

# **The Financial Crisis and Information Gaps**



FINANCIAL  
STABILITY  
BOARD



## **Progress Report**

### **Action Plans and Timetables**

**Prepared by the IMF Staff and the FSB Secretariat**  
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### LIST OF ABBREVIATIONS AND ACRONYMS

|                  |   |
|------------------|---|
| <i>2008 SNA</i>  | The <i>System of National Accounts 2008</i>   |
| ABS              | Asset Backed Securities   |
| BCBS             | Basel Committee on Banking Supervision  |
| BIS              | Bank for International Settlements  |
| BOPCOM           | IMF Committee on Balance of Payments Statistics   |
| BSA              | Balance Sheet Approach  |
| <i>BPM6</i>      | <i>Balance of Payments and International Investment Position Manual</i> , sixth edition |
| CCPs             | Central Counterparties  |
| CDS              | Credit Default Swaps  |
| CGFS             | Committee on the Global Financial System  |
| CPIS             | Coordinated Portfolio Investment Survey   |
| CPPIs            | Commercial Property Price Indices   |
| CRT              | Credit Risk Transfer  |
| ECB              | European Central Bank   |
| Eurostat         | Statistical Office of the European Communities  |
| FOF              | Flow of Funds   |
| FSAP             | Financial Sector Assessment Program   |
| FSB              | Financial Stability Board   |
| FSF              | Financial Stability Forum   |
| FSI              | Financial Soundness Indicators  |
| G-20             | The Group of Twenty   |
| G-22             | The Group of Twenty Two   |
| GFS              | Government Finance Statistics   |
| <i>GFSM 2001</i> | <i>Government Finance Statistics Manual, 2001</i>                                       |
| <i>GFSR</i>      | <i>IMF's Global Financial Stability Report</i>  |
| HFCS             | Household Finance and Consumption Survey  |
| IAG              | Interagency Group on Economic and Financial Statistics                                  |
| IAIS             | International Association of Insurance Supervisors                                      |
| IBS              | International Banking Statistics  |
| IMF              | International Monetary Fund   |
| IIP              | International Investment Position   |
| IOSCO            | International Organization of Securities Commissions                                    |
| ISWGNA           | Inter-Secretariat Working Group on National Accounts                                    |
| IWGPS            | Inter-Secretariat Working Group on Price Statistics                                     |
| MCM              | IMF's Monetary and Capital Markets Department   |
| OECD             | Organisation for Economic Co-operation and Development                                  |
| OTC              | Over-the-Counter  |
| PGI              | Principal Global Indicators   |
| <i>PSD</i>       | <i>Public Sector Debt Guide</i>   |
| REPIs            | Real Estate Price Indices   |
| SDDS             | Special Data Dissemination Standard   |
| SIGFIs           | Systemically Important Global Financial Institutions                                    |
| <i>SNA</i>       | <i>System of National Accounts</i>  |
| SPV              | Special Purpose Vehicles  |
| SRF              | Standardized Report Form  |
| STA              | IMF's Statistics Department   |
| TFFS             | Inter-Agency Task Force on Finance Statistics   |
| UN               | United Nations  |
| WG               | Working Group   |
| WGSD             | Working Group on Securities Databases   |
| WEO              | World Economic Outlook  |

## **The Financial Crisis and Information Gaps: Progress Report Action Plans and Timetables**

### **EXECUTIVE SUMMARY**

In November 2009 the G-20 finance ministers and central bank governors endorsed 20 recommendations to address information gaps described in the report “*The Financial Crisis and Information Gaps*” prepared by the Financial Stability Board (FSB) Secretariat and International Monetary Fund (IMF) staff. They requested the FSB Secretariat and the IMF staff to report back by June 2010 with a concrete plan of action, including a timetable, to address each of the outstanding recommendations in the report.

This report responds to that request. A consultative process was conducted involving international experts on financial stability and statistics from national authorities, international agencies, as well as standard setting bodies. The report describes the progress since November 2009 and the plans going forward. It contains a number of key messages:

- Work has started to address all the 20 recommendations. The November 2009 Report provided significant impetus for further action and, since then, considerable progress has been made in a number of the recommendations.
- Some of the most challenging recommendations (such as those calling to better understand global financial networks) are among the most important for enhancing financial stability analysis.
- Closing all the gaps will take time and resources, and will require coordination at the international level and across disciplines, as well as strong high-level support. The legal framework for data collection might need to be strengthened in some economies.
- Flexibility and prioritization in the timetable of implementation will be needed to account for the countries’ level of statistical development and resource constraints.
- Before the next progress report is due in June 2011, IMF staff plan to visit individual G-20 economies to discuss reporting practices and feasible strategies for implementing the work plans and timetables going forward. Feedback from these visits will be reflected in the next report.

Set out ahead is a summary table of the progress to date, and the proposed action plans going forward, with timetables, in addressing the 20 G-20 endorsed recommendations. Detailed action plans and timetables are in the Annex. The report seeks endorsement by the G-20 ministers and central bank governors of these action plans and timetables.

**Summary Table: Progress Report, Action Plans, and Timetables**

| Recommendation   | Progress to date  | Action Plan and timetable  |
|--|---|--|
| <p>1. Staff of FSB and the IMF report back to G-20 Finance Ministers and Central Bank Governors by June 2010 on progress, with a concrete plan of action, including a timetable, to address each of the outstanding recommendations. Thereafter, staff of FSB and IMF to provide updates on progress once a year. Financial stability experts, statisticians, and supervisors should work together to ensure that the program is successfully implemented.</p> | <p>As requested in November 2009, the present report, prepared by the FSB Secretariat and IMF staff, is provided to the G-20 finance ministers and central bank governors for their meeting in June 2010.</p>   | <p>FSB Secretariat and IMF staff to provide a second progress report by June 2011. For those recommendations where there do exist frameworks and ongoing collection (the second column in figure 1), the next report intends to provide detailed information on progress in data compilation and dissemination for each G-20 economy. It will be recognized that in some instances a specific recommendation might not be applicable to all G-20 economies. IMF staff intends to visit individual G-20 economies to discuss reporting practices. In all other cases, progress towards implementation of the recommendations will be reported.</p>        |
| <b>Monitoring Risk in the Financial Sector</b>   |   |  |
| <p>2. The IMF to work on increasing the number of countries disseminating Financial Soundness Indicators (FSIs), including expanding country coverage to encompass all G-20 members, and on other improvements to the FSI website, including preferably quarterly reporting. FSI list to be reviewed.</p>  | <p>In March, 2010, the IMF's Executive Board decided to include seven FSIs in the IMF's Special Data Dissemination Standard (SDDS), on an encouraged basis. Work is in progress to integrate the regularly reported FSI data into the IMF's <i>Global Financial Stability Report</i> by April 2011.</p> | <p>IMF staff to work in the implementation of the IMF's Executive Board decision on the SDDS, particularly with countries subscribing to this standard. IMF staff will encourage the four G-20 economies that do not report FSIs to disseminate these data on the IMF website. In the second half of 2011, the IMF is to organize a meeting of the FSI Reference Group of Experts to discuss possible changes in the list of FSIs and the methodology for compiling them. The IMF staff is to report back to the IMF Executive Board on the work on FSIs at the Eighth Review of Data Standards, provisionally scheduled for the first half of 2012.</p> |
| <p>3. In consultation with national authorities, and drawing on the <i>Financial Soundness Indicators Compilation Guide</i>, the IMF to investigate, develop, and encourage implementation of standard measures that can provide information on tail risks, concentrations, variations in distributions, and the volatility of indicators over time.</p>   | <p>Initial work has been undertaken to identify the key issues. The IMF conducted a conference in May 2010 attended by academics, financial sector representatives, and public sector officials to discuss conceptual issues.</p>   | <p>IMF staff to develop conceptual guidance in the first half of 2011 for discussion at the FSI Reference Group of Experts.</p>  |

|    |  |  |  |
|----|--|--|--|
| 4. | Further investigation of the measures of system-wide macroprudential risk to be undertaken by the international community. As a first step, the BIS and the IMF should complete their work on developing measures of aggregate leverage and maturity mismatches in the financial system, drawing on inputs from the Committee on the Global Financial System (CGFS) and the Basel Committee on Banking Supervision (BCBS). | Drawing on the BIS's International Banking Statistics (IBS) data, the BIS has made recent advances in developing measures of maturity mismatches ("funding gaps") on banks' international balance sheets, and is pursuing further enhancements. The IMF conducted a conference in May 2010 attended by academics, financial sector representatives, and public sector officials to discuss related conceptual issues.  | IMF and BIS staff intend to complete their work on developing measures of aggregate leverage and maturity mismatches in the financial system, in time for the June 2011 report.  |
| 5. | The CGFS and the BIS to undertake further work in close cooperation with central banks and regulators on the coverage of statistics on the credit default swap markets for the purpose of improving understanding of risk transfers within this market.  | Agreements have already been reached by the BIS for the reporting central banks to provide more detail on the Credit Default Swaps data, with regard to counterparties, starting with data reported for June 2010, and with regard to geography of counterparties and underlying instruments, starting with data reported for June 2011.   | Implementation of the agreements reached, by mid-calendar 2011.  |
| 6. | Securities market regulators working through IOSCO to further investigate the disclosure requirements for complex structured products, including public disclosure requirements for financial reporting purposes, and make recommendations for additional improvements if necessary, taking account of work by supervisors and other relevant bodies.  | In April 2010, IOSCO published a report on Asset Backed Securities (ABS) Disclosure Principles providing guidance to securities regulators who are developing or reviewing their regulatory disclosure regimes for public offerings and listings of ABS ( <a href="http://www.iosco.org/news">http://www.iosco.org/news</a> ).   | Later this year, IOSCO may also consider further work to develop disclosure principles for more complicated instruments such as collateralized debt obligations and examine the distinction between public and private offerings which could lead to the development of disclosure principles for private offerings of ABS.  |
| 7. | Central banks and, where relevant, statistical offices, particularly those of the G-20 economies, to participate in the BIS data collection on securities and contribute to the further development of the BIS-ECB-IMF <i>Handbook on Securities Statistics (Handbook)</i> . The Working Group on Securities Databases to develop and implement a communications strategy for the <i>Handbook</i> .                        | In March 2010, the Review Group on the BIS-ECB-IMF <i>Handbook on Securities Statistics (Handbook)</i> met to discuss the draft of Part 2 of the <i>Handbook</i> which focuses on statistics of debt securities holdings. This followed completion last year of Part 1 of the <i>Handbook</i> which focused on statistics of debt securities issues. The Review Group includes experts from central banks, national agencies, and international organizations. | Part 2 of the <i>Handbook</i> is well-advanced and scheduled to be released on the IMF website in mid-calendar 2010. Part 3 of the <i>Handbook</i> is envisaged to cover non-debt securities statistics (equities) and be finalized by the end of calendar 2011. The BIS aims to complete the initial improvement of its quarterly securities data collection for all G-20 economies before end-August 2010. It intends to further expand its securities database based on the conceptual frameworks developed in Part 1 and Part 2 of the <i>Handbook</i> . |

| <b>International Network Connections</b> |  |   |  |
|--|--|---|--|
| 8.                                       | The FSB to investigate the possibility of improved collection and sharing of information on linkages between individual financial institutions, including through supervisory college arrangements and the information exchange being considered for crisis management planning. This work must take due account of the important confidentiality and legal issues that are raised, and existing information sharing arrangements among supervisors.   | The FSB has set up a working group (covering recommendations 8 and 9) that is moving forward in three work streams: (i) identifying data needs in various key areas—micro prudential supervision, macro prudential oversight, and crisis management; (ii) mapping data sources to supply these needs, and (iii) reviewing the legal and confidentiality issues involved in the provision of data. | The FSB working group aims at producing a report and a draft template for systemically important global financial institutions for review by the FSB by the end of calendar 2010.  |
| 9.                                       | The FSB, in close consultation with the IMF, to convene relevant central banks, national supervisors, and other international financial institutions, to develop by end 2010 a common draft template for systemically important global financial institutions for the purpose of better understanding the exposures of these institutions to different financial sectors and national markets. This work should be undertaken in concert with related work on the systemic importance of financial institutions. Widespread consultation would be needed, and due account taken of confidentiality rules, before any reporting framework can be implemented. |   |  |
| 10.                                      | All G-20 economies are encouraged to participate in the IMF's Coordinated Portfolio Investment Survey (CPIS) and in the BIS's International Banking Statistics (IBS). The IMF and the BIS are encouraged to continue their work to improve the coverage of significant financial centers in the CPIS and IBS, respectively.  | Country participation in the IBS has continued to increase. The Committee on Global Financial Systems (CGFS) and the IMF Committee on Balance of Payments Statistics (BOPCOM) have set up working groups to investigate possible enhancements to the IBS and the CPIS, respectively.  | Both the BIS and IMF to continue working to increase country participation in their surveys, including from G-20 economies. CGFS and BOPCOM working groups to report back to their parent committees in the second half of calendar 2010 for decisions on possible enhancements. |

