

#### August 28, 2012

# 2012 REVIEW OF DATA PROVISION TO THE FUND FOR SURVEILLANCE PURPOSES

# **EXECUTIVE SUMMARY**

**Data provision is a key ingredient of the IMF's surveillance activities.** The previous Review of Data Provision to the Fund for Surveillance Purposes discussed by the Executive Board in March 2008 (<u>the 2008 Review</u>) introduced a new classification system for rating the adequacy of data provision by a member and strengthened the procedures for following up on potential breaches of Article VIII, Section 5. Both enhancements are working well and staff does not propose further modification; nor does staff propose changing the minimum set of data that members are required to provide to the Fund for surveillance purposes.<sup>1</sup>

However, following the global crisis and the 2011 Triennial Surveillance Review (TSR), the data needs for surveillance have evolved substantially. While there has been significant progress in data provision since the 2008 Review in areas such as International Investment Position and Financial Soundness Indicators, the survey of mission chiefs conducted for the 2011 TSR indicated the lack of data was the biggest impediment to IMF surveillance work on macro-financial issues.

This 2012 Review is set in the context of the challenges facing the global economy and notes how the Fund's data initiatives face these challenges. Specifically, it illustrates how the G-20 Data Gaps Initiative (DGI), the Special Data Dissemination Standard Plus (SDDS Plus), and other initiatives are addressing the data needs that have emerged and influencing Fund policy for data provision. It also outlines efforts to strengthen data quality for surveillance.

To support efforts to strengthen surveillance as discussed in the 2011 TSR, the Review recommends that staff reports should pay special attention to financial sector data limitations affecting surveillance. They should include progress regarding the DGI data categories and SDDS Plus adherence (where relevant). Furthermore, in collaboration with area departments, STA should follow up to ensure consistency among the GDDS data plans for improvement, technical assistance, and the data deficiencies identified in Article IV consultations.

Most recommendations in this Review would focus on strengthening the implementation of the existing data provision framework. The proposals in this paper fit within the existing resource envelope. Staff would update the data provision guidelines where relevant, reflecting the Board's discussion of this 2012 Review, and strengthen the implementation of the guidelines in bilateral and multilateral surveillance work. The next review of data provision for Fund surveillance purposes is scheduled for 2017.

<sup>&</sup>lt;sup>1</sup> Article VIII Section 5 and Annex A to the Decision Strengthening the Effectiveness of Article VIII, Section 5—decision No. 13182 (4/10), adopted January 20, 2004, as amended (the "2004 Decision").

Approved by Robert Heath and Martin Mühleisen Prepared by the Statistics and Strategy, Policy, and Review Departments In consultation with other Departments Prepared by a staff team led by Ethan Weisman (STA) and Alison Stuart (SPR) and comprising Yuko Hashimoto, Jisung Moon, Yoko Shinagawa, Natasha Che, Nora Bennis, and Timothy Gibson (STA), and Tetsuya Konuki, So Jung Kwon, Nicolas Million, and Gillian Nkhata (SPR).

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#### ACRONYMS

AUD	Australian dollar
BIS	Bank for International Settlements
BOP	Balance of Payments
BPM6	Balance of Payments and International Investment Position Manual, Sixth Edition
CAD	Canadian dollar
CDIS	Coordinated Direct Investment Survey
CDS	Credit Default Swap
CGER	Consultative Group on Exchange Rate Issues
COFER	Currency Composition of Official Foreign Exchange Reserves
CPIS	Coordinated Portfolio Investment Survey
DGI	Data Gaps Initiative
DOT	Direction of Trade
ECB	European Central Bank
EDGG	Economic Data Governance Group
EDMI	Economic Data Management Initiative
EDSC	Economic Data Steering Committee
FDI	Foreign Direct Investment
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
FSIs	Financial Soundness Indicators
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GFSM 2001	Government Finance Statistics Manual 2001
GFSR	Global Financial Stability Report
G-SIFI	Global Systemically Important Financial Institution
G-20	Group of 20
IAG	Inter-Agency Group
IBS	International Banking Statistics
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
IFS	International Financial Statistics
IFSWF	International Forum of SWFs
IIP	International Investment Position
ILO	International Labor Organization
IMDs	Integrated Monetary Databases
INFER	Instrument Composition of Transactions in Foreign Exchange Reserves
I-to-A	Institution to Aggregate
LEIs	Legal Entity Identifiers
MD	Managing Director

MFSM	Monetary and Financial Statistics Manual
OECD	Organization for Economic Co-operation and Development
OFC	Other Financial Corporations
PGI	Principal Global Indicators
PRGT	Poverty Reduction and Growth Facility
ROSCs	Reports on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard
SDDS Plus	Special Data Dissemination Standard Plus
SDMX	Statistical Data and Metadata Exchange
SEFER	Survey of Securities Held as Foreign Exchange Reserves
SIA	Statistical Issues Appendix
SNA	System of National Accounts
SRFs	Standardized Report Forms
SWFs	Sovereign Wealth Funds
ТА	Technical Assistance
TCIRS	Table of Common Indicators Required for Surveillance
TSR	Triennial Surveillance Review
WEO	World Economic Outlook

# INTRODUCTION

1. **The policy framework for data provision to the Fund is anchored in the Articles of Agreement but relies largely on a cooperative approach with member countries.** Article VIII Section 5, together with Annex A to the 2004 Decision, defines the minimum set of data that members are required to provide to the Fund for surveillance purposes. The adequacy of data provided, implications of data inadequacies for surveillance, and the scope for improvement are assessed by the Fund on a regular basis.<sup>2</sup> However, most members provide extensive data to the Fund that far exceed those that are legally required.

2. **The IMF keeps data provision by members under periodic review since timely, accurate, and comprehensive data are essential for fulfilling its surveillance mandate.** The previous Review of Data Provision to the Fund for Surveillance Purposes was discussed by the Executive Board in March 2008 (the 2008 Review). The 2008 Review introduced a new classification system for rating the adequacy of data provision by a member to help with this assessment. The present review was expected to be conducted in 2013, but was brought forward to 2012 in the context of the ongoing global crisis. In particular, the Managing Director's (MD) statement on the 2011 Triennial Surveillance Review (TSR) announced that the Review of Data Provision to the Fund for Surveillance Purposes would be brought forward to 2012 to allow the Board to consider where more and better data could be leveraged to enhance surveillance.

# 3. The 2012 Review assesses the framework as updated in 2008, building on recommendations by the 2011 Triennial Surveillance Review (TSR).

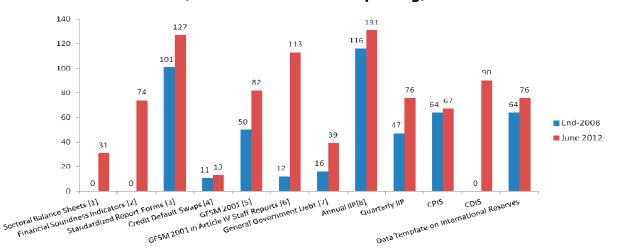
- This report reviews ways in which data provision can be improved and how surveillance can take account of data shortcomings. No further changes to the data provision framework are recommended.
- This report also addresses the issues regarding the data needed to enhance analyses on global interconnectedness and spillovers, as reflected in the 2011 TSR and the MD's work program. These needs are assessed in the context of the G-20/IMFC Data Gaps Initiative (DGI) coordinated with other stakeholders (such as the Financial Stability Board (FSB), the G-20 economies, and the international institutions that are members of the Inter-Agency Group on Economic and Financial Statistics—IAG<sup>3</sup>).
- The 2012 Review also outlines the Fund's efforts to strengthen data quality for surveillance.

<sup>&</sup>lt;sup>2</sup> Data provision is monitored in the Table of Common Indicators Required for Surveillance (TCIRS) in Article IV Staff Reports. The Statistical Issues Appendix (SIA) discusses data issues, shortcomings and implications for surveillance. <sup>3</sup> The members of the IAG are the Bank for International Settlements (BIS), the European Central Bank (ECB), Eurostat, the IMF (chair), the Organization for Economic Co-operation and Development (OECD), the United Nations, and the World Bank.

4. **The proposals in this paper fit within the existing resource envelope.** As envisaged by the TSR, most actions are focused on strengthening the implementation of data provision requirements in staff reports, including in the areas of financial sector surveillance and external stability assessments. Staff would update the data provision guidelines, where relevant, reflecting the Board's discussion of this 2012 Review, and implement updated data provision guidelines in bilateral and multilateral surveillance work.

## DATA ISSUES IN SURVEILLANCE

5. **More and better macroeconomic statistics have been compiled and disseminated since the 2008 Review, in particular on external sector and inter-sectoral issues.** Figure 1 shows the increase in availability of inter-sectoral balance sheets, standardized monetary data, financial soundness indicators, and IIP reporting. Many countries have begun to report the IMF's Coordinated Direct Investment Survey (CDIS), and fiscal data are being presented increasingly using the Fund's *Government Finance Statistics Manual 2001* framework, including information on government balance sheets.<sup>4</sup>



### Figure 1. Increased Selected Macroeconomic Data Availability, 2008–12 (Number of countries reporting)

Sources: IMF STA as of June 2012, except as described in the footnotes

Source: OECD.Stat. Some balance sheet data are only partial. The chart reflects that none were reported to the OECD at end-2008. [2] Dissemination of financial soundness indicators (FSIs) began in mid-2009. [3] 2008 data from *IFS* MFS Supplement, December 2008. The most recent data are from the *International Financial Statistics (IFS)*, August 2012. [4] Source: *BIS*. [5] High frequency (monthly and quarterly) data compiled in the *GFSM 2001* format submitted to the *IFS*. [6] Earliest data from July 2011. [7] World Bank Public Sector Debt Statistics Database, <u>www.worldbank.org/qpsd</u>. [8] Release of the CDIS results began in 2010 with data at end-2009.

<sup>&</sup>lt;sup>4</sup> The Executive Board approved key elements of the *GFSM 2001* to be used in staff reports by May 2011 and requested continued assistance to member countries in developing capacity to produce comprehensive *GFSM 2001* data. See Government Finance Statistics to Strengthen Fiscal Analysis; IMF Policy Paper; February 26, 2010 (http://www.imf.org/external/np/pp/eng/2010/022610.pdf).

6. Where shortcomings in data provision exist, the assessment process introduced by the **2008 Review has resulted in greater candor in staff reports** (Box 1). Although over two-thirds of member countries have data shortcomings (110 "B" countries and 22 "C" countries, according to the classification as of May 2012), most of these are not rated to have serious shortcomings that significantly hamper surveillance. As of May 2012, the number of countries rated "C" was 12 percent, of the Fund membership, three times higher than the 4 percent of cases where data provision was considered "inadequate" back in 2007. Countries rated "C" are concentrated in Africa, Asia, and the Middle East and Central Asia regions (Figure 2).

#### Box 1. Changes to Data Provision Introduced Following the 2008 Review

The Board approved the following changes to the data provision framework following discussion of the 2008 Review with a view to both streamlining staff reviews of data adequacy and more effectively addressing those data provision issues that hamper staff's ability to analyze key economic issues and draw appropriate policy conclusions.

