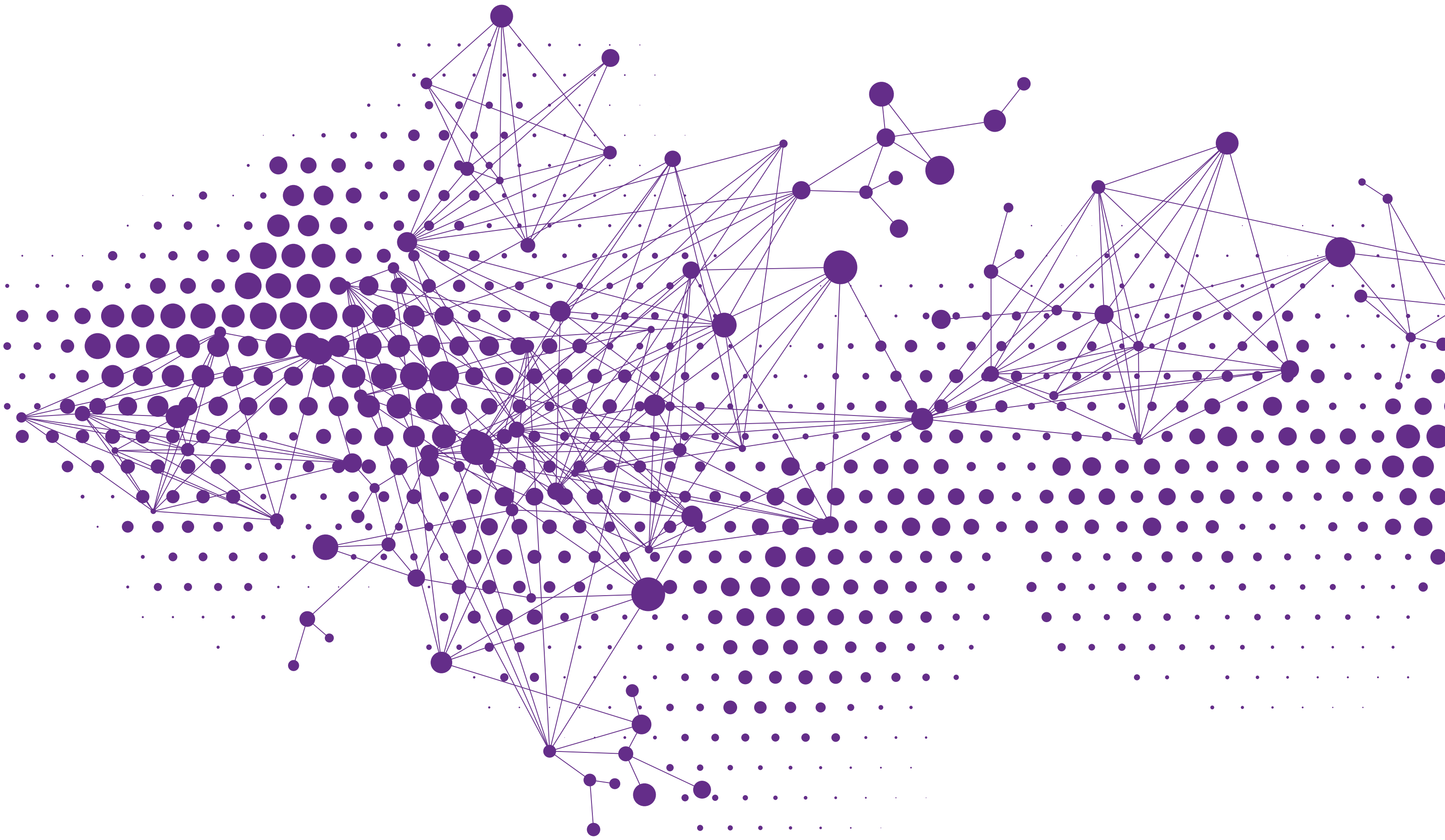
GUIDELINES

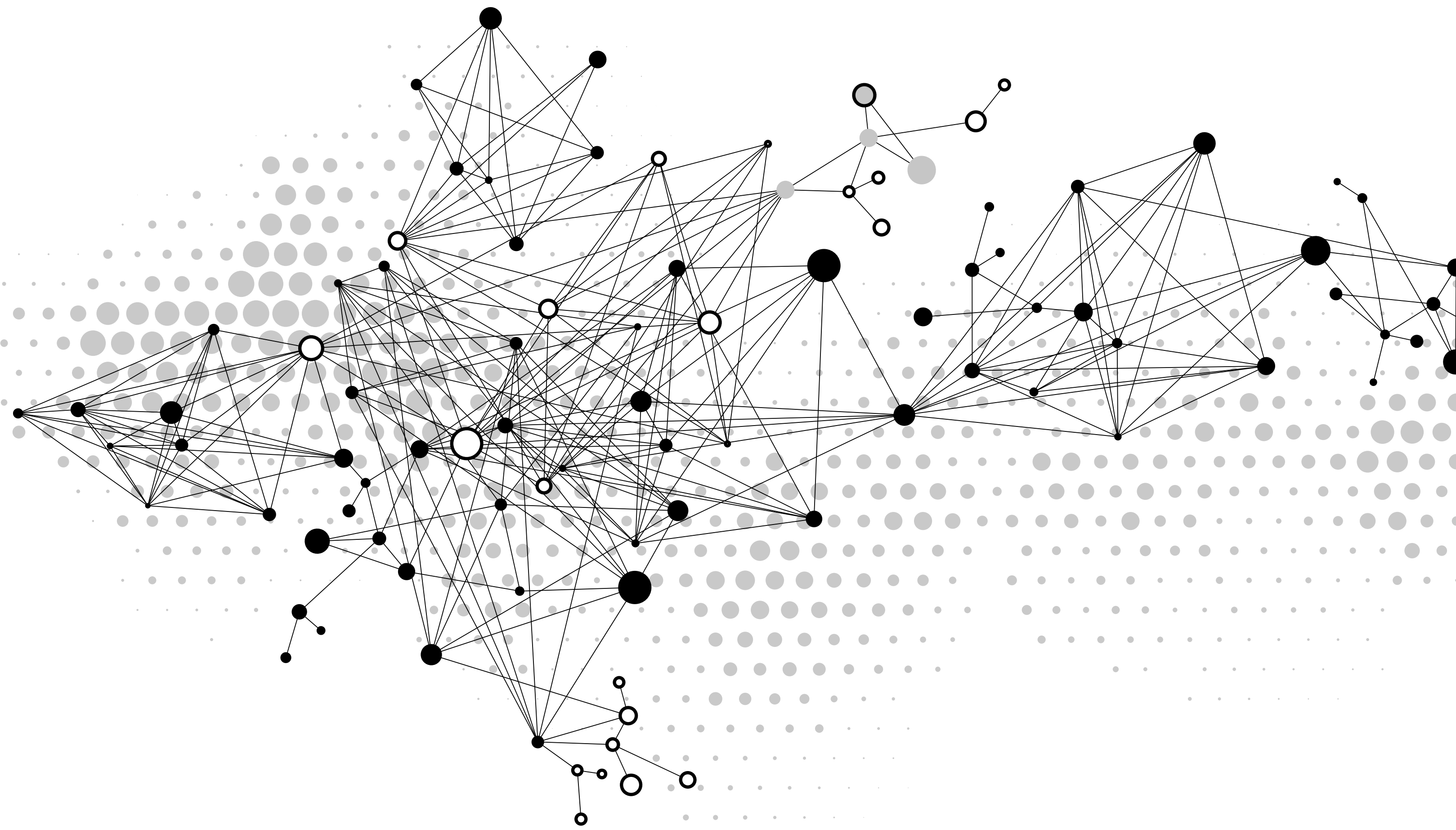


INTERNATIONAL RESERVES AND FOREIGN CURRENCY LIQUIDITY

GUIDELINES FOR A DATA TEMPLATE

INTERNATIONAL MONETARY FUND

GUIDELINES



INTERNATIONAL RESERVES AND FOREIGN CURRENCY LIQUIDITY

GUIDELINES FOR A DATA TEMPLATE

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Preface

This book is an update of the *International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template (Guidelines)* issued in 2001. It sets forth the underlying framework for the Data Template on International Reserves and Foreign Currency Liquidity (Reserves Data Template) and provides operational advice for its use. The update was needed to ensure consistency with the text of the sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6)* and to take account of the 2009 revision to the Reserves Data Template by IMF Executive Board decision. In addition, some clarifications were needed to reflect IMF experience with countries that report data in the Reserves Data Template.

The updated version of the *Guidelines* includes three new appendices in addition to the five core chapters and five Appendices of the 2001 edition. The new Appendices are *Reserve Assets and Currency Unions; Frequently Asked Questions on the Characteristics of Reserve Assets; and Statistical Treatment of Lending to the IMF, Lending to IMF Managed Trusts,* and *Special Drawing Rights*. They are aimed at providing further clarifications on the methodology and data concepts used in the Reserves Data Template and, consequently, at assisting IMF member countries in reporting the required data.

The Reserves Data Template was jointly developed in 1999 by the IMF and a working group of the Committee on the Global Financial System (CGFS) of the Group of Ten central banks. The Reserves Data Template was modified in 2009 following approval by the IMF Executive Board on strengthening the effectiveness of Article VIII section (5) of the IMF's Articles of Agreement. The Reserves Data Template is innovative in that it integrates data on balance-sheet and off-balance-sheet international financial activities of country authorities and supplementary information. It aims to provide a comprehensive account of countries' official foreign currency assets and drains on such resources arising from various foreign currency liabilities and commitments of the authorities. The public disclosure of such information by countries on a timely and accurate basis promotes informed decision making in the public and private sectors, thereby helping to improve the transparency and functioning of global financial markets.

The public dissemination of the Reserves Data Template is a prescribed category of the IMF's Special Data Dissemination Standard (SDDS), which the IMF established in 1996. The SDDS, to which countries may subscribe on a voluntary basis, provides a standard for good practices in the dissemination of economic and financial data. The SDDS requirements of the Reserves Data Template with respect to the frequency and periodicity of reporting are described in Appendix 1.

Countries' Reserves Data Template data can be found on the Websites of their central banks or finance ministries. The data are also accessible on the IMF's Website at www.imf.org/external/np/sta/ir/index.htm. The IMF Website redisseminates countries' Reserves

Data Template data in a common format and in a common currency to facilitate users' access to the information and to promote data comparability across countries.

The update of the *Guidelines* was completed by staff of the IMF Statistics Department (STA). Robert Heath, Deputy Director, Ralph Kozlow, Division Chief of the Balance of Payments Division, and Florina Tanase, Deputy Division Chief, contributed substantially and oversaw work. Antonio Galicia-Escotto and Paul Austin, both senior economists in the Balance of Payments Division, were principally responsible for updating the *Guidelines*. Anbinh Phan and Esther George supported the preparation of the document. Anne Y. Kester was the primary author of the 2001 edition.

The update of the *Guidelines* was a consultative process with member countries and with other IMF departments. In this process, the Reserve Assets Technical Expert Group (RESTEG) played an important role. STA wishes to acknowledge, with thanks, the members listed below of the 2010 reconvened RESTEG:

Chair: Ralph Kozlow
Secretariat: Antonio Galicia-Escotto and Paul Austin

Mohammed Abdulkarim (Bahrain); Falmata Kpangni Gama (Chad); Denis Marionnet (Bank for International Settlements); Alexandre Pedrosa (Brazil); Carmen Picón Aguilar (European Central Bank); Ursula Schipper (Germany); Raymon Yuen (Hong Kong SAR, China); Mihály Durucskó (Hungary); Yoshiki Kokubo (Japan); Daisuke Takahashi (Japan); Dongwoo Kim (Korea); Julio Santaella (Mexico); Lydia N. Troshina (Russian Federation); NG Yi Ping (Singapore); Linda Motsumi (South Africa); Mala Mistry (United Kingdom); Charles Thomas (United States); Christian Mulder and Han van der Hoorn (IMF Monetary and Capital Markets Department); and Alison Stuart (IMF Strategy, Policy, and Review Department).

The updated version of the *Guidelines* also benefited from comments by national compilers and international agencies during the public comment periods on February 17–May 20, 2011 (Chapters 1 through 5) and August 8–September 7, 2011 (Appendices).

Within the IMF, we particularly thank Katharine Christopherson Puh, Bernhard Steinki, and Gabriela Rosenberg (Legal Department); Tetsuya Konuki and Nicolas Million (Strategy, Policy, and Review Department); Christian Mulder (Monetary and Capital Markets Department); and Sheila Bassett, Carlos Janada, and George Kabwe (Finance Department) for their contribution to the update.

Louis Marc Ducharme
Director
Statistics Department
International Monetary Fund

1 Overview of the Reserves Data Template

1 International financial crises, such as in the late 1990s, have underscored the importance of disseminating comprehensive information on countries' international reserves and foreign currency liquidity[1] on a timely basis. Deficiencies in such information made it difficult to anticipate and respond to crises by obscuring financial weaknesses and imbalances (see Box 1.1). Moreover, both the complexity and the importance of such information have increased as a result of the ongoing globalization of financial markets and financial innovation. The international financial activities[2] that countries' central banks and government entities undertake occur in myriad forms, involve multiple domestic and foreign entities, and span locations around the globe. To assess countries' foreign currency liquidity requires supplementing data on international reserves that cover largely cross-border and balance-sheet activities with those on other foreign currency positions and off-balance sheet activities.

2 Timely disclosure of such information serves a number of purposes. It can strengthen the accountability of the authorities by better apprising the public of the authorities' policy actions and risk exposure in foreign currency. It can spur a more timely correction of unsustainable policies and possibly limit the adverse effects of contagion in times of financial turbulence. It can allow market participants to form a more accurate view of the condition of individual countries, of the vulnerability of regions, and of possible international consequences, thereby limiting uncertainty and the associated volatility in financial markets. Enhanced data transparency also can assist multilateral organizations to better anticipate emerging needs of countries.

An Innovative Data Framework to Help Strengthen the International Financial Architecture

3 Information on international reserves and foreign currency liquidity will best inform public and private decision making if countries disclose it in a coherent, common framework. As part of the effort to strengthen the architecture of the international financial system, the International Monetary Fund (IMF) and a working group of the Committee on the Global Financial System (CGFS) of the Group of Ten central banks in 1999 developed such a framework in the form of a data disclosure template for countries' use.[3]

4 The Reserves Data Template, which is shown in Appendix 2, was devised in consultation with country authorities, statistical compilers, international organizations, market participants, and users. It reflects the efforts of all to balance the anticipated benefits of increased data transparency and potential costs of adding to the authorities' reporting burden. This first revision to the *2001 Guidelines* takes account of the updates included in the *Balance of Payments and International Investment Position Manual*, sixth edition (*BPM6*), and the changes introduced to the original template in 2009.[4]

[1] The concepts of international reserves and foreign currency liquidity are discussed later in this chapter and elaborated in later chapters of these *Guidelines*.

[2] International financial activities here refer to financial transactions and positions in foreign currencies.

[3] Background information on SDDS and on strengthening the provision of information on international reserves and foreign currency liquidity within the SDDS are presented in Appendix 1.

[4] Updates to the Reserves Data Template may be made at the discretion of the Executive Board of the IMF. Such updates occur very infrequently. The latest version of the template may be found at: http://www.imf.org/external/np/sta/ir/IRProcessWeb/sample.aspx.

Box 1.1 Data Deficiencies as Revealed by Financial Crises in the 1990s

Financial crises in the 1990s revealed a number of data deficiencies, including:

Incomplete information on reserve assets

- Pledged assets (for example, assets used as collateral for third party's loans) frequently were not identified, and assets of a similar nature, such as securities lent and repurchase agreements,[1] often were included in reserve assets without separate identification, distorting information on the liquidity positions of the authorities.
- Deposits held in financially weak domestic banks and their foreign affiliates, which were not available for use in a crisis, often were included in reserve assets, leading to overestimation of reserves.
- Valuation practices could depart significantly from market values, complicating assessments of the realizable value of reserve assets.
- Coverage of international reserve assets varied among countries, impeding cross-country comparisons.

Lack of publicly available information on official short-term foreign currency obligations

- Public information was lacking in many countries on the off-balance-sheet activities of the authorities that could affect foreign currency resources. An absence of data on forward commitments of foreign exchange under financial derivative contracts,[2] for example, could result in understatement of encumbered reserve assets.
- Lack of information on the authorities' financial derivative activities (for example, in foreign currency futures and forwards) could also obscure the risk exposure of government entities, which could lead to sudden sharp drains on foreign currency resources. Significant drains could occur, for example, in the event of changes in exchange rates. Similarly, unavailability of information on options written and bought by the authorities could hinder assessment of potential inflows and outflows of foreign currency when the options were exercised.
- Inadequate information on actual and potential foreign currency liabilities of the monetary authorities and central government could hamper monitoring of drains on foreign currency resources. Such inadequacies included incomplete information on principal and interest payments on loans and bonds falling due in the short term, on the authorities' foreign exchange guarantees, and on contractual provisions in debt instruments that allow creditors to demand early payment in the face of changing economic conditions.
- Publicly available information on reserves generally did not take account of unused unconditional lines of credit, which could represent either a complementary source of foreign exchange in times of need or a potential drain on such resources.