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| 11. | The BIS and the CGFS to consider, amongst other improvements, the separate identification of nonbank financial institutions in the consolidated banking data, as well as information required to track funding patterns in the international financial system. The IMF, in consultation with the IMF's Committee on Balance of Payments Statistics, to strive to enhance the frequency and timeliness of the CPIS data, and consider other possible enhancements, such as the institutional sector of the foreign debtor. |  |  |
| 12. | The IMF to continue to work with countries to increase the number of International Investment Position (IIP) reporting countries, as well as the quarterly reporting of IIP data. The <i>Balance of Payments and International Investment Position Manual</i> , sixth edition ( <i>BPM6</i> ) enhancements to the IIP should be adopted by G-20 economies as soon as feasible.  | In March 2010, the IMF Executive Board decided to prescribe for subscribers to the IMF's SDDS, after a four year transition period, quarterly reporting (from annual) of the IIP data, with a maximum lag of one quarter (quarterly timeliness). The working group set up by BOPCOM described above is considering ways of improving the availability of bilateral IIP data and accelerating implementation of the <i>BPM6</i> 's recommendations for enhancements, including the separate identification of nonbank financial institutions. | BOPCOM working groups to report back in the second half of calendar 2010. IMF staff to work with economies to implement the Executive Board decision on the SDDS by 2014. Guidance is to be provided in the upcoming <i>BPM6</i> Compilation Guide. IMF staff will encourage reporting by the G-20 economy that does not disseminate IIP as yet.   |
| 13. | The Interagency Group on Economic and Financial Statistics (IAG) to investigate the issue of monitoring and measuring cross-border, including foreign exchange derivative, exposures of nonfinancial, and financial, corporations with the intention of promoting reporting guidance and the dissemination of data.   | A working group has been created under the auspices of the IAG and led by the BIS. It has undertaken an initial review of existing methodological guidance and of data availability.   | In 2010, the BIS-led working group intends to bring together information on various datasets that shed light on the cross-border positions of non-bank financial corporations and non-financial corporations either from direct or indirect sources, and work on an issues paper on the concept of nationality /consolidation as compared to residency/location. This work will form the background for a workshop organized later in calendar 2010 (with the sponsorship of the Irving Fisher |



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| 14.   | The IAG consulting with the FSB to revisit the recommendation of the G-22 to examine the feasibility of developing a standardized template covering the international exposures of large nonbank financial institutions, drawing on the experience with the BIS's IBS data, other existing and prospective data sources, and consulting with relevant stakeholders.  |  | Committee) to assist in identifying the issues that may need to be addressed in specific methodological standards or guidelines, and in developing reporting templates.   |
| <b>Sectoral and Other Financial and Economic Datasets</b> |  |  |   |
| 15.   | The IAG, which includes all agencies represented in the Inter-Secretariat Working Group on National Accounts, to develop a strategy to promote the compilation and dissemination of the balance sheet approach (BSA), flow of funds, and sectoral data more generally, starting with the G-20 economies. Data on nonbank financial institutions should be a particular priority. The experience of the ECB and Eurostat within Europe and the OECD should be drawn upon. In the medium term, including more sectoral balance sheet data in the data categories of the Special Data Dissemination Standard could be considered. | A working group has been created under the auspices of the IAG and led by the IMF. The IMF has created an inventory of existing practices with regard to the reporting of data to international agencies or otherwise disseminating sectoral data. | A conference of experts is planned in early 2011 to share experiences, discuss the gaps, and seek to agree upon some minimum reporting needs for G-20 economies, drawing upon the existing frameworks of the IMF and the OECD. The work program for the Eighth Review of the IMF's Data Standards Initiatives, provisionally scheduled for the first half of 2012, includes the possibility of strengthening the SDDS with regard to integrated sectoral balance sheet information.   |
| 16.   | As the recommended improvements to data sources and categories are implemented, statistical experts to seek to compile distributional information (such as ranges and quartile information) alongside aggregate figures, wherever this is relevant. The IAG is encouraged to promote production and dissemination of these data in a frequent and timely manner. The OECD is encouraged to continue in its efforts to link national accounts data with distributional information.   | The OECD and Eurostat have set up task forces to define common international methodology and implement pilot studies.  | During 2010 and 2011, the OECD and Eurostat task forces will develop the methodology for matching survey data with national accounts aggregates and pilot studies will be conducted in individual countries. It is expected that a first set of methodological studies and estimates will be completed in the course of 2012. Once methodologies are in place, periodic monitoring of the distribution of household economic resources (income, consumption, and wealth) within the System of National Accounts could be envisaged. |

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| 17.   | The IMF to promote timely and cross-country standardized and comparable government finance data based on the accepted international standard, the <i>Government Finance Statistics Manual 2001</i> .  | In March 2010, the IMF Executive Board decided to adopt a standardized presentation of fiscal data following the <i>Government Finance Statistics Manual, 2001 (GFSM 2001)</i> , with staff reports to use this format by May 2011. In addition, the fiscal data of the IMF's World Economic Outlook (WEO) now follows the <i>GFSM 2001</i> format.   | The IMF staff to work with countries to promote the <i>GFSM 2001</i> consistent with the IMF Executive Board decision.   |
| 18.   | The World Bank, in coordination with the IMF, and consulting with the Inter-Agency Task Force on Finance Statistics, to launch the public sector debt database in 2010.   | In March 2010, the Task Force on Finance Statistics (TFFS) endorsed the proposal for the World Bank to gather quarterly public sector debt data from developing and emerging market countries.  | The website to be launched by end-calendar year 2010.  |
| 19.   | The Inter-Secretariat Working Group on Price Statistics to complete the planned handbook on real estate price indices. The BIS and member central banks to investigate dissemination on the BIS website of publicly available data on real estate prices. The IAG to consider including real estate prices (residential and commercial) in the Principal Global Indicators (PGI) website. | Under the auspice of the Inter-Secretariat Working Group on Price Statistics (IWGPS), and led by Eurostat, a first draft of the Handbook on Residential Property Price Indices is expected to be posted for comment in mid-calendar 2010 with, following further international consultations, a final draft planned for mid-calendar 2011. In February 2010, the BIS solicited authorization from the central banks reporting residential property price indices to allow their dissemination on the BIS website. | The IWGPS to complete its work on schedule. Provided the BIS receive authorization from its member central banks, data on residential property price indices will be disseminated on the BIS website. They will then be made available through the PGI website later in 2010.  |
| <b>Communication of Official Statistics</b> |   |   |  |
| 20.   | The G-20 economies to support enhancement of the Principal Global Indicators website, and close the gaps in the availability of their national data. The IAG should consider making longer runs of historical data available.   | The PGI website was significantly enhanced in December 2009 and offers access to an on-line database with user-selected longer runs of historical data presented in comparable units of measure (growth rates, index numbers, and/or percent of GDP). During March 2010, the PGI website was accessed by visitors from over 150 countries.  | During 2010, the high priorities for enhancing the PGI website include: (i) expanding the data coverage and timeliness of the PGI website by the G-20 economies; (ii) encouraging use of existing systems to report data to international organizations (such as the IMF Integrated Correspondence System), and (iii) increasing the world-wide sharing of data disseminated by G-20 economies by promoting the adoption of SDMX for the dissemination of official statistics. |

## The Financial Crisis and Information Gaps: Progress Report Action Plans and Timetables

### INTRODUCTION

1. For the meeting of the G-20 finance ministers and central bank governors in St. Andrews, Scotland, in November 2009, Financial Stability Board (FSB) Secretariat and International Monetary Fund (IMF) staff presented a report on “*The Financial Crisis and Information Gaps*.”<sup>1</sup> The report, which contained 20 recommendations for closing information gaps, was endorsed at the meeting, with a request that FSB and IMF staff report back by June 2010 on progress, with a concrete plan of action, including a timetable, to address each of the outstanding recommendations (Recommendation # 1).
2. The present report responds to this request. It describes progress so far, and priorities and constraints going forward, and notes institutional arrangements for guiding and monitoring progress. Moreover, two-page progress reports for each recommendation providing more details on action plans and timetables are presented in the Annex.
3. To ensure that the action plans and timetables were informed by a broad range of expertise, the IMF Statistics Department (STA) and the FSB Secretariat organized a senior official’s conference in Basel in April 2010, hosted by the Bank for International Settlements (BIS). The material from the conference, including a summary of key points made, is available at [www.imf.org/external/np/seminars/eng/2010/infogaps/index.htm](http://www.imf.org/external/np/seminars/eng/2010/infogaps/index.htm). The work has also benefited from consultations and coordination among the members of the Inter-Agency Group on Economic and Financial Statistics (IAG).<sup>2</sup>

### I. PROGRESS MADE SINCE NOVEMBER 2009

4. The November 2009 report provides a thematic framework for closing information gaps highlighted during the global financial crisis. The 20 recommendations are grouped under four themes (build-up of risk in the financial sector, cross-border financial linkages, vulnerability of domestic economies to shocks, and improving communication of official statistics).
5. Work has started to address all the recommendations. In some cases, closing the gaps raises significant challenges. In others, the identified gaps relate to existing initiatives where the conceptual framework for capturing data is well developed. Considerable progress has been made in several recommendations. Going forward, prioritization, coordination, and cooperation among international agencies and G-20 economies remains essential to a successful implementation of the work program.

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<sup>1</sup> The G-20 November 2009 Report is available at <http://www.imf.org/external/np/g20/pdf/102909.pdf>.

<sup>2</sup> The members of the IAG are the Bank for International Settlements, the European Central Bank, Eurostat, the IMF (chair), the Organization for Economic Co-operation and Development, the United Nations, and the World Bank.

6. Figure 1 presents an overview of the 20 recommendations, organized in a matrix form. The rows reflect the four themes noted above and the columns reflect their status in terms of whether reporting/conceptual frameworks exist or need to be developed. This is a broad representation to provide a stylized overview of the present situation.

**Figure 1: Overview of the 20 Recommendations**

|   | <b>Conceptual/statistical framework needs development</b>  | <b>Conceptual/statistical frameworks exist and ongoing collection needs enhancement</b>   |
|---|--|---|
| <b>Build-up of risk in the financial sector</b>       | # 3 (Tail risk in the financial system and variations in distributions of, and concentrations in, activity)<br># 4 (Aggregate Leverage and Maturity Mismatches)<br># 6 (Structured products) | # 2 (Financial Soundness Indicators (FSIs))<br># 5 (Credit Default Swaps)<br># 7 (Securities data)  |
| <b>Cross-border financial linkages</b>                | # 8 and # 9 (Global network connections and systemically important global financial institutions)<br># 13 and # 14 (Financial and Nonfinancial Corporations cross-border exposures)          | # 10 and # 11 (International Banking Statistics (IBS) and the Coordinated Portfolio Investment Survey (CPIS))<br># 12 (International Investment Position (IIP)) |
| <b>Vulnerability of domestic economies to shocks</b>  | # 16 (Distributional Information)  | # 15 (Sectoral Accounts)<br># 17 (Government Finance Statistics)<br># 18 (Public Sector Debt)<br># 19 (Real Estate Prices)                                      |
| <b>Improving communication of official statistics</b> |  | # 20 (Principal Global Indicators)  |

7. This report is organized along the columns and rows as presented in Figure 1.

## A. Conceptual/Statistical Framework Needs Development

8. Some of the most challenging recommendations are also among the most important for improving financial stability analysis and macro-policy decision making more broadly. These include gaining a better understanding of global financial networks.

9. These important recommendations require considerable analytical input, as the crisis has highlighted complexities that may prove difficult to measure. Cooperation across disciplines—financial stability, supervisory, statistical, and coordination with standard setters, notably the Basel Committee on Banking Supervision, as well as high level support are needed to deliver a successful outcome. There may also be some need for strengthening legal frameworks for data collection in some economies.

### *Build-up of risk in the financial sector*

10. The build-up of leverage and maturity mismatches within the financial system were identified at an early stage as major contributing factors to the crisis (recommendation # 4). Further progress needs to be made on the conceptual basis for measurement, and on which data gaps would be the most critical to fill. Given the importance of monitoring leverage and maturity mismatches to prevent future crises, addressing the gaps is a high priority.

11. Data gaps in this area were already noted in 2009 by the report by the Financial Stability Forum (the predecessor of the FSB) on “*Addressing Procyclicality in the Financial System*” and by the IMF Staff Position Note on “*Addressing Information Gaps*.” The relevance of these factors in cross-border funding markets was also highlighted in a recent report by the Committee on Global Financial Systems (CGFS).<sup>3</sup> For leverage, in particular, a recent study by the McKinsey Global Institute concluded that policymakers should work toward developing an international system for tracking leverage at a granular sector level across countries and over time.<sup>4</sup>

12. Further, the need to look beyond aggregated data and improve the identification of tail risks (as well as variations in distributions of, and concentrations in, activity) was another lesson drawn by financial stability analysts from the crisis. This is reflected in Recommendation # 3.

13. The IMF and the BIS staff are working closely on addressing these gaps. The BIS has made significant recent advances in the analysis of maturity mismatches (“funding

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<sup>3</sup> The Functioning and Resilience of Cross Border Funding Markets, CGFS paper no. 37, March 2010.

<sup>4</sup> McKinsey Global Institute, “Debt and Deleveraging: The Global Credit Bubble and its Economic Consequences,” January 2010.

gaps”) for the banking sector on the basis of its IBS data.<sup>5</sup> But pursuing this work further is likely to involve longer-term projects, as the analytical and data challenges involved remain significant. For instance, in practice, the measurement of leverage and maturity mismatches is not necessarily conceptually uniform across sectors, institutions or markets and, therefore, it may prove difficult (or in fact misleading) to devise aggregate measures across sectors. To take this work forward, the IMF held a conference on these topics in late May 2010, which was attended by academics, private sector representatives, and public sector officials, while the BIS is looking to further enhance the work described above on “funding gaps” for the banking sector, drawing on the IBS data. In time for the June 2011 report, IMF and BIS staff intend to complete their work on developing measures of aggregate leverage and maturity mismatches in the financial system.

