

Chapter Eleven

Compilation of FSI Data: Practical Issues

Introduction

11.1. The previous chapter sets out some of the strategic and managerial issues that need to be addressed when embarking on the compilation and dissemination of FSI data. This chapter focuses on the practical considerations.

11.2. At the outset it is worth noting that practical experience in compiling FSI data is still relatively limited, and experience will be gained as the *Guide* is implemented. Given this, the chapter focuses on the basic data sources that can be employed in calculating FSI ratios, and other data series required to meet the *Guide*'s requirements. The focus is on the main body of FSI ratios derivable from financial statements. Data sources for the FSIs covering financial and real estate markets are discussed in Chapters 8 and 9.

11.3. As background, it is likely that existing data sources for deposit-takers can be the basis for meeting many of the data requirements in the *Guide*. This may be particularly true for domestically-controlled cross border data sourced from information available to supervisors (see paragraph 11.8). The compiler should thus see the extent to which existing data sources can meet the requirements of the *Guide* before investigating the possibility of collecting new data series. In determining the need to collect new data, and hence an increased resource cost, authorities must make a judgment as to the likely impact and importance of the additional data series for compiling and monitoring FSI data. For instance, where an additional series would have an insignificant impact on an FSI ratio, the case for collecting such data is diminished.

Basic data sources

Deposit-takers

11.4. There are typically two main official sources of information available for use in compiling FSIs on deposit-takers: (i) commercial accounting/supervisory data, and (ii)

national accounts based data, including monetary statistics (see Box 11.1). For the geographic distribution of loans, data on cross-border exposures published by the BIS can be utilized.¹⁹² In addition, there are private sources of data that provide information derived from published financial statements.

11.5. There are important differences between the national accounts- and commercial accounting-based data, arising from the different purposes for which data are compiled. In terms of scope, commercial financial statements for deposit-takers consolidate activities of subsidiaries with the parent because of the interest in the performance of the entire group. In contrast, national accounts-based data include only the flows and positions of deposit-takers located in the domestic economy because of the interest in macroeconomic developments in the economy as a whole. So, whereas commercial financial accounts and supervisory data will eliminate intra-group transactions, national accounts-based data are based on data reported for each deposit-taker within a group, including loans to other group members. Another important difference between the data sources is that national accounts-based data are collected on the basis that the information will be aggregated,¹⁹³ unlike commercial accounting and supervisory data.

11.6. In summary, national accounts-based data are more suited to monitoring developments in the domestic economy on an aggregate basis,¹⁹⁴ while commercial and supervisory data are more suited to monitoring developments of deposit-taking groups on a cross-border consolidated basis.

¹⁹² Information on the coverage of BIS data is available in *Guide to International Banking Statistics* (2000), BIS. It can be viewed at www.bis.org

¹⁹³ Not all institutions in the population may report each period for national accounts purposes. For instance, the smallest institutions may report on a less frequent basis than other reporters. For periods when the smallest do not report, the aggregated reported data are typically “grossed up” to take account of the “missing” reporters.

¹⁹⁴ As noted in Chapter 5, the *MFSM* eliminates intra-deposit-takers positions in the depository corporations’ survey.

Commercial and supervisory data

11.7. Balance sheet and income and expense data are usually collected by supervisory agencies as an essential element of the supervisory function. Because typically the collection has a statutory basis, experience suggests that these data may be more reliable than those collected for economic statistical purposes in economies with weak statistical systems. However, while there are internationally agreed supervisory requirements, the methods by which these are implemented vary by country. Also, the accounting standards that supervisors regard as a basis for relevant and reliable measures of income and expense and balance-sheet items, and of capital adequacy, vary across countries, even though the International Accounting Standards Board is working towards common international standards.

11.8. In some countries, data might be collected for supervisory purposes on standardized forms with clear and specific instructions on how it should be completed, including a common reporting date. In other countries, supervisory and national accounts-based data are collected together on returns that are organized and structured in a single framework, and additional series are collected for supervisory or national accounts purposes as needed. Such reporting approaches might lend themselves to providing data that can be aggregated for FSI purposes. On the other hand, in some countries, supervisors collect data that are separate from national accounts-based data and customized to individual institutions, both with respect to content and the reference date for the reports. In such instances, to compile FSIs the *Guide* encourages greater consistency of approach. At this time, limited knowledge is available on countries' methods of collecting consolidated supervisory data and on how such data could be aggregated.

11.9. Table 11.8 at the end of this chapter reconciles the income and expense and balance sheet items in Table 4.1, with the relevant international accounting standards to illustrate how commercial accounting data might be utilized to meet the *Guide*'s requirements. However, this table should be regarded as a broad guide, and the reader is advised to consult Appendix III for more details. Series that might not be available from regulatory or commercial accounting sources, but might be needed are highlighted below.

National accounts based-data

11.10. Balance-sheet data are usually collected from resident deposit-takers by the central bank on a monthly basis to produce monetary aggregates. Further, while not normally collected as part of the data for compiling monetary statistics, income data might well be collected on a quarterly periodicity for use, along with the monthly balance sheet data, in the compilation of national accounts data.

11.11. The balance-sheet and income and expense items required for calculating FSIs in accordance with the *Guide* are set out in Table 4.1. Table 11.8 at the end of this chapter reconciles the income and expense and balance-sheet items in Table 4.1 and those in the *1993 SNA*, illustrating how national accounts-based data can be used to meet the *Guide*'s requirements. However, Table 11.8 should be regarded as a broad guide, and the reader is advised to consult Appendix III for more details. Series not covered by national accounts-based data but which might be needed are highlighted below.

Other Financial Corporations

11.12. Official data collection on the activities of other financial corporations has traditionally lagged that for deposit-takers both in terms of its scope and frequency. However, the increasing importance of other financial corporations in domestic financial systems has produced a trend toward increased data collection. Central banks and/or national statistical offices usually collect information on other financial corporations. Alternatively it might be necessary to rely initially on information provided in the published accounts of other financial corporations until official data sources are developed.

Nonfinancial Corporations and Households

11.13. The agency responsible for compiling national accounts statistics is likely to collect data on these sectors. To meet the requirements of the encouraged list of FSIs, additional data series will need to be developed, such as debt service payments, and other data that are not specified in the *SNA* framework. While national accounts data are usually the source of official information on the household sector, published accounts provide an

alternative source of information on the corporate sector. Tables 11.9 and 11.10 provide a reconciliation of the needs of the *Guide* and (1) the 1993 SNA and (2) international accounting standards.

11.14. Obtaining data on the household sector is difficult. If different from the agency calculating FSIs, coordination with the agency compiling data on the household sector for inclusion in national accounts statistics is essential. The additional data series on debt service that is required could be added to any household surveys of expenditures, income, financial assets and liabilities.

11.15. For the purposes of monitoring household debt, while the sector will likely focus its borrowing on resident financial corporations not least because of familiarity, with modern forms of communication and the ability to advertise products across borders, borrowing from abroad might become more prevalent. Thus, there may be a need to capture cross-border activity. Some countries set up specific procedures to capture cross-border assets and liabilities held by residents with nonresident financial corporations. Under these procedures, all households are obliged to report such positions to the central bank on a regular basis (monthly, quarterly, or annually). Also, transactions settled through these accounts abroad are to be reported by households, with the frequency and detail of individual reporting dependent on the scale of the activity undertaken.

Other data requirements

Deposit-takers

11.16. While data from available sources can serve as a basis, other information might be needed to meet the data series requirements of the *Guide*, and to enable the consolidation and aggregation of data. As can be seen from the tables ahead, considerably fewer additional series might be needed to compile the required data from commercial accounting and supervisory sources than from national accounts sources. This is because

many of the concepts underlying the list of FSIs for deposit-takers are supervisory in nature, including the idea that data be compiled on a consolidated group basis.¹⁹⁵

11.17. As noted above, in determining the need to collect new data, and hence an increased resource cost, authorities must make a judgment as to the likely impact and importance of the additional data series for compiling and monitoring FSI data.

