

# **INTERNATIONAL MONETARY FUND**

## **Financial Soundness Indicators**

**Statistics Department**



### **SUMMARY OF KEY POINTS AND CONCLUSIONS**

**Prepared for the Reference Group Meeting of Experts**

**Washington, D.C.**

**November 15–16, 2011**

**February 3, 2012**

## Background

1. In 2001, the IMF Executive Board agreed on a list of financial soundness indicators (FSIs) to be compiled by member countries and disseminated on the IMF external website. This was followed by the publication of the *Financial Soundness Indicators Guide* (hereafter, the *Guide*) in 2006. In July 2009, the IMF's Statistics Department (STA) launched the FSI page ([www.fsi.imf.org](http://www.fsi.imf.org)), containing data and metadata for some 50 countries. Currently, about 70 countries—spanning all regions of the world—are reporting FSIs for posting on the IMF's website. These reporters include all G-20 economies but one.

2. Five years after the publication of the *Guide*, and two years after the launching of the IMF's website, recent international developments—such as the global financial crisis and the adoption of the Basel III Accord—made it an opportune time to assess the experience of countries in compiling and disseminating FSIs, with a view to further improving their usefulness for financial stability analysis. Additionally, Recommendation 2 of the report *The Financial Crisis and Information Gaps* endorsed by the G-20 Finance Ministers and Central Bank Governors in November 2009 called for the IMF to work on increasing the number of countries disseminating FSIs, expanding the coverage to encompass all G-20 members, improving the FSI website, encouraging at least quarterly reporting of FSIs and, last but not least, reviewing the list of FSIs to be reported on by countries. The crisis also highlighted the need to know more about the activities of non-bank financial institutions, especially those of systemic importance, and their implications for the soundness of the financial system.

3. To address these issues, and to review the current list of FSIs in order to improve their usefulness, the IMF hosted a meeting of the Financial Soundness Indicators Reference Group of Experts (FSIRG). The meeting took place in Washington, D.C., during November 15–16, 2011.

4. In her opening remarks, Mrs. Adelheid Burgi-Schmelz (Director of STA) highlighted the progress achieved in the compilation and dissemination of FSIs and outlined the tasks ahead. Among them, she stressed the importance of having consistent and internationally comparable statistics on the solvency of financial institutions, the need to adapt these indicators to the new regulatory framework of Basel III, and the moral hazard posed by non-bank financial institutions of systemic importance.

## Overview

5. Prior to the meeting, the IMF identified a number of issues drawing from the experience accrued on the reporting of FSIs by IMF member countries and the lessons arising from recent international developments. These issues were consolidated into seven groups, for which a series of questions were posed in a Discussion Note prepared for the meeting.

6. Mr. Robert Heath, Deputy Director of STA, provided an introduction to the discussions. Here, he briefly referred to the history of the FSIs, mentioning the Coordinated Compilation Exercise carried out in 2005, the support by the IMF Executive Board for the regular reporting of these indicators, and the enhanced dissemination of FSIs as part of the Special Data Dissemination Standards (SDDS) as encouraged items and the possible inclusion of some FSIs in the SDDS-Plus initiative. He mentioned the use of FSIs in the tables accompanying the IMF's *Global Financial Stability Report*, financial sector surveillance, and financial sector assessment programs.

7. The key points made at the FSIRG are presented below, following the questions that had emerged from the Discussion Note circulated ahead of the meeting.

## **Issues for Discussion, Conclusions, and Action Points**

### **A. Deposit Takers**

8. The new Basel III regulatory framework, which represents a substantial change from the current framework, will be fully implemented in 2019, with a phase-in period starting in 2013. Adoption of the Basel III Accord will have an impact on the compilation of the current FSIs measuring capital adequacy, leverage, and liquidity.

9. Under Basel III, the existing definition of "total regulatory capital" has been tightened, in particular for Tier 1 capital. A new Capital Conservation Buffer has been established above the regulatory minimum capital requirement, which will be introduced in 2016 and will increase annually until 2019. A new leverage ratio will supplement risk-based capital requirements. Two new internationally harmonized global liquidity standards have been introduced, as a complement to capital requirements: a Liquidity Coverage Ratio and a Net Stable Funding Ratio.

### **Question**

**1. Virtually all respondents indicated that they will adopt Basel III as envisaged for the capital adequacy ratios by the phase-in arrangements established by the BCBS. Should the FSIs introduce the changes from 2013, 2015, or on an ongoing basis as countries switch to Basel III? How best to handle the breaks in time series following the introduction of the new Basel III concepts?**

### ***Participants' views***

10. There was a general agreement that Basel III should be the basis for revising the current FSIs, and that the revised indicators should be introduced on an ongoing basis in accordance with the phase-in arrangements established by the BCBS. The majority of participants confirmed their

commitment to adopt Basel III on time, and many of them earlier rather than later. However, certain countries do not foresee implementing Basel III in the near future.