14. In April 2010, the International Organization of Securities Commissions (IOSCO) released a report on Asset Backed Securities Disclosure Principles<sup>6</sup> to guide securities regulators who are developing or reviewing their regulatory disclosure regimes for public offerings and listings of asset-backed securities (Recommendation # 6). Later this year, IOSCO may also consider further work to develop disclosure principles for more complicated structured products, such as collateralized debt obligations.

### ***Cross-border financial linkages***

15. In terms of priorities, the improved understanding of global financial networks and the role of systemically important global financial institutions (SIGFIs) are considered by the financial stability experts consulted to be particularly important. Although financial network analysis is increasingly recognized as a priority,<sup>7</sup> the limited availability of data is a major challenge to analysts.

16. In this connection, two recommendations (# 8 and # 9) cover the possibility of improved collection and sharing of information on linkages between individual financial institutions, and the development by end-calendar 2010 of a common draft template for SIGFIs.<sup>8</sup> These recommendations pose significant analytical and legal issues. There is a

<sup>5</sup> For details, see McGuire, P. and G. von Peter (2009), “The US dollar shortage in global banking and the international policy response,” BIS Working Papers, no 291, October.

<sup>6</sup> <http://www.iosco.org/news>.

<sup>7</sup> For instance, a good description of this work was provided to the IMF Executive Board in the March 2010 paper on *Financial Sector Surveillance and the Mandate of the Fund* by IMF staff (available at <http://www.imf.org/external/np/pp/eng/2010/031910.pdf>). Other relevant work includes *New Financial Order: Recommendations preparing G 20-London, April 2, 2009*. O. Issing, J. Asmussen, J.P Krahenen, K. Regling, J. Weidmann, W. White; *Rethinking the Financial Network*, Andrew Haldane, Bank of England, May 5, 2009; *Recent advances in modeling systemic risk using network analysis*, Introductory remarks by Gertrude Tumpel-Gugerell, ECB workshop, October 5, 2009; and in the IMF Working Paper 10/105, *Cross-Border Financial Surveillance: A Network Perspective*, by Marco Espinosa and Juan Solé.

<sup>8</sup> Also, relevant for this work is the report on *Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations* produced by the staff of the IMF, BIS and

need to develop a conceptual framework and identify the specific data needs before any additional collection of data can be initiated. In this connection, the FSB has set up a working group to take work related to these recommendations forward, including identifying the data needs, map data sources, and review the legal and confidentiality issues involved in the provision of data by individual institutions. This work could apply to both systemically important bank and non-bank financial institutions.

17. There is also a lack of information on the cross-border exposures of large nonbank financial institutions, despite their increasing importance in the international financial markets as highlighted by Recommendation # 14. Further, for policy makers to better understand the risks that entities in their economy face, and more broadly understand the distribution of risks in the global economy, the need for data on corporations (both financial and nonfinancial) on a consolidated basis (in addition to the usual residency-based perspective) was highlighted by the crisis (Recommendation # 13).<sup>9</sup> For instance, in some economies, locally-owned nonfinancial corporations were using offshore entities to borrow funds. This activity was not known to domestic policy makers, until risks crystallized and these loans came back on the corporations' balance sheets when the crisis intensified.

18. These recommendations raise conceptual and definitional challenges for economic and financial statisticians, not least to determine how best to adapt (or link) data compiled on a residency basis to (or with) information on a group consolidated basis.<sup>10</sup> In particular, traditional economic and financial statistics, such as national accounts, are compiled based on the residence of the entity (residency criteria).

19. A working group of the IAG, led by the BIS, has been created to take forward the work on these recommendations (# 13 and # 14). The working group intends to carry out a stock-take of existing data collection initiatives, both with respect to direct sources as well as to indirect sources, i.e., those where these sectors might be identified as counterparties. Further, after a stocktaking of available methodologies for measuring international exposures of financial and non-financial corporations, the plan is to work on an issues paper on the concept of consolidation as compared to residency/location and

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FSB in response a request made by the G-20 Leaders in April 2009 to develop guidance for national authorities to assess the systemic importance of financial institutions, markets and instruments. The report is available at <http://www.imf.org/external/np/g20/pdf/100109.pdf>.

<sup>9</sup> For instance, in his opening remarks to the high-level conference in April 2010, Hervé Hannoun (Deputy General Manager, BIS) noted that the inability to “see” the consolidated balance sheet, either at the individual bank level or at the headquarter country level, could mean that the build-up of stresses at the systemic level are not monitored (<http://www.bis.org/speeches/sp100419.htm>).

<sup>10</sup> The issue of consolidation of enterprise groups is on the research agenda of the System of National Accounts. See page 604 of the *System of National Accounts, 2008*. Available at: <http://unstats.un.org/unsd/nationalaccount/SNA2008.pdf>.

organize a workshop to help identify more clearly the methodological and data compilation guidance needed. For Recommendation # 14 this includes the need to develop a standardized template covering the cross-border exposures of large nonbank financial institutions.

20. Addressing the above gaps is of a high priority given the need to better understand network connections in an increasingly globalized world. However, the technical and resource challenges should not be underestimated, most particularly for the gaps related to SIGFIs being addressed by the FSB working group. On these, close consultation would be needed with the intermediaries, who themselves should benefit substantially from improved data on network connections, as a result of an improved understanding of how their business activities relate to the aggregate picture. Given the significant resource implications of collecting and—more importantly—making efficient use of all these additional data, this effort will remain focused on what is necessary to deliver concrete improvements.

### ***Vulnerability of domestic economies to shocks***

21. The lack of information on how income, consumption, and wealth are distributed within sectors, particularly households (as reflected in Recommendation # 16) hampered the identification of vulnerabilities developing in the domestic economy. The OECD, with Eurostat, are leading this work to rectify this gap, and are looking to define common international methodology and implementing pilot studies.

### **B. Conceptual/statistical Frameworks Exist and Ongoing Collection Needs Enhancement**

22. The November 2009 Report provided significant impetus for further action for those recommendations for which conceptual/statistical frameworks exist and there is need to strengthen ongoing collection. For several of the 20 recommendations, international bodies have already taken a number of actions that support their implementation, including the IMF with regard to FSIs (# 2), IIP (# 12), and Government Finance Statistics (# 17), and the BIS (via the CGFS) with regard to Credit Default Swaps (# 5). For other significant recommendations progress has been made in international working groups and task forces (securities (# 7), public sector debt (# 18), real estate prices (# 19), and the Principal Global Indicators (PGI) website (# 20)).

23. In March 2010, the IMF Executive Board took a number of decisions related to recommendations # 2, # 12, and # 17. In particular, the IMF Executive Board decided to enhance the Special Data Dissemination Standard (SDDS) by<sup>11</sup>:

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<sup>11</sup> IMF Public Information Notice (PIN) 10/41 of March 23, 2010.



- including seven FSIs into the SDDS on an “encouraged” basis (that is, not legally “prescribed” under the SDDS)—to strengthen information about the financial sector and better detect system risks (Recommendation # 2); and
- moving to quarterly reporting (from annual) of the IIP data, with a maximum lag of one quarter (quarterly timeliness), on a “prescribed” basis, after a four year transition period—in order to better understand cross-border linkages (Recommendation # 12).<sup>12</sup>

24. Also in March 2010, the IMF Executive Board approved a phased migration strategy for implementing the *Government Finance Statistics Manual 2001 (GFSM 2001)* as the standard for IMF fiscal data (Recommendation # 17).<sup>13</sup> This will contribute to better and more comparable fiscal data, including on government assets and liabilities.

25. In June 2009 the CGFS approved changes to Credit Risk Transfer Statistics (Recommendation # 5) that include improved information on counterparty risk and exposure to various reference entities and expanding the reporting to collect details on instruments such as index CDS contracts <http://www.bis.org/publ/cgfs35.htm>). Subsequently agreements have been reached by the BIS with the reporting central banks to report these new datasets, with implementation phased in 2 steps, for June 2010 and June 2011 data.

26. Progress has been made also to enhance security statistics (Recommendation # 7) both conceptually through the BIS-ECB-IMF *Handbook on Securities Statistics* and through the collection of data by the BIS. The BIS has solicited authorization from a wider range of central banks to report residential property price indices for dissemination on the BIS website (Recommendation # 19).

27. The public sector debt database (Recommendation # 18) is well advanced to be launched by end-calendar 2010, following the Task Force on Finance Statistics (TFFS)<sup>14</sup> endorsement of the proposal for the World Bank to gather quarterly public sector debt data from developing and emerging market countries. The PGI website (Recommendation # 20) of economic and financial data for G-20 economies, initially released by the IAG in April 2009, was significantly enhanced in December 2009 and is attracting world-wide attention.

28. The global financial crisis reinforced the importance of integrated economic data, both stocks and flows, so that the impact of developments in one sector of the economy

<sup>12</sup> It was also decided to add a simplified table on countries’ external debt by remaining maturity (on an encouraged” basis) to better monitor the vulnerability of domestic economies to shocks.

<sup>13</sup> See <http://www.imf.org/external/pp/longres.aspx?id=4431>.

<sup>14</sup> The TFFS consists of representatives of the BIS, Commonwealth Secretariat, ECB, Eurostat, IMF (Chair), OECD, Paris Club, UNCTAD and the World Bank.

on other sectors, and flows such as valuation changes, can be reliably analyzed. Strengthening sectoral information is reflected in Recommendation # 15. The IMF is currently creating an inventory of existing practices with the intent of conducting an expert group meeting in early 2011, to share experiences, discuss the gaps, and identify common templates to take this work forward.

29. Two recommendations deserve particular attention because of their importance in helping to understand cross-border financial networks (recommendations # 10 and # 11). These recommendations build on the existing initiatives of the quarterly BIS IBS and the annual IMF CPIS, which provide data on cross-border banking transactions and portfolio debt and equity positions respectively.<sup>15</sup>

30. These data sets help track financial transactions and/or positions on a bilateral basis. In addition to enhancements regarding country coverage, the CGFS and the IMF Balance of Payments Statistics Committee have created working groups to study other enhancements (such as the separate identification of nonbank financial institutions in the consolidated banking data, as well as information required to better track funding patterns and maturity mismatches in the international financial system in the case of the BIS (also relevant for Recommendation # 4); and, the enhancement of the frequency and timeliness of the CPIS data and the identification of the institutional sector of the foreign debtor in the case of the IMF). These working groups are expected to give careful consideration to the benefits and the costs of enhancements and report to their parent committees in the second half of calendar 2010.

31. The involvement of all the G-20 economies in these two long-standing collections is fundamental given their relevance for understanding cross-border financial flows and positions. In particular, there are positive externalities that flow to other economies through mirror data that can be compiled from the counterpart information supplied. In this regard, the IMF and the BIS continue to work to increase country participation in the CPIS, and the IBS, respectively.

## **II. CHALLENGES AND INSTITUTIONAL ARRANGEMENTS**

32. At the senior officials' conference in Basel, a number of challenges were identified. Given the different levels of statistical development among the G-20 economies and resource constraints, flexibility will be needed in the timetables for implementation. The legal framework for data collection might need to be strengthened in some economies. Moreover, to close all the gaps identified in these 20 recommendations, additional resources are likely to be required for statistical functions. Finance Ministers and Central Bank Governors are encouraged to support an increase in human and financial resources to address data gaps revealed by the global financial crisis.

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<sup>15</sup> The IMF has also conducted a Coordinated Direct Investment Survey with a reference date of end-2009. First results are expected towards the end of calendar 2010.

33. The IMF staff plan to visit individual G-20 economies to discuss reporting practices and resource implications (including for respondents) in implementing the work plans. They will discuss with national compilers the priorities that have emerged.

34. To successfully implement the work program, an effective coordination of the work at the international level is needed, not least to leverage resources and minimize costs. The G-20 November 2009 report set out the institutional structure for guiding and monitoring progress. Lead agencies have been appointed to take responsibility for individual recommendations. The IMF staff and FSB Secretariat have cooperated closely in overseeing the whole program, and shall provide annual updates on progress to the G-20 finance ministers and central bank governors, as agreed in November 2009. In particular, the IAG and other international statistical groups have supported the process. Moreover, the IMF staff and FSB Secretariat plan to conduct a further meeting of senior officials in the first half of 2011 to assess further progress and next steps.

### **III. WORK PROGRAM**

35. The table following the Executive Summary provides a summary of progress, and the proposed work program going forward for implementing the G-20 initiatives. As noted above detailed two-page notes on each recommendation that provide further detail are presented in the Annex.

36. *The report asks for the endorsement by the G-20 finance ministers and central bank governors of these action plans and timetables.*

## Annex: Detailed Action Plans and Timetables

### Recommendation 2: Financial Soundness Indicators

*The IMF to work on increasing the number of countries disseminating Financial Soundness Indicators (FSIs)—including expanding country coverage to encompass all G-20 members—and on other improvements to the FSI website, including preferably quarterly reporting. FSI list to be reviewed.*

**Lead agency:** IMF

#### I. MAJOR RECENT DEVELOPMENTS

In July 2009, the IMF launched a website to disseminate Financial Soundness Indicators data for IMF member countries. Currently, 49 countries report FSIs for publication on the website: <http://fsi.imf.org/FSIHome.aspx#Group>. Countries choose to report various combinations of the 12 core FSIs (for deposit takers) and 28 encouraged FSIs (including 13 for deposit takers).<sup>16</sup> Four G-20 economies do not report FSIs for dissemination on the IMF website.

Work on updating the methodology in the *Compilation Guide on FSIs (Guide)* has involved close consultation with the FSI Reference Group of Experts, composed of 17 international and regional agencies, with amendments posted on the IMF website in July 2008. Also, training courses on FSIs have been conducted for IMF member countries' compilers to promote the use of the *Guide* as a benchmark.

