

INTERNATIONAL MONETARY FUND

Data Provision to the Fund for Surveillance Purposes

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EXECUTIVE SUMMARY

Events in the international financial system have repeatedly confirmed that the provision of comprehensive, timely, and accurate economic data by member countries is essential for effective Fund surveillance and crisis prevention. In particular, data on core statistical indicators are of critical importance in this connection. Furthermore, the availability of timely and detailed data on international reserves, external debt, and capital flows has assumed increased importance in assessing countries' external vulnerability.

A review of members' provision of data to the Fund shows a broad improvement in the coverage of data and data issues in surveillance. There has been some progress in the timeliness of the reporting of the core statistical indicators. In addition, staff reports for Article IV consultations continue to devote considerable attention to data issues and discuss the implications of data deficiencies for macroeconomic analysis, particularly in cases where data provision was assessed to be inadequate. Finally, the treatment of data issues in summings up has also strengthened.

In the wake of the crises in emerging-market countries, improving information on international reserves and external debt has become a priority in efforts to strengthen surveillance. For these reasons, the Board established benchmarks for the provision of data to the Fund on reserves and related items and on external debt. In view of the diversity of circumstances facing individual members, the benchmarks serve as points of reference rather than absolute standards. That is, staff reports are to compare countries' practices with these benchmarks, indicating the reasons for any differences, their significance, and, if appropriate, the member's plans for strengthening data provision in these areas.

The survey of staff reports suggests that the benchmarks for international reserves and related items and external debt have provided a coherent and uniform framework for the assessment of data provision to the Fund in these areas. Positive experience with the use of the reserves benchmark is a particularly encouraging step towards the ideal of members' providing high frequency and comprehensive reserves data for surveillance. However, reporting on the use of the benchmarks in Article IV staff reports needs to be improved further. To this end, this paper proposes enhancements to the statistical appendix and core indicators table. This paper also proposes that technical assistance in support of the provision of higher frequency and comprehensive reserves and external debt data should remain a priority.

The frequent and timely disclosure of data on reserves and related items to the public is important for market stability. Subscribers to the Special Data Dissemination Standard (SDDS) report reserves data to the public with at least monthly timeliness and monthly periodicity. However, technical and resource constraints identified by national authorities represent obstacles to moving to a weekly frequency for the dissemination of reserves data under the SDDS at this time. This paper proposes that staff consider how to address the issues raised by subscribers in moving to the dissemination of template data on a weekly-weekly basis and make recommendations to the Board on this topic in the fifth review of the Fund's data standards initiative in 2003.

Data provision for vulnerability assessment has improved, though ensuring that data are of sufficient comprehensiveness, timeliness, and accuracy remains critical for effective surveillance and policymaking. The extent of discussions of countries' vulnerabilities in staff reports has improved in the past year, in particular for countries with access to international

capital markets. However, data deficiencies often hamper vulnerability analysis, and few staff reports discuss implications of such gaps. To further enhance vulnerability assessment, this paper proposes that staff continue to seek to identify gaps in data and technical assistance priorities during Article IV consultations and that members take steps to strengthen the compiling of data identified as important for vulnerability assessment. In addition, staff will explore with appropriate working groups, such as the Inter-Agency Task Force on Finance Statistics and the IMF's Committee on Balance of Payments Statistics, country experts, the Bank for International Settlements, and other international entities how their expertise might be brought to bear to evaluate and fill in gaps in data, including creditor-side data on cross-border exposures.

The staff proposals for strengthening data provision outlined in this paper would imply a need for many, if not most, members to strengthen their data systems. The resource implications could be substantial, particularly as regards data for vulnerability assessment, and the Fund will likely be requested to offer technical assistance to national authorities to support their efforts. An appropriate balance needs to be struck between greater timeliness in data provision and data accuracy.

During the previous review of data provision to the Fund, Directors emphasized the critical importance of the Fund being provided with adequate fiscal data, and urged staff to continue working on improving the provision of these data. Since then, staff finalized the *Government Finance Statistics Manual*, which represents a major advance in the development of an analytical framework for fiscal data. Next, staff will follow up with statistical agencies during 2002 on transitional issues in migrating to the new framework.

An important aspect of improving the quality of data provided to the Fund is a member's revision policy. Data revisions can improve the accuracy of data and can also bring to light data that have been misreported. A well-articulated revision policy provides assurances that revisions to data result exclusively from statistical considerations. This paper proposes that staff encourage national authorities to articulate policies on revisions to data to enhance the quality of data provided for Fund surveillance and help assess when the reporting of inaccurate information to the Fund would give rise to a breach of obligations.

In coming months, the Executive Board will also consider a paper on Strengthening the Application of Article VIII, Section 5,¹ which discusses the minimum requirements for members necessary for the Fund to carry out its responsibilities. That paper outlines proposals that would broaden this minimum coverage, in line with changes in the international financial environment and consistent with the Fund's policy on data provision.

¹ For some countries, the provision of the data necessary for effective surveillance, in line with their obligations under the Fund's Articles of Agreement, is becoming an increasingly important issue. For more details, see a forthcoming paper on *Strengthening the Application of Article VIII, Section 5*.

I. INTRODUCTION²

1. The Fund's policy on data provision has focused on the provision of core data for surveillance and on augmenting existing indicators to increase the effectiveness of surveillance. Beyond the minimum core data set, tailoring data requirements to members' characteristics and circumstances, while taking into account their statistical capacity, is consistent with the Fund's responsibility to conduct surveillance in an evenhanded manner (Appendix I). Through periodic reviews, the Board provides guidance to members and staff on the requirements for the provision of data critical for surveillance and to the capacity of governments to make policy wisely.

2. This paper reviews current policies and practices regarding the provision of data to the Fund for surveillance, focusing on specific issues raised by the Executive Directors in several earlier Board discussions (Appendix II). Accordingly,

- Section II discusses the treatment of data issues in surveillance, including the provision of core statistical indicators that the Executive Board has identified as important for surveillance.³ Experience with the use of the benchmarks for the provision of data on international reserves and foreign currency liquidity and on external debt, as agreed by the Board in June 2000, is also reviewed. In addition, this section revisits the timeliness and periodicity⁴ of the dissemination of reserves template data to the public, under the Special Data Dissemination Standard (SDDS).⁵
- Section III outlines progress in the provision of data for vulnerability assessment and fiscal analysis; it also discusses the delineating of policies for the revision of data in the context of data provision to the Fund and the Fund's policy on the misreporting of data.
- Section IV presents conclusions and issues for discussion.

² The principal contributors to this paper are Ms. Metzgen, Mr. Mulder, Ms. Tamirisa, and Ms. Aturupane (all PDR) and Messrs. Enoch and Dublin, Ms. Kester, Messrs. Motala and Fernando (all STA) with input from Messrs. Christofides, Walsh, and Chi (all PDR) and Messrs. Patterson, Heath, Basanti, and Kirkley (all STA).

³ In 1995, the Board agreed on the set of core indicators important for surveillance. See *Summing Up by the Chairman – Strengthening Fund Surveillance: Provision of Statistical Data by Members* (SUR/95/34, 4/7/95); and *Operational Guidance Note on Provision of Statistical Data by Members* (SM/95/180, Attachment II, 7/21/95).

⁴ Periodicity refers to the frequency with which the data are compiled. Timeliness is the maximum lapse of time between the reference date for the data and their dissemination.

⁵ *Summing Up by the Acting Chairman - Review of the Fund's Data Standards Initiatives* (BUFF/01/115, 7/31/01).

II. STRENGTHENING DATA PROVISION TO THE FUND

A. Data Provision and Treatment of Data Issues in Surveillance

3. During the June 2000 discussion of *Data Provision to the Fund for Surveillance Purposes*, Directors were “encouraged that a large majority of members provide data on core statistical indicators on a timely basis” even though they also recognized the resource constraints and other challenges faced by some countries.⁶ Most Directors also stressed that it would be useful for staff reports and summings up to address data provision to the Fund, drawing out the implications of data deficiencies for the macroeconomic analysis. To provide an update to the Board on progress in these areas since the June 2000 review, staff surveyed the provision of core statistical indicators and the treatment of data issues in 133 Article IV consultation reports issued during December 2000—November 2001.⁷

4. As regards core statistical indicators, the general conclusion is that members’ reporting of high frequency indicators has shown a broad improvement in timeliness while their reporting of low frequency indicators has been largely unchanged (Appendix IV). For the high frequency indicators, data provision has been timely with improvements in the number of countries reporting data on total official reserve assets, reserve money, and the central bank balance sheet. For data on official reserve assets, the improvement was noteworthy; currently nearly half of the countries covered report reserve asset data with timeliness of one week or less (up from 38 percent observed in the previous survey).⁸ Among the low frequency indicators, the results were mixed; the average reporting lag declined only for external debt and the overall government balance, reflecting in part greater focus on these categories.

5. The review of the treatment of data issues in staff reports and summings up confirms that, in line with Board guidance, considerable attention was devoted by staff and the Board to data provision in Article IV consultations (Table 1):

⁶ See *Summing Up by the Acting Chairman, Data Provision to the Fund for Surveillance Purposes* (BUFF/00/93, 7/10/00); and *Statement by the Staff Representative on Data Provision to the Fund for Surveillance Purposes* (BUFF/00/108, 7/25/00).

⁷ See Appendix III for a list of countries. In October 2000, following the Executive Board discussion on *Data Provision to the Fund for Surveillance Purposes* (BUFF/00/93, 7/10/00), a guidance note was issued to staff setting out the operational implications of the Board decision. Thus, the survey of the treatment of data issues in Article IV and Article IV-UFR consultation reports and summings up begins after October 2000. In addition, there was follow up with mission teams.

⁸ See Figure 1, Appendix IV for comparative data, covering Article IV consultation reports issued during March 1999—February 2000.

- Nearly all staff reports covered data issues in the main text, a result broadly similar to that of the previous survey.
- About 80 percent of all staff reports assessed the overall adequacy of data for surveillance. Data were judged to be adequate for surveillance in 65 percent of these reports, representing some modest improvement compared with 60 percent in the previous survey.
- In most cases where data provision was assessed to be inadequate, staff drew out implications of data deficiencies for macroeconomic analysis.

Table 1. Assessment of Article IV Consultation Reports and Summings Up 1/ 2/
(In number of staff reports, unless indicated otherwise)

Staff Reports							Summings Up
	Staff reports covered by survey	Discusses data issues in the main text	Assesses the overall adequacy of the data for surveillance	Data assessed to be adequate for surveillance	Data assessed to be inadequate for surveillance	Discusses the implications of data deficiencies for macroeconomic analysis 5/	Paragraph assessing data provision to the Fund
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>All countries</u> 3/	133	129 (97%)	107 (80%)	70 (65%)	37 (35%)	30 (81%)	112 (90%)
Industrial	18	16 (89%)	16 (89%)	14 (88%)	2 (12%)	2 (100%)	14 (88%)
Transition	20	20 (100%)	18 (90%)	14 (78%)	4 (22%)	4 (100%)	15 (75%)
Emerging	13	13 (100%)	12 (92%)	8 (67%)	4 (33%)	4 (100%)	10 (91%)
Developing	82	80 (98%)	61 (76%)	34 (56%)	27 (44%)	20 (74%)	73 (94%)
Memo item: Market access economies 4/	46	45 (98%)	45 (98%)	32 (71%)	13 (29%)	13 (100%)	39 (93%)

Source: IMF staff

1/ The survey covered Article IV consultation documents issued during December 2000-November 2001.

2/ In columns 2 and 3, percentages are calculated relative to the total number of staff reports covered by the survey (column 1). In columns 4 and 5, percentages are calculated relative to the number of staff reports that have included an assessment of data adequacy for surveillance (column 3). In column 6, percentages are relative to the number of staff reports that have assessed data to be inadequate for surveillance (column 5).

3/ WEO classification (see Appendix III for lists of countries and their classification among country groups in WEO).

4/ A category of countries with access to international financial markets, the “market access economies” is defined here as all non-industrialized countries (according to the WEO classification) that have received external sovereign ratings from the two major rating agencies, Moody’s and Standard and Poor’s, as of 2001 (see Appendix III).

5/ Of those reports for which data are assessed to be inadequate for surveillance.

6. Similarly, the treatment of data issues in summings up has improved in line with Board guidance that summings up of Executive Board discussions of Article IV consultations include a paragraph assessing data provision to the Fund. Ninety percent of all summings up contained an assessment of data provision to the Fund. This result compares with 64 percent of summings up in the survey for the previous review.