- The classification of data adequacy was simplified to facilitate assessments that are clear, candid, and consistent across countries, and to ensure that resources are focused on identifying the most critical data deficiencies. The classification of data adequacy became:
  - (A) Data provision is adequate for surveillance
  - (B) Data provision is broadly adequate for surveillance
  - (C) Data provision has serious shortcomings that significantly hamper surveillance.
- SIAs were to be more focused on significant data deficiencies, but expanded to include financial sector data issues where warranted.
- The coverage of reserve liabilities and derivatives in Annex A of the 2004 Decision was expanded to include (as of January 1, 2009) those linked to foreign currency but settled in domestic currencies, for closer alignment with international best practice on reserves reporting.
- International investment position (IIP) data, the provision of which has always been required under Article VIII, Section 5, was added to the Table of Common Indicators Required for Surveillance (TCIRS).

Steps for staff to follow when there is concern that a member may not be complying with its obligations to provide data for surveillance under Article VIII, Section 5 were clarified, to support consistent and even-handed treatment.

7. Overall, the data provision procedures implemented after the 2008 Review have been

**effective.** Staff's analysis has been clearer and more candid on the existence of data inadequacies, which makes it easier to identify remedial actions. The staff report review process has led to more uniform application of the A, B, and C classifications. Implementation of the new classification by area departments has been almost complete and feedback from mission chiefs suggests that most find the classification to be useful. However, about 40 percent of respondents to the mission chiefs survey had some difficulties drawing a sharp distinction between cases (either between A and B, or B and C). Staff could benefit from improved guidance on how to draw those distinctions.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> The shift in classifications among "A", "B", and "C" has been small during 2009–12; as part of improved staff guidance, area departments would be asked to report on any modifications to these classifications relative to the previous Article IV staff report in the SIA section.

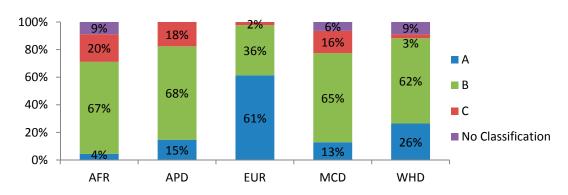
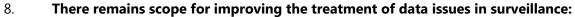


Figure 2. Data Provision Classification, by Region



- **Candor**. Two thirds of mission chiefs who responded to the survey felt that the discussion of data issues in the Article IV report was candid. However, 41 of the 70 respondents to the mission chiefs survey (mainly covering developing economies) indicated that important data deficiencies hampered surveillance to some extent (compared to 22 countries rated "C" Fund-wide, comprising 16 percent of developing economies), and about three-quarters of these respondents indicated that the SIAs cited major data deficiencies.<sup>6</sup> This suggests there may be some hesitancy by teams to use the "C" classification.
- **Discussion in staff reports**. Explicit recognition of the effects of data deficiencies on surveillance and proposals for remedial measures in the main text of staff reports are relatively rare. Among the 50 Article IV staff reports reviewed for this paper, 15 cases had data shortcomings indicated in the main text or SIA, of which six reports did not mention remedial measures. In the mission chief survey, 11 percent responded that the discussion of data issues in the staff report was either moderately candid or not candid, due to considerations related to maintaining a harmonious relationship with the authorities.
- **Macro-financial data**. The 2011 TSR highlighted that mission chiefs found data limitations for financial sector surveillance to be a key impediment to their work: 73 percent of the respondents to the mission chiefs' survey conducted for the 2011 TSR saw data limitations as an impediment to macro-financial analysis at least to some extent. However, only a third of the 50 staff reports reviewed for this paper mentioned financial sector data deficiencies (either for surveillance purposes or for supervisory purposes), and around 40 percent made no mention of financial sector data inadequacies at all.<sup>7</sup> In part, this may reflect the lack of guidance provided since the 2008 Review on what to report for category A and B countries with respect to financial sector data.

<sup>&</sup>lt;sup>6</sup> In part this may reflect a higher than representative sample of mission chiefs working with low income countries among the respondents (see Appendix I for survey details).

<sup>&</sup>lt;sup>7</sup> The illustrative SIA example in the current version of the Guidance Note may have misled the country teams: in the case "A" example the coverage of financial data was rather thin while the case "B" example did not include financial sector data.

- **Timeliness**. In most countries that were reviewed for this report, the timeliness of data provision for surveillance remained unchanged between 2009 and the most recent staff report.
- **Remedial Actions**. Most "C" countries are participants in the Fund's General Data Dissemination System (GDDS), but the GDDS statistical plans for improvement are often not consistent with the data deficiencies identified in staff reports. Greater attention could be given to ensure that the data issues affecting surveillance are reflected in a consistent manner in the GDDS plans for improvement and are addressed through technical assistance.
- **Staff estimates**. The use of staff estimates to compensate for historical data shortcomings is not sufficiently documented or clearly distinguished in staff reports. Almost all (48 out of 50) staff reports reviewed did not clearly distinguish official statistics from other sources of data or staff estimates of historical data. When staff estimates were made, usually in the absence of adequate data quality, resulting modifications to official statistics (causing discrepancies with official data) were not well documented.<sup>8</sup>
- **Data quality**. A key judgment that staff has to make is whether the macroeconomic statistics are of sufficient quality to conduct effective surveillance. This includes assessing the accuracy and timeliness of data, data consistency, and international comparability of data. While over 100 Data ROSCs have been disseminated, only a limited number of reports (one to two) are updated each year, given resource constraints. Therefore, most Data ROSCs may not be sufficiently up-to-date to assist mission teams in reaching a conclusion on the adequacy of data provision for surveillance purposes. Moreover, while these reports assess macroeconomic data disseminated to the public, they do not necessarily cover all the data that may be needed for Fund surveillance, nor do they cover data that may be submitted to the Fund for that purpose but are not made accessible to the public.

#### Recommendations

# 9. **Overall, the 2008 data provision framework is working well and there is no need to change it.** However, operational improvements can be made within this framework:

- *Clearer instructions*. Clearer instructions will be provided to staff on the distinction among data provision classifications and candor will continue to be encouraged.
- *Identify data deficiency.* The main text of staff reports should continue to identify the main data deficiencies that affect surveillance, whether these reflect a lack of capacity, how surveillance was affected, and remedial measures. In particular, data deficiencies that affect financial sector surveillance should be clearly spelled out in staff reports. To this end, STA has developed a modified SIA template with a section to focus on financial sector

<sup>&</sup>lt;sup>8</sup> The Economic Data Management Initiative (EDMI, Appendix IV) aims to manage this risk, but staff reports could also better distinguish and document source data and estimates.

aggregates covering provision of CDIS and Coordinated Portfolio Investment Survey (CPIS) data, International Banking Statistics (IBS) data, Financial Soundness Indicators (FSIs) and aggregate cross border exposures (Appendix VI). This will also allow teams to report progress regarding the DGI (Box 2) and Special Data Dissemination Standard Plus (SDDS Plus) adherence (for systemically important financial sectors) where relevant (Box 3). Moreover, staff reports should follow-up on the recommendations on data provision issues raised in the previous Article IV report.

- *Consistency with GDDS*. In collaboration with area departments, STA will follow up to ensure consistency between the GDDS data plans for improvement and the data deficiencies identified in Article IV consultations. For "C" countries, GDDS plans for improvement, staff reports, and technical assistance (TA) provision should be consistent.<sup>9</sup>
- *Timeliness*. STA would support the authorities in enhancing the timeliness of provision and dissemination of key statistics, through TA and data standard (SDDS, GDDS) exercises.
- *Clarity of data sources.* Staff reports should explicitly distinguish among official statistics, other sources of data, and staff estimates on historical data, especially if these sources are mixed within the same table. Staff reports could briefly document how staff estimates were produced.
- *Tools.* To support mission teams, STA intends to enhance the tools and information on aspects of data quality (Appendix V), for example, by updating the Guidance Note on Data Provision and giving consideration to the development of a data quality index by country, incorporating information from the Fund's Data Standards Initiatives, and other sources. Data quality will continue to be assessed in the context of topical data ROSCs.
- Data Quality. To further promote data quality, staff will continue to collaborate with other international agencies to improve data sharing, common content and technical standards,<sup>10</sup> and develop common templates and coding to facilitate common sourcing of data and improve consistency of reporting. Such international coordination should also reduce the reporting burden for countries.

<sup>&</sup>lt;sup>9</sup> In the unlikely instance that an SDDS subscriber is classified as a "C" case, the SIA should indicate the measures being taken to address the data deficiencies that are hampering surveillance. There are no such cases at present. IMF technical assistance could support those measures in certain cases. There are no "plans for improvement" as part of the SDDS.

<sup>&</sup>lt;sup>10</sup> Such as the Statistical Data and Metadata eXchange (SDMX).

# HANDLING POTENTIAL BREACHES OF OBLIGATIONS UNDER ARTICLE VIII, SECTION 5

10. Between March 2008 and April 2012, sustained concerns were raised with eight members about their willingness to share data required for Fund surveillance to the best of their ability.<sup>11</sup> These cases involved concerns related to inaccurate reporting or incomplete reporting of a variety of data specifically required under Article VIII, Section 5, as further elaborated in the Decision on Strengthening the Effectiveness of Article VIII, Section 5 (Decision No. 14107-(08/38)). All of those eight cases were the subject of inter-departmental discussions. In six cases, the Board discussed the MD's reports under Rule K-1 (K-1 reports). The Board agreed there was a breach in these six cases. Remedial actions were already in place in five cases, and in one case further remedial actions were recommended.

11. **Around half of these cases have been resolved with a prompt process, although the rest have been protracted.** Four cases were resolved within a year from the initial awareness by the staff of the data issue. The other cases have taken more time. One was resolved after six years; the three other unresolved cases have been ongoing in excess of two years (Appendix II). In these cases: (i) substantial progress is being made toward fully adequate provision of data for one case; (ii) staff has not been able to reach a view for another case whether it is a breach because difficulties in engaging with the authorities have hampered staff's efforts to understand the nature of the problem; and (iii) the Board has issued a decision calling on the relevant member to take remedial measures in a third case. The member has, until now, yet to implement these measures.

12. Staff's efforts to address potential breaches generally followed the practices set out in the Decision on strengthening the effectiveness of Article VIIII Section 5 and elaborated in the guidance (Guidance Note on Data Provision to the Fund for Surveillance Purposes,).

- Concerns in all cases were shared among departments quickly, staff engaged with the authorities promptly after reaching inter-departmental agreements, and with reasonably quick follow-up.<sup>12</sup> Staff actions were taken irrespective of the need to conduct the Article IV consultations as required under the legal framework.
- Staff kept management and the respective Executive Director's office informed during the course of interactions with the authorities. In a few cases, management directly engaged with the authorities prior to the letter stage.

<sup>&</sup>lt;sup>11</sup> This review does not cover misreporting cases under Fund arrangements. However, it covers cases which came up in the context of Fund arrangements, but the issue was about data specifically required under Article VIII, Section 5 or in the Decision on Strengthening the Effectiveness of Article VIII, Section 5 (Decision No. 14107-(08/38)).

<sup>&</sup>lt;sup>12</sup> Indeed, during the period under review there were six other cases—not included in the discussion above—where staff became concerned about a potential breach of Article VIII, Section 5, but determined quickly, sometimes in consultation with the authorities, that they were not a breach.

- In cases where management formed a view that there was a breach, a letter was sent by management in a timeframe consistent with the expected limits articulated in the staff's Guidance Note, except for one case where the issue was highly complex.
- The "staff due diligence" and "pre-letter" stages of procedures for handling concerns of potential breaches of Article VIII, Section 5 which were more fully articulated in the 2008 Data Provision Review and Guidance Note have been followed and these procedures appear to have helped improve staff's handling of potential breaches (see Appendix II).

