5 Sectoral Financial Statements for Financial Soundness Indicators

I. Introduction

5.1 The balance sheet, or the stock of assets and liabilities, and income and expense statements of deposit takers (DTs) and other financial corporations (OFCs) are fundamental to understanding their financial condition.[1] Data series obtained from such statements can be used to calculate most of the FSI ratios for financial corporations, although additional series are needed to complete the full set. In addition to data reported by individual institutions, other data are required to make adjustments at the group level, primarily to eliminate transactions and positions among institutions within the same group.[2] Data for constructing the financial statements for nonfinancial corporations (NFCs) and households (HHs) are mainly obtained from the system of national accounts (SNA), in particular the financial accounts.

5.2 This chapter first outlines a common accounting framework for financial reporting. It then presents detailed sectoral financial statements and defines the line-item series required to calculate the FSI ratios. Where necessary, the chapter also draws on other macroeconomic statistical methodologies, supervisory and macroprudential requirements.

5.3 As highlighted in Chapter 4, countries are converging toward International Financial Reporting Standards (IFRS), but they still have different accounting systems and rely on a wide variety of data sources when compiling FSIs. Indeed, some data series may not even be collected, and others may not meet the definitions suggested in the *Guide*. In such circumstances, the data that most closely approximate the principles in the *Guide* should be used. It should be noted that such differences in accounting frameworks may hamper cross-country comparability and reinforce the relevance of disseminating metadata to improve transparency and help users interpret the FSIs.

5.4 The sectoral financial statements and detailed definitions provided in the *Guide* fulfill several aims. First, they support compilation efforts at the national level as they specify the definitions of data series required for calculating FSIs. Second, this guidance sets out a consistent framework that draws on relevant international standards and takes account of analytical needs, providing a benchmark to national compilers, even if their own national standards differ; such a benchmark can be used as a reference when disseminating metadata. Third, this approach helps foster comparability of data across countries.

II. Financial Statements

Income and Expense Statement

5.5 This statement includes income and expenses related to the operations of the entity. After expenses have been deducted along with any dividends paid or payable to shareholders, any remaining income is transferred to the capital and reserves as retained earnings. As noted in Chapter 4, for FSI compilation, income and expenses are recorded on an accrual basis. As defined in the *Guide*, net income before dividends measures the increase or decrease in net assets of the sector during the period.

5.6 What the *Guide* defines as *income and expense statement* corresponds to the IAS 1 concept of *statement of comprehensive income*, presented as a single statement or as two statements: *statement of profit or loss* and a *statement of other comprehensive income*.[3]

[1] The terms "balance sheet" and "income and expense statement" in the *Guide* broadly correspond to statement of financial position and statement of comprehensive income as defined in International Accounting Standard (IAS) 1.

[2] Group-level data are discussed in more detail in Chapter 6.

[3] See IAS 1, paragraph 81. The profit or loss section represents the traditional profit and loss concepts, while the other comprehensive income section presents items of income and expense that are not recognized in profit or loss, such as foreign currency translation gains or losses, as required or permitted by other IFRS.

Balance Sheet

5.7 The balance sheet (known in IAS 1 as *statement of financial position)* is the statement of assets, liabilities, and capital at the end of each accounting period:

a. Assets comprise both nonfinancial and financial assets (including financial derivatives).

b. Liabilities include debt liabilities, financial derivatives, and general provisions.

c. The difference between the book value of assets and liabilities is known in the *Guide* as capital and reserves and coincides with the IFRS term "equity."[4] This represents the "cushion" to absorb any losses arising from the income and expense statement, or for other reasons. If liabilities exceed assets, then the entity is balance-sheet insolvent.

5.8 Some liabilities and assets of corporations are contingent on a certain event(s) occurring and are therefore recorded off-balance sheet (see paragraphs 4.19–4.24). As noted in Chapter 4, such items require monitoring to assess the full financial risk exposure of the corporation.

5.9 Measures of profitability and capital depend on the accounting definitions and recognition rules adopted. In developing the guidance on definitions set out further, the *Guide* defers to IFRS and to the banking supervision standards set by the Basel Committee on Banking Supervision (BCBS). Box 5.1 summarizes these sources and complements them with a

[4]In the *2008 SNA*, the equivalent term is "equity and investment fund shares" together with "net worth." In the *Guide*, the term "equity and investment fund shares" is used only to denote equity assets.

Box 5.1 Measurement Frameworks

In determining the most relevant measurement framework for the compilation of FSIs, three basic standards can be drawn upon—national accounting, commercial accounting, and banking supervision.

National accounts data

The system of national accounts (SNA) consists of a coherent, consistent, and integrated set of macroeconomic accounts based on internationally agreed concepts, definitions, classifications, and accounting rules. The SNA provides a comprehensive accounting framework of aggregated macroeconomic data. Central to the development of national accounts and the related methodologies is the concept of residency; there are five resident institutional sectors and the rest of the world.

The main source of information on national accounting is the System of National Accounts 2008 (2008 SNA) (United Nations and others, 2008). Other related methodologies include The Monetary and Financial Statistics Manual and Compilation Guide 2016 (MFSMCG) (IMF, 2016); Balance of Payments and International Investment Manual, sixth edition (BPM6) (IMF, 2009); Government Finance Statistics Manual 2014 (GFSM) (IMF, 20014); and External Debt Statistics: Guide for Compilers and Users (Bank for International Settlements and others, 2013).

International accounting standards

International Financial Reporting Standards (IFRS), formerly international accounting standards (IAS), are a series of standards for commercial accounting that provide concepts that underlie the preparation and presentation of financial statements of commercial, industrial, and business reporting enterprises, whether in the public or the private sector.[1] Over time, IFRS are replacing or supplementing IAS, with 17 IFRS and 25 IAS in force at end-July 2018. There may also be specific national accounting standards in jurisdictions that have not adopted IFRS, or that have included some national variations from IFRS.

The IFRS, including earlier IAS, are available from the International Accounting Standards Board (IASB), www.iasb.org.

Banking supervision

In 1988, the Basel Committee on Banking Supervision (BCBS) agreed on standards governing the capital adequacy of internationally active banks. This original capital accord, which was amended in 1996 to incorporate market risk, provides a framework for the measurement of capital in relation to the perceived credit and market risk of the assets owned by the bank. Two fundamental objectives lie at the heart of the BCBS's work. First, the framework is intended to strengthen the soundness and stability of the international banking system. Second, the framework is intended to be fair and, through a high degree of consistency in its application to banks in different countries, to diminish sources of competitive inequality among international banks.

Box 5.1 Measurement Frameworks *(concluded)*

While banking supervisors rely on commercial accounting standards for financial statements from banks, they commonly prescribe specific treatments which may vary from IFRS with respect to the classification and provisioning of loans and other assets and require detailed reporting on various asset and liability items, including deposits and liquid assets. Supervisory reporting provides the source data for many of the memoranda series required to compile the FSIs.

The main sources of information on the BCBS's capital adequacy requirements are the "International Convergence of Capital Measurement and Capital Standards" (BCBS, 1988), "Amendment to the Capital Accord to Incorporate Market Risks" (BCBS, 1996), "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (often known as Basel II, BCBS 2004), "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems" (BCBS 2010), and "Basel III: Finalizing Post-Crisis Reforms" (BCBS 2017).[2]

Financial soundness indicators

Unlike commercial accounting and supervisory approaches which concern individual entities, the FSI framework, like the national accounts, focuses on aggregated sector information.

However, whereas the national accounts embrace symmetric recording of flows and positions within and across sectors, commercial accounting and supervisory approaches—the basis for compiling FSIs for DTs and OFCs—do not.

While the national accounts aim at recording all economic activity, the FSI framework, like commercial and supervisory standards, favors a consolidated approach for financial corporations to avoid the double counting of capital and activity.

[1] The effective date of IFRS was January 1, 2001, which may have resulted in breaks in series. The IASs and IFRS are voluntary standards that are implemented by national authorities. The European Union and some other countries adopted IFRS in 2005, while other countries have adopted IFRS at later dates. In some cases, elements of IFRS have been adapted to local conditions, or not fully implemented, or may not be applicable to all entities even when IFRS has been adopted, for example, publicly traded companies. Thus, national commercial accounting standards may differ from IFRS in important respects.
[2] All are available on the BIS website (https://www.bis.org/bcbs/index.htm?m=3%7C14).

brief description of the national accounts framework and their relevance to the compilation of FSIs.

III. Sectoral Financial Statements

5.10 Sectoral financial statements are shown on an institutional sector basis. While the income and expense statements and the balance sheets for financial corporations have a considerable degree of overlap in terms of line-item series identified, there are significant differences in presentation and composition between DTs and subsectors of OFCs, which have implications for the calculation of FSIs.[5] Furthermore, it is not possible to aggregate separate information from individual institutional units to construct sectoral financial statements for NFCs and HHs; their data are sourced from SNA estimates. The DT sector is presented first because of its central role in the financial system and the wider range of series from the sectoral financial statements required to calculate FSIs for DTs.

5.11 The line-item series in the financial statements for which definitions are provided are those required to calculate the FSIs set out in Chapters 7 to 10, either directly or as important building blocks in calculating the required aggregates. The advantage of defining these series within the framework of a financial statement is the accounting rigor that is imposed—the series are defined to ensure that the integrity of a double-entry recording system is maintained—while promoting a consistency of approach in the classification and coverage of transactions and positions.

5.12 To avoid duplication, each series is defined only once, even if it appears in multiple sectoral financial statements. Most of the definitions are provided in the section covering the DTs' financial statement, set out in Table 5.1. They are also applicable to the sectoral financial statement of OFCs, such as

[5] For instance, interest margin is an important FSI series for DTs, but not for insurance corporations, whose main source of revenue is premium income.

money market funds (Table 5.2), insurance corporations (Table 5.3), and pension funds (Table 5.4). Data for NFCs aggregate (Table 5.5) and HHs (Table 5.6) are largely sourced from SNA estimates. When disseminating data, compilers are encouraged to document any material differences between national practice and the guidance provided.

Deposit Takers

Income and expense statement

5.13 For DTs, the main source of revenue and expense is interest. *Interest income/expense* is a form of income that accrues on debt instruments such as deposits, loans, debt securities, and other accounts receivable/payable. It includes fees and commissions that are an integral part of the effective yield of a financial instrument, as discussed in paragraph 5.18. For the borrower, it is the cost (known as an interest cost) of the use of another entity's funds. Interest income and expense may also include gains (and losses) on instruments meeting the criteria for hedge accounting pursuant to IFRS 9. As explained in Chapter 4 (paragraph 4.14), interest is recorded as accruing continuously. As shown in Table 5.1, the difference between

Table 5.1 Deposit Takers

Income and Expense Statement	Balance Sheet
1. Interest income[1]	14. **Total assets** (= 15 + 16 = 23 + 31)
i. Gross interest income	15. *Nonfinancial assets*
ii. *less* Provisions for accrued interest on nonperforming assets	16. *Financial assets* (= 17 through 22)
2. Interest expense[1]	17. Currency and deposits[1]
3. *Net interest income* (= 1 – 2)	18. Loans (after specific provisions) (= 18.i – 18.ii)
4. Noninterest income	i. Gross loans[1]
i. Fees and commissions receivable[1]	i.i. Interbank loans[2]
ii. Gains or losses on financial instruments	i.i.i. Resident
iii. Prorated earnings	i.i.ii. Nonresident
iv. Other income[1]	i.ii. Noninterbank loans
5. *Gross income* (= 3 + 4)	i.ii.i. Central bank
6. Noninterest expenses	i.ii.ii. General government
i. Personnel costs	i.ii.iii. Other financial corporations
ii. Other expenses	i.ii.iv. Nonfinancial corporations
7. Provisions (net)	i.ii.v. Other domestic sectors
i. Loan loss provisions	i.ii.vi. Nonresidents
ii. Other financial asset provisions	ii. Specific provisions[3]
8. *Net income (before taxes)* (= 5 – (6 + 7))	19. Debt securities[1]
9. Income tax	20. Equity and investment fund shares
10. *Net income after tax* (= 8 – 9)	21. Financial derivatives[1]
11. Other comprehensive income (loss) net of tax	22. Other financial assets[1]
12. Dividends payable	23. *Liabilities* (= 28 + 29 + 30)
13. *Retained earnings* (= 10 – 12)	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)**

Table 5.1 Deposit Takers (*concluded*)

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 capital *less* corresponding supervisory deductions[4]
35. Additional Tier 1 capital *less* corresponding supervisory deductions[4]
36. Tier 2 capital *less* corresponding supervisory deductions[4]
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]
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

Source: IMF staff.