11. In certain countries, both regulatory frameworks will be simultaneously in use, with large banks adopting Basel III while Basel II will still be in force for other institutions such as small banks. This will create a problem for aggregating internal data based on different regulatory frameworks. The meeting asked the IMF to provide guidance on such issues and to work on revisions to the *Guide* to adapt it to the new Basel III standards.

12. Breaks in the series will be unavoidable, but they are not expected to be significant in the main. In any event, the metadata must clearly indicate these breaks to ensure appropriate interpretation of the aggregate figures.

### *Conclusions*

- Most countries will adopt Basel III on time, and in several cases earlier rather than later. Therefore, the meeting supported introduction on an ongoing basis. A couple of countries indicated that Basel II will still be in force for some institutions (e.g. small banks), i.e., not all banks within an economy would adopt Basel III, so internal issues of aggregation may arise.
- Breaks in the series will be unavoidable, but it is not expected that they will be significant due to the transition period. In any case, the metadata must clearly indicate these breaks.

### *Action points*

- Investigate how to address issues of data aggregation for countries implementing Basel II (or Basel I) and Basel III simultaneously.
- Study possible revisions to the *Guide* to adapt it to the Basel III standards.

### **Question**

**2. Should the other capital-based FSIs adopt the Tier 1 definition from Basel III when the latter is implemented?**

### *Participants' views*

13. Participants agreed that after adoption of Basel III the capital adequacy ratios should be calculated following the new regulatory framework. There was full agreement that indicators I01 and I02 will be calculated according to the new definitions. For indicators I12, I14, and I25 most

countries believe that they should be based on total regulatory capital (Tier1+Tier2). For indicator I07, a balance sheet capital measure was preferred.

14. Most countries prefer to use Tier 1 capital when calculating indicator I13, including to better identify the risk profile of the exposure. However, since the inclusion or not of foreign bank branches (which do not have Tier 1 capital) would strongly influence the ratio, some countries preferred to have the option of calculating it using balance sheet capital. Therefore, the consensus was to allow the compilation of this indicator using either balance sheet or Tier 1 capital.

15. It was noted that banks using internal models cannot calculate indicator I25, and that EU countries do not have this information. Also, the calculation of indicator I03 should be carefully reviewed as general provisions, which can be used as a buffer to cover loan losses, are not accounted for in case Tier 1 is used as the denominator for this indicator.

### ***Conclusions***

- Once Basel III is adopted, the compilation of capital adequacy ratios will necessarily follow the new regulatory framework. Countries will have no choice but to report FSIs according to Basel III.
- For the five FSIs that rely on regulatory capital:
  - ✓ I01 and I02, they will be calculated according to the new definitions of Basel III.
  - ✓ For I12, I14, and I25, use total regulatory capital (Tier 1 + Tier 2).
- For the FSIs that give the option between regulatory or balance sheet capital:
  - ✓ For I07, use balance sheet capital.
  - ✓ For I13, most countries prefer to use Tier 1 capital, although some countries considered balance sheet capital to be more appropriate.
  - ✓ For I16 and I17, most countries prefer to use total regulatory capital, although some countries would prefer to use balance sheet capital.
  - ✓ For I03, continue to use either the total regulatory capital or balance sheet capital.

### ***Action points***

- Redefine capital-based FSIs along the agreements reached during the FSIRG meeting.
- For indicator I03, investigate how to revise the *Guide* to adapt it to international accounting standards.

## Question

**3. Should new FSIs be introduced for the Common Equity Tier 1 (CET1) ratio and the tangible common equity ratio? What would be the drawbacks, if any, from introducing the tangible common equity ratio as a measure of a bank's viability?**

### *Participants' views*

16. There was very little support to use tangible capital, due to the degree of judgment required to compile the indicator, including the treatment of such items as deferred tax assets and deductions from capital arising from holdings in other financial institutions. The interventions indicated that CET1, as defined by Basel III and which constitute a subset of Tier 1, should be used instead. The advantage of this approach is that it will promote country comparability, while the definition of tangible capital is open to interpretation and may confuse users.

17. Using CET1 will imply the introduction of a new FSI. It was noted that the Basel Committee already collects this indicator, but there were doubts that it can share the data with countries.

### *Conclusions*

- There is support for a new FSI for the CET1 ratio (a subset of Tier 1).
- The ratio of assets (or debt) to total tangible common equity could be a measure of leverage, but there was little support for a new FSI based on tangible common equity.

### *Action points*

- Construct a new solvency FSI based on CET1.