#### II. CURRENT POSITION

After the launch of the FSI website in July 2009, the IMF Statistics Department (STA) is giving a high priority to streamlining the FSI template in order to reduce the burden on the reporting countries as well as to promote countries' participation in the regular submission of FSIs to the IMF. Further enhancements to the FSI website are also under way to make it more user-friendly and capable of accepting queries created by users.

Following consultation with subscribers and capital market participants, the IMF Executive Board agreed to include seven FSIs in the IMF's Special Data Dissemination Standard (SDDS) on an encouraged basis.<sup>17</sup> This should support reporting of FSIs. Further, work is in progress to integrate the regularly reported FSI data into the IMF's *Global Financial Stability*

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<sup>16</sup> Following an initial consultative meeting of experts and a survey of member countries, the IMF Executive Board endorsed a list of core and encouraged Financial Soundness Indicators (FSIs) in June 2001: <http://www.imf.org/external/np/sta/fsi/eng/fsi.htm>.

<sup>17</sup> These FSIs are regulatory tier 1 capital to risk-weighted assets, regulatory tier 1 capital to assets, nonperforming loans net of provisions to capital, nonperforming loans to total gross loans, return on assets, liquid assets to short-term liabilities, and net open position in foreign exchange to capital.

*Report (GFSR)*. This project is slated to be completed in early 2011 (with the April 2011 issue of the *GFSR*).

### **III. WAY FORWARD**

In response to this recommendation, one of the objectives of the FSI project is to increase the number of countries reporting FSIs for dissemination on the IMF website, and encourage quarterly reporting. The recent steps taken and described above—streamlined reporting, inclusion of FSIs in the SDDS on an encouraged basis, and regular reporting of data in the *GFSR*—should support this process. In particular, IMF staff will work in implementing the noted Executive Board decision on the SDDS; expanding the use of FSIs in other Fund publications, such as Financial Sector Assessment Program (FSAP) reports, and the IMF's Vulnerability Exercise; and increasing the reporting of such indicators in staff reports. A number of new countries will be invited each year to participate in the regular submission of FSIs to STA, and in particular, the IMF is to work to encourage the remaining G-20 economies that currently do not report FSIs for dissemination on the IMF website to do so.

The recommendation calls also to review and extend the list of FSIs. In the second half of 2011, when ongoing discussions on regulatory reforms are expected to be settled, the IMF will organize a meeting of the FSI Reference Group of Experts as well as other international agencies and national authorities to discuss possible changes needed in the list of FSIs and the methodology for compiling them. The changes are envisaged to include developing new FSIs for sectors other than deposit takers, such as other financial corporations, nonfinancial corporations, and households. This work will also aim to improve cross-country comparability of FSIs and encourage continued efforts by the IMF and other international agencies to harmonize the methodologies of data compilation and reporting.

The IMF staff is to report back to the IMF Executive Board on the work on FSIs at the Eighth Review of the IMF's Data Standards Initiatives, provisionally scheduled for the first half of 2012.

### **Recommendation 3: Tail Risks in the Financial System and Variation in Distributions of, and Concentrations in, Activity**

*In consultation with national authorities, and drawing on the Financial Soundness Indicators Compilation Guide, the IMF to investigate, develop and encourage implementation of standard measures that can provide information on tail risks, concentrations, variations in distributions, and the volatility of indicators over time.*

**Lead agency:** IMF

#### **I. MAJOR RECENT DEVELOPMENTS**

While there is no unequivocal and generally accepted definition of tail risk as it applies to financial stability, a working definition commonly used by researchers and practitioners is that “tail risk is the risk of large unexpected losses (low probability but large impact) for the financial sector as a whole”. As such, this definition is very close to the concept of systemic risk, for which there exist a number of techniques and modeling approaches that have been recently developed.

In response to this recommendation, work has proceeded in taking stock of existing conceptual frameworks and models. The Table below provides an illustrative taxonomy of some of these models. They can be divided according to the type of data that they rely on: (i) accounting data, (ii) interbank exposures data, (iii) price and market data, or (iv) a combination of the above.

Going forward, data requirements to measure tail and systemic risks should be guided by advances on the analytical side. Therefore, agreement on measures of tail and systemic risks need to precede calls for collecting additional specific statistics.

Regarding measures of concentration and dispersion, these are described in the IMF’s *Financial Soundness Compilation Guide*, Chapter 15. It should be noted, however, that data on measures of concentration and dispersion are not currently collected under the existing IMF data collection framework.

#### **II. CURRENT POSITION**

Progress in this area faces the following critical challenges:

- Making definitions of tail and systemic risks operationally relevant: it is critical to translate these definitions into measures for which data are relatively easy to collect and which are monitorable on an ongoing basis for macro prudential surveillance.

- The definitions of tail and systemic risks must also be flexible enough to be able to capture new tail and systemic risks as they emerge in the future.

### **III. WAY FORWARD**

Given the complexity of the issues and the number of stakeholders involved, the IMF's Monetary and Capital Markets Department (MCM) held a conference on these topics in late May 2010 (after this report was finalized) which was attended by academics, financial sector representatives, and public sector officials at the Fund's Headquarters in May 2010. The priorities of the conference are to:

- Explore whether there is a consensus among supervisors, financial sector representatives, and academics regarding an operational definition of tail and systemic risks.
- Explore potential ways to develop operational measures of tail risks, and to review different approaches to measuring such risks.
- Identify common elements and elaborate proposals on a possible common approach.
- Identify the needs for additional information to compile measures of tail risks.
- Discuss the feasibility of devising practical ways to share relevant information among key stakeholders while satisfying the main confidentiality concerns of the parties involved.

Therefore, work on the identification and measurement of tail and systemic risks is likely to extend over a period of time. After the conference, a summary report highlighting potential next steps will be circulated to interested parties for consultation. Based on this feedback, new concrete steps will be agreed upon.

The longer-term objective is to develop conceptual guidance in the first half of 2011 for discussion at the FSI Reference Group of Experts, adoption into the FSI methodology, and eventually data collection.

## Taxonomy of Representative Financial Tail-Risk Models

|  | <i>Accounting-based</i>   | <i>Inter-bank accounting exposures</i>  | <i>Market-based</i>   |  |  |
|--|---|---|---|--|--|
|  | <b>Accounting Balance Sheet</b>   | <b>Network Simulations</b>  | <b>Equity Joint Tail Risk</b>   | <b>CDS CoRisk Analysis</b>   | <b>CDS-PoD Distress Dependence</b>   |
| <b>Implemented/Calibrated using Information from</b> | Accounting balance sheet data for institution and system  | Interbank exposures data  | Equity market-based joint tail risk indicators from equity returns or higher moments of equity options  | 5-year individual CDS spreads of financial institutions.   | Individual CDS-PoDs 5  |
| <b>Outputs</b>                                       | (i) Provides static accounting-based financial stability indicators, (ii) quantifies changes in book assets and capital   | (i) Provides metric on domino effect induced by alternative distress events, (ii) Identifies systemic linkages and vulnerable countries/institutions, (iii) Quantifies potential capital losses at country/institutional level; and (iv) can track potential contagion paths. | (i) Provides metric of time varying non-linear measures of dependence (i.e. correlation in the presence of fat-tailed distributions), (ii) Provides probability measure of joint co-movement in equity tail events over time.                   | (i) Estimates of unconditional and conditional credit risk measures for different quantiles (or 'risk regimes'), and (ii) estimates of the effect on conditional credit risk induced by 'source' institutions on 'locus' institutions during stress regimes. | (i) Recovers multivariate density and thus common distress in the system: JPoD, BSI; (ii) DiDe; and (iii) Probability of cascade effects triggered by particular FI.                           |
| <b>Advantages</b>                                    | (i) Data widely available   | (i) Allows identification of most systemic and vulnerable institutions within a system, and (ii) can be used to elaborate "risk maps" of contagion effects.   | (i) Captures effects of direct and indirect linkages in changes in equity between financial institutions, as well as the regime-dependent behavior, (ii) Can capture spill-overs between financial institutions, markets, and between countries | (i) captures institutions' co-dependence risk from direct and indirect linkages, (ii) can be used to elaborate "risk maps"   | (i) Able to use other PoDs; (ii) Multiple outputs; (iii) Includes linear and non-linear dependence; and (iv) Endogenous time-varying distress dependence                                       |
| <b>Shortcomings</b>                                  | (i) static backward-looking indicator; (ii) does not account for probability of default; (iii) difficult issues in proper aggregation and correlation methodologies | (i) Requires data on inter-institution exposures, and (ii) static modeling of institutional behavior.   | (i) Requires liquid and frequently traded equity price data, and (ii) if the model inputs use equity option information it requires a set of liquid equity option prices at different strike prices.  | Usefulness is undermined by factors that affect market efficiency  | (i) CDS may overstates objective default probabilities; (ii) uncertainties on what recovery rate to assume to get default probability; (iii) CDS affected by presence of government guarantees |
| <b>Examples/References</b>                           | Cihak (2007) <sup>1</sup>   | Bank of England (WP 383), GFSR (2009) <sup>3</sup> Espinosa, Marco, and Sole, IMF, WP 10/105, (2010)  | Jobst (2007), Gray and Jobst (2009) <sup>4</sup>  | GFSR (2009) <sup>2</sup>   | Segoviano and Goodhart (2009) <sup>2</sup>   |

Notes: BSI = bank stability index; CCA = contingent claims approach; CDS = credit default swap; DiDe = distress dependence matrix; EDF = expected default frequency; JPoD = joint probability of default.

<sup>1</sup> IMF Working Paper No. 07/59, 2007, (Washington: IMF).

<sup>2</sup> IMF Working Paper No. 09/4, 2009, (Washington: IMF).

<sup>3</sup> *Global Financial Stability Report*, World Economic and Financial Surveys, April, (Washington: IMF). Chapter 2, "Assessing the Systemic Implications of Financial Linkages."

<sup>4</sup> Gray, D.F., and A. A. Jobst, 2010, "New Directions in Financial Sector and Sovereign Risk Management, *Journal of Investment Management*, Vol. 8, No. 1, pp. 23–38.



## **Recommendation 4: Aggregate Leverage and Maturity Mismatches**

*Further investigation of the measures of system-wide macroprudential risk to be undertaken by the international community. As a first step, the BIS and the IMF should complete their work on developing measures of aggregate leverage and maturity mismatches in the financial system, drawing on inputs from the Committee on the Global Financial System (CGFS) and the Basel Committee on Banking Supervision (BCBS).*

**Lead agencies:** BIS and IMF

### **I. MAJOR RECENT DEVELOPMENTS**

The BIS, both directly and indirectly via its Standing Committees, has done a lot of work on systemic risk analysis over the years. Drawing on the BIS's International Banking Statistics (IBS) data, the BIS has made significant advances in developing measures of maturity mismatches ("funding gaps") on banks' international balance sheets.<sup>18</sup> This work represents the first consistent measures of maturity mismatch for the core financial system. One of the findings is that maturity mismatches in the banking system seem to build up slowly over an extended period of time. This suggests that they can in fact be tracked, given the availability of suitable indicators (such as the ones based on the IBS).

However, the BIS's IBS-based work also illustrates the limits of analytical exercises based on large-scale reporting frameworks. First, coverage is restricted to banking entities and, for those, only their international activities. Second, only on-balance sheet items are covered (abstracting from certain adjustments made to generate ultimate risk positions; some other derivatives positions can in principle be inferred from on-balance sheet data). Third, interlinkages are known only at the sectoral level. This limits the usefulness of this and other aggregate datasets in dealing with system-wide leverage, particularly outside the banking sector.<sup>19</sup>

The IMF has started work to assess the viability and desirability of a framework for monitoring leverage and maturity mismatches at the sectoral level. This approach complements more aggregate, model-based approaches to macroprudential risk measurement. Severe information gaps among some of the most leveraged sectors of the financial system have been identified. Thus, by design, the IMF intends to focus on developing leverage and maturity mismatch indicators for sectors where such indicators do not exist or where data availability is extremely sparse. These sectors would include hedge funds, components of the shadow banking system (e.g., money and repo markets), off-

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<sup>18</sup> For details on the methodology, see McGuire, P. and G. von Peter (2009), "The US dollar shortage in global banking and the international policy response", BIS Working Papers, no 291, October.

<sup>19</sup> In order to be truly meaningful for system-wide loss estimation purposes, leverage measures would need to capture the dynamic interactions of leveraged positions in cases where they are being unwound. This suggests a focus on analytical exercises that can take these interactions into account.

balance sheet activities, and derivatives, including their use by corporates and public sector institutions.

## II. CURRENT POSITION

The BIS' IBS data allow for an analysis of maturity mismatches in the international context, and relatively small enhancements could be made to improve these measures (this includes measures of on-balance sheet leverage). Going beyond this existing work, and hence beyond the IBS, would likely require additional data collection or extensions of the reporting perimeter of existing statistical datasets. It is unlikely, however, that extensions to aggregate datasets will reliably capture system-wide leverage. Alternative analytical frameworks for the measurement of system-wide leverage exist, but would require individual institution-level data to cover inter-linkages.<sup>20</sup> Possibilities in this context are being explored with regard to recommendations # 8 and # 9.

## III. WAY FORWARD

Taking into account ongoing work and in response to this recommendation, the IMF, with the participation of the BIS and the FSB, held a conference in May 2010 (after this report was finalized) to focus on operationalizing systemic risk measurements. The conference aimed to develop an intellectual consensus around conceptually sound measures for the sectors noted above. If such a consensus can be developed, the next steps would be to explore specific metrics, identify the data required to calculate them, and assess the desirability (e.g. cost/benefit) and feasibility of collecting relevant data.