Domestically-consolidated data

11.18. The additional deposit-takers data series that might be required are shown in Tables 11.1 to 11.3. These tables are based on an assessment of what information could be available from national accounts sources compared with the *Guide*'s requirements. These tables assume that data are collected on the same basis as for national accounts-based data—on an institutional unit basis.

11.19. The first table shows those series that are not covered in national accounts-based data, but are needed to calculate the agreed indicators. The second table covers those series needed for the aggregation of data at the sector-level, and the third table covers those series needed to present data on a consolidated basis rather than separately incorporated entity basis.

Series not covered in national accounts-based methodology

11.20. Table 11.1 presents those series that along with those available from national accounts based methodology allow the compilation of the agreed indicators for deposit-takers. Given the extra costs involved in collecting such data, set out below are brief explanations why these data series are required and information on possible sources. Series marked as “required” are those needed to calculate an agreed indicator; series marked as “encouraged” are those included in Table 4.1 but are not needed to calculate an agreed indicator.

¹⁹⁵ In the *Guide* a group is defined as a parent deposit-taker, its deposit-taking branches, and deposit-taking subsidiaries (and similarly for other corporate sectors).

Table 11.1: Series not covered in national accounts-based methodology: Domestic deposit-takers

Income and expense

Provisions	
<i>Accrued interest on nonperforming assets</i>	Required
<i>Loan loss provision</i>	Required
<i>Other financial asset provisions</i>	Required
Gains and losses on financial instruments	Required
Gains and losses on the sale of an associate or subsidiary ^{1/}	Required ^{2/}
Gains and losses on sale of fixed assets in the period ^{1/}	Required
Total gains and losses on sale of fixed assets	Encouraged
Extraordinary items	Required

Balance sheet related

Liquid assets	
<i>Core</i>	Required
<i>Broad</i>	Required
Short-term liabilities (remaining maturity)	Required
Nonperforming loan assets	Required
Other nonperforming assets	Encouraged
Arrears	Encouraged
Provisions	
<i>Accrued interest on nonperforming loans^{3/}</i>	Required
<i>Specific loan provisions</i>	Required
<i>Loan loss reserves</i>	Encouraged
<i>Other specific provisions</i>	Required ^{4/}
Foreign currency denominated	
<i>Loan assets</i>	Required
<i>Liabilities</i>	Required
Foreign currency linked	
<i>Loan assets</i>	Required
<i>Liabilities</i>	Required
Real estate loan assets	
<i>Residential</i>	Required
<i>Commercial</i>	Required
Large exposures	
<i>Number of large exposures</i>	Required
<i>Exposures to largest entities in the economy</i>	Required
<i>Exposures to affiliated entities^{5/}</i>	Required
Net open position in foreign currency	Required

Net open position in equities	Required	
Duration of assets	Required	
Duration of liabilities	Required	
	<i>Subsidiaries</i>^{8/}	<i>Associates</i>^{8/}
Shares and other equity ^{6/}	Required	Required
Shares and other equity ^{7/}	Required	Required
Prorated share of retained earnings (income)	Required	Required
Purchased goodwill	Required	Required

Other encouraged series

Net liabilities of branches of foreign deposit-takers to their parents	Encouraged
Assets transferred to special purpose entities	Encouraged
Guarantees	
Resident	Encouraged
Nonresident	Encouraged
Credit commitments	
Resident	Encouraged
Nonresident	Encouraged

1/ Measured as the difference between the sale value and the balance sheet value at the previous end-period.

2/ Depending on the source of information on gains and losses on financial instruments (see text ahead).

3/ This item is required if gross loan data are only available on a basis that includes accrued interest on nonperforming loans. If other assets are also recorded inclusive of accrued interest on nonperforming assets, then additional data on accrued interest for such nonperforming assets will be required.

4/ To be identified by type of instrument.

5/ These cover exposures to other group entities and associates of the reporting entity.

6/ Valued as the proportionate share of the parent deposit-taker's stake in subsidiaries/associates capital and reserves.

7/ As valued on the balance sheet if different from the previous line.

8/ Including reverse equity investments of subsidiaries and associates in their parent investors. Also, the data for subsidiaries and associates could be provided in one aggregate figure, that is separate identification is not essential.

Income and expense series

11.21. *Provisions:* Data on provisions are essential for understanding the soundness of a deposit-taker, because of the impact of loan and other potential losses on profits and capital strength. Provisions data are not *1993 SNA* series but may be collected for supervisory purposes.

11.22. *Gains and losses on financial instruments, gains on sale of fixed assets, and extraordinary items:* Data on gains and losses on financial instruments are an integral

element of profitability, and are directly required for the calculation of one indicator and are indirectly required for several others. As explained in Appendix III, data on gains and losses on financial instruments are potentially available from the revaluation account of the 1993 SNA, but at the present time collection of these data is relatively limited, hence the inclusion of this item in Table 11.1. Similar reasoning applies for data on extraordinary items. Gains on sale of fixed assets such as property used for branch operations affect profits but are not identifiable from 1993 SNA data. Data on the gain/loss in the period are required because they are included in net income in the period. Also, the total gain/loss is encouraged because information on such gains and losses might be of analytical interest in its own right for macroprudential purposes.

11.23. *Gain or loss on the sale of a subsidiary or associate:* The *Guide* recommends that such gains or losses (including those on reverse investments) be excluded from income. In the national accounts, such gains or losses are classified as a valuation change if a corporation or quasi-corporation is sold. So if data on gains and losses on financial instruments are sourced from the revaluation account of the 1993 SNA, data on gains and losses on sales of subsidiaries and associates need to be excluded. Also, this series may be of analytical interest in its own right.

Balance sheet related series

11.24. *Liquid assets:* Data on liquid assets are used to calculate two indicators. While monetary statistics provide some data, such as deposits at the central bank, the liquid-asset concepts developed in the *Guide* are not available in national accounts-based data.

11.25. *Short-term liabilities:* While data on short-term liabilities are available on an original maturity basis from national accounts data sources, the preference in the *Guide* is for data on a remaining maturity basis. This is because the indicator for which this series is required is a liquidity measure, comparing short-term liabilities with liquid assets.

11.26. *Nonperforming loans, other nonperforming assets, and arrears:* As with provisions, data on nonperforming loans are essential for understanding the financial

soundness of the deposit-taking sector and are required for the calculation of two series. However such data are not contained in national accounts-based data, but may be collected for supervisory purposes. While other nonperforming assets and arrears are not data series required to compile agreed indicators, data on these items can provide relevant information, as rising levels of nonperforming assets and/or arrears suggests financial weakness in the asset side of the balance sheet.

11.27. *Provisions:* Data on the outstanding position of specific loan provisions are required to calculate the data series *nonperforming loans net of provisions* that is used to calculate one indicator, and to adjust the value of outstanding loans for specific provisions. Information on provisions for the accrual of interest on nonperforming loans are required if data on gross loans (and the sectoral breakdown) are only available inclusive of the accrual of such interest; that is, consistent with the *1993 SNA*. Separate information on the loan loss reserves is encouraged as this series provides an indication of the extent of potential losses in the deposit-takers' portfolio of loans. Other specific provisions relate to the outstanding level of specific provisions for other financial assets. Such provisions reduce the value of these assets in the balance sheet and should be separately identified in the same manner as such provisions for loans. Also, the outstanding amounts for specific provisions, and provisions for accrued interest on nonperforming loans, need to be excluded from capital and reserves for data sourced from national accounts-based information. None of the data on provisions are *1993 SNA* series¹⁹⁶ but may be collected for supervisory purposes.