[1]Securities lent and repurchase agreements are discussed in detail in Chapter 2 and Chapter 5.

[2]Forwards, futures, and options are financial derivative instruments. Various aspects of these instruments are discussed later in this chapter and in all other chapters of these guidelines.

5 The Reserves Data Template is comprehensive; it integrates the concepts of international reserves and foreign currency liquidity in a single framework. In addition to covering the traditional balance-sheet information on international reserves and other selected external assets and liabilities of the authorities, the Reserves Data Template takes account of their off-balance-sheet activities[5] (such as in forwards, futures, and other financial derivatives, undrawn credit lines, and loan guarantees). It also notes future and potential inflows and outflows of foreign exchange associated with balance-sheet and off-balance-sheet positions. Moreover, it includes data intended to illustrate how liquid a country's foreign currency assets are (such as the identification of assets pledged and otherwise encumbered) and to reveal a country's risk exposure to exchange rate fluctuations (including that relating to options contracts and indexed instruments).

6 The Reserves Data Template is forward looking. It covers not only the authorities' foreign currency resources on a reference date, but also inflows and outflows of foreign exchange over a future one-year period.

[5]Off-balance-sheet foreign currency activities refer to financial transactions and positions in foreign currency not recorded on the balance sheet.

The one-year horizon is consistent with the convention of defining "short-term" to cover a 12-month period.

7 The rest of this chapter elaborates on the underlying framework of the Reserves Data Template and delineates its key characteristics and structure. Chapters 2 through 5 provide guidelines on how the data called for in the various sections of the Reserves Data Template should be reported.

Concepts of International Reserves and Foreign Currency Liquidity

8 The underlying framework of the Reserves Data Template is built on two related concepts, international reserves and foreign currency liquidity, which are integral to the structure and coverage of the template. The two concepts and their linkages are explained below.

International Reserves (Reserve Assets)

9 *BPM6* sets forth the underlying concept of international reserves. A country's international reserves refer to ". . . those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing)" (*BPM6*, paragraph 6.64).[6] As defined, the concept of international reserves is based on the balance-sheet framework, with "reserve assets" being a gross concept. It does not include external liabilities of the monetary authorities.[7] However, for further analysis, *BPM6* defines reserve-related liabilities and provides an additional analytical framework for analyzing foreign currency liquidity of the authorities.

10 Underlying the concept of international reserves is the distinction between residents and nonresidents,[8] with reserve assets representing selected claims of the monetary authorities on nonresidents. The reserve assets of countries in a currency union should include only those assets that represent claims on nonresidents of the currency union and otherwise meet the definition of reserve assets (see *BPM6*, Appendix 3, paragraph A3.29).

11 Also integral to the concept of international reserves are the provisos "readily available to" and "controlled by" the monetary authorities. That is, only assets that meet these criteria can be considered reserve assets.

12 Reserve assets include monetary gold, special drawing rights (SDRs), reserve position in the IMF, and other reserve assets.

13 Chapter 2 explains in detail the concept and coverage of reserve assets as set forth in the *BPM6*. It also discusses how the terms "readily available" and "controlled by" can be invoked in practice to identify reserve assets.

14 In the Reserves Data Template, reserve assets are often referred to as "official reserve assets."

Foreign Currency Liquidity

15 Foreign currency liquidity is a broader concept than that of international reserves. In the Reserves Data Template, foreign currency liquidity has two dimensions. It refers to (1) the foreign currency resources (including both official reserve assets and other foreign currency assets) at the disposal of the authorities that readily can be mobilized to meet demands for foreign exchange, and (2) both predetermined (known or scheduled) and contingent (potential) inflows and outflows (referred to hereafter as "net drains")[9] of foreign currency resources resulting

[6] For dollarized economies (i.e., economies that have adopted a foreign currency—typically the U.S. dollar, the Euro, or another widely traded international currency—as their legal tender), the need to hold reserves for the purpose of intervention in exchange markets is not relevant for defining the reserve assets of these economies.

[7] The term "monetary authorities" is defined later in this chapter under "Key Features of the Reserves Data Template."

[8] In *BPM6*, the concept of residence is not based on nationality or legal criteria; it is based on the transactor's predominant center of economic interest. The residence of each institutional unit is the economic territory with which it has the strongest connection expressed as its center of predominant economic interest. The economic territory of a country generally corresponds to its geographical boundaries (although it can extend beyond them). A transactor whose center of predominant economic interest is outside the economic territory of the country is considered a nonresident.

[9] As will be elaborated in Chapter 3 of this document, "net drains" refer to outflows of foreign currency net of inflows of foreign currency.

from short-term[10] foreign currency liabilities and off-balance-sheet activities of the authorities. Underlying the liquidity concept is the notion that prudent management of this position requires managing foreign currency assets along with foreign currency obligations to minimize the vulnerability to external shocks.

16 The concept of foreign currency liquidity is broader than that of international reserves in at least three respects: (1) while reserve assets refer to external assets of the monetary authorities, foreign currency liquidity concerns foreign currency resources and drains on such resources of the monetary authorities and the central government, referred to hereafter in combination as "the authorities," as opposed to "monetary authorities" (see next section on "institutions covered"); (2) while reserve assets represent the monetary authorities' claims on nonresidents, foreign currency liquidity relates to the authorities' foreign currency claims on and obligations to residents and nonresidents; and (3) while the concept of reserve assets is based on the balance-sheet framework, the concept of liquidity encompasses inflows and outflows of foreign currency that result from both on- and off-balance-sheet activities of the authorities.

17 The concept of foreign currency liquidity is also broader than the notion of net international reserves. Although there is not a standard statistical definition of net international reserves, this term is often defined to refer to reserve assets net of outstanding reserves-related liabilities (usually, only short-term liabilities are included in the calculation) at a point in time, with such assets and liabilities representing the monetary authorities' readily available claims on and liabilities to nonresidents. Foreign currency liquidity takes account of foreign currency drains on existing foreign currency resources arising from the authorities' financial activities vis-à-vis residents and nonresidents in the coming 12-month period. Information on whether a country's short-term foreign currency drains are significant relative to its foreign currency resources could be used, along with other information, to analyze the country's external vulnerability.

18 To enhance the transparency of data on countries' international reserves and their foreign currency liquidity, the template calls for comprehensive disclosure of the authorities' (1) official reserve assets, (2) other foreign currency assets, (3) predetermined short-term net drains on foreign currency assets, (4) contingent short-term net drains on foreign currency assets, and (5) other related information. As discussed later in this chapter, these data components form the structure of the Reserves Data Template.

19 A schematic presentation of the framework of the Reserves Data Template, showing the linkages between the concepts of international reserves and foreign currency liquidity, is provided in Figure 1.1.

Key Features of the Reserves Data Template

The Reserves Data Template sets forth the institutions that are to be covered and their financial activities over a certain time horizon in order to facilitate analysis of the authorities' foreign liquidity and risk exposure.

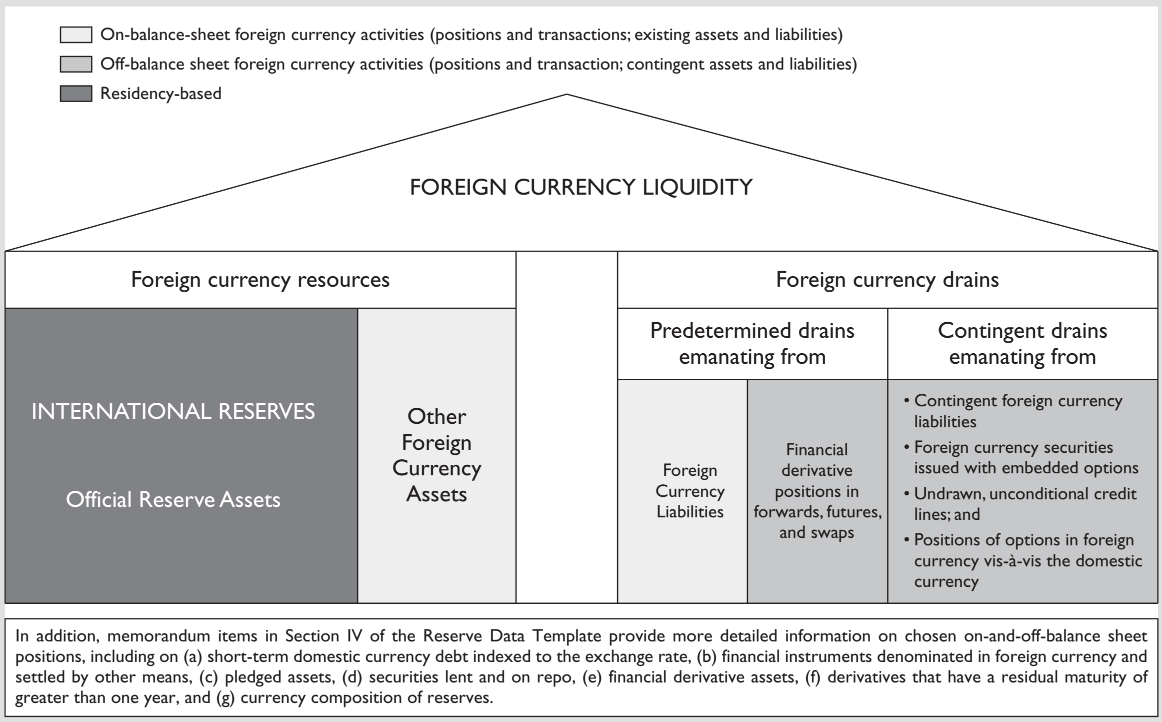
Institutions Covered

20 The Reserves Data Template is intended to apply to all public-sector entities responsible for, or involved in, responding to currency crises. In practice, this coverage includes the monetary authorities, which manage and hold the international reserves, and the central government (excluding social security funds),[11] which, together with the monetary authorities, account for most of the official foreign currency obligations. Demands for the authorities' foreign currency resources also could fall upon other entities in the public sector. These other public entities generally are not covered in the template because of the difficulties of obtaining the data from these entities on a timely basis. Nonetheless, these other public-sector entities should be included if their foreign currency activities are of material significance. Where data on such other entities are included, they should be clearly indicated in country notes accompanying the data. The coverage of Special Purpose Government

[10] See the definition of "short-term" as provided later under "time horizon" in this chapter.

[11] The coverage of both the monetary authorities and the central government is explicit in the Template. The operation of a currency board (with stipulations that the central government's foreign currency obligations are not to be met by resources of the monetary authorities) does not remove the requirement for reporting of data on the central government in the Template.

Figure 1.1. Linkage between Concepts of International Reserves and Foreign Currency Liquidity (a schematic presentation)



Funds, sometimes known as Sovereign Wealth Funds (SWFs), in the Reserves Data Template should be assessed and their activities should be recorded based on the requirements of the *Guidelines*.[12] So, if the activities of Special Purpose Government Funds are on the books of the central bank or an agency of the central government, then, in the absence of legal or administrative impediments, the foreign exchange activities of the Special Purpose Government Funds should be recorded in the Reserves Data Template consistent with other foreign currency activities of the central bank and central government.[13] If the Special Purpose Government Fund is a long-term fund with a separate legal identity, owned and controlled by the central government, and its resources are available for balance of payments purposes, the liquid foreign exchange assets of the Fund should be included in Section I, but as it has a separate legal identity, its other foreign exchange activities are not included in the Reserves Data Template unless they pertain to the management of reserve assets.

21 Consistent with the *BPM6* (paragraph 6.66), the Reserves Data Template defines "monetary authorities" as "a functional concept" encompassing the central bank (and other institutional units such as the currency board, monetary agency, etc.) and certain operations usually attributed to the central bank but sometimes carried out by other government institutions or commercial banks. Such operations include the issuance of currency; maintenance and management of international reserves, including those resulting from transactions with the IMF; and the operation of exchange stabilization funds. In some countries

[12] *BPM6*, paragraphs 6.93–6.98, provides a definition of Special Purpose Government Funds and sets out the criteria to determine whether their liquid foreign assets should be included in reserve assets or not.

[13] It is encouraged that the total holdings of SWFs assets included in Section 1 of the Reserves Data Template be reported in the country notes.

and currency unions, the monetary authority may be defined as including central banks only (such as the Eurosystem[14] in the European Monetary Union); however, the inclusion in the Reserves Data Template of short-term foreign currency liabilities of central governments is important for liquidity analysis.

22 In conformity with existing international guidelines, the Reserves Data Template defines the central government to include a central group of departments or ministries that make up a single institutional unit; plus in many countries, other units operating under the authority of the central government with a separate legal identity and enough autonomy to form additional government units (*Government Finance Statistics Manual (GFSM 2001)* paragraph 2.50). The central government excludes state and local government. Social security funds could be merged with their appropriate level of government or distinguished all together as one subsector of the general government sector (*2008 System of National Accounts (2008 SNA)*, paragraphs 4.128–4.132); the requirement to disclose relevant information on a timely basis precludes the inclusion of these elements in the data to be reported. Social security funds are "social insurance schemes covering the community as a whole, or large sections of the community, that are imposed and controlled by government units" (*2008 SNA*, paragraph 4.124).

23 It is preferable if a single Reserves Data Template is prepared for each country covering foreign currency activities of both the monetary authorities and the central government (excluding social security funds) (see also Chapter 2).

Financial Activities Covered

24 For the purpose of liquidity analysis, the Reserves Data Template specifies that only instruments settled (i.e., redeemable) in foreign currency are to be included in resources and drains (Sections I through III of the Template). The rationale is that, as concerns future inflows and outflows of foreign currency arising from the authorities' contractual obligations, only instruments settled in foreign currency can directly add to or subtract from liquid foreign currency resources. Other instruments, including those denominated in foreign currency or with a value linked to foreign currency (such as foreign currency options) but settled in domestic currency, will not directly affect liquid resources in foreign exchange.[15]

25 Instruments denominated in foreign currency or indexed to foreign currency but settled in domestic currency (and other means) are to be reported as memorandum (memo) items in Section IV of the Reserves Data Template. These instruments can exert substantial indirect pressure on reserves during a crisis, particularly when expectations of a sharp depreciation of the domestic currency lead holders to exchange the instruments for foreign currency. Among such instruments are domestic currency debt and derivatives that are indexed to foreign currency and settled in domestic currency.

Treatment of Financial Derivatives Activities[16]

26 The Reserves Data Template covers various aspects of financial derivative activities, including (1) predetermined foreign currency flows pertaining to the authorities' forwards (including nondeliverable forwards (NDFs)), futures, and swap contracts; (2) potential transactions arising from options positions; and (3) the net, marked-to-market value of outstanding financial derivative contracts. The extensive coverage of financial derivatives activities in the template is based on the fact that measures of risk associated with such activities are relevant only when constructed on an overall portfolio basis, taking into account notional (and nominal) values and cash market positions, and offsets between them.

27 The focus of the Reserves Data Template is on financial derivatives settled in foreign currencies. (Nondeliverable forwards, futures, and options

[14] The Eurosystem is the monetary authority of the Eurozone, the collective of European Union member states that have adopted the euro as their sole official currency. The Eurosystem consists of the European Central Bank and the central banks of the member states that belong to the Eurozone.

[15] While there is no direct impact, there is a strong indirect impact as the claims increase in size. Also, changes in the overall supply and demand for domestic currency assets will influence the balance of payments and thus indirectly affect liquid foreign exchange resources.

[16] Financial derivatives are financial instruments that are linked to underlying assets, reference rates, or indexes such as stocks, bonds, currencies, and commodities. Derivative instruments allow users to disaggregate risks, accepting ones that they are willing to manage, and transferring those they are unwilling to bear. Derivative contracts include forwards, futures, swaps, and options (see Chapters 3 and 4 for greater detail on this subject).

settled in domestic currency are to be disclosed as memo items.) Such information is especially important in times of crisis when there is strong pressure to devalue the domestic currency and when considerable official obligations in foreign currencies are already outstanding.

28 Because inflows and outflows of foreign currency related to the authorities' financial derivative activities may involve different counterparties, risks, and maturities, the Reserves Data Template calls for reporting separate information on long and short positions. **Long positions** correspond to inflows that augment the foreign currency resources of the authorities; **short positions** represent outflows that diminish such resources.

29 The net, marked-to-market values of financial derivatives to be reported in the Reserves Data Template are those of outstanding contracts that will be settled in foreign currency. In some instances, derivatives should be reported on a marked-to-market value basis, and in other instances, on a nominal/notional value basis (see specific instructions).

30 The Reserves Data Template incorporates the results of "stress testing" to assess the authorities' risk exposure to fluctuations in exchange rates (the provision of this information is encouraged, not prescribed, for subscribers to the IMF's Special Data Dissemination Standard). Stress testing involves examining the effect of large movements in key financial variables on a portfolio. It is different from historical simulation in that it may cover situations absent from the historical data. Rigorous stress testing can alert the authorities to the risk exposure they face. In the Reserves Data Template, stress testing is applied to the authorities' options positions.

31 Under the Reserves Data Template's "stress test," information on the value of "in-the-money" options should be reported under several exchange rate scenarios. "In-the-money" options refer to option contracts that would be exercised on the basis of the assumptions specified in the scenarios—that is, options which, when exercised, could entail foreign currency flows.[17] Within the "stress test," notional values of the options should be reported in Section III of the Reserves Data Template, except that, in the case of cash-settled options,[18] the estimated future cash flow should be reported; see Appendix 4.