13. **The Board was informed of the staff's concerns in all cases where inter-departmental agreements were reached on a course of action.** In all six cases where a letter was sent by management to the member (in one case exceptionally a mission chief's letter was sent), the MD issued a K-1 Report. The Board found breaches of data provision obligations for surveillance in all of these six cases. The Board decided not to take further action in five cases where a K-1 Report was issued, given that accurate data had already been provided or remedial actions had been agreed between the staff and members at the time of the Board discussion of the K-1 Report. As of August 2012, the sixth case is pending.

14. **Overall, the review suggests that, in most cases, the staff has followed good practices handling concerns of potential breaches of data provision obligations.** The clarification of the steps to be taken following the 2008 Data Provision Review has helped staff follow up in a timely manner in a number of cases, although in some others the process to resolution has been lengthy due to complexity or difficulty in engaging the authorities.

#### Recommendation

15. The procedures for following up on potential breaches of Article VIII, Section 5 are working well and staff does not propose further modification of the Guidance Note. However, staff could review prolonged open cases to see what lessons could be learned.

# **DATA GAPS**

16. **The ongoing crisis has starkly identified the need for a more complete description of systemic risks arising from positions and exposures across sectors and borders.** This theme is at the core of initiatives to fill data gaps, for example, in the context of the G20/IMFC DGI (see Box 2). Emphasis on filling data gaps was also reflected in the MD's action plan to take forward the findings of the TSR, which highlighted five priority areas: interconnectedness, risk assessments, financial stability, external stability, and traction.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> <u>http://www.imf.org/external/np/pp/eng/2012/041812.pdf</u>

#### Box 2. G-20/IMFC Data Gaps Initiative

The global crisis highlighted the need to improve existing economic and financial datasets and give greater attention to the data needed for financial stability analysis in order to support evidence-based policy decisions and strengthen the functioning of markets.

The Group of 20 economies (G-20) asked the IMF and FSB to look into data gaps revealed by the global crisis and report back to G-20 Finance Ministers and Central Bank Governors. Arising from this request was the G-20 DGI with 20 recommendations, which has been endorsed by the IMFC, as well as the G-20 Finance Ministers and Central Bank Governors. The recommendations address key data gaps that are seen as major impediments to proper analysis of cross-border financial interconnectedness, financial sector soundness, and domestic financial stability.

**From an implementation standpoint, the 20 recommendations under the DGI can be divided into two categories**: i) those recommendations for which the conceptual statistical framework needs development, and ii) those recommendations for which conceptual statistical frameworks exist and ongoing data collection and dissemination needs enhancement. Broadly, addressing the first group of recommendations has a more medium- to longer-term horizon.

**The DGI is making significant progress in all areas.** Fund staff is leading the work, in consultation with the FSB, and with a collaborative and cooperative approach with national authorities and the international institutions members of the IAG. Work on developing templates and agreement on data access with regard to the recommendations on Global Systemically Important Financial Institutions (G-SIFIs) is progressing with the FSB, with Fund staff closely engaged. Important decisions on G-SIFIs issues are expected in early 2013.

**Establishment of the Principal Global Indicators (PGI) website has been one of the first tangible results of this work (<u>http://www.principalglobalindicators.org/default.aspx</u>). The PGI dataset draws on data from all members of the IAG and disseminates the data swiftly. It provides internationally comparable data for the G-20 and the five members of the FSB that are not part of the G-20 to facilitate the monitoring of economic and financial developments for these economies. The PGI covers financial, governmental, external, and real sector data, with links to data available at websites of international and national agencies.** 

**Implementation is in progress regarding enhancements to the IMF's IIP and CPIS, and the BIS' IBS.** In addition, substantive development work is on-going in other areas (sectoral accounts, securities statistics, and real estate prices). Looking forward, the development and implementation of new conceptual frameworks, such as for G-SIFIs, would greatly enhance the availability of key data to monitor economic vulnerabilities to external and domestic shocks more effectively. Following the initial report on the DGI presented to the November 2009 G-20 Finance Ministers and Central Bank Governors meeting, two progress reports on DGI implementation were submitted (May 2010, and June 2011).<sup>14</sup> The third report is scheduled to be produced by September 2012.

<sup>&</sup>lt;sup>14</sup> Reports on the G-20 Data Gap Initiative can be found at <u>http://www.imf.org/external/np/g20/pdf/102909.pdf</u>, <u>http://www.imf.org/external/np/g20/pdf/053110.pdf</u>, and <u>http://www.imf.org/external/np/g20/pdf/063011.pdf</u>.

17. **The work of the DGI would help address the priority areas identified in the 2011 TSR.** It encourages the compilation of sectoral accounts, including sectoral balance sheets, and the IMF's CPIS and IIP, aims at enhancing the BIS' IBS,<sup>15</sup> and improves the availability of government finance and debt data, as well as real estate prices. Further in February 2012, the Board broadly endorsed the establishment of the SDDS Plus to further strengthen data provision by economies with systemic financial sectors (Box 3), especially with regard to nine data categories that are of focus in the DGI. There are other data sets (e.g., balance of payments (BOP) and direction of trade (DOT)) covered neither by the DGI nor the SDDS Plus, on which the international community is working, and which support the new emphasis in the TSR. This statistical work will need adequate resourcing at the national level.

#### Box 3. Data Standards Initiatives: The SDDS Plus

The IMF introduced the Data Standards Initiatives in the mid 1990s following the Mexican financial crisis to promote the transparency of economic and financial statistics. The data standards initiatives initially consisted of two tiers: (1) the SDDS, a monitored standard designed to guide countries that have or might seek access to international capital markets in the dissemination of economic and financial data to the public; and (2) the GDDS, a statistical development framework designed to guide countries in the provision of economic, financial, and socio-demographic data to the public.

During the Eighth Review of the Data Standards Initiatives in February 2012, the Board broadly endorsed the SDDS Plus with a view to addressing the data gaps revealed during the global crisis. The SDDS Plus aims at countries that have systemically important financial sectors. The SDDS Plus draws on the on-going work on the DGI, requiring adhering countries to disseminate a broader range of data with shorter periodicity and faster timeliness.

To adhere to the SDDS Plus, countries need to be in full observance of the SDDS and meet nine additional or more stringent data categories, based in large part on the DGI work. The nine data categories cover: sectoral balance sheets; general government operations; general government gross debt; other financial corporations survey; seven FSIs; debt securities; participation in the CPIS, and the CDIS; and public disclosure of participation in the quarterly COFER database. There are no flexibility options for these data categories; however the SDDS Plus would initially allow transition periods for up to four of these data categories through the end of 2019.

Adhering to the SDDS Plus would be voluntary, but once a country adheres, it undertakes to meet the most rigorous data dissemination and data quality standards.

<sup>&</sup>lt;sup>15</sup> Staff is working with the BIS and their reporting central banks to streamline IMF access to the international banking statistics.

18. **For surveillance purposes, data availability in some of these areas is still patchy and insufficient to conduct thorough analysis.** For example, FSIs are helpful to identify the buildup of risk, although some of the indicators are backward looking and only identify potential problems with a lag. Reporting of granular information on inter-sectoral positions and exposures (e.g., sectoral balance sheets) is necessary for a basic quantitative analysis of macro-financial risks. But in this area, data are still in short supply and enhancements to data collection are in progress (Table 1, column 2).

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

#### Table 1. Overview of the G-20/IMFC DGI Recommendations<sup>16</sup>

<sup>&</sup>lt;sup>16</sup> Recommendation 1 referred to delivery of the ongoing reports.

# **KEY DATA SETS**

19. **The Fund has followed up on recommendations of the 2008 Review.** This section reviews the progress on a number of key data sets maintained by the Fund, which cover positions and exposures vis-à-vis the rest of the world as well as inter-sectoral positions and financial exposures.

### A. International Investment Position (IIP)

20. **Assessing developments in countries' IIP** is important for Fund surveillance, in particular for external stability, and good progress has been made on coverage, periodicity, timeliness, and other aspects of data quality.

- The number of countries regularly reporting quarterly and annual IIP data has increased (Figure 1) and STA technical assistance on IIP has been stepped up, including through informal bilateral contacts and the publication of the *Quarterly International Investment Position Statistics: Data Sources and Compilation Techniques* in March 2011.
- The measurement of IIP data also has been clarified. First, the *Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6)*<sup>17</sup> provides detailed guidance on measuring IIP statistics, for example through memorandum tables capturing the currency breakdown of the IIPs. Second, to better understand changes in countries' IIPs, foreign direct investment (FDI) data are being improved through the CDIS. Similarly, portfolio investment measurement is also being improved through the Coordinated Portfolio Investment Survey (CPIS), which will begin to be conducted semi-annually beginning with the reference date of end-June 2013.
- Following the proposal at the 2008 Review, IIP is now included in TCIRS as part of Article IV staff reports, in accordance with the *Guidance Note on Data Provision to the Fund for Surveillance Purposes*.
- *BPM6* incorporates statistical improvements to capture Sovereign Wealth Funds (SWFs). The *BPM6* now provides a coherent framework for classifying the external assets of SWFs, provides guidance on the sectoral breakdown and functional allocation of SWFs, and allows for a voluntary disclosure of SWF assets not included in official reserves. Countries that have SWFs are strongly encouraged to compile IIP data in accordance with *BPM6* and report the IIP data to the IMF, if they have not done so yet.<sup>18</sup>

<sup>&</sup>lt;sup>17</sup> <u>http://www.imf.org/external/pubs/ft/bop/2007/bopman6.htm</u>

<sup>&</sup>lt;sup>18</sup> A survey of the members of the International Forum of SWFs (IFSWF) regarding their experiences in the application of the Santiago Principles, including data issues, conducted in collaboration with the IMF

<sup>(</sup>http://www.ifswf.org/pst.htm ), stated that: i) all respondents have fully or partially implemented one of the principles on data reporting; and ii) most members provide data about their financial status regularly to their owners through annual, quarterly or monthly reports.

#### Recommendation

21. **The Fund should continue its work on helping members to improve IIP reporting and in particular to encourage more timely reporting through the quarterly provision of data**. Under the SDDS,<sup>19</sup> subscribers will be required to disseminate quarterly IIP data with a maximum lag of one quarter starting from September 2014 (beginning with data for 2014 quarters I and II), which should further help promote quarterly data dissemination.

### **B.** Reserves Data Template

22. **Since 2008, the number of countries reporting the International Reserves and Foreign Currency Liquidity (the Reserves Data Template) has increased.** As of June 2012, 76 countries report Reserves Template data (from 64 at end-2008).<sup>20</sup> Moreover, Annex A of the Decision on Strengthening the Effectiveness of Article VIII, Section 5 was amended following the 2008 Review, with the Reserve Template now including exchange-traded futures denominated in foreign currency and settled in domestic currency.<sup>21</sup>

23. To assist compilers in reporting the required data, STA has updated the *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template* (Guidelines) in line with the *BPM6* and revisions to the Reserves Template. The updated Guidelines contain clarifications based on countries' experiences. A pre-publication draft was posted in January 2012 and is undergoing final edits for publication

(http://www.imf.org/external/np/sta/ir/IRProcessWeb/pdf/guide.pdf).

#### Recommendation

24. STA will provide members with TA, as needed, to implement the Guidelines.

### C. Currency Composition of Foreign Exchange Reserves (COFER)

25. **Reporting the currency composition of reserves is important for global surveillance, but progress on reporting has been mixed**.<sup>22</sup> As of end-Q1 2012, there were 145 COFER reporting

<sup>&</sup>lt;sup>19</sup> Eighth Review of the Fund's Data Standards Initiatives. The PIN is published here: Eighth Review PIN.