B. International Reserves and Foreign Currency Liquidity

Provision of Data on International Reserves and Foreign Currency Liquidity for Surveillance: Use of the Reserves Benchmark

7. During the last Executive Board review of data provision,⁹ Directors agreed to establish the SDDS prescription as the benchmark for the provision of data on international reserves and foreign currency liquidity.¹⁰ This involves the use of the template on international reserves and foreign currency liquidity as the format for reporting data with monthly periodicity and timeliness (Box 1). Directors underscored that the benchmark “should be viewed as neither a compulsory floor nor a ceiling, but rather used as a framework for assessing members’ data provision to the Fund.” Directors also agreed that all Article IV consultation (including combined Article IV consultation) reports should compare the countries’ provision of these data against the benchmark, indicating the reasons for any differences, their significance and, if appropriate, the member’s plans for strengthening data provision to the Fund in this area.¹¹

8. Experience during Article IV consultations since the previous Board discussion suggests that the SDDS prescription for international reserves and foreign currency liquidity has proved useful as a comprehensive and uniform framework for assessment of members’ data provision practices in this area. The benchmark has facilitated discussions between staff and authorities on this topic in many countries and has helped to improve the availability and quality of data on international reserves and foreign currency liquidity for surveillance purposes.

9. The survey of staff reports indicates that the benchmark has been used only in 38 percent of all cases (Table 2). For economies with access to international capital markets, 72 percent of staff reports referenced the SDDS prescription. The benchmark was also actively used in transition economies, many of which already have or are seeking access to international capital markets. However, in developing countries with Fund-supported programs, staff tended not to rely on the benchmark for international reserves and foreign currency liquidity as the main tool for evaluating countries’ reporting of these data. In many of these countries, staff instead focused on examining gross assets and foreign currency liabilities in the context of program performance criteria on net international reserves and debt, respectively. Yet, in many of these cases the use of the reserves template could help to

⁹ See *Summing Up by the Acting Chairman, Data Provision to the Fund for Surveillance Purposes* (BUFF/00/93, 7/10/00).

¹⁰ The concept of foreign currency liquidity includes official reserve assets and other foreign currency assets and predetermined and contingent foreign currency liabilities (see Box 1).

¹¹ See *Summing Up by the Acting Chairman, Data Provision to the Fund for Surveillance Purposes* (BUFF/00/93, 7/10/00).

assess the availability of reserves (and identification of predetermined and contingent liabilities against these reserves) and also provide a cross check on the reporting of these data and on their quality.

10. As noted above, timeliness for the reporting of total official reserve assets has improved (Figure 1, Appendix IV). Some 76 percent of members surveyed report reserve asset data with a lag of one month or less compared with 71 percent in the previous survey. Moreover, almost half of all countries report these data with a lag of one week or less. Only a few countries report reserve asset data with lags substantially beyond one month, and staff have raised this issue with the authorities.

Box 1. SDDS Specifications for International Reserves and Foreign Currency Liquidity and for External Debt		
	Prescribed	Encouraged
<i>International Reserves and Foreign Currency Liquidity</i>	Disseminate data on total official reserve assets; other foreign currency assets; predetermined short-term drains on foreign currency assets; contingent short-term drains on foreign currency assets; and other related items (as defined in <i>International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template</i> , October 2001) in national currency and/or in U.S. dollars with monthly periodicity. Data on total official reserve assets should be disseminated with a one-week lag; for all other items, a lag of no more than one month is prescribed.	Disseminate weekly data on the full template with a lag of no more than one week. For contingent short-term drains on foreign currency assets, stress testing of the exposure (in terms of foreign exchange liquidity), arising from the options positions to different exchange rate scenarios, is encouraged.
<i>External Debt</i>	Disseminate quarterly external debt statistics within one quarter of the reference period with information for the general government, the monetary authorities, the banking sector, and other sectors, including by maturity—long- and short-term—on an original maturity basis and by instrument as set out in the Fund’s <i>Balance of Payments Manual</i> , fifth edition.	Disseminate twice yearly, within one quarter of the reference quarter, a debt service schedule in which the principal and interest components are separately identified for four quarters and two semesters ahead. The data should be disaggregated by sector (see prescribed). Disseminate a domestic-foreign currency breakdown of external debt each quarter within one quarter of the reference period.

Table 2. Use in Surveillance of the Benchmark on International Reserves and Foreign Currency Liquidity 1/
(In number of staff reports, unless indicated otherwise)

Country Group	The Use of the Benchmark Discussed in the Staff Report	Staff Reports Covered by Survey
<u>All countries</u> 2/	50 (38%)	133
Industrial	12 (67%)	18
Transition	12 (60%)	20
Emerging	12 (92%)	13
Developing	14 (17%)	82
Memo items:		
Market-access economies 3/	33 (72%)	46
SDDS subscribers 4/	36 (88%)	41
Program countries 5/	12 (26%)	47

Source: IMF staff

1/ Percentages are calculated relative to the total number of staff reports covered by the survey.

2/ WEO classification (see Appendix III for lists of countries and their classification among country groups in WEO).

3/ A category of economies with access to international financial markets, the “market access economies” is defined here as all non-industrialized economies (according to the WEO classification) that have received external sovereign ratings from the two major rating agencies, Moody’s and Standard and Poor’s, as of 2001 (see Appendix III).

4/ Currently 50 countries subscribe to the SDDS, and, of these, 41 were covered in the survey of staff reports.

5/ The category of program countries covers countries with a Fund-supported program in effect as of December 1, 2000 and countries with a Fund-supported program that came into effect between December 1, 2000 and November 30, 2001.

11. The experience with the use of the benchmark on international reserves and foreign currency liquidity for many members reaffirms the validity of the benchmark approach to the assessment of data provision in this area; however, the reference to the benchmark was not included in all Article IV reports. To improve the reporting in Article IV reports on the use of the benchmark, staff propose enhancements to the statistical appendix and core indicators table (Appendix V). Under this proposal, the statistical appendix would cover the use of the reserves template, consistency of data with template definitions,¹² and, where relevant, measures for addressing the gaps identified and/or other related policy issues, as is now the case for some staff reports.¹³ The proposed enhancements to the statistical appendix and core

¹² *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template*, International Monetary Fund, Washington, DC, October 2001.

¹³ For instance, the statistical appendix of the Albania staff report assesses the provision of data on reserves and foreign currency liquidity in the context of the SDDS template (*Albania – Staff Report for the 2001 Article IV Consultation and Review Under the Third Annual Arrangement Under the Poverty Reduction and Growth Facility*, EBS/01/106, 7/2/01).

indicators table would align the coverage of these issues more closely with the discussion of the reserves template in the main text of the staff reports. These proposals would, nevertheless, require staff to devote somewhat more effort to reporting on statistical issues in Article IV reports. The additional resource costs would be difficult to quantify at this time, but are likely to be spread across the area departments, the Statistics Department, and the Policy Development and Review Department.

12. Notwithstanding the satisfactory experience with the use of the benchmark, relying on monthly template data involves risks as this may not provide sufficiently detailed and timely data for effective surveillance and vulnerability assessment (Box 2). The importance of such data was illustrated during the Asian crisis and in more recent country cases. The data template has helped to address the need for comprehensive data on reserves and foreign currency liquidity. On timeliness, more than one-third of Fund members currently report selected reserves data for surveillance with daily or weekly periodicity; and almost half of them provide these data within a week or less (see Appendix IV). Moving to weekly periodicity and timeliness in the provision of reserves template data remains a priority and staff will continue to identify and address additional technical assistance needs in this area in consultation with the authorities. Staff estimates that these enhanced technical assistance activities could require considerably more than one additional staff year for a number of years.

Dissemination of Reserves Template Data to the Public Under the SDDS

13. The Board asked staff in thinking of the evolution of the SDDS to consider the feasibility of moving to higher frequency and a shorter time lag in the dissemination of data on reserves and related items.¹⁴ As noted, the SDDS prescribes the dissemination of template data on a monthly basis with a lag of no more than one month. Weekly dissemination of template data with a weekly lag is encouraged (see Box 1).

14. Moving the SDDS in this direction is an aim generally agreed by the Board in 1998.¹⁵ As Directors observed, frequent and timely dissemination of data on international reserves and related items fosters transparency and accountability in macroeconomic policy and is important for preventing crises and facilitating responses to those that occur. Besides limiting misperceptions by market participants, frequent and timely disclosure demonstrates to the public that the authorities are well aware of their reserves position and provides an

¹⁴ See *Summing Up by the Acting Chairman - Data Availability, Dissemination, and Provision to the Fund* (SUR/98/112, 9/14/98) and *Summing Up by the Acting Chairman – Second Review of the Special Data Dissemination Standard – Further Considerations* (BUFF/99/40, 6/3/99) and Appendix II for more details.

¹⁵ See *Data Availability, Dissemination, and Provision to the Fund* (SM/98/206, 8/13/98), page 17, and *Summing Up by the Acting Chairman* (SUR/98/112, 9/14/98).

Box 2. How Important are Frequent and Comprehensive Data on International Reserves for Surveillance? Evidence from Selected Countries

In a world where financial crises tend to unfold rapidly through countries' capital accounts, frequent and comprehensive data on international reserves are becoming increasingly essential for effective surveillance. Gross reserves are a faulty measure of available international liquidity. To form a complete and accurate picture of international liquidity, data on both reserve assets and related liabilities are needed, including those on financial derivatives, short-term foreign currency and indexed debt, and non-deliverable forwards and options. The need for such data is particularly important if authorities engage in complex financial transactions, setting on- and off-balance sheet liabilities against reserve assets, or secure access to contingent credit lines to bolster reserves in times of need. Frequent - weekly, and in some cases daily - detailed data on reserve assets and liabilities are critical for surveillance and for policy-making as the authorities themselves need such data for monitoring and contingency planning.

During the Asian crisis, deficiencies in the availability and quality of reserve data obscured the analysis of vulnerabilities in Korea and Thailand and hindered surveillance and the formulation of the initial response to the crisis:

- In **Korea**, official estimates of gross official reserves included deposits held in overseas branches of domestic banks to render support to these banks in meeting their external debt obligations. By November 1997 such claims had become largely illiquid, with usable reserves turning out to be only one third of published reserve data.
- In **Thailand**, prior to the float in July 1997, the authorities had undertaken large-scale forward interventions and swap transactions to support the baht. They did not reveal information on net reserves and the forward foreign exchange position to staff until after the crisis broke.

In light of these lessons, in 1998, the Board agreed to modify the SDDS to provide for more frequent and timely dissemination of data on international reserves and foreign currency liquidity with the aim of the dissemination of weekly data with a weekly lag. A data template was designed to ensure comprehensive reporting of data on reserve assets and related liabilities and subsequently was incorporated in the SDDS. In 2000, the SDDS prescription on international reserves and foreign currency liquidity was adopted as a benchmark for surveillance. These steps have helped strengthen staff assessments of countries' vulnerabilities and more generally proved useful for surveillance, as illustrated in the following country cases:

- **Peru** started releasing weekly data on the composition of official reserve assets and reserve-related liabilities in mid-2001. (Data on reserve-related liabilities are revalued monthly.) This detailed information complements data on gross and net reserves, which staff receive daily with a one-day lag, allowing staff to monitor, for example, if any reserve assets are placed in foreign branches of domestic banks.
- **Thailand** now releases data on the key assets and liabilities of the central bank, including the net open forward position, on a weekly basis. Staff also receive daily data on gross and net reserves and on official transactions in on-shore and off-shore spot and forward foreign exchange markets. Taken together, these have helped strengthen the staff's ability to monitor developments in the country's international liquidity position.
- In recent years, the authorities in the **Philippines** have been intervening frequently, albeit on a limited scale, in the spot and non-deliverable forward foreign exchange markets. Staff closely monitor such interventions and the associated risk on the basis of daily data on gross and net international reserves and official transactions in spot and non-deliverable forward markets.

However, relying on a combination of monthly template data and selected high frequency reserve indicators has an important drawback, especially in potential and actual crisis cases. At any given point in time template data available are typically one to two months old. While daily or weekly data on gross and net reserves and official transactions can serve as a proxy for intra-monthly changes in international liquidity, this is an imperfect proxy. There is a risk that if the authorities choose to encumber reserves through transactions that are not specially reported to the Fund, these will become known only a month or two later, when the full template data are released. In a vulnerable country, such a delay could be extremely costly.

opportunity for the authorities to explain their reactions to policy developments.¹⁶ Substantial, swift changes in capital flows or the liquidity of assets can lead to instant changes in reserves, which would not be adequately reflected in monthly data.

15. Since May 2000, when SDDS subscribers began disseminating data on the template on international reserves and foreign currency liquidity, the transparency and quality of these data have notably improved. Twenty-four of the 50 SDDS subscribers now publish headline figures on gross international reserves and/or more detailed information on reserve assets on a daily, weekly, or fortnightly basis.¹⁷ Twenty one countries disseminate monthly template data with timeliness of less than one month: eleven (Brazil, Canada, Colombia, Czech Republic, Estonia, Lithuania, Germany, Japan, Peru, Tunisia, and the United Kingdom) release these data within one week after the end of the month; two (Austria and Israel), within two weeks; and eight (Costa Rica, Iceland, Latvia, Netherlands, Norway, Portugal, Spain, and Turkey), within three weeks. One subscriber (Thailand) disseminates data on the official net open forward position on a weekly basis. However, only one country, the United States, publishes the template information with weekly frequency and with a lag of less than one week.¹⁸ The fact that most SDDS subscribers do not now disseminate the template data with a weekly periodicity and timeliness suggests they do not view the benefits commensurate with the costs.