Valuation Principles

32 In the Reserves Data Template, most values reported in Sections I and IV should reflect market values, that is, the values of foreign currency resources that could be obtained in the market if the instrument were liquidated; that is, at market prices on the reference date. In cases where determining market values on a frequent basis is impractical, approximate market values can be substituted during the intervening periods (see Chapter 2 for details).

33 Drains on foreign exchange resources, including predetermined and contingent drains, are to be valued in nominal terms; in this context, this means the cash-flow value when the currency flows are due to take place. Generally, this means the principal repayments reflect the "face value" of the instrument and the interest payments reflect contractual amounts due to be paid.[19]

34 Inflows and outflows of foreign currency related to forwards (including NDFs), futures, and swaps are to be reported at nominal or notional values. For options, the Reserves Data Template requires disclosure of the notional value. Market values of outstanding financial derivative contracts (i.e., positions) are to be disclosed on a net, marked-to-market basis (see also Chapter 5).

Time Horizon

35 Consistent with the focus on liquidity, the horizon covered in the Reserves Data Template is short term. For practical purposes, "short-term" is defined as "up to and including one year."[20] Finer breakdowns

[17] As will be explained in Chapter 4, a call option is "in-the-money" if the strike price (i.e., the pre-agreed price) is less than the market price of the underlying security. A put option is "in-the-money" if the strike price is greater than the market price of the underlying security.

[18] Cash settled options are option contracts whereby settlement is done via the payment of cash equal to the difference between the market value and the contractual value (strike price) of the underlying item at the time of exercise or expiration. In contrast, physically settled options involve the delivery of the underlying notional value of the foreign currency.

[19] Face value is the undiscounted amount of principal to be repaid. Under most circumstances, the nominal value of principal payments, expressed in the currency of denomination of the contract, would correspond to the face value of the instrument concerned. However, in some circumstances, the anticipated cash-flow value will differ from the face value.

[20] This is consistent with the definition of "short-term" used in *BPM6*.

of time horizons of "up to one month," "more than one month and up to three months," and "more than three months and up to and including one year" are included to enable policymakers and market participants to assess the authorities' liquidity positions within the one-year time frame.

36 The term "residual maturity" is used in the Reserves Data Template to indicate the types of "short-term" foreign currency flows to be reported for the various subperiods of the one-year time horizon. Residual (remaining) maturity is commonly referred to as the time remaining until the final repayment of the outstanding obligations. Accordingly, applying the "residual maturity" concept, one should include (1) flows emanating from short-term instruments with original maturities of one year or less, and (2) flows arising from instruments with longer original maturities whose residual (remaining) maturity is one year or less. In addition, in the Reserves Data Template, this concept also includes principal and interest payments falling due within one year on instruments with original maturities of more than one year that are not already covered in (2).

Other Reporting and Dissemination Considerations

37 The Reserves Data Template does not specify the currencies (domestic, U.S. dollar, euro, or others) in which the data are to be reported. It is recommended, however, that compilers report data in the Reserves Data Template in the same currency they normally use to disseminate data on official reserve assets. This will enhance the analytical usefulness of data disclosed in the Reserves Data Template and promote reconciliations among different data sets. To facilitate data comparability over time and among countries, it is preferable that the reporting currency be a reserve currency or, at a minimum, a stable one.

38 The reference date in the Reserves Data Template is the end date of the reporting period (e.g., the reference date for September refers to the last day of September). For position data, data to be reported refer to outstanding stocks of assets (and liabilities, as applicable) on that date. For flow data, data to be reported refer to the anticipated amount on the reference date of future outflows and inflows of foreign currency, associated with known predetermined or contingent positions outstanding on the reference date. Where appropriate, the convention of applying a plus (+) sign should be used to denote assets, long positions, and inflows of foreign currency, and a minus sign (−) should be used to denote liabilities, short positions, and outflows of foreign currency.

39 In determining outstanding foreign currency resources and flows, it is recommended that transaction dates (not settlement dates) be used. Transaction dates are the preferred basis of recording because the time lags for countries' settlement practices differ and at that time economic exposures change. Where settlement dates are used, they should be applied consistently from period to period and mentioned in country notes accompanying the data (see also paragraph 3.55 of *BPM6*).

40 The Reserves Data Template is designed for use in diverse economies, including dollarized and economies with currency boards. Therefore, not all items in the Reserves Data Template are applicable to all countries. Accordingly, items that are not applicable (i.e., in which there are no stock positions or transactions) should be left blank in the Template. Where the value of an item is zero, an entry denoting zero should be shown.

41 In view of the varied information called for in the Reserves Data Template, data in the different sections of the Template are not to be added to or subtracted from one another to derive a single number for the whole Template. Various analyses, however, can be made by examining data reported by countries in the various sections of the Template.

42 To enhance the analytical usefulness of the data and to minimize the prospect that users will misinterpret information reported in the Reserves Data Template, it is recommended that country-specific exchange rate arrangements (such as the operation of a currency board or the implementation of dollarization), special features of reserves management policy (including the matching of maturities of foreign currency assets and liabilities and the use of hedging techniques), and accounting practices and statistical treatments of certain financial transactions (as discussed later throughout this document) be disclosed in country notes accompanying the data, where appropriate. It would also be useful to disclose the major sources of funds for reserve assets and other foreign currency assets, which may include foreign currency earnings from exports, issuance of foreign currency bonds, and foreign currency deposits from domestic banks (see also A5.5 in Appendix 5). Some countries present country notes in the form of a customized Section V. However, the Reserves Data Template as approved by the IMF Executive Board does not include a Section V.

43 The Reserves Data Template can be disseminated to the public on the Internet or through other media. In addition, the IMF has established a common database for the collection of reserves template data disseminated by the IMF member countries, and the redissemination of these data (in time series format) through the IMF's external Website. Collection and dissemination of the data by the IMF are based on the structure of the Reserves Data Template presented in Appendix 2. Participation is voluntary. The redissemination of the template data by the IMF does not constitute endorsement of the quality of the data by the IMF (see: http://www.imf.org/external/np/sta/ir/colist.htm).

44 Given the comprehensive coverage of the Reserves Data Template, various data sources need to be tapped to collect the requisite information. Close collaboration between the monetary authorities and other relevant government agencies is a prerequisite for timely and accurate reporting of the template data.

Structure of the Reserves Data Template

45 The Reserves Data Template has four sections. Section I covers information on the authorities' foreign currency resources, including official reserve assets and other foreign currency assets. Sections II and III consider data required to reveal the net drains on such foreign currency resources in the short term. Section IV specifies the memo items on which supplementary information is needed.

46 The types of data to be reported differ in the four sections. Section I concerns stock (position) data; Sections II and III cover foreign currency inflows and outflows associated with various on-balance-sheet and off-balance-sheet positions. Section IV provides supplementary information on positions and flows.

47 Specifically, Section I of the Reserves Data Template deals with the composition and magnitude of a country's foreign currency resources, including the authorities' holdings of various types of financial instruments. Reserve assets are distinguished from other foreign currency assets, facilitating reconciliation between existing data countries disseminate on international reserves and those in the Reserves Data Template.

48 Sections II and III, respectively, address predetermined and contingent drains (demands) on foreign currency resources in the short term in view of their different nature. Examples of predetermined drains on foreign currency resources include those relating to amortized debt service payments and known commitments in forwards, futures, and swaps contracts. Examples of contingent drains are those associated with government guarantees, options, and other contingent liabilities, such as term deposits held at the central bank by depositors, which are redeemable, subject to payment of penalties. The separate reporting of predetermined and contingent drains on foreign currency resources is intended to avoid a mingling of the authorities' actual and contingent short-term liabilities.

49 Section IV provides information on (1) positions and flows not disclosed in Sections I through III but deemed relevant for assessing the authorities' reserves and foreign currency liquidity positions and risk exposure in foreign exchange (for example, the domestic currency debt indexed to foreign currency); and (2) additional details on positions and flows disclosed in Sections I through III (for example, the currency composition of reserves and pledged assets included in reserves).

50 Financial derivatives are explicitly covered in four different sections of the template: The disclosure of inflows and outflows of foreign currency associated with forwards and futures in nominal/notional values is addressed in Section II; notional values of options positions are covered in Section III; net, marked-to-market values of various types of financial derivatives are to be disclosed in Sections I and IV; and Section IV also covers some information on the notional value of financial derivatives.

Structure of these Guidelines

51 Chapter 2 provides guidance on comprehensive coverage of the authorities' foreign currency resources, comprising coverage of official reserve assets and of other foreign currency assets.

52 Chapter 3 delineates ways to report on predetermined short-term net drains on the authorities' foreign currency resources, including those associated with loans and securities, forward commitments, and other foreign currency inflows and outflows.

53 Chapter 4 discusses how contingent demands on such foreign currency resources are to be disclosed, including those related to government guarantees, securities with embedded options, and undrawn, unconditional credit lines. It also sets forth the steps to be taken to report on the notional values of options positions and explains how stress testing can be undertaken.

54 Chapter 5 presents information covering positions and flows not disclosed elsewhere in the Template but deemed relevant for assessing the authorities' reserves and foreign currency liquidity positions and risk exposures, including short-term domestic debt indexed to foreign currency, pledged assets, market and notional values of financial derivatives, other relevant activities in foreign currency (in particular, securities lent and collateralized under repurchase agreements), and currency composition of reserve assets.

55 Item-by-item guidelines are provided for each section of the Reserves Data Template in the respective chapters. Table 1.1 presents a reference index showing where the item-by-item guidelines can be found in this document.

56 To facilitate the dissemination of the Reserves Data Template by countries, Appendix 2 presents a sample form for presenting all items of the Reserves Data Template and, at the same time, incorporating details called for in the footnotes of the Reserves Data Template and guidelines provided in this document. For ease of exposition, line items identified in the guidelines presented in Chapters 2 through 5 refer to those shown in the sample form contained in Appendix 2.

57 Background information on the SDDS and on strengthening the provision of information on international reserves and foreign currency liquidity within the SDDS are presented in Appendix 1. A summary of recommended guidelines for reporting specific types of activity in all parts of the Reserves Data Template is presented in Appendix 3. An illustration of stress testing of "in-the-money" options is shown in Appendix 4. Appendix 5 describes the IMF's redissemination of countries' Reserves Data Template data on the IMF's Website to facilitate users' access to the information. It also provides guidelines for countries to report the data to the IMF for such purposes. Guidelines for the reporting of reserve assets by countries in a currency union are presented in Appendix 6. Appendix 7 provides frequently asked questions (FAQs) that are useful in determining whether a particular financial instrument qualifies as a reserve asset. Appendix 8 addresses the statistical treatment of lending to the IMF, lending to IMF Managed Trust Accounts, and Special Drawing Rights (SDRs).

Table 1.1 Reference Index for Item-by-Item Guidelines

	Paragraph Number[1]
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[1]Refers to paragraph numbers in these *Guidelines*.

2 Official Reserve Assets and Other Foreign Currency Assets (Approximate Market Value): Section I of the Reserves Data Template

58 This chapter provides guidelines to assist countries in reporting data on the authorities' foreign currency resources (comprising reserve assets and other foreign currency assets) in Section I of the Reserves Data Template. Items I.A.(1) through I.A.(5) are used to report information on reserve assets and Section I.B., on other foreign currency assets. All items in Section I refer to outstanding assets (stock) on the reference date. As noted in paragraph 42, to facilitate liquidity analysis, it is recommended that information on special features of the reporting country's reserves management policy and major sources of funds for reserve assets and other foreign currency assets be described in country notes accompanying the template data. To enhance data transparency, it is also important to indicate in country notes specific changes in the reporting country's exchange rate arrangements (for example, the implementation of dollarization) and their impact on the level of the country's reserve assets.

Disclosing Reserve Assets and Other Foreign Currency Assets

59 "Reserve assets" are those external assets that are readily available to and controlled by the monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes (*BPM6*, paragraph 6.64). "Other foreign currency assets" refer to liquid foreign currency assets of the monetary authorities that are not included in reserve assets, as well as such assets of the central government (excluding social security funds). For practical purposes, with respect to foreign currency assets of the central government (excluding social security funds), only assets that are materially significant need to be included in the Reserves Data Template.

60 *BPM6* provides the international guidelines for the compilation of reserve assets; *BPM6* defines reserve assets as the monetary authorities' foreign currency claims on nonresidents. Reviews of data reported by selected member countries to the IMF[1] indicate, however, that the coverage of countries' data on international reserves varies because (1) some countries do not fully disclose their international reserves; and (2) countries may define reserve assets differently for operational purposes, for example, maintaining part of their reserve assets as deposits in resident financial institutions or as investments in securities issued by resident institutions and including such claims on residents in their reserve assets.[2]

61 As a tool for liquidity management, the Reserves Data Template aims to enhance the transparency of existing dissemination practices of countries on reserve assets and facilitates the compilation of such data to meet reserves management and balance of payments

[1] Countries' data on reserve assets are reported to the IMF for publication in the IMF's monthly *International Financial Statistics (IFS)*, the annual *Balance of Payments Statistics Yearbook (BOPSY)*, the monthly Balance of Payments Statistics online database, and on the IMF's Website on international reserves and foreign currency liquidity: http://www.imf.org/external/np/sta/ir/IRProcessWeb/colist.aspx.

[2] In *BPM6*, claims denominated in foreign exchange in resident banks are excluded from reserves assets but are presented as a supplementary item in the International Investment Position (IIP).

reporting needs. To facilitate reporting countries' disclosure of the operational coverage of reserve assets, while maintaining the underlying concept of reserve assets as set forth in the *BPM6* for balance of payments reporting purposes, the Template calls for the identification of the monetary authorities' foreign currency deposits in resident financial institutions and their holdings of foreign currency securities issued by the foreign branches and subsidiaries of institutions that have their headquarters in the reporting country (see later in this chapter, "Identifying Institutions Headquartered in the Reporting Country and Institutions Headquartered outside the Reporting Country").

62 *BPM6* does not allow the inclusion of the monetary authorities' foreign currency deposits in resident entities in reserve assets. Under the *BPM6*, foreign currency securities issued by entities "headquartered in the reporting country but located abroad" are external assets. Foreign currency securities issued by entities "headquartered and located in the reporting country" are not external assets and should not be included in official reserves. Foreign currency deposits and foreign currency securities that are reserve assets should be reported in Section I.A. of the Template. Those that do not meet the criteria for reserve assets but are liquid should be included in Section I.B. (see later discussion on reporting "other foreign currency assets"). In certain cases, for prudential reasons and because of creditworthiness considerations, the monetary authorities place foreign currency deposits with institutions located in the reporting country or hold foreign currency securities issued by institutions located in the reporting country as part of their reserves management policy. Such assets should be reported in Section I.B. of the Template under "other foreign currency assets."

63 The rest of this chapter:

- examines key considerations in reporting reserve assets as set forth in the *BPM6*, clarifies certain *BPM6* concepts, and notes the need to promote comparable data reporting among countries on international reserves;
- considers the treatment of the different types of financial instruments in reserve assets;
- elaborates on the treatment in the Reserves Data Template of external assets held in resident financial institutions;
- discusses the concordance between the Reserves Data Template data on reserves and the major components of reserve assets as set forth in the *BPM6*, with a view to facilitating the use of the Reserves Data Template data for purposes both of balance of payments reporting and reserves management;
- identifies information that can be reported under the data category "other foreign currency assets"; and
- provides guidelines for the derivation of approximate market values for reserve assets and other foreign currency assets.

Defining Reserve Assets

64 Chapter 1 provided the definition of reserve assets as set forth in the *BPM6*. For easy reference, it is repeated here. Reserve assets are "external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing)"[3] (*BPM6*, paragraph 6.64). Countries have interpreted "readily available" and "controlled by" in varying ways when applying the concept in practice. Some guidelines for implementing the concept in reporting data on reserve assets in the Reserves Data Template are provided below (see also Appendices 6 and 7).[4]

Guidelines for Implementing the *BPM6* Concept on Reserves

65 Underlying the *BPM6* concept of reserves are the notions of "effective control" by the monetary authorities of the assets and the "usability" of the assets to the monetary authorities. Accordingly, reserve assets are, first and foremost, liquid assets denominated

[3]For fully dollarized economies, the need to hold reserves for the purpose of intervention in foreign exchange markets is not relevant.

[4]Only financial assets, including gold bullion, controlled by the monetary authorities can be classified as reserve assets.

and settled in foreign exchange and readily available to the monetary authorities.[5]

66 If the authorities are to use the assets for the financing of payments imbalances and to support the exchange rate, the reserve assets must be foreign currency assets.

67 Furthermore, to be liquid such foreign currency assets must be in convertible foreign currencies (*BPM6*, paragraph 6.72), that is, freely usable for settlements of international transactions.[6] A corollary is that assets redeemable only in nonconvertible foreign currencies cannot be reserve assets. For the purposes of the Reserves Data Template, convertible foreign currencies may include gold and SDRs (*BPM6*, paragraph 6.72).