In addition to its contribution to the IMF conference, the BIS intends to continue its current work on system-wide measures of risk. Key priorities include analytically-driven improvements of existing data sets (in particular, its IBS; see also Recommendation # 11), efforts to enhance indirect measures of leverage for systemically important institutions that embed inter-linkages, and regular dissemination of updates of existing measures.

IMF and BIS staff intend to complete their work on developing measures of aggregate leverage and maturity mismatches in the financial system, in time for the June 2011 report. The work will draw on the final version of the joint BCBS/CGFS working group report on systemic liquidity risk,<sup>21</sup> and any results from ongoing work on recommendations # 8 and # 9.

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<sup>20</sup> See, Huang, X., H. Zhou and H. Zhu (2009), "A framework for assessing the systemic risk of major financial institutions", BIS Working Papers, no 281, April.

<sup>21</sup> This working group was established in May 2009 to gather information on the pricing of liquidity risk by banks, to consider the usefulness of quantitative and price-based approaches to assessing system-wide liquidity risk, and to explore how the structure of funding markets influences liquidity risk and its pricing. The report is expected to be completed in June 2010.

## **Recommendation 5: Credit Default Swaps**

*The CGFS and the BIS to undertake further work in close cooperation with central banks and regulators on the coverage of statistics on the credit default swap markets for the purpose of improving understanding of risk transfers within this market.*

**Lead agency:** BIS

### **I. MAJOR RECENT DEVELOPMENTS**

The BIS has compiled and published data on credit default swaps (CDS) since 2005. These data are reported on a consolidated and semi-annual basis by the G-10 countries and Switzerland. In the early stage of the financial crisis significant gaps were revealed in statistics on credit risk transfer (CRT) instruments. The Committee on Global Financial Systems (CGFS), in September 2008, established a Working Group (chaired by the ECB) to review the CRT statistics and gain a better understanding of the structural changes in global CRT markets, as well as obtain better information on the transfer and ultimate distribution of credit risk.

In June 2009 the CGFS approved the recommendations of its Working Group on Credit Risk Transfer Statistics (see: <http://www.bis.org/publ/cgfs35.htm>) that are to be phased in 2 steps, in June 2010 and then in June 2011, both in the context of the regular semi-annual BIS Survey on over-the-counter (OTC) and CDS activity. These included improved information on counterparty risk and exposure to various reference entities and expanding the reporting to collect details on instruments such as index CDS contracts.

### **II. CURRENT POSITION**

Presently, aggregate G-10 data on CDS are published by the BIS, with a limited counterparty, instrument and maturity breakdown, in both total amounts outstanding and gross market values. From June 2010 data disseminated by the BIS will include data on central counterparties (CCPs), index CDS and a finer counterparty breakdown, including hedge funds and Special Purpose Vehicles (SPV). The first data should be released to the public by the end of October 2010.

From June 2011, the BIS semi-annual survey will be expanded to a regional counterparty breakdown as well as information on asset-backed securities and synthetic collateralized debt obligations, gross credit exposure, detailed rating category, and sector.

Agreements have been reached by the BIS with the reporting central banks to report these new datasets. The degree of granularity of the data released by the BIS will then be considerably increased.

### **III. WAY FORWARD**

The main task is to implement the agreements reached. Communication has started with the central banks on the modalities of the expansion of the reporting framework at end-June 2011. Details should be finalized in the coming months on time for the preparation of the new report by the main financial institutions (reporting dealers) active in the trading of these instruments.

## **Recommendation 6: Structured Products**

*Securities market regulators working through IOSCO to further investigate the disclosure requirements for complex structured products, including public disclosure requirements for financial reporting purposes, and make recommendations for additional improvements if necessary, taking account of work by supervisors and other relevant bodies.*

**Lead agency:** International Organization of Securities Commissions (IOSCO)

### **I. MAJOR RECENT DEVELOPMENTS**

IOSCO established, in 2007, a task force to find out the implications of the ongoing crisis on financial markets regulation. Soon after, IOSCO decided to start working on disclosure principles for asset-backed securities (ABS Disclosure Principles), including residential mortgage-backed securities and commercial mortgage-backed securities. The work was carried out by the IOSCO Technical Committee through its Standing Committee on Multinational Disclosure and Accounting and was finalized in April 2010 with the publication of the final report (<http://www.iosco.org/news>). The report provides guidance to securities regulators who are developing or reviewing their regulatory disclosure regimes for public offerings and listings of asset-backed securities (ABS). This will in turn contribute to enhancing investor protection by facilitating a better understanding of the issues that should be considered by regulators.

The ABS Disclosure Principles for regulatory regimes outline the information (on about 20 fields) which should be included in any offer document of these complex financial products. With this publication IOSCO has met an important part of the gaps identified in Recommendation # 6 while improving the publicly available information for these structured products at the moment of sale.

### **II. PRESENT POSITION**

The ABS Disclosure Principles have been published.

### **III. WAY FORWARD**

The IOSCO Technical Committee through its Standing Committee on Multinational Disclosure and Accounting is considering a mandate for developing principles for on-going disclosure of public offered and listed ABS. Later this year, the Technical Committee may also consider further work to develop disclosure principles for more complicated instruments such as collateralized debt obligations and examine the distinction between public and private offerings which could lead to the development of disclosure principles for private offerings of ABS.

## **Recommendation 7: Securities Data**

***Recommendation 7:** Central banks and, where relevant, statistical offices, particularly those of the G-20 economies, to participate in the BIS data collection on securities and contribute to the further development of the BIS-ECB-IMF Handbook on Securities Statistics (Handbook). The Working Group on Securities Databases to develop and implement a communication strategy for the Handbook.*

**Lead agencies:** BIS, ECB, and IMF

### **I. MAJOR RECENT DEVELOPMENTS**

Part 1 of the *BIS-ECB-IMF Handbook on Securities Statistics (Handbook)* was published in May 2009 and provides a conceptual framework, including presentation tables, for the compilation and dissemination of statistics on debt securities issues. It is designed to encourage national and international statistics bodies to produce consistent and comparable securities data. The *Handbook* is available at <http://www.imf.org/external/np/sta/wgsd/hbook.htm>. The concepts and definitions are based on the *System of National Accounts 2008* and the IMF *Balance of Payments and International Investment Position Manual*, 6th edition.

The development of Part 2 of the *Handbook* is well advanced. It provides a conceptual framework, including presentation tables, for statistics on debt securities holdings.

### **II. CURRENT POSITION**

There are a variety of national sources for debt securities issuance. Some specific data are published by central banks or national statistical institutes, typically for the government and banking sectors. In this context, in addition to approaching the entities issuing debt securities, various commercial or institutional sources are used, including stock exchanges, central securities depositories, securities settlement systems, and custodians. Many of these individual national sources lack comparability, including due to the application of rather heterogeneous accounting and valuation rules.

Many central banks or national statistical agencies use debt securities statistics (issues and holdings) as a source to compile financial accounts, other flow accounts, and balance sheets by institutional sector.

The BIS has published statistics on international debt securities issues since the mid-1980s and on domestic debt securities issues since the second half of the 1990s. In 2007 the Committee on Global Financial Systems (CGFS) recommended that central banks work actively with the BIS to improve its data, in particular to make them more internationally comparable and consistent. In response, the BIS is working with central banks in this area. In the Eurosystem, national central banks are sending data to the ECB, which has published securities issues statistics for the euro area as a whole since 1999. National central banks also publish their respective national statistics on the basis of this methodology. The IMF is collecting, compiling, and disseminating debt securities holdings data in the context of the Coordinated Portfolio Investment Survey (CPIS) (see Recommendation # 10 for further details).

### III. WAY FORWARD

The BIS has approached central banks to report securities on a regular quarterly basis to the BIS based on the reporting templates in Part 1 and Part 2 of the *Handbook* (attached). The BIS intends to disseminate the data collected in its publications and on its website. Good progress is being made with respect to G-20 economies and all the 40 non-euro area central banks. The BIS aims to complete this improvement of its quarterly data collection for debt securities for all G-20 economies before end-August 2010, with improved data collection for remaining countries before end-2010, and the reporting of these debt security issues (sector, market, and currency) data on a regular quarterly (end-quarter) basis with a three-month reporting lag by early 2011. For the euro area, the ECB is foreseen to continue collecting data on debt securities issues from euro area countries and compiling euro area aggregates.

Further collections are anticipated. Further breakdowns, for all markets, by selected sub-sector, maturity, and interest rate is anticipated by 2012; and some limited information of holdings would also be released by 2012, covering only the key institutional sectors holding debt securities issued by residents and non-residents. As these additional data become available, the BIS will disseminate the data in comparable formats in its publications and on its website. The ECB and euro area national central banks intend to publish new statistics on traditional and synthetic securitization transactions in early 2011.

Regarding the *Handbook*, Part 2 is well-advanced and scheduled to be released on the IMF website in mid-calendar 2010. Part 3 is envisaged to cover non-debt securities statistics (equities) and be finalized by the end of calendar 2011. A specific Data Structure Definition for securities statistics will also be developed to facilitate the exchange and dissemination of data on securities using SDMX.

Finally, with respect to the *communication strategy* to be developed by the Working Group on Securities Databases (WGSD), involving the BIS, the ECB, the IMF, and the World Bank, the focus will be on supporting the dissemination of improved debt statistics on the BIS website (and on the ECB website for the euro area and euro area countries). Also, some aggregate information will be included in the Principal Global Indicators website (see Recommendation # 20 for further details on this website). With respect to data on securities holdings, the IMF's CPIS will provide an opportunity to promote work on the *Handbook*.

The WGSD website (<http://www.imf.org/external/np/sta/wgsd/index.htm>) will be used to promote the communication on the work of the WGSD and press statements will be made to alert the public of the release of new or updated parts of the *Handbook*. WGSD members will make presentations on the *Handbook* and its implementation at international meetings, seminars and workshops.

The WGSD will continue to consult with the Review Group on the *Handbook on Securities Statistics* which includes experts from central banks, national statistical institutes and other international organizations. Drafts of new parts of the *Handbook*, as well as any revisions to existing parts, will be posted on the WGSD website during a public comment period.

**Debt Securities Issues Classified by Issuers and Maturity (for all markets, all currencies)**

| Maturity/<br>Interest rate  | Issuer | Residents            |                        |                       |                                      |                    | Non-residents | All issuers |                             |
|---|--------|----------------------|------------------------|-----------------------|--------------------------------------|--------------------|---------------|-------------|-----------------------------|
|   |        | Non financial corps. | Financial corporations |                       |                                      | General government |               |             |                             |
|   |        |                      | Total                  | of which Central bank | of which Deposit-taking corporations | Total              |               |             | of which Central government |
| 1. Short term at original maturity  |        |                      |                        |                       |                                      |                    |               |             |                             |
| 1.3. All interest rates   |        |                      |                        |                       |                                      |                    |               |             |                             |
| 2. Long term at original maturity   |        |                      |                        |                       |                                      |                    |               |             |                             |
| 2.1. Fixed interest rate  |        |                      |                        |                       |                                      |                    |               |             |                             |
| 2.2. Variable interest rate   |        |                      |                        |                       |                                      |                    |               |             |                             |
| 2.3. All interest rates   |        |                      |                        |                       |                                      |                    |               |             |                             |
| 3. All maturities   |        |                      |                        |                       |                                      |                    |               |             |                             |
| 1.1. Fixed interest rate  |        |                      |                        |                       |                                      |                    |               |             |                             |
| 1.2. Variable interest rate   |        |                      |                        |                       |                                      |                    |               |             |                             |
| 1.3. All interest rates   |        |                      |                        |                       |                                      |                    |               |             |                             |
| 4. <i>Memo item: long term at original maturity, with a remaining maturity up to and including one year</i> |        |                      |                        |                       |                                      |                    |               |             |                             |
| 5. <i>Memo item: Securitization debt securities</i>   |        |                      |                        |                       |                                      |                    |               |             |                             |

**Key Breakdowns on Holdings of Debt Securities**

| Holder              | Residents                  |                        |                    |   |               | Non-residents |
|---------------------|----------------------------|------------------------|--------------------|---|---------------|---------------|
|                     | Non-financial corporations | Financial corporations | General government | Households and non-profit institutions serving households | All residents |               |
| Resident Issuer     |                            |                        |                    |   |               |               |
| Non-resident Issuer |                            |                        |                    |   |               |               |
| All issuers         |                            |                        |                    |   |               |               |

## **Recommendations 8 and 9: Global Network Connections and Systemically Important Global Financial Institutions**

*Recommendation 8: The FSB to investigate the possibility of improved collection and sharing of information on linkages between individual financial institutions, including through supervisory college arrangements and the information exchange being considered for crisis management planning. This work must take due account of the important confidentiality and legal issues that are raised, and existing information sharing arrangements among supervisors.*

*Recommendation 9: The FSB, in close consultation with the IMF, to convene relevant central banks, national supervisors, and other international financial institutions to develop by end-2010 a common draft template for systemically important global financial institutions for the purpose of better understanding the exposures of these institutions to different financial sectors and national markets. This work should be undertaken in concert with related work on the systemic importance of financial institutions. Widespread consultation would be needed, and due account taken of confidentiality rules, before any reporting framework can be implemented.*

**Lead agency: FSB**

### **I. MAJOR RECENT DEVELOPMENTS**

In response to these recommendations, the FSB set up, in March 2010, a working group (WG) on data gaps and systemic linkages under the chairmanship of Aerdts Houben, Director for Financial Stability at De Nederlandsche Bank. The WG is charged with taking forward recommendations 8 and 9 which have been grouped together given the close links between them. The group has just less than 30 members, drawn from national authorities, international institutions and standard setting bodies, including the International Association of Insurance Supervisors (IAIS). The WG draws on a wide range of expertise, bringing together members with experience in financial stability analysis, supervision and regulation, crisis management, statistics, and legal issues, given that it will be necessary to harness a wide range of skills to take forward the recommendations.