16. Prescribing the dissemination of reserves template data with weekly periodicity and timeliness (now encouraged) raises several issues that would need to be addressed. Specifically:

- Statistical systems may need to be modified to enable compilation of accurate and more frequent data and monitoring of these data; the resource costs associated with modifications in systems would need to be assessed;

¹⁶ For instance, in staff discussions with private sector representatives at the Institute of International Finance's (IIF) Committee on Crisis Prevention and Resolution in Emerging Markets, participants requested more frequent and timely reserves template data. The IIF formally asked the Fund to take up the issue of the dissemination of weekly-weekly reserves data.

¹⁷ Headline figures on gross international reserves are published daily by Argentina, Brazil, and Colombia. Tunisia updates its central bank's foreign currency assets also on a daily basis. Data on selected components of reserve assets are disseminated on a weekly basis by Australia, Canada, Costa Rica, Croatia, Ecuador, France, India, Indonesia, Mexico, Peru, Slovak Republic, Sweden, Thailand, Tunisia, Turkey, and the United States; and on a fortnightly basis by Chile, Czech Republic, Korea, Malaysia, and Slovenia.

¹⁸ The United States does not report having any predetermined and contingent foreign-currency obligations in its data template.

- Frequent data may reflect extraneous factors (“noise”), which may induce unwarranted market response if data are disseminated to the public without adequate explanation on changes in the data from period to period; and
- A more rigorous standard whereby weekly-weekly dissemination of the template data is prescribed (rather than encouraged, as now) may dissuade potential subscribers, and thus the benefits of strengthening the standard would need to be weighed against the advantage of enabling a larger group of countries to subscribe to the standard.

17. The importance of the disclosure of frequent and comprehensive reserves data suggests that the SDDS would need to be updated in this area sometime in the future. At this stage, SDDS subscribers have indicated that the additional resource costs of producing more frequent and timely data are unjustified in relation to the perceived benefits (Box 3). However, most subscribers have believed that they would not encounter any major technical difficulties in disseminating template data on a monthly basis with a weekly lag. Staff will consider how to address the issues raised by subscribers in moving to the dissemination of template data on a weekly-weekly basis (see paragraph 16) and will make recommendations to the Board on this topic in the *Fifth Review of the Fund’s Data Standards Initiatives* in 2003.

Box 3. SDDS Subscribers’ Views on the Feasibility of Disseminating Template Data with Weekly Periodicity and Timeliness

Following the Fourth Review of the Fund’s Data Standards Initiatives, staff solicited subscribers’ views on the feasibility of providing these data on a weekly basis with weekly timeliness.^{1/}

Most SDDS subscribers interviewed noted that a move to weekly-weekly dissemination of template data would require additional resources and that data quality would decline in the process. While they saw that disseminating data on the template in its entirety was important in reducing the prospects of financial crises, they cited technical constraints that would impede dissemination on a weekly basis. These constraints included the need to reconfigure accounting data to facilitate more frequent monitoring and the complexity of using public debt databases that are maintained on a monthly basis for monitoring the discharge of foreign currency obligations.

Policy concerns expressed by a number of the countries consulted include that weekly dissemination of the template data would adversely affect exchange rate management and that markets would overreact to fluctuations in the weekly data, which could be due to extraneous factors. A number of countries also noted that the weekly data, when compiled, most likely would be preliminary in nature and subject to frequent revisions. They thought that monthly data, which are more representative of economic fundamentals, would be more analytically meaningful.

Finally, a number of subscribers regarded the dissemination of data for the full reserve template on a weekly-weekly basis as a low priority and a misallocation of resources. They indicated that they already disseminated high frequency data on gross official reserve assets—fortnightly, weekly or even daily—and considered that this was a more effective way for providing data to the public, given resource constraints.

^{1/} *Review of Fund’s Data Standards Initiatives* (SM/01/208, 6/3/01).

C. External Debt

18. Directors also agreed in June 2000 to establish a benchmark for the provision of external debt data to the Fund (see Appendix II). The benchmark comprises the prescribed and encouraged elements of the SDDS for the external debt data category (see Box 1). As with the benchmark for reserves, Directors asked that staff reports compare countries' practices with the benchmark, indicating the reasons for any differences, their significance, and, if appropriate, the member's plans for strengthening data provision in this area.¹⁹

19. The review of staff reports indicated that only a few of them compared country-reporting practices with the benchmark or made a specific reference to the benchmark in connection with data on external debt. To improve the reporting in Article IV consultation reports on the use of the benchmark on external debt and issues relating to international investment position (IIP) data, staff propose modifications to the statistical appendix and core indicators table (see Appendix V). As a result of these modifications and those proposed above for reporting on the use of the reserve benchmark, the statistical appendix would cover broad external sector issues including not only the balance of payments but also external debt and debt service, the IIP, and international reserves and foreign currency liquidity, as is now the case for some staff reports.²⁰

20. Compilation of external debt data remains a challenge for many members. For countries subscribing to the SDDS, the availability of such data is expected to improve in the course of next year, as the SDDS transition period for this data category ends on March 31, 2003 and countries begin to disseminate detailed external debt data on a quarterly basis. SDDS subscribers are also expected to begin disseminating annual IIP data this year, and this will enhance the availability of external debt data (Box 4).

21. In addition, in the past two years, there have been intensive efforts by the Fund, in cooperation with other institutions, to foster improvements in the coverage and compilation of external debt statistics. The Fund chaired Inter-Agency Task Force on Finance Statistics has completed its work on new international guidelines for external debt statistics – *External Debt Statistics: Guide for Compilers and Users (the Debt Guide)* – and has conducted seven

¹⁹ See *Summing Up by the Acting Chairman, Data Provision to the Fund for Surveillance Purposes* (BUFF/00/93, 7/10/00).

²⁰ For instance, the statistical appendices of the staff reports of Australia, Croatia, and Korea discuss the IIP and external debt (*Australia - Staff Report for the 2000 Article IV Consultation*, SM/01/42, 2/8/01; *Republic of Croatia - Staff Report for the 2000 Article IV Consultation and Request for Stand-By Arrangement*, EBS/01/27, 3/5/01; *Republic of Korea – Staff Report for the 2000 Article IV Consultation and Post-Program Monitoring Discussion*, EBS/01/1, 1/4/01).

regional seminars to promote the new guidelines and to raise awareness of the SDDS data dissemination requirements for the external debt data category.²¹

Box 4. International Investment Position Data

The international investment position (IIP) deals with the stock of external financial assets and liabilities^{1/} at a specific point of time. Thus, gross external debt is encompassed within the IIP framework. The Fund's data standards initiatives, which have emphasized the importance of stock data, are expected to result in the availability of more country information on IIPs later this year.

The SDDS transition period for the IIP statistics ended on December 31, 2001. Given that IIP data are to be disseminated by the SDDS subscribers with annual periodicity and six months timeliness, data for end-2001 must be disseminated no later than June 30, 2002 (or September 30, 2002 provided the subscriber is disseminating quarterly external debt data with a one-quarter lag in accordance with the SDDS prescription). The SDDS encourages dissemination of quarterly IIP data within one quarter. In the General Data Dissemination System (GDDS), the IIP is an "encouraged extension" of the comprehensive framework for the external sector.

As of end-2001, the database maintained by the Statistics Department (STA) contained IIP data for 78 countries, covering 41 of the 50 SDDS subscribers, 20 of the 40 GDDS participants, and 17 other countries. About three quarters of these countries report comprehensive IIP data to STA.^{2/} Most of the reporting countries provide annual IIP data to STA; a quarter of the countries report quarterly data.

^{1/} Disaggregated by the following sectors: the general government, the monetary authorities, the banking sector, and other sectors.

^{2/} Comprehensiveness was assessed by the availability of data for most of the broad functional categories of the IIP and by the provision of data in recent years.

III. OTHER ISSUES RELATED TO DATA PROVISION TO THE FUND

A. Improving Data for Vulnerability Assessment

22. External vulnerability assessment has assumed increasing importance in surveillance, especially for those developing countries with access to international capital markets. Directors have encouraged staff to focus more intensively on informational needs in the context of vulnerability assessments in order to ensure that data availability will improve

²¹ The target audience for these seminars has been the managers and senior compilers in the countries subscribing to the SDDS and the seminars focused on the actions required to implement the new SDDS requirements. The seminars to be conducted in FY 2003 will be aimed at mid-level compilers and will more comprehensively cover the methodology and practice of compiling external debt statistics.

over time. Most recently, in discussing approaches to vulnerability assessment for emerging market economies in October 2001, the Executive Board emphasized the importance of addressing gaps and deficiencies in the data available for assessing vulnerability in surveillance and designing appropriate policy responses (see Appendices I and II).

23. The survey of staff reports revealed that the analysis of countries' vulnerabilities to an external crisis has improved notably in the past year. In line with Board guidance, Article IV staff reports now systematically include indicators of external vulnerability and generally in a separate standard table (Appendix VI). Staff reports for most economies with access to international capital markets (89 percent) did meet this requirement, and many also discussed vulnerabilities in the main text of the report (Table 3). However, further efforts by these member countries and Fund staff will be needed to compile and collect the data identified by the Board as important for strengthening vulnerability assessment (see Appendix II). Vulnerability indicators are reported more selectively in staff reports for developing countries without access to international capital markets and industrial countries (39 percent and 67 percent, respectively), as seems appropriate in light of the economic characteristics and circumstances of different groups of countries.

24. There is also evidence that staff place greater emphasis on reserve adequacy analysis in surveillance of members' economies. Most staff reports for economies with access to international capital markets (78 percent) discuss reserve adequacy explicitly, and the majority of them (61 percent) do so by comparing international reserves to short-term external debt, though several continue to measure short-term debt on an original maturity basis.

25. In addition to frequent and comprehensive data on international reserves and related items (discussed in Section II.B), adequate vulnerability assessments by national authorities and the Fund, particularly in economies borrowing substantially in international capital markets in foreign currencies, generally require the following data, as recently identified by the Board (see Appendices II and VII for a detailed description of the relevant Board decisions and statistical guidance, respectively):

Table 3. External Vulnerability Assessments in Article IV Consultation Reports 1/
(In number of staff reports, unless indicated otherwise)

Country Group	Vulnerability indicators table included	Vulnerabilities discussed based on vulnerability indicators table	Reserve adequacy discussed	Reserve adequacy discussed based on reserves-to-short-term debt ratio	Staff reports covered by survey
<u>All countries</u> 2/	80 (60%)	36 (27%)	80 (60%)	26 (20%)	133
Industrial	12 (67%)	3 (17%)	2 (11%)	2 (11%)	18
Transition	12 (60%)	5 (25%)	15 (75%)	3 (15%)	20
Emerging	13 (100%)	12 (92%)	12 (92%)	12 (92%)	13
Developing	43 (52%)	16 (20%)	51 (62%)	9 (11%)	82
Memo item: Market-Access 3/	41 (89%)	22 (48%)	36 (78%)	22 (48%)	46

Source: IMF staff

1/ Percentages are calculated relative to the total number of staff reports covered by the survey.

2/ WEO classification (see Appendix III for lists of countries and their classification among country groups in WEO)

3/ A category of economies with access to international financial markets, the “market access economies” is defined here as all non-industrialized economies (according to the WEO classification) that have received external sovereign ratings from the two major rating agencies, Moody’s and Standard and Poor’s, as of 2001 (see Appendix III).

- Balance sheet (stock) data on the basis of the IIP (in line with the fifth edition of the *Balance of Payments Manual (BPM5)* and the new *Debt Guide*), to provide a snap shot of countries’ external assets and liabilities by sector,²² maturity, and instrument,²³
- Data on the maturity profile²⁴ and repayment schedules of external debt to facilitate stress testing of the balance of payments and scenario analysis, as discussed by the Board in October 2001 (see Appendix II);

²² The general government, the monetary authorities, the banking sector, and other sectors, in line with *BPM5*.

²³ In this regard, SDDS subscribers are required to disseminate end-2001 IIP data by end-June 2002. Also, the SDDS prescribed and encouraged categories for external debt have been adopted as a benchmark for surveillance.

²⁴ The maturity profile of external debt provides a basis for estimating refinancing needs during the forthcoming year. Data on rollover rates for interbank claims, which could be tracked in countries with high-frequency debt monitoring systems, could also provide an early warning of
(continued)

- Disaggregated data on capital flows (in line with *BPM5*), particularly for countries that are highly vulnerable to capital flow reversals.²⁵ Specifically, balance of payments data for such countries in particular should be reported in sufficient detail so that capital flows can be analyzed by sector, maturity, and instrument;
- Data on the maturity profile of public sector liabilities and their composition in terms of foreign currency and interest rate sensitivity, especially for countries with large stocks of debt and or refinancing needs, to facilitate analysis of public sector vulnerabilities. These data would be consistent with the new *Debt Guide* and the *Government Finance Statistics Manual 2001 (GFSM 2001)*. Consideration should be given to compiling detailed data not only for external debt but for domestic debt as well;²⁶
- Corporate sector data to gauge foreign exchange and interest rate exposure in addition to standard corporate sector indicators relating to profitability, cash flow, and financial structures, as discussed by the Board in June and October 2001 (see Appendix II).²⁷ Such data are not readily available from official sources for many countries, but members and staff could be more proactive, including for industrial countries, in taking advantage of other existing information sources, for example, data from private sector databases and stock exchanges.²⁸ The focus should be on those data that are relevant for assessing the macroeconomic situation.
- Financial soundness indicators (FSIs), more generally, to strengthen monitoring of vulnerabilities in the financial system.²⁹ Staff are preparing a *Financial Soundness*

emerging problems. Where available, data on such rollover rates could be presented in the external vulnerability table (see Appendix VI) on an aggregate basis for different types of claims (such as interbank claims and trade-related loans).