68 In general, only external claims actually owned by the monetary authorities are regarded as reserve assets. Nonetheless, ownership is not the only condition that confers control. In cases where institutional units (other than the monetary authorities) in the reporting economy hold legal title to external foreign currency assets and can only transact in these assets on terms specified by the monetary authorities or only with their express approval; the authorities have access on demand to these claims on nonresidents to meet balance of payments financing needs and related purposes; and there is a prior law or an otherwise legally binding contractual arrangement confirming this agency role of the resident entity that is actual and definite in intent, such assets can be considered reserve assets. This is because such assets are under the direct and effective control of the monetary authorities. To be counted in reserves, such assets are to meet other criteria as set forth above, including availability to meet balance of payments needs (see paragraph 6.67 in *BPM6*).

[5]A liquid asset refers to an asset that can be bought, sold, and liquidated with minimum cost and time and without unduly affecting the value of the asset. This concept refers to both nonmarketable assets, such as demand deposits, and marketable assets, such as securities for which there are ready and willing sellers and buyers. "Readily available" assets are assets that are available in the most unconditional form.

[6]As noted in *BPM6*, the term "freely usable" is not used in a restrictive sense to cover the currencies in the SDR basket only.

69 In addition, in accordance with the residency concept in the *BPM6*, "external" assets refer to claims of the monetary authorities on nonresidents. Conversely, the authorities' claims on residents are not reserve assets (see also paragraph 62). As will be clarified later, foreign currency claims of the monetary authorities on residents may be "other foreign currency assets" of the monetary authorities and should be reported as such in Section I.B. of the Reserves Data Template.

70 Some loans to the IMF, such as long-term loans to IMF Managed Trust Accounts,[7] which are readily repayable to meet a balance of payments need, are reserve assets, but other long-term loans provided by the monetary authorities to nonresidents, which would not be readily available for use in times of need, are not reserve assets but are recorded as predetermined inflows (Section II.1) if they have a residual maturity of one year or less. Short-term loans to nonresidents, however, may qualify as reserve assets if available upon demand by the authorities.

71 Transfers of foreign currency claims to the monetary authorities by other institutional units in the reporting economy just prior to certain accounting or reporting dates with accompanying reversals of such transfers soon after those dates (commonly known as "window dressing") should not be counted as reserve assets. If such transfers are included in reserves, they should be disclosed in country notes accompanying the data.

72 Assets pledged are typically not readily available. If clearly not readily available, pledged assets should be excluded from reserves. Examples of pledged assets that clearly would not be readily available are assets that are blocked when used as collateral for third-party loans and third-party payments. Other examples of assets that are to be excluded from international reserves include assets pledged by the monetary authorities to investors as a condition for the investors to invest in securities issued by domestic entities (such as central government agencies). Also to be excluded from reserve assets are assets lent by the monetary authorities

[7]See Appendix 8 for guidelines on the statistical treatment of lending to the IMF, lending to IMF managed trust funds, and SDRs.

to a third party, which are not available until maturity; or prior to maturity, are not marketable. If pledged assets are included in reserves, their value should be reported in Section IV under "pledged assets." Pledged assets are to be differentiated from reserve assets that are used under securities lending arrangements and repurchase agreements (repos). The reporting of repos and related transactions is discussed in paragraphs 85–88. (Pledged assets are separately identified from securities lent or repoed and gold swapped in Section IV—memo items—of the Reserves Data Template. See Chapter 5 for detail.) Pledged assets should only be excluded at most to the value of the pledge; in other words, if the pledge is valued at 100, the maximum amount to be excluded from reserve assets is 100 (*BPM6*, paragraph 6.109).

73 Reserve assets must actually exist. Lines of credit that could be drawn on and foreign exchange resources that could be obtained under swap agreements are not reserve assets because they do not constitute existing claims. (Such lines of credit are, however, to be reported in Section III of the Reserves Data Template and are discussed under contingent foreign exchange resources in Chapter 4.)

74 Real estate owned by the monetary authorities is not to be included in reserve assets because real estate is not considered a liquid asset.

Reporting Financial Instruments in Reserve Assets

75 Reserve assets include: monetary gold, special drawing rights (SDRs), reserve position in the IMF, and other reserve assets. In the Reserves Data Template, "monetary gold" corresponds to "gold (including gold deposits and, if appropriate, gold swapped)," and "other reserve assets" corresponds to the two items, "foreign currency reserves (in convertible foreign currencies)" and "other reserve assets." "Other reserve assets" in the Reserves Data Template has subcategories for financial derivatives, loans to nonbank nonresidents, and other.

76 Monetary gold, SDR holdings, and reserve positions in the IMF are considered reserve assets because they are owned assets readily available to the monetary authorities in unconditional form. Currency and deposits and other claims in many instances are also readily available and therefore may qualify as reserve assets. Below are guidelines for reporting data in the Reserves Data Template on these instruments.

Foreign Currency Reserves—Item I.A.(1) of the Reserves Data Template

77 The Reserves Data Template presents financial instruments in a different way than does the International Investment Position (IIP) in *BPM6*. For example, the Reserves Data Template lists securities, and currency and deposits under the category "foreign currency reserves." The IIP in *BPM6* does not have a category called foreign currency reserves. A full reconciliation of these presentational differences between the *BPM6* and the Reserves Data Template is provided later in this chapter.

78 Currency is not identified as a separate component of the Reserves Data Template. The rationale for this treatment is that currency usually is not a major component of countries' reserve assets; in reporting data in the Template, currency should be included in deposits with central banks in item I.A.(1)(b)(i). For financial derivatives, the Reserves Data Template calls for the separate reporting of their net, marked-to-market values under items I.A.(5), I.B., and IV.(1)(e), as appropriate (see later discussion in this chapter and Appendix 3).

Securities—Item I.A.(1)(a) of the Reserves Data Template

79 Securities should include highly liquid, marketable equity and debt securities;[8] liquid, marketable, long-term securities (such as 30-year U.S. Treasury bonds) are included. Securities not listed for public trading are, in principle, excluded unless such securities are deemed liquid enough to qualify as reserve assets.

80 Only foreign currency securities issued by nonresident entities should be included in this item of the Reserves Data Template. It therefore follows that the category "of which, issuer headquartered in reporting country" should be used to report only

[8]Equity securities include stocks and shares and similar instruments. Also included are participating preferred shares, mutual funds, and investment trusts. Debt securities cover (1) bonds and notes, debentures; and (2) money market instruments (such as treasury bills, commercial paper, bankers' acceptances, negotiable certificates of deposits with original maturity of one year or less) and short-term notes issued under note issuance facilities.

foreign currency securities that are issued by institutions "headquartered in the reporting country but located abroad." As mentioned earlier, foreign currency securities issued by institutions "headquartered and located in the reporting country" are excluded; they are to be reported in Section I.B. of the Reserves Data Template if they are foreign currency liquid assets. Likewise, holdings of foreign currency securities issued by the domestic government are not reserve assets. Foreign currency securities issued by foreign governments can be reserve assets (see the discussion on "other foreign currency assets" later in the chapter). (See also paragraph 62.)

81 When securities reported in the Reserves Data Template include both securities held directly and securities held under repurchase agreements (repos) and security lending agreements,[9] this should be indicated in country notes accompanying the data. The Template also calls for the reporting of securities lent and repoed in item IV(1)(d).

82 The term "repurchase agreements" (repos) in the Reserves Data Template refers to both repos and reverse repos. A repurchase agreement is one in which a party that owns securities acquires funds by selling the specified securities to another party under simultaneous agreement to repurchase the same securities at a specified price and date.[10] A reverse repo is one in which a party provides funds by purchasing specified securities pursuant to a simultaneous agreement to resell the same securities at a specified price and date.[11]

83 Securities lending involves the lending of securities collateralized by other highly liquid securities or in exchange for cash. When securities lending involves cash, it is considered to be similar to repos.

84 Accounting practices differ among countries for the treatment of securities under repos/reverse repos and security lending. Some countries, for example, record repos as transactions in securities, in which the securities are deducted from the balance sheet and the funds acquired are added to the balance sheet. Others, however, do not deduct the securities on the balance sheet; instead, they show the funds obtained from the repo transaction as an asset on the balance sheet, counterbalanced by a liability (a collateralized loan) shown on the balance sheet for the funds acquired that need to be repaid. In light of the different treatments for repos, the Reserves Data Template requires that countries provide information on the accounting treatment used. Such information is to be disclosed in country notes accompanying the data on repos.

85 Against the background of different accounting practices among countries, the reporting of repos, reverse repos, and related activities should aim to give an accurate picture of a country's foreign currency liquidity position. In this regard, it is essential to characterize accurately the nature of repo transactions and to maintain data transparency. For these reasons, it is recommended that repos and reverse repos be reported in the Template as follows:

i For a repo, the funds received should be shown as an increase in deposits among reserve assets (item I.A.(1)(b)). To consider the recording of the securities from the perspective of the cash borrower under the repo, the securities should be assessed against the criteria for reserve asset treatment and, if they are not liquid or readily available for meeting balance of payments financing needs (or are available for meeting balance of payments financing needs only if a substitute reserve asset has to be provided as collateral), they should be excluded from the cash borrower's reserve assets. If the cash received (and not the securities transferred under the repo) is recorded in reserves, then no predetermined future drain exists (because the repurchase of the securities will result in offsetting changes in reserves—a decrease in deposits and an increase in securities). It is recognized that for practical reasons some countries may include both the cash received and securities transferred under the repo in reserve assets.[12] When both the securities and

[9] Including sell/buybacks and other similar collateralized arrangements. Gold swaps are reported under item I.A.(4) of the Reserves Data Template.

[10] Or on demand, for some contracts.

[11] Or on demand, for some contracts.

[12] These approaches accord with the *BPM6* (paragraph 6.88), which states that "Securities that have been transferred under repurchase agreements, or similar agreements by the monetary authorities for cash collateral are assets of the original authorities and are either (a) included as reserve assets of the original owner or (b) excluded from reserve assets and reclassified as portfolio investment assets."

the cash are recorded in reserves, a predetermined future drain also exists (to be reported in II.3, outflows related to repos). See also Chapter 3 for the reporting of foreign currency inflows and outflows related to repo activities. If additional securities are provided under the repo (perhaps because of a margin call), the treatment of the securities is the same as for the initial transaction.

ii For a reverse repo, the funds provided to the counterparty should be shown as a decrease in deposits among reserve assets (item I.A.(1)(b)), unless the lender's domestic currency was used. The securities collateral acquired are not recorded as reserve assets under item I.A.(1)(b); they should be reported under item IV.(1)(d) under "borrowed or acquired but not included in Section I."[13] In addition, if the claim (i.e., the repo asset, loan receivable) arising from the funds provided is liquid and available on demand to the purchaser of the securities (the monetary authorities) for meeting a balance of payments financing need, the claim qualifies as a reserve asset and is included in Section I.A.(5) "other reserve assets, other." However, if the claim (repo asset, loan receivable) is not liquid and not available on demand to the purchaser of the securities, it does not qualify as a reserve asset; instead, the future predetermined cash inflow associated with the return of the securities should be recorded in Section II.3 of the Template as "inflows related to reverse repos."

86 Where the monetary authorities undertake a reverse repo and subsequently repo out the securities (obtained in the reverse repo) for cash, this should be reported in the following way: a reverse repo transaction is first reported, as illustrated in paragraph 85 (ii) above; this is followed by the recording of a repo transaction, as discussed in paragraph 85 (i) above; and the values of the securities involved are disclosed separately under reverse repos and repos in item IV.(1)(d) of the Template (see also Appendix 3).

87 Where the monetary authorities undertake a reverse repo and subsequently sell the securities received, this should be reported as follows: a reverse repo transaction is first reported, as illustrated in paragraph 85 (ii) above; this is followed by the recording of the funds received from the sale of securities under item I.A.(1)(b). As the security sold was received without acquiring economic ownership, consistent with the concept of predetermined net drains, a future predetermined foreign currency outflow associated with the return of the securities to the repo counterparty should be reported in item II.3 of the Reserves Data Template.

88 The treatments described above should be applied to securities lent/borrowed in exchange for cash. Where securities are lent/borrowed with other securities used as collateral and no cash is exchanged, the transaction should not be reported in Section I of the Reserves Data Template but recorded in item IV.(1)(d) under securities lent or on repos, with accompanying country notes indicating that securities are acquired as collateral in security lending activities (see Appendix 3, item (9)). The rationale for this approach is that collateral generally is not recognized on the collateral holder's balance sheet because there has been no change in the economic ownership. In cases where securities are lent/borrowed with other securities used as collateral and such activity is accomplished through methods analogous with first undertaking a repo and subsequently undertaking a reverse repo, such a transaction can be recorded in Section I.A. to show a decrease in "securities," counterbalanced by an increase in repo assets to be shown in item I.A.(5) under "other reserve assets," provided that the repo assets so acquired are liquid and that they meet the criteria of reserve assets. The recording of such securities lending activities in Section I.A. of the Reserves Data Template is to be clearly stated in country notes accompanying the data.

89 To be readily available to the authorities to meet balance of payments financing and other needs under adverse circumstances, reserve assets generally should be of high quality (investment grade).[14] If reserve assets include securities below investment grade, this must be indicated in country notes accompanying the data.

[13] The securities do not qualify for recording as reserve assets because there is considered to be no change in economic ownership of the securities (see paragraph 7.58 in *BPM6*).

[14] Information available from rating agencies can be supplemented by other criteria (including the creditworthiness of the counterparty) to determine the quality of the securities.

90 For the recording of securities issued by entities headquartered in the reporting country, see the section below, "Identifying Institutions Headquartered in the Reporting Country and Institutions Headquartered outside the Reporting Country."

Total Currency and Deposits—Item I.A.(1)(b) of the Reserves Data Template

91 Deposits refer to those available on demand; consistent with the liquidity concept, these generally refer to demand deposits. Term deposits that are redeemable upon demand or at very short notice without unduly affecting the value of the deposit can also be included.

92 Deposits included in reserve assets are those held in foreign central banks, the Bank for International Settlements (BIS), and other banks. The term "banks" generally refers to deposit-taking corporations[15] and encompasses such institutions as "commercial banks, savings banks, savings and loan associations, credit unions or cooperatives, building societies, and post office savings banks or other government-controlled savings banks (if such banks are institutional units separate from government)" (*2008 SNA*).

93 Because short-term loans provided by the monetary authorities to other central banks, the BIS, the IMF, and depository institutions are much like deposits, it is difficult in practice to distinguish the two. For this reason, by convention, the reporting of deposits in reserve assets should include short-term foreign currency loans, which are redeemable upon demand, made by the monetary authorities to these nonresident banking entities. Short-term foreign currency loans, that are available upon demand, made by the monetary authorities to nonresident nonbank entities and long-term loans to IMF Managed Trust Accounts that are readily repayable to meet a balance of payments financing need are included in "other reserve assets" under I.A.(5) in the Reserves Data Template.

94 As discussed earlier, currency holdings are to be reported in total currency and deposits under item I.A.(1)(b)(i). Currency consists of foreign currency notes and coins in circulation and commonly used to make payments (commemorative coins are excluded).

95 For the recording of deposits with institutions headquartered in the reporting country, see the next section, "Identifying Institutions Headquartered in the Reporting Country and Institutions Headquartered outside the Reporting Country."

IMF Reserve Position—Item I.A.(2) of the Reserves Data Template

96 IMF reserve position is the sum of (1) the "reserve tranche," that is, foreign currency amounts that a member country may draw from the IMF at short notice[16] and (2) any indebtedness of the IMF (under a loan agreement) in the General Resources Account that is readily available to the member country including the reporting country's lending to the IMF under the General Arrangements to Borrow (GAB) and the New Arrangements to Borrow (NAB). Claims on the IMF that are denominated in SDRs are regarded as foreign currency claims.

Special Drawing Rights (SDRs)—Item I.A.(3) of the Reserves Data Template

97 SDRs are international reserve assets the IMF created to supplement the reserves of IMF member countries. SDRs are allocated in proportion to the countries' respective quotas.

Gold (including gold deposits and, if appropriate, gold swapped)—Item I.A.(4) of the Reserves Data Template

98 Gold in the Reserves Data Template refers to gold the authorities own and includes gold bullion

[15] *BPM6* (paragraph. 4.71) defines "deposit taking corporations except the central bank" in the financial corporations sector. Included are institutional units engaging in financial intermediation as a principal activity and having liabilities in the form of deposits or financial instruments (such as short-term certificates of deposits) that are close substitutes for deposits. Deposits include those payable on demand and transferable by check or otherwise usable for making payments and those that, while not readily transferable, may be viewed as substitutes for transferable deposits.

[16] Reserve-tranche positions in the IMF are liquid claims of members on the IMF that arise not only from the reserve asset payments for quota subscriptions but also from the sale by the IMF of their currencies to meet the demand for use of IMF resources by other members in need of balance of payments support. Repayments (repurchases) of IMF resources in these currencies reduce the liquid claim of the member whose currency was supplied. In Section IV.2(a) on currency composition, the reserve position in the IMF should be classified as denominated in "currencies in SDR basket."

and unallocated gold accounts with nonresidents[17] (monetary gold). Gold held by monetary authorities as a reserve asset (i.e., monetary gold) is shown in this item.[18] Allocated gold accounts provide ownership of a specific piece of gold. The ownership of the gold remains with the entity placing it for safe custody (see *BPM6*, paragraph 5.76). Other gold not included in official reserve assets, but with a purity of at least 995/1,000 should be recorded under "other foreign currency assets" in Section I.B. of the Reserves Data Template. Holdings of silver bullion, diamonds, and other precious metals and stones[19] are not reserve assets and should not be recorded in the Template.