Note: DT = deposit taker; NPLs = nonperforming loans.

[1] To understand the interconnections among DTs, separate identification of income and claims on other DTs in the reporting population is encouraged.

[2] Interbank loans and deposits comprise those loans to or deposits from any other DT. Nonperforming interbank loans should be included in line 49.

[3] If only gross loans data are available, including the accrual of interest on NPLs, any provisions for accrued interest on NPLs should be included in this line item and, if significant, separately identified.

[4] Depending on the regulatory framework.

[5] Sum of supervisory deductions not already deducted from the corresponding regulatory capital component.

[6] While individual country circumstances will vary, data on the distribution of lending by regional groupings of countries are encouraged, with additional country information where relevant (see paragraph 8.9).

Table 5.2 Other Financial Corporations: Money Market Funds

Income and Expense Statement	Balance Sheet
1. Interest income 2. Interest expenses 3. Noninterest income 4. *Gross income* (= 1 – 2 + 3) 5. Noninterest expenses and provisions 6. *Net income (before taxes) (= 4 – 5)* 7. Income tax 8. *Net income after tax* (= 6 – 7) 9. Other comprehensive income (loss) net of tax	10. **Total assets** (= 11 + 12 = 23) 11. *Nonfinancial assets* 12. *Financial assets (= 13 through 18)* 13. Currency and deposits 14. Loans 15. Debt securities 16. Equity and investment fund shares 17. Financial derivatives 18. Other financial assets 19. *Liabilities* (= 20 + 21 + 22) 20. Loans 21. Financial derivatives and employee stock options 22. Investment fund shares issued 23. **Balance sheet total (= 19 = 10)**
Memorandum Series ***Other series required to calculate additional FSIs*** Sectoral distribution of investments (percentage) i. Central bank ii. Deposit takers iii. Other financial corporations iv. Central government v. Other general government vi. Nonfinancial corporations vii. Nonresidents Maturity distribution of investments (percentage) i. 1–30 days ii. 31–90 days iii. >90 days GDP	

Source: IMF staff.

Table 5.3 Other Financial Corporations: Insurance Corporations

Income and Expense Statement	Balance Sheet
1. Premiums earned, net of reinsurance (= 1.i – 1.ii + 1.iii) i. Gross premium earned ii. Reinsurers' share of gross premiums earned iii. Transfer of premium reserves from other companies 2. Claims incurred, net of reinsurance (= 2.i – 2.ii + 2.iii + 2.iv) i. Gross claim payments ii. Reinsurers' share of gross claim payments iii. Changes in reserves for claims outstanding iv. Transfer of premium reserves to other companies 3. Net change in technical reserves for future claims 4. *Net income from insurance activity* (= 1 – 2 + 3) 5. Other operating income (= 5.i + 5.ii + 5.iii) i. Commissions received ii. Real estate income iii. Gains and losses from the sales of fixed assets iv. Other income 6. *Gross income* (= 4 + 5) 7. Other operating expenses (= 7.i + 7.ii + 7.iii + 7.iv) i. Personnel costs ii. Underwriting expenses iii. Real estate expenses or nonfinancial asset depreciation iv. Other expenses 8. Investment income (net) (= 8.i + 8.ii – 8.iii) i. From financial investments ii. From other investments iii. Interest cost 9. Gain/losses due to revaluations of financial assets/liabilities 10. *Net income (before taxes)* (= 6 – 7 + 8 + 9) 11. Income tax 12. *Net income after tax* (= 10 – 11) 13. Other comprehensive income (loss) net of tax	14. **Total assets** (= 15 + 16 = 31) 15. *Nonfinancial Assets* *of which* i. Property, own use ii. Property for investment 16. *Financial assets* (= 17 through 23) 17. Currency and deposits 18. Loans 19. Debt securities 20. Equity and investment fund shares 21. Reinsurance claims (= 21.i + 21.ii) i. Reinsurance recoverable ii. Reinsurance receivable 22. Financial derivatives 23. Other financial assets 24. *Liabilities* (= 25 through 29) 25. Loans 26. Debt securities 27. Financial derivatives and employee stock options 28. Other liabilities 29. Insurance, pensions, and standardized guarantee schemes (= 29.i + 29.ii + 29.iii + 29.iv) i. Net equity of households in life insurance reserves ii. Prepayment of insurance premiums and insurance payable iii. Pension fund reserves iv. Other technical provisions 30. Capital and reserves 31. **Balance sheet total** (= 24 + 30 = 14) **Memorandum Series** Other series required to calculate additional FSIs 32. GDP

Source: IMF staff.

Table 5.4 Other Financial Corporations: Pension Funds

Income and Expense Statement	Balance Sheet
1. Investment income (= 1.i + 1.ii + 1.iii) i. Interest income ii. Other income from investments iii. Net change in fair value of investments 2. Investment expense (= 2.i + 2.ii) i. Investment management expenses ii. Taxation on investments 3. *Net investment income* (= 1 – 2) 4. Other income 5. Total administrative expenses 6. Net actuarial gains/losses 7. *Net income (before taxes)* (= 3 + 4 – 5 + 6) 8. Income tax 9. *Net income after tax* (= 7 – 8) 10. Other comprehensive income (loss) net of tax	11. **Total assets** (= 12 + 13 = 30) 12. *Nonfinancial assets* (= 12.i + 12.ii) i. Property, own use ii. Property for investment 13. *Financial assets* (= 14 through 22) 14. Currency and deposits 15. Loans 16. Debt securities 17. Equity and investment fund shares 18. Contributions receivable 19. Insurance, pensions, and standardized guarantee schemes 20. Financial derivatives 21. Pension benefit surplus 22. Other financial assets 23. *Liabilities* (= 24 through 27) 24. Loans 25. Debt securities 26. Financial derivatives and employee stock options 27. Other liabilities 28. Net equity of households in pension fund reserves (= 28.i + 28.ii + 28.iii) i. Defined contribution ii. Defined benefit iii. Hybrid schemes 29. *Net worth* (= 11 – 23 – 28) **30. Balance sheet total** (= 23 + 28 + 29 = 11)
Memorandum Series *Other series required to calculate additional FSIs:* 31. Liquid assets 32. Estimated pension payments in the next 12 months. 33. GDP	

Source: IMF staff.

Table 5.5 Nonfinancial Corporations

Income and Expense Statement	Balance Sheet
1. Revenue from sales of goods and services (excluding indirect sales taxes) 2. Cost of sales 3. *Net operating income* (= 1 – 2) 4. Interest income 5. Interest expenses 6. Other income (net) 7. *Net income (before taxes)* (= 3 + 4 – 5 + 6) 8. Corporate income taxes 9. *Net income after taxes* (= 7 – 8) 10. Dividends payable 11. *Retained earnings* (= 9 – 10)	12. **Total assets** (= 13 + 14) 13. *Nonfinancial assets* (13.i through 13.v) i. Real estate property ii. Equipment iii. Intellectual property products iv. Inventories v. Other 14. *Financial assets* (= 15 through 20) 15. Currency and deposits 16. Debt securities 17. Equity and investment fund shares 18. Trade credit 19. Financial derivatives 20. Other financial assets 21. *Liabilities* (= 26 + 27 + 28) 22. Loans 23. Debt securities 24. Trade credit 25. Other liabilities 26. *Debt* (= 22 through 25) 27. Financial derivatives and employee stock options 28. General and specific provisions 29. *Capital and reserves* 30. **Balance sheet total** (= 21 + 29 = 12)
Memorandum series *Other series required to calculate additional FSIs:* 31. Earnings before interest and taxes 32. Total debt to nonresidents 33. Total debt in foreign currency 34. Debt-service payments (principal and interest) 35. Interest income receivable from other nonfinancial corporations 36. GDP	

Source: IMF staff.

Table 5.6 Households

Income and Expenses	Balance Sheet
Sources of income 1. Wages and salaries 2. Property income receivable 3. Current transfers (e.g., from government) 4. Other 5. *Less* taxes, including social security contributions, and other current transfers 6. *Gross disposable income* (= 1 + 2 + 3 + 4 – 5)	7. **Total assets** (= 8 + 9) 8. *Nonfinancial assets* (= 8.i + 8.ii + 8.iii) i. Real estate ii. Consumer durable goods iii. Other 9. *Financial assets* (= 10 through 15) 10. Currency and deposits 11. Debt securities 12. Loans 13. Equity and investment fund shares 14. Insurance, pensions, and standardized guarantee schemes 15. Other financial assets 16. *Liabilities* (= 19 + 20) 17. Loans 18. Other debt instruments 19. *Debt* (= 17 + 18) 20. Other liabilities 21. *Net worth* (= 7 – 16)
Memorandum Series ***Other series required to calculate additional FSIs:*** 22. Debt-service payments (interest and principal) 23. Debt collateralized by real estate 24. GDP	

Source: IMF staff.

interest income and interest expense is known as *net interest income*.

5.14 A specific issue arises as to whether interest should accrue on nonperforming assets, and if so, whether this should affect net interest income. The *Guide* recommends that interest on a nonperforming asset should be recorded on a cash payment, not accrual, basis. Interest income should not include accrued interest on nonperforming assets because doing so would overstate net interest income relative to the actual interest-earning capacity of the DT.[6]

5.15 Table 5.1 includes the line items for *gross interest income* (line 1.i), including accrued interest on nonperforming assets, and *provisions for interest accrual on nonperforming assets*, (line 1.ii). The latter should be deducted from the former to eliminate the interest accruing on nonperforming assets in the interest income line. If the debtor subsequently pays interest on nonperforming assets to the DT, interest income should be recognized in the period when payments are received and, if significant, should be referred to in any accompanying explanatory documentation.[7] If any interest is accrued before an asset was classified as nonperforming, this accrual should be reversed. If data are available only on interest income, excluding interest accrual on nonperforming assets, then only the interest income (line 1 in Table 5.1) should be reported.

5.16 *Noninterest income* is all other income received by the DT. Included are *fees and commissions* from the provision of services, *gains and losses on financial*

[6]The *Guide* recognizes that while in many countries classification of an asset as nonperforming is strong evidence for it to be placed on a nonaccrual basis, the provision of collateral or other guarantees might lead the DT to consider that debtors will continue to meet their obligations. While accepting that national practices do vary on this matter, for compiling FSIs, the *Guide* recommends that an asset cease accruing interest upon its classification as nonperforming, and to subsequently record interest income only if the debtor makes an interest payment.