<sup>&</sup>lt;sup>20</sup> Including the ECB and Eurosystem (<u>http://www.imf.org/external/np/sta/ir/IRProcessWeb/colist.aspx</u>).

<sup>&</sup>lt;sup>21</sup> Decision on Strengthening the Effectiveness of Article VIII, Section 5 (Decision No. 13183-(04/10) as amended), paragraph viii of Annex A. The SDDS requirements were modified accordingly.

<sup>&</sup>lt;sup>22</sup> Since the COFER survey was designed to collect information specifically on currency composition of foreign exchange reserves, the COFER data are limited. However, other datasets that STA collects provide additional information on reserves assets. Specifically, the Instrument Composition of Transactions in Foreign Exchange Reserves (INFER) and the Survey of Securities Held as Foreign Exchange Reserves (SEFER) provide information on the instrument classification and the geographical holdings of securities within reserves assets. In addition, the balance of payments data (BPM6 version) contain reserve-related liabilities and the Reserves Template also contains data on exposure of possible drain on foreign exchanges arising from options.

countries, accounting for less than 55 percent of total world foreign exchange reserves, down from 77 percent in 2001 (Figure 3).<sup>23</sup> Even though the number of reporting economies has increased over the past decade, the proportion of global reserves accounted for by the COFER has declined as the reserves of non-COFER reporting countries have grown substantially.



Source: IMF. Currency Composition of Official Foreign Exchange Reserves (COFER).

#### Recommendations

26. Following consultation with the Board, the Fund developed an Action Plan to expand COFER data and encourage countries with large reserves to participate (Appendix III).<sup>24</sup> The action plan comprises:

- **Expansion of country coverage**. A COFER outreach seminar is being contemplated to further explain the COFER initiative, assuage possible concerns, and encourage reporting.
- **Expansion of currency coverage**. Two additional currencies—the Australian dollar (AUD) and the Canadian dollar (CAD)—have a relatively high number of country reporters and are to be considered for separate identification in COFER reporting.
- **Greater transparency on reporting**. Releasing the names of COFER reporting countries or economies that are willing to do so would support the transparency of COFER (country data would be kept strictly confidential as is currently the case). Such a release could be timed in early 2013, following the launch of the SDDS Plus—adherence to the SDDS Plus requires a country to make public its participation in the COFER database.<sup>25</sup>

<sup>&</sup>lt;sup>23</sup> The COFER database contains end-of-period quarterly data on the currency composition of official foreign exchange reserves identifying separately the following currencies: U.S. dollar, Euro, Pound sterling, Japanese yen, and Swiss franc. All other currencies are included indistinguishably in a category called "other currencies." See <a href="http://www.imf.org/external/np/sta/cofer/eng/index.htm">http://www.imf.org/external/np/sta/cofer/eng/index.htm</a>.

<sup>&</sup>lt;sup>24</sup> Monitoring Financial Interconnectedness, Including the Data Template for Global Systemically Important Financial Institutions, PIN No. 11/61.

<sup>&</sup>lt;sup>25</sup> Staff would confirm the willingness of each economy that does not adhere to the SDDS Plus to disclose their participation in the COFER database ahead of the first release.

### D. Global Systemically Important Financial Institutions (G-SIFIs)

27. **The crisis has demonstrated that distress in a G-SIFI can have considerable impacts on economic and financial stability across borders.** A lack of timely and accurate information on the interconnectedness of G-SIFIs and their common exposures to different financial sectors and economies is a key blind spot and vulnerability facing policy makers across the world. Under the G-20 DGI, Fund staff has been working closely with the FSB secretariat and FSB member economies in an FSB working group to develop a common reporting template. In early 2013, key decisions are expected to be taken by the FSB Plenary on the establishment of the final form of the common data template for G-SIFIs and on data access. Although the IMF's Articles of Agreement require members to provide information for the Fund to fulfill its surveillance mandate, members are not obliged to furnish information "in such detail that the affairs of individuals or corporations are disclosed."<sup>26</sup> However, confidential information is often shared with the Fund in the context of Financial Sector Assessment Programs (FSAPs) on a voluntary basis and where there are established modalities for ensuring confidentiality.

# 28. Access to G-SIFIs information is essential for the Fund to effectively implement the key recommendations of the 2011 TSR and the forthcoming Financial Surveillance Strategy. The

2011 TSR emphasized the need to enhance surveillance on financial interconnectedness, including spillover and contagion analyses on the global economic consequences of shocks to G-SIFIs. In order to conduct such analyses, it is essential for the Fund to have access to information on positions between G-SIFIs and countries' domestic sectors and markets through institution-to-aggregate (I-to-A) data. The Fund may face challenges in obtaining access to such information given the strict confidentiality of the data: some legislative amendments may be needed for some members to provide such access to the Fund (and other international financial institutions (IFIs)), while in others strong support from the authorities will be necessary. Members' strong support to enable the Fund to obtain the access would be vital.

#### Recommendations

- The Fund will continue to work with the FSB secretariat in designing the common template for G-SIFIs, by articulating what particular data are necessary for its macro-financial surveillance.
- The IMF will continue to emphasize the need for strictly confidential access by the Fund to G-SIFIs (I-to-A) data.

<sup>&</sup>lt;sup>26</sup> However, the Fund can request information beyond that required under the Articles as a condition for the Use of Fund Resources.

### E. Standardized Report Forms (SRFs)

29. **Since the 2008 Review, standardized reporting of monetary data has increased and data coverage broadened—helped by the use of SRFs.** SRFs embody the recommendations of the *Monetary and Financial Statistics Manual* and allow improved classification of monetary data by sector and instrument, as well as richer detail on currency composition, which facilitates construction of sectoral balance sheets. The number of reporting IMF member countries increased from 101 at end-2008 to 127 as of end-June 2012.<sup>27</sup> However, following the World Economic Outlook (WEO) classification, eight advanced, 25 emerging, and 28 low-income economies (including eight members of the G-20) do not report monetary data using SRFs (although they may report data in another format).

#### Recommendation

30. **The Fund encourages countries to broaden their coverage of monetary and financial statistics by including the data of other financial corporations (OFC)** through a program of technical assistance and training.<sup>28</sup> The number of countries reporting OFC data increased from 18 at end-2008 to 32 as of end-June 2012. The SDDS Plus (Box 3) includes data on a minimum set of OFCs' assets and liabilities with quarterly periodicity and quarterly timeliness.

### F. Financial Soundness Indicators (FSIs)

31. **The IMF has made significant progress on FSI dissemination practices, particularly in the context of SDDS enhancements.** The number of FSI reporting economies has increased to 74 (as of end-June 2012) from 45 (as of mid-2009 when FSI dissemination began on a regular basis). Also, economies have expanded the number of FSIs reported and have begun dissemination of some of those FSIs at higher frequencies. To encourage further improvements, seven FSIs were introduced as a new SDDS data category on an encouraged basis by the IMF's Executive Board in March 2010.<sup>29</sup> Given the funding risks that emerged over the ongoing financial crisis, efforts to expand FSIs on funding sources for financial institutions are taking place. Currently, there are three indicators available in the FSI dataset for banks.<sup>30</sup> However, only one is in the subset of FSIs is underway.

<sup>&</sup>lt;sup>27</sup> These include countries reporting in accordance with the ECB's framework.

<sup>&</sup>lt;sup>28</sup> OFCs consist of insurance companies, pension funds, investment funds other than money market funds, other financial intermediaries, and all other financial corporations that are not depository corporations.

<sup>&</sup>lt;sup>29</sup> The seven FSIs are: (i) regulatory tier 1 capital to risk-weighted assets, (ii) regulatory tier 1 capital to assets, (iii) nonperforming loans net of provisions to capital, (iv) nonperforming loans to total gross loans, (v) return on assets, (vi) liquid assets to short-term liabilities, and (vii) net open position in foreign exchange to capital.

<sup>&</sup>lt;sup>30</sup> They are (i) liquid assets to total assets; (ii) liquid assets to short-term liabilities; and (iii) customer deposits to total (non-interbank) loans.

#### Recommendation

32. **The Fund should continue to encourage FSI dissemination by members.** The SDDS Plus includes dissemination of six of those seven FSIs.<sup>31</sup> In addition, given the important role real estate prices played during the global financial crisis, the SDDS Plus also prescribes the dissemination of the FSI on residential real estate prices. Following a November 2011 FSI reference group meeting, the list of FSIs and the FSI Compilation Guide are under review,<sup>32</sup> with a view to releasing updates in 2013/14. Subsequent reviews of the coverage of FSIs are expected to take place every three years.

### **G.** Government Finance Statistics

33. Significant progress has been made in implementing a standardized *GFSM 2001* reporting framework for fiscal statistics in IMF staff papers.<sup>33</sup> The number of staff papers with

fiscal tables using a *GFSM 2001* presentation at least for government operations has increased from 49 in November 2011 to 113 as of end of June 2012. The presentation of fiscal data in a standardized and transparent framework enhances the quality and cross-country comparability of the data.

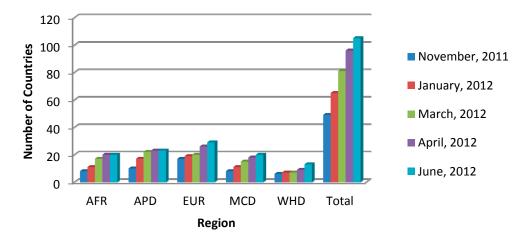


Figure 4. *GFSM 2001* Presentation of Fiscal Data in IMF Staff Reports Since November 2011

#### 34. However, government financial balance sheet data require greater emphasis and

**attention.** Only 39 of the 105 staff reports show a complete financial balance sheet and only a few include memorandum items such as information on contingent liabilities, guarantees or arrears. Such data are key to fiscal risk and sustainability analysis.

<sup>&</sup>lt;sup>31</sup> "Net open position in foreign exchange to capital" is not included in the SDDS Plus.

<sup>&</sup>lt;sup>32</sup> As the FSI Guide defers to Basel standards (either Basel I, II, or III as adopted by individual country) with regard to the compilation of regulatory underlying series, and to IFRS with regard to the recording of incomes and expenses and some other accounting rules, any related changes in these two standards will be valid for compiling FSIs.

<sup>&</sup>lt;sup>33</sup> Government Finance Statistics to Strengthen Fiscal Analysis; IMF Policy Paper; February 26, 2010 (<u>http://www.imf.org/external/np/pp/eng/2010/022610.pdf</u>).

35. **Institutional Coverage of Government Finance Statistics needs to be broadened in many countries.** For a substantial number of countries, the coverage of fiscal data is limited to budget execution data or the central government. Without complete coverage of general government sector it is difficult obtain a complete understanding of public finances.

#### Recommendation

36. **Fund staff will focus on encouraging members to produce and disseminate complete general government balance sheet data**. Financial balance sheet data should cover the general government and include memorandum information on contingent liabilities or arrears if significant. Progress in improving the reporting of balance sheet data for the general government would also help to strengthen assessments of fiscal risk and sustainability analysis.

### H. Labor Market Indicators

37. **Currently, the availability of official labor market statistics is limited.** Labor market data published in *International Financial Statistics (IFS)*—including data on employment, labor force, unemployment, and unemployment rates—are mainly sourced from the International Labor Organization (ILO). The SDDS and GDDS include three labor market variables: employment, unemployment, and wages/earnings. Out of 71 SDDS subscribers, 57 provide the required data and the rest take advantage of a flexibility option. Out of 103 GDDS participants, only 45 report data for the three variables.

# 38. To address data deficiencies, the IMF would need to rely on the expertise of other institutions (such as the ILO, OECD, the World Bank and regional development banks).