## Question

**4. With regard to the leverage ratio (LVR), what are the views of the meeting on introducing the new Basel III leverage ratio in January 2015 when the bank level disclosure starts, and continuing with the current leverage ratio until that time, and perhaps thereafter?**

### *Participants' views*

18. It was indicated that the BCBS already collects this leverage indicator. However, participants were not clear whether the BCBS can share this information with countries. Participants agreed that the current FSI leverage ratios should be kept, at least until the BCBS has

developed the ratio and indicated how numerator and denominator must be calculated. The trigger to introduce a new LVR based on Basel III would be when the BCBS informs national supervisors to start monitoring this ratio.

19. Regarding the calculation of indicator I13, most participants were in favor of having it calculated using Tier 1 capital. However, since the inclusion or not of foreign bank branches (which do not have Tier 1 capital) would strongly influence the ratio, some countries preferred to have the option of calculating it using balance sheet capital.

20. Emerging economies were concerned about the time line, since they may not be fully aligned with Basel III at the time of the introduction of the new leverage ratio.

21. There were different views on the need to discontinue the current leverage ratio (I13) or to keep it after a new LVR indicator is introduced in the FSI set.

### *Conclusions*

- For the leverage ratio (I13): as the work to specify and introduce Basel III leverage ratio is on-going, the current leverage measure should be maintained, at least until the new Basel leverage ratio is fully adopted. Some considered that even after the introduction of the new Basel measure there remains an analytical value in maintaining the current ratio.

### *Action points*

- Closely follow the development of the new Basel III leverage ratio to produce a similar indicator to be included in the FSI set at the time of its introduction by the BCBS.
- Assess cost and benefits of keeping the current leverage indicator I13, after the new leverage ratio is included in the FSI set.

### **Question**

**5. As the new Liquidity Coverage Ratio (LCR) will be introduced in January 2015, what are the views of the meeting on maintaining the existing indicators I10 and I11, at least until that time, and perhaps thereafter?**

### *Participants' views*

22. There were differing views on the need to maintain the current indicators I10 and I11, especially after the new LCR foreseen by Basel III is introduced (2015). In favor of dropping them after LCR has been adopted is the fact that different definitions for these indicators,

especially for liquid assets, make them not comparable among countries. Other countries considered that LCR, a looking forward indicator, complements rather than overlaps with I10.

23. The issue of confidentiality of LCR data was raised, and so the possibility that this indicator may not be published. It was also suggested that the *Guide* develops and recommends a more standard definition of liquid assets in line with Basel III (“stock of high-quality liquid assets”).

### ***Conclusions***

- Until the LCR of Basel III is fully adopted, liquidity indicators I10 and I11 are to be maintained.
- Once the LCR is adopted, it should be reported as a new FSI. At that time, indicators I10 and I11 should be revisited. The general consensus is that I11 could be dropped, since it is very close to the LCR, while I10 could be kept.

### ***Action points***

- Work towards more standardized definitions of liquid assets.
- Assess costs and benefits of maintaining liquidity indicators I10 and I11 after the introduction of the new LCR of Basel III.

## **B. Nonfinancial Corporations (NFCs), Households (HHs), and Real Estate Markets**

24. FSIs on nonfinancial corporations (NFCs), households (HHs), and real estate markets are very important for stability purposes, but they are difficult to collect. This seems to be the case mainly because these sectors and datasets are more closely related to national accounts than banks and banking supervision. Nonetheless, these sectors and especially real estate markets played a critical role in the global financial crisis. In order to improve the collection of FSIs on these sectors and compile real estate price indices based on sound and internationally-agreed methodologies a closer cooperation across national statistical agencies would be needed.

### **Question**

1. With regard to NFCs, what would be the drawbacks of redefining I30 as “Earnings to interest expenses” from “Earnings to interest and principal expenses,” if this made this indicator simpler and more meaningful?



### *Participants' views*

25. Views differed on this issue. Even if participants would prefer to compile I30 as currently defined, some countries do not have enough information to do that. Therefore, they prefer to compile just “earnings to interest expenses.” The argument was made that there is no framework where the principal payment could be calculated, and so a revised indicator would bring it within the SNA framework. Other participants preferred the indicator as it is now (“earnings to interest and principal expenses”), with the argument that assumptions can be made on rolling over the debt of nonfinancial corporations and that indicators of debt/GDP for nonfinancial corporations are currently being produced.

26. Some participants proposed alternative indicators, such as “earnings to current liabilities” or “NFC debt/GDP”.

### *Conclusions*

- The preferred definition for I30 is the current one, i.e., “earnings to interest and principal expenses.”
- However, when countries do not have data on principal expenses, they may compile as an alternative indicator “earnings to interest expenses.”
- Other indicators were suggested for further investigation and consultation:
  - ✓ NFC debt to GDP.
  - ✓ NFC earnings to short term liabilities.

### *Action points*

- Assess costs and benefits of compiling new indicators, in addition to the current indicator I30.