[7]Where interest ceases to accrue on claims on other DTs in the reporting population, to avoid asymmetric reporting of net income at the sector level, additional information on the amounts involved should be reported—both the provisions and any amounts subsequently paid.

instruments, *prorated earnings*, and *other income*.[8] Net interest income together with noninterest income is equal to *gross income*.

5.17 *Fees and commissions* are for services such as payment services; intermediary services (e.g., those associated with lines of credit and letters of credit); services related to transactions in securities (e.g., brokerage, placements and underwriting of new issues, arrangement of swaps and other financial derivatives, and security lending); and services related to asset management (e.g., portfolio management and safe custody).[9]

5.18 Accounting rules for the recognition of revenues from financial service fees are set out in the IFRS framework, distinguishing between: (1) *fees that are an integral part of the effective interest rate of a financial instrument*, generally treated as an adjustment to the effective interest rate; (2) *fees earned as services are provided*, such as those charged for servicing a loan; and (3) *fees that are earned on the execution of a significant act*, such as commissions on the sale of securities to a client, or placement fees for arranging a loan between a borrower and an investor. While fees in (1) are treated as interest income through an adjustment to the effective interest rate, fees in (2) and (3) are included in fees and commissions receivable.

5.19 *Gains and losses on financial instruments* are those arising during the period under review. The *Guide* recommends recording in this item any realized and unrealized gains and losses arising during each period on all financial instruments (financial assets and liabilities, in domestic and foreign currencies) held at fair value through profit and loss on the balance sheet.[10] Gains and losses on equity in associates, unconsolidated subsidiaries, and any reverse equity investments that are designated at FVOCI are excluded.[11] Gains and losses on foreign exchange instruments and on financial derivatives, such as interest rate swaps, with the exception of instruments meeting the qualifying criteria for hedge accounting under IFRS 9, are also included. Gains and losses on financial instruments exclude any interest included in the net interest income account as accrued for that instrument in the reporting period, as such amounts have already been accounted for as interest income. Gains and losses on financial assets held at fair value through other comprehensive income are excluded, and recorded instead in line 11, other comprehensive income.

5.20 Volatility in other comprehensive income can be indicative of a buildup of unrealized gains and losses.

5.21 For those financial instruments for which gains and losses can be recorded only when realized, the gain or loss should be measured as the difference between the transaction value and the market value recorded on the balance sheet at the end of the previous period. Any realized valuation gains or losses on disposal/derecognition are reported through the profit or loss section of the income and expense statement. Any unrealized gains or losses that developed over previous periods are included in other comprehensive income in accordance with IFRS 9. In addition, all gains or losses in the reporting period—that is, since the previous end-period—that are realized on any other financial assets (except for those related to associates, unconsolidated subsidiaries, and reverse equity investments, which are all recorded directly in capital and reserves) should also be included within the gains and losses on the financial instruments line. This includes gains and losses on loan sales.

5.22 *Prorated earnings* cover the proportion of net income after tax from associates, unconsolidated subsidiaries, and reverse equity investments, and— for domestic-based data—foreign branches.[12, 13] Prorated

[8] Such gains and losses are not classified as income in the *2008 SNA*.

[9] Implicit fees and commissions, such as those corresponding to the *2008 SNA* concept of "financial intermediation services indirectly measured" (FISIM), are not included in this item. In other words, interest income is not adjusted for any FISIM estimates.

[10] IFRS 9, paragraphs 5.7.1–5.7.4, indicates that financial assets or liabilities measured at fair value through profit and loss are to be recognized in profit and loss (except if they are part of a hedging relationship, or special cases of equity investment); while gain or losses on financial assets measured at amortized cost are to be recognized in profit or loss only when the financial asset is derecognized.

[11] Associates and subsidiaries are defined in Chapter 6.

[12] Unless the taxes on net income are payable by the investor, in which instance this item covers net income before tax.

[13] This item also covers income reflecting the withdrawal of income by the owner from a quasi-corporation. Only withdrawal of income from the net income earned by the quasi corporation should be included.

earnings are calculated on the basis of the share of equity owned.[14]

5.23 *Other income* covers (1) dividends declared payable by other corporations or cooperatives in which DTs have an equity stake,[15] (2) gains or losses on sales of fixed assets in the current period (measured as the difference between the sale value and the balance sheet value at the previous end-period), (3) rental and royalty income receivable (including income from buildings, other structures, and equipment; from land and subsoil assets; and from other produced and non-produced assets); and (4) any amounts receivable by DTs arising from compensation for damage or injury.

5.24 In addition, total other comprehensive income (or loss) that would be reported in an IFRS Statement of Comprehensive Income should be reported on line 11. This will include items to be subsequently reclassified to net income such as the net change in unrealized gains (losses) on financial assets at fair value through other comprehensive income (available-for-sale securities under IAS 39); the net change in unrealized foreign currency translation gains (losses) on investments in foreign operations, net of hedging activities; and the net change in gains (losses) on derivatives designated as cash flow hedges; as well as items specified in IFRS that will not subsequently be reclassified to net income such as actuarial gains (losses) on employee benefits plans; and the change in net unrealized gains (losses) on equity securities designated at fair value through other comprehensive income.

5.25 *Noninterest expenses* cover all expenses other than interest expenses, including *fees and commissions*. They include operating expenses relating to the ordinary banking business (other than interest expenses and fees and commissions that are an integral part of the effective yield of a financial instrument) such as (1) personnel (or staff) costs; (2) expenses for property and equipment (ordinary and regular maintenance and repair);[16] rentals paid on building, other structures, and equipment (and related depreciation);[17] and rents paid on land; (3) other expenditures related to the operations, including purchases of goods and services (e.g., advertising costs, staff training, service expenses, and fees for other services provided), and royalties paid for the use of other produced or non-produced assets (excluding those expenses classified as personnel costs); and (4) taxes other than income taxes—such as taxes on the ownership or use of land and buildings or on labor employed (including payroll and other employee-related taxes payable by the employer)—less any subsidies related to operating activity, such as subsidies received from general government. Also included are any fines and penalties imposed on DTs, by courts of law or otherwise, and any amounts payable by DTs as compensation to other institutional units for injury and damage. For DTs, operating expenses also include any premiums paid to a deposit insurance fund.

5.26 *Personnel costs* include the total remuneration, in cash or in kind, payable by the enterprise in return for work done by employees during the accounting period. Included are wages and salaries, including paid annual leave and paid sick leave; profit sharing and bonuses; allowances for housing and cars; as well as free or subsidized goods and services (except those required for employees to carry out their work); and social security contributions for such items as medical care and pensions. Also included are unfunded employee social insurance benefits, such as the continued payment of normal or reduced wages during periods of absence from work as a result of illness or accidents, redundancy payments, accruals for holidays, long service leave, and so on. Employee stock options (see paragraph 5.63) are a way of paying wages and salaries in kind and should be considered as personnel expenses when granted.

[14] Any earnings from deposit-taking associates that are covered in the reporting population should be excluded from this line at the sector level.

[15] To avoid double counting of income before taxes, in the sector-level data, dividends receivable from other DTs in the reporting population should be excluded from this item and instead included (with a negative sign) in the dividends payable line—so, the data for dividends payable by, and receivable from, other DTs in the reporting population will net to zero in this line.

[16] Such expenses are different in nature, and so recorded differently, from expenditures on gross fixed capital formation, which add to nonfinancial assets in the balance sheet.

[17] There are differences between the national accounts and commercial accounts measurements of depreciation. The *Guide* does not make a judgment as to the preferred method. The national accounts approach is based on current market prices, whereas the commercial accounts approach is based on historic prices but allows for periodic reviews with adjustments to the schedule of depreciation as necessary.

5.27 *Loan loss provisions* are net new allowances for losses that DTs make in the reporting period to reflect increases in expected credit loss (ECL, an expense) or decreases in ECL (income). As discussed in Chapter 4, the concept of ECL does not include a distinction between general and specific allowance for loan loss. Consistent with IFRS 9, DTs should recognize ECL using a forward-looking approach. ECL is the sum of (1) the 12-month expected credit losses for financial instruments whose credit loss has not increased significantly since initial recognition and (2) full-lifetime expected credit losses if the credit risk on a financial instrument has increased significantly since initial recognition.[18]

5.28 The *Guide* relies on national practices in identifying loan loss provisions and distinguishing between specific and general provisions and recommends that such practices be clearly documented (paragraph 4.38). Provisions for the accrual of interest on nonperforming assets should not be included under loan loss provisions, as they are identified within (and excluded from) net interest income.[19] While provisions for losses or future expenses reduce net income, overshooting of expected losses or expenses in any one period could be reversed in subsequent periods subject to national practice, increasing income in those periods.

5.29 *Other financial asset provisions* include the expense incurred to establish an expected credit loss allowance against any other financial assets that are within the scope of IFRS 9. This includes financial assets valued at amortized cost such as securities held for the purpose of collecting the cash flows. Consistent with IFRS 9, allowance for loss on these assets is recognized in the profit and loss and netted against the assets.[20] This category also includes any net new provisions made for supervisory purposes to take account of changes in the volatility of bid-ask spreads or other factors relating to closing out a position in less-liquid tradable instruments. Gross income *less* noninterest expenses and provisions for expected credit losses on loans and other financial assets[21] equates to *net income before taxes*.

5.30 Some events are extraordinary in relation to the business ordinarily carried out by the enterprise. These may include the recovery of written-off loans and (although rare) catastrophic losses arising from a natural or other disaster. Extraordinary items can include income but will usually be an expense item. However, IAS 1 prevents the reporting of extraordinary items in the statements presenting profit or loss and other comprehensive income, or in the notes.[22] Therefore, those *extraordinary items* are to be presented in Table 5.1 as part of other income in (line 4.iv), or as part of other expenses in (line 6.ii). If the volume of those extraordinary events is significant, metadata explaining them should accompany the dissemination of the FSIs.

5.31 *Income taxes* are those taxes that accrue in the period under review and are related to the income, profits, and capital gains of DTs. Once taxes are deducted from net income, the total is equal to *net income after taxes*.

5.32 *Dividends* are amounts payable for the period under review to the owners of DTs after all other expenses have been met, leaving *retained earnings* (net income after taxes less dividends payable) to be posted to the retained earnings account of capital and reserves.

Balance sheet

Nonfinancial assets

5.33 *Nonfinancial assets* are all economic assets other than financial assets. Nonfinancial assets provide benefits to their owners but do not represent claims on other institutional units. It is expected that balance sheets of DTs and OFCs show a small proportion of nonfinancial assets within the total.[23]

[18] See IFRS 9, paragraphs 5.5.3 and 5.5.5.

[19] As noted in paragraph 5.15, for any interest that has accrued in earlier periods but is subsequently considered to be an expected identifiable loss, the provision for the loss should be included in line 7 of Table 5.1, and not as a provision for accrued interest on nonperforming assets.

[20] This reduces the carrying value of the security in the balance sheet.

[21] Provisions should usually represent as an expense. However, in any one period, they might add to income if there is a reduction in expected loss or recovery exceeding the net value of an asset for which an allowance for loss had previously been established.

[22] See IAS 1, paragraph 87.