99 Unallocated gold (gold deposits) of monetary authorities representing claims on nonresidents are to be included in gold and not in total deposits.[20] Unallocated gold accounts are accounts that give title to claim the delivery of gold (see *BPM6*, paragraphs 5.77 and 6.78–6.83). In reserves management, it is common for monetary authorities to have their bullion physically deposited with a bullion bank, which may use the gold for trading purposes in world gold markets. Private placements sometimes also occur. The ownership of the gold effectively remains with the monetary authorities, who earn interest on the deposits, and the gold is returned to the monetary authorities on maturity of the deposits. The term maturity of the gold deposit is often short, up to six months. To qualify as reserve assets, gold deposits must be available upon demand to the monetary authorities and should be of a high quality. For instance, to minimize risks of default, monetary authorities can require adequate collateral (such as securities) from the bullion bank.[21] It is important that compilers not include such securities collateral in reserve assets, thereby preventing double counting.

[17] Gold includes gold bullion (including allocated gold accounts) and unallocated gold accounts with nonresidents that give title to claim the delivery of gold. Gold bullion takes the form of coins, ingots, or bars with a purity of at least 995 parts per 1,000, including such gold held in allocated gold accounts (*BPM6* paragraph 5.74–5.76).

[18] Such gold is treated as a financial instrument because of its historical role in the international monetary system.

[19] These precious metals and stones are considered goods and not financial assets.

[20] Sometimes known as gold lending transactions or gold loans.

[21] If the securities received as collateral are repoed out for cash, a repo transaction should be reported, as discussed earlier under "securities."

100 In reserves management, monetary authorities also may undertake gold swaps.[22] In gold swaps, gold is exchanged for cash and a firm commitment is made by the monetary authorities to repurchase at a future date the quantity of gold exchanged. Accounting practices for gold swaps vary among countries. Some countries record gold swaps as transactions in gold, in which the gold and the cash exchanged are reflected as offsetting asset entries on the balance sheet. Others treat gold swaps as collateralized loans, leaving the gold claim on the balance sheet and recording the cash exchanged as two offsetting asset and liability entries on the balance sheet.[23]

101 For the purpose of the Reserves Data Template, it is recommended that gold swaps the monetary authorities undertake be treated in the same ways as repos and reverse repos (see paragraph 85 of these *Guidelines* and paragraph 6.82 of *BPM6*).

Other Reserve Assets—Item I.A.(5) of the Reserves Data Template

102 "Other reserve assets" include assets that are liquid and readily available to the monetary authorities but not included in the other categories of reserve assets. These assets include the following:

[22] Such gold swaps generally are undertaken between monetary authorities and with financial institutions.

[23] This treatment applies only when an exchange of cash against gold occurs, the commitment to buy back the gold is legally binding, and the repurchase price is fixed at the time of the spot transaction. The logic is that in a gold swap the "economic ownership" of the gold remains with the monetary authorities, even though the authorities temporarily have handed over the "legal ownership." The commitment to repurchase the quantity of gold exchanged is firm (the repurchase price is fixed in advance), and any movement in gold prices after the swap affects the wealth of the monetary authorities. Under this treatment, the gold swapped remains as a reserve asset, the cash received a repo deposit (see *BPM6*, paragraph 6.82) and a predetermined drain is recorded in Section II.3. in the Reserves Data Template. Gold swaps commonly permit central banks' gold reserves to earn interest. Usually, the central banks receive cash for the gold. The counterparty generally sells the gold on the market but typically makes no delivery of the gold. The counterparty often is a bank that wants to take short positions in gold and bets that the price of gold will fall or is one that takes advantage of arbitrage possibilities offered by combining a gold swap with a gold sale and a purchase of a gold future. Gold producers sell gold futures and forwards to hedge their future gold production. Treating gold swaps as collateralized loans instead of sales can obviate the need to show frequent changes in the volume of gold in monetary authorities' reserve assets, which, in turn, would affect world holdings of monetary gold as well as the net lending of central banks.

- the net, marked-to-market value of financial derivatives positions (including, for instance, forwards, futures, swaps, and options) with nonresidents, if the derivative products pertain to the management of reserve assets, are integral to the valuation of such assets, and are under the effective control of the monetary authorities. Such assets must be highly liquid and denominated and settled in foreign currency. Forwards and options on gold are to be included in this item. "Net" refers to asset positions offset by liability positions.[24]
- short-term foreign currency loans redeemable upon demand provided by the monetary authorities to nonbank nonresidents.
- long-term loans to IMF Managed Trust Accounts that are readily available to meet a balance of payments financing need.
- other financial assets not included elsewhere but that are foreign currency assets that are available for immediate use (such as nonnegotiable investment funds shares/units arising from pooled asset schemes).[25]
- repo assets that are liquid and available upon demand to the monetary authorities (see also paragraph 85(ii)).

Identifying Institutions Headquartered in the Reporting Country and Institutions Headquartered outside the Reporting Country

103 To enhance the comparability of data across countries and provide additional insight into factors that may affect the liquidity of reserve assets, the Reserves Data Template distinguishes between institutions headquartered and not headquartered in the reporting country. In the Template, "institutions headquartered in the reporting country" refer to domestically controlled institutions, as opposed to foreign-controlled institutions. The latter are referred to as "institutions headquartered outside the reporting country." One rationale for this distinction is that assets held in institutions headquartered in the reporting country may not be liquid or available to the authorities in times of financial crisis. Another is that in crisis situations the monetary authorities could be constrained by concerns about the impact of their foreign exchange operations on the liquidity situation of domestically controlled institutions. Yet another reason is that the authorities conceivably could influence the disposition of assets held in institutions headquartered in the reporting country.

104 The term "headquartered in the reporting country" refers to institutional units that consist of a headquarters unit in the reporting country together with its branches and subsidiaries[26] in the reporting country and abroad. The term "headquartered in the reporting country but located abroad" refers to the foreign branches and subsidiaries of the headquarters unit.

105 The term "headquartered outside the reporting country" refers to institutional units that consist of a headquarters unit outside the reporting country together with its branches and subsidiaries outside the reporting country and in the reporting country. The term "headquartered abroad but located in the reporting country" refers to resident branches and subsidiaries of such headquarters unit.

Guidelines for Headquartering Distinction in Compiling Items I.A.(1)(a), I.A.(1)(b)(ii), and I.A.(1)(b)(iii) of the Reserves Data Template

106 The headquartering distinction applies to reserve assets in the form of deposits in banks and, to a lesser extent, securities. For the sake of simplicity, such detail is not required for the data category on item I.A.(5) "other reserve assets" unless sizable assets are held in institutions headquartered in the reporting country, in which case they are to be reported in separate lines or in country notes.

[24] See also Chapter 5 for a discussion on reporting of marked-to-market values of financial derivatives in the Template, including "netting by novation."

[25] For further details on pooled asset schemes, see *BPM6*, paragraphs 6.99–6.101.

[26] "Branches" refers to unincorporated entities wholly owned by the parent (headquarters) institution; and "subsidiaries" refers to incorporated entities more than 50 percent owned by the parent institution.

107 Deposits in banks are to be separately reported under the headquartering distinction. However, under the residency concept set forth in the *BPM6*, monetary authorities' deposits held in resident banks (including banks "headquartered and located in the reporting country" and banks "headquartered abroad but located in the reporting country") do not constitute external claims on nonresidents and are not considered reserve assets. However, external claims of resident banks on nonresidents, under the specified conditions, can be considered as reserve assets.[27] If any deposits held in resident banks are included in official reserves, they should be disclosed, as set out in paragraph 108.

108 The identification of institutions headquartered in and outside the reporting country provides important information. Thus, line I.A.(1)(b)(ii), "banks headquartered in the reporting country," should be used to report the monetary authorities' deposits in domestically controlled banks; the line "of which located abroad" should be used to report the monetary authorities' deposits in foreign branches and subsidiaries of domestically controlled banks. Line I.A.(1)(b)(iii), "banks headquartered outside the reporting country" should be used to disclose deposits in foreign-controlled banks; the line "of which located in the reporting country" should be used to report deposits in foreign-controlled banks' branches and subsidiaries located in the reporting country. In cases where the monetary authorities have ownership stakes in institutions headquartered and located outside the reporting country, the monetary authorities' deposits in such nonresident institutions should not be included in reserve assets. If they are included despite this guidance, the amounts should be clearly stated in country notes accompanying the data.

109 Under the *BPM6*, holdings of foreign currency securities issued by entities "headquartered and located in the reporting country" represent the authorities' claims on residents; such assets, therefore, are not considered external assets; where such assets are liquid and readily available, they should be reported under Section I.B. of the Template (see paragraph 62). Holdings of securities issued by entities "headquartered in the reporting country but located abroad" can be included in reserve assets if they meet the relevant criteria; these securities should be reported under item I.A.(1)(a). Holdings of foreign exchange securities issued by the government and by other institutions resident in the domestic economy are not official reserve assets. (If any such securities are included in official reserve assets, it should be stated in country notes accompanying the Reserves Data Template.)

[27] See paragraph 68 and Appendix 7 (Question 1 of Frequently Asked Questions on the Characteristics of Reserve Assets).

Reconciling the Reserves Template Data and the *BPM6* Concept of Reserves

110 In principle, official reserve assets specified in Section I.A. of the Reserves Data Template should correspond to the data on international reserves countries compile for balance of payments and international investment position purposes under the guidelines of the *BPM6*. The definition of official reserves should be consistent across all macroeconomic statistics sets in the country. Where countries do not now adhere to the *BPM6*, the operational guidelines provided in this document are intended to promote countries' adherence to such an international standard and the full disclosure of their operational coverage of reserve assets (see also paragraph 62).

111 Official reserve assets shown in Section I.A. of the Reserves Data Template and the *BPM6* components of reserve assets can be reconciled through a concordance of the two presentations as discussed below.

112 The *BPM6* lists types of reserve assets in this order: monetary gold, special drawing rights (SDRs), reserve position in the IMF, currency and deposits, securities, financial derivatives, and other claims. In the Reserves Data Template, reserve assets are identified to include foreign currency reserves (viz., securities and deposits), IMF reserve position, SDRs, gold, and other reserve assets. The reordering of the components as shown in the Reserves Data Template reflects the prominence of foreign exchange in reserves management in today's global financial environment. As noted earlier, the components of foreign currency reserves and other reserve assets in the Reserves Data Template together correspond to the *BPM6* coverage (see Table 2.1).

113 Since countries report currency in total deposits in the Reserves Data Template, item I.A.(1)(b)

Table 2.1 Concordance between Classifications of Reserve Assets in *BPM6* and the Reserves Data Template

BPM6		**Template**
Reserve assets in IIP	**Corresponding to template item**	**Official reserve assets**
Monetary gold	I.A.(4)	I.A. Official reserve assets
Gold bullion		(1) Foreign currency reserves (in convertible foreign currencies)
Unallocated gold accounts		(a) Securities
Of which monetary gold under swap for cash collateral		*of which:*
Special drawing rights	I.A.(3)	issuer headquartered in reporting country but located abroad
Reserve position in the IMF	I.A.(2)	
Other reserve assets	I.A.(1), I.A.(5)	(b) Total deposits with:
Currency and deposits[1]	I.A.(1)(b)	(i) other central banks, BIS, and IMF
Claims on monetary authorities	I.A.(1)(b)(i)	(ii) banks headquartered in the reporting country
Claims on other entities	I.A.(1)(b)(ii), (iii)	*of which:*
Securities	I.A.(1)(a)	located abroad
Debt securities		(iii) banks headquartered outside the reporting country
Short-term		
Long-term		*of which:*
Equity and investment fund shares		located in the reporting country
Of which securities under repo for cash collateral		(2) IMF reserve position
		(3) SDRs
Financial derivatives	Part of I.A.(5)	(4) Gold (including gold deposits and, if appropriate, gold swapped)
Other claims	Part of I.A.(5)	
		(5) Other reserve assets (specify)

[1] Excludes deposits in banks located in the reporting country.

corresponds to currency and deposits under reserve assets listed in the *BPM6*.

114 In deriving deposits in reserve assets under the *BPM6* concept, one generally would include only these items shown in Section I.A. of the Template: (1) deposits with other central banks, the BIS, and the IMF; (2) deposits held in foreign branches and subsidiaries of domestically controlled banks; and (3) deposits in banks "headquartered and located outside the reporting country." *BPM6* does not allow deposits in resident banks to be included in reserve assets.

115 With respect to securities, holdings of foreign currency securities issued by nonresident entities to be included in I.A.(1)(a) and net, marked-to-market values of highly liquid financial derivatives positions with nonresidents to be included in I.A.(5) of the Template, taken together, correspond to "securities" and financial derivatives listed in reserve assets in the *BPM6*.

116 Given the coverage of items I.A.(1) under "foreign currency reserves" and I.A.(5) under "other reserve assets" of the Reserves Data Template, these two items correspond to currency and deposits, securities, financial derivatives, and other claims in reserve assets shown in the *BPM6*.

117 Both the *BPM6* and the Reserves Data Template prescribe market valuation of reserve assets. There should be no difference in the value of reserve assets reported under the *BPM6* and that shown for official reserve assets under Section I.A. of the data template. Countries should apply consistent valuation methods for balance of payments and IIP reporting purposes and for compiling the data for the Reserves Data Template.

Defining Other Foreign Currency Assets

118 The foreign currency liquidity of a country is assessed by comparing its total foreign currency resources with its short-term predetermined and contingent drains on such resources. Foreign currency resources include reserve assets and other foreign currency assets of the authorities. A key definitional difference between other foreign currency assets and official reserve assets is that other foreign currency assets can emanate from positions with other residents. Based on this liquidity concept, "other foreign currency assets," like reserve assets, must be liquid foreign currency assets that meet the criteria of being available for use by the authorities in times of crisis. Pledged assets that are clearly not readily available should be excluded.

Other Foreign Currency Assets—Item I.B. of the Reserves Data Template

119 Like reserve assets, these assets must be in convertible currencies so that they can be available on demand to meet foreign currency needs of the authorities.

120 Like reserve assets, these assets must represent actual claims; credit lines and swap lines are not to be included.

121 Like reserve assets, these assets must be settled in foreign currencies; foreign currency assets settled in domestic currencies should be disclosed in Section IV under memo items.

122 Unlike reserve assets, these assets do not need to be external assets; they can be claims on residents.

123 Liquid foreign currency claims on nonresidents not included in reserve assets should be included in "other foreign currency assets."

124 These assets should be reported both for the monetary authorities and for the central government (excluding social security funds). As noted earlier, in view of the difficulties of collecting information from the central government, only assets of these entities that are materially significant should be included.

125 Examples of "other foreign currency assets" include:

- The authorities' foreign currency deposits in banks "headquartered and located in the reporting country" not included in reserve assets.
- The authorities' foreign currency deposits in banks "headquartered abroad but located in the reporting country."
- The authorities' investment in foreign currency securities issued by entities "headquartered and located in the reporting country."
- Gold bullion with a purity of at least 995/1,000 that is not included in reserve assets.
- Net marked-to-market values of highly liquid financial derivatives that represent (1) net claims of the monetary authorities on residents, and (2) net claims of the central government (excluding social security funds) on residents and nonresidents.
- Working balances abroad of government agencies available for immediate use. Nonetheless, if these balances are not large and reporting would entail a significant administrative burden, they could be omitted.
- Liquid foreign currency assets that are readily available and controlled by the monetary authorities and/or central government, are of material significance, and are not included in official reserves assets. Examples include readily available liquid foreign currency assets held in Special Purpose Government Funds which are not included in official reserve assets.[28]

[28] Depending on national circumstances, the liquid foreign currency assets of Special Purpose Government Funds, usually called Sovereign Wealth Funds, may be in official reserves assets or not. For more guidance on the classification of foreign currency assets of Special Purpose Government Funds, see *BPM6*, paragraphs 6.93–6.98.

126 In reporting "other foreign currency assets" in the Reserves Data Template, countries need to specify the major categories of such assets.

127 If assets are reclassified from reserve assets to other foreign currency assets or vice versa, this should be explicitly stated in country notes accompanying the Reserves Data Template.

Applying Approximate Market Values to Reserve Assets and Other Foreign Currency Assets

128 In principle, "reserve assets" are to be valued at market prices. For purposes of the Template, "other foreign currency assets" of the authorities should be valued on a similar basis. In practice, however, accounting systems may not generate actual market values on all reporting dates for all classes of instruments. In these cases, approximate market values may be substituted. In valuing reserve assets and other foreign currency assets, in general, interest earnings, as accrued, on such foreign currency resources should be included (see Appendix 8 for a discussion of accrued SDR interest).

Guidelines for Applying Market Valuation on Assets

129 The market valuation should be applied to reserve assets and other foreign currency assets outstanding (that is, the stock of the assets) on the reference date (that is, at the end of the appropriate reporting period). If necessary, the stock of assets on the reference date can be approximated by adding the net cumulating flows during the reference period to the stock at the beginning of the reference period.

130 Periodic revaluations of the different types of assets should be undertaken to establish benchmarks on which future approximations can be based. It is recommended that such benchmark revaluations be undertaken at least on a quarterly basis. For each reporting period, at a minimum, the value of foreign currency instruments should be adjusted using the market exchange rates applicable on the reference date to arrive at an approximate market value of the assets.

