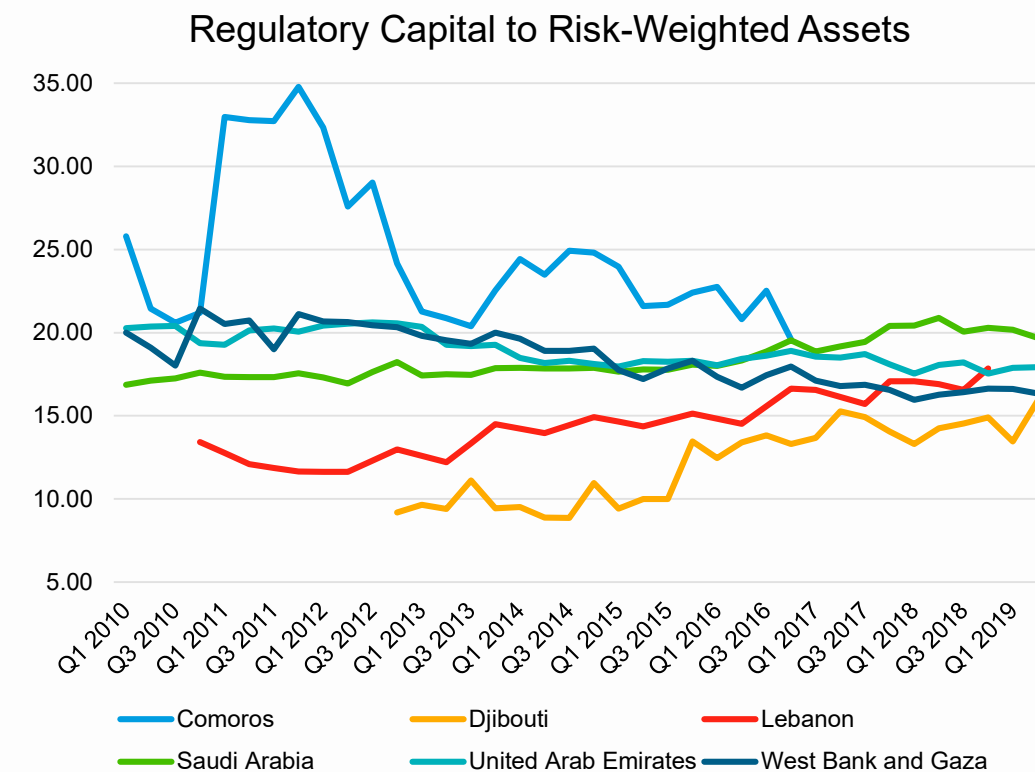
# Examples of the Reported FSIs by AMF Members

How well are non-performing loans provisioned relative to the capital?



Source: IMF FSIs online database.

How well are DTs Capitalized as Compared to Risk Weighted Assets?



Source: IMF FSIs online database.

# Concentration and Distribution Measures (CDMs)

The updated *FSIs Guide* presents a framework for compiling and reporting CDMs for selected FSIs.

**A concern raised for FSIs:** aggregate FSIs for a sector may hide variations that could endanger the financial system. For example, data for highly capitalized DTs could offset those for undercapitalized DTs, such that the aggregate may appear robust while masking vulnerabilities from weak DTs whose failure could lead to contagion throughout the system.

- For this reason, FSIs need to be supplemented by CDMs.
- To address this concern, in 2009, the IMF/Financial Stability Board G-20 DGI called on the IMF “to investigate, develop, and encourage implementation of standard measures that can provide information on tail risks, concentrations, variations in distributions, and the volatility of indicators over time.”
- The updated 2019 *FSIs Guide* makes specific recommendations on the CDMs.

# CDMs for Selected Core FSIs for DTs

The updates *FSIs Guide* recommends the compilation and dissemination of:

- CDMs for 7 selected FSIs for DTs: capital adequacy (2); asset quality (2); profitability (2); leverage (1).
- Measures include standard deviation, skewness, kurtosis, weighted quartile, and Herfindahl index.

1. Sector Asset Concentration (Herfindahl Index)							
	TIER 1 Capital to Risk- Weighted Assets	NPLs to Gross Loans	NPLs net of Provisions to Capital	Provisions to NPLs	Return on Assets (ROA)	Return on Equity (ROE)	TIER 1 Capital to total Assets
2. Weighted Quartiles							
1 <sup>st</sup> Quartile (weighted)							
2 <sup>nd</sup> Quartile (weighted)							
3 <sup>rd</sup> Quartile (weighted)							
4 <sup>th</sup> Quartile (weighted)							
3. Weighted Standard Deviation							
4. Weighted Skewness							
5. Weighted Kurtosis							

Source: 2019 *FSIs Guide*.

**Thank You!**

**Questions?**