[23] For some financial instruments used by Islamic banks, Islamic banks may record nonfinancial assets used for leasing or installment sales agreements in relation to financial instruments. This can result in larger proportions of nonfinancial assets as a component of the balance sheet compared to data from countries without Islamic banks. See IFSB *PSIFI Compilation Guide*.

Nonfinancial assets are further discussed when presenting the sectoral balance sheet for NFCs (paragraph 5.141).

5.34 Some nonfinancial assets of DTs might be goods and real estate property acquired in the process of collecting impaired loans. These are not part of the fixed and other nonfinancial assets used in the normal conduct of their business, but assets that will be sold to (totally or partially) recover the outstanding loans.

Financial assets and liabilities

5.35 *Financial assets* are a subset of economic assets that are financial instruments. Most financial assets are financial claims arising from contractual relationships created when one institutional unit provides funds or other resources to another.[24] These contracts are the basis of creditor/debtor relationships through which asset owners acquire unconditional claims on economic resources of other institutional units. When a financial claim is created, a liability of equal value is simultaneously incurred by the debtor as the counterpart to the financial asset.

5.36 The identification and presentation of the different types of financial assets and liabilities can vary depending on analytical needs and national accounting practices. In the list of FSI ratios, the primary focus is on instruments by functional type, such as loans, debt securities, or derivatives. Thus, in the *Guide*, the primary classifications of financial assets and liabilities are *currency and deposits*, *loans, debt securities*, *equity and investment fund shares (assets), financial derivatives,* and *other assets/liabilities*.

5.37 *Currency* consists of notes and coins that are of fixed nominal values and are issued or authorized by central banks or governments. Currency is divided into domestic currency and foreign currency. Domestic currency is the legal tender in the economy and is issued by the central bank (or government) of that economy or of the common currency area to which the economy belongs. Foreign currency represents claims on nonresident central banks or governments. Gold and commemorative coins that are not in circulation as legal tender are classified as nonfinancial assets rather than as currency.

[24] In the SNA, by convention, financial assets also include monetary gold, which is gold bullion held by monetary authorities as a reserve asset and for which there is no counterpart liability.

5.38 *Deposits* are standard, non-negotiable contracts open to the public at large that represent the placements of funds available for later withdrawal. They include all claims on the central bank, government units, and some OFCs, that are represented by evidence of deposit. Claims of one DT on another are excluded from deposits and are instead recorded as interbank loans (paragraph 5.47). Deposits comprise *transferable* and *nontransferable* deposits. *Transferable deposits* comprise all deposits that are (1) exchangeable for banknotes and coins on demand at par and without penalty or restriction; and (2) directly usable for making third-party payments by check, draft, giro order, direct debit/credit, or other direct payment facility.[25] *Nontransferable deposits* comprise deposits that cannot be used for third-party payments or have restrictions on the number or size of such third-party payment. Most common nontransferable deposits include, among others: (1) sight deposits that permit immediate cash withdrawals but are not useable for direct third-party payments; (2) savings deposits, which pay interest but cannot be used for direct payments to third-parties;[26] (3) fixed-term deposits, which can have maturities ranging from a month to a few years; (4) non-negotiable certificates of deposits; (5) repayable margin payments in cash related to different financial contracts, such as financial derivatives; and (6) repurchase agreements that resemble a deposit where the DT is the cash-taker.[27]

5.39 Volatility of deposits refers to the likelihood that depositors will, at short notice, withdraw funds in response to a perceived weakness in an individual DT or in the banking system. Determining such

[25] Money market funds shares can be regarded as functionally equivalent to deposits. However, in the *Guide,* they are classified as equity and investment fund shares because their characteristics, and hence regulation, are different from that of DTs.

[26] Deposits that are called "savings deposits" but are equipped with automatic transfer service features are considered transferable deposits.

[27] In Islamic finance, much of the deposit-like funding provided by the public to banks is not in the form of interest-bearing deposit accounts but rather as "profit-sharing investment accounts" in which the bank shares with the funders the earnings generated by the deposited funds. Although such accounts are commonly used like deposit accounts, they differ because they have quasi-investment characteristics and do not guarantee specific interest-like payments. This means that funders share in the risks in the bank's investments, which changes the financial soundness profile of the bank.

likelihood in advance is difficult, but typically the key factors taken into account are the type of depositor, the existence of insurance coverage, and the maturity of the deposits (remaining maturity). Experience suggests that some types of depositors are less likely to move their funds than others.[28] Additionally, deposits covered by credible insurance schemes are more likely to be a stable form of funding for DTs than those not covered. Also, deposits with a long-remaining maturity are likely to be more stable, although the lower the penalties for withdrawal, the less relevant this factor is in determining the likelihood of withdrawal.

5.40 *Customer deposits* are usually considered to be a more stable type of deposit and can be employed to fund long-term lending. This series is required to calculate the ratio of customer deposits to loans, an additional FSI. The *Guide* recommends that the type of depositor be the primary factor in defining customer deposits, because of both its relevance and its general applicability. Thus, customer deposits include all deposits placed by residents or nonresidents, except those placed by (resident and nonresident) financial corporations, central governments, and central banks. The depositors in the excluded sectors are more likely to monitor DTs' financial information, are less likely to be covered by deposit insurance, and perhaps have a fiduciary responsibility to safeguard their assets. They are, therefore, more prone than other depositors to shifting deposits as risks increase. Perhaps because of deposit insurance, household depositors tend to be less aware of the risks, while commercial depositors may have other relationships with banks that make them more reluctant than institutional investors to move funds. Provided it can be determined that the penalties for withdrawal are high, customer deposits could also include those from the excluded sectors that have a remaining maturity of more than one year.[29,30]

[28]This is reflected is the Basel III liquidity standards, with different run-off rates prescribed when calculating the Liquidity Coverage Ratio to approximate the relative "stickiness" of different types of deposit.

[29]Another approach that could yield a similar outcome would be to determine customer deposits by type of deposit, that is: (1) deposits known for their stability such as demand deposits, small-scale savings, and time deposits; and (2) deposits covered by a (credible) deposit insurance scheme.

[30]For Islamic banks, the characteristics of customer deposits noted in this paragraph also exist, but customer behavior will also be affected to some extent by the risk-bearing nature of some of funding provided by customers, as noted in footnote 25.

5.41 *Loans* are financial assets that are (1) created when a creditor lends funds directly to a debtor, and (2) evidenced by documents that are not negotiable.[31] Collateral, in the form of either a financial asset (e.g., security) or nonfinancial asset (e.g., land and building), may be provided under a loan transaction, though it is not an essential feature. Loans collateralized by real estate should be separately identified to assist in financial stability analysis. The loan category includes commercial loans, overdrafts, installment loans, hire-purchase credit, loans to finance trade credit, financial leases, and repurchase agreements.[32] Undrawn lines of credit are not recognized as an asset, and therefore not as loans, because they are only potential claims. Accounts receivable/payable, which are treated as a separate category of financial assets, are excluded from loans. To meet the requirements of the FSI list, loans to other DTs (resident and nonresident) are distinguished in Table 5.1 from other loans as interbank loans (line 18.i.i), which are attributed by sector on a residency basis, as defined in Chapter 2.

5.42 Loans that have become negotiable are to be reclassified from loans to debt securities. For such reclassification, there needs to be firm evidence of secondary market trading, including the existence of market makers, and frequent quotations of the instruments, such as provided by bid-offer spreads. A transfer or one-time sale of a loan, for example, to a special purpose vehicle for securitization, would not normally constitute a basis for reclassifying the loan as a security.

5.43 Two forms of loans require further discussion. A *finance lease* is a contract under which the lessor—the financial corporation providing the financing—as the legal owner of an asset, conveys substantially all the risks and rewards of ownership of the asset to the lessee, who becomes the economic owner of the asset. Under a finance lease, the lessor recognizes assets held under a finance lease as a receivable at an amount

[31]A financial asset is negotiable if its legal ownership is readily capable of being transferred from one unit to another unit by delivery or endorsement. Loans may be traded or securitized, but their legal form is not designed for negotiability in the same way as debt securities.

[32]Except those repurchase agreements that resemble a standard deposit, where the DT receives cash from a client and provides a security as collateral.

equal to the net investment in the lease. Payments under a finance lease are treated not as rentals on the asset but as finance income over the lease term of a finance lease, based on a pattern reflecting a constant periodic rate of return on the net investment.[33]

5.44 A *securities repurchase agreement* (repo) is an arrangement involving the provision of securities in exchange for cash with a commitment to repurchase the same or similar securities at a fixed price either on a specified future date or with an "open" maturity.[34] Repos convey the legal ownership of the securities to the cash provider, which entitles the cash provider to sell the securities to a third party (on-selling). Despite conveyance of the legal ownership to the cash provider, the economic ownership is retained by the cash taker (i.e., the securities provider), as the cash taker retains the market risk and ownership benefits, other than the right of sale, including holding gains or losses and interest income on the securities. Because of these features, repurchase agreements should be recorded as loans collateralized by the securities underlying the agreement.[35] The securities should remain on the balance sheet of the cash taker and a new financial asset (i.e., a loan) should be recorded as an asset of the cash provider offsetting the reduction in cash and a liability, offsetting the cash received, of the cash taker. Although repurchase agreements are usually classified as loans, those resembling a standard deposit, where the client of the DTs is the cash-provider, should be classified as deposits. If securities acquired under a repo or securities-lending arrangement are sold to third parties, the security taker should record on the balance sheet a liability equal to the current market value of the security that was sold (short position).[36]

5.45 A *gold swap*, under which gold is exchanged for other assets (usually foreign exchange), is similar in nature to a repo and is to be recorded as a collateralized loan.

[33] See IFRS 9, paragraph 3.2.7.

[34] "Open" maturity is when both parties agree daily to renew or terminate the agreement. Such an arrangement avoids settlement costs if both parties wish to rollover the repo on a continuing basis.

[35] Repos may be used for a variety of purposes. An extended discussion of repos and securities lending can be found in Chapter 4 of the *Monetary and Financial Statistics Manual and Compilation Guide* (*MFSMCG*), paragraphs 4.71–4.84.

[36] IFRS 9, paragraph BA.7.

5.46 *Securities lending* is similar to a repo. Ownership of the security is transferred to the borrower with the execution of an agreement to return it. The lender earns a fee for the transaction and typically takes collateral in the form of other securities, or less commonly, cash or other instruments. If the security-taker provides cash as collateral, then the arrangement is treated in the same way as a repo, with the securities involved remaining on the balance sheet of the security provider. In the more typical case of non-cash collateral being provided, the ownership of both the securities lent and collateral provided changes hands; the borrowed securities are recorded on the balance sheet of the borrower, and the securities provided as collateral are recorded on the balance sheet of the lender.

5.47 *Interbank loans* are loans granted to other DTs, usually with a short-term maturity. For the compilation of the FSI Customers Deposits to Total Loans, and to monitor interbank exposures, interbank loans should be identified separately from other loans because their behavior often differs from that of loans with non-DT entities, and because they can be a channel for transmission of stress between banks.

5.48 *Specific loan loss provisions* are the outstanding amount of provisions made against the value of individual non-performing loans, collectively assessed groups of loans, and non-performing loans to other DTs (see also paragraph 5.27) in accordance with requirements specified by the DT supervisory authority.[37, 38, 39] In some economies, provisions are constituted

[37] As discussed in Chapter 4, IFRS 9 focuses on the concept of ECL. In line with BCBS guidance, compilers should follow national supervisory standards in identifying specific and general provisions. The *Guide* recommends that interest on NPLs should not accrue, so specific loan provisions should not in principle include specific provisions for interest accrual on NPLs.

