

Part IV

Dissemination and Data Analysis

Chapter Twelve

Dissemination of FSI ratios and related data

Introduction

12.1 To enhance the transparency of their financial system, countries are encouraged to disseminate data on the core and other relevant FSI ratios on a frequent basis. This chapter provides a standard framework for the dissemination of the core and encouraged FSIs. It can be adapted to meet specific country circumstances. The chapter also provides additional frameworks for the dissemination of information that allows analysts to interpret the FSI data in the context of the specific country circumstances, including the structural features of the financial system. Dissemination of this additional information can be essential, because disseminating FSIs alone may not provide an adequate basis for their own interpretation due to the complexity of information they encapsulate, the range of data sources used in their construction, and the various accounting rules under which the data can be compiled.

12.2 Further, while FSIs provide a variety of information on the health and soundness of the financial system that are essential for macroprudential analysis, even with the additional information, they are not sufficient in their own right to provide a comprehensive analysis of the vulnerabilities of a country's financial system. Other factors that are important but outside the scope the *Guide* include the quality of supervision and of corporate governance, and the incentives facing financial corporations including the legal framework and the role of government in the financial system. It should be recognized that coming to a judgment on the strength and vulnerability of any financial system by combining these qualitative factors with the quantitative FSI data is not an exact method of analysis.

Dissemination Practices

12.3 As noted above, it is recommended that FSIs be disseminated on a frequent basis. The availability of information can vary between FSIs—for instance, information on inter-bank interest rates will be available more frequently than information on the geographic

distribution of lending. Nonetheless, countries are encouraged to release at least a core FSI dataset on a quarterly frequency, within one quarter of the reference date. Some FSIs may be available for dissemination more frequently.

12.4 The data covered in a core dataset can vary depending upon national circumstances but as a minimum it should include the core FSIs for domestically controlled deposit-takers on a cross-border basis.²⁰⁵ Preferably the data on a quarterly frequency should cover institutions that account for a significant percentage, such as 90-95 per cent or more, of assets of the reporting population with complete coverage at least on an annual frequency. It is recognized that some structural information may also only be available on an annual basis.

12.5 When data are disseminated, provisional data should be clearly indicated, and any major revisions explained by way of notes to the published tables. Breaks in series, for example, due to changes in the reporting population, should be clearly identified and quantified where possible. Such explanations are particularly important given that the entrance or departure of a few institutions from the reporting sample could potentially have a significant impact on the ratios.

12.6 Given the wide-range of source data needed for compiling FSIs, data from various agencies (e.g., the central bank, statistical agency, and supervisory agency) are likely to be included. Nevertheless, as noted in Chapter 10, it is recommended that one agency takes lead responsibility for the dissemination of a full set of FSIs on one centralized website and/or in a paper publication. Such an approach facilitates access by users. The lead agency should be designated as the contact point for user queries on national FSIs.

²⁰⁵ If the domestically controlled deposit-takers do not have any foreign deposit-taking subsidiaries and branches then the data for these deposit-takers should be on a domestically consolidated basis.

A framework for disseminating FSIs

12.7 Set out ahead is a dissemination framework based on three modules. These modules organize information into a series of tables to provide a coherent body of information. The three modules and their elements are:

Module 1

- **The core and encouraged FSIs:** Table 12.1 provides an illustrative presentation of the list of indicators on both a domestic-controlled cross-border and domestic consolidated-basis. It is recognized that alternative possibilities for the ordering of the list exist. Time series data are encouraged, with graphical presentations to facilitate the identification of trends in FSIs and complement the data series themselves.²⁰⁶
- **Financial sector overview:** The *Guide* sets out some structural indicators for deposit-takers, and other financial corporations. See Table 12.2. These indicators go beyond the agreed FSIs.
- **Sector-level income and expense and balance-sheet statements:** These statements provide the underlying data series used to calculate many FSI ratios. The *Guide* considers that disseminating these statements would support the analysis of the FSI datasets, although such dissemination goes beyond the agreed FSIs. Such data can help gauge the magnitudes of the underlying amounts, enable interpretation of the ratios—especially whether intertemporal movements in ratios are caused by changes in the component elements of the numerator and/or denominator—and allow additional FSIs to be calculated as country circumstances require. The tables for disseminating the sector-level income and expense and balance sheet data are presented in Chapter 4: Table 4.1 (Deposit-takers), Table 4.2 (Other financial corporations), Table 4.3 (Nonfinancial corporations) and Table 4.4 (Households).