Securities

131 The stock of equity securities of companies listed on stock exchanges can be revalued based on the midpoint of the quoted buy and sell prices of the shares on their main stock exchange on the reference date.

132 For debt securities, the market price is the midpoint of the buy and sell prices at the close of business on the reference date and includes accrued interest. If that value is not available, other methods of approximation include yield to maturity and discounted present value.

Currency, Deposits, and Loans

133 The market value of currency, deposits, and loans generally is reflected in their nominal (face) value.[29]

Financial Derivatives

134 Financial derivatives reported in Section I are to reflect their market values. For futures contracts, this involves marking to market. Given the daily settlement of gains and losses on futures exchanges, it is unlikely that market values of futures contracts will be reported. The market value of swap and forward contracts is derived from the difference between the initially agreed contract price and the prevailing (or expected prevailing) market price of the underlying item. The market values of options depend on a number of factors, including the contract (strike) price, the price and price volatility of the underlying instrument, the time remaining before expiration of the contract, and interest rates (see also Chapter 5).

Monetary Gold

135 Monetary gold is valued at the current market price of commodity gold. The basis of valuation (such as the volume and the price used in the computation) is to be disclosed. (The sample form in Appendix 2 provides the specific reporting of the volume of gold, with the expectation that the price could be deduced from the reported data.)

SDRs

136 SDRs are valued at an administrative rate determined by the IMF. The IMF determines the value of SDRs daily in U.S. dollars by summing the values,

[29] Consistent with *BPM6*, arrears of interest and principal are included in the value of the investment. However, assets that are in arrears may not be liquid or may no longer be considered generally of high quality (see paragraph 89), and so may not qualify for inclusion in reserve assets.

which are based on market exchange rates, of a weighted basket of currencies. The basket and weights are subject to revision from time to time.

Reserve Position in the IMF

137 The reserve position in the IMF is valued at a rate reflecting current exchange rates (of the SDR against the currency used to report the Reserves Data Template for the reserve tranche position, and of the currency in which loans from the reporting country to the IMF are denominated in the case of outstanding loans from the reporting country to the IMF that meet the definition of a reserve asset).

3 Predetermined Short-Term Net Drains on Foreign Currency Assets (Nominal Value): Section II of the Reserves Data Template

138 Section II of the Reserves Data Template is used to report the authorities' predetermined short-term net drains on foreign currency assets. "Predetermined" drains are the known or scheduled contractual obligations in foreign currencies with both residents and nonresidents. Contractual obligations of the authorities can arise from on-balance-sheet and off-balance-sheet activities. On-balance-sheet obligations include predetermined payments of principal and interest associated with loans and securities (see also footnote 6 of the Reserves Data Template). Off-balance-sheet activities that give rise to predetermined flows of foreign currency include commitments in forwards, swaps, and futures contracts. Potential or possible receipts of foreign currency, such as from the future sale of commodities,[1] future disbursements under loan commitments, and claims in dispute, among others, should not be included in this section. Only predetermined net drains derived from actual assets and liabilities should be included.

Defining Predetermined Net Drains

139 Short-term net drains refer to contractual foreign currency obligations scheduled to come due during the 12 months ahead. Maturity depends upon when the contract falls due irrespective of whether the expectation is that it will be rolled over. "Net drains" refer to outflows of foreign currency net of inflows. Outflows are to be reported separately from inflows.

[1] Countries expecting a steady inflow of foreign currencies, such as from future commodity sales, may provide additional information in footnotes or metadata accompanying the Reserve Data Template.

140 Outflows consist of scheduled amortizations of foreign currency obligations and associated interest payments during the coming year and scheduled deliveries of foreign currencies under forwards, futures, and swap contracts. Inflows comprise obligations due to the authorities in the 12-month period ahead arising from on- and off-balance-sheet activities. Outflows and inflows recorded in this section are only from actual assets and liabilities. Note, however, with respect to foreign currency inflows associated with assets of the authorities, that only those pertaining to assets not covered in Section I of the Reserves Data Template are to be included, that is, it would be inconsistent to regard an asset as already existing (Section I) while, at the same time, reporting the inflow from it in Section II as a predetermined net inflow. For example, foreign currency assets shown in Section I include accrued interest, and thus interest on such assets should not be recorded in Section II. Similarly, proceeds from the sale of foreign currency assets (such as securities) are reflected in the positions shown in Section I as increases in foreign currency deposits and decreases in securities. In addition, inflows from contractual foreign exchange obligations that are not expected to be received, for example, because the debtor is delinquent, should not be included in Section II (see also later discussion in this chapter under "Reporting Other Foreign Currency Drains"). Future expected disbursements of funds from loan commitments are excluded from Sections II and III. The recording of lines of credits and undisbursed resources from Fund arrangements under very specific circumstances are explained in paragraphs 206–221.

141 The predetermined foreign currency flows covered in Section II of the Reserves Data Template can emanate from positions vis-à-vis residents and nonresidents. The predetermined foreign currency flows covered in Section II of the Reserves Data Template refer to those that emanate from the authorities' balance-sheet and off-balance-sheet positions vis-à-vis residents and nonresidents.

142 Whether an obligation is short term is defined on the basis of its remaining (residual) maturity. "Short-term" refers to a period up to and including one year. Thus, short-term obligations include those with an original maturity of one year or less and those with longer original maturities whose remaining maturity is one year or less. In the Reserves Data Template, they also include any amortization and interest payments falling due during the coming year on obligations with an original maturity of more than one year.

143 Predetermined drains covered in Section II of the Reserves Data Template are those of the monetary authorities and the central government, excluding social security funds. As stated in footnote 11 in paragraph 20, the existence of a currency board does not remove the requirement to report data on the central government in the Reserves Data Template.

Reporting Data on Predetermined Drains

144 In reporting data on predetermined drains, a number of considerations need to be taken into account. Unlike data in Section I of the Reserves Data Template, which pertain to stock data showing foreign currency assets of the authorities on the reference date (the last day of the reference period), information required in Section II concerns outflows and inflows of foreign currency during the 12 months following from the reference date. The time horizon is broken into three subperiods: "up to one month," "more than one month and up to three months," and "more than three months and up to and including one year." The finer breakdowns of the time horizon are intended to facilitate a more detailed assessment by policymakers and market participants of the authorities' liquidity position. The "total" column in Section II of the Reserves Data Template is to reflect the sum of the three subperiods.

145 Unlike foreign currency assets reported in Section I of the Reserves Data Template, which are to be disclosed at approximate market values, inflows and outflows of foreign currency in Section II of the Reserves Data Template are to be recorded in nominal values; that is, the cash-flow value when the flows take place. No discounting for such flows is needed. Inflows and outflows of foreign currency in Section II of the Reserves Data Template should be recorded on a due for payments basis and not on an accrual basis.

146 When converting foreign currency loans, securities, and other on-balance-sheet obligations to the currency used in the reporting of the data, the exchange rate to be used is the market rate applicable at the reference date. For forwards, futures, and swaps, the exchange rate specified in the contract should be used to determine the nominal value, which then can be converted to the reporting currency at the market exchange rate for the reference date.

147 In reporting domestic currency instruments that settle in foreign currency, the domestic currency flows should first be converted to foreign currency at the exchange rate specified in the instrument; they then should be converted to the reporting currency at the market exchange rate applicable at the reference date. Given that this section records predetermined settlements in foreign currency, instruments settled in domestic currency but are indexed to foreign currency should be excluded while instruments settled in foreign currency but are linked to domestic currency should be included in this section. Domestic currency instruments indexed to foreign exchange rates and settled in domestic currency should be reported in Section IV using notional/nominal value.

148 In Section II, as in Sections III and IV, the computation of net drains (net flows) requires that inflows and outflows be recorded with opposite signs; plus signs (+) are used for inflows or receipts of foreign exchange reserves and minus signs (–) for outflows or payments of foreign exchange reserves. Net drains (net flows) can have a (+) or a (–) sign.

149 Obligations relating to loans and securities (viz., debt service payments of principal and interest) involve foreign currency outflows; the minus sign (–) should accompany the data. Corresponding foreign currency obligations due to the authorities are to be recorded with a (+) sign. In addition, interest payments should be reported separately from principal (see sample form in Appendix 2).

150 In the case of predetermined currency flows related to financial derivatives contracts, short positions (corresponding to outflows) and long positions (corresponding to inflows) should be distinguished by (–) and (+) signs, respectively. The aggregate (net) position may have either sign. The disclosure of gross positions is required in order to provide more complete information on the foreign currency flows of the authorities, but netting is allowed if offsetting positions are maintained with the same counterparty and at the same maturity and insofar as a legally enforceable master netting agreement exists allowing settlement in net terms. This procedure is generally referred to as netting by novation.[2] Netting by novation also is allowed for matched positions on organized exchanges.

151 Since repos and reverse repos are different in nature from traditional loans and securities, it is recommended that if the accounting practices noted in paragraph 85(i) and (ii) are followed, foreign currency outflows and inflows associated with repos and reverse repos should be recorded in item II.3 of the Reserves Data Template, with outflows separately identified from inflows and accompanied by appropriate signs (see also Appendix 3). In particular, as explained in paragraph 85(i), predetermined foreign currency outflows associated with repos should be reported in item II.3 of the Reserves Data Template if the securities provided as collateral remain in reserves. Predetermined foreign currency inflows relating to reverse repos should be recorded in item II.3 when the repo asset (loan receivable) is not liquid and not recorded in reserves (paragraph 85(ii)). This will facilitate the crosschecking of data reported in Sections I, II, and IV of the Reserves Data Template on repos and related activities undertaken by the authorities. Foreign currency flows associated with repos and reverse repos should be separately identified from other short-term flows in item II.3.

[2]Netting by novation should be distinguished from closure netting. The latter generally refers to cases of insolvency and bankruptcy, where netting ensures that financial market participants can terminate or close out and net financial market contracts; closure netting allows market participants to liquidate collateral pledged by the defaulting counterparty in connection with these contracts.

152 Amortization schedules are good data sources for deriving information on gross foreign currency outflows and inflows related to repayments on short-term loans and installments on long-term loans and associated interest payments falling due within the three time horizons of a one-year period. Countries also can draw on the detailed public-sector external debt data that they compile, where appropriate. Flow of funds accounts represent yet another good data source for Section II of the Reserves Data Template.

How Foreign Currency Transactions in the Reserves Data Template Relate to Those in the External Accounts

153 Loans and securities referred to in Section II of the Reserves Data Template are similar to those defined as loans and securities in the *BPM6*. Nonetheless, there are a number of important differences.

154 Unlike data on external liabilities compiled for a country's international investment position (IIP),[3] which are based on the residency concept with external liabilities referring to liabilities to nonresidents irrespective of currencies involved, only loans and securities repayable in foreign currencies, irrespective of the residency of the holder, are to be included in Sections II and III of the Reserves Data Template.

155 Unlike data reported in countries' IIP, which reflect outstanding assets and liabilities at a point in time, the information called for in Section II concerns the foreign currency inflows and outflows emanating from outstanding assets and liabilities to be received or paid within the three periods of the forthcoming 12 months.

156 In addition, data on external liabilities compiled for IIP purposes are based on the original maturity of instruments. In the Reserves Data Template, short-term foreign currency flows are determined on the basis of the remaining maturities of instruments.[4]

[3]A country's IIP is represented by its balance sheet of external financial assets and external liabilities.
[4]Including amortized payments of instruments with remaining maturities of longer than one year.

157 The IIP calls for separate data for the central bank and of the general government,[5] viewing them as two different sectors of the reporting economy. The Reserves Data Template requires information on total foreign currency flows associated with the monetary authorities and the central government (excluding social security funds) as a whole.

158 The IIP calls for external assets and liabilities to be measured at current market prices as of the reference date. Section II of the Reserves Data Template calls for the recording of inflows and outflows at nominal values (i.e., the amounts the debtor owes the creditor, including principal and any accrued and unpaid interest).

Reporting Foreign Currency Flows Associated with Loans, Securities, and Deposits

Loans, Securities, and Deposits—Item II.1 of the Reserves Data Template

159 Loans are financial assets that (a) are created when a creditor lends funds directly to a debtor, and (b) are evidenced by documents that are not negotiable (see *BPM6*, paragraph 5.51). Included are loans incurred by the authorities and the central government to finance trade, other loans and advances (including mortgages), use of IMF credit and loans from the IMF, and financial leases. Loans under repo, reverse repo, and gold swap arrangements are excluded from item II.1 but may be recorded, as appropriate, in item II.3.

160 Short-term loans repayable within the time horizon are to be reported. In the case of debt maturing in more than one year, interest payments and principal installments falling due within one year are to be reported. Long-term loans with a remaining maturity of up to one year also are to be included.

161 Short-term foreign currency loans and deposits held among central banks and other banking institutions are difficult to distinguish in practice. For this reason, "foreign currency deposits" are included in item II.1. Deposits of foreign central banks and other foreign banking institutions[6] with the monetary authorities of the reporting country are included, along with foreign currency deposits held at the central bank of the reporting country by resident entities. These deposits are ones legally and in practice redeemable by depositors on short notice. Among these, deposits "on call" are to be reported under the shortest maturity category. The recording of other types of deposits with the monetary authorities not covered in item II.1 is discussed in Chapter 4 (paragraph 197).

162 Debt securities are negotiable instruments serving as evidence of a debt (see *BPM6*, paragraph 5.44). They consist of (1) bonds and notes (including debentures, nonparticipating preference shares, and negotiable long-term certificates of deposits) and (2) money market or negotiable debt instruments. Bonds and notes usually give the holder the unconditional right to a fixed money income or to a contractually determined variable money income; that is, when payment of interest is not dependent on the earnings of the debtor. Bonds, notes, and debentures also provide the holder with the unconditional right to a fixed sum as a repayment of principal on a specified date or dates. Included are nonparticipating preferred stocks or shares and convertible bonds. Also so treated are negotiable certificates of deposit with maturities of more than one year, dual-currency bonds,[7] zero-coupon bonds and other deeply discounted bonds, floating-rate bonds, indexed bonds, and asset-backed securities, such as collateralized mortgage obligations and participation certificates. (Mortgages are not bonds and are included under loans.)

163 Money market instruments generally give the holder the unconditional right to receive a stated, fixed sum of money on a specified date. These instruments usually are traded at a discount in organized markets. The discount is dependent on the interest rate and the time remaining to maturity. Included are instruments such as treasury bills, commercial paper and bankers' acceptances, and short-term negotiable certificates of deposit.

164 Only securities issued by the monetary authorities and the central government (excluding social security funds) settled in foreign currencies should be considered in reporting on predetermined outflows of

[5] The central government is a component of the general government. The general government comprises the central government, state government, and local government, including social security funds.

[6] Other types of nonresident entities should be included if they hold deposits with the authorities of the reporting country.

[7] A dual currency bond is a bond where the interest or principal (or both) payments differ from the currency in which it was issued.

foreign currency resources in item II.1 of the Reserves Data Template.

165 To derive information on foreign currency flows pertaining to public debt securities on a frequent and timely basis, an adequate and consistent statistical system is required. Such a system might exist in the agency that publishes the Reserves Data Template or in another government organization that provides the data to the publishing agency. Such a system should maintain detailed information on characteristics of each debt security such as: (1) the entity that issues the security, (2) the dates of issue and of maturity, (3) the currency of issue, (4) the amount raised, (5) the nominal or face value of the debt, (6) the interest rate, (7) the timing of payments of interest, and (8) where applicable, the embedded put options.[8] From such a system, information can be derived on the amount the issuer will pay the holder at the date of redemption of the security, which represents the nominal value of the security called for in the Reserves Data Template.

166 Inflows of foreign currency to be reported in item II.1 of the Reserves Data Template include those relating to scheduled foreign currency obligations due to the authorities on outstanding loans, securities, and deposits owned by the authorities that are not covered in Section I of the Reserves Data Template. Inflows arising from outstanding loans, securities, and deposits that the authorities do not expect to receive should not be included, such as when the debtor is delinquent.

Foreign Currency Flows Relating to Forwards, Futures, and Swaps

Forwards, Futures, and Swaps—Item II.2 of the Reserves Data Template

167 In determining foreign currency flows, financial derivatives can be regarded as instruments that unbundle various contractual rights and obligations, allowing for the transfer or exchange of risks. Settlement is in the form of specified cash flows, the size of which are determined by reference to, or derived from, values of underlying instruments (foreign currencies, securities, and commodities) or from particular financial indexes (such as interest rates, exchange rates, and stock price indexes).

168 Item II.2 of the Reserves Data Template is for reporting on forwards, futures, and swaps. Options, which are financial derivatives that may or may not be exercised, are to be reported in Section III.

169 Only financial derivatives settled in foreign currency vis-à-vis domestic currency should be covered in item II.2 of the Reserves Data Template.

170 Forwards and futures are agreements to buy or sell a fixed quantity of a particular asset (for example, currency) at a specified future date at a pre-agreed price. Swaps are agreements by two parties to exchange cash flows in the future according to a prearranged formula. Futures and swaps are no more than variations of forward contracts.

171 A forward contract, as distinguished from a futures contract, is an "over-the-counter" (OTC) instrument. It is not traded on organized exchanges but by dealers (typically banks) trading directly with one another or with their counterparties over the telephone, by computer, or by facsimile. Examples are forward exchange agreements.