### **Question**

**2. What are the meeting’s views on possible technical refinements/enhancements to FSIs on HHs? What are the meeting’s views on possible new indicators on HHs?**

### *Participants' views*

27. Participants noted that the reporting rate of I34 was very low. It would be worthwhile to research what indicators countries are currently compiling in this area, and after that decide on possible alternative indicators. Some participants indicated that “total housing loans/total loans to

HHs” is not a useful indicator due to the high level of securitization in some countries, which takes mortgage loans off-balance sheet of commercial banks, with very significant non-banking HH debt.

28. One of the limitations faced by FSI compilers is that household data are collected outside the banking sector, where the regulatory entities do not have the legal authority to request information. Data sourced from the banking sector cover only households debt to banks (mortgage loans, car loans, credit card debt), which is clearly not total households debt.

29. Participants suggested alternative indicators, such as “HH debt/GDP,” “HH debt/gross disposable income,” “HH equity/HH real estate value,” and “mortgage loan/value.”

### *Conclusions*

- Additional to HH debt to GDP, it was agreed that further investigation and consultation was required to compile “HH debt to gross disposable income.”
- The meeting saw a need for the introduction of measures of HH and bank exposure to the real estate market. Two measures were raised for further investigation and consultation:
  - ✓ A “dynamic” measure of “owner’s equity to HH real estate value.”
  - ✓ A “supervisory” measure of “loan to value,” calculated for each new mortgage loan as the amount of the loan granted as a proportion of the house value.
- For some countries, it is difficult to collect data on HH debt outside of the banking sector, even though such debt may be significant. Countries were encouraged to compile these data on a best efforts basis, and it was noted that the parallel work on sectoral accounts would support such endeavors.

### *Action points*

- Investigate the costs and benefits of introducing alternative FSIs for households.

### **Question**

**3. What are the meeting’s views on possible new indicators on real estate markets?**

### *Participants’ views*

30. Countries agreed that real estate price indices are critical, given the importance of real estate in most economies as a source of household wealth and as a basis for borrowing and lending. However, it can be very difficult to construct them. In particular, some countries do not

have an active real estate market and reliable market prices. In most cases data are provided by commercial banks, raising quality issue questions.

### *Conclusions*

- The meeting noted the difficulty in constructing real estate price indices but reaffirmed the importance of the current two indicators (I37, I38).

### **Question**

#### **4. What lessons and insights can be shared on practical ways to improve collaboration among concerned national agencies?**

31. National experiences were presented.

### **C. Other Financial Corporations (OFCs)**

32. The recent global crisis demonstrated the need for capturing data on the shadow banking sector, which can be broadly defined as financial intermediation by institutions, markets, and instruments outside of the banking sector and traditional securities markets. The need to better understand their activities has been a recurrent theme raised by national authorities during recent G-20 bilateral consultation undertaken by IMF staff in the context of the G-20 Data Gaps Initiative.

### **Question**

#### **1. Should additional granularity be sought beyond the envisaged three-way OFC subsectors split comprised of (i) money market funds; (ii) insurance and pension funds; and (iii) other financial intermediaries?**

### *Participants' views*

33. There was general support for a breakdown of the OFC sector, broadly agreeing with the originally proposed three sub-sectors: money market funds, insurance corporations and pension funds, and other financial intermediaries. Additionally, the discussion of the differences in the structure of risks in the insurance and reinsurance markets in comparison with the banking market could inform the further work on FSIs.

34. A question was raised about the *Guide* definition of leasing, factoring, and other similar companies as non-deposit takers, which are being consolidated within the deposit-takers sector following Basel regulations. Here, the possibility of double counting exists, and the *Guide* should be revised to address it. Another issue raised was how to cover special purpose vehicles (SPVs)

and trust funds in FSIs. The meeting noted that the systemic relevance of MMFs may vary across countries and the MMFs definition may not be harmonized cross countries.

35. Data for subsectors of the OFCs are already being compiled for the Euro Area, although specific problems arise: hedge funds with headquarters outside the European Union, and only annual data for pension funds are available, among others. Conversely, other countries indicated that they do not compile FSIs for OFCs due to difficulties faced with regard to access to information, consolidation issues, and timeliness.

36. There was a suggestion to separate insurance corporations from pension funds, and to add a special sub-sector for investment funds. Participants supported this idea, but suggested that it be considered along with the discussions on new FSIs for each OFC subsector.

### *Conclusions*

- The meeting supported a subsector breakdown for the OFC sector. There was support for a breakdown at least between MMF, ICPF, and other OFCs. The meeting noted that the systemic relevance of MMFs may vary across countries.
- It should be further investigated whether it is worthwhile to split ICPF between insurance corporations and pension funds; and to identify investment funds within the other OFCs. SPVs and trust funds could also be considered.

### *Action points*

- Follow-up on the split of the OFC sector into subsectors.