²⁵ Countries that employ settlements-based systems or international transactions reporting systems are usually in a good position to compile such data on a monthly basis.

²⁶ See *Approaches to Vulnerability Assessment for Emerging Market Economies* (SM/01/301, 10/3/01).

²⁷ See the *Acting Chairman's Concluding Remarks, Macprudential Indicators* (BUFF/01/94, 7/6/01) and *Summing Up by the Acting Chairman - Approaches to Vulnerability Assessments for Emerging Market Economies* (BUFF/01/168, 10/31/01).

²⁸ See the *Acting Chairman's Concluding Remarks on Debt- and Reserve-Related Indicators of External Vulnerability* (BUFF/00/69, 5/9/00). Additionally, to analyze market views of contagion, Fund staff have used data on bond prices, stocks, trade patterns, and common lenders. The International Capital Markets Department is working on further tools.

²⁹ See the *Acting Chairman's Concluding Remarks - Macprudential Indicators* (BUFF/01/94, 7/6/01).

Indicators Compilation Guide to provide guidance to national compilers on concepts and methods for compiling such indicators.

26. Intensified efforts by member countries and Fund staff to ensure that the above data are compiled with the necessary detail, in a statistically sound manner, are needed. Many national authorities are already seeking to prepare these data in a comprehensive and timely fashion in order to conduct monitoring and to reduce uncertainty in markets. However, the cross-country comparability of these data and their analytical usefulness cannot be ensured unless standardized statistical methods and the relevant breakdowns are used in compiling these data. Staff would welcome Directors' views on what steps should be taken to achieve this. To make speedy progress in this area, staff suggest bringing together statisticians, government, and central bank experts from member countries, the Bank of International Settlements (BIS) and other relevant international entities in appropriate working groups, organized and sponsored by the Fund, such as the Inter-Agency Task Force on Finance Statistics and the IMF's Committee on Balance of Payments Statistics to explore how their expertise might be brought to bear to evaluate and fill in the gaps in data needed for adequate vulnerability assessments.

27. Compiling many of the data identified above tends to be resource intensive; therefore, a priority for staff together with the authorities will be to identify data gaps, capacity constraints, and technical assistance needs in these areas during Article IV consultations. Progress in compiling data needed for strengthening vulnerability assessments will be discussed in Article IV consultation reports. Staff also propose that data needs for vulnerability assessment be reviewed in the context of the discussions on data provision to the Fund. An appropriate balance needs to be struck between greater timeliness in data provision and data accuracy.

28. To further enhance vulnerability assessments, data from debtor countries need to be complemented by creditor-side data on cross-border exposures, as discussed by the Board in May 2000 (see Appendix II) and advocated by the Financial Stability Forum.³⁰ Several improvements have been made in BIS statistics and in the Fund's Coordinated Portfolio Investment Survey in recent years, which go some distance in meeting these needs.³¹ Adding a maturity breakdown in the BIS locational banking statistics would be a particularly useful extension (see Appendix VII). This would enable a combined breakdown of creditor banks' claims by sector (bank and nonbank) and maturity, thereby improving the usefulness of these residency-based statistics for staff assessments of countries' external positions and facilitating comparisons with national data to identify gaps in coverage.³² Another important undertaking,

³⁰ Caution should be exercised in the use of creditor-side data, however, partly because their primary purpose is to measure exposures of creditor institutions, and therefore, valuation of these data may differ from those of debtor-side data.

³¹ For more details, see the 2001 *Annual Report of the IMF Committee on Balance of Payments Statistics*, forthcoming.

³² See the report of the Financial Stability Forum's (FSF) Working Group on Capital Flows of April 5, 2000. This topic was also discussed during the *Conference on Capital Flow and Debt Statistics* sponsored by the Fund in cooperation with the above FSF group in February 2000.

to facilitate assessment of volatility in capital flows and to enable a more complete view of financial institutions' exposures, would be to extend the coverage of financial derivatives in the BIS statistics, and staff intends to explore this with the BIS. Among the issues to be discussed would be the scope for the BIS reporting countries to compile data on aggregate gross short and long foreign exchange positions vis-à-vis individual nonreporting countries, broken down by the underlying currency. Staff will raise the issue of gaps such as these in creditor-side data and possible ways to alleviate them in the Inter-Agency Task Force on Finance Statistics and other appropriate groups. These groups will attempt to quantify the resource costs for the various agencies and data-reporting countries that are associated with these new initiatives.

B. Fiscal Data: Methodological Enhancements

29. During the previous review of *Data Provision to the Fund for Surveillance Purposes*, it was recognized that several of the deficiencies in fiscal data provision could not be easily resolved within the current government finance statistics methodological framework.³³ Although it was generally agreed that establishing a benchmark for fiscal data similar to the ones for reserves and for external debt would be a difficult task, many Directors nonetheless underscored the importance of continuing to work expeditiously on the methodological issues related to the development of a benchmark for fiscal data.

30. The staff finalized the *Government Finance Statistics Manual 2001 (GFSM 2001)*,³⁴ which represents a major advance in the development of an analytical framework for compilation and presentation of fiscal statistics. The *GFSM 2001* introduces accrual recording in order to capture all resources used by governments, integrates stocks and flows with a view to developing government balance sheets, and provides for multiple fiscal measures depending on the goal of the analysis.³⁵ It is recognized that the implementation of the fully integrated system presented in this manual will take time and will need to progress at a pace determined by countries' differing needs and circumstances. Staff will undertake exercises for a group of representative countries during 2002 to catalogue transitional issues in migrating to the new framework. Based on the conclusions of these exercises, operational guidance will be prepared for introducing the framework across the membership of the Fund and for modifying fiscal reporting requirements based on the *GFSM 2001*.

³³ *A Manual on Government Finance Statistics*, 1986.

³⁴ The *GFSM 2001* methodology was developed over a number of years by Fund staff in close consultation with member countries and several international organizations and groups (including Eurostat, the ECB, the OECD, the World Bank, the UN, BCEAO, and CIS).

³⁵ The concepts and principles set out in the *GFSM 2001* are harmonized with those of the *System of National Accounts 1993* so that government finance statistics can be linked consistently to other macroeconomic statistics.

C. Data Quality and Revision Policies

31. In recent years, the Fund has intensified its efforts to assist countries to improve the quality of data.³⁶ Revisions to data are an important aspect of data quality and are often required where preliminary estimates include adjustments and/or imputations owing to incomplete source data. For instance, revisions may be necessary to incorporate more comprehensive sources as they become available. Such an approach is effectively an attempt to balance timeliness and accuracy. Data that are timely but inaccurate are not only useless, but could be misleading if used as a basis for decision-making. Conversely, accurate data that are not timely can be irrelevant if they are not available when needed. In this sense, revisions seek to improve the balance between these facets of data quality.³⁷

32. While revisions can improve the accuracy of data, they can also bring to light data that have been misreported. In this connection, an important element of the effort to improve the quality of data provided to the Fund is a member's revision policy.³⁸ A well-articulated revision policy provides assurances that revisions to data result exclusively from statistical considerations. Such a policy clearly identifies preliminary data, ensures that revisions follow a regular and transparent schedule, and provides users with adequate documentation on the origins and impact of revisions. In this context, it is important for staff to be able to differentiate between modifications of data reported to the Fund that arise from the application of legitimate statistical procedures and those where the changes are not justified by accepted statistical practices. It also helps to highlight cases of misreporting by establishing, ex ante, the cycle and procedures under which data are revised, central to assessing when and whether the reporting of inaccurate information to the Fund would give rise to a breach of obligations.³⁹

³⁶ See *Summing Up by the Acting Chairman - Review of the Fund's Data Standards Initiatives* (BUFF/01/115, 7/31/01) and (SM/01/208, 7/11/01).

³⁷ Revision studies are an important tool for providing information necessary to undertake preliminary estimates and to continuously improve them. Revision studies and revision policy and practice are assessed under the Data Quality Assessment Framework.

³⁸ For a discussion of this issue, see *Review of the Fund's Data Standards Initiatives – Supplement I* (SM/01/208, 7/11/01).

³⁹ A forthcoming paper on *Strengthening the Application of Article VIII, Section 5* will address the question of what constitutes misreporting to the Fund and specifies the range of circumstances under which the provision of inaccurate information would give rise to a breach of obligations. For an earlier discussion on the topic, see *Misreporting of Information in the Context of Fund Surveillance and Fund Financial Assistance – Present Legal Framework* (EBS/00/13, 2/2/00).

IV. ISSUES FOR DISCUSSION

33. Executive Directors may wish to focus their discussion on the following issues:

Data Provision and Treatment of Data Issues

34. The staff survey shows a broad improvement in the timeliness of the reporting of high frequency indicators while members' reporting on low frequency indicators was largely unchanged.

Do Directors view recent progress in the provision of core statistical indicators as satisfactory? Do Directors recommend that staff continue to encourage and support members' work to further build up their statistical capacity in this area?

35. Staff reports for Article IV consultations generally continue to devote considerable attention to data provision to the Fund and related data issues. In line with Board guidance, staff increasingly discussed implications of data deficiencies for macroeconomic analysis, particularly in cases where they considered data provision inadequate. In addition, the treatment of data issues in summings up has improved considerably, reflecting the emphasis placed on this by the Board.

How do Directors assess the coverage of data issues in Fund surveillance? Do they agree that the treatment of data issues should be more closely integrated in the discussion of macroeconomic analysis and policy issues? Do Directors still consider that summings up should include a paragraph on data provision to the Fund in all cases?

Provision of Data on International Reserves and Foreign Currency Liquidity and on External Debt for Surveillance

36. The staff survey suggests that the SDDS prescriptions for international reserves and foreign currency liquidity and external debt have provided a coherent and uniform framework for the assessment of data provision to the Fund in this area. However, the reference to the reserves benchmark was not included in all Article IV consultation reports, particularly in developing countries. Evidence on the use of the benchmark for external debt is less apparent from the survey of staff reports. To improve the reporting in Article IV staff reports on the use of the benchmarks, staff propose enhancements to the statistical appendix and core indicators table (Appendix V).

Do Directors support the staff proposal to modify the format of the statistical appendix and core indicators table with a view to improving the reporting on the use of the benchmarks in Article IV consultation reports?

37. The experience with the use of the reserves benchmark is a positive step towards the ideal of members' providing high frequency and comprehensive reserves data for surveillance. The importance of such data was illustrated during the Asian crisis and in more recent country cases (Box 2). Staff is of the view that technical assistance needs in this area remain a priority

and will continue to provide the necessary assistance to identify and address these needs in consultation with the authorities.

Do Directors agree that technical assistance in support of the provision of higher frequency and comprehensive reserves data remains a priority?

Dissemination of Reserves Template Data under the SDDS

38. The frequent and timely disclosure of reserves data to the public is important for market stability and is emerging as best practice for many countries. However, technical and resource constraints and considerations of “noise” in high frequency data identified by national authorities represent obstacles to moving to a weekly frequency for the dissemination of reserves template data under the SDDS at this time. Staff will consider how to address the issues raised by subscribers (see paragraph 16) in moving to the dissemination of template data on a weekly-weekly basis and will make recommendations to the Board on this topic in the *Fifth Review of the Fund’s Data Standards Initiatives* in 2003.

What are Directors views on how to address these issues in moving to dissemination of template data on a weekly-weekly basis?

Data Requirements for Vulnerability Assessments

39. The extent of discussions of countries’ vulnerabilities has improved in the past year, in particular for economies with access to international capital markets. Staff reports now routinely provide standardized indicators of external vulnerability and discuss aspects of countries’ vulnerabilities based on these indicators. However, data deficiencies often hamper vulnerability analysis and few staff reports discuss relevant data gaps and their implications for the assessment of macroeconomic developments. In addition, there is a need for further progress in improving creditor-side data on cross-border exposures, along the lines suggested in Section III.A.

Are Directors satisfied with the coverage of vulnerability indicators and issues in Article IV staff reports?

How do Directors see member countries moving toward improving the availability of the data needed for strengthening vulnerability assessments (paragraphs 25, 28)? Do Directors agree with staff proposals in this area (paragraphs 26-28)?

Efforts to Improve Fiscal Data

40. During the previous discussion on data provision to the Fund, Directors emphasized the critical importance of the Fund being provided with high-quality, accurate, and comparable fiscal data, and urged staff to continue working on improving the provision of fiscal data to the Fund. Since then, staff finalized the *Government Finance Statistics Manual*, which represents a major advance in the development of an analytical framework for fiscal statistics; exercises are underway to monitor countries’ experience with the new framework. As a next step, staff will follow up with statistical agencies during 2002 on transitional issues in migrating to the new framework.