[38] If the accounting practice is not to accrue interest on NPLs, but to include the interest in the value of the loan on the balance sheet offset by an item such as interest in suspense, it is suggested that the interest in suspense be included together with the data for specific loan provisions on the balance sheet. If this approach is adopted, it should be explained in the metadata.

[39] In jurisdictions such as the EU that have elected to treat all ECL as specific provisions, it will be necessary to report a subset of provisions which are only those held against non-performing loans. In jurisdictions that prescribe an allocation of ECL to general and specific provisions, for example considering as specific provisions that portion of ECL attributable to loans having a significant increase in credit risk since initial recognition, the supervisory prescription of specific provisions should be used.

against nonperforming and performing loans, without the possibility of separately identifying them. For such cases, the *Guide* defers to the national legal framework for provisioning, which should be documented in the metadata. The *Guide* recommends reporting specific loan loss provisions as a negative asset item, netting from total gross loans (line 18.ii in Table 5.1).

5.49 *Debt securities* are negotiable financial instruments serving as evidence that units have obligations to settle by means of providing cash, a financial instrument, or some other item of economic value, and give the holder an unconditional right to receive interest and/or principal payments. They include bills, bonds and debentures, commercial paper, negotiable certificates of deposit, asset-backed securities, loans that have become de facto negotiable, preferred stocks or shares that pay a fixed income but do not provide for participation in the residual value of the corporation, bankers' acceptances, and similar instruments normally traded in the financial markets.[40] Some corporate bonds are convertible into shares of the same corporation at the option of the bondholder; if the conversion option is traded separately, then it is recorded as a separate asset and classified as a financial derivative.

5.50 Common types of debt securities are those sold on: (1) a *coupon basis*, stipulating that periodic interest, or coupon, payments will be made during the life of the instrument and that the principal will be repaid at maturity; (2) an *amortized basis*, stipulating that interest and principal payments will be made in installments during the life of the instrument; (3) a *discount***,** or *zero coupon, basis*, whereby a security is issued at a price that is less than the face (or par) value of the security, and all interest and principal are paid at maturity; or (4) an *indexed basis*, which ties the amount of interest or principal payment to a reference index, such as a price index or an exchange rate index, or to the price of a commodity (e.g., gold). The *Guide* defers to IFRS regarding the accrual of interest and the related asset classification and measurement of all types of debt securities.

5.51 Table 5.1, line 19, includes all the above instruments under the heading of debt securities. However, it is recognized that national practices might separately identify certain types of instruments, such as mortgage-backed securities, government securities, and securities considered to be of a liquid nature.

5.52 *Equity* comprises all instruments and records acknowledging claims on the residual value of a corporation after the claims of all creditors have been met. Ownership of equity in legal entities is usually evidenced by shares, stocks, participations, depository receipts, or similar documents.[41] Shares and stocks have the same meaning. Participating preferred shares are those that provide for participation in the residual value on the dissolution of an incorporated enterprise; such shares are also equity securities, whether or not the income is fixed or determined according to a formula.[42] Buybacks by a DT of its own equity securities reduce the number of equity securities outstanding.

5.53 Equity assets include equity investments in associates, unconsolidated subsidiaries, and reverse equity investments, as well as other equity investments in DTs. In the context of domestic data, equity assets include any share capital provided to foreign branches.

5.54 *Investment fund shares* comprise shares or units of all kinds issued by money market funds (MMFs) and non-MMF investment funds, which are collective investment schemes that raise funds from the public. The fundamental difference between them is that MMFs typically invest in low-risk liquid money market instruments with a residual maturity of less than one year, are often transferable, and are often regarded as close substitutes for deposits. Non-MMFs investment funds typically invest in longer-term financial assets and possibly real estate. MMF and

[40] The *Handbook on Securities Statistics* (jointly published by the BIS, ECB, and IMF) deals with the conceptual framework for the compilation and presentation of securities statistics, elaborating on issues such as issuers, holders, currency, maturity, and type of interest rate.

[41] Depository receipts allow a nonresident institutional unit to introduce its equity (or debt) into another market in a form more readily acceptable to the investors in that market, often including translating the price of securities into the currency of the receiving economy, and adjusting issues to national legal and reporting standards. Depository receipts are classified according to the underlying financial instrument backing them (i.e., debt and equity).

[42] Accounting standard setters agree that not everything commonly called equity qualifies as such. For instance, mandatorily redeemable preferred stocks are liabilities, and so are various kinds of puttable stock, where the stocks are being essentially used as currency.

non-MMF investment fund shares or units represent a claim on a proportion of the value of an established investment fund.

5.55 *Financial derivatives* are financial instruments that are linked to another specific financial instrument, indicator, or commodity, and through which specific financial risks (e.g., interest rate risk, foreign exchange risk, equity and commodity price risk, and credit risk) can be traded in their own right in financial markets. The value of a financial derivative depends on the price of the underlying item: the reference price. The reference price may relate to a commodity, a financial asset, an interest rate, an exchange rate, another derivative, or a spread between two prices. The derivative contract may also refer to an index or a basket of prices. Unlike debt instruments, no principal amount is advanced that has to be repaid, and no investment income accrues. Financial derivatives are used for several purposes, including risk management, hedging, arbitrage between markets, and speculation.

5.56 There are two broad types of financial derivatives: *forward-type contracts* and *options*. A major difference between a forward contract and an option is that, whereas either party to a forward is a potential debtor, the buyer of an option acquires an asset and the option's writer incurs a liability. Option contracts can expire without worth; options are exercised only if settling a contract is advantageous for the option's holder.

5.57 A *forward-type contract* (forward) is an unconditional contract by which two parties agree to exchange a specific quantity of an underlying item (financial or real) at an agreed-upon contract price (the strike price) on a specified date. Forward-type contracts include forwards, futures, and swaps. *Forward rate agreements* and *forward foreign exchange contracts* are common types of forward-type contracts. A *swap contract* involves the counterparties exchanging, in accordance with prearranged terms, cash flows based on the reference prices of the underlying items.[43] Swap contracts classified as forward-type contracts include currency swaps, interest rate swaps, cross-currency interest rate swaps, and equity swaps.

5.58 *Futures* are forward-type contracts traded on organized exchanges, while forward contracts are bought and sold in over-the-counter (OTC) trading conducted directly between the parties, although clearing may occur through a central counterparty. For futures, the exchanges facilitate trading by determining the standardized terms and conditions of the contract, acting as the counterparty to all trades, and requiring margins to be deposited and paid to mitigate against risk.

5.59 At the inception of a forward-type contract, risk exposures of equal market value are exchanged, so a contract typically has zero value at inception. As time passes, market rates change, and the price of the underlying item changes and the market value of the forward contract will change (although it may be restored to zero by periodic settlements during its life). The classification of a forward-type contract may change between asset and liability positions.

5.60 An *off-market swap* has a nonzero value at inception as a result of having reference rates priced differently from current market values (i.e., "off-the-market"). The economic nature of an off-market swap is equivalent to a combination of a loan and an on-market financial derivative. Therefore, off-market swaps should be recorded as two stock positions in the sectoral balance sheets—a loan and an on-market financial derivative.

5.61 In an *option contract* (option), the purchaser acquires from the seller a right to buy or sell, depending on whether the option is a call (a contract to buy) or a put (a contract to sell) a specified underlying item at a strike price on or before a specified date. The purchaser of an option pays a premium to the writer of the option. Throughout the life of the contract, the writer of the option has a liability and the buyer an asset, although the option can expire worthless; the option will be exercised only if settling the contract is advantageous for the purchaser.

5.62 Options can be contrasted with forward-type contracts in that: (1) at inception, a premium is paid for an option representing a non-zero value for the contract, unlike a forward-type contract where there is usually no up-front payment and the derivative contract begins with a zero value reflecting the mutual net exchange of

[43] Other types of arrangements also called swaps, but not meeting the definition given earlier, include gold swaps, central bank swap arrangements and other similar arrangements, and credit default swaps, a type of option contract.

claims and obligations between the parties to the forward contract; (2) during the life of an option contract, the buyer is always the creditor and the writer is always the debtor; whereas for a forward-type contract, either party can be creditor or debtor, and it may change during the life of the contract; and (3) at maturity, redemption is determined by the buyer of the option, whereas it is unconditional for a forward-type contract.

5.63 *Employee stock options* are options to buy the equity of a company, offered to employees of the company as a form of remuneration and as an incentive to perform their duties in the best interests of the corporation's shareholders. This *Guide* recommends treatment of employee stock options as an increase in equity with an offsetting debit comprising the fair value of the stock option at the date the options are exercised.[44]

5.64 If an instrument such as a security or a loan contains an embedded derivative that is inseparable from the underlying instrument, valuation and classification varies for assets and liabilities.[45] For financial liabilities, an embedded derivative is accounted for separately from the host contract as a derivative (FVTPL) if it is not closely related to the host contract in terms of economic risk and characteristics. Examples are bonds that are convertible into shares and securities with options for repayment of principal in currencies that differ from those in which the securities were issued. For financial assets, if the host is an asset that falls within the scope of IFRS 9, there is no bifurcation and the embedded instrument is measured in its entirety in accordance with IFRS 9. If the host does not fall within the scope of IFRS 9, the derivative is accounted for separately from the host (FVTPL).

5.65 Financial derivative contracts are usually settled by net payments of cash rather than by the delivery of the underlying items. Exchange-traded contracts, such as commodity futures, are often settled before maturity. Cash settlement is a logical consequence of the use of financial derivatives to trade risks independently of the ownership of underlying items. Some financial derivative contracts—particularly those involving foreign currency—are, however, settled by delivery of the underlying items. Once a financial derivative reaches its settlement date, any unpaid overdue amount is reclassified as accounts receivable/payable, as its value is fixed, and thus the nature of the claim becomes debt. Gross market values for financial derivative assets and liabilities should be recorded on the balance sheet, and any valuation gains and losses should be recorded in the income and expense statement.

5.66 *Other financial assets* (or *other liabilities* from the debtor perspective) cover prepayments of insurance premiums and miscellaneous other items due to be received or paid. Miscellaneous other items receivable or payable include accrued but unpaid taxes, dividends (including dividends declared but not yet payable), purchases and sales of securities, rent, wages and salaries, social contributions, social benefits, and similar payments.

5.67 *Trade credit and advances* are mostly relevant to NFCs and separately identified as asset and liability items in their balance sheets. For other sectors, it is included in other financial assets and liabilities, but will generally not be relevant to the DT sector. Trade credit and advances are claims (or obligations) that arise from the sale (or purchase) of goods and services for which payment is not yet due. They consist of (1) trade credit extended directly by the suppliers of goods and services to their customers, and (2) advances for work that is in progress (or is yet to be undertaken) and prepayment by customers for goods and services not yet provided. Trade credit does not include loans, debt securities, or other liabilities that are issued to finance trade credit. So, trade-related loans provided by a third party, such as a DT, to an exporter or importer are not included in this category but are included under loans. If significant allowances are made against these assets, particularly trade credit, compilers are encouraged to separately identify these allowances.[46]

5.68 *General provisions for losses on financial assets* and *other provisions* are presented in the *Guide* as liability items and classified as a separate component (line 30 in Table 5.1), although they are "internal

[44] See IFRS 2 *Share-based Payment*.
[45] Refer to IFRS 9, Section 4.3, Embedded Derivatives.
[46] The ECL approach applies to trade receivables. Refer to IFRS 9, paragraph 5.5.15.

accounts" to reflect losses on certain assets rather than liabilities to creditors. The *Guide* defers to national supervisory standards for the allocation of allowances for ECL to general and specific provisions. When specific and general provisions are created, they are included in the income and expense statement as an expense (see paragraph 5.27). The counterpart for the created specific provisions reduces the net value of the relevant asset on the balance sheet, while the counterpart for the created general provisions shows as a liability item in the balance sheet.