172 The essential difference between a forward contract and a futures contract is that the latter is traded on organized exchanges and settlement is with a central counterparty. Examples of futures contracts are interest rate futures, equity futures, currency futures, and commodity futures.

173 Swaps can be considered as a series of forward contracts. One type of swap, often referred to as a foreign exchange swap, involves the exchange of two currencies (principal amount only) on a specific date at a rate agreed to at the time of inception of the contract (the short leg) and the reverse exchange of the same two currencies at a date further in the future at a rate agreed at the time of the contract (the long leg).[9] Another type of swap, often referred to as a currency swap, involves contracts that commit two counterparties

[8]See also Chapter 4 (paragraphs 199–205) on securities with embedded put options.

[9]For example, an initial sum in U.S. dollars is exchanged for its equivalent in pounds sterling (a spot transaction) and a reverse exchange taking place at the maturity of the swap. Both spot/forward and forward/forward swaps are included. Short-term swaps carried out as "tomorrow/next day" transactions also are included in this category.

to exchange principal amounts in different currencies and streams of interest payments in different currencies for an agreed period of time and to re-exchange the principal amounts at maturity at the same exchange rate. These and other types of swaps are covered in item II.2 of the Reserves Data Template.

174 The foreign currency flows that should be reported in Section II of the Reserves Data Template are the foreign exchange commitments (nominal or notional value—see also paragraph 176) that need to be met at settlement of all outstanding forward, futures, and swap contracts.[10]

175 Where future contracts are subject to daily settlement and so predetermined cash flows for such futures contracts are negligible, no value is to be reported in Section II of the Reserves Data Template. However, the notional value of futures settled in a foreign currency should be provided in the country notes.

176 For countries that use nondeliverable forwards (NDFs) that are settled in foreign currency, the notional value of such contracts should be included in item II.2 of the Reserves Data Template. This treatment is to take account of the fact that, like forwards, NDFs can have a significant impact on a country's exchange rate. As NDFs are not identified as such in the Reserves Data Template, their notional value should be clearly identified in country notes accompanying the data. NDFs settled in domestic currency but denominated (or indexed) to a foreign currency should be reported in Section IV and are discussed in Chapter 5 (paragraphs 245–250).

177 In the Reserves Data Template, short and long positions refer to those corresponding to future outflows and inflows of foreign currency, respectively.

Reporting Other Foreign Currency Drains

Other Predetermined Foreign Currency Flows—Item II.3 of the Reserves Data Template

178 Item II.3—"other"—should be used to report on the flows not included in items II.1 and II.2 of the Reserves Data Template. These include:

- Predetermined foreign currency outflows and inflows relating to repos, reverse repos, and gold swaps (as well as those associated with securities lending with cash collateral), accompanied by appropriate signs. Report repos (outflows) when the collateralized securities remain in reserves. Report reverse repos and securities lending with cash collateral (inflows) when the repo asset is not recorded in reserve assets (see Appendix 3).
- Accounts payable that are materially significant, including scheduled payments for goods and services previously purchased on credit by the authorities, payments of interest and principal in arrears, and wages and salaries outstanding (outflows of foreign currency).

179 Item II.3 should only be used to report materially significant accounts receivable from creditworthy entities (inflows of foreign currency); when they are included in II.3, they should be reported separately from outflows. Inflows not expected to be received by the authorities (such as accounts that are delinquent) within the specified time horizon should be excluded.

[10] Structured notes are classified as debt securities. Structured notes normally take the form of customized instruments with a bullet redemption and with either the redemption value or the coupon linked to movements in one or more economic variables, typically a currency, an interest rate, an asset or commodity price, or a combination thereof.

4 Contingent Short-Term Net Drains on Foreign Currency Assets (Nominal Value): Section III of the Reserves Data Template

Defining Contingent Net Drains

180 Section III of the Reserves Data Template covers contingent short-term net drains on foreign currency resources. As discussed in Chapter 3, net drains refer to outflows (reductions in foreign currency resources) net of inflows (increases in foreign currency resources). Contingent outflows and inflows simply refer to contractual obligations that give rise to potential or possible future additions or depletions of foreign currency assets. Contingent drains are reported as off-balance-sheet activities, since only actual assets and liabilities should be reflected on balance sheets. Section III of the Reserves Data Template differs from Section II because foreign currency flows to be reported in Section III are contingent upon exogenous events. As with predetermined foreign currency drains covered in Section II of the Reserves Data Template, contingent drains can arise from positions with either residents or nonresidents.

181 Section III covers two different types of contingent flows: (1) those that emanate from potential assets and liabilities (for example, undrawn and unconditional credit lines, and contingent liabilities in the form of foreign exchange guarantees); and (2) those that reflect possible future inflows and outflows of foreign currency arising from the authorities' positions in existing options contracts, if and when the options are exercised.

182 Data on options required in Section III of the Reserves Data Template are more detailed than those disclosed on forwards, futures, and swaps in Section II, which emphasizes short and long positions. In Section III, in addition to short and long positions, call and put options are distinguished, as are written and bought options. The additional information is needed in view of the nonlinear nature of the payoffs from options to determine which contracts will result in foreign currency outflows when the options are exercised and which ones will result in inflows. The information also may reveal whether the authorities play an active (for example, as purchasers of options) or passive (as writers of options) role in the execution of the contracts, which may reflect their risk exposures.

183 Section III also calls for stress testing of the exposure (in terms of foreign exchange liquidity) arising from the options positions to different exchange rate scenarios. The stress testing is an encouraged but not a prescribed item of the SDDS.[1]

184 Notwithstanding these differences between Sections II and III, most of the general guidelines on reporting data for Section II of the Template also apply to Section III. For example, appropriate signs must accompany the data, that is, the plus (+) sign for inflows, and the minus (–) sign for outflows.

185 Short-term inflows and outflows of foreign currency are determined by the remaining maturities of the financial instruments, which cover three periods of the time horizon of one year. As in Section II of the Reserves Data Template, the "total" column shown in Section III should reflect the sum of the three subperiods.

186 For financial derivatives, the distinction between short and long positions, which reflect future outflows (i.e., contingent decreases in foreign currency

[1] The SDDS is discussed in Appendix 1.

resources) and inflows (i.e., contingent increases in foreign currency resources), respectively, is maintained.

187 The institutional units covered are those of the monetary authorities and the central government, excluding social security funds. As stated in footnote 11 in paragraph 20, the existence of a currency board does not remove the requirement of reporting data pertaining to the central government in the Template.

188 Except for options, which are to be based on notional values, all other contingent inflows and outflows of foreign currency are to be presented in nominal values.

189 Market values of options are to be reported in Section IV of the Reserves Data Template under memo items.

190 The rest of this chapter focuses on the identification of (1) contingent liabilities of the authorities, (2) potential outflows within one year or less (decreases in foreign currency resources) associated with securities with embedded options (puttable bonds), (3) contingent inflows and outflows pertaining to undrawn and unconditional credit lines, and (4) possible foreign currency flows arising from the authorities' positions in options contracts.

Contingent Liabilities

Contingent Liabilities in Foreign Currency—Item III.1 of the Reserves Data Template

191 Item III.1 of the Reserves Data Template is used to report the authorities' contingent liabilities in foreign currency, including collateral guarantees and other contingent liabilities. In principle, only contractual obligations of the authorities are included here. In practice, financial instruments issued with the support of government (public mandates) may also be covered, even though no explicit financial backing is provided by the authorities.[2] Nonetheless, when such instruments are reported in the Reserves Data Template, they should be separately identified in country notes accompanying the data.

[2] Examples include global bond issues of the Federal National Mortgage Association (Fannie Mae), a United States government-sponsored enterprise.

192 The reporting of guarantees is confined to those of foreign currency obligations falling due in one year or less. Such obligations include debt service and other payments that are triggered by specific events as set forth in the guarantees.

Collateral Guarantees—Item III.1(a) of the Reserves Data Template

193 Collateral guarantees in the Template refer to guarantees provided by the authorities backed by collateral; that is, in exchange for incurring the obligations, the authorities (the guarantors) would gain a claim on the collateral or other assets of the defaulting entity. The guarantees referred to in the Reserves Data Template are pledges of repayment by the authorities in the event of default by another entity or other guarantee triggering events.

194 Data to be reported under this item of the Template are the foreign currency flows that would occur if the guarantees are exercised, and not the value of any collateral backing the guarantees. When the value reported for the guarantees is net of the disposal value of the collateral that may be claimed, this should be made fully transparent in country notes accompanying the data.

195 Examples of collateral guarantees on debt falling due within one year, with the monetary authorities and other central government entities as the guarantors, include (1) guarantees on loans and securities with remaining maturities of up to one year, (2) deposit insurance covering foreign currency deposits with a remaining maturity of up to one year in banks that offer such insurance coverage, and (3) foreign exchange guarantees the authorities provide to fix the domestic currency costs to resident entities of international commercial transactions, whereby the authorities bear the risk of loss (or stand to gain) due to exchange rate changes. Because of the differing nature of collateral guarantees, additional information should be provided in country notes accompanying the data to specify clearly the types of collateral guarantees covered by the reported data.

Other Contingent Liabilities—Item III.1(b) of the Reserves Data Template

196 Other contingent liabilities refer to other legal or contractual obligations of the authorities that are contingent on some future event or action.

The criterion for reporting the contingent obligation in this item is that the authorities be "demonstrably committed" to meet the obligations when called upon to do so. Contingent liabilities are to be disclosed when the legal and contractual obligations take force.

197 Examples of other contingent liabilities are letters of credit, securities underwriting agreements, and foreign currency loan commitments the authorities provide to other domestic entities. Other examples are term deposits with remaining maturity of more than one year held at the monetary authorities by resident and nonresident depositors, which are redeemable subject to payments of penalties, and which are not covered in item II.(1) of the Reserves Data Template. Also included are foreign currency deposits held at the monetary authorities by commercial banks of the reporting country in respect of the regulatory reserves/liquidity requirements and which are not covered in item II.(1) of the Reserves Data Template. Foreign currency deposits with a remaining maturity of one year or less are included in item II.(1).

198 Contingent liabilities are to be disclosed in their nominal values to reflect the amount of the foreign currency flows when they occur.

Securities with Embedded Options (Puttable Bonds)

Foreign Currency Securities Issued with Embedded Options (Puttable Bonds)—Item III.2 of the Reserves Data Template

199 Item III.2 of the Reserves Data Template calls for the disclosure of information on puttable bonds. The latter generally refer to publicly traded debt instruments with embedded put options settled in foreign currency that allow creditors to demand early repayment of loan principal under specified conditions.[3] To assess contingent demands on foreign currency resources, the Template requires the disclosure of data on bonds with put options ("puttable bonds"): this is the case because, when creditors exercise the put options, the authorities immediately have to repay their medium- and long-term debt in advance of the original maturity of the instrument.

200 Only bonds with a residual maturity of greater than one year (with embedded put options that can be exercised, and so demand payment, in one year or less) should be reported in item III.2, as bonds with shorter maturities already are covered in Section II of the Reserves Data Template.

201 A bond recorded as a two-year bullet,[4] with a put after one year, for example, should be included in the total column under III.2, since creditors see such an instrument as a one-year bond with the option of a one-year extension.

202 Creditors are likely to elect to exercise the put option, once the contractual conditions are satisfied, if it is advantageous to them to do so.[5] When creditors exercise put options, from the perspective of the bond issuer, foreign currency outflows will occur because the issuer is required to redeem the bond using foreign currency resources. Some puts can only be exercised following specified "credit events," such as a borrower's credit rating falling below a prespecified threshold. Discrete puts are puts that may be exercised only on specified days.[6]

203 Only "hard puts" such as those discussed above are to be reported in the Reserves Data Template. "Hard puts" refer to put options embedded in securities under contractual provisions. "Soft puts" refer to the covenants that allow acceleration of repayment of the debt if the covenants are breached. "Soft

[3] From the perspective of creditors, put options shorten the contractual minimum maturity of the debt while allowing creditors the right to maintain the original maturity on the original interest rate basis. This affords creditors the opportunity to withdraw early and benefit from any increase in yields by exercising the put and relending the resources at a higher spread, as well as the ability to continue to lock in a favorable yield if interest rates decline. Debtors write put options as a means to achieve lower spreads. Financial crises have shown that debtors accepting put options may not have fully anticipated the difficulties they would face if options were exercised at the time they experienced a substantial loss of market access. This practice has exacerbated financial crises.

[4] A bullet loan or bond is a loan or bond whose principal repayments all take place at maturity.

[5] This allows creditors seeking to maintain their exposure to relend the resources and to benefit from the higher spread and permits creditors wanting to unwind their exposure to do so at an attractive price.

[6] Most puttable instruments include one or two put dates, although a few instruments are puttable semiannually. (Few instruments are puttable on a continuous basis.)

puts" are not to be reported because they are general in nature and are difficult to identify.[7]

204 Data on puttable bonds are to reflect the nominal values of principal and relevant interest payments due.

205 Because cash flows of puttable bonds are intrinsically uncertain, no breakdown of data by the three time periods under the one-year time horizon is required.

Undrawn, Unconditional Credit Lines

Undrawn, Unconditional Credit Lines—Items III.3 and III.4 of the Reserves Data Template

206 Items III.3 and III.4 are used for reporting undrawn, unconditional credit lines. Credit lines are contingent mechanisms that provide a country liquidity; they represent potential sources of additional reserve assets and foreign currency assets of the authorities. Consistent with the nature of reserve assets and other foreign currency assets covered in Section I of the Reserves Data Template, unconditional credit lines refer to those readily available to the authorities (that is, ones that are highly liquid and do not have material conditionality attached). In addition, only such credit lines that are undrawn should be reported.

207 The amounts to be entered over the three periods of the time horizon should reflect the credit committed for the respective time frames. If the credit commitment is available on demand with no period segmentation, it should be reported under the item "Up to one month."

208 Two different sets of data are to be differentiated under Section III in the Template: (1) credit lines provided to the authorities are to be recorded under item III.3; and (2) credit lines provided by the authorities are to be recorded under item III.4. Countries are to report either (1) or (2), depending on whether they are the debtors or the creditors. In cases where both (1) and (2) are applicable, they should be separately reported in the Reserves Data Template.

[7] Full payment under a hard put brings closure to the issue, while a default resulting from a breach of a loan covenant may trigger cross default/cross acceleration clauses in other external debts, at least until the default has been covered by a full payment on the debt in question.

209 Only credit lines in foreign currencies are to be recorded in Section III of the Reserves Data Template. A creditor should not include in Section III of the Reserves Data Template credit lines it provides in its domestic currency. A debtor only should report credit facilities committed in foreign currency.

210 While undrawn credit lines are to be reported in Section III of the Reserves Data Template, actual assets and liabilities (principal and interest) are incurred when the credit lines are drawn. Thus, credit lines that have been drawn should be reported in Sections I and II of the Reserves Data Template accordingly: increases in foreign currency resources in Section I are counterbalanced by predetermined future loans and securities obligations in Section II of the Reserves Data Template. In cases where countries treat swap drawings as repurchase agreements (see the discussion below of reciprocal currency arrangements), such information also should be disclosed in Section IV of the Reserves Data Template under securities lending and repurchase agreements. Credit lines the authorities provide are to be treated symmetrically.

211 Credit lines covered in the Template include reciprocal currency arrangements among central banks and with the Bank for International Settlements (BIS), financing agreements between central banks and consortia of private financial institutions that allow the central banks to acquire new funding under specified circumstances, and certain elements of credit arrangements between countries and the IMF.

212 *Reciprocal currency arrangements are short-term arrangements among central banks and with the BIS that afford the central banks temporary access to the foreign currencies they need for intervention operations to support their currencies.* When such a credit line is drawn, a swap transaction takes place. This involves a spot (immediate delivery) transaction, in which one central bank transfers securities (it might involve foreign or domestic currency) to another central bank in exchange for foreign currency. It might also be structured as an exchange of currencies. The transaction entails a simultaneous forward (future delivery) transaction, in which the two central banks agree to reverse the transactions, typically three months in the future. The central bank that initiates the swap transaction pays its counterpart interest on the foreign currency drawn. In view of the reversible nature of these transactions, it is recommended that, when the credit lines are drawn, they be treated as loans in the Reserves Data Template with appropriate entries recorded in Sections I, II, and IV of the Reserves Data Template. Reciprocal currency arrangements should only be included if they are unconditional. Both counterparties should report the credit line under "credit lines provided by," and neither counterparty need report the reciprocal swap arrangement as "credit lines provided to" the other because they are lending their own, not foreign, currency to one another. If the reporting party is providing foreign exchange and not domestic currency to a counterpart, then it should be recorded as "credit lines provided to." A swap credit line that requires foreign currency assets as collateral should not be included in items III.3 and/or III.4, although it should be noted in country notes.