Are Directors satisfied with the recent progress in the work on improving the provision of fiscal data to the Fund?

Data Quality and Revision Policies

41. Well-articulated revision policies enhance the quality of data provided for Fund surveillance and help assess when the reporting of inaccurate information to the Fund would give rise to a breach of obligations.

Do Directors agree that staff should encourage countries to articulate policies on data revisions?

General Principles of Data Provision to the Fund

42. The Fund relies on members' cooperation in the provision of data it needs for its surveillance. Article VIII, Section 5 of the Fund's Articles of Agreement provides that the Fund may require members to furnish it with information, as it deems necessary for its activities; Article IV, Section 3(b) stipulates that each member shall provide the Fund with the information necessary for surveillance. These requirements are subject to qualifications relating to members' capacity to furnish data and the disclosure of information about individuals or corporations. In line with the above, the Executive Board makes a case-by-case determination of the adequacy of members' data provision to the Fund.

43. Recent crises in emerging market economies have reinforced the importance of adequate economic and financial data for surveillance, the prevention of external crises, and the assessment of countries' vulnerability. In this context, the Board has emphasized the need to extend the coverage of Article VIII, Section 5 to better reflect the present data needs of the Fund.⁴⁰ Among the noteworthy omissions from the list of variables members are required to report under Article VIII, Section 5, that are now proposed to be included are categories of information in the Fund's core areas of surveillance, including monetary aggregates, interest rates, the public finances, and aggregate information about a member's financial system.⁴¹ However, while reporting such core indicators provides a necessary minimum data set for surveillance, it is not always sufficient for effective surveillance and crisis prevention.

44. In making a case-by-case determination of data provision by members the Board also considers whether members should supplement information on core statistical indicators. For example, in July 2000, Directors agreed to establish benchmarks in the areas of international reserves and foreign currency liquidity and of external debt as a framework for assessing provision of these key data to the Fund. However, it was generally accepted that some elements of the benchmarks would not always be relevant for all members given countries' different circumstances and phases of developments and also that in some cases more than the benchmark would be called for.⁴²

⁴⁰*Summing Up by the Acting Chairman – Data Provision to the Fund for Surveillance Purposes* (BUFF/00/93, 7/10/00).

⁴¹ *Strengthening Fund Surveillance – Provision of Statistical Data by Members* (SM/95/59, 3/24/95). Staff proposals for an extension of Article VIII, Section 5 are described in a forthcoming paper on *Strengthening the Application of Article VIII, Section 5*.

⁴² Section II of this paper reviews experiences with the use of the benchmarks in surveillance. For a general review of recent advancements in surveillance, see *Biennial Review of the Implementation of the Fund's Surveillance* (SM/02/82, 3/14/02).

45. Similarly, for countries borrowing substantially in international capital markets in foreign currencies, data on private sector balance sheets and financing needs are often essential to enable the Fund staff, and the national authorities, to identify emerging vulnerabilities early on. In October 2001, the Board emphasized the importance of addressing gaps and deficiencies in these and other data necessary for assessing vulnerability and designing appropriate policy responses.⁴³ These data tend to be less critical for an assessment of vulnerabilities in countries that have no access to capital markets or those that can borrow chiefly in their domestic currencies.

46. Members are treated uniformly insofar as they are all required to provide a minimum set of core data, consistent with their capacity; but beyond this, they are expected to provide the data appropriate to their individual characteristics and circumstances that are needed for uniformly effective surveillance.

⁴³*Summing Up by the Acting Chairman - Approaches to Vulnerability Assessments for Emerging Market Economies* (BUFF/01/168, 10/31/01).

Summary of Executive Board Discussions

47. During the Board discussion on Data Provision to the Fund for Surveillance Purposes in June 2000:⁴⁴

- Directors were encouraged that a large majority of members provide data on core statistical indicators on a timely basis;
- Most Directors stressed that it would be useful if, in the future, staff reports would note and draw out the implications of data deficiencies for the macroeconomic analysis included in staff reports;
- Most Directors supported the inclusion of a paragraph assessing data provision to the Fund in summings up of Executive Board discussions of Article IV consultations;
- Directors agreed with the proposal to establish the SDDS prescription for international reserves, foreign currency liquidity, and external debt as benchmarks for the provision of data to the Fund in these areas, although it was generally accepted that some elements of the benchmarks would not always be relevant for all members given countries' different circumstances and phases of development. Directors noted that the data required for adequate Fund surveillance in some cases may be more detailed and timely than implied by the benchmarks;
- Many Directors emphasized that staff reports should compare countries' practices with these benchmarks, indicating the reason for any differences, their significance, and if appropriate, the member's plans for strengthening data provision in these areas;
- Directors emphasized the need for the Fund to provide technical assistance to help countries strengthen their data systems in line with the benchmarks;
- Directors also emphasized the critical importance of the Fund being provided with high-quality, accurate, and comparable fiscal data, and urged the staff to continue working on improving the provision of fiscal data to the Fund;
- Directors agreed that data requirements for surveillance should reflect the present data needs of the Fund. In this light, most Directors agreed that further consideration should be given to extending the coverage of Article VIII, Section 5 for this purpose.

⁴⁴See *Summing Up by the Acting Chairman, Data Provision to the Fund for Surveillance Purposes* (BUFF/00/93, 7/10/00).

48. During the Board discussion on Data Availability, Dissemination, and Provision to the Fund in September 1998:⁴⁵

- Directors generally agreed with the staff's proposals to modify the SDDS to provide for more frequent and timely dissemination of data to the public on international reserves and related items – which aim at the provision of weekly data with a one week lag;
- They noted that disclosure of reserves data on a weekly or fortnightly basis is emerging as best practice by many countries, and that some of the emerging market economies affected by recent crises now report daily or weekly reserves data;
- However, several Directors considered that such a practice could strain some countries' already limited resources as well as risk markets misinterpreting short-term changes in reserve flows.

49. During the Board discussion on the Second Review of the Special Data Dissemination Standard – Further Considerations in March 1999.⁴⁶

- Most Directors considered that recent international financial crises demonstrated the importance of disseminating information on reserves and related items with a short lag and a relatively high frequency;
- In that context, several Directors noted that publication of reserves data on a weekly basis, with a lag of only a few days, had become increasingly common among emerging market economies active in international capital markets; these Directors encouraged other members to follow such practices;
- However, since the reserves template called for much more detailed data, many Directors also stressed that there would be a need for countries to adapt their internal reporting systems to generate the information needed under that template;
- Directors considered that it was appropriate for the SDDS prescriptions for the periodicity and timeliness of data dissemination in connection with the new template to reflect the consensus among members.

50. During the Board discussion of the *Review of the Fund's Data Standards Initiatives* in July 2001:⁴⁷

⁴⁵ See *Summing Up by the Acting Chairman – Data Availability, Dissemination, and Provision to the Fund* (SUR/98/112, 9/14/98).

⁴⁶ See *Summing Up by the Acting Chairman – Second Review of the Special Data Dissemination Standard – Further Considerations* (BUFF/99/40, revised 6/3/99).

- Directors stressed the importance of frequent and timely template data on international reserves and foreign currency liquidity, and highlighted the importance of members' data dissemination efforts for improved transparency and crisis prevention;
- Most directors supported the retention of the current prescriptions of monthly periodicity and monthly timeliness for data disseminated in the template on international reserves and foreign currency liquidity and noted that moving to weekly periodicity and weekly timeliness for SDDS subscribers would be premature or inappropriate. It was agreed that this issue would be revisited at the time of the next review of data provision to the Fund.

51. In several discussions since March 2000, the Executive Board has emphasized the importance of addressing gaps and deficiencies in the data available for assessing vulnerability in surveillance and designing appropriate policy responses.

52. During the Board discussion of the Biennial Review of the Implementation of the Fund's Surveillance and of the 1977 Surveillance Decision in March 2000:⁴⁸

- Many Directors saw a hierarchy of concerns relevant for Fund surveillance: all issues related to external sustainability and vulnerability to balance of payments or currency crises will continue to be at the apex of this hierarchy;
- Most Directors noted that for effective diagnosis of financial vulnerabilities and incipient crises, all countries vulnerable to large capital account swings should provide high-quality and timely information on the usability of international reserves, on short-term debt, and on developments in market sentiment;
- Some Directors saw scope for standardizing the data requirements and the nature of vulnerability indicators to be reported and for the systematic use of alternative scenarios and stress tests for member countries;
- Directors encouraged staff to continue to look for signs of linkages between potential weaknesses in the corporate sector and external vulnerability, following up, if warranted, on a case-by-case basis;
- Directors noted that surveillance teams should be aware of the work being done on a country in the other institutions, and could feed the results of this work into the surveillance process, whenever they were relevant to the Fund's core concerns.

⁴⁷See *Summing Up by the Acting Chairman, Review of the Fund's Data Standards Initiatives* (BUFF/01/115, 7/31/01).

⁴⁸See *Summing Up by the Acting Chairman, Biennial Review of the Implementation of the Fund's Surveillance and of the 1977 Surveillance Decision* (SUR/00/32, 3/21/00).

53. During the Board discussion of Debt and Reserve-Related Indicators of External Vulnerability in May 2000:⁴⁹

- Directors considered debt and reserve-related indicators of external vulnerability to be important tools for strengthening the analysis of vulnerability;
- Most Directors agreed that the ratio of international reserves to short-term debt could be a particularly useful indicator of reserve adequacy, especially for economies with significant, but not fully certain, access to international capital markets;
- Directors agreed that the analysis of vulnerability needed to take into account other potential sources of short-term demand for reserves, including the potential for capital flight, derivatives exposures, and short-term public debt to residents;
- Directors urged staff to pay close attention to the currency composition, maturity, interest rate, and other terms of external debt in its analyses of vulnerability, taking into account derivatives exposures, as well as the positions of the various sectors of the economy;
- Directors agreed that it was important to obtain more adequate information on the financial and non-financial corporate sector and urged staff and member countries to take full advantage of information on individual banks and companies made available through securities regulatory bodies and other sources;
- Directors agreed that improvements in creditor-side data sources had a major role to play in strengthening the analysis of external vulnerability, but urged caution in the use of data from such sources as these have been created for other purposes.

54. During the Board discussion of *Macprudential Indicators* (MPIs) in June 2001:⁵⁰

- Directors noted that selected MPIs are already being reported as part of Fund surveillance and encouraged such reporting in the future, as warranted, as well as the use of these MPIs in vulnerability assessments;
- Directors stressed that these analyses and tests should take account of country circumstances and institutional characteristics;

⁴⁹See the *Acting Chairman's Concluding Remarks on Debt- and Reserve-Related Indicators of External Vulnerability* (BUFF/00/69, 5/9/00).

⁵⁰See the *Acting Chairman's Concluding Remarks, Macprudential Indicators* (BUFF/01/94, 7/6/01).

- Directors broadly supported the selection of a set of encouraged MPIs consisting of additional indicators for the banking sector, as well as indicators for the non-bank financial sector, the corporate and household sectors and real estate markets;
- Directors broadly endorsed the proposal for the Fund to encourage and facilitate voluntary efforts by national authorities to initiate dissemination of the core and encouraged MPIs and their metadata;
- Directors supported the proposal for a more systematic compilation of macroprudential data in the context of the Financial Sector Assessment Program (FSAP), and in those Article IV consultations where in-depth financial sector assessments are undertaken. MPIs will also be included in Article IV consultation reports where data are available.

55. During the Board discussion of Approaches to Vulnerability Assessment for Emerging Market Economies in October 2001.⁵¹

- Directors emphasized the importance of addressing gaps and deficiencies in the data available for assessing vulnerability and designing appropriate policy responses;
- Director noted that data needed for vulnerability assessments include those on the foreign exchange exposures of the corporate sector, and on countries' financing needs – including their degree of reliance on debt rollovers, trade finance, and bond finance. Directors generally encouraged Fund staff to focus more intensively on these informational needs in order to ensure that data availability will improve over time.

⁵¹See *Summing Up by the Acting Chairman – Approaches to Vulnerability Assessment for Emerging Market Economies* (BUFF/01/168, 10/31/01).