11.28. *Foreign- currency loans and liabilities:* Positions in foreign currency raise the potential of vulnerability to exchange rate movements. Two series are used to measure this vulnerability. While some national accounts-based methodologies, in particular the monetary and external debt methodologies, encourage the collection of data on foreign currency positions, and could be extended to cover the data required, the coverage in the *Guide* differs

¹⁹⁶ The *MFSM* indistinguishably includes provisions as a liability item under other accounts receivable/payable but encourages separate identification of expected loan losses (paragraph 390).

from both. The data for foreign currency denominated and foreign currency linked loans could be collected as a single series, and similarly for liabilities.

11.29. *Residential and commercial real estate loans:* Experience suggests that exposure to the real estate market can be a source of risk to the deposit-taking sector, and is reflected in two series. The loan data required in national accounts-based methodology does not include the separate identification of data on residential and commercial real estate loans, but could be collected at a more disaggregated level so as to include real estate lending. The International Standard Industrial Classification identifies real estate at the sub-category level (see Box 6.1). Commercial real estate lending among deposit-takers in the reporting population that are part of the same group should be excluded from the data.

11.30. *Large exposures:* Data on such exposures are required to calculate one indicator. Such data are not required for national accounts purposes, but the number of large exposures of deposit-takers that are identified under the national supervisory regime should be available to bank supervisors. However, the *Guide*'s other definitions of large exposures, including those to the largest entities in other sectors and to affiliated entities, may not be the same as used for supervisory purposes. Exposures to deposit-takers in the reporting population that are part of the same group should be excluded from the data.

11.31. *Net open positions:* Net open positions in equities and foreign exchange are included in the list of FSIs. Such information may be monitored and collected by supervisors.

11.32. *Duration of assets and liabilities:* Duration provides an indication of interest rate risk of deposit-takers. However, such data are difficult to compile and are not commonly available even to supervisors. For these reasons, the *Guide* includes as an alternative the concept of gap analysis, i.e., average repricing analysis for which data may be more readily available.

11.33. *Shares and other equity, and prorated share of retained earnings:* The *Guide* recommends that, for all sectors, (1) investments in subsidiaries and associates are valued in the balance sheet on the basis of the prorated share of the value of these entities' capital and

reserves, and (2) the prorated share of earnings is included in income. This approach is also recommended for so-called reverse equity investments that is if an associate or subsidiary takes an equity stake in its parent. This is not the approach taken for domestic subsidiaries and associates in the national accounts-based data.¹⁹⁷ So for all corporations, additional data are required to adjust the balance sheet, and particularly capital and reserves, and income data derived from national accounts based data.¹⁹⁸ Any difference between the reported balance-sheet value of the equity investments in subsidiaries and associates and the proportionate share should increase (if the latter is greater than the former) or reduce (if the former is greater than the latter) capital and reserves, with the adjustment attributed to the valuation adjustment.

11.34. *Goodwill*: The *Guide* recommends that data on goodwill be deducted from nonfinancial assets and from capital and reserves. National accounts based data includes goodwill in nonfinancial assets and implicitly in net worth.

Other encouraged series

11.35. *Net liabilities of branches of foreign deposit-takers to their parents* might be available from those responsible for compiling data on foreign direct investment. Typically branches are funded by interbank deposits from their parent rather than having their own capital. As noted in Chapter 4, gross liabilities could be separately identified.

11.36. *Assets transferred to special purpose entities* is not a series available from national accounting sources but might be available to supervisors. In discussions on the draft *Guide*, information on the scale of assets transferred from deposit-takers' balance sheets was considered by a number of commentators to be relevant for macroprudential analysis

¹⁹⁷ However, it is the approach for nonresident subsidiaries/associates owned by resident corporations.

¹⁹⁸ Because income data are not presented for the other financial corporations sector, no additional information on retained earnings for this sector is needed.

11.37. *Guarantees and credit commitments* are off-balance sheet items considered to be relevant for macroprudential analysis. Data for these series are not available from the national accounts sources and in the IBS data are compiled for the cross-border consolidated banking statistics, only.

Data required for the aggregation of deposit-takers' data

11.38. Some adjustments are required to avoid double counting of capital and assets, and overstatement of specific income and expense lines when data for individual entities are aggregated to produce information for the entire sector. These sector-level adjustments are explained in Chapter 5. Table 11.2 provides a complete list of the series required to make the adjustments, which are explained below, although, depending upon national circumstances, not all may be relevant. Also, the total data could be disaggregated by column to gain greater understanding of the relationships with subsidiaries, associates, and other deposit-takers.

11.39. The table ahead relates to positions and flows among deposit-takers in the reporting population and is based on the assumption that the reporting population covers all domestic deposit-takers. Additionally, the reporting population could be specified to create group-wide data on a peer group basis. However, this would increase the collection costs, and the *Guide* considers that such a collection of additional detailed data be based on the national analytical needs. Peer group data and its compilation are discussed in Chapter 13; given the costs, peer group data might well be compiled on an approximate best practice basis.

11.40. *Equity investments in deposit-taking subsidiaries, deposit-taking associates, and other deposit-takers*: To avoid double counting of deposit-takers' capital and reserves for the entire sector, equity investments in other deposit-takers need to be excluded.¹⁹⁹ So, for equity investments in deposit-taking subsidiaries and deposit-taking associates (and for reverse equity investments), the value of the proportionate share in the capital and reserves

¹⁹⁹ For the same reason, similar adjustments are need for the nonfinancial corporation sector because equity is a denominator for three FSIs for that sector (see ahead).

need to be separately identified.²⁰⁰ The required data on equity investments is not ordinarily collected as part of the national accounts-based data. The series in this table differ from the similar series in Table 11.1 to the extent that the deposit-takers have non-deposit-taking subsidiaries and associates (included in the Table 11.1 series but not Table 11.2 series). While the table provides a disaggregated view of the data required, for shares and other equity for deposit-takers subsidiaries and associates in the reporting population, aggregated data will suffice.

11.41. For equity investments in other deposit-takers, the market value of the equity owned needs to be identified and deducted from total capital and reserves (a numerical example is provided in Appendix IV, section III). The required data on such equity investments might be available from national accounts sources, if the market value of equity investments in resident subsidiaries and associates can be separated from equity investments in other deposit-takers in the reporting population.

11.42. Line 2—shares and other equity—is not required if captured in data reported under Table 11.1.

11.43. *Certain income items:* The income series in Table 11.2 (item 3) are required to ensure that specific sub-totals are not overstated for the sector as whole. While the table provides a disaggregated view of the data required, for all these series aggregated data will suffice (that is, aggregate data for all three columns).

11.44. Fees and commissions and any other non-interest income earned by a deposit-taker from another deposit-taker will not affect net income, but will increase both the non-interest income and expenses lines. As these series are used in four series used to calculate agreed indicators, it is recommended that any such intra-deposit-taking sector income and expense be excluded from the sector totals for gross income and non-interest expenses. These data might be available from national accounts based sources.

²⁰⁰ If Tier 1 data are not available, the proportionate share of narrow capital and reserves could additionally be identified (paragraph 4.61).