### **Question**

**2. What are the meeting's views on possible new indicators customized for each OFC subsector, including those listed above in the question 2 commentary?**

### *Participants' views*

37. Participants agreed that the starting point could be the presentation by the German representative. The indicators recommended in the presentation were profitability and liquid assets to short term liabilities for MMFs, where the latter indicator serves as a measure of maturity transformation. These need to be discussed with the International Association of Insurance Supervision (IAIS), the International Organization of Securities Commission (IOSCO), the Financial Stability Board (FSB), the Basel Committee on Banking Supervision, and the BIS. However, these indicators cannot be looked at in isolation. Moreover, the usefulness of these additional indicators should first be established before additional collection burden are imposed.

38. The ECB has already received a request from users to compile 25 indicators for the insurance sector, and these indicators are focused on: i) profitability, ii) solvency, iii) the breakdown of assets by instruments, iv) assets classification in terms of government bonds, corporate bonds, equity, investment on commercial properties, and v) liquidity of assets. These indicators will be applied to all EU members. However, production of these indicators will depend on the implementation of the “Solvency II” framework which was delayed until 2014.

### *Conclusions*

- Regarding the introduction of new indicators, the meeting agreed on the need to be parsimonious. The indicators set out in the presentation by Germany could be a starting point for further investigation and consultation. Additionally, consideration could be given to compile indicators on the insurance sector on a group consolidated basis, while being mindful that double-counting issues may arise.

### *Action points*

- Assess the introduction of new indicators for the OFC sector and subsectors.

### **Question**

#### **3. What lessons and insights can be shared on practical ways to address data coverage issues, data sharing practices, and reporting burdens at the national level?**

39. There was a suggestion to limit the set of indicators. Participants expressed their concerns about indicators that are not in the financial accounts and suggested harmonizing the structure of OFCs across international organizations (Recommendation 15 of the G-20).

40. It was explained that the OECD has two databases. The first one is the “institutional investor assets database,” which contains quarterly data with a split between: i) insurance companies, divided into a) life insurance and b) nonlife insurance; ii) pension funds, and iii) investment funds divided into a) open-ended (money markets and other mutual funds) and b) closed-ended funds, within which real estate funds are separately identified. The second database relies on supervisory authorities’ data. The OECD is trying to work together with both databases.

### *Conclusions*

- Several indicators are already being compiled for supervisory and/or solvency purposes. To avoid duplications, relevant standard setting bodies should be consulted on any new indicator.

*Action points*

- Consult relevant standard setters.

**D. Improving Frequency and Timeliness of Reporting**

41. The need for more frequent and timely FSIs was recognized in Recommendation 2 of the G-20 Report of November 2009, which encouraged at least quarterly reporting of FSIs. In this connection, countries were strongly encouraged to report underlying profit and loss and balance sheet data (at least for deposit takers) to the IMF for dissemination. Currently, 43 countries, or 70 percent of the total reporting population, provide these data for deposit-takers.

**Questions**

- 1. What lessons and insights can be shared on practical ways to overcome internal national processes to increase the frequency and timeliness of reporting?**
- 2. What lessons and insights can be shared on practical ways to address legal constraints for the submission of underlying data?**

*Participants' views*

42. Countries noted that the frequency and timeliness of the data should be improved. Nonetheless, some countries will continue to report FSIs on a semi-annual basis. Other countries noted that they are moving to a quarterly reporting basis. Cost issues must also be considered, as well as the trade-off between frequency/timeliness and accuracy. More frequent and timelier data may be subject to revisions (especially those indicators based on national accounts statistics). A compromise may be the publication of preliminary data, with the metadata clearly indicating that they may be subject to revision. The possibility of reporting individual FSIs based on different consolidation approaches for different frequencies was also raised. In the EU the approach under implementation to improve data timeliness and frequency is to compile indicators for Large Banking and Insurance Groups (rather than for the entire banking and/or insurance population). The need to improve the IMF's reporting template was raised by participants.

*Conclusions*

- Several countries are working towards improving the frequency and timeliness of their data reporting. There is also work underway in the EU.
- Due to the trade-off between timeliness and accuracy, the possibility was raised of reporting preliminary data based on a sample of the reporting population, subject to later revisions. The metadata should clearly indicate the preliminary nature of such indicators.

*Action points*

- Encourage and support countries to report more frequent and timely FSI data.
- Improve the IMF's reporting template.

**E. Improving Cross-Country Comparability**

43. More prescriptive guidelines may be needed for the calculation of certain indicators and certain definitions of the underlying data. A case in point is consolidation where it was proposed to limit the options to Cross-Border Cross-Sector Domestically Incorporated (CBCSDI) and Domestic Controlled Cross-Border Cross-Sector (DCCBS) bases, with Domestic Consolidation (DC) accepted for countries with no foreign branches and subsidiaries. The choice of the consolidation basis will certainly affect the FSIs data, although the degree of variation triggered by different consolidation bases will depend on the financial structure of each country. Converging towards one or two consolidation bases, would facilitate cross-country comparability.