Currently, the Fund's Research Department is starting a collaborative project with the ILO's Employment Trends Team to improve projections of labor market variables, but development of underlying statistics remains a challenge. In this context, further collaboration between STA and the ILO to support the development of labor market statistics may be warranted.

#### Recommendation

39. **The Fund will encourage members to voluntarily provide key labor market data: employment, unemployment, and wage/earnings to the extent that their capacity allows.** As progress is made in collaboration with the ILO and other agencies to improve labor market statistics, these findings will help staff feed new information into surveillance work.

# **RESOURCE IMPLICATIONS**

#### 40. The proposals in this paper fit within the existing resource envelope because they

**primarily continue developing existing initiatives.** No changes are envisaged regarding the data provision framework, including procedures to implement Article VIII, Section 5. Many actions are directed to staff to further strengthen implementation of data provision to the Fund for surveillance purposes, including enhancing staff reports on financial sector surveillance and external stability assessments in line with the 2011 TSR. Staff would update the data provision guidelines, as foreseen in the TSR, reflecting the Board's discussion of this 2012 Review, and implement these updated data provision guidelines in bilateral and multilateral surveillance work.

# **ISSUES FOR DISCUSSION**

#### Do Directors agree that:

- Staff reports should pay special attention to financial sector data limitations affecting surveillance and note data limitations that may impede financial or external stability assessments.
- The Statistical Issues Appendix should report on surveillance data shortcomings along the lines of the draft modified template and include progress regarding the Data Gaps Initiative data categories and SDDS Plus adherence (where relevant, and especially for economies with global systemically important financial sectors).
- Staff should work to enhance the tools and information on aspects of data quality and will report back to the Board around 2017.
- The procedures for following up on potential breaches of Article VIII Section 5 remain unchanged.
- Staff will focus on improving the following data sets: IIP, COFER, financial soundness indicators (including real estate prices), general government debt, monetary and financial data through the adoption of standardized reporting forms, and labor market indicators (the latter relying largely on the work of other international organizations who have the relevant expertise).
- Staff will continue to work with the FSB secretariat in developing a G-SIFIs data set and emphasizing the need for strictly confidential data access.
- For "C" countries, staff should ensure consistency among GDDS plans for improvement, staff reports, and technical assistance.
- Staff reports should continue to follow-up on data recommendations in the previous Article IV reports.

# APPENDIX I. METHODOLOGY OF ARTICLE IV STAFF REPORTS REVIEW AND MISSION CHIEFS SURVEY

### I. Review of Article IV Staff Reports

1. **A representative sample of Article IV staff reports were reviewed jointly by STA and SPR.** The goal of this exercise was to determine, in conjunction with the 2012 Survey of Mission Chiefs, whether the guidance note on data provision issued following the 2008 Review of Data Provision to the Fund has been implemented, and the extent to which these procedures have been effective in strengthening surveillance.

2. **The review covered a sample of 50 countries,** which was constructed to mirror the regional and income dispersion across the Fund's membership (Table A.1). The methodology was similar to the exercises undertaken for the 2008 and 2011 Triennial Surveillance Reviews.

- The sample universe included 150 Article IV consultation staff reports discussed by the Board between January 1, 2011 and March 31, 2012. If a country had two Article IV consultations completed during this period, only the latest one was included in the sample universe.
- The membership was stratified by income group (advanced, emerging, and developing/lowincome) and by region (five regions by IMF area department), and percentages of the membership within each strata calculated. The sample universe was similarly stratified, and a target number of countries was specified (based on a total of 50 staff reports) to match the percentage of the membership within each strata. In each stratum, a random number ranging from zero to one was assigned to each country, and then countries with the highest score within each stratum were drawn to match the target number as closely as possible, within the constraints of the available universe.
- Definitions of income group classifications were as follows: (i) Advanced: advanced economies according to the WEO classification in October 2010; (ii) Emerging markets: countries that fall into neither of advanced nor developing/low-income; and (iii) Developing/low-income: all PRGT-eligible countries. They are listed in Appendix I of *Emerging from the Global Crisis: Macroeconomic Challenges Facing Low-Income Countries* (http://www.imf.org/external/np/pp/eng/2010/100510.pdf).

AFR	APD	EUR	MCD	WHD
C.A.R	Brunei Darussalam	Albania	Afghanistan	Belize
Cameroon	Cambodia	Austria	Azerbaijan	Brazil
Comoros	China, P.R .of.	France	Djibouti	Chile
Congo, Rep of.	Fiji	Germany	Libya	Mexico
Equatorial Guinea	Marshall Islands	Hungary	Qatar	Paraguay
Ethiopia	Mongolia	Luxemburg	Tajikistan	Peru
Gambia, The	Papua New Guinea	Macedonia	Turkmenistan	St. Lucia
Guinea	Singapore	Norway	U.A.E.	St. Vincent
Mauritius	Vietnam	Poland		United States
Nigeria		Spain		
Togo		Sweden		
Zimbabwe		Turkey		
12	9	12	8	9

Table A.1. List of 50 Countries for the Review of Staff Reports

### II. Survey of Article IV Mission Chiefs

3. A survey of Article IV mission chiefs was conducted in early 2012 in order to gather their views on the adequacy of data provided to Article IV mission teams and the procedures used to assess data adequacy during Article IV consultations.

4. **The survey contained questions addressing the classification of data adequacy, the appropriateness of these classifications, and the ease with which such classifications were assigned**. The survey also asked mission chiefs to report on the extent to which data issues were covered during discussions with country authorities, described in the main text of the staff report, as well as the degree of consistency between these discussions and the SIA.

5. Seventy Mission Chiefs responded to the survey, covering 44 percent of target

**members.** Most of the mission chiefs surveyed have been on their job for one to three years. Efforts were made to include as many respondents as possible. The sample represented a fairly even spread across area departments, and seemed reasonably representative of the Fund's membership, as well as the distribution of "A", "B", and "C" classifications, although there was a higher representation of mission chiefs working with low income countries. While only one-third of countries covered by respondents had published a data ROSC within the last 10 years, almost two-thirds had conducted an FSAP.

6. **Over 80 percent of mission chiefs stated that the Fund's data provision "A", "B", "C" classification scheme was a useful framework through which to identify and address data challenges.** Three-quarters of the respondents noted that the data provision framework was working adequately and did not see any need for changing the roles or procedures followed by departments, including STA and SPR. While 60 percent had no difficulty to classify the adequacy of data provision into one of these three categories following the data provision guidance note, the remaining 40 percent noted that they had some difficulties. The most common critical issues that affected this classification were: coverage, timeliness, accuracy, reliability, and transparency.

7. **The survey suggested that data problems affecting surveillance may be more common than recorded in staff reports.** Regarding the adequacy of data for surveillance, many respondents noted that either there was a lack of timely key data for macroeconomic analysis and thus the team prepared estimates for key variables with estimation based on limited indicators, or recent data needed for macroeconomic analysis was available, but some key data suffered from severe deficiencies that hamper analyses and introduced considerable uncertainty into projections. The number of countries covered by these two sample responses exceeded the total number of "C" cases Fund-wide in recent staff reports.

8. Where issues arose, the types of data problems were diverse. There was no single data category or variable that was commonly perceived to be a clear priority for improvement across the sample of countries.

9. **On the other hand, data concerns were usually discussed with the authorities.** In over 60 percent of the cases, teams either had serious discussions with the authorities to raise awareness of the issues, or the discussions were limited because the authorities were already aware of the issues and were taking steps to address them. These discussions frequently covered the nature of the main data deficiencies and the impact of those deficiencies on the staff's analysis and recommendations. Two-thirds of the mission chiefs that responded characterized the descriptions of data issues in staff reports as "Candid". Moreover, in 80 percent of the cases, where serious shortcomings were identified in a previous Article IV mission, the subsequent consultation followed up on those issues. In another 15 percent of the cases, there were no significant data issues to discuss.

10. **The authorities' views were reflected in the main text of the staff report in a majority of cases.** The authorities often noted their human and financial resource constraints to address these data issues.

11. **Technical assistance was being received or was being requested to address data shortcomings.** When staff identified serious shortcomings that hampered surveillance in data provision to the Fund, 90 percent of the cases recommended technical assistance consistent with the remedial measures proposed. However, only half of the time IMF TA fully addressed identified data deficiencies. When provided, it was moderately effective 70 percent of the time, partly due to low absorption capacity constraints.

12. Consistency between GDDS plans for improvement, data shortcomings identified in staff reports, and the remedial measures needed to address these shortcomings are not systematically checked. Most mission chiefs characterized GDDS plans for improvement as "not relevant."

# Appendix II. Background Information on the Review of Handling Potential Breaches of Article VIII, Section 5

### A. Summary of cases of concern about potential breaches of Article VIII, Section 5

1. During the period between March 2008 and April 2012, there were eight cases where staff had sustained concerns that the authorities were not sharing required data with Fund staff to the best of their abilities. The following table summarizes key facts about those cases. Out of those eight cases, three were reported as "open and still being pursued" in the 2008 Data Provision Review.<sup>1</sup> Among those three, (i) one prolonged case was resolved over two years after the initial awareness of the case by staff; (ii) K-1 reports were issued for another prolonged case and the Board issued a decision calling on the member to adopt remedial measures, which the member has, until now, yet to put in place; and (iii) one case is still open as staff has yet to reach a view on whether there is a breach.

			Was the	Was the			Did the K-1		
		Concerns	management	management	Board		Report		Timeframe until
	Type of	shared	informed during the	letter sent to	informed	Was the K-1	recommend		resolution, or
	problem	with other	interactions with the	the authorities?	of staff	Report issued	further actions		until 4/30/2012
ID Types of Data	1/	depts.?	authorities?	(Letter Stage)	concerns?	to the Board?	by the Board?	Status 2/	if still open 3/
1 Fiscal	М	Yes	Yes	Yes	Yes	Yes	No	С	<1
2 CPI, GDP	М	Yes	Yes	Yes	Yes	Yes	Yes	0	<2
3 Fiscal, public debt	М	Yes	Yes	Yes	Yes	Yes	No	С	<1
4 IIP	Р	Yes	Yes	Yes	Yes	Yes	No	0	2+
5 Reserves, CG debt	М	Yes	Yes	No	Yes	Yes	No	С	<1
6 Reserves	М	Yes	Yes	Yes	Yes	Yes	No	С	<1
7 CPI	М	Yes	Yes	No	Yes	No	N/A	С	2+
8 Fiscal, external debt	М	Yes	N/A	No	No	No	N/A	0	2+

#### Table A.2. Summary of Potential Cases

1/ Types of data reporting problems are: non-provision of data (N); incomplete provision of data (P); provision of inaccurate data and late provision, i.e., providing data with excessively long lags (L).

2/ Status is either closed, i.e. resolved (C), or is open and still being pursued (O).

3/ Timeframe is either less than about one year (<1); between one and two years (1+); or more than two years (2+).

<sup>&</sup>lt;sup>1</sup> The 2008 Data Provision Review classified five cases as open and still being pursued. Among those five cases, two cases are not reported in this Review because staff reached the conclusion that these were not breaches of obligations under Article VIII, Section 5.

### **B.** Phases in the handling of potential breaches of Article VIII, Section 5

2. Handling of these cases typically involves several phases, as laid out in the "Guidance Note on Data Provision to the Fund for Surveillance Purposes" (Guidance Note hereafter). In a first phase, staff becomes aware of problems with data provision that may not be caused by a member's capacity, and take initial steps to follow up on the concerns—usually in the form of interdepartmental consultation on the nature of the issue and a strategy to address it after an initial round of clarification with the authorities. For all of these eight cases, it took less than a month for area department teams to share their concerns with LEG, SPR, and STA.