Table 11.2: Interbank positions and flows

Domestic deposit-takers				
	<i>Of which</i>			
	<i>Total</i>	<i>Subsidiaries^{1/2/}</i>	<i>Associates^{1/2/}</i>	<i>Other deposit-takers</i>
1. Shares and other equity ^{3/}		Required ^{4/}	Required ^{4/}	Required
2. Shares and other equity		^{5/}	^{5/}	Not applicable
3. Non-interest income (excluding trading gains and losses):	Required			
o/w Fees and commissions	Required			
Dividends receivable	Required			
Prorated share of retained earnings	Required ^{6/}			Not applicable
Gains or losses in the period on sale of fixed assets to other deposit-takers	Required			
4. Gains and losses on equity investments in other deposit-takers		Not applicable	Not applicable	Required
5. Nonperforming loans to deposit-takers in the reporting population ^{6/}				
Current period				
Provisions for accrued interest	Required			
Specific provisions	Required			
Outstanding position				
Provisions for accrued interest	Required			
Specific provisions	Required			

1/ Including deposit-taking branches of separately incorporated subsidiaries and associates.

2/ Resident deposit-taking subsidiaries/associates that have reverse equity investments in their resident parent deposit-taking investor should report the transactions and positions vis-à-vis the parent investor in these columns.

3/ Valued as the proportionate share of the parent deposit-takers' stake in subsidiaries/associates capital and reserves (similar for reverse investments), and as the market value of any equity stake in other resident deposit-takers. For subsidiaries and associates, if Tier 1 data are not available, the narrow measure of capital and reserves could also be identified (see paragraph 4.61).

4/ These data series could be reported as one combined figure.

5/ As valued in the balance sheet if different from line 1. Also, if the balance sheet value of subsidiaries and associates are reported in Table 11.1 these data are not required.

6/ Subsidiaries and associates only

7/ These series might not be significant in some economies and hence may not be relevant. If there are other nonperforming asset claims on other deposit-takers in the reporting population, the data series as in item 5 are required for these assets.

11.45. Similarly, including dividend income in the non-interest income line would affect gross and net income for the sector. So likewise it is recommended that such income from equity investments be eliminated from gross income and dividends payable. With

regard to the proportionate share of retained earnings from deposit-taking associates and deposit-taking subsidiaries (and from reverse equity investments), these amounts should also be excluded from non-interest income, and from retained earnings for the entire sector. Any gain or loss in the period on a sale of fixed assets to another deposit-taker, is not a gain or loss for the sector as a whole so is deducted from sector-wide income. Data on dividends may be available from national accounts sources, but data on the proportionate share of retained earnings and sales of fixed assets will not be so available.

11.46. *Gains and losses on equity investments* (item 4) are required so that gains and losses arising from these intra-sector claims do not impact on sector-wide income.

11.47. Data on *nonperforming loans to other deposit-takers in the reporting population* (item 5) are required to eliminate asymmetric reporting at the sector-level between debtor and creditor deposit-takers. The data on outstanding specific provisions to other deposit-takers in the reporting population are required to be added back to capital and reserves and to reduce the total amount of outstanding specific provisions (see paragraph 11.27). Also, provisions for accrued interest on nonperforming loans (and other assets) to deposit-takers in the reporting population need to be added to the outstanding value of loans (and other assets).

Consolidated information

11.48. The *Guide* encourages the compilation of FSI series on a consolidated basis for entities in the same sector and reporting population. Thus, for data compiled using national accounts based information, certain additional intra-group data need to be eliminated. The series required are set out in Table 11.3.

11.49. The series in Table 11.3 are intended to supplement those in Table 11.2. Whereas the series in Table 11.2 are required to eliminate some positions and transactions when aggregating data at the sector level, the series in Table 11.3 are those needed to compile sector-wide data on a consolidated basis (see Box 5.1). Information on intra-group positions might also be of analytical interest in its own right.

Table 11.3: Other intra-group positions and flows

	Domestic deposit-takers
	Other group entities ^{1/}
Balance Sheet	
Liabilities to:	
Deposits	Required
Loans	Required
of which: <i>foreign currency denominated</i>	Required
<i>foreign currency linked</i>	Required
Debt securities	Required
Financial derivatives	Required
Other liabilities	Required
Foreign-currency denominated liabilities	Required
Foreign currency linked liabilities	Required
Income and expense statement	
Interest income receivable	Required ^{2/}
Memorandum items relating to claims:	
Liquid assets claims (core)	Required
Liquid assets claims (broad)	Required
Nonperforming loans	Required
Short-term claims	Required
Other nonperforming assets	Encouraged
Arrears	Encouraged
Guarantees	Encouraged
Credit Commitments	Encouraged

^{1/} A group in this context is a parent deposit-taker, its deposit-taking branches, and deposit-taking subsidiaries in the reporting population. So this column covers those entities within the same group as the reporting entity but are separately incorporated or are domestic offices of entities that are separately incorporated.

^{2/} This item is required to ensure that there is consistency in the consolidated balance sheet between the treatment of debt instruments in the balance sheet (intra-group claims excluded) and gross interest income and expense in the income account (also to be excluded).

11.50. Intra-group positions are those positions with resident entities that are in the same group as the reporter, but are separately incorporated or are offices of separately incorporated entities. So, if a parent has positions with its' domestic deposit-taking subsidiary, these are included in the table, as are positions of the subsidiary with a domestic deposit-taking branch of the parent or other domestic subsidiaries (or branch of the subsidiary) in the group, and the reporting population. It might help the compiler to be informed of the names of group members in the reporting population.

11.51. For the balance sheet items, data are for liabilities only, and for memorandum items, claims only. Data on foreign currency denominated and linked loans could be reported as one combined figure. For the balance-sheet series at the sector level, gross liabilities and gross assets are reduced by the amount reported for each series listed below. In other words, if the parent lends to its subsidiary, both gross loan assets (and the gross interest income) and gross loan liabilities (and gross interest expense) are reduced at the sector level by the outstanding amount of loans (interest income) extended (receivable) by the parent to the subsidiary as of the reference date.

11.52. The data for the memorandum items are needed to reduce the sector-level totals for these items.

Cross-border consolidated data

11.53. To compile data on a domestic-controlled cross-border consolidated basis compilers need to rely on supervisory data. If these data are reported on a cross-border consolidated basis,²⁰¹ Table 11.4 sets out the series that might be required to avoid overstatement of certain income items, and capital and reserves in the sector-wide data. The table relates to positions and flows among deposit-takers in the reporting population.

²⁰¹ If supervisory data are reported on a group consolidated basis, which consolidates information for subsidiaries that are not deposit-takers, to provide data on a deposit-taking basis other adjustments are needed to "deconsolidate" such subsidiaries.

11.54. The extent to which data are required will depend upon national circumstances. For instance, if supervisory requirements do not permit, or require data to be reported excluding, intra-deposit-taking equity investments, then data on shares and other equity are not additionally required. As noted above, in determining the need to collect new data, and hence an increased resource cost, authorities must make a judgment as to the likely impact and importance of the additional data series for compiling and monitoring FSI data.

Table 11.4: Inter-Group Positions and Flows (Cross-border consolidated data)

<i>Other domestically incorporated, domestically controlled deposit-takers, their subsidiaries^{1/} and branches</i>			
	<i>Of which</i>		
	<i>Total</i>	<i>Associates^{2/}</i>	<i>Other</i>
1. Shares and other equity ^{3/}		Required	Required
2. Shares and other equity ^{4/}		Required	Not applicable
3. Non-interest income (excluding trading gains and losses):	Required		
o/w Fees and commissions	Required		
Dividends receivable	Required		
Prorated share of retained earnings		Required	Not applicable
Gains or losses on sale of fixed assets to other deposit-takers	Required		
4. Gains and losses on equity investments in other deposit-takers		Not applicable	Required
5. Nonperforming loans to deposit-takers in the reporting population ^{5/}			
Current period			
Provisions for accrued interest	Required		
Specific provisions	Required		
Outstanding position			
Provisions for accrued interest	Required		
Specific provisions	Required		

1/ Including deposit-takers branches of separately incorporated subsidiaries.
2/ Domestically controlled deposit-takers that are associates of domestically controlled deposit-takers and have reverse equity investments in the latter should report the transactions and positions vis-à-vis the associate investor in this column.
3/ Valued as the proportionate share of the parent deposit-takers' stake in associates capital and reserves (similar for reverse investments), and as the market value of any equity stake in other deposit-takers in the reporting population.
4/ As valued in the balance sheet if different from line 1.
5/ These series might not be significant in some economies and hence may not be relevant. If there are other nonperforming asset claims on other deposit-takers in the reporting population, the data series as in item 5 are required for these assets.