5.69 *Debt* is defined as the outstanding amount of those actual current and non-contingent liabilities that require payment of principal or interest by the debtor at some point(s) in the future. Thus, for DTs, debt comprises those financial liabilities that are deposits, loans, debt securities, and other liabilities.

5.70 *Capital and reserves* is defined as the equity interest of the owners in an enterprise and is the difference between total assets and liabilities. It represents the amount available to absorb unidentified losses.

5.71 In the *Guide*, total capital and reserves include the following:

a. *Funds contributed by owners* comprise the total amount from the initial and any subsequent issuance of shares, stocks, or other forms of ownership. This item is valued as the nominal amount of proceeds from the initial and subsequent issuances. It is not revalued.
b. *Retained earnings* reflect all previous years' after-tax profits that have not been distributed to shareholders or appropriated as general or special reserves. This item is also valued at the nominal amount of earnings that have been retained and is not revalued.
c. *Current year result* represents the accumulation of profit or loss since the beginning of the business year.
d. *General and special reserves* are reserves that reflect appropriations from retained earnings.[47]

[47] In many cases, general reserves are required by law to provide the entity and its creditors with an added measure of protection from the effects of losses. Special reserves also provide added protection, but from the effects of losses that may arise from specific activities of the corporation.

5.72 Under consolidated reporting at group level, when the parent has less than full ownership of a subsidiary, the capital and reserves attributable to minority shareholders in the subsidiary are included in capital and reserves, because the focus of FSIs is on the total capital and reserves of the DTs in the reporting population.

Memorandum series

5.73 Some of the series required to calculate the FSIs are not directly available from the financial statements described earlier. They are included as memorandum items to the financial statements. These series fall into two categories: (1) supervisory-based series, and (2) series that provide for further analysis of the balance sheet.

Supervisory-based series

5.74 These are series to be directly sourced from supervisory information because the definitions conform to supervisory guidance. For supervisory-based series, the *Guide* relies on the definitions and concepts of the BCBS as implemented by national authorities. Due to the many elements of national discretion in the various Basel standards and many jurisdictions' adoption of definitions and requirements that vary in areas aside from national discretion in the relevant Basel standard, compilers will rely on national supervisory standards for these series, and should therefore document in the metadata the exercise of national discretion as well as any elements that vary from the relevant Basel standard.

5.75 Chapter 3, which describes the regulatory framework for DTs, provides detail with respect to the elements of regulatory capital, the calculation of risk-weighted assets, and liquidity ratios. This section focuses on their most relevant features. The BCBS has developed specific definitions of *regulatory capital* to be used as numerators in regulatory capital adequacy ratios (see paragraph 3.24 and 3.25). The definitions extend beyond purely capital and reserve account items identified on the balance sheet, to include several specified types of subordinated debt instruments and reserves. Banks are expected to have total regulatory capital of at least 8 percent of risk-weighted assets, with specific minimums for its components. Based on the Basel regulatory framework, regulatory capital consists of three components.

5.76 *Tier 1 capital* under Basel I and Basel II comprises equity capital and freely available disclosed reserves (see paragraph 3.26). Tier 1 capital should already reflect the corresponding *supervisory deductions*, such as goodwill (see paragraph 5.80). Regarding total capital, supervisory deductions cover investments in unconsolidated banking and financial subsidiaries and, at the discretion of national authorities, investment in capital of other banks and financial institutions.[48]

5.77 Under Basel III, Tier 1 capital is split into two components: (1) *Common equity tier 1* (CET1) capital, and (2) *Additional tier 1* (AT1) capital (see paragraphs 3.27 and 3.28). Both components of Tier 1 are measured net of supervisory deductions. *CET1* capital consists predominantly of common shares, retained earnings, and accumulated other comprehensive income and other disclosed reserves. *AT1* capital consists of instruments that are subordinated, have fully discretionary non-cumulative dividends or coupons, and have neither a maturity date nor an incentive to redeem.

5.78 *Tier 2 capital* under Basel I and II consists of financial instruments and reserves that are available to absorb losses, but might not be permanent and have uncertain values, might entail costs if sold, or which otherwise lack the full loss-absorption capacity of Tier 1 capital items (see paragraphs 3.29 and 3.30). The balance of Tier 2 capital should reflect the corresponding supervisory deductions. Tier 2 capital and subordinated debt cannot exceed 100 percent and 50 percent, respectively, of Tier 1 capital. The composition of Tier 2 capital was modified under Basel III, in order to strengthen the loss absorption capacity of banks (see paragraph 3.30).

5.79 *Tier 3 capital* was introduced in the 1996 amendment to Basel I (see paragraph 3.6). At the discretion of national authorities, it can be used solely to support market risk. It consists of medium-term subordinated debt and is limited to 250 percent of the bank's Tier 1 capital. Tier 3 capital is eliminated under Basel III.

[48] In the absence of data on Tier 1 capital (as in the case of units not subject to Basel capital adequacy guidelines), the data for funds contributed by owners together with retained earnings (including those earnings appropriated to reserves) could be used.

5.80 *Supervisory deductions* cover goodwill (see next paragraph) and all other intangibles, as a deduction from Tier 1 capital (CET1 in Basel III). With regard to total regulatory capital, supervisory deductions cover investments in unconsolidated banking and financial subsidiaries and, at the discretion of national authorities, investment in capital of other banks and financial institutions, and other specified types of asset. The data reported in *Supervisory deductions* (line 38 of Table 5.1) is the amount, if any, not already deducted from the components of regulatory capital Tier 1 (CET1 and AT1) and Tier 2, in accordance with paragraphs 5.76 to 5.78.

5.81 *Goodwill* is defined as the excess of the fair (paid) value for a business entity over the book value of the acquired net assets. Accounting standard setters consider goodwill to be an asset. However, goodwill is an intangible asset, and as such not available to absorb losses.[49]

5.82 *Risk-weighted assets* arise from the application to all on- and off-balance- sheet assets of specified risk weights in Basel I and the Standardized approaches in Basel II and III, and an approved methodology for risk modeling of specified assets in the internal-ratings-based approaches of Basel II (see paragraphs 3.32–3.36). Assets are weighted by factors representing their credit riskiness and potential for default. Through the use of credit conversion factors, the credit risk of off-balance-sheet exposures, such as credit line commitments and letters of credit that serve as financial guarantees, is also taken into account in determining regulatory capital requirements. The calculation of risk-weighted assets evolved from fixed coefficients for credit risk in Basel I to basic and more sophisticated methods of measuring credit, market, and operational risks in Basel II and III.

5.83 The measure of total regulatory capital will differ from the measure of capital and reserves in the sectoral balance sheet of Table 5.1. In this context, some general statements can be made:

a. Both regulatory capital and the sectoral balance sheet measure of capital cover paid-in capital,

[49] Consistent with IFRS, if the cost of the acquired entity is lower than the market or fair value of its net assets (negative goodwill), any excess that remains after a rigorous valuation of the net assets acquired is a gain in profit or loss.

reserves (both disclosed and undisclosed), valuation adjustments, retained earnings, and current year result. However, the amounts posted to reserves can differ due to different accounting approaches and regulatory frameworks, such as the treatment of gains or losses on financial instruments.

b. The regulatory measure of capital can include general provisions (up to 1.25 or 0.6 percent of risk-weighted assets, in the standardized or advanced approaches, respectively). As discussed in Chapter 4, the concept of general provisions is not included in the IFRS 9 ECL model. In line with the BCBS transitional guidance on IFRS 9, compilers should rely on national supervisory standards for the identification of specific and general provisions. Specific provisions should be obtained from supervisory data as a memorandum item.

c. Goodwill is deducted from the regulatory measure of capital, while in the sectoral balance sheet, it is recorded as intangible assets and, therefore, implicitly included in the total measure of capital and reserves.

d. The regulatory measure covers certain debt instruments, such as subordinated debt, which are classified as liabilities in the sectoral balance sheet measure.

e. At the sector level, only intragroup equity investments (between units within the same group) are excluded from the sectoral balance sheet measure. That means equity investments in DTs that are not within the same group are included in balance sheet capital. As noted earlier, at national discretion, investments in unrelated DTs may or may not be deducted from regulatory capital calculations.

f. Non-DTs may be consolidated for the calculation of regulatory capital (or investments in such entities deducted from regulatory capital), but this is not preferred for the calculation of the sectoral balance sheet measure.

5.84 *Off-balance-sheet exposures* include contractual financial arrangements that are often referred to as contingencies and are not defined as financial assets or liabilities. These arrangements comprise commitments (including liquidity facilities), unconditionally cancellable commitments, direct credit substitutes, acceptances, stand-by letters of credit, trade letters of credit, failed transactions, and unsettled securities. Off-balance-sheet items are a source of potentially significant leverage.

5.85 *High-quality liquid assets* is a supervisory concept defined in Basel III as those unencumbered assets that can be converted easily and immediately into cash at little or no loss of value. The Basel III text sets out specific market-related characteristics and operational requirements that high-quality liquid assets should possess or satisfy.

5.86 *Total net cash outflows* is a supervisory concept defined in Basel III as the total expected cash outflows minus total expected cash inflows in the specified stress scenario for the subsequent 30 calendar days.[50]

5.87 *Stable funding* is a supervisory concept defined in Basel III as the portion of those types and amounts of equity and liability financing expected to be reliable sources of funds over a one-year time horizon under conditions of extended stress.

5.88 *Large exposures* are defined as the sum of all exposure values of a DT to a counterparty or to a group of connected counterparties, if it is equal to or above 10 percent of the DT's eligible capital base.[51] Specific principles are outlined for the measurement of exposure values. Off-balance-sheet exposures should be converted into credit exposure equivalents through the use of credit conversion factors.

Series that provide a further analysis of the balance sheet

5.89 In order to calculate some core and additional FSIs, there is a need for a number of series that are subtotals of the balance sheet line items and that provide for further analysis of the balance sheet.

5.90 *Liquid assets* are those assets that are readily available to an entity to meet a demand for cash. While it may be possible to raise funds through borrowing, conditions in the market may not always be favorable,

[50] For the calculation of total expected cash outflows and inflows, see BCBS *Basel III: The Liquidity Coverage Ratio and Liquidity Monitoring Tools* (2013).

[51] BCBS, *Standards—Supervisory Framework for Measuring and Controlling Large Exposures*, April 2014, page 4.

and experience has shown the necessity for DTs to maintain a prudent level of liquid assets. For a financial asset to be classified as a liquid asset, the holder must have the reasonable certainty that it can be converted into cash with speed and without significant loss under normal business conditions. The financial assets included in this item go beyond the supervisory definition of high-quality liquid assets.