**Questions**

**1. Would DC be an appropriate alternative to CBCSDI and DCCBS in those cases where deposit-takers have no foreign branches or subsidiaries? Should the FSIs Compilation Guide focus on CBCSDI, DCCBS, and DC?**

**2. What lessons and insights can be shared on practical ways to address the national legal issues, as well as structural data limitations that may constrain the migration to CBCSDI or DCCBS where appropriate?**

*Participants' views*

44. Participants stressed that cross-country comparability of the data needs to be improved. The narrowing of the consolidation basis towards CBCSDI and DCCBS would enhance data comparability. It was suggested that for countries without or non-significant foreign branches and subsidiaries, the DC consolidation basis could be equivalent to CBCSDI. However, it is important to highlight that a DC consolidation basis will not include non-deposit taking subsidiaries of resident deposit takers, which would be the case with CBCSDI or DCCBS consolidation bases. The relevance of this discrepancy needs to be analyzed for each particular country. It was noted that the introduction of the Basel III framework could contribute to improved cross-country comparability of data.

45. Regarding "Other" consolidation basis, some countries are bound to it due to domestic legal restrictions. Another issue is that under the current reporting guidelines to the IMF, any deviation (even minor ones) from the definition of the consolidation bases forces the country to

report its data as “Other” consolidation basis. If these deviations are not substantial, an alternative could be to use the relevant reporting basis and highlight the deviations in the metadata.

46. The ECB indicated its willingness to assist bridging the FSIs for Deposit-Takers with the FINREP and COREP templates under development by the European Banking Authority (to be finalized by June 30, 2012), as this would improve the cross-country comparability across the FSIs compiled by the 27 EU countries.

### ***Conclusions***

- The meeting supported the use of DC as a consolidation basis for countries with institutions that have very few or no foreign branches or subsidiaries, which would make this basis broadly equivalent to CBCSDI.
- While a number of participants stressed the need to improve cross-country comparability of data, there was no consensus to narrow the consolidation bases to CBCSDI, DCCBS, and DC. IMF staff will look into the extent to which countries that report “Other” as consolidation basis are close to CBCSDI or DCCBS and will contact the relevant countries.
- Due to legal constraints, some countries do not have any other option than to report on an “Other” consolidation basis.

### ***Action points***

- Investigate which countries are currently using an “Other” consolidation basis simply due to minor deviations from the definitions provided in the *Guide*, and move such countries to the corresponding consolidation basis with explanations in the metadata.

## **F. Tail Risk, Concentration and Dispersion Measures, Leverage and Maturity Mismatch**

47. The Monetary and Capital Markets Department (MCM) of the IMF made a presentation on its work on tail risks, which was well received by participants. However, the calculation of tail risks may well be beyond the scope of FSIs, because it entails analysis at the individual institution level with scenarios about price movements of an asset or portfolio and their impact on the solvency of the institution.

48. The FSIs, as reported to the IMF and as published on national websites, are weighted averages of the FSIs calculated using data from individual institutions. As such, they hide variations within the population and outliers that may eventually put in danger the financial system as a whole especially in the case of SIFIs. It is therefore important to augment data on averages with indicators at an institutional (bank) level.



## Questions

**1. What are the meeting's views about the IMF encouraging the reporting of standard deviations by quartiles for core FSIs on deposit takers as part of the FSI reporting framework?**

**2. What lessons and insights can be shared on practical ways to address the legal issues associated with confidentiality that prevent distinguishing between SIFIs and non-SIFIs in certain jurisdictions?**

**3. What lessons and insights can be shared on the usefulness of collecting, analyzing and sharing concentration and dispersion measures especially for deposit-takers and by quartiles?**

49. Participants agreed that the work on tail risks is beyond the scope of FSIs, and publishing dispersion measures on quartiles can face confidentiality problems. However, concentration and dispersion measures for the whole population can be very meaningful and useful for financial sector analysis. The dissemination of concentration and dispersion measures can be initiated with one or two simple indicators.

50. It was noted that the European Banking Authority is compiling dispersion measures for a sample of large banking groups only and not for the consolidated banking data. For the consolidated banking data, there are other dispersion measures. In order to avoid the problem of confidentiality, the ECB agreed with the European Banking Authority that they would produce these dispersion measures only for the EU as a whole. Ideally, the ECB would like to have dispersion measures country by country, but these could only be feasible if a country has at least six larger banking groups in the sample. If they have less than six, they would not report such dispersion measures.

51. It was suggested that the IMF organize a "Coordinated Compilation Exercise" on concentration and dispersion measures.