11.55. Also, depending upon accounting standards adopted, additional series not included in Table 11.4 might be needed to adjust individual deposit-taker's data. These series comprise (1) purchased goodwill to be excluded from nonfinancial assets and from capital and reserves; (2) the amount of amortized goodwill each period to be excluded from income; and (3) gains and losses on the sale of subsidiaries and associates (including those on reverse investments) to be excluded from income.

11.56. The data requirements in Table 11.4 mirror those in Table 11.2 and are needed for the same reasons as explained in describing the series specified in that table. They relate to the positions and flows among domestically controlled deposit-taking groups that have parent banks incorporated in the domestic economy.

11.57. The total data could be disaggregated by column to gain a greater understanding of the relationships with associates, and other deposit-takers.

11.58. In Table 11.4 the reporting population covers all domestic-controlled deposit-takers. Additionally, the reporting population could be specified to create group-wide data on a peer group basis. However, this would increase the collection costs, and the *Guide* considers that such a collection of additional detailed data be based on the national analytical needs. As noted above, Chapter 13 discusses peer group data and its compilation.

Compiling cross-border consolidated data from national accounts based information

11.59. To compile data on a cross-border consolidated basis, as noted above, compilers might need to rely on supervisory data. However, there is growing interest among the compilers and users of macroeconomic statistics to develop so-called foreign affiliate trade data. One focus at the present time is on information on trade-in- services, and in understanding the modes of supply by domestic entities to foreign markets, one of which is the establishment of a presence in a foreign market. A recently published trade-in-service

manual²⁰² is likely to encourage progress in this field. Beyond production and trade-in-services data, the manual discusses the possibility of compiling assets and net worth data for foreign affiliates (paragraphs 4.67-4.68 of the manual) on the basis of the concepts in the *1993 SNA*. Given these developments, there may be mutual benefit in FSI compilers consulting with those agencies responsible for compiling trade-in-services data to learn more about data compilation on trade of foreign affiliates of domestic entities that are being planned or are already underway.

Other Financial Corporations

11.60. For other financial corporations, additional data series for the balance sheet only might be required, primarily to exclude intra-sectoral equity investments and, for data reported on a nonconsolidated basis, information on intra-group positions.

11.61. The additional data series required are set out below. Unlike the tables for deposit-takers above, the table below can be relevant for both domestic and cross-border consolidated data. Series marked as “required” are those needed to calculate an agreed indicator.

11.62. Shares and other equity in subsidiaries and associates (and reverse investments) should be valued on the balance sheet at the proportionate share of the investor’s stake in the capital and reserves of the subsidiary and associate. If these investments are reported on the balance sheet at market value of the equity, these data need to be replaced by the proportionate value. Hence the required shares and other equity series in columns 1 and 2. The data for subsidiaries and associates could be combined depending upon the source—for data provided on a consolidated basis, adjustments for subsidiaries may not be required

²⁰² *Manual on Statistics of International Trade in Services (2001)*, European Commission, IMF, Organization for Economic Co-operation and Development, United Nations, United Nations Conference on Trade and Development, and World Trade Organization.

11.63. For equity investments of other financial corporations in their other financial corporations subsidiaries and associates in the reporting population (and similarly for reverse investors) and in other financial corporations in the reporting population, these need to be excluded from sector-wide capital to avoid double counting of capital. Hence the required shares and other equity series in columns 3, 4, and 5. The data for subsidiaries and associates could be combined depending upon the source.

Table 11.5: Additional data series for Other financial corporations

	O/w “Other financial corporations” in the reporting population				
	Subsidiaries ^{1/} (1)	Associates ^{1/} (2)	Subsidiaries ^{1/2/} (3)	Associates ^{1/} (4)	Other (5)
Balance Sheet					
Shares and other equity ^{3/}	Required	Required	Required	Required	Required
Shares and other equity ^{4/}	Required	Required	^{5/}	^{5/}	
Purchased goodwill	Required	Required			
Liabilities to: ^{2/}					
Deposits			Required		
Loans			Required		
Debt securities			Required		
Insurance technical reserves			Required		
Financial derivatives			Required		
Other liabilities			Required		

1/ Other financial corporations in the reporting population that are subsidiaries/associates and have reverse equity investments should report the positions vis-à-vis their parent investor(s)” in columns 1 and 2. If both the reverse investor and the entity in which they are investing are in the reporting population, data should also be reported in column 3 and/or 4.

2/ These data are only required if the source data are only available on an unconsolidated basis, such as in the national accounts. This column covers positions with all those entities in the same group as the reporting entity and are in the reporting population but are separately incorporated or are offices of entities that are separately incorporated.

3/ Valued as the proportionate share of the investor’s stake in subsidiaries and associates capital and reserves (similar for reverse investments), and as the market value of any equity stake in other financial corporations in the reporting population.

4/ As valued in the balance sheet if different from the line above.

5/ These series are only required if the series in columns 1 and 2 are not reported.

11.64. Data on purchased goodwill are required in order to be deducted from nonfinancial assets and from capital and reserves. The data for subsidiaries and associates could be combined depending upon the source.

11.65. Further, if source data are on an unconsolidated basis, such as in the national accounts, adjustments will need to be made not only for shares and other equity but also for other intra-group positions that appear on the balance sheet.²⁰³ These balance sheet positions are listed in column 2. As noted in the description of Table 11.3, gross liabilities and gross assets at the sector-level are reduced by the amount reported for each series listed.

Nonfinancial corporations

11.66. For nonfinancial corporations, to calculate the agreed FSIs additional data series might be required. Two sets of series are presented ahead: first, in Table 11.6, individual data series not available from national accounts-based methodology; and second in Table 11.7, other additional data series. Series marked as “required” are those needed to calculate an agreed indicator; series marked as “encouraged” are those included in Table 4.3 but are not needed to calculate an agreed indicator. As with other sectors, the importance of specific series depends upon national circumstances, and in determining the need to collect new data, and hence an increased resource cost, authorities must make a judgment as to the likely impact and importance of the additional data series for compiling and monitoring FSI data.

11.67. Table 11.6 covers items in the income and expense and balance sheet accounts, and some encouraged series. Some series are required to adjust sector-level income to ensure that it is not boosted by intra-sector transactions, while other series are those specifically required to compile an FSI ratio.

²⁰³ If source data consolidate information for subsidiaries that are not other financial corporations, to provide data on an other financial corporations basis other adjustments are needed to “deconsolidate” such subsidiaries.

Table 11.6: Series not covered in national accounts-based methodology: Nonfinancial corporations

Income and expense-related

Gains and losses on financial instruments	Required
Gains and loss on the sale of an associate or subsidiary ^{1/2/}	Required ^{3/}
Gains/losses on sale of fixed assets in the period ^{1/}	Required
Extraordinary items	Required

Balance sheet-related

Debt service payments	Required
Interest	Encouraged
Principal	Encouraged
Net open position in foreign currency	Required

Subsidiaries^{4/}

Associates^{4/}

Shares and other equity ^{5/}	Required	Required
Shares and other equity ^{6/}	Required	Required
Prorated share of retained earnings (income)	Required	Required
Purchased goodwill	Required	Required

Other encouraged series

Liquid assets	
Core	Encouraged
Broad	Encouraged
Variable rate debt	Encouraged

- 1/ Measured as the difference between the sale value and the balance sheet value at the previous end-period.
2/ Such data are also required if commercial accounting sources are used that include such gains and losses in income.
3/ Depending on the source of information on gains and losses on financial instruments (see text ahead).
4/ Including reverse equity investments of subsidiaries and associates in their parent investors. Also, the data for subsidiaries and associates for each item could be provided in one aggregate figure, that is separate identification is not essential.
5/ Valued as the proportionate share of the parent deposit-taker's stake in subsidiaries/associates capital and reserves.
6/ As valued on the balance sheet if different from the previous line.