5.91 Whether an instrument is considered liquid or not depends on judgment and is influenced by market conditions. For example, cash, transferable deposits, and deposits that permit immediate cash withdrawals are typically liquid and are included in liquid assets, while non-traded instruments with a long time until maturity are not. Other deposits provide certainty of value but may not be readily convertible into cash because of restrictions on withdrawals prior to maturity. Conversely, tradable securities, particularly those issued by the government or the central bank, might be readily converted into cash through sale on the secondary market, but their realizable value depends on the market price at the time of sale.

5.92 In the *Guide*, *liquid assets* comprise (1) currency; (2) deposits and other financial assets that are available either on demand or within three months or less; and (3) securities that are traded in liquid markets (including repo markets) that can be readily converted into cash, with insignificant risk of change in value under normal business conditions. Typically, securities issued by the government or the central bank in their own currency meet the criteria to be classified as liquid assets, and in a number of markets high credit-quality private securities, including those issued by financial institutions, may also meet the criteria.

5.93 *Short-term liabilities* are the short-term element of DTs' debt liabilities (line 28 in Table 5.1) and the net (short-term, if possible) market value of financial derivatives positions (liabilities (line 29) *less* assets (line 21) in Table 5.1). The definition includes short-term liabilities to other DTs in the reporting population. Consistent with the definition of liquid assets, *short-term liabilities* could be withdrawn either on demand or within three months or less. Preferably, "short term" should be defined on a remaining maturity basis, although original maturity can be used as a (more limited) alternative.

5.94 *Nonperforming loans* (NPLs) are defined as those loans for which (1) payments of interest or principal are past due by 90 days or more; or (2) interest payments equal to 90 days or more have been capitalized (reinvested into the principal amount), refinanced, or rolled over (payment delayed by agreement); or (3) evidence exists to reclassify them as nonperforming even in the absence of a 90-day past due payment, such as when the debtor files for bankruptcy. The amount of loans recorded as nonperforming should be the gross value of the loan as recorded on the balance sheet, not just the overdue amount.

5.95 Once a loan is classified as nonperforming, it (and/or any replacement loans) should remain classified as such until payments are received, or the principal is written-off on this or subsequent loans that replace the original. It is recognized that some national supervisory practices might be stricter in that loans are classified as nonperforming until payments are received for specified periods of time, for example, until three consecutive payments have been made.

5.96 Replacement loans include loans arising from rescheduling or refinancing the original loan(s) (restructured loans) and loans provided to make payments on the original loan. While these loans may be granted on easier than normal commercial terms, provided the terms and conditions of the replacement loan are complied with by the debtor, and subject to national supervisory guidance, the loan is no longer classified as an NPL.

5.97 *Residential real estate loans* are those loans that are collateralized by residential real estate. Residential real estate includes houses, apartments and other dwellings (e.g., houseboats and mobile homes), and any associated land intended for occupancy by individual HHs.

5.98 *Commercial real estate loans* are those loans that are collateralized by commercial real estate, as well as loans to construction companies and loans to companies active in the development of real estate (including those companies involved in the development of multi-household dwellings). Commercial real estate includes buildings, structures, and associated land used by enterprises for retail, wholesale, manufacturing, or other such purposes.

5.99 The counter parties to Total gross loans can be broken down into the different institutional *sectors of the economy*, and nonresidents, as defined in Chapter 2. This classification follows primarily the sectoral classification of the SNA: (1) deposit-taking corporations except the central bank (DTs in the *Guide*); central bank; the seven subsectors of the financial corporations sector that are not DTs (subsumed in the *Guide* as OFCs), general government, NFCs, and other domestic sectors (HHs and NPISHs), plus nonresidents.[52, 53]

5.100 The *geographic distribution of loans* refers to an attribution of loans on the basis of the residence of the immediate counterpart—that is, the country of residence of the debtor. While country circumstances will differ, a regional classification of lending is encouraged, with perhaps additional detail on lending to residents of other countries that may be of particular relevance, such as neighboring countries. The regional grouping is based on the IMF's *World Economic Outlook* classification.

5.101 For DTs, *foreign currency loans* and *foreign currency liabilities* are those assets and liabilities that are denominated in a currency other than the domestic currency, and those that are denominated in domestic currency but with the amounts to be paid linked to a foreign currency (foreign currency linked). By convention, those loans, and liabilities that are denominated in a foreign currency but with the amounts to be paid linked to a domestic currency (domestic currency linked) are also included in foreign currency loans and liabilities. For related financial derivative liabilities, it is recommended that the net fair value position (liabilities *less* assets) be included in the foreign currency liability measure rather than the gross liability position, because of the market practice of creating offsetting contracts, and the possibility of a forward-type instrument switching from an asset to a liability position and vice versa from one period to the next.

[52] These are money market funds, non-MMF investment funds, other financial intermediaries except insurance corporations and pension funds, financial auxiliaries, captive financial institutions and money lenders, insurance corporations, and pension funds.
[53] The NFC sector could be disaggregated by type of industry.

5.102 The *net open position in foreign currency* for on-balance-sheet items and the *total net open position in foreign currency* are calculated by summing the net position for each foreign currency into a single unit of account (the reporting currency). The calculation is described in more detail in Chapter 7 (paragraphs 7.77–7.83).

5.103 *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. An alternative source for compiling this underlying series is the standardized report form (for other depository corporations) used for transmitting monetary data to the IMF for publication in *International Financial Statistics*, which many economies report to the IMF Statistics Department on a monthly basis.

Other Financial Corporations

5.104 As described in Chapter 2, the OFC sector comprises a wide and diverse range of institutions performing financial intermediary, or auxiliary, activities outside the deposit-taking system. Two FSIs for OFCs show the relative importance of the OFC sector (and its subsectors) within the domestic financial sector and within the total economy; no sectoral financial statements are needed to calculate these two FSIs. Additionally, specific FSIs should be compiled for three subsectors of the OFC sector, for which separate financial statements are required, namely: (1) MMFs, (2) insurance corporations (ICs), and (3) pension funds (PFs). They are set out in Tables 5.2 to 5.4.

5.105 The definition of the series presented in these sectoral balance sheets and income and expenses statements are the same as for the corresponding series in Table 5.1, albeit somewhat simplified and adapted to the specific requirements for each subsector. The given discussion touches only on those items previously not presented when describing the financial statements of DTs.

Money market funds

5.106 Table 5.2 presents a summarized sectoral financial statement for MMFs. The typical sectoral balance sheet of MMFs is dominated by financial

assets largely comprising holdings of high-quality, short-term maturity, debt securities. The main liability of MMFs is the amount due to investors, who are entitled to receive the value of each share with its accumulated income (or loss) or net asset value (NAV). Total other comprehensive income (or loss) that would be reported in an IFRS Statement of Comprehensive Income should be included in line 9.

5.107 The *sectoral distribution of investments* as a percent of their total investments provides an indication of the concentration of MMFs investments. Potentially, this can provide a very rough approximation of asset quality—a higher proportion of government and central bank exposures suggests less risk and possibly greater liquidity relative to a higher proportion of exposure to nonfinancial corporations. The distribution of the financial investments held by MMFs is based on the economic sectors of the *2008 SNA*, and is the same (except for the non-inclusion of other domestic sectors) as the one used for the sectoral distribution of loans by DTs: central bank, DTs, OFCs, general government, NFCs, and non-residents.

5.108 The liquidity profile of MMFs' investments (beyond the "less than one year" investment rule) can be monitored through the *maturity distribution of investments*, as a percentage of total investments. MMFs' investments are split into three groups: (1) from 1 to 30 days; (2) from 31 to 90 days; and (3) more than 90 days. The *Guide* recommends compiling these data on a remaining maturity basis, although using original maturity can also be an alternative.

Insurance corporations

5.109 Summarized sectoral financial statements for ICs are presented in Table 5.3, including memorandum items needed for calculating some additional FSIs. The financial statement presented in Table 5.3 should be *separately* compiled for life insurance and non-life insurance (including reinsurance).

Income and expense

5.110 *Premiums earned* constitute, together with investment income, the main source of revenue for ICs. It constitutes all premiums received and receivable (after the deduction of any taxes or other duties levied on direct insurance premiums) to cover all types of insurance services, which are recognized as income during the reporting period. Premiums earned (line 1 in Table 5.3) should be reported net of reinsurance ceded (line 1.ii in Table 5.3) and including transfer of premium reserves from other insurers (line 1.iii in Table 5.3).

5.111 *Claims incurred* are financial obligations of the insurers with respect to the beneficiary, concerning the risks realized by events during the period, as defined by the policy. They include both gross claims paid during the period plus changes in reserves for claims outstanding and the transfer of premium reserves to other companies, typically reinsurers. They are presented on a net basis, subtracting the reinsurers' share of gross claims.

5.112 Another expense item for ICs is the *net change in technical reserves* needed to provide for future claims for unearned premiums, life insurance, outstanding claims, and other types of technical reserves.

5.113 *Other operating income* includes all income not due to premiums or investments, such as income from commissions or rents received on real estate holdings.

5.114 *Other operating expenses* include personnel costs, underwriting expenses, depreciation of non-financial assets, and any other operating costs not related to claims or investments.

5.115 *Investment income* corresponds to the income earned from holdings of financial (debt securities, equity, investment fund shares, etc.) and nonfinancial (property) assets, associated with both unit-linked and non-unit-linked products. It is presented on a net basis, subtracting the interest cost on liabilities, such as loans received, the costs of managing own property, and the income on unit-linked products that is passed on to policyholders. For non-unit-linked (non-participating) insurance, all risk and income of the investments are borne by the ICs; while the investment income of unit-linked (participating) insurance is passed-through to policy holders, who bear risk and income of the investments.

5.116 *Gains and losses on revaluation of financial assets* are those arising during the period under review. Similar to the investment income, it is necessary to distinguish gains and losses on

revaluations of those financial assets allocated to non-unit-linked (non-participating) insurance (appropriated by the ICs) from those allocated to unit-linked insurance (participating—appropriated by policy holders).

5.117 The calculation of net income before and after taxes is similar to the one performed for DTs, although with a presentation adapted to the need of ICs. Relevant items here are the net income from insurance activity (premiums *less* claims *less* net change in technical reserves), net operating income, and the net income on own investments.

5.118 Total other comprehensive income (or loss) that would be reported in an IFRS Statement of Comprehensive Income should be included in line 13.

Balance sheet

5.119 Beyond the different categories of the sectoral balance sheet already described for DTs, some items need to be highlighted for the case of ICs.

5.120 *Nonfinancial assets* include both property for own use and also property held for investment purposes, generally real estate. Investments in real estate may be channeled through real estate investment funds, and not only through direct investment. In such cases, the claims on real estate investment funds are classified as equity and investment fund shares.

5.121 *Reinsurance claims* on the asset side record the reinsurance claims recoverable from reinsurers, and the claims on other insurers for reinsurance sold for which premiums have not yet been paid. On the liability side, *insurance, pensions, and standardized guarantee schemes* comprise reserves created to cover: (1) life insurance and annuities entitlements, which are assets of HHs; (2) non-life insurance payable for claims not yet settled, or not yet presented; (3) prepayment of non-life insurance premiums not yet used; (4) pension fund reserves, in cases where ICs offer pension schemes; and (5) any other technical reserve.

5.122 As in the case of DTs, *capital and reserves* represents the equity interest of ICs' owners and is calculated as the difference between total assets and total liabilities.

Pension funds

5.123 Summarized sectoral financial statements for PFs are presented in Table 5.4, including memorandum items needed for calculating some additional FSIs.