The core and encouraged FSIs

12.8 Table 12.1 provides an illustrative presentations of FSI data: (1) on a domestic-controlled, cross-border consolidated basis and, (2) on a domestic-basis (with data for deposit-takers and other corporations on a domestically-consolidated basis). See paragraphs 5.31 to 5.32 and 5.36 to 5.39 for guidance.

²⁰⁶ Ideally, data series would extend back to cover at least one business cycle to facilitate interpretation of current FSIs.

12.9 The *Guide* requires that data be compiled and disseminated on a domestically-controlled, cross-border consolidated basis for the core indicators, all of which are highlighted in bold italics below. Beyond this, the *Guide* encourages the compilation of the other data series in the table. As noted in Chapter 5, national authorities may see a need to compile separate data on foreign-controlled deposit-takers; such information could be disseminated as an additional column in the table for deposit-taking FSIs, only.

Table 12.1: Financial Soundness Indicators

Ratios unless otherwise stated

	<i>Domestically controlled, cross-border (for soundness analysis) (required)</i>	<i>Domestic- based (for link with macroeconomy) (encouraged)</i>
(a) Deposit-takers^{1/}	(1)	(2)
<i>Capital-based ^{2/}</i>		
<i>Regulatory Capital to risk-weighted assets</i>		3/
<i>Regulatory Tier 1 capital to risk-weighted assets</i>		3/
<i>Capital to assets</i>		
<i>Return on equity</i>		
<i>Nonperforming loans net of provisions to capital</i>		
<i>Large exposures to capital</i>		
(number of large exposures)		
(to large resident entities) ^{4/}		
(to connected borrowers) ^{5/}		
<i>Duration of assets (years and months) ^{6/}</i>		
<i>Duration of liabilities (years and months) ^{6/}</i>		
<i>Net open position in foreign exchange to capital ^{7/}</i>		
Gross asset position in financial derivatives to capital		
Gross liability position in financial derivatives to capital		
Net open position in equities to capital		
<i>Asset-based</i>		
<i>Liquid assets to total assets</i>		
<i>Liquid assets to short-term liabilities</i>		
Customer deposits to total (noninterbank) loans		
<i>Return on assets</i>		
<i>Nonperforming loans to total gross loans</i>		
<i>Sectoral distribution of loans to total loans (percentages of total) ^{8/}</i>		
<i>Deposit-takers</i>		
<i>Other financial corporations</i>		
<i>Nonfinancial corporations</i>		
<i>Households</i>		
<i>Nonprofit institutions serving households</i>		
<i>General government</i>		
<i>Nonresident</i>		
Residential real estate loans to total loans		
Commercial real estate loans to total loans		

Geographical distribution of loans to total loans
(percentages of total) ^{9/}

Domestic economy

Advanced countries

Regions excluding advanced countries

Africa

o/w Sub-Sahara

Asia

Europe

o/w FSU including Russia

Middle East

Western Hemisphere

Foreign currency denominated loans to total loans

Foreign currency denominated liabilities to total liabilities

Income and Expense-based

Interest margin to gross income

Trading foreign exchange gains (losses) to total income

Noninterest expenses to gross income

Personnel expenses to noninterest expenses

(b) Other Financial Corporations

Assets to total financial system assets

Assets to GDP n.a.

(c) Non Financial Corporations

Total debt to equity

Return on equity

Earnings to interest and principal expenses

Net foreign exchange exposure to equity

Number of applications for protection from creditors n.a.

(d) Households ^{10/}

Household debt to GDP n.a

Household debt burden to income n.a.

(e) Domestic Real Estate Markets

Residential Real Estate Prices (annual percentage increase) n.a.

Commercial Real Estate Prices (annual percentage increase) n.a.

(f) Domestic Security Market Liquidity

Average bid-ask spread in the security market
(percentage of mid-point price) n.a.

(please specify the instrument)

Average turnover ratio in the securities market
(please specify the instrument) n.a.

(g) Interest Rates

Spread between reference lending and deposit rate (basis points)

Spread between highest and lowest domestic interbank rate (basis points)

n.a

n.a. not applicable

1/ All series highlighted in bold and italics are core FSIs.

2/ For all the capital-based indicators except the regulatory capital FSIs, both a narrow and total capital measure can be adopted. Where applicable, Tier 1 capital should be used as the narrow measure.

3/ In most cases, such data might be only applicable to incorporated deposit-takers.