At the time of writing, the WG has undertaken initial investigations identifying data needs and gaps from a micro and macro-prudential perspective, some possible data sources to fill in gaps, and legal and confidentiality constraints governing the collection and sharing of data on individual institutions. The data needs on linkages between individual financial institutions necessary for crisis management purposes are also being reviewed.

### **II. CURRENT POSITION**

To move the work forward, the WG has created three streams namely: (i) identifying data needs in various key areas—macro prudential supervision, macro prudential oversight, and



crisis management; (ii) mapping data sources to supply these needs, and (iii) reviewing the legal and confidentiality issues involved in the provision of data.

### **III. WAY FORWARD**

In identifying institutional data gaps and codifying information requirements from the perspectives of micro and macro prudential oversight and supervision, and crisis management, strong and clear arguments as to the potential benefits the information will provide and the costs associated with not obtaining it will be ascertained. The WG will be asked to justify the needs on the basis of clear and concrete examples, drawing on experience of the financial crisis and on plausible hypothetical examples as needed. That hurdle will help to ensure that the important gaps are addressed.

The WG will also focus on assessing potential sources of information that could be used to address gaps (for example through amendments of or extensions to existing sources as well as publicizing underused sources). It will then review the requirements identified by the data needs team and draw on knowledge and statistical experience to advise on how these might be met. Data sources could vary across countries because of inconsistencies in availability. The WG will draw on national, regional, and international experiences.

The WG will also focus on confidentiality of information sharing, outlining current constraints and, as needed, setting out the issues, questions and options that policymakers will need to address if such constraints are to be relaxed.

In response to Recommendation # 9, the WG is working to a timetable with a view to producing a report and a draft template for systemically important global financial institutions for review by the FSB by the end of calendar 2010.

## **Recommendations 10 and 11: International Banking Statistics and the Coordinated Portfolio Investment Survey**

***Recommendation 10:** All G-20 economies are encouraged to participate in the IMF's Coordinated Portfolio investment Survey (CPIS) and in BIS's International Banking Statistics (IBS). The IMF and the BIS are encouraged to continue their work to improve the coverage of significant financial centers in the CPIS and IBS, respectively.*

***Recommendation 11:** The BIS and the CGFS to consider, amongst other improvements, the separate identification of nonbank financial institutions in the consolidated banking data, as well as information required to track funding patterns in the international financial system. The IMF, in consultation with the IMF's Committee on Balance of Payments Statistics, to strive to enhance the frequency and timeliness of the CPIS data, and consider other possible enhancements, such as the institutional sector of the foreign debtor.*

**Lead agencies:** BIS, IMF

### **I. MAJOR RECENT DEVELOPMENTS**

The Committee on Global Financial Systems (CGFS), which sponsors the BIS international financial statistics, approved in March 2010 the establishment of an Ad-hoc Working Group to address solutions to close gaps in both the international banking (and OTC derivatives) statistics. This is a continuation of the efforts that the BIS has been undertaking since the 1970's and the mid 1980's to compile, on a locational and consolidated basis respectively, data on the international lending and borrowing of the financial institutions in the main financial centers. In addition to the separate identification of nonbank financial institutions, proposals for enhancing the international banking statistics aim to better help analysts track banks' funding patterns (and this is also related to the work on Recommendation # 4).

With the support of the IMF Committee on Balance of Payments Statistics (BOPCOM), the IMF has assembled the IMF Task Force on IIP/CPIS Data Enhancements. The Task Force is to advise the IMF's Statistics Department and the BOPCOM on possible enhancements to the CPIS to improve its usefulness and relevance, particularly with regard to country participation in the survey and the frequency and timeliness of data releases, consistent with recommendations # 10 and # 11. The Task Force is also to propose a timetable for implementing its advice.

### **II. CURRENT POSITION**

The IMF is conducting missions to significant financial centers to promote participation in the CPIS, and to promote broadening in the coverage of domestic sectors by current CPIS reporters. As of March 2010, about 75 countries participate in the CPIS. Among the G-20 economies, 18 currently participate in the CPIS. The CPIS data are annual with around one year lag in publication.

The BIS has made constant efforts to expand the coverage of the countries/financial centers reporting to its IBS, in particular to capture systemically important countries or centers. For instance, all the main offshore centers are reporting quarterly to the BIS the locational assets and liabilities, on both a residency and a nationality basis, with a currency, sector, and vis-à-vis country breakdown. The number of reporting countries to the BIS' IBS has regularly increased over time. Currently 43 central banks participate in the locational and 30 in the consolidated banking statistics. It should be noted that some of the reporting countries are currently not fully compliant with all the requested breakdowns. However, efforts are constantly being made to close the gaps. BIS' IBS are available on a quarterly (international banking) frequency, with publication of the provisional data done at Q+110 days. (<http://www.bis.org/statistics/index.htm>). Five out of the 20 G-20 economies do not provide data, of which two have yet to be officially invited to participate. Of the three invited, discussions with the central banks in these countries have been ongoing for several years.

### **III. WAY FORWARD**

The work of the Task Force on IIP/CPIS Data Enhancements is scheduled to conclude in October 2010, and report to the BOPCOM in regard to possible enhancements to CPIS data, its estimates of the compilation burden, and possible implementation timetable. The IMF will reach out to stakeholders to explain the importance of enhancing CPIS data in the recommended ways. Also, the IMF will provide compilation guidance to its members, to facilitate the compilation and timely provision of relevant data.

The Ad-hoc Working Group is also expected to report back to the CGFS in the second half of calendar 2010. In parallel, work will be undertaken within the BIS to improve not only the timeliness of the publications and the availability of the data on the BIS website, but also the coverage of the data to additional G-20 economies.

Both the BIS and IMF continue to work to increase country participation in their surveys, including from G-20 economies.

## **Recommendations 12: International Investment Position**

**Recommendation 12:** *The IMF to continue to work with countries to increase the number of International Investment Position (IIP) reporting countries, as well as the quarterly reporting of IIP data. The Balance of Payments and International Investment Position Manual, sixth edition (BPM6) enhancements to the IIP should be adopted by G-20 economies as soon as feasible.*

**Lead agency:** IMF

### **I. MAJOR RECENT DEVELOPMENTS**

In March 2010, the IMF Executive Board decided to prescribe for subscribers to the IMF's Special Data Dissemination Standard (SDDS), after a four year transition period, quarterly reporting (from annual) of the IIP data, with a maximum lag of one quarter (quarterly timeliness). In addition, the IMF has continued its work on the IIP pipeline project, which helped to increase the number of countries providing annual and quarterly IIP data to the IMF for redissemination.

Further, the newly formed Task Force on IIP/CPIS Data Enhancements, working on the issues identified in recommendations 10 and 11, will consider accelerating the following *BPM6* enhancements: (i) a more detailed sectoral breakdown, including identification of nonbank financial institutions; (ii) standardized reporting for the currency composition of international assets and liabilities; (iii) information on the impairment of cross-border loans; and (iv) supplementary detail on the remaining maturity of international assets and debt liabilities. The Task Force is also to consider improving the availability of bilateral IIP data.

### **II. CURRENT POSITION**

As of April 2010, 119 economies provide year-end IIP data, of which 48 provide quarterly IIP data to the IMF's Statistics Department (STA). Among the G-20 economies, 19 currently provide IIP data.

### **III. WAY FORWARD**

The IMF staff is to work with economies to implement the Executive Board decision on the SDDS by 2014. Guidance is to be provided on compiling the IIP in the upcoming *BPM6 Compilation Guide*. IMF staff will encourage reporting by the G-20 economy that does not disseminate IIP data.

The Task Force on IIP/CPIS Data Enhancements intends to give careful consideration to the benefits and costs of accelerating implementation of the enhancements to the IIP, and is expected to report to the IMF Committee on Balance of Payments Statistics in the second half of calendar 2010.

## **Recommendations 13 and 14: Financial and Nonfinancial Corporations Cross-border Exposures**

### **Recommendation 13:**

*The IAG to investigate the issue of monitoring and measuring cross-border, including foreign exchange derivative, exposures of non-financial, and financial, corporations with the intention of promoting standardised reporting guidance and the dissemination of data.*

### **Recommendation 14:**

*The IAG, consulting with the FSB, to revisit the recommendation of the G-22 to examine the feasibility of developing a standardized template covering the international exposures of large nonbank financial institutions, drawing on the experience with the BIS's IBS data, other existing and prospective data sources, and consulting with relevant stakeholders.*

**Lead agency:** BIS

## **I. MAJOR RECENT DEVELOPMENTS**

The crisis has, in certain jurisdictions, highlighted the lack of data on cross-border exposures of *non-financial corporations*, in particular of larger corporations using foreign affiliates to raise finance, provide implicit guarantees or engage in derivative transactions. Small and medium firms that were highly concentrated in exporting in some instances also acquired foreign exchange exposures through derivatives contracts booked in foreign markets.

With respect to *financial corporations*, in particular internationally active banks, the BIS consolidated banking statistics as well as the BIS OTC derivative statistics capture their global consolidated exposures, including those arising from derivative transactions and other off-balance sheet activities. The BIS consolidated banking statistics are available on an immediate borrower basis as well as on an ultimate risk basis (the latter takes account of inward and outward risk transfers by reporting banks). But despite their increasing importance, there is a lack of information on the cross-border exposures of nonbank financial institutions.

Accounting and measurement of financial exposures on a consolidated basis is a relatively new area of work. Definitions are not always clear. For instance, in the national and financial accounting area, consolidation refers to offsetting claims and liabilities of institutions within the same institutional sector (e.g., interbank). In the BIS international banking statistics the term is used for globally consolidating the claims (exposure) of banks headquartered in a particular country. This latter approach is also followed in international accounting standards, in banks' internal risk management practices and in global supervisory standards. A third concept of consolidation refers to complex banking groups which include affiliates providing banking services as well as non-bank financial services such as insurance (e.g., holding companies). Apart from clarifying relevant concepts and definitions, work is needed to understand how a framework for consolidated data can be made compatible with, or integrated into, the traditional financial statistics compiled on a residency basis.

A working group of the IAG, led by the BIS, has been created to take forward the work on these recommendations. It has undertaken an initial review of methodological guidance and of data availability.

## **II. CURRENT POSITION**

Through the framework of the System of National Accounts 2008 and related methodologies, frameworks exist for the collection and dissemination of data on financial and nonfinancial corporations on a residency basis.

However, statistical information on non-financial corporations compiled on a residency basis would not capture the financial exposures of non-resident affiliates. On the other hand, information on a consolidated basis is generally only available from the financial statements which would not necessarily provide the level of detail needed with respect to financial positions such as those related to derivatives.

Both the consolidated data of the BIS's consolidated banking statistics and from the IMF's Financial Soundness Indicators (FSIs) capture data on a consolidated basis for deposit-takers. The FSI guidance includes a template for capturing future cash flows arising from financial derivative contracts.

There is ongoing statistical work and discussions at the BIS, IMF and ECB, in particular relating to the methodological and practical issues of handling the concept of consolidation and the definition of banking/financial groups and in Eurostat, relating to non-financial groups. But to date it has not been coordinated. The OECD also collects and publishes statistics on financial statements of banks as well as indicators.

## **III. WAY FORWARD**

The working group intends to undertake a more detailed review of existing methodological developments and of the availability of data sources at the national and international level. This work has two strands:

1. A stock-take of available information. That is bringing together information on the various datasets that shed light on the cross-border positions of non-bank financial corporations and non-financial corporations either from direct sources or from indirect sources, i.e., where these sectors are identified as counterparts in other datasets.
2. Drafting an issues paper on the concept of nationality/consolidation as compared to residency/location.

These two strands will form the background for a workshop/conference to be organized later in 2010 (with the sponsorship of the Irving Fisher Committee). The workshop would assist in identifying the issues that may need to be addressed in specific methodological standards or guidelines (existing or new) and in developing reporting templates.

## Recommendation 15: Sectoral Accounts

**Recommendation 15:** *The IAG, which includes all agencies represented in the Inter-Secretariat Working Group on National Accounts, to develop a strategy to promote the compilation and dissemination of the balance sheet approach (BSA), flow of funds, and sectoral data more generally, starting with the G-20 economies. Data on nonbank financial institutions should be a particular priority. The experience of the ECB and Eurostat within Europe and the OECD should be drawn upon. In the medium term, including more sectoral balance sheet data in the data categories of the Special Data Dissemination Standard could be considered.*

**Lead agency:** IMF

### I. MAJOR RECENT DEVELOPMENTS

The global financial crisis reinforced the importance of integrated economic data, both stocks and flows, so that the impact of developments in one sector of the economy on other sectors, and flows such as valuation changes, can be reliably analyzed. The *System of National Accounts 2008 (2008 SNA)* framework is the established methodology for compiling national accounts, and includes integrated current and accumulation accounts, and balance sheets for institutional sectors. The *2008 SNA* updates the earlier *1993 SNA* standard that most G-20 economies have adopted. This framework covers both financial and nonfinancial assets.