## *Conclusions*

- The G-20 has asked the IMF to investigate with national authorities dispersion and concentration measures. The meeting supported taking this work forward, focusing on the most common concentration and dispersion measures. Cost/benefit, confidentiality, and economic usefulness aspects should be considered.
- The idea was raised to conduct a sample survey among FSI reporting countries.

*Action points*

- Develop simple concentration and dispersion measures for selected FSIs and for the whole population, which could eventually be disseminated on the IMF webpage.
- Study the possibility to organize a sample survey exercise on concentration and dispersion measures.

**G. Review of the List of Core and Encouraged FSIs**

52. The relative newness of the steady-state reporting of FSIs to the IMF and the launch of the IMF's FSIs website (<http://fsi.img.org>), along with cost-benefit trade-offs, would counsel against significant changes to the list of FSIs and its two-tier structure distinguishing between core and encouraged FSIs. The FSIRG went through the current list of FSIs, focusing on usefulness for financial stability analysis and the reporting burden for the countries. To avoid confusion with the SDDS, it was proposed to rename the current "encouraged" FSIs as "additional" FSIs.

**Questions**

- 1. Taking into account the preceding discussion, what final refinements to the list of core FSIs may command a broad-based support with a view to begin reporting within a short timeframe?**
- 2. What are the meeting's views on the draft list of FSIs to be included in a possible SDDS-Plus?**
- 3. Taking into account the preceding discussion, what final refinements to the list of additional FSIs may command broad-based support? Is additional work/research in certain areas needed to support final views?**

*Participants' views*

53. There was full agreement to change the nomenclature from "encouraged" to "additional" FSIs.

54. Participants indicated that real estate price indicators are very important. However, there are concerns about the quality of such indicators and the difficulty in constructing them. In many countries, real estate price indices are produced not by an official statistical agency but by the private sector, raising questions about their quality. It was not clear how many countries produce these indicators and it was noted that very few report them to the IMF. These difficulties increase for commercial real estate prices. Therefore, more work is needed before including these

indicators in the core set. It was suggested not to do this before at least half of the FSI participating countries report them.

55. The meeting supported including leverage ratio(s) and “provisions to nonperforming loans” among the core set of FSIs. It was noted that three leverage ratios were discussed and that clarity was needed as to which one(s) should be included in the core set.

56. Once new indicators are included in the FSI set following Basel III (leverage, liquidity), the list of current FSIs should be reviewed to avoid duplication.

57. Some participants considered that Return on Equity (ROE) was a very important indicator, but that countries need a methodology for its calculation. In particular, a decision needs to be taken on which “net income” (before or after taxes) should be used in the ROE calculation. The same consideration could be made for Return on Assets (ROA).

58. No clear consensus was found to move any of the indicators currently in the core set to the “additional” list of indicators. The availability of net open position in foreign exchange to capital appears to differ depending on whether the banks in an economy use internal models or not. Banks that use internal models for computing market risk, use a market risk model to compute all the market risk as a whole (for example a position in foreign exchange could be compensated with one in interest rate or in equity, if they move opposite). Therefore, these banks do not compute “net open position.” Banks that use standard models for computing market risk have different measures for each type of market risk (price, interest, foreign exchange, equity...) one of which is foreign exchange. In this connection, some participants noted the usefulness of a “risk market indicator” that could be provided by all banks. It was agreed that the list of core FSIs should be parsimonious. The European Systemic Risk Board (ESRB) are planning to compile “net open position in foreign exchange to capital” and “net open position in equities to capital” starting in 2013.

### ***Conclusions***

- The meeting agreed to change the nomenclature from “encouraged” to “additional” indicators.
- The meeting supported including leverage ratio(s) and “provisions to nonperforming loans” among the core set of FSIs.
- It was noted that the meeting had discussed three leverage ratios and that clarity was needed as to which one should be included in the core set.
- Once new indicators are included in the FSIs set following Basel III (leverage, liquidity), the list of current FSIs should be reviewed to avoid duplications.

- It was agreed that monitoring real estate prices is critically important, but that more work is needed before including these indicators in the core set.
- No clear consensus was found to move any of the indicators currently in the core set to the “additional” list of indicators. Nonetheless, it was agreed that the list of core FSIs should be parsimonious.
- As possible candidates to be deleted from the list of FSIs, the meeting indicated “net open position in equities to capital,” (I25) “net foreign exchange exposure to equity,” (I31) and “number of bankruptcy proceedings initiated” (I32).
- It was requested to look into the relevance of including some FSIs for the government sector. Another suggestion was an FSI on nonresident funding of resident banks.
- The meeting reviewed the proposed list of FSIs for the SDDS-Plus. It was explained that the indicators for “commercial real estate prices” and “residential real estate loans to total loans” were not favorably received by SDDS coordinators. For “residential real estate prices,” a transition period will be needed. The meeting suggested that FSIs included in the SDDS-Plus may be hyperlinked to the FSI website, as it is done for the SDDS.