11.68. Unlike national accounts based sources, data on gains and losses on financial instruments are included in income in the *Guide*, as are gains and losses in the period on the sale of fixed assets. Gains and losses on financial instruments are potentially available from the revaluation account of the 1993 SNA, if so data on gains and losses on the sale of subsidiaries and associates need to be excluded (see paragraph 11.23). Data on extraordinary items might also be available from national accounts sources (see Appendix III).

11.69. Data on debt service payments and on the net open position in foreign exchange are required to calculate two indicators and are not available from national accounts-based sources. The need for data on shares and other equity and prorated share of retained earnings relating to subsidiaries, associates, and other nonfinancial corporations is the same as described for deposit-takers in paragraph 11.33. Data on purchased goodwill are required in order to be deducted from nonfinancial assets and from capital and reserves (and amortization of such goodwill excluded from income)

11.70. The encouraged series—liquid assets and variable rate debt—are considered of use for macroprudential analysis but are not required to calculate an agreed FSI.

11.71. Additional data series required are set out in Table 11.7, but unlike the tables for deposit-takers above, the table below can be relevant for both domestic and cross-border consolidated data. The table relates to positions and flows among nonfinancial corporations in the reporting population. Many of the series required relate to excluding (1) intra-group positions in order that the sector-level data are compiled on a consolidated basis, (2) intra-sector equity investments to avoid double counting of capital and reserves at the sector-level, and (3) income transactions to ensure that sector income is not boosted by intra-sector transactions.

11.72. For the income items, the need for data on dividends receivable, gains and losses on sale of fixed assets to other nonfinancial corporations, and the gains and losses on equity investments in nonfinancial corporations are the same as described for deposit-takers for Table 11.2 (see paragraphs 11.45 and 11.46). With regard to the proportionate share of retained earnings, any amounts attributable to nonfinancial associates and subsidiaries (and from reverse equity investments) in the reporting population should be excluded from sector-wide income. Also, in the consolidated data at the sector-level, interest receivable from nonfinancial subsidiaries should be excluded from interest income and interest expense (see also paragraph 11.51). Also, the total data could be disaggregated by column to gain greater understanding of the relationships with subsidiaries, associates, and other nonfinancial corporations.

Table 11.7: Additional data series for Nonfinancial corporations

	Nonfinancial corporations (in the reporting population) ^{1/}	Of which:		
		Subsidiaries ^{2/3/}	Associates ^{2/}	Other
Income related^{4/}				
Dividends receivable	Required			
Interest income receivable		Required	Required ^{5/}	Required ^{5/}
Prorated share of retained earnings	Required ^{6/}			Not applicable
Gains or losses in the period on sale of fixed assets to other nonfinancial corporations	Required			
Gains and losses on equity investments in other nonfinancial corporations				Required
Balance Sheet				
Shares and other equity ^{7/}		Required	Required	Required
Shares and other equity		8/	8/	
Liabilities to:				
Deposits		Required		
Loans		Required		
Debt securities		Required		
Trade credit		Required		
Financial derivatives		Required		
Other liabilities		Required		
Balance sheet related				
Debt service receipts		Required	Encouraged	Encouraged
Interest		Required	Encouraged	Encouraged
Principal		Required	Encouraged	Encouraged

1/ If data are provided on a consolidated basis with subsidiaries in the reporting population included, then the data in this column should exclude transactions with these subsidiaries. The total data could be disaggregated by column to gain greater understanding of the relationships with subsidiaries, associates, and other deposit-takers.

2/ Non financial corporations in the reporting population that are subsidiaries/associates and have reverse equity investments should report the positions vis-à-vis their parent investor(s) in these columns.

3/ These data are only required if the source data are only available on an unconsolidated basis, such as in the national accounts. This column covers positions with all those entities in the same group as the reporting entity and are in the reporting population but are separately incorporated or are offices of entities that are separately incorporated.

4/ If commercial accounts data are the source of information, depending upon the accounting practice adopted, data on the amortization of goodwill will also be required so that it can be excluded from income.

5/ Data for interest income receivable for associate and other nonfinancial corporations in the reporting population can be combined in one figure

6/ Covers only subsidiaries and associates.

7/ Valued as the proportionate share of the investor's stake in subsidiaries and associates capital and reserves (similar for reverse investments), and as the market value of any equity stake in other nonfinancial corporations in the reporting population.

8/ As valued in the balance sheet if different from the line above. Also, if the balance sheet value of subsidiaries and associates are reported in Table 11.6 these data are not required.

11.73. Data on shares and other equity relating to subsidiaries, associates, and other nonfinancial corporations are needed to eliminate inter-sector equity investments in order to avoid double counting of capital and reserves at the sector-level (see also paragraphs 11.40 and 11.41) . If source data are on an unconsolidated basis, such as in the national accounts, intra-group positions in the balance sheet items listed in column 2 need to be eliminated from gross liabilities and gross assets to provide data on a consolidated basis. Also, if source data are on an unconsolidated basis, debt service receipts from subsidiaries are also required to be eliminated from debt service payment data on a consolidated basis.²⁰⁴ Information on other intra-sector debt service receipts is encouraged to allow debt service payments to be calculated excluding intra-sector payments.

11.74. Another series that is required is the **number of applications for protection from creditors**.

Availability of data

11.75. It is unlikely that all data series specified in the *Guide* are readily available to all national authorities. Some data series may not 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, but it is important that, for each data series, any deviations be understood and well documented.

11.76. Data series for the numerator and denominator of a FSI ratio may not be available with the same periodicity, restricting the frequency of compilation of the indicator. Depending on the nature of the underlying series, it may be possible to estimate the series that is available on less frequent basis, but the results should be used with caution.

11.77. Also, the assumptions underlying grossing-up procedures for missing reporters should be carefully reviewed. For example, they might implicitly assume that the

²⁰⁴ It is proposed that receipts from, rather than payments to, other nonfinancial corporations be collected given that if tradable bonds are issued, the payer might not know the identification of the creditor. But of course, debt service receipts from the creditor perspective are debt service payments from the debtor perspective.

reporting population is representative of the non-reporting population, whereas the non-reporting population might be specialized in certain lines of business.

Breaks in series

11.78. It is particularly important to monitor and document breaks in series. One of the most important types of breaks arises from changes in the reporting population. For instance, new deposit-takers can be licensed while others are closed. Also, mergers between deposit-takers can be significant.

11.79. For data compiled on a domestic-controlled cross-border consolidated basis, a resident deposit-takers' acquisition of a nonresident deposit-taker would boost the assets and liabilities of the group and would increase exposure of the resident deposit-taker to nonresident markets. Further, for domestic-consolidated-based data, if one deposit-taker merges with another, the existing inter-deposit-takers' positions will be eliminated, causing a break in series in the data for the entire sector; the larger the deposit-takers the more significant this will be. The impact could be even more significant on peer group analysis. For instance, if the merger is between deposit-takers in different peer groups, both sets of peer group data, both balance sheet and income and expense data, will be affected. Clearly the more significant the deposit-taker leaving or joining a peer group, the more significant the break.