4/ Defined as claims of the largest deposit-takers on the largest entities in the resident economy, including government, to capital (see paragraph 6.35)

5/ Defined as claims on affiliated entities, including nonresident entities, to capital (paragraph 6.36).

6/ As noted in Chapter 6 an alternative approach to assessing interest rate risk of a portfolio of assets and liabilities is to use “gap” analysis (see Table 6.1).

7/ The measure of the net open position employed, whether total or on-balance sheet items only, should be made explicit when disseminating data.

8/ Supplementary information by type of industry could also be provided.

9/ Supplementary information by jurisdiction could also be provided, if significant.

10/ To be compiled on an aggregate-residence basis

Financial sector overview

12.10 Table 12.2 presents structural indicators for the domestic financial sector.

Table 12.2: Financial Sector Overview

	No. of instns.	No. of employees	No. of branches	Financial Assets			Market Concentration 1/	Claims on residents as a percentage of assets	Total Premium Income
				Billions (\$)	Percent	Percent of GDP			
Resident deposit-takers 2/									
Domestically controlled									n.a
o/w government									n.a
private									n.a
Foreign controlled									
o/w subsidiaries									n.a
branches									n.a
Memo item:									
Cross-border consolidated 3/					n.a	n.a			n.a
Other financial corporations 2/									
Insurance Companies 4/			n.a.						
Nonlife insurance			n.a.						
Life insurance			n.a.						
Pension Funds 4/			n.a.						n.a.
Securities Dealers 4/			n.a.						n.a.
Investment Funds 4/			n.a.						n.a.
Other Financial Entities 4/			n.a.						n.a.

n.a. not applicable

1/ Number of institutions accounting for 75 percent or more of the financial assets of the sector.

2/ Identifying the names of the top five institutions in the sector and their share of financial assets is encouraged.

3/ Cross-border consolidation of deposit-taking business of domestically incorporated and controlled deposit-takers.

4/ A distinction by domestically-controlled and foreign-controlled is encouraged if there is significant foreign control ownership of domestic institutions

Module 2

- **Metadata** describing in detail the content and coverage of the FSIs and the accounting conventions and other national guidelines reflected in the data should be publicly available. In particular, deviations from the principles set out in the *Guide* should be clearly explained, and any differences in approaches among the datasets (including within and between sectors) disseminated should be highlighted. At the development stage, some FSIs may be calculated from data that itself has been created from various subgroup datasets that adopt different accounting principles. This approach, if used, should be highlighted in metadata.

12.11 Below are some illustrative points for items that could be covered in such metadata. This module is modeled on the approach in the IMF's Special Data Dissemination Standard and the General Data Dissemination System.

1. Coverage, Periodicity, and Timeliness of data

Data Category

Such as deposit-takers, nonfinancial corporations, etc.

Periodicity and Timeliness of Release

Frequently with which data are disseminated released and with what time delay. If some data series are released more frequently than others, this can be specified.

2. Access by the public

Dissemination Practices

Such as the mode(s) of disseminating FSIs, and the main centralized source for users wanting to access FSIs.

Contacts

Names, addresses, e-mail addresses, etc, for people to contact.

3. Integrity

Terms and Conditions

Such as information on the terms and conditions under which these data are produced and which agencies are involved in the process.

Revisions

Information about revision and advance notice of major changes in methodology.

4. *Quality of the disseminated data*

General Information

Accounting Framework: Descriptions of the underlying accounting framework(s) for source data.

Nature of the Basic Data: Data sources, consolidation methodology, institutional coverage, etc.

Compilation Practices: Information on samples and surveys, statistical adjustments, methods of verifying data, etc.

Accounting and Classification Principles: Time of recognition principles, valuation methods, classification of accounts, use of netting, etc. Deviation of principles from those in the *Guide* should be explained.

Other: Any other relevant information on compilation practices for the data that are disseminated, including information on significant changes in the reporting population.

Specific Information on FSIs Disseminated

12.12 A brief description of the definitions and the data sources for the numerator and denominator of each FSI, with cross-references to the general information section. Other specific information could include whether the denominator and numerator are available on the same periodicity of the release, and if not, how is this dealt with in the data disseminated.

Module 3

- **Peer group analysis of institutions and descriptive statistics on data concentration and dispersion.** Sector-level balance sheets and income statements can disguise important subcategory information. The use of peer groups and descriptive statistics are discussed in more detail in the next chapter.

12.13 In IMF discussions with both users and compilers of FSIs, the need for peer group (or subgroup) analysis, and dispersion analysis has been highlighted.