3. A second phase is to reach consensus among departments on the nature of the concerns and next steps, including informing management. For five cases, initial inter-departmental agreements on the nature of the issue and next steps were reached quickly: in less than a month. There were two cases where it took about half a year for relevant departments to reach internal agreements because of technical complexities of the issues. In one case, little progress was made over a prolonged period because of difficulties ascertaining whether the member's capacity was an issue and because of difficulties engaging the authorities.

4. Staff then engages with the authorities to seek further clarification, often repeatedly, and when applicable, proposes steps to resolve potential breaches. Country teams contacted the authorities promptly after internal agreements are reached. In six cases, management formed the view that the member was in breach of the data provision obligations and formal procedures took place. Management sent a letter to all of those cases (letter stage), except for one case where only a mission chief's letter was sent. In that exceptional case, the authorities provided the staff with relevant data and promptly took remedial measures.

5. Staff kept management informed of developments during the course of interactions with the authorities. In a few cases, management engaged directly with the authorities by meeting with them prior to the letter stage. In all cases, the respective Executive Director's office was informed when there were formal contacts with the authorities regarding potential breaches.

6. In all seven cases where interdepartmental agreements were reached and engagements with the authorities subsequently took place, the Board was informed of the staff's concerns. In six cases where management formed the view that the member was in breach of its obligations, reporting to the Board took the form of the Managing Director's report under Rule K-1 (K-1 Report, see below) in accordance with the Decision on Strengthening the Effectiveness of Article VIII, Section 5 (Decision No. 14107-(08/38)). In one case the Board was made aware of a concern about a potential breach in the context of the Article IV consultation. In one case interdepartmental agreement has not yet been reached.

# Appendix III. The Currency Composition of Official Foreign Exchange Reserves (COFER) Initiative

1. Better data on the currency composition of official foreign exchange reserves (COFER) data would facilitate analysis of developments in reserve currencies, and provide a stronger basis for the assessment of global imbalances and considering issues such as the role of the SDR (see *Enhancing International Monetary Stability—A Greater Role for the SDR*). The data in the IMF's COFER database, which is managed by STA, are collected from countries on a strictly confidential basis.<sup>1</sup> The database contains end-of-period quarterly data identifying separately the following currencies: U.S. dollar, Euro, Pound sterling, Japanese yen, and Swiss franc. All other currencies are included indistinguishably in a category called "other currencies."

2. As part of the COFER initiative, the Managing Director (MD) sent a letter in November 2011 to the Governors for the IMF of member countries (COFER reporters and nonreporters), informing them of steps that the Fund would take to expand COFER coverage. In December 2011, follow-up letters were sent by the Director of STA to Central Bank Governors or Finance Ministers of member countries and other economies. These letters included a COFER currency range survey and solicited national authorities' views on certain issues, including for existing reporters, releasing the names of reporters. Together the MD and STA letters were sent to 191 economies. Sixty-three economies (or 33 percent of the total) responded. Of the 63 respondents, 58 are current COFER reporters and five are non-reporters. In particular:

- **Current COFER reporters:** Main messages were: (i) a willingness to support IMF's COFER data expansion; and (ii) a commitment to cooperate with the Fund in this effort.
- **Current non-reporters:** Of the five responses received from non-reporters, three were willing to report COFER data and two declined. Subsequently, the former have begun or resumed COFER data reporting to STA.
- **Largest non-reporters**: Among the largest five non-reporters mentioned in the *Monitoring Financial Interconnectedness* paper to the Executive Board in April 2011, two declined to report data and the other three did not respond.

3. In general, respondents to the survey of 139 reporting economies underscored the benefits of improving transparency by releasing the names of country reporters. Two-thirds of respondents had no objection to revealing the names of country reporters.<sup>2</sup> Several countries reiterated the importance of maintaining *individual* data confidentiality, which is consistent with current IMF policy (only *aggregate* COFER data are disclosed). The survey asked about adding currencies in COFER reporting.

<sup>&</sup>lt;sup>1</sup> <u>http://www.imf.org/external/np/sta/cofer/eng/index.htm</u>

<sup>&</sup>lt;sup>2</sup> On the question about revealing the names of country reporters: (i) 66 percent of respondents had no objection; (ii) 12 percent expressed concerns/objections; and (iii) 22 percent did not answer the specific question.

#### **Proposed next steps**

- 4. In the light of the foregoing, the following next steps are being considered:
- **Expansion of country coverage**: A COFER outreach seminar is being contemplated to further explain the COFER initiative, assuage possible concerns, and elicit more positive responses. The scope, modality, and specific dates of such seminar are to be determined.
- **Expansion of currency coverage**: The survey revealed that the overwhelming proportion of foreign exchange reserves are held in the five currencies identified in the COFER survey. Further, countries responding to the survey reported ten "other currencies." Of these currencies, only two—the Australian dollar (AUD) and the Canadian dollar (CAD)—had more than two countries report holdings of their currency, and these currencies are to be considered for inclusion in COFER reporting. Any currency added to COFER reporting should meet the definition of a convertible currency that is freely usable for settlements of international transactions. Staff intends to repeat the currency range survey in around three years.
- **Greater transparency on reporting**. Releasing the names of COFER reporting countries or economies that are willing to do so would support the transparency of COFER (country data would be kept strictly confidential as is currently the case). Such a release could be timed in early 2013, following the launch of the SDDS Plus—adherence to SDDS Plus would require a country to make public its participation in the COFER database. Staff would confirm the willingness of each jurisdiction that does not adhere to the SDDS Plus to disclose their participation in the COFER database ahead of the first release.

## Appendix IV. The Economic Data Management Initiative and Data Provision

 The Economic Data Management Initiative (EDMI) Task Force was established in April 2010 at the request of the Managing Director, to address data management challenges at the Fund. Background studies concluded that the Fund is at the earliest stages of data management (DM) maturity by industry standards, with no clear guiding strategies for DM driven by business needs, weak governance bodies, and poorly executed procedures.

2. To upgrade the Fund's DM framework, a new governance structure has been established. An Economic Data Steering Committee (EDSC) will provide strategic direction and an Economic Data Governance Group (EDGG) will take charge of implementation and operation of the strategies. A Chief Economic Data Manager for the Fund and Senior Data Managers (SDM) in area and functional departments have been selected to move this initiative forward. The initiative has focused on the following core issues.

#### Migrating country desk data to structured databases

3. Migration of country desk data to structured databases is essential to improving data management. Structured databases will help strengthen data quality through better identification of data series, improved metadata, easier data validation, and improved transparency.

#### Enhancing sharing of cross-country datasets

4. Currently only limited sets of cross-country data are available for sharing. There is a lack of information on what is available and retrieval tools are also scarce. Sixty-nine cross-country datasets have been identified in the Fund as shareable. However, sharing practices are hindered by the lack of central registry for datasets and universal access tools, and diverse coding and sharing practices. Under the EDMI, the Fund will establish a registry of shareable cross-country data with a streamlined toolset for search and retrieval for in-house use and will continue to use the data warehouse as the repository for external data dissemination.

#### Data sourcing arrangements

5. The Fund's need for commercial financial data is growing fast. Although current spending on commercial data is modest by industry standards, a larger budget is required to meet increasing data needs and more targeted spending can help manage cost pressures. A senior-level group representing user departments assessed current spending and prepared a proposal on existing and new initiatives on commercial financial data. Area departments also source monetary data from STA through the use of Integrated Monetary Databases (IMDs), but the usage has been limited due to the cost of tailoring data, loss of timeliness, and lack of familiarity with IMDs. In the future, a demand-driven approach will be used to extend the IMDs and area departments will be asked to identify for STA a list of countries for future IMD participation.

#### Validating WEO historical data

6. WEO historical data are not always consistent with *IFS*, which can be a potential reputational risk for the Fund. However, documentation of these differences is largely absent. To mitigate the reputational risk, a disclaimer accompanies the dissemination of WEO data, indicating that the data may differ from official data. In the medium term, approaches to improve data validation are to be developed.

## Appendix V. Data Quality Characteristics of Relevance for Surveillance

### A. Accuracy, Timeliness, and Reliability

1. When reviewing data quality, users are most interested to know whether the observations are as close as possible to the "true" underlying value; in other words, are the data accurate? However, this "true" value may not be known or knowable. Thus, users must rely on a series of reasonableness checks, by looking at adding-up and other conditions of internal, intersectoral, and inter-temporal consistency (discussed below). Anecdotal evidence is also useful in this respect.

2. Users are often willing to sacrifice some accuracy to obtain more timely data, but there is a well recognized trade-off between accuracy and timeliness. Flash estimates, preliminary data, and back-of-the-envelope estimates, may be faster, but they come at the expense of more comprehensive, better validated statistics. For example, higher frequency (say quarterly) data, which are usually timelier, should be benchmarked against lower frequency (say annual) data, especially if the later are based on more comprehensive source data. Nevertheless, policy demands may necessitate and country circumstances may facilitate faster inputs that can be replaced with more accurate data at a later stage. The risk is that conclusions drawn from the timeliest data may involve larger errors than would otherwise be the case (especially if these are used to make forecasts). Confidence intervals around such forecasts are not commonly made, but may be useful to inform decision-makers of these conditions. Area department assessments of data quality should take these accuracy-timeliness trade-offs into account, depending on policy needs and country circumstances

3. Another, and related, aspect of data quality concerns the reliability of the statistics. Given that data may be available as a preliminary estimates (and user forecasts may even precede those estimates), the first available data point may differ from subsequent revised estimates and final figures. This is independent from the issue of whether or not the final value is accurate in an absolute sense. The variance around the final value provides users with a view on how reliable those statistics are. High variance is equivalent to less reliable data because the reported value may vary widely over time. This is not to argue that no revisions should be made; the assumption is that statistics compilers revise data to provide users with more accurate information (however, this assumption should be tested empirically, if possible, inter alia, using the techniques mentioned regarding accuracy). Therefore, there may be a trade-off between accurate and reliable data (although it may be argued that less reliable data may have a lower probability of being accurate). Users should be aware of this distinction and take these factors into account in their assessments of data quality. To the extent that accuracy and reliability are explicitly measured empirically depends on the sophistication of compilers and users, and the availability of resources to conduct sound revision studies. Area department assessments of data quality should include a review of data revision studies when available, and either conduct or request a revision study for critical data.

4. In line with the Fund's Data Quality Assessment Framework,<sup>1</sup> a staff assessment regarding the accuracy of data should also take into account the underlying information used to compile the statistics, especially the source data and statistical techniques. The source data need to be timely, comprehensive, take country circumstances into account, and be used following standardized concepts and definitions, scope, classification, valuation, and error assessment methods. Similarly, sound statistical techniques would include appropriate estimation methods to adjust for missing observations. Moreover, intermediate results and statistical outputs should be regularly assessed and validated. Ideally, all of this would be based on internationally accepted statistical methods.

### **B.** Distinguishing Official Statistics from Staff Estimates

5. The majority of staff reports used data estimates to compensate for data shortcomings, but these estimates were not usually clearly distinguished in staff reports from other historical data sources. Based upon the review of a sample of 50 of the most recent Article IV staff reports in 2012 and 2011 (Appendix I), staff report data did not clearly distinguish official statistics from other sources of data or staff estimates. When staff estimates were made, usually in the absence of data of adequate quality, modifications to official statistics (resulting in discrepancies with official data) were not well documented. Moreover the reasons for making such estimates were not recorded; in some cases, the financial programming exercise requires such estimates to "close the loop" to present a consistent set of macroeconomic data. When such data are disseminated to the public in staff reports, this has raised the IMF's reputational risk regarding the credibility of data disseminated to the public. The lack of documentation further increases that risk. Management and staff have become increasingly aware of this risk, and have embarked on an Economic Data Management Initiative (Appendix IV) to address data sharing and processes to manage this risk.