11.80. In general, it is important for compilers to document such mergers, and any changes in underlying accounting rules that affect the continuity of the data series. Such information should be maintained over time.

Table 11.8: Deposit-takers' Income and Expense Statement

FSI lines in the Guide	System of National Accounts	International Accounting Standard
	Line Item	Relevant standard
1. Interest Income	D. 41; P.11	IAS 18.29; 30.10
2. Interest Expense	D. 41; P.11	IAS 18.29; 30.10; 32.30-31
3. Net Interest Income	D.41; P.11	IAS 30.10
4. Noninterest Income (net)		
4 (i) Fees and commissions receivable	P.11	IAS 18 20; 18 App. 14
4. (ii) Gains or losses on financial instruments	AF.2; AF 3; AF. 4; AF.5; AF.7; AF.8	IAS 39.103-108; 30.15; IAS 21.15, 17, 19
4. (iii) Other income		
Rental income	D.45; P.11	IAS F74; IAS 40.66 (d) (i)
Dividends and other income from equity holdings	D.42; D.43	IAS 18.30; 28.3; 31.32-34
Other income	D.75; part of AN11	IAS 8.18; 16.56; 40.28
5. Gross Income	3 + 4	3 + 4

Table 11.8: Deposit-takers' Income and Expense Statement (Continued)

FSI lines in the Guide	System of National Accounts	International Accounting Standard
	Line Item	Relevant standard
6. Operating Expenses		
6 (i) Personnel costs	D.1; D. 623	IAS 19.4
6 (ii) Other expenses		
Purchases of goods and services	P.2; D.45	IAS 78
Depreciation	K.1; part of K.9	IAS 16.41-48; 16.50
Other operating expenses	D.71; D.75	n.a.; IAS 8.18
Taxes other than income taxes, and subsidies	D.29; D.59; D.39	n.a.; IAS 20.29-30
7. Provisions (net)		
7 (i) Loan loss provisions	K.10	IAS 30.45
7 (ii) Other financial asset provisions	K.10	IAS 39 109-111
(Bad debt recoveries)		(IAS 39.114)
8. Net Income before extraordinary items and taxes	5. - 6. - 7	5. - 6. - 7.
9. Extraordinary items	K.7; K.8	IAS 8.11-15
10. Income tax expense	D.51	IAS 12.2
11. Net Income after tax	8 -(9+10)	8 - (9+10)
12. Dividends payable	D.42; D.43	IAS 18.30; 32.30
13. Retained Earnings	11 -12	11 -12

Table 11.8: Deposit-takers' Balance sheet

	System of National Accounts	International Accounting Standards	
	Line Item	Disclosure Requirements	Relevant Standards
14. Total Assets			
15. Non-Financial Assets	AN		IAS 1.66
	AN.1	Property, plant, and equipment	IAS 1.66a; 16.6
	AN.2 - (part of AN.22)	Inventories	IAS 1.66e; 2.4
		Intangible Assets	IAS 1.66b; 38.7
16. Financial Assets	AF		IAS.30
17. Currency and deposits	AF.2	Cash and balances with central bank	IAS 30.19; 30.21
		Placements with other banks	IAS 30.21
18. Loans	AF.4		
18 (i. i) Interbank	AF.4, S.122	Placements with and loans and advances to other banks less Placements with other banks	IAS 30.19; 30.21;39.10
18 (i.ii). Non-Interbank	AF.4-S.122	Loans and advances to customers	IAS 30.19
Sectoral distribution of loans	AF.4 S.1 through S.2		IAS 14.9
Geographical distribution			IAS 14.19
19 Debt Securities	AF.3	Treasury bills and other bills eligible for rediscounting with the central bank	IAS 30.19
		Other money market placements	IAS 30.19
		Part of government and other securities for dealing purposes	IAS 30.19 - 32.60 (c); 39.10
		Part of investment securities	IAS 30.19- 32.60 (c); 39.10
20. Shares and other equity	AF.5	Part of government and other securities for dealing purposes	IAS 30.19; 39.10
		Part of investment securities	IAS 30.19; 1.66d; 28.6
21. Financial derivatives	AF.7	(n) Derivative financial instruments	IAS 32.9-10; 39.10
22. Other assets	AF. 6 + AF.8	Trade and other receivables	IS 1.66f; IAS 39.10
		Tax assets	IAS 1.66i; 12.12

Table 11.8: Deposit-takers' Balance sheet

	System of National Accounts	International Accounting Standards	
	Line Item	Disclosure Requirements	Relevant Standards
23. Liabilities	AF		IAS.30
24. Currency and Deposits	AF.2		
(i) Customer deposits	AF.2 -S12	Amounts owed to other depositors	IAS 30.19
(ii) Interbank deposits	AF.2, S122	Deposits from other banks	IAS 30.19
(iii) Other currency and deposits	AF.2, S12-S122	Other money market deposits	IAS 30.19
25. Loans	AF.4	Part of other borrowed funds	IAS 30.19
26. Debt Securities	AF.3	Part of borrowed funds	IAS 30.19
		Certificates of deposit	IAS 30.19
		Promissory notes and other liabilities evidenced by paper	IAS 30.19
27. Other liabilities	AF.8	Trade and other payables	IAS 1.66h
		Tax liabilities	IAS 1.66i; 12.12
28. Debt	AF.2 + AF.3 + AF.4 + AF.8	Deposits from other banks+other money market deposits+amounts owed to other depositors+other borrowed funds+certificates of deposit+promissory notes and other liabilities evidenced by paper+trade and other payables+tax liabilities.	IAS 30.19
29. Financial Derivatives	AF.7	Derivative financial instruments	IAS 32.9-10; 39.10
30. Capital and reserves	AF.5 + B.90 (- part of AN.22)	Capital and Reserves	IAS 1.66m; F.65 - 68
(i) Narrow capital	Funds contributed by owners	Issued capital	IAS 1.74, IAS F65
	Retained earnings	Accumulated profit/loss	IAS F65
	General and special reserves	Reserves	IAS F65 - 66

Table 11.9: Nonfinancial Corporations' Income and Expense Statement

FSI lines in the Guide	System of National Accounts	International Accounting Standards
	Line item	Relevant standard
1. Revenues from sales of goods and services (excluding indirect sales taxes)	P.11- (part of P.52)	IAS 18.14; 18.20
2. Cost of sales		
Personnel costs	D.1; D.623	IAS 19.4
Cost of goods and services	P.2; D.45	IAS F 78
Depreciation	K.1; part of K.9	IAS 16.41-48; 16.50
Other costs of sales	D.75; n.a. (potential costs).	IAS 8.18; 37.24
Taxes other than income taxes, and subsidies	D.29; D.59; D.39	n.a.; IAS 20.29-30
3. Operating Income	1. - 2.	1. - 2.
4. Interest income	D.41	IAS 18.29
5. Interest expense	D.41; P.2	IAS 18.29; IAS 32.30-31
6. Other income (net)	D.45	n.a.
Rental income	D.45; P.11	IAS F74; IAS 25.40.66 (d) (i)
Dividends and other income from equity holdings	D.42; D.43	IAS 18.30; 28.3;31.24-34
Net gains/losses on assets and liabilities	part of AN.11; AF.2; AF.3; AF 4; AF.5; AF.7; AF.8	IAS 16.56; 40.28 21.15, 17, 19
Other income	D.75	IAS 8.18
7. Net income before extraordinary items and taxes	3 + 4 - 5 + 6	3 + 4 - 5 + 6
8. Extraordinary items	K 7; K.8	IAS 8.11-15
9. Corporate income taxes	D.51	IAS 12.2
10. Net income after taxes	7 - (8+9)	7 - (8+9)
11. Dividends payable	D.42; D.43	IAS 18.30; IAS 32.30
12. Retained Earnings	11-12	11. - 12.