#### *Action points*

- Further investigate the compilation of real estate price indices, with a view of including them in the future in the core set of FSIs once harmonization among countries has improved and a substantial number of countries report them to the IMF.
- Review the current list of core and encouraged (future “additional”) FSIs, along the lines discussed during the FSIRG meeting.

Status of FSI Reporting to the IMF									
Reporting population as of July 2011:								63	
Descriptions (in percent of total reporting population)		Monthly	Quarterly	Semi-annual	Annual	Only once	TOTAL	SDDS encouraged (Seven FSIs)	GFSR tables (Six FSIs)
<b>Core FSIs for Deposit Takers</b>									
I1	Regulatory capital to risk-weighted assets	14%	54%	10%	21%	2%	100%		X
I2	Regulatory Tier 1 capital to risk-weighted assets	14%	54%	10%	21%	2%	100%	X	
I3	Nonperforming loans net of provisions to capital	14%	52%	10%	21%	2%	98%	X	
I4	Nonperforming loans to total gross loans	14%	51%	10%	21%	2%	97%	X	X
I5	Sectoral distribution of loans to total loans	5%	51%	10%	16%	2%	83%		
I6	Return on assets	14%	51%	10%	24%	2%	100%	X	X
I7	Return on equity	14%	51%	10%	24%	2%	100%		X
I8	Interest margin to gross income	14%	51%	10%	22%	2%	98%		
I9	Noninterest expenses to gross income	14%	51%	10%	22%	2%	98%		
I10	Liquid assets to total assets	14%	52%	8%	17%	2%	94%		
I11	Liquid assets to short-term liabilities	13%	52%	8%	17%	2%	92%	X	
I12	Net open position in foreign exchange to capital	10%	40%	6%	14%	2%	71%	X	
<b>Encouraged FSIs for Deposit takers</b>									
I13	Capital to assets	14%	51%	6%	13%	2%	86%		X
I14	Large exposures to capital	5%	29%	3%	10%	2%	48%		
I15	Geographical distribution of loans to total loans	2%	35%	5%	8%	0%	49%		
I16	Gross asset position in financial derivatives to capital	6%	33%	5%	10%	2%	56%		
I17	Gross liability position in financial derivatives to capital	6%	33%	5%	10%	2%	56%		
I18	Trading income to total income	11%	41%	6%	13%	2%	73%		
I19	Personnel expenses to noninterest expenses	13%	43%	6%	14%	2%	78%		
I20	Spread between reference lending and deposit rates (basis)	6%	32%	6%	3%	2%	49%		
I21	Spread between highest and lowest interbank rates (basis)	3%	16%	2%	2%	2%	24%		
I22	Customer deposits to total (noninterbank) loans	14%	43%	6%	10%	2%	75%		
I23	Foreign-currency-denominated loans to total loans	13%	38%	5%	11%	2%	68%		
I24	Foreign-currency-denominated liabilities to total liabilities	13%	35%	5%	13%	2%	67%		
I25	Net open position in equities to capital	5%	17%	2%	8%	2%	33%		
<b>Encouraged FSIs for Other Financial Corporations</b>									
I26	Assets to total financial system assets	2%	21%	3%	8%	0%	33%		
I27	Assets to Gross Domestic Product (GDP)	2%	19%	3%	8%	0%	32%		
<b>Encouraged FSIs for Nonfinancial Corporations</b>									
I28	Total debt to equity	0%	13%	6%	5%	0%	24%		
I29	Return on equity	0%	10%	5%	6%	0%	21%		
I30	Earnings to interest and principal expenses	0%	3%	5%	3%	0%	11%		
I31	Net foreign exchange exposure to equity	0%	0%	3%	0%	0%	3%		
I32	Number of bankruptcy proceedings initiated	0%	11%	2%	6%	0%	19%		
<b>Encouraged FSIs for Households</b>									
I33	Household debt to GDP	0%	21%	5%	6%	0%	32%		
I34	Household debt service and principal payments to income	0%	10%	2%	5%	0%	16%		
<b>Encouraged FSIs for Market Liquidity</b>									
I35	Average bid-ask spread in the securities market	0%	14%	0%	2%	0%	16%		
I36	Average daily turnover ratio in the securities market	2%	14%	0%	3%	0%	19%		
<b>Encouraged FSIs for Real Estate Markets</b>									
I37	Residential real estate prices (index)	0%	16%	3%	10%	0%	29%		
I38	Commercial real estate prices (index)	0%	6%	2%	3%	0%	11%		
I39	Residential real estate loans to total loans	3%	33%	6%	6%	0%	49%		
I40	Commercial real estate loans to total loans	2%	24%	3%	3%	0%	32%		
I41	Regulatory Tier 1 capital to total assets							X	
I42	Provisions to non-performing loans								X

Source: IMF's Statistics Department