Country Classifications ^{1/}

Program Countries ^{2/}		Non-Program Developing Countries		Non-Program Advanced Countries	Non-Program Transition Countries
Armenia	Mozambique	Algeria	Libya	Australia	Albania
Benin	Nicaragua	Antigua and Barbuda	Malaysia	Austria	Czech Republic
Bolivia	Nigeria	Aruba	Maldives	Belgium	Hungary
Bulgaria	Panama	Bahamas, The	Malta	Canada	Poland
Burkina Faso	Peru	Barbados	Mauritius	China, Hong Kong SAR	Slovak Republic
Cameroon	Philippines	Belize	Mexico	Finland	Slovenia
Colombia	Rwanda	Bhutan	Micronesia, Federated States of	France	Uzbekistan
Cote d'Ivoire	Senegal	Botswana	Morocco	Germany	
Croatia	Sierra Leone	Brunei	Nepal	Greece	
Djibouti	Sri Lanka	Cape Verde	Netherlands Antilles	Iceland	
Estonia	Tajikistan	Chile	Oman	Ireland	
Ethiopia	Tanzania	China	Paraguay	Israel	
Gambia, The	Uganda	Comoros	Samoa	Italy	
Georgia	Ukraine	Congo, Dem. Rep. Of	Saudi Arabia	Japan	
Ghana	Uruguay	Costa Rica	Solomon Islands	Netherlands	
Guinea	Vietnam	Dominica	South Africa	Norway	
Guinea-Bissau	Yemen	Dominican Republic	St. Lucia	San Marino	
Honduras	Zambia	Egypt, Arab Republic of	Sudan	Singapore	
Kazakhstan		El Salvador	Suriname	Sweden	
Korea		Equatorial Guinea	Syrian Arab Republic	Switzerland	
Kyrgyz Republic		Eritrea	Thailand	United Kingdom	
Lao P.D.R.		Grenada	Togo	United States	
Lesotho		Guatemala	Tonga		
Lithuania		India	Trinidad & Tobago		
Madagascar		Iran	Tunisia		
Malawi		Jamaica	United Arab Emirates		
Mali		Kiribati	Venezuela		
Mauritania		Kuwait	Zimbabwe		
Moldova		Lebanon			

1/ The classification covers countries for which Article IV Consultation reports were issued during December 1, 2000 – November 30, 2001, unless indicated otherwise.

2/ Program countries comprise countries with a Fund-supported program in effect as of December 1, 2000 through November 30, 2001.

Country Classifications

Industrial Countries ^{3/}	Transition Economies ^{3/}	Emerging Market Economies ^{3/}	Developing Countries ^{3/}		
Australia	Albania	Chile	Algeria	Guinea	San Marino
Austria	Armenia	China	Antigua	Guinea-Bissau	Saudi Arabia
Belgium	Bulgaria	China, Hong Kong SAR	Aruba	Honduras	Senegal
Canada	Croatia	Colombia	Bahamas	India	Sierra Leone
Finland	Czech Republic	Israel	Barbados	Iran	Solomon Islands
France	Estonia	Korea	Belize	Jamaica	South Africa
Germany	Georgia	Malaysia	Benin	Kiribati	Sri Lanka
Greece	Hungary	Mexico	Bhutan	Kuwait	St. Lucia
Iceland	Kazakhstan	Peru	Bolivia	Lebanon	Sudan
Ireland	Kyrgyz Republic	Philippines	Botswana	Lesotho	Suriname
Italy	Lao, P.D.R.	Singapore	Brunei	Libyan Arab Jamahiriya	Syrian Arab Republic
Japan	Lithuania	Thailand	Burkina Faso	Madagascar	Tanzania
Netherlands	Moldova	Venezuela	Cameroon	Malawi	Togo
Norway	Poland		Cape Verde	Maldives	Tonga
Sweden	Slovak Republic		Comoros	Mali	Trinidad and Tobago
Switzerland	Slovenia		Congo, Dem. Rep. of	Malta	Tunisia
United Kingdom	Tajikistan		Costa Rica	Mauritania	Uganda
United States	Ukraine		Cote d'Ivoire	Mauritius	United Arab Emirates
	Uzbekistan		Djibouti	Micronesia	Uruguay
	Vietnam		Dominica	Morocco	Yemen
			Dominican Republic	Mozambique	Zambia
			Egypt	Nepal	Zimbabwe
			El Salvador	Netherlands Antilles	
			Equatorial Guinea	Nicaragua	
			Eritrea	Nigeria	
			Ethiopia	Oman	
			Gambia, The	Panama	
			Ghana	Paraguay	
			Grenada	Rwanda	
			Guatemala	Samoa	

^{3/} World Economic Outlook (see http://www-int.imf.org/depts/res/weo/Group_Aggregates/newgroups.asp?zingid=newgroups1).

Country Classifications

Market-Access Economies ^{4/}				SDDS Subscribers ^{5/}		
Argentina	Estonia*	Pakistan	Uruguay*	Argentina	Hungary*	Singapore*
Barbados*	Guatemala*	Panama*	Venezuela*	Australia*	Iceland*	Slovak Republic*
Belize*	Hungary*	Papua New Guinea		Austria*	India*	Slovenia*
Bolivia*	India*	Paraguay*		Belgium*	Indonesia	South Africa*
Botswana*	Indonesia	Peru*		Brazil	Ireland*	Spain
Brazil	Israel*	Philippines*		Canada*	Israel*	Sweden*
Bulgaria*	Jamaica*	Poland*		Chile*	Italy*	Switzerland*
Chile*	Jordan	Qatar		China, Hong Kong SAR *	Japan*	Thailand*
China*	Kazakhstan*	Romania		Colombia*	Korea*	Tunisia*
China, Hong Kong SAR*	Korea*	Russia Federation		Costa Rica*	Latvia	Turkey
Colombia*	Kuwait*	Singapore*		Croatia*	Lithuania*	United Kingdom*
Costa Rica*	Latvia	Slovak Republic*		Czech Republic*	Malaysia*	United States*
Croatia*	Lebanon*	Slovenia*		Denmark	Mexico*	
Cyprus	Lithuania*	South Africa*		Ecuador	Netherlands*	
Czech Republic*	Malaysia*	Thailand*		El Salvador*	Norway*	
Dominican Republic*	Malta*	Trinidad & Tobago*		Estonia*	Peru*	
Ecuador	Mexico*	Tunisia*		Finland*	Philippines*	
Egypt*	Morocco*	Turkey		France*	Poland*	
El Salvador*	Oman*	Ukraine*		Germany*	Portugal	

4/ The survey of staff reports covers 13 emerging market economies out of 19 economies included in the WEO sample of emerging markets. This study extends the WEO category of emerging market economies to include economies with access to international financial markets. Market access economies are defined as all non-industrialized economies (according to the WEO definition) that have received external sovereign ratings from the two major rating agencies, Moody's and Standard and Poor's, as of 2001. This list of economies corresponds closely to those economies identified by staff as having potential market access in 1998, as part of an exercise to identify economies for which the staff reports would benefit from reporting additional vulnerability indicators. Indeed, most of these economies receive significant flows of private debt creating capital. The number of economies that meet this criterion is 59 and, of these, 46 economies were covered in the survey of staff reports (denoted by *). Of these 46 market access economies, 24 are SDDS subscribers.

5/ Of the 50 SDDS subscribers, 41 economies were covered in the survey of staff reports (denoted by *). The most recent subscriber, Costa Rica, subscribed to the SDDS on November 28, 2001.

Data Provision and Treatment of Data Issues in Surveillance

56. Against the background of the Mexican financial crisis, the coverage and reporting of statistical data required for effective surveillance were approved by the Executive Board in 1995.⁵² Directors were concerned that shortcomings in surveillance due to information deficiencies could have costly adverse effects and therefore, they stipulated that, as an absolute minimum, members should report to the Fund data on core indicators covering the main sectors of the economy and the balance sheet of the central bank, on a timely basis and with a periodicity necessary for effective surveillance.⁵³ At the same time, Directors recognized that data requirements for surveillance change over time and vary across countries and endorsed a flexible approach to ensure evenhanded surveillance.

57. The operational framework for the treatment of data provision to the Fund in Article IV consultations was established following approval by the Board of the operational guidelines to staff on the treatment of statistical issues in Article IV consultation reports.⁵⁴ According to these guidelines, all staff reports are to contain a clear indication of the adequacy of the data provided to the Fund for surveillance, both in the context of the Article IV consultation and for the regular monitoring of economic developments between consultations. Where data are deficient, the staff appraisal is to bring this to the attention of the Board and indicate the remedial measures required.

58. The statistical appendix to the staff report should provide a normative assessment of the minimum core statistical indicators for continuous surveillance between consultations as well as other indicators needed in specific circumstances on a case-by-case basis. In addition, the appendix should address the coverage and quality of general economic data in important sectors and the impact of any deficiencies on the capacity of the authorities to determine appropriate policy responses and on the ability of Fund staff to analyze economic developments and assess policy proposals within a quantitative macroeconomic framework. The appendix should also include a matrix regarding the periodicity, timeliness, and availability of information that has been identified as the core minimum for effective surveillance.

59. During the June 2000 discussion of *Data Provision to the Fund for Surveillance Purposes*, Directors reviewed progress in the provision of data on core statistical indicators.

⁵²See *Summing Up by the Chairman – Strengthening Fund Surveillance – Provision of Statistical Data by Members* (SUR/95/34, 4/7/95), and *Operational Guidance Note on Provision of Statistical Data by Members* (SM/95/180, Attachment II, 7/21/95).

⁵³The core indicators are exchange rates, international reserves, reserve money, broad money, interest rates, consumer prices, external trade, current account balance, external debt, overall government balance, and GDP.

⁵⁴See *Concluding Remarks by the Chairman—Data Provision to the Fund for Surveillance—Preliminary Review of Experience* (SUR/95/87); and *Data Provision to the Fund for Surveillance—Preliminary Review of Experience* (SM/95/180).

They were “encouraged that a large majority of members provide data on core statistical indicators on a timely basis. However, Directors also recognized that for some countries progress in this area has been slow, owing to resource constraints and the long gestation period needed for statistical capacity building.”⁵⁵

60. With a view to providing an update to the Board on progress in this area since the June 2000 review, staff conducted a survey of core statistical indicators and the treatment of data issues in 133 Article IV consultation reports and summings up issued during December 2000–November 2001.⁵⁶

A. Review of Data Provided for Article IV Consultation Reports

61. The results of the survey of core statistical indicators are presented in Figures 1 and 2, which also contain comparative data for the previous survey.⁵⁷ The salient feature to emerge from the survey is that members’ reporting of high frequency indicators has shown a broad improvement in timeliness. In particular, there has been a decline in the reporting lag for data on international reserves, reserve money, and the central bank balance sheet. The improvement in the timeliness of international reserves data provision is noteworthy; almost half of the countries surveyed report these data with a lag of a week or less compared to 38 percent in the previous survey. This outcome is due to an across-the-board improvement for all country groups (Table A below) and reflects the attention given to international reserves data in the assessment of countries’ external vulnerability. The timeliness of exchange rate data was also noteworthy with nearly all countries continuing to provide these data with a lag of one month or less. Exceptions to this trend are the increase in the timeliness of interest rate and consumer price data provision,

⁵⁵*Summing Up by the Acting Chairman, Data Provision to the Fund for Surveillance Purposes*, (BUFF/00/93, 7/10/00).

⁵⁶Based on the WEO country classification, the total of 133 countries comprised 18 industrial, 13 emerging market, 20 transition and 82 developing economies. Among these, for those countries that had subscribed to the SDDS, the data in the staff reports were supplemented by information gathered from web sites maintained by national authorities, which can be accessed through the Fund’s Dissemination Standards Bulletin Board. The survey covers 11 core indicators and the central bank balance sheet, as identified by the Board in 1995 (see *Summing Up by the Chairman – Strengthening Fund Surveillance – Provision of Statistical Data by Members*, SUR/95/34, 4/7/95): the high-frequency indicators, which are exchange rates, international reserves, reserve/base money, broad money, interest rates and the CPI; and low frequency indicators, compiled and accessible less often, and comprising external trade, current account balance, overall government balance, GDP/GNI, and external debt.

⁵⁷The previous survey comprised 130 Article IV staff reports and summings up for the period March 1999—February 2000. Based on the WEO country classification, these countries consisted of 22 industrial, 23 emerging-market, 16 transition, and 69 developing economies. The current survey comprises 18 industrial, 13 emerging-market, 20 transition, and 82 developing economies.

which partly reflect the greater proportion of developing countries in the current survey. The results for the reporting of low frequency indicators were mixed; the reporting lag declined only for external debt data and the overall government balance and increased for trade, current account balance and GDP/GNI data. Although modest, the improvements are encouraging, considering that there is a long gestation period for statistical capacity building to show results in these areas.

Table A: Timeliness of International Reserves Data Provision by WEO Country Category
(in percent of the total number of countries in a given country group)

	Reporting lag of one week or less in the previous survey	Reporting lag of one week or less in the current survey
<u>All countries</u>	38	49
Industrial	40	89
Transition	60	85
Emerging	65	92
Developing	24	25
Memo item:		
Market-access economies	60	65

62. Improvements in data provision were in part due to the impetus of the Fund's data standards initiatives, which have increased country awareness of the need to produce timely and high quality data. As of end-December 2001, 50 countries had subscribed to the SDDS and another 40 had participated in the GDDS. Furthermore, a number of countries are preparing to join SDDS or GDDS and intensive contacts between the Fund staff and the national authorities have been instrumental in accelerating statistical reporting. In addition, compilation and reporting of data on external debt by SDDS countries have been spurred by the need to disseminate data on the IIP.⁵⁸ These efforts also have been enhanced by the ongoing work to disseminate quarterly external debt statistics with a one-quarter lag following the end of the transition period on March 31, 2003. Finally, with respect to other countries, the implementation of the Heavily Indebted Poor Countries (HIPC) initiative can be cited as a factor in strengthening data compilation practices and data provision to the Fund.