Income and expense

5.124 *Investment income* represents the main source of income for PFs. It is composed of interest income on financial instruments, other types of income on financial instruments (e.g., capital gains on equity), and income from investments in property (real estate). It also includes the net change in the fair value of investments of PFs. In the case of defined benefit schemes, PFs bear all gains and losses of their investments, since their liabilities to beneficiaries are determined by the defined benefit. In the case of defined contribution schemes, PFs pass through the gains and losses of the investment to the pension beneficiaries, who are entitled to future payments based on the return of their contributions.

5.125 *Investment expenses* are mainly constituted by expenses for managing investments and taxation of the return on investments.

5.126 *Net actuarial gains/losses* are part of the PFs' net income. They measure gains or losses arising from differences between the long-term estimates and the actual events, or changes in actuarial assumptions, during the reporting period. Gains or losses on actuarial liabilities can occur because long-term assumptions (e.g., mortality, salary increases, and retirement rates) were not met. Usually, actuarial assumptions are subject to legal constraints and regulatory/supervisory approval.

5.127 Total other comprehensive income (or loss) that would be reported in an IFRS Statement of Comprehensive Income should be included in line 10.

Balance sheet

5.128 As for the case of ICs, PFs hold *nonfinancial assets* for own use, but also for investment purposes, mainly real estate.

5.129 The main liability of PFs are financial claims that both existing and future pensioners

hold against PFs to pay pensions. These are the *net equity of households in pension funds reserves.* These reserves show the extent of financial claims both existing and future pensioners hold against the PF to pay pensions. Beyond pensions, some schemes may have other related liabilities, such as for health benefits, which are included under entitlements to non-pension benefits. For pragmatic reasons, liabilities for non-pension entitlements may be included with those for pension entitlements. PF entitlements are measured as the present value of the amounts expected to be paid out based on actuarial assumptions. The reserves created for pension benefits can be distinguished between reserves for: (1) defined contribution plans, (2) defined benefit plans, and (3) hybrid schemes.[54]

5.130 The difference between total assets and total non-pension-related liabilities constitute the *net total assets* of a PF.

5.131 The difference between the net total assets of a PF and its pension fund reserves is recorded as the *net worth* of the PF, which can be positive (net assets larger than pension reserves) or negative (net assets below pension reserves).

Memorandum series

5.132 *Liquid assets* of PFs comprise: (1) currency; (2) deposits and other financial assets that are available either on demand or within one year or less; and (3) securities that are traded in liquid markets. The *Guide* recommends the compilation of liquid assets on a remaining maturity basis, although original maturity may be an alternative.

5.133 *Estimated pension payments in the next 12 months* are the sum of the actuarially expected payments to beneficiaries by PFs during the next year.

Nonfinancial Corporations

5.134 The data for constructing income statements and a sectoral balance sheet for NFCs are sourced from the SNA, more specifically from financial accounts. Efficiency and methodological problems will arise when trying to aggregate individual NFCs financial statements. As mentioned in the *2008 SNA,* "It may be difficult, if not impossible, to achieve micro databases and macroeconomic accounts that are fully compatible with each other in practice. Nevertheless, as a general objective, the concepts, definitions and classifications used in economic accounting should, so far as possible, be the same at both a micro and macro level to facilitate the interface between the two kinds of data."[55]

5.135 Therefore, sectoral income statements and balance sheets for NFCs are estimates obtained from national account data, rather than the result of the sum of individual financial statements, as is the case for DTs or for some subsectors of OFCs. Table 5.5 sets out a simplified income and expense statement and a sectoral balance sheet for NFCs, which is needed for the calculation of the additional FSIs for NFCs. The balance sheet is presented with assets, liabilities, and capital and reserves (which includes the SNA concept of net worth), as the difference between assets and liabilities.

Income and expense

5.136 *Operating income* of an NFC is the revenue from the *sales of goods and services* (excluding taxes on goods and services) less the *cost of those sales*. The cost of sales include: (1) personnel (staff) costs; (2) costs of materials purchased for the production process; (3) depreciation of installations and equipment; (4) fixed and variable production overheads; (5) rentals paid on land, buildings, and equipment; (6) royalties paid; (7) distribution costs, including transportation and advertising expenses; and (8) any other costs associated with production and sales, including professional fees, insurance, research and development costs, taxes other than income taxes, and so on.

5.137 In addition to operating income, other sources of income include *net interest income* (interest income *less* interest expense) and *other income (net)*. *Net interest income* is the difference between interest income and interest expenses. *Interest*

[54] PFs may reinsure part of their PF reserve liabilities with ICs, in which case they would show a claim on ICs on the asset side of their balance sheet.

[55] 2008 *SNA*, paragraph 1.62.

income is the income received by NFCs as remuneration on their holdings of deposits and debt securities, and on loans made by NFCs to their customers or other institutional units. *Interest expenses* comprise the cost incurred by an entity for borrowed funds and represents interest accrued and payable on any type of borrowings during the period under consideration.

5.138 *Other income* (net) encompasses rents, rentals, and royalties receivable (payable); income from holdings of shares and other equity; gains or losses arising during the period on financial instruments and on the sales of fixed assets; and any amounts receivable (payable) by nonfinancial corporations arising from compensation for damage or injury.

Balance sheet

5.139 The definitions of balance sheet series presented in Table 5.5 are the same as for the corresponding series in Table 5.1.

5.140 *Total assets* comprise financial and nonfinancial assets (paragraphs 5.33 and 5.35).

5.141 *Nonfinancial assets* for NFCs distinguish between (1) real estate property, (2) equipment, (3) intellectual property products, (4) inventories, (5) valuables, and (6) other nonfinancial assets.

5.142 The sectoral balance sheet for NFCs separately identifies *trade credit*. Trade credit and advances include: (1) trade credit extended directly to purchasers of goods and services; and (2) advances for work that is in progress or is to be undertaken, such as progress payments made during construction or for prepayments of goods and services. Trade credit does not include loans, debt securities, or other liabilities that are issued to finance trade credit.

5.143 Regarding coverage, *equity and investment fund shares* include such claims on associates, unconsolidated subsidiaries, any reverse equity investments, and, for data compiled on a domestic basis, any share capital provided to foreign branches.

5.144 For non-financial corporations, *capital and reserves* are otherwise known as equity. They represent the claims of the shareholders on the residual value of a corporation after the claims of all creditors have been met. In the sectoral balance sheet, capital and reserves are presented at book value (i.e., as the difference between total assets and liabilities). In the SNA, equity is treated as a liability of the issuing institutional unit, with the difference between the corporation's book value (capital and reserves) and its market value recorded as the corporation's *net worth*.

Memorandum series

5.145 *Interest income receivable from other nonfinancial corporations* is that amount of interest income (item 35 in Table 5.5) that is receivable from other nonfinancial corporations that are also in the reporting population.

5.146 *Earnings before interest and tax* (EBIT) is defined as net operating income (item 3 in Table 5.5) plus interest income (item 4 in Table 5.5) plus other income (net) (item 6 in Table 5.5) *less* interest income receivable from other NFCs (item 35 in Table 5.5). Interest expenses are excluded by definition. Interest receivable from other NFCs is deducted from EBIT data to ensure that sector earnings are not inflated by such intrasector income.

5.147 *Total debt to nonresidents* is the outstanding amount of those actual current, and not contingent, liabilities that require payment(s) of principal or interest by the debtor at some point(s) in the future and that are owed to nonresidents by resident NFCs. The data for compiling the external debt for NFCs are sourced from data compiled to be consistent with the *External Debt Statistics Guide*.[56]

5.148 *Total debt in foreign currency* is the part of NFCs' total debt with principal and interest payments denominated in a currency other than the domestic

[56]The *External Debt Statistics: Guide for Compilers and Users* provides guidance on the concepts, definitions, and classification of external debt data, as well as the source and techniques for compiling these data and the analytical uses.

currency, regardless as to whether the creditor is resident or a nonresident.

5.149 *Debt-service payments* are interest and principal payments made on outstanding debt liabilities within the specified period of the statement. Principal payments always reduce the amount of debt outstanding. Interest payments are those periodic payments that meet interest costs arising from the use of another entity's funds.[57]

Households

5.150 Households (HH)s' micro data are typically derived from sample surveys that may be subject to significant response and reporting errors. It may be particularly difficult to obtain reliable and meaningful data about the activities of small unincorporated enterprises owned by HHs. Aggregates based on HH surveys have to be adjusted for certain typical biases, such as the underreporting of certain types of expenditure and also to make them consistent with macro data. Therefore, the data to derive a simple sectoral financial statement for HHs are sourced from the SNA's financial accounts.

5.151 Table 5.6 sets out a simplified sectoral financial statement for HHs, needed for the calculation of the additional FSIs for HHs.

Income and expense

5.152 The main source of *income* for HHs is *wages and salaries* (gross of any income tax) from employment. These are payable in cash or kind and are a component of compensation for employment. Other major sources of income include *property income receivable* (interest, dividends, and rent) and *current transfers,* including those from general government. *Other* income sources include operating income from production activity (gross of consumption of fixed capital).[58]

5.153 *Gross disposable income* includes these sources of income *less* current taxes on income and wealth, contributions for social insurance (e.g., for old-age insurance paid by HHs to general government), and other current transfers (e.g., payments of fines, penalties, and subscriptions to NPISHs).

Balance sheet

5.154 HHs' *nonfinancial assets* are mainly composed by their ownership of real estate, consumer durable goods, and other nonfinancial assets. HHs' *financial assets* and *liabilities* correspond broadly to the series defined in Table 5.1. Within HHs, unincorporated enterprises may own other (non-real estate) fixed assets, but these tend to be small relative to housing.

5.155 *Insurance, pensions, and standardized guarantee schemes* represent a special case of financial assets held by HHs. They mostly correspond to the contributions from HHs to life insurance, annuity, and pension entitlements, and are claims of HHs on ICs and PFs.

5.156 *Total household debt* comprises all the loans granted to the HH sector; including mortgages loans, consumer loans, credit cards debts, and other debts. Countries that do not have HHs debt data sourced from SNA may consider using mirror data from the financial corporations sector and indicate so in the metadata.

5.157 *Net worth* is defined as the value of the assets owned by HHs *less* their liabilities.

Memorandum series

5.158 *Household debt-service and principal payments* are the debt service payments made by HHs

[57] For long-term debt instruments, interest costs paid periodically are defined as those to be paid by the debtor to the creditor annually or more frequently; for short-term instruments, that is, with an original maturity of one year or less, interest costs paid periodically are defined as those to be paid by the debtor to the creditor before the redemption date of the instrument.

[58] Production within the HH sector takes place within enterprises that are directly owned and controlled by members of HHs, either individually or in partnership with others. When members of HHs work as employees for corporations, quasi corporations, or the government, the production to which they contribute takes place outside the HH sector.

on outstanding debt liabilities within a specified period of time. Such payments always reduce the amount of debt outstanding. Interest payments are those periodic payments that meet interest costs arising from the use of another entity's funds, and principal payments are all other payments that reduce the amount of principal outstanding. Countries that do not have data on debt-service and principal payments from national accounts sources, may use data sourced from financial corporations and indicate so in the metadata. *Debt collateralized by real estate* covers all debt for which real estate is used as a form of collateral. This includes borrowing for the purchase, refinancing, or construction of buildings and structures (including alterations and additions to such), and for land.