The financial crisis highlighted the need for data identifying financial asset maturity and currency mismatches across sectors. In this context, the IMF developed the “balance sheet approach” (BSA), a from-whom-to whom presentation of sectoral financial positions, in a sequence of papers from 2002.<sup>22</sup> The BSA begins with the SNA balance sheet, augmenting it with a counterparty sector and domestic/foreign currency of denomination breakdown.

The flow of funds (FOF) account is a from-whom-to whom sectoral breakdown of the SNA financial account showing intersectoral transactions in financial assets and liabilities, explaining the part of the difference between closing and opening positions in the BSA that arises from transactions in financial instruments. For coherence and international comparability, the FOF should be part of an integrated presentation of the national accounts.

### II. CURRENT POSITION

All but two G-20 economies use the *1993 SNA* in disseminating national accounts data to the international public. One G-20 economy has adopted the *2008 SNA* and another still follows the *1968 SNA*. A number of G-20 economies have plans to adopt the *2008 SNA* by 2014 and

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<sup>22</sup> See for instance, using the Balance Sheet Approach in Surveillance: Framework, Data Sources, and Data Availability, Johan Mathisen and Anthony Pellechio, IMF Working Paper, WP/06/100

2015. The IMF is currently compiling BSA financial balance sheet data from 13 G-20 economies based on its Standardized Report Form (SRF) (See the attached table layout.)

A working group has been created under the auspices of the IAG and led by the IMF. The IMF has conducted an inventory of the data G-20 economies disseminate relative to the SNA standards. A complete set of sectoral balance sheets and accumulation accounts (at least covering the *SNA* main institutional sectors and the *SNA* main asset categories) for both financial and non-financial assets is generally lacking. With respect to sectoral financial balance sheet and financial account, all G-20 advanced economies (bar one) disseminate these data using at least the minimum *SNA* institutional sector and the minimum *SNA* financial instrument classifications. No G-20 emerging market economy has sectoral financial balance sheets. With respect to sectoral non-financial balance sheets and capital accounts, all G-20 advanced economies disseminate these data using the minimum *SNA* main sectoral breakdown with further details for some asset categories (mainly for fixed assets). Although all G-20 emerging market economies have a capital account for the total economy, sectoral and asset breakdowns are available only in a few cases. OECD disseminates annual financial accounts and balance sheet data for many of its member countries. (See the attached table layout). Eurostat disseminates annual financial accounts and balance sheet data for EU member countries.

### III. WAY FORWARD

The IMF, with OECD, is planning a conference of experts in early 2011 to share experiences, discuss the gaps, and seek to agree upon some minimum reporting needs for G-20 economies, drawing upon the existing frameworks of the IMF and the OECD. The intention is thereafter to:

- Post on the Principal Global Indicators website sectoral balance sheet data in the SNA format already disseminated or available on request, sometime in 2011.
- Expand the reporting of detailed annual and quarterly sectoral accounts by G-20 and non G-20 advanced economies in accord with the 2008 *SNA*. Provide technical assistance and training to economies as necessary.
- Return to the IMF Executive Board at the time of the Eighth Review of the IMF's Data Standards Initiatives, provisionally scheduled for the first half of 2012, with possible recommendations for strengthening the SDDS with regard to integrated sectoral balance sheet information.

Given the resource costs involved in compiling these data, it is recognized that there may need to be flexibility in the timetable of implementation depending on the countries' level of statistical development.



**IMF “Balance Sheet Approach” Presentation of Financial Positions by Institutional Sector**  
**Based on Standardized Report Form (SRF) Program**

| Financial instrument/institutional sector/subsector | 1993 SNA financial instrument /sector codes | Public sector |                    |                            |                                  | Financial sector              |                              | Nonfinancial private sector       |  | Rest of the world |
|---|---|---------------|--------------------|----------------------------|----------------------------------|-------------------------------|------------------------------|-----------------------------------|--|-------------------|
|   |   | Central bank  | Central government | State and local government | Public nonfinancial corporations | Other depository corporations | Other financial corporations | (Other) Nonfinancial corporations | Other resident sectors (Households and NPISHs) | Non-residents     |
|   |   | S.121         | S.1321             | S.1322-1323                | S.11001                          | S.124-S.127                   | S.128-S.129                  | S.11002-11003                     | S.14-15  | S.2               |
| Claims (assets), liabilities, net position          |   |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| <b>Institutional sector/subsector<sup>23</sup></b>  |   |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| In domestic currency                                |   |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Monetary gold and special drawing rights (SDRs)     | AF.1  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Currency and deposits                               | AF.2  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Securities other than shares                        | AF.3  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Loans   | AF.4  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Shares and other equity                             | AF.5  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Insurance technical reserves                        | AF.6  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Financial derivatives                               | AF.7  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Other accounts receivable/payable                   | AF.8  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| In foreign currency                                 |   |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Monetary gold and special drawing rights (SDRs)     | AF.1  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Currency and deposits                               | AF.2  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Securities other than shares                        | AF.3  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Short-term  | AF.31                                       |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Long-term   | AF.32                                       |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Loans   | AF.4  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Short-term  | AF.41                                       |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Long-term   | AF.42                                       |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Shares and other equity                             | AF.5  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Insurance technical reserves                        | AF.6  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Financial derivatives                               | AF.7  |               |                    |                            |                                  |                               |                              |                                   |  |                   |
| Other accounts receivable/payable                   | AF.8  |               |                    |                            |                                  |                               |                              |                                   |  |                   |

<sup>23</sup> Table stub repeats for each institutional sector/subsector shown in the column headings.

## OECD Presentation of Financial Positions by Institutional Sector

| 1993 SNA financial Instrument/institutional sector                    | 1993 SNA instrument/<br>sector<br>code <sup>24</sup> | Nonfinancial<br>corporations | Financial<br>corporations <sup>25</sup> | General government | Households and<br>nonprofit institutions<br>serving households | Total economy | Rest of the world |
|---|--|------------------------------|---|--------------------|--|---------------|-------------------|
|   |  | S.11                         | S.12                                    | S.13               | S.14-S.15  | S1            | S2                |
| Monetary gold and SDRs  | AF.1   |                              |   |                    |  |               |                   |
| Monetary gold   | [AF.11]  |                              |   |                    |  |               |                   |
| Special drawing rights (SDRs)   | [AF.12]  |                              |   |                    |  |               |                   |
| Currency and deposits   | AF.2   |                              |   |                    |  |               |                   |
| Currency  | AF.21  |                              |   |                    |  |               |                   |
| Transferable deposits   | AF.22  |                              |   |                    |  |               |                   |
| Other deposits  | AF.29  |                              |   |                    |  |               |                   |
| Securities other than shares  |  |                              |   |                    |  |               |                   |
| Securities other than shares, except financial derivatives            | AF.3   |                              |   |                    |  |               |                   |
| Short-term securities   | AF.31  |                              |   |                    |  |               |                   |
| Long-term securities  | AF.32  |                              |   |                    |  |               |                   |
| Financial derivatives   | AF.7   |                              |   |                    |  |               |                   |
| Loans   | AF.4   |                              |   |                    |  |               |                   |
| Short-term loans  | AF.41  |                              |   |                    |  |               |                   |
| Long-term loans   | AF.42  |                              |   |                    |  |               |                   |
| Shares and other equity   | AF.5   |                              |   |                    |  |               |                   |
| Shares and other equity, except mutual funds shares                   |  |                              |   |                    |  |               |                   |
| Quoted shares   |  |                              |   |                    |  |               |                   |
| Unquoted shares   |  |                              |   |                    |  |               |                   |
| Other equity  |  |                              |   |                    |  |               |                   |
| Mutual funds shares   |  |                              |   |                    |  |               |                   |
| Insurance technical reserves  | AF.6   |                              |   |                    |  |               |                   |
| Net equity of households in life insurance and pension funds reserves | AF.61  |                              |   |                    |  |               |                   |
| Net equity of households in life insurance reserves                   | [AF.611]   |                              |   |                    |  |               |                   |
| Net equity of households in pension funds                             | [AF.612]   |                              |   |                    |  |               |                   |
| Prepayments of premiums and reserves against outstanding claims       | AF.62  |                              |   |                    |  |               |                   |
| Other accounts receivable   | AF.8   |                              |   |                    |  |               |                   |
| Trade credits and advances  | AF.81  |                              |   |                    |  |               |                   |
| Other accounts receivable, except trade credits and advances          | AF.82  |                              |   |                    |  |               |                   |

<sup>24</sup> Bracketed items are implied by 1993 SNA Financial Account coding.

<sup>25</sup> Banks, investment funds, insurance corporations, and pension funds.

## Recommendation 16: Distributional information

**Recommendation 16:** *As the recommended improvements to data sources and categories are implemented, statistical experts to seek to compile distributional information (such as ranges and quartile information) alongside aggregate figures, wherever this is relevant. The IAG is encouraged to promote production and dissemination of these data in a frequent and timely manner. The OECD is encouraged to continue in its efforts to link national accounts data with distributional information.*

**Lead agency:** OECD

### I. MAJOR RECENT DEVELOPMENTS

National accounts-based data on household income, consumption and wealth provide no information on how income, consumption and wealth are distributed across socio-economic classes of households.<sup>26</sup> Distributional information comes from other sources, in particular household surveys and administrative data, and is of direct interest for economic policy and for central banks. For example, a strongly skewed distribution of wealth and its composition can be indicative of the exposure of some groups of households to financial risk.

The OECD and Eurostat have set up task forces to define common international methodology and implement pilot studies. They are launching projects with their member countries to advance and coordinate the development of distributional measures to accompany national accounts figures. Eurostat is establishing a sponsorship program on the follow-up to the Stiglitz-Sen-Fitoussi report (<http://www.stiglitz-sen-fitoussi.fr>) that would include work on the issue, while the OECD is taking steps to create a project on these issues under the auspices of its National Accounts Working Party. Work by the two organizations is closely coordinated. The ECB has set up a Network of euro area researchers and statisticians for setting up and doing research with the Eurosystem household finance and consumption survey (HFCS) data.

For a variety of reasons, there is a need to integrate micro results with macro-economic statistics. Some are discussed in the Stiglitz-Sen-Fitoussi report. However, there are a number of challenges. For instance, distributional information may need some adjustments before it can be used to inform about the distribution of national accounts income, consumption and wealth e.g., to take account of under-representation of specific subpopulations in surveys (e.g., immigrants, homeless, people living in institutions, etc.), and households' tendency to underreport income and wealth.

The Canberra Manual on Household Income Statistics is an important methodological source (<http://www.lisproject.org/links/canberra/finalreport.pdf>) that is currently being updated.

### II. CURRENT POSITION

At this point, very few empirical results are available that try to integrate in a systematic way micro and macro information about household economic resources. The most prominent exception is recent work undertaken by researchers at INSEE, the French national statistical

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<sup>26</sup> The 2008 SNA (Chapter 4) recommends various breakdowns for the household sector, including also according to income size.

institute.<sup>27</sup> In this approach, households are classified into subcategories according to four criteria: (quintiles of) equivalized income, employment status, age of the household head, and family structure. Subsequently, the various items of the household account are broken down by these categories. These statistics, which are currently limited to the year 2003 and to household income, in-kind services, and consumption expenditures, give rise to policy-relevant information. Other statistical offices have also developed information on household income distribution (for instance those of the Netherlands and Germany) along with coordinated efforts at the European level. However, income categories are not always compatible with national accounts. This type of information is directly relevant for the formulation and for the monitoring of the effects of social policy.

### III. WAY FORWARD

In 2010, the task forces set up by OECD and Eurostat will develop the methodology for matching survey data with national accounts aggregates. The challenge will be to define a harmonized approach able to accommodate a variety of data situations in different countries. In parallel with establishment of the methodology, pilot studies will be conducted in individual countries and it is expected to obtain selected results in the course of 2011. In addition to the work by OECD and Eurostat, there are various initiatives underway.

At the initiative of Canada and Australia, the OECD's Committee on Statistics is considering starting methodological and conceptual work on the joint distribution of household income, wealth, and consumption. While not necessarily matched with the national accounts measures of these variables, such work will be central to identifying the most vulnerable members of our societies, namely those at the lower end of the income, wealth, and consumption distribution. The OECD has approached the national statistical offices of Brazil, China, India, Indonesia, Russia, and South Africa to participate in this work.

The ECB is coordinating the launch of the Eurosystem HFCS conducted in the 16 euro area countries,<sup>28</sup> as a primary source of information for complementing with distributive information on households' assets and liabilities the *System of National Accounts*. Similar household wealth surveys already exist or are currently being set up in other OECD economies. Contacts are being established between the Household Finance and Consumption Network and national account experts to explore the potential for synergies between the Eurosystem HFCS and the euro area accounts, with a research conference planned for October 2010 ([www.ecb.int/events/conferences/html/joint\\_ecb\\_lux.en.html](http://www.ecb.int/events/conferences/html/joint_ecb_lux.en.html)). Other projects are underway at the World Bank and the United Nations.

It is expected that a first set of methodological studies and estimates will be completed in the course of 2012 such that an active contribution to the development of international methodological standards/guidelines may be envisaged. Once methodologies are in place, periodic monitoring of the distribution of household economic resources (income, consumption, and wealth) within the *System of National Accounts* could be envisaged.

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<sup>27</sup> For a first set of empirical results for France, see Fesseau and Le Laidier (2009), available under <http://www.oecd.org/dataoecd/33/30/43953916.pdf>.

<sup>28</sup> More information is available at [http://www.ecb.europa.eu/home/html/researcher\\_hfcn.en.html](http://www.ecb.europa.eu/home/html/researcher_hfcn.en.html)).