### C. Data Consistency Issues

6. **Macroeconomic statistics consistency enhances the usefulness of the data for surveillance purposes.** There are three important and mutually supportive data consistency characteristics: internal consistency, inter-sectoral consistency, and inter-temporal consistency.

#### 7. Internal consistency means that the data are consistent for the sector under

**consideration.** This is usually checked through adding-up conditions (vertically and horizontally) and is most easily and quickly checked when a statistical framework has been applied consistently. Using internationally accepted statistical methodologies allows comparisons of flows and stocks in such a framework. For some data categories, the size and trend in "errors and omissions" provides an indication of internal consistency; however, for other data sets such as fiscal data, discrepancies provide a similar indication.

<sup>&</sup>lt;sup>1</sup> <u>http://dsbb.imf.org/Pages/DQRS/DQAF.aspx</u>

8. Inter-sectoral consistency is an integral part of bilateral surveillance because it is ensured through the financial programming exercise, even when national statistics are not fully inter-sectorally consistent, which is usually the case. National data sets typically are not perfectly inter-sectorally consistent for a variety of reasons, in part because separate institutions compile different data sets, often based on different source data, methods, and purposes of compilation, perhaps under different legal frameworks and because inter-institutional cooperation varies across countries and agencies. According to a preliminary assessment of sectoral data inconsistencies, conducted within STA, among balance of payments, monetary and finance, and government finance statistics by institutions, inconsistencies are found for most countries regardless of their size and level of development. Even among advanced countries, a high incidence of crosssectoral data discrepancies is found, for example, in the area of central banks' and other depository corporations' foreign liabilities and financial transactions between the banking sector and the government sector. Although the sources of inconsistencies may lie in differences in institutional or instrument coverage, valuation, and methodologies used by data-compiling agencies, large inconsistencies may cast doubt on the accuracy and reliability of surveillance and country analysis at the Fund.

9. **Breaks in time series data cause inter-temporal inconsistencies and may also cause inter-sectoral inconsistencies.** Breaks in series can be due to many reasons, including changes in data compilation methodology, data revisions, and interruptions in source data collection or processing (severe economic shocks can cause sharp movements in variable values, but these are not breaks in time series). Moreover, if these breaks in time series appear in only certain data sets, this may also cause inter-sectoral inconsistencies.

#### 10. **Prominent examples of methodological changes include:**

- Coverage, sectorization, and classification: Institutional units are grouped into sectors according to certain criteria. For example, whether the government sector includes only budgetary central government units, extra-budgetary units, or is broadened to cover institutional units in the general government sector (state or local governments and units controlled by the general government that do not sell output at economically significant prices). Whether units are inside or outside the "government sector" may vary over time and across macroeconomic data sets. Similarly, the classification of transactions and (asset and liability) instruments may vary across time and across data sets. Reclassification may cause time series or inter-sectoral breaks in data.
- Time of recording: The time of recording transactions can be determined on accrual basis or cash basis, and accrual recording may be complicated regarding when accrual is recorded to have occurred (e.g., due-for-payment, commitment basis, etc.). In addition, breaks happen when the recording basis changes.
- Valuation: the values of market transactions and of financial assets and liabilities can be calculated in different ways. Breaks can happen when, for example, valuation principle changes from nominal value to market value.

• Consolidation and netting: consolidation refers to the elimination of stocks and flows that occur between institutional units when the latter are grouped together (such as when central, state, and local governments are grouped into general government). Changes in the definition of a group can lead to breaks in data series. Transactions can be presented on a gross or net basis, such as gross debt liabilities versus gross debt liabilities minus debt assets. Changing the instruments considered for gross or net calculations can also lead to breaks in series.

11. **Breaks in time series can appear in staff reports for many reasons.** This can occur when the data used by staff are not updated in time to reflect all the latest revisions or data provision has been hampered by delays in source data or slow data compilation. In addition, external shocks sometimes result in drastic changes in data values. For example, hyper-inflation can lead to sudden changes in nominal values. Alternatively, an external commodity shock could lead to large shifts in the balance of payments and erratic nominal exchange rate behavior. While the latter two examples are not breaks in time series, staff may attempt to estimate the underlying trend for analytical purposes. Staff should always clearly identify major breaks and shifts in data, document when the data were modified to correct for these issues, and attempt to describe how those adjustments could affect the analysis.

#### International comparability

#### 12. International comparability is warranted not only for bilateral and multilateral

**surveillance purposes.** Significant international effort has been exerted to address some of these data comparability challenges, independently by the Fund and in collaboration with national authorities and other international agencies. These efforts include: 1) continuous development, dissemination and capacity building efforts associated with internationally accepted statistical methodologies and compilation guides; 2) the Fund's Data Standards Initiatives; and 3) the DGI, including especially the PGI work.

13. There are various factors inhibiting international comparability, including challenges associated with coverage, periodicity, timeliness, revisions, and methodologies. Cross-country data comparison will be erroneous if data coverage differs in each country and this is easily illustrated with fiscal data. For example, public debt to GDP ratios for a country at any given time can range from 40 to over 100 percent depending on the coverage of public sector used.<sup>2</sup> Moreover, given the variety of structures and definitions of government and public sector services, the coverage of "the government sector" is comparable across countries only at the general government or (nonfinancial or total) public sector levels. On periodicity, useful international comparisons of data must involve the use of similar periods, which explains the Fund's encouragement for all members to develop quarterly data across macroeconomic data sets. Lengthy lags in data provision, as well as uneven revisions across countries, can also hinder timely

<sup>&</sup>lt;sup>2</sup> Robert Dippelsman, Claudia Dziobek, and Carlos A. Gutierrez Mangas, "What Lies Beneath: The Statistical Definition of Public Sector Debt" (SDN/12/09).

cross-country comparisons of key economic indicators. Moreover, surveillance based on a cross-country data analysis will be hampered if the methods used to compile data are dissimilar (in other words the latest internationally accepted statistical methodologies are not followed or deviations from those methodologies are not thoroughly documented to allow users to make appropriate adjustments to the data to make the data more comparable). Issues can still arise if older versions of those methodologies are used, deviations are not well documented, the deviations are extensive, or insufficient supplementary information is not available, so that the ability of users to make appropriate adjustments is significantly impaired.

14. The IMF has supported the collection, dissemination, and analysis of macroeconomic statistics of its member countries since its inception, particularly through the dissemination of statistical manuals and guides.<sup>3</sup> The IMF has promoted the adoption of those manuals and guides through capacity building efforts, especially technical assistance and training. Promotion of the adoption of statistical standards is reinforced when those frameworks are used in staff reports. For example, the Executive Board approved key elements of the *GFSM 2001* to be used in staff reports starting in May 2011 and requested continued assistance to member countries in developing capacity to produce comprehensive and cross-country comparable *GFSM 2001* data.<sup>4</sup> A less formal approach was followed regarding the adoption of *BPM5* presentations for the balance of payments in staff reports, although this resulted in a slower and less even adoption of that manual in staff reports and, to some extent, by the membership.

15. The Fund's Data Standards Initiatives have also been instrumental in promoting the adoption of international statistical methodologies and the documentation of those methods in publicly available metadata. Deviations from internationally accepted statistical methodologies are to some extent unavoidable as they are mainly caused by country specific circumstances, but enhancing transparency is strongly recommended. For example, to enhance the data quality dimension of the SDDS, at the time of the Seventh Review of the Fund's Data Standards Initiatives in December 2008, the IMF Executive Board approved a requirement for SDDS subscribers to include in their metadata both citations of internationally accepted statistical methodologies. Assessing the extent to which internationally accepted statistical methodologies have been adopted is important to aspects of data quality as revealed by these citations and deviations. A study of these metadata has revealed that this information provides valuable insight on data quality.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> A list of internationally accepted statistical methodologies can be found here: <u>http://dsbb.imf.org/Pages/SDDS/StatMethod.aspx</u>. The STA website also contains links to related compilation guides for compilers and users: http://www.imf.org/external/data.htm#guide.

<sup>&</sup>lt;sup>4</sup> Government Finance Statistics to Strengthen Fiscal Analysis; IMF Policy Paper; February 26, 2010 (http://www.imf.org/external/np/pp/eng/2010/022610.pdf).

<sup>&</sup>lt;sup>5</sup> Weisman, Ethan and Tim Gibson, 2012, "Using Citations and Deviations from Internationally Accepted Statistical Methodologies in SDDS Metadata to Communicate Data Quality to Users", paper presented at the European Conference on Quality in Official Statistics.

### 16. The work of the IAG to establish and enhance the PGI has demonstrated the

**limitations and potential to provide users with internationally comparable macroeconomic statistics.** To establish a centralized global data provision system, the Principal Global Indicators (PGI)<sup>6</sup> was established by the IAG in 2009 as a one-stop shop, bringing together data for G-20 economies and five non G-20 economies members of the FSB. It provides information on major economic indicators that is available at participating international agencies covering financial, governmental, external, and real sector data, with links to data available at websites of international and national agencies.

<sup>&</sup>lt;sup>6</sup> <u>http://www.principalglobalindicators.org/default.aspx</u>

# Appendix VI. Draft Template for the SIA: with Greater Focus on Data Issues Affecting Financial Sector Surveillance

Case A

[COUNTRY NA	AME]—STATISTICAL ISSUES APPENDIX			
As of [Date] I. Assessment of Data Adequacy for Surveillance General: Data provision is adequate for surveillance.				
-	forms to the methodological recommendations of the <i>2008 System</i> balance sheet, meeting SDDS Plus requirements, has been			
Price Statistics: Since December 1998, CPI	weights have been updated annually. The monthly CPI is available			
in the second week following the reference	e month. The producer price index is calculated according to the			
chain-linked Laspeyres formula with weigh	ts updated every year.			
Government Finance Statistics: Compreh	ensive data reporting systems support the accuracy and reliability o			
the government finance statistics according	g to GFSM 2001. However, the timeliness of quarterly data does not			
yet meet SDDS Plus requirements.				
ntensifying efforts to expand coverage of	nt for about 10 percent of liabilities. STA has recommended insurance companies and implement standardized report forms for			
intensifying efforts to expand coverage of other financial corporations. For Financial Sector Surveillance: Partic consolidated international banking data (				
intensifying efforts to expand coverage of i other financial corporations. <b>For Financial Sector Surveillance:</b> Partic consolidated international banking data ( Settlements. Currently disseminates a resi	insurance companies and implement standardized report forms for ipates in the IMF's CDIS and CPIS. Provides locational and International Banking Statistics—IBS) to the Bank for International			
intensifying efforts to expand coverage of i other financial corporations. <b>For Financial Sector Surveillance:</b> Partic consolidated international banking data ( Settlements. Currently disseminates a resi commercial property price index.	insurance companies and implement standardized report forms for ipates in the IMF's CDIS and CPIS. Provides locational and International Banking Statistics—IBS) to the Bank for International idential property price index and is in the process of preparing a			
intensifying efforts to expand coverage of i other financial corporations. For Financial Sector Surveillance: Partic consolidated international banking data ( Settlements. Currently disseminates a resi commercial property price index. Data on NPLs are not timely. No data available on non-financial corpor	insurance companies and implement standardized report forms for ipates in the IMF's CDIS and CPIS. Provides locational and International Banking Statistics—IBS) to the Bank for International idential property price index and is in the process of preparing a			
intensifying efforts to expand coverage of i other financial corporations. For Financial Sector Surveillance: Partic consolidated international banking data ( Settlements. Currently disseminates a resi commercial property price index. Data on NPLs are not timely. No data available on non-financial corpor The currency-linked and indexed bonds h liabilities.	insurance companies and implement standardized report forms for ipates in the IMF's CDIS and CPIS. Provides locational and International Banking Statistics—IBS) to the Bank for International idential property price index and is in the process of preparing a			
<ul> <li>For Financial Sector Surveillance: Partic consolidated international banking data (Settlements. Currently disseminates a resise commercial property price index.</li> <li>Data on NPLs are not timely.</li> <li>No data available on non-financial corport for the currency-linked and indexed bonds have based bonds have been been been been been been been be</li></ul>	insurance companies and implement standardized report forms for ipates in the IMF's CDIS and CPIS. Provides locational and International Banking Statistics—IBS) to the Bank for International idential property price index and is in the process of preparing a rations cross border exposures.			