63. In regard to the periodicity of data, trends indicate that country practices have remained broadly unchanged between the previous and current surveys. Data on high frequency indicators were compiled with a monthly periodicity for nearly all countries. The data for exchange rates, however, were for the vast majority of countries compiled on a daily basis (Table 1, this Appendix). With respect to the low frequency indicators, periodicity showed much greater variation; the majority of countries compiled GDP/GNP data with annual frequency while in the case of the external current account balance and external debt, only two-thirds and half of all countries, respectively, compiled data with quarterly frequency or less.

⁵⁸The transition period for disseminating data on the IIP ended on December 31, 2001.

64. When analyzed across country groupings, the survey shows that interest rate data were available to the Fund with the greatest frequency (daily) from advanced countries. With respect to the low-frequency indicators, while most countries continued to compile data on exports and imports on a monthly frequency, only advanced countries and countries in transition achieved a similar frequency for data on the overall government balance. A further disaggregation of developing countries by program status, however, indicates that those with active programs, too, for the most part compiled data on the overall government balance with a monthly frequency – a feature that stemmed in part from the close monitoring of this aggregate by Fund staff in the context of programs.

65. With respect to GDP/GNP, largely due to the prescriptions of the SDDS, advanced countries compiled data with quarterly frequency. A similar observation can be made about countries in transition, and possibly reflects a carryover of similar practices from the days of central planning. However, for the vast majority of developing countries, these data were compiled with only annual frequency.

B. Treatment of Data Issues in Article IV Consultation Reports

66. This review confirms that considerable attention was devoted by the staff to data provision to the Fund and their implications for surveillance in Article IV consultations (see text Table 1).⁵⁹ The treatment of data issues in staff reports comprises the discussion of data issues in the main text, the assessment of the overall adequacy of these data for surveillance, the discussion of data deficiencies for macroeconomic analysis, and the preparation of the statistical appendix.

67. The review showed that for all staff reports, 97 percent discussed data issues in the main text and 80 percent assessed the overall adequacy of data for surveillance. In those cases where data provision was considered inadequate for surveillance (35 percent), staff discussed the implications for accurate economic analysis in four fifths of these cases. In a large majority of these cases, references to data issues were included in the staff appraisal. The explicit assessments were more frequent in stand-alone Article IV consultation reports (90 percent) than in reports for combined Article IV consultations.

68. When analyzed using WEO country classifications, 90 percent of reports for industrial, emerging market, and transition economies assessed the adequacy of data provision. However, for developing countries, there was an explicit assessment of data adequacy for surveillance in about 75 percent of staff reports. Data were assessed to be inadequate for surveillance in 44 percent of developing countries, a rate that was notably higher than for other country groupings. Implications of data deficiencies for macroeconomic analysis were discussed in about 75 percent of developing country reports, the lowest of all country groupings.

⁵⁹The list of member countries in the review and their classification among country groups are shown in Appendix III.

69. For economies with access to international financial markets, 98 percent of staff reports discussed the adequacy of data for surveillance. Data were determined to be inadequate in 29 percent of reports for these countries, and staff discussed the implication of these data deficiencies for macroeconomic analysis in all cases.

Figure 1. Frequency Distribution of Data Lags: High Frequency Indicators

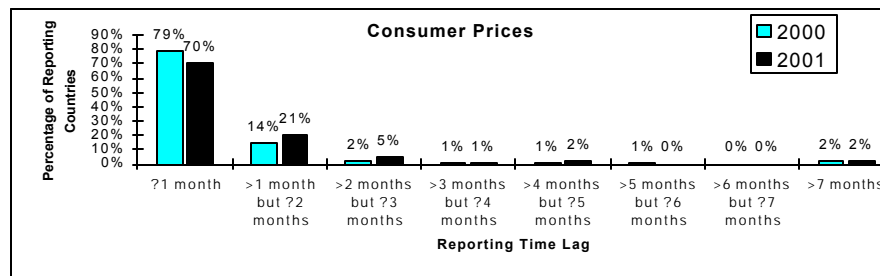
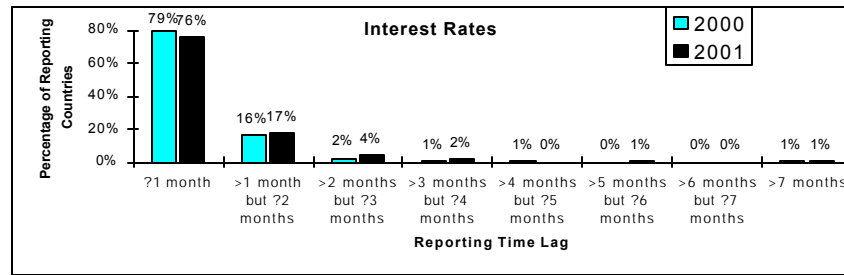
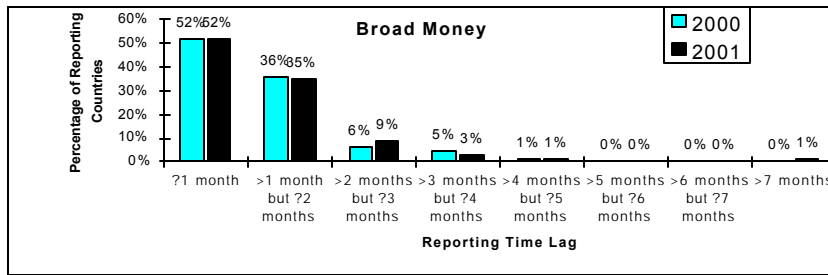
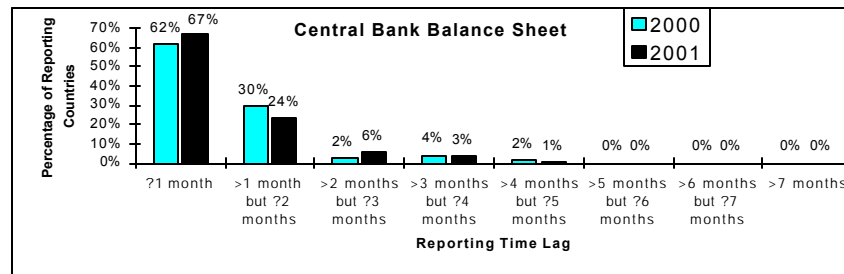
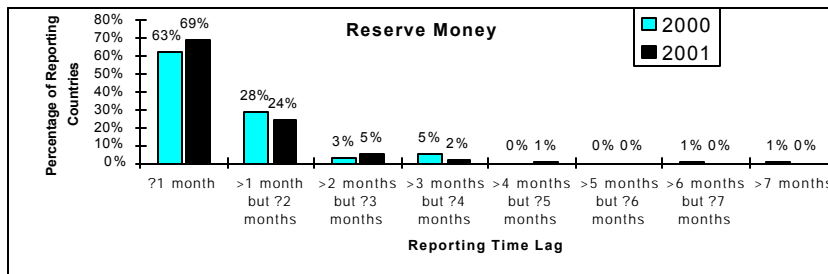
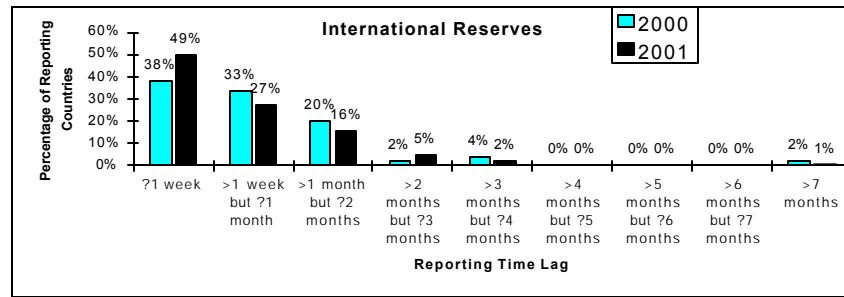
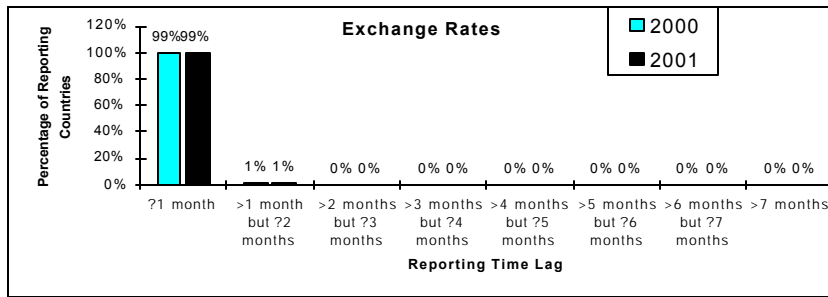
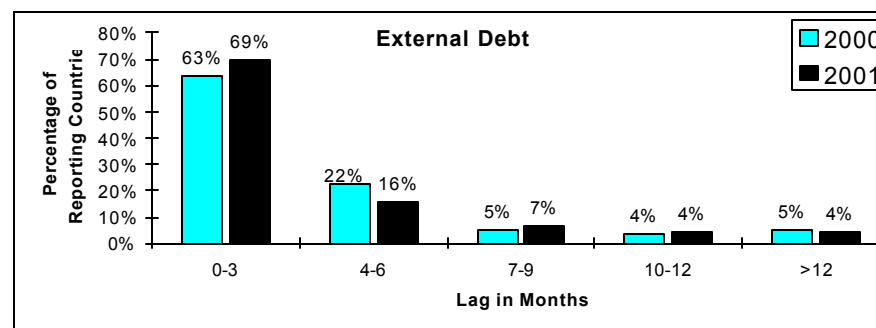
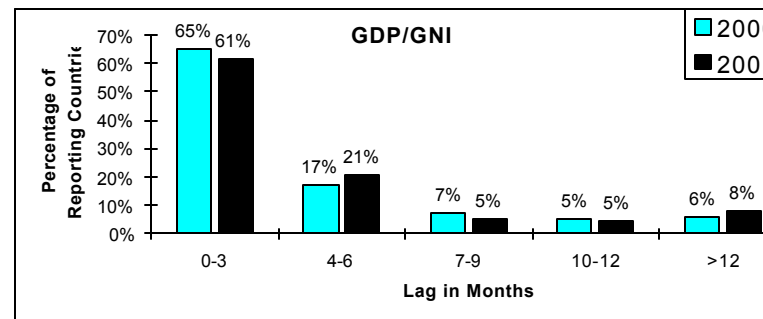
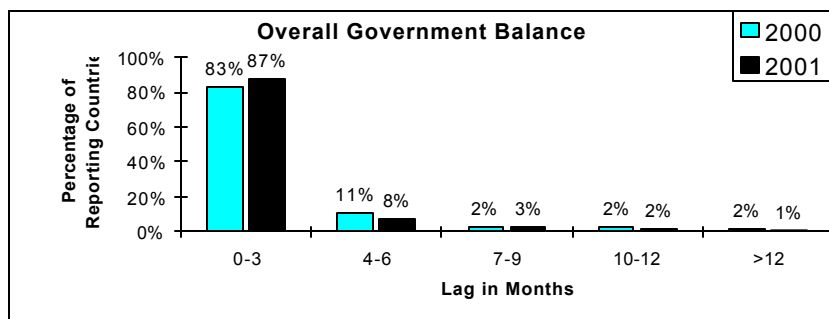
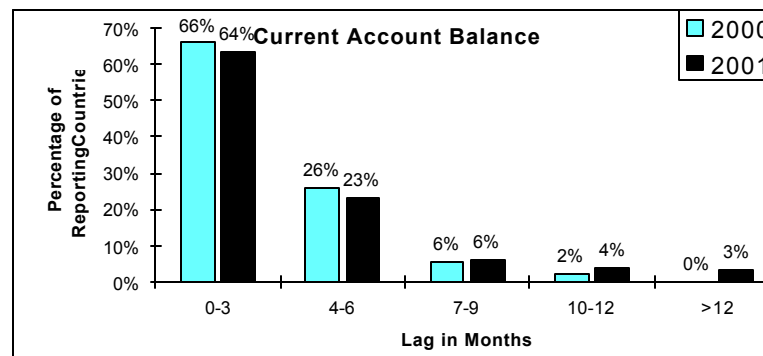
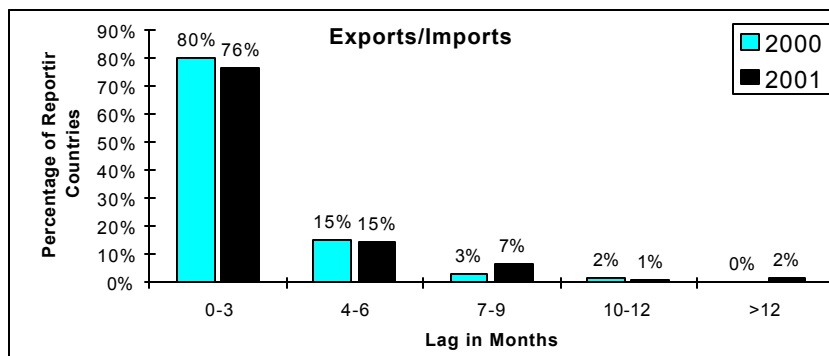


Figure 2. Frequency Distribution of Data Lags: Low Frequency Indicators ^{1/}



^{1/} The calculation of lags is based on the surveys of core statistical indicators in Article IV consultation reports issued during March 1999 – February 2000 and December 2000 – November 2001.