## **Recommendation 17: Government Finance Statistics**

*The IMF to promote timely and cross-country standardized and comparable government finance data based on the accepted international standard, the Government Finance Statistics Manual 2001.*

**Lead agency:** IMF

### **I. MAJOR RECENT DEVELOPMENTS**

In March 2010, the IMF Executive Board decided to adopt a standardized presentation of fiscal data following the *Government Finance Statistics Manual, 2001 (GFSM 2001)*.<sup>29</sup> IMF Staff reports will be using this format by May 2011. In addition, the fiscal data of the World Economic Outlook (WEO) now follows the *GFSM 2001* format: for example, the concept of “net lending (+)/ borrowing (-)” will replace the concept of “overall balance.”

Further, the data in staff reports should include information on the government stock of financial assets together with information on gross debt; this stock information should be supplemented with information on “other flows,” if available. The inclusion of an integrated balance sheet table is best practice whenever large changes in the volume, value, or composition of assets and liabilities take place. Gross debt should be recorded at nominal value, and also at market value if available.

The above information will be reported, to the extent possible, for the general government (or wider aggregates when appropriate). In any case, all Fund publications should specify the coverage of their data, according to a predefined institutional structure. Deviations from the *GFSM 2001* methodology due to data availability are to be flagged in footnotes.

### **II. CURRENT POSITION**

As of April 2010, data reporting by G-20 economies remained uneven in each of the areas outlined above.

*Government Finance Statistics Yearbook* (very detailed, annual data): As of April 2010, 15 out of the G-20 economies have reported annual data based on the *GFSM 2001* framework while four have not reported data. Of the reporting countries, 12 cover the general government and three the central government.

The IMF is developing “Maps of Governments” to highlight the coverage basis on which data are reported - central government versus the general government - to help the users’ understanding when looking at data on a cross-country basis.

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<sup>29</sup> “Government Finance Statistics to Strengthen Fiscal Analysis,” March 2010.

Reporting for publication in the *International Financial Statistics (IFS)* (less detailed, in most cases quarterly or monthly timeliness and frequency): Again, the institutional coverage varies: four G-20 economies provide data on the budgetary central government, four cover central government, seven cover the general government. Five G-20 economies do not report high-frequency (monthly or quarterly) fiscal statistics to the IMF Statistics Department for publication in the IFS.

Some countries that report data in the *GFSM 2001* framework maintain national methodologies in parallel, which adds further layers of complexity and can lead to confusion as the data reported to international agencies may differ from data disseminated elsewhere. Two G-20 economies use the *GFSM 2001* framework for their national reporting and fiscal analysis; five G-20 economies use the European System of Accounts (*ESA95*); three G-20 economies use the *SNA93* framework—both are closely aligned with *GFSM 2001*; two G-20 economies use country specific frameworks, and the remaining eight G-20 economies use presentations largely based on the *GFSM 1986* framework.

While the *GFSM 2001* framework is now well established among the IMF's overall membership as the international methodology for compiling comparable government finance statistics, many have not yet adopted the *GFSM 2001* framework for their national reporting and fiscal analysis. To further support this work at the national level, the IMF will continue to lead the consultative and coordinated process for promoting the application of the *GFSM 2001* methodology and improving availability of timely and comparable government finance statistics.

### **III. WAY FORWARD**

The IMF staff is to work with countries, in consultation with other international agencies, to promote the *GFSM 2001* consistent with the IMF Executive Board decision.

Over the next year, IMF staff will start the update of the *GFSM 2001* in line with the changes arising from the *2008 SNA*; and leverage the tools of the SDMX for data transmission and exchange.

## **Recommendation 18: Public Sector Debt**

*The World Bank, in coordination with the IMF, and consulting with the Inter-Agency Task Force on Finance Statistics, to launch the public sector debt database in 2010.*

**Lead agency:** World Bank

### **I. MAJOR RECENT DEVELOPMENTS**

Data on public sector debt are important for a wide range of economic issues. During its March 4–5, 2010 meetings in Washington D.C., the Task Force on Finance Statistics (TFFS)<sup>30</sup> endorsed the proposal for the World Bank to gather quarterly public sector debt data from developing and emerging market countries.

The basic requirement for countries to participate is to supply quarterly data on central government debt. Data on general government and public sector debt is encouraged, if available. The Development Data Group of the World Bank will collect and disseminate data on-line.

Central government debt is already included as a category in the IMF's General Data Dissemination System (GDDS) on an annual basis, with quarterly data encouraged. Central government debt has been identified as the area where there is the most urgent data gap, and where there is scope for improvement in the short term. While data on debt of other levels of government will be sought, the values of debt tend to be larger for central government than other levels of government and thus central government debt would indicate total general government debt in many cases. As well, the smaller number of agencies involved for central government means that data should be more timely and readily available than for broader measures of government.

Data for general government may be available and are essential for comparison with external debt data (that covers general government) and deriving domestic general government debt as the difference between total general government debt and the corresponding external debt.

### **II. CURRENT POSITION**

A structured template has been agreed by the TFFS (see attached table).

The data will be collected for the following sectors on an as-available basis:

- General government
- o/w Central government
- o/w Budgetary central government

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<sup>30</sup> The TFFS consists of representatives of the BIS, Commonwealth Secretariat, ECB, Eurostat, IMF (Chair), OECD, Paris Club, UNCTAD and the World Bank.

- Nonfinancial public corporations
- Financial public corporations
- Total public sector

It should be noted that different sectors and subsectors cannot be summed, or state and local derived as a residual, because of debt held between different parts of the public sector. (Debt between different public sector units is consolidated in the totals.)

Also, a *Public Sector Debt (PSD) Guide* is being prepared by the IMF under the auspice of the TFFS to provide guidance to compilers. This *Guide* will use the same harmonized concepts as from other macro-economic manuals and guides, allowing linkages to be examined with other available data, e.g., between total general government debt and its external components, or between general government debt and debt of other sectors. A final version of the *PSD Guide* is expected early in 2011.

### **III. WAY FORWARD**

The World Bank and the IMF are jointly approaching central government debt contacts identified in selected Special Data Dissemination Standard (SDDS) and GDDS metadata through a letter inviting participation. However, reporters will have to coordinate internally with responsible agencies to compile the data that will be needed, which might affect the overall reporting process negatively. In particular, the primary source for public sector debt is likely to be the Ministry of Finance, while external debt is usually supplied by other agencies, such as the Central Bank.

The data will be published in a public sector debt website with links to complementary and related information sources, such as the Joint External Debt Hub.

The project is on schedule for the website to be launched by end-calendar year 2010.



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**Gross Debt of [institutional coverage] at Nominal Value**

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**By maturity and type of instrument:****Short-term, by original maturity:**

Currency and deposits  
 Debt securities  
 Loans  
 Insurance, pensions, and standardized guarantee schemes  
 Other accounts payable

**Long-term, by original maturity:****With payment due in one year or less:**

Currency and deposits  
 Debt securities  
 Loans  
 Insurance, pensions, and standardized guarantee schemes  
 Other accounts payable

**With payment due in more than one year:**

Special Drawing Rights (SDRs)  
 Currency and deposits  
 Debt securities  
 Loans  
 Insurance, pensions, and standardized guarantee schemes  
 Other accounts payable

**Total gross debt**

Special Drawing Rights (SDRs)  
 Currency and deposits  
 Debt securities  
 Loans  
 Insurance, pensions, and standardized guarantee schemes  
 Other accounts payable

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**By currency of denomination:**

**Domestic currency denominated**  
**Foreign currency denominated**

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**By residence of the creditor:**

**Domestic creditors**  
**External creditors**

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**Memorandum item:**

**Debt securities at market value**

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## **Recommendation 19: Real Estate Prices**

**Recommendation 19:** *The Inter-Secretariat Working Group on Price Statistics (IWGPS) to complete the planned handbook on real estate price indices. The BIS and member central banks to investigate dissemination on the BIS website of publicly available data on real estate prices. The IAG to consider including real estate prices (residential and commercial) in the Principal Global Indicators (PGI) website.*

**Lead agency:** BIS and Eurostat

### **I. MAJOR RECENT DEVELOPMENTS**

Eurostat is the lead agency responsible for the drafting of the *Handbook on Residential Property Price Indices* (RPPIs) and is working under the aegis of the IWGPS. The methodological foundation for the handbook on residential property price indices work has been underscored by contributions to a series of conferences on real estate price indices (REPIs)—IMF-BIS, 2003; OECD-IMF 2006; and Eurostat-IAOS-IFC, 2009. These contributions include methodological issues and details of country practice. No equivalent methodological work on Commercial Property Price Indices (CPPIs) is underway.

In February 2010, the BIS solicited authorization from the central banks reporting RPPIs to make this information publicly available on the BIS website.

### **II. CURRENT POSITION**

The BIS currently receives RPPIs for 13 G-20 economies and CPPIs for one G-20 economy. These data are only shared amongst the BIS member central banks. Frequencies vary from monthly to annual. Timeliness varies from six weeks to fourteen months. Each series has individual metadata, albeit limited. The BIS has now asked central banks for permission to make this information publicly available on its website. As of April 2010, data reporting by G-20 economies to the BIS on real estate prices remained uneven, in terms of statistical dimensions (such as frequency, timeliness, and quality of metadata), for both RPPI and particularly CPPI.

The ECB collects residential property price indicators for all euro area countries and makes available an aggregate indicator for the euro area, weighting together the indicators considered to be the most representative for each country. National data are managed in an ECB internal database. The indicator for the euro area is compiled at semi-annual frequency and is produced between four to six months after the end of the reporting period.

The ECB has been running a euro area wide survey on the availability of CPPIs. The available data stem exclusively from non-official sources. Further investigations are required in order to assess the statistical quality—both in terms of data and metadata—and the usability of these indicators.

### III. WAY FORWARD

A first draft of the *Handbook on RPPIs* is expected by May 2010 with a final draft planned for mid-calendar 2011. Given the lack of homogeneity of methodologies in the compilation of RPPIs by countries, an opportunity for national and international agency comments on the conceptual framework is considered essential before the final draft is released in 2011.

On data dissemination, provided the BIS receive agreement from its member central banks, data RPPIs will be disseminated on the BIS website. These data could then be made available through the Principal Global Indicators website later in 2010.

Eurostat and the EU National Statistical Institutes are carrying out pilot work to develop harmonized RPPIs during the course of 2010-2011. Eurostat plans a first release of an experimental index for the euro area as a whole in September 2010.

The IWGPS will consider the need to improve commercial real estate price information, given its importance for financial stability analysis.

## **Recommendation 20: Principal Global Indicators**

*The G-20 economies to support enhancement of the PGI website, and close the gaps in the availability of their national data. The IAG should consider making longer runs of historical data available.*

**Lead agency:** IMF

### **I. MAJOR RECENT DEVELOPMENTS**

The Principal Global Indicators (PGI) website was launched in April 2009 and is an undertaking of the IAG. It presents data for the G-20 economies to facilitate the monitoring of economic and financial developments for these systemically important economies in response to the on-going financial and economic crisis. Significant enhancements to the PGI website were released on December 21, 2009. At present, the PGI website offers access to an on-line database with user-selected longer runs of historical data presented in comparable units of measure (growth rates, index numbers, and/or percent of GDP). The site is available at <http://www.principalglobalindicators.org/>. In April 2010, visitors from over 140 countries accessed the site.

The Statistical Data and Metadata Exchange (SDMX) initiative provides standards for exchanging data and its implementation on the PGI would increase the timeliness and access to the data it contains. The SDMX initiative is sponsored by seven international agencies (BIS, ECB, Eurostat, IMF, OECD, UN, and World Bank) and the technical standards and content guidelines it developed and promotes will improve the exchange of statistical information.

### **II. CURRENT POSITION**

Data on the PGI website are limited to the series that the G-20 economies report to the international agencies participating in the PGI. For example, eight of the G-20 economies do not report to the IMF monetary and financial data in the format that correspond to the *IMF Monetary and Financial Statistics Manual 2000*; seven do not report government gross debt data, with five not reporting any government finance statistics to the IMF Statistics Department.

### **III. WAY FORWARD**

The high priorities include: (i) expanding the data coverage and timeliness of the PGI website for the G-20 economies; (ii) encouraging the use of existing systems to report data to international organizations (such as the IMF Integrated Correspondence System), and (iii) increasing the world-wide sharing of data disseminated by G-20 economies by promoting the adoption of SDMX for the dissemination of official statistics. Another key priority is for IAG agencies participating in the PGI website to prioritize SDMX in their data sharing

arrangements with the objective of reducing overlaps in data collection from the G-20 economies.

In close collaboration with participating IAG agencies, the IMF's Statistics Department will continue the development and maintenance of the PGI website, including the identification of priorities for improving coverage and access to key macroeconomic statistics of the G-20 economies on the PGI. These include:

- Monitoring the timeliness of PGI data by comparing with the timeliness of the data disseminated by the G-20 economies that subscribe to the IMF Special Data Dissemination Standard.
- Improving the coverage and accuracy of historical data through improved data sharing with other international agencies.
- Undertaking a thorough review of data reporting arrangements between G-20 data producing agencies and the IMF to identify data deficiencies.
- Developing world and regional aggregates for a key set of PGI indicators.
- Working actively with G-20 economies that have not adopted the international standards for reporting data to international agencies.
- Visits by the IMF to individual G-20 economies to review their data reporting practices with a view to improve the coverage of the PGI (during 2010–11).

In the medium to long-term, it is expected that Financial Soundness Indicators (FSIs) would be added to the data coverage of PGI (2011) and consideration will be given to expand the country coverage of PGI beyond the G-20 economies to include other systemically important economies (2011).