II. Data Standards and Quality				
Adherent to the Special Data Dissemination Standard	No data ROSC is available.			
Plus (SDDS Plus) since [Date]. Will use the transition				
period ending 2019 for general government				
operations and general government gross debt.				
Subscriber to the Fund's Special Data Dissemination				
Standard (SDDS) since [Date]. Uses SDDS flexibility				
option on the timeliness of the industrial production				
index and the merchandise trade data.				
III. Progress Implementing the G-20/IMF Data Gaps Initiatives				
Currently disseminate a residential property price index index.	and is in the process of preparing a commercial price			

# **Appendix VII. Data Sets At-A-Glance**

Data sets	Brief description	Where	
IFS	Main economic indicators from the IMF International Financial Statistics (IFS).	http://elibrary- data.imf.org/DataReport.aspx?c=1449311&d=33120&e=170185	
FSIs	Data on core and encouraged set of selected financial soundness indicators.	http://fsi.imf.org/ http://elibrary- data.imf.org/FindDataReports.aspx?d=33061&e=171851	
SRFs	Standardized report forms used to collect monetary and financial data from member countries.	http://www.imf.org/external/pubs/ft/cgmfs/eng/index.htm	
GFS	Data on revenue, expense, transactions in assets and liabilities, and stocks of assets and liabilities of general government and its subsectors as reported by member countries.	http://elibrary- data.imf.org/FindDataReports.aspx?d=33061&e=170809	
Public Debt	Joint WB-IMF database that presents public sector debt statistics (general government plus public corporations). Breakdowns by level of government, type of instrument, currency, and maturity are provided, using standard definitions to support cross-country comparisons.	f http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/EXTQF UBSECDEBT/0,,menuPK:7404478~pagePK:64168427~piPK:64168435~t heSitePK:7404473,00.html	
BOP and IIP	Data on balance of payments and international investment position; provides world and regional data as well.	http://elibrary- data.imf.org/FindDataReports.aspx?d=33061&e=170784	
CPIS	Data on the stock of cross-border holdings of equities and long- and short-term debt securities broken down by the economy of residence of the issuer.	http://cpis.imf.org/ http://elibrary- data.imf.org/FindDataReports.aspx?d=33061&e=169309	
CDIS	Data on inward and outward direct investment positions cross- classified by counterpart economy.	http://cdis.imf.org/ http://elibrary- data.imf.org/FindDataReports.aspx?d=33061&e=171392	
Reserves Template	Data on international reserves and foreign currency liquidity in a common template and in common currency.	http://www.imf.org/external/np/sta/ir/IRProcessWeb/index.aspx http://elibrary- data.imf.org/FindDataReports.aspx?d=33061&e=169362	
COFER	Data on currency composition of official foreign exchange reserves.	http://www.imf.org/external/np/sta/cofer/eng/index.htm http://elibrary- data.imf.org/FindDataReports.aspx?d=33061&e=171906	
DOTS	Direction of Trade Statistics provides trade data by trading partners and regions.	http://elibrary- data.imf.org/FindDataReports.aspx?d=33061&e=170921	

Data sets	Brief description	Where
Other data sets:		
Sectoral balance sheets	Data on national accounts financial balance sheets data by economic sector (OECD).	http://stats.oecd.org/Index.aspx?DataSetCode=QASA_TABLE720
Fiscal Monitor Summary	Overview of countries fiscal data, including projections (IMF Fiscal Affairs Department).	http://elibrary- data.imf.org/DataReport.aspx?c=15134738&d=33061&e=172490
IBS	Cross-border lending and borrowing of internationally active banks in key financial centers, including offshore centers from the BIS locational banking statistics and consolidated banking statistics.	http://www.bis.org/statistics/bankstats.htm
Real estate price indices	The property price statistics bring together data from different countries (BIS).	http://www.bis.org/statistics/pp.htm
Securities (equity and debt)	Quarterly statistics on securities markets, including: international debt securities, international equities, and domestic securities (BIS).	http://www.bis.org/statistics/secstats.htm
CDS	Semiannual data on credit default swaps (CDS)—(BIS).	http://www.bis.org/statistics/derstats.htm
Other useful link	S:	
SDDS/GDDS	SDDS was established to guide countries that have or that might seek access to international capital markets in the dissemination of economic and financial data; GDDS was established to guide countries in the provision to the public of comprehensive, timely, accessible, and reliable economic, financial, and socio-demographic data.	http://dsbb.imf.org/Pages/SDDS/home.aspx http://dsbb.imf.org/Pages/GDDS/home.aspx
PGI	Web site brings together data for the major economies available from international agencies covering the financial, governmental, external, and real sectors.	http://www.principalglobalindicators.org/default.aspx
DGI	Access to reports on the Data Gaps Initiative	http://www.principalglobalindicators.org/about_iag.aspx
Financial Access Survey	Geographic and demographic data on access to basic consumer financial services worldwide.	http://fas.imf.org/ http://elibrary- data.imf.org/FindDataReports.aspx?d=33061&e=171851

## Appendix VIII. The DGI and 2011 TSR Priorities

1. The 2011 TSR confirmed that core surveillance work will remain the same, but with a shift in emphasis, highlighting five areas where bilateral and multilateral surveillance could be strengthened, particularly in the light of the global crisis. These areas are: interconnectedness; risk assessments; financial stability analysis; external stability analysis; and traction. These themes were reflected in the Managing Director's action plan to take forward the findings.<sup>1</sup> Data provision plays an important role in all of these areas, but as noted in the TSR, the needs in financial sector and external stability analyses are particularly acute.

# 2. In one of the TSR background papers, Martin Wolf listed among his requirements for successful surveillance to better integrate perspectives. In this context, he wrote:

"...the real mistake was...the failure to integrate the analysis of the global balance of payments with the flow of funds within countries and with the structure and growth of the balance sheets of financial sectors. In other words, we need a coherent and integrated analysis of the global and domestic flow of funds, the structure of the national and sectoral balance sheets and movement in asset prices, including exchange rates. It is only then that one can hope to have a reasonable picture of the stresses emerging within the system and, in particular, of possible connections between changes in assets prices, the risks of insolvency and the threat of a panic. The Fund is better placed than any other institution to carry out such an integrated view of the world economy. Indeed, it is the only institution with any chance of doing so."

3. There is a direct link among the themes emerging from the TSR, the recommendations of the DGI, and the data sets specified under the SDDS Plus. Many of these data sets work in the direction outlined by Mr. Wolf.

#### Interconnectedness

4. **This work covers both domestic and cross-border issues.** The theme of **interconnectedness** is strongly embedded in the DGI, providing a direct link between surveillance work and the work on datasets such as I-to-A data from the G-SIFIs templates; the CPIS data and the BIS's IBS; and sectoral accounts from a domestic perspective. Other relevant data sets supporting the analysis of interconnectedness include the CDIS, COFER, BOP/IIP and direction of trade statistics.

#### **Risk assessments**

5. **The TSR drew attention to the need to deepen the IMF's analysis to better identify vulnerabilities and transmission channels.** Staff are guided to take explicit account of risks in both multilateral (e.g., WEO, GFSR, and Fiscal Monitor reports) and bilateral country surveillance. Data that

<sup>&</sup>lt;sup>1</sup> <u>http://www.imf.org/external/np/pp/eng/2012/041812.pdf</u>

support these analyses include sectoral balance sheets (including especially debt by sector), as well as traditional macroeconomic datasets (including especially government finance and debt, monetary statistics, including credit aggregates, and balance of payments data). In particular, the need for consistent and comparable government finance statistics, including gross debt data, is self-evident, but a long way from being realized.

#### **Financial stability assessments**

6. **Much of the data needed for financial sector surveillance lie beyond traditional macroeconomic statistics, while data confidentiality issues strike at the center of some of the limits to data access, particularly given the need for granular data.** A number of the datasets being enhanced and developed under the DGI contribute directly to this agenda including FSIs; nonbank financial institutions data; cross border datasets such as the G-SIFIs, IBS, and CPIS; securities statistics; and measures of maturity and leverage in both the banking and shadow banking sectors. Further STA's contribution to the work of the FSB to develop Legal Entity Identifiers (LEIs) aims to both strengthen members' abilities to prevent and manage crises. As new data become available to staff, staff reports should begin to reflect the additional information to make financial sector surveillance more robust.

#### **External stability analysis**

7. **The 2011 TSR reiterated that external stability remains at the core of the Fund's mandate and made the case for more extensive external stability analysis beyond exchange rate fundamentals.** Nevertheless, one of the data limitations identified in the TSR concerns the lack of quantitative information needed to conduct thorough exchange rate (CGER) and external balance analysis. As noted above, external sector statistics have been significantly strengthened in recent years, with improved availability and quality of related information. Some of the data becoming available to support this analysis include the new current, capital and financial account, and IIP data, which include information on currency breakdowns using the *BPM6* framework. Further, these data are better integrated with external debt statistics, and data from the Reserves Template.

#### Traction

8. The TSR discussed redoubling efforts to promote candor by following up on the recommendations of previous Article IV surveillance and FSAPs and covering issues of unemployment, inequality and inclusive growth where they are macro-critical. This would require leveraging the expertise and information of other organizations for example on data on labor markets (Section IV.D), and related income distribution, as well as more integrated macroeconomic datasets, such as sectoral balance sheets. The work led by the OECD on the

distribution of income, consumption and wealth, under the DGI, albeit still in a developmental stage, should help support analysis of macro-social issues.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> In early 2011, two Expert Groups on households' economic resources were established following the Stiglitz-Sen-Fitoussi recommendations (see <a href="http://www.stiglitz-sen-fitoussi.fr/documents/rapport\_anglais.pdf">http://www.sdnetwork.eu/pdf/doc</a> workshops/2010%20berlin/Country%20islands/France/12%20Stiglitz-Sen-Fitoussi%20Commission%20Recommendations.pdf</a> ). These are: 1) an OECD Expert Group on Micro Statistics on Income, Consumption and Wealth, which aims to pursue methodological work to develop standards and guidelines for measuring household wealth and propose a framework for joint analysis of micro data on households income, consumption and wealth; and 2) an OECD-Eurostat Expert Group on Disparities in National Accounts, with a goal of providing more distributional information on income, consumption and wealth of households, in part by conducting a feasibility study to use existing micro sources to produce indicators of disparities by group of households consistent with SNA totals.