Table 1. Survey of Core Indicators: Statistical Summary of Periodicity of Indicators

Description	Exchange Rates	International Reserves	Reserve/ Base Money	Central Bank Balance Sheet	Broad Money	Interest Rates	Consumer Prices	Exports/ Imports	Current Account Balance	Overall Government Balance	GDP/ GNI	External Debt
All Countries												
Countries Reporting	132	132	125	126	129	131	132	131	130	132	131	119
Frequency of Indicator:												
Daily	111	24	16	8	2	50	1	0	0	0	0	1
Weekly	6	24	23	22	13	17	4	0	0	2	0	1
Monthly	15	76	82	89	109	52	121	92	25	88	4	36
Quarterly	0	1	0	1	2	4	4	30	64	23	55	26
Annual	0	2	0	1	1	0	0	9	39	17	69	47
Other	0	5	4	5	2	8	2	0	2	2	3	8
Non-Program Advanced Countries												
Countries Reporting	22	22	21	22	21	22	22	21	21	22	22	16
Frequency of Indicator:												
Daily	22	1	2	0	0	21	0	0	0	0	0	0
Weekly	0	2	3	6	1	0	0	0	0	0	0	0
Monthly	0	17	16	13	20	0	21	21	9	21	0	1
Quarterly	0	1	0	1	0	1	1	0	11	0	20	3
Annual	0	0	0	0	0	0	0	0	1	1	2	10
Other	0	1	0	2	0	0	0	0	0	0	0	2
Non-Program Developing Countries												
Countries Reporting	56	56	51	52	55	56	56	56	56	56	55	51
Frequency of Indicator:												
Daily	43	8	5	2	1	13	0	0	0	0	0	0
Weekly	2	12	11	9	6	8	3	0	0	1	0	0
Monthly	11	32	34	39	44	29	49	33	8	27	1	14
Quarterly	0	0	0	0	2	2	2	18	26	11	14	7
Annual	0	2	0	1	1	0	0	5	22	16	38	27
Other	0	2	1	1	1	4	2	0	0	1	2	3

Table 1. Survey of Core Indicators: Statistical Summary of Periodicity of Indicators (concluded)

Description	Exchange Rates	International Reserves	Reserve/ Base Money	Central Bank Balance Sheet	Broad Money	Interest Rates	Consumer Prices	Exports/ Imports	Current Account Balance	Overall Government Balance	GDP/ GNI	External Debt
Non-Program Countries in Transition												
Countries Reporting	7	7	7	6	7	7	7	7	7	7	7	6
Frequency of Indicator:												
Daily	6	2	0	0	0	5	1	0	0	1	0	0
Weekly	1	1	0	0	0	0	0	0	0	2	0	1
Monthly	0	3	4	4	6	2	6	6	4	5	0	4
Quarterly	0	0	0	0	0	0	0	1	3	1	6	2
Annual	0	0	0	0	0	0	0	0	0	0	1	0
Other	0	1	3	2	1	0	0	0	0	0	0	0
Program Countries												
Countries Reporting	47	47	46	46	46	46	47	47	46	47	47	46
Frequency of Indicator:												
Daily	40	13	9	6	1	11	0	0	0	0	0	1
Weekly	3	9	9	7	6	9	1	0	0	0	0	1
Monthly	4	24	28	33	39	21	45	32	4	35	3	17
Quarterly	0	0	0	0	0	1	1	11	24	11	15	14
Annual	0	0	0	0	0	0	0	4	16	0	28	10
Other	0	1	0	0	0	4	0	0	2	1	1	3

Statistical Appendix: Statistical Issues

I. Real Sector

II. Fiscal Sector

III. Monetary Sector

IV. External Sector

In addition to the balance of payments, this section would also cover other external sector issues such as reserves, external debt and debt service, and the international investment position. For reserves, this would include information on the use of the reserve data template as a benchmark in surveillance, consistency of data with template definitions, and, where relevant, measures for addressing the gaps identified and/or other related policy issues. Similarly, data for external debt would also be compared with the benchmark.

Statistical Appendix: Core Statistical Indicators
(As of M/D/Y)

	Exchange Rates	International Reserves 1/	Central Bank Balance Sheet	Reserve/ Base Money	Broad Money	Interest Rates	Consumer Price Index	Exports/ Imports	Current Account Balance	Overall Government Balance 2/	GDP	External Debt 3/	Debt Service 3/
Date of latest observation													
Date received													
Frequency of data													
Frequency of reporting													
Source of data													
Mode of reporting													
Confidentiality													
Frequency of publication													

1/ Please footnote whether the data on the category International Reserves refer to total gross reserve assets or net international reserves. Please also indicate the periodicity, timeliness, and comprehensiveness with which the reserve template data are reported. Note that a detailed comparison with the reserve benchmark should be provided in the text of the statistical appendix.

2/ Please footnote whether the category Overall Government Balance refers to the central or general government balance.

3/ Please footnote for the external debt category the periodicity, timeliness, and comprehensiveness with which elements of the external debt benchmark are reported. Note that a detailed comparison with the benchmark should be provided in the text of the statistical appendix.

Indicators of External Vulnerability
(In percent of GDP, unless indicated otherwise)

Financial indicators

Public sector debt
Broad money (percent change, 12-month basis)
Private sector credit (percent change, 12 month basis)
31 day T-bill yield
31 day T-bill yield (real)

External Indicators

Exports (percent change, 12-month basis in US\$)
Imports (percent change, 12-month basis in US\$)
Terms of trade (percent change, 12 month basis)
Current account balance
Capital and financial account balance
 o/w: Inward portfolio investment (debt securities etc.)
 Other investment (loans, trade credits etc.)
 Inward foreign direct investment in the form of debt
Gross official reserves (in US\$)
Central Bank short-term foreign liabilities (in US\$)
Central Bank foreign currency exposure (in US\$)
Short term foreign assets of the financial sector (in US\$)
Short term foreign liabilities of the financial sector (in US\$)
Foreign currency exposure of the financial sector (in US\$)
Official reserves in months of imports GS
Broad money to reserves
Total short term external debt to reserves
Total external debt
 o/w: Public sector debt
Total external debt to exports GS
External interest payments to exports GS
External amortization payments to exports GS
Exchange rate (per US\$, period average)
REER appreciation (-) (12 month basis)

Financial Market Indicators

Stock market index
Foreign currency debt rating
Spread of benchmark bonds (basis points, end of period)

Statistical Guidance and Frameworks for Data Relevant for Vulnerability Assessment

Data Category	Statistical Guidance and Frameworks
<p>Balance sheet (stock) data on external assets and liabilities on the basis of the IIP framework</p>	<p>The fifth edition of the <i>Balance of Payments Manual (BPM5)</i> provides a statistical framework for the recording of the international investment position (IIP) and a detailed set of its standard components. These are disaggregated by sector (general government, monetary authorities, banking sector, and other), maturity (long-term and short-term) and instrument (for example, portfolio investment includes equity securities and debt securities (bonds and notes, money market instruments) and other investment covers trade credits, loans, currency and deposits, and other investment). The <i>Balance of Payments Compilation Guide</i> provides guidance on the compilation of IIP statistics.</p> <p><i>External Debt Statistics: Guide for Compilers and Users (Debt Guide)</i> provides a statistical framework for the recording of external debt data, including guidance on compilation. Various presentations are shown, including one that is consistent with the IIP presentation in <i>BPM5</i> and which would meet the dissemination requirements of the SDDS.</p> <p>The SDDS prescribes dissemination of an annual IIP within two quarters of the reference year; dissemination of quarterly data within one quarter is encouraged. The SDDS stipulates that assets and liabilities should be classified according to the following component breakdown specified in <i>BPM5</i>—direct investment, portfolio (including equity and debt), other investment, and reserves. The SDDS encourages a breakdown of liabilities in the form of securities and loans, within portfolio and other investment, by currency of issue and by original maturity (for example, short, medium, and long term).</p> <p>The SDDS prescription for external debt statistics calls for quarterly data within one quarter of the reference period with information for four sectors (general government, monetary authorities, banking sector and other), including by maturity—long and short term—on an original maturity basis and by instrument as set out in <i>BPM5</i>.</p> <p>In the GDDS, the IIP is an “encouraged extension” of the comprehensive framework for the external sector.</p>
<p>Maturity profile and repayment schedules of external debt</p>	<p>The <i>Debt Guide</i> defines the debt service schedule and provides model presentations that are consistent (with some additional sectoral detail) with the SDDS and the GDDS specifications. In addition, there is presentation of external debt by short-term remaining maturity, which identifies short-term debt on an original maturity basis as well as long-term obligations due for payment within one year or less. The <i>Debt Guide</i> also briefly discusses high frequency debt monitoring systems that permit the tracking of roll-over rates.</p> <p>The SDDS prescription for external debt statistics calls for quarterly data within one quarter of the reference period with information for four sectors (general government, monetary authorities, banking sector, and other), including by maturity—long and short term—on an original maturity basis and by instrument as set out in <i>BPM5</i>.</p> <p>The SDDS encourages reporting twice yearly, within one quarter of the reference quarter, a debt service schedule in which principal and interest components are separately identified for four quarters and two semesters ahead. The data should be disaggregated by sector—general government, monetary authorities, banking sector, and other.</p>

Statistical Guidance and Frameworks for Data Relevant for Vulnerability Assessment

Data Category	Statistical Guidance and Frameworks
Disaggregated data on capital flows	<p>The <i>BPM5</i> provides a statistical framework for the recording of capital flows with a breakdown by sector (general government, monetary authorities, banking sector, and other), maturity (long-term and short-term), and instrument (for example, portfolio investment includes equity securities and debt securities (bonds and notes, money market instruments), and other investment covers trade credits, loans, currency and deposits, and other investment). The <i>Balance of Payments Compilation Guide</i> provides guidance on the compilation of capital flow statistics.</p> <p>The SDDS prescribes data on balance of payments on a quarterly basis to be disseminated within one quarter of the reference quarter.</p>
Maturity profile of public sector liabilities and their composition in terms of foreign currency and interest rate sensitivity	<p>The <i>Debt Guide</i> contains a separate chapter on public and publicly guaranteed debt, including a model presentation. As regards maturity, there is a long-term/short-term split by instrument, as well as separate breakdowns for public sector external debt and for publicly guaranteed private sector external debt. In addition, there is presentation of external debt by short-term remaining maturity, which identifies short-term debt on an original maturity basis as well as long-term obligations due for payment within one year or less. The <i>Debt Guide</i> discusses interest rates and external debt and provides a model presentation on interest rate composition—fixed rate linked and variable rate linked—by sector and maturity (long and short term). The <i>Debt Guide</i> also discusses foreign currency and domestic currency external debt. (See also the discussion of IIP data above.)</p> <p>The <i>GFSM 2001</i> provides a methodological framework for compilation of fiscal statistics, including domestic and foreign public assets and liabilities (broken down by instruments most commonly used in financing government operations).</p> <p>The SDDS prescription for external debt statistics calls for quarterly data within one quarter of the reference period with information for four sectors (general government, monetary authorities, banking sector and other), including by maturity—long and short term—on an original maturity basis and by instrument as set out in <i>BPM5</i>.</p> <p>The GDDS includes public and publicly guaranteed external debt (and the associated debt service schedule) as a core data category.</p>
Corporate sector data	<p>In many of the model presentations, the <i>Debt Guide</i> distinguishes between nonbank financial corporations and non-financial corporations, which goes beyond the more limited <i>BPM5</i> classification of corporate data—banks and other. Foreign currency and foreign currency linked external debt and interest rate composition is also specified. The <i>Debt Guide</i> also contains a presentation showing a sectoral presentation for gross external assets and gross external debt. The <i>Debt Guide</i> will facilitate the preparation and dissemination of corporate sector data.</p> <p>The <i>Financial Soundness Indicators Compilation Guide</i> being prepared by staff will provide guidance on the compilation of corporate sector financial soundness indicators, including total debt to equity, return on equity, and corporate net foreign exchange exposure to equity.</p>

Statistical Guidance and Frameworks for Data Relevant for Vulnerability Assessment

Data Category	Statistical Guidance and Frameworks
Creditor-side data on bank exposures (with a combined breakdown by sector and maturity)	<p>The quarterly BIS locational banking statistics provide a bank/nonbank breakdown of external claims (and liabilities) by country but with no maturity breakdown (which the BIS consolidated banking statistics provide). Data are also available on banks' holdings of international securities, by country.</p> <p>The Fund-sponsored <i>Coordinated Portfolio Investment Survey</i> provides creditor information of individual participating countries vis -à-vis individual countries, with component detail on equities, long-term bonds, and short-term paper. In some cases, the participating countries would have a sectoral breakdown (creditor) of these positions. Data for 2001 are expected to be available in late 2002.</p>