Table 11.9: Nonfinancial Corporations' Balance Sheet

	System of National Accounts	International Accounting Standards	
	Line Item	Disclosure Requirements	Relevant Standards
13. Total Assets			
14. Non-Financial Assets	AN	14+15	IAS 1.66
15. Produced	AN.1		
Fixed assets	AN.11	Property, plant, and equipment	IAS 1.66a; 16.6
Inventories	AN.12	Inventories	IAS 1.66e; 2.4
Other	AN.13	Part of Intangible Assets	IAS 1.66b; 38.7
16. Non-produced	AN.2 (- part of AN 22)	Part of tangible assets	IAS 1.66a; 16.6
		Part of intangible Assets	IAS 1.66b; 38.7
17. Financial Assets	AF	17+18+19+20+21+22	IAS 1.66
18. Currency and deposits	AF.2	Cash and part of cash equivalents	IAS 1.66g; 7.6
19. Debt securities	AF.3	Part of other financial assets	IAS 1.66c
20. Shares and other equity	AF.5	Investments accounted for using the equity method	IAS 1.66d; 28.6
		Part of other financial assets	IAS 1.66c
21. Trade Credit	AF.81	Part of trade and other receivable	IAS1.66f; 39.10
22. Financial Derivatives	AF.7	Derivative financial instruments	IAS 32.9-10; 39.10
23. Other assets	AF.6 + AF.89	Part of trade and other receivables	IAS 1.66f; 39.10
		Tax assets	IAS 1.66i; 12.12
24. Liabilities	AF	28+29	IAS1.66
25. Loans	AF.4	Part of non-current interest bearing liabilities	IAS1.66k
		Part of cash equivalents	IAS 1.66g; 7.8
26. Debt securities	AF.3	Part of non-current interest bearing liabilities	IAS1.66k
27. Trade Credit	AF.81	Part of trade and other payables	IAS1.66h
28. Other liabilities	AF.89	Part of trade and other payables	IAS 1.66h
		Tax liabilities	IAS 1.66i; 12.12
29 Debt	AF.3 + AF.4 + AF.8	Trade and other payables+tax liabilities+non-current interest bearing liabilities+ part of cash equivalents	IAS1.66
30. Financial Derivatives	AF.7	Derivative financial instruments	IAS 32.9-10; 39.10
31. Capital and reserves	AF.5 + B.90 (- part of AN22)	Capital and Reserves	IAS 1.66m; F65 - 68
(i) Narrow capital		Issued capital	IAS 1.74; F65
		Accumulated profit/loss	IAS F65
		Reserves	IAS F65 - 66

Table 11.10: Households' Income

FSI lines in the Guide	System of National Accounts
	Line item
1. Wages and salaries	D.11
2. Property income receivable (net)	D.4
3. Current transfers	D.62; D.7
4. Other	$P1 - (P2 + D.1 + D.29 + D.39 + \text{part of } P.52)$
5. Less: taxes including social security contributions	D.5; D.6112; D.6113; D.62;D.7
6. Gross disposable income	B.6

Chapter 11: Compilation of FSI Data: Practical Issues

Box 11.1

Constructing FSIs from Monetary and Financial Statistics

Balance sheet data reported to central banks by financial corporations for the compilation of monetary aggregates and financial statistics are a potential source of information for the compilation of data for deposit-takers on a domestic-basis. In 2000, the IMF published the *Monetary and Financial Statistics Manual (MFSM)*. The *MFSM* is harmonized with the 1993 *SNA*, and addresses specific analytical needs relating to the role of monetary statistics in assisting monetary policy formulation and monitoring. This box explains how data collected using *MFSM* methodology can be utilized to compile the agreed indicators for deposit-takers.

The *MFSM* encourages the collection of balance sheet data from resident financial corporations (including branches of foreign banks). Subject to adjustments (see ahead), the balance sheet items specified in the *MFSM*¹ can be aggregated to construct the following data series on a domestically consolidated basis:²

- Customer deposits
- Noninterbank loans
- Sectoral distribution of loans
- Total loans
- Capital and reserves
- Assets
- Gross asset and liability positions in financial derivatives
- Total liabilities
- Equity and other shares

¹ See Table 7.1 on pages 80 to 85 of the *MFSM*.

² The following structural indicators can also be constructed: total assets of the financial system and of subgroups of financial corporations, and claims of financial corporations on residents as a percentage of total assets.

While a reliable source, monetary statistics might need to be adjusted to bring data series on loans, capital, financial derivatives, and assets and liabilities into accordance with the principles set out in the *Guide*.³ Moreover, unlike the monetary data, the balance sheet data presented in the *Guide* are explicitly linked to an income and expense account for the financial corporations.

Drawing on the series set out in Tables 11.1 to 11.3, the following adjustments might be necessary:

- Equity investments in subsidiaries and associates are valued on the basis of the investor's prorated share of these entities' capital and reserves and not at the market price of the equity held. Any difference in the value is reflected in assets and in capital and reserves. Data collected in Table 11.1 could be used.
- To avoid double counting of deposit-takers' capital and reserves at the sector-level, equity investments among deposit-takers in the reporting population need to be excluded, and counterpart adjustments made to capital and reserves. The adjustments could be implemented by using information collected under item 1 (and perhaps 2) in Table 11.2 to eliminate from assets and capital and reserves (i) the market value of shares and other equity investments in other resident deposit-takers; and (ii) equity investments in deposit-taking subsidiaries and deposit-taking associates.
- Other bilateral claims and liabilities among resident deposit-takers that belong to the same group should be eliminated using the information specified in Table 11.3. Thus, loans and positions in financial derivatives among resident deposit-takers in the same group should be excluded from the aggregated balance sheet data used to compile the data series listed above.

³ As noted in the chapter, in determining the need to collect new data, and hence the increased resource cost, authorities must make a judgment as to the likely impact and importance of the additional data series for compiling and monitoring FSI data.

- In the *Guide*, unlike the *MFSM*, loans (and other assets) data should exclude accrued interest on nonperforming loans (other assets).
- In contrast to the *MFSM* approach, in the *Guide* the value of total assets excludes specific provisions.⁴ Accordingly, total assets in the aggregated balance sheet should be adjusted to exclude specific provisions, with a counter adjustment to capital and reserves (within which narrow capital and reserves). Similarly, in the *Guide*, the value of total assets and of capital and reserves excludes purchased goodwill, unlike the *MFSM*.
- Also, general provisions are classified as an “other receivables/payable” in *MFSM*,⁵ but as part of capital and reserves in the *Guide*.
- Whereas the *Guide* includes unrealized gains/losses on financial assets and liabilities in retained earnings,⁶ such gains and losses are included as part of the revaluation account in the *MFSM*. Thus, if compiling a narrow measure of capital and reserves from the aggregated balance sheet data, unrealized gains/losses on financial instruments need to be reallocated to retained earnings.

Moreover, although the *MFSM* encourages the collection of balance sheet data from all resident financial corporations, as explained in Chapter 2, coverage of the “other depository corporations” in the *MFSM* might not be identical to that of the deposit-taking sector in the *Guide* (see paragraph 2.4, footnote 7).

Other data sources such as the BIS locational data on the geographic distribution of bank lending, may be collected from the same reporting population as for monetary and financial statistics, facilitating combination of data sources to compile the agreed ratios. For example, the indicator on the geographic distribution of loans to total loans can be constructed by

⁴ The value of loans after the deduction of specific provisions is a series used in calculating an agreed indicator.

⁵ See paragraph 179 of the *MFSM*.

⁶ In other words, in the *Guide* unrealized gains and losses on financial assets/liabilities are routed through the income and expense account.

using the aforementioned BIS data for the numerator and data on total loans from the monetary statistics in the denominator.