213 Credit lines between central banks and private financial institutions can take different forms and generally involve the payment of a regular commitment fee by a potential borrower to a provider of credit in exchange for opening and maintaining a credit line, with provisions allowing for renewals. Some credit lines are in the form of swap facilities: at the time a credit line is drawn upon, domestic currency securities owned by the authorities are swapped for foreign currency. Others are pure credit facilities.[8]

214 Commitments by countries to the IMF under the GAB and the NAB[9] are not to be included in Section III of the Reserves Data Template. This is because lending to the IMF under the GAB and the NAB results in an increase in the countries' reserve positions at the IMF (which is part of official reserve assets), and thus does not result in a reduction in the level of official reserve assets.[10]

215 Similarly, countries' commitments to lend to IMF Managed Trust Accounts and similar bilateral lending arrangements are not to be reported in Section III of the Reserves Data Template.[11] Creditor claims under these lending agreements are considered part of a member's reserve assets, provided the terms of the agreement indicate that the claims are readily redeemable if the creditor represents a balance of payments need, and thus do not result in a reduction in the level of reserve assets.

216 In general, IMF arrangements are conditional lines of credit and thus should not be included in Section III of the Reserves Data Template. However, where a country has not drawn amounts that have become available (for instance, because it treats an arrangement as precautionary), these amounts can be shown in Section III as available over the period up to the next "test date."[12, 13] It should be noted that inclusion, in precautionary arrangements, of amounts available only up to the point of the next test date will cause the amount of unconditional lines of credit to fluctuate over time.[14] In addition, countries are encouraged to indicate in

[8] Other contingent financial arrangements are in the form of private market-based insurance: the debtor pays an insurance premium to compensate the writer of the option (the creditor) for the risks undertaken. The insurance is against adverse liquidity risks.

[9] The GAB and the NAB are standing borrowing arrangements between the IMF and a number of lenders. They comprise a series of individual credit arrangements between lenders and the IMF. Calls under these credit lines can be made only under certain circumstances and for specific amounts. Once calls have been approved, the IMF is authorized to draw under these arrangements up to the agreed amount.

[10] Drawings take place under the GAB in domestic currency; they also occur under the NAB in domestic currency unless the lender is an institution of a nonmember. In such cases, foreign currency (i.e., the currency of another IMF member) is used. For IMF members, although lending under the GAB and the NAB is in domestic currency, such lending increases the country's reserve position in the IMF. A country's claims on the IMF under the GAB and the NAB are reserve assets because the country can obtain an equivalent amount of convertible foreign currency from the IMF if it represents that it has a balance of payments need.

[11] The reporting in the reserve data template of note purchase agreements (NPAs) with the IMF is discussed in Appendix 8.

[12] A "test date" is a date at which end-of-period "performance criteria" in a program with the IMF (e.g., a floor on net international reserves or a ceiling on the fiscal deficit) have to be observed if any drawings are to be made thereafter without a waiver. For resources available under Fund facilities, such as the Precautionary and Liquidity Line (PLL) and the Flexible Credit Line (FCL), the recording in Section III (Lines of Credit) should conform to the specific availability provisions of the agreement with the IMF. See Appendix 7 (Question 2 of Frequently Asked Questions on the Characteristics of Reserve Assets).

[13] Although drawings from IMF facilities generally also depend on "continuous" performance criteria, these performance criteria are generally of a form that requires the authorities to refrain from taking certain actions, and thus are not regarded as material conditionality for the purposes of the Reserves Data Template (see paragraph 206). The usual continuous performance criteria include, for instance, absence of introduction of multiple currency practices and nonoccurrence of official external payment arrears.

[14] For instance, amounts may be available as of end-January under the "up to one month" heading (based on observance of performance criteria for end-December) that will not be available as of end-March (as continued availability will depend on observance of performance criteria for end-March, which will not be ascertained for several days or weeks).

the country notes the amounts of Fund arrangements that are scheduled to become available, subject to observance of the relevant conditions, over the next one, three, and twelve months. The unconditional credit facilities that arise from memberships of regional pooling arrangements such as the Latin American Reserve Fund (LARF) should be included in Section III.3(a) "other national monetary authorities, BIS, IMF, and other international organizations," with a footnote provided explaining the nature of these credit lines.

217 When the authorities provide the credit lines, the data should be accompanied by a minus (–) sign, indicating potential outflows of foreign currencies. Where the authorities receive the credit lines, the data should be preceded by a plus (+) sign, showing potential inflows of foreign currencies.

218 Credit facilities and commitments associated with the BIS, the IMF, national monetary authorities, and other international organizations can be separately identified under item III.3(a) (provided by these organizations), and item III.4(a) (provided to these organizations), with appropriate signs.

219 The coverage of banks is the same as that defined in Chapter 2 (see paragraph 92). The term "other financial institutions" refers to nonbank financial institutions.

220 The distinction between banks and other financial institutions that are "headquartered in the reporting country" and those "headquartered outside the reporting country" is the same as that defined in Chapter 2 (paragraphs 103–105).

221 Data are to reflect nominal values of the credit lines.

Options

Short and Long Positions in Options—Item III.5 of the Reserve Data Template

222 Item III.5 of the Reserves Data Template discloses information on the authorities' options positions.[15] An option agreement is a contract giving the holder the right, but not the obligation, to buy (i.e., call) or sell (i.e., put) a specified underlying asset at a pre-agreed price (the strike price), either at a fixed point in time (the European option) or at a time chosen by the holder until maturity (the American option).[16] In the case of foreign currency options, the amount of foreign exchange that can be purchased or sold by the exercise of the option is the notional value of the option contract.

223 The Reserves Data Template calls for information in notional values on short positions covering (1) bought puts and (2) written calls (assuming that the purchaser of the put or writer of the call will deliver foreign exchange—not its domestic currency—if these options are exercised). It also includes information on long positions covering (1) bought calls and (2) written puts (assuming that the purchaser of the call or writer of the put will receive foreign exchange—not its domestic currency—if these options are exercised). (See Box 4.1 for definitions of these terms.)

224 For a conservative measure of the possible drain arising from an option position, where there is more than one exercise date for an option, the earliest date should be used to determine its maturity. (This treatment, for example, applies to American- and Bermudan-style options with and without margin calls.)

225 To estimate the possible future inflows and outflows in foreign exchange arising from the position in options, information to be disclosed includes (1) the notional value of all the options with maturities up to one month, more than one month and up to three months, and more than three months and up to a year; and (2) the notional value of options (short and long positions) in the money for each maturity category, under several exchange rate scenarios (depreciation of domestic currency by 5 and 10 percent and appreciation of domestic currency by 5 and 10 percent).

226 "In-the-money" options are ones that would produce a profit for the holder if the options were exercised.

227 The notional value of the overall position is a good proxy of the maximum exposure resulting from the options positions.

228 To facilitate the reporting of data on options, selected terms and basic characteristics of option contracts are summarized in Box 4.2.

[15]NDF options settled in foreign currency are also included in this item. NDF options settled in domestic currency are included in Section IV.1.(b).

[16]There are also types of option contracts that can be exercised at a number of specified times in the future (Bermudan-style options).

Box 4.1 Definitions of Puts and Calls

Bought puts: Foreign currency put options give buyers the right (but not the obligation) to sell foreign currency at agreed prices on or before specified dates. Data on "bought puts" refer to the amounts of foreign currency that the central bank and the central government (as buyers of the put options) will have to part with if they exercise the option (i.e., sell the foreign currency).

Written calls: Foreign currency call options give buyers the right (but not the obligation) to buy foreign currency at agreed prices on or before specified dates. Data on "written calls" refer to amounts of foreign currency that the central bank and the central government (as writers of the call options) will have to part with if the buyers exercise the options (i.e., buy the foreign currency).

For call options to purchase foreign currency, the notional value refers to amounts of foreign currency that the central bank and the central government (as buyers of the call options) will receive if they decide to exercise the call options (i.e., buy the foreign currency).

For put options to deliver currency, the notional value refers to amounts of foreign currency that the central bank and the central government (as writers of the put options) will receive if the buyers of options exercise the put options (i.e., sell the foreign currency).

Bought puts and written calls, therefore, reflect potential foreign currency outflows, hence, short positions. Bought calls and written puts reflect potential inflows, hence, long positions. However, the purchase of puts or calls on any two currencies provides foreign exchange inflows on bought puts and written calls, if the contracts so specify.

229 In completing items III.5(a) and III.5(b) of the Reserves Data Template, note that holding an option that gives one the right to buy a given amount of foreign exchange at a specified local currency price is equivalent to holding an option that gives one the right to sell a given amount of local currency in exchange for foreign currency at the same price.

230 All options should, if necessary, first be converted into puts and calls in foreign currency, instead of local currency (see Appendix 4 for detail).

Pro-memoria: In-the-Money Options

231 The notional value of all options in the portfolio provides an approximate measure of possible additions or subtractions to foreign exchange resources that might arise from the options portfolio. It is not an exact measure because in many circumstances only a fraction of the options will be exercised and because it gives no sense of conditions under which the options will be exercised. To describe all possible scenarios in which the options position would affect foreign exchange resources, however, would require a much more elaborate template. The Pro Memoria section conveys a sense of when the options would be exercised without engaging in elaborate stress testing. The idea is to look at five simple scenarios for the local currency exchange rate and to gauge the impact of the options on foreign exchange resources for each scenario.[17] In all scenarios, it is assumed that the cross rates among foreign currencies remain unchanged from the current rates.

232 The first scenario assumes the local currency exchange rate remains unchanged relative to all foreign currencies. The Template asks for the notional value of the options in the money at current exchange rates. This gives a sense of the options that would be exercised and hence the drain and additions to foreign exchange resources if there were no further change in exchange rates.

233 The second scenario assumes a 5-percent depreciation of the local currency relative to all foreign currencies and no further change in exchange rates thereafter. The Template asks for the notional value of the options that would be in the money under such a scenario. The third scenario poses a 5-percent appreciation of the local currency against all foreign currencies, and no further change in exchange rates. The fourth and fifth scenarios are similar but examine a 10-percent depreciation and appreciation, respectively.

234 A put option is "in the money" if the market price is below the strike price. A call option is "in the money" if the market price is above the strike price. Where long positions are held, calls are exercised if the market price is above the strike price; and puts are exercised when the market price is below strike price. When these options are exercised, they will add to foreign currency resources.

235 An example of these stress-testing scenarios is shown in Appendix 4.

[17] In the case of cash-settled options, the estimated future inflow/outflow should be disclosed. Positions are "in the money" or would be, under the assumed values.

Box 4.2 Definitions of Selected Terms on Options

Call option: A call option gives its holder the right, but not the obligation, to purchase a fixed amount of foreign currency (the notional value) at a prespecified local currency price (the strike price) at one or more dates in the future (the exercise date(s)).

Put option: A put option gives its holder the right, but not the obligation, to sell a fixed amount of foreign currency (the notional value) at a prespecified local currency price (the strike price) at one or more dates in the future (the exercise date(s)).

Strike price (or exercise price): For options to purchase or sell currencies, the strike price is the prespecified price at which the option holder may exchange one currency for another currency. Throughout this discussion, this will be expressed in terms of the local currency price of foreign exchange.

Notional value: The notional value of the contract is the amount of foreign exchange that can be purchased or sold by the exercise of the option. Throughout the ***Guidelines***, this will be expressed in terms of units of foreign currency.

Exercise date(s): These are the dates on which the option holder may exercise the option. The last, and perhaps only, date at which the option can be exercised is the expiration date of the option.

European-style option: A European-style option has only one exercise date and that is the expiration date of the option.

American-style option: An American-style option can be exercised at any date up to and including its expiration date.

In the money: A foreign currency option is in the money if the current market price for foreign exchange is different from the option's strike price and the price differential makes it advantageous for the holder of the option to exercise it. A call option is in the money if the market price is above the strike price. The holder of the option could make a profit by exercising the option—and thus acquire foreign exchange at the strike price—and immediately resell the foreign exchange at the higher market price. Similarly, a put option is in the money if the market price is below the strike price.

Out of the money: An option is out of the money when the market price differs from the strike price and the price differential makes it disadvantageous to exercise the option. A call option is out of the money when the market price is below the exercise price. A put option is out of the money when the market price is above the strike price.

Short position: For purposes of the Template, short positions pertain to option contracts that, if exercised, would result in a drain on foreign currency resources.

Long position: For purposes of this template, long positions pertain to option contracts that, if exercised, would result in an addition to the authorities' foreign currency resources.

5 Memo Items: Section IV of the Reserves Data Template

Coverage of Memo Items

236 Section IV of the Reserves Data Template provides information covering (1) positions and flows not disclosed in Sections I–III but deemed relevant for assessing the authorities' reserves and foreign currency liquidity positions and risk exposure in foreign exchange; (2) additional details on positions and flows disclosed in Sections I–III; and (3) positions and flows according to a breakdown or valuation criteria different from those found in Sections I–III.

237 Information on seven different items is to be disclosed in Section IV of the Reserves Data Template. They are as follows:

- Short-term domestic currency debt indexed to foreign exchange rates.
- Financial instruments denominated in foreign currency and settled by other means (e.g., in domestic currency). This item includes derivatives (forwards, futures, swaps, and options contracts), as well as other instruments.
- Pledged assets.
- Securities lent and on repos (as well as gold swapped).
- Financial derivatives assets (net, marked to market).
- Derivatives that have residual maturities longer than one year, with a breakdown between derivatives subject and not subject to margin calls.
- Currency composition of reserve assets (disseminated at least once a year).

238 In reporting data on the memo items, data pertaining to assets should be separately recorded from those on liabilities wherever applicable. An exception is financial derivative asset items, for which the "net" basis means that the liabilities are netted from the assets (see discussion on financial derivatives later in this chapter).

239 Types of instruments are to be identified where applicable.

240 Where instruments are marked to market in a currency other than the reporting currency, end-period market prices and exchange rates should be used to convert the values to the reporting currency.

241 After presenting some brief comments on the recording of selected memo items as shown below, the rest of this chapter discusses in greater detail the reporting of (1) financial instruments denominated in foreign currency and settled by other means, (2) securities lent and repurchase agreements, and (3) financial derivatives assets.

Financial Instruments Denominated in Foreign Currency and Settled by Other Means

Short-Term Domestic Currency Debt—Item IV.(1)(a) of the Reserves Data Template

242 With respect to short-term domestic currency debt indexed to foreign exchange rates, consistent with the rest of the Reserves Data Template, "short-term" is determined by the residual maturity of the instruments as defined in Chapter 1. Accordingly, the data to be reported should cover such short-term debt with (1) original maturity of one year or less, (2) longer original maturity where remaining maturity is one year or less, and (3) principal and interest payments falling due within the next 12 months for debt with remaining maturity of longer than one year. Only the total nominal amount is to be reported. Detail for the three subperiods within the one-year horizon is not required. Domestic currency debt refers to debt issued by the monetary authorities and the central government, excluding social security funds. Only such short-term debt indexed to foreign exchange rates and settled in the domestic currency is to be included in item IV.(1)(a) of the Reserves

Data Template. Domestic currency debt settled in foreign currencies is to be covered in Sections II and III of the Reserves Data Template as appropriate.

Financial Instruments Denominated in Foreign Currency and Settled by Other Means (e.g., in domestic currency)—Item IV.(1)(b) of the Reserves Data Template

243 The rationale for including information on these financial instruments is that they resemble instruments that are settled in foreign currency. These instruments are separately reported in Section IV of the Reserves Data Template because they are often issued in the domestic market and held by residents and thus are actually or potentially subject to different legal or regulatory restrictions. Information on this memo item should be broken down by type of instrument.

244 Financial instruments denominated in foreign currency and settled in domestic currency (and other means) include indexed securities and derivatives (forwards, futures, swaps, or option contracts). Data on the nominal/notional value should be reported, except for securities which should be valued at market value. Forwards and futures are defined in Chapter 3 (paragraphs 170–172) and options in Chapter 4 (paragraph 222). Short and long positions in derivatives should be separately reported.

245 This item includes NDFs denominated or indexed to a foreign currency but settled in a domestic currency. An NDF is typically an over-the-counter instrument. It differs from a normal foreign currency forward contract in that there is no physical settlement of the two currencies at maturity. The financial institution that sold the NDF contract will mark the notional value of the contract to market, using an index (or formula) agreed upon at the time the contract is entered into by the two counterparties. One party will make a cash payment to the other based on the contract's intrinsic (net) value.

246 The net amount can be settled in local currency or foreign currency (usually U.S. dollars). Whereas onshore banks trade in NDFs that settle in foreign or local currencies, typically, offshore banks deal in NDFs that settle in foreign currencies.

247 In addition to forward-based NDFs, there also can be options on NDFs. In an NDF option, the option buyer pays a premium to protect the foreign currency value of an amount in local currency. If the option expires "in the money," the writer pays the intrinsic value to the purchaser. There is no exercise of the option; the payment is automatic. If the option expires "out of the money," no payment is due to either party.

248 NDFs are commonly used to hedge local currency risks in emerging markets where local currencies are not freely convertible, where capital markets are small and undeveloped, and where there are restrictions on capital movements. Under these conditions, the normal forward foreign exchange contracts generally do not work well; they may not be enforceable and they may not be liquid.

249 Item IV.(1)(b) of the Reserves Data Template requires disclosure of NDFs settled in domestic currency only.[1] Such information is useful because NDFs can exert substantial indirect pressure on reserves. If market participants anticipate that a local currency will decline, they can buy derivatives that let them maintain the foreign currency value of their local currency assets; such widespread buying has the potential to further depress the value of the local currency.

250 The Reserves Data Template prescribes, where applicable, that the notional value of nondeliverable forward positions be shown in the same format as that for the notional value of deliverable forwards/futures in Section II of the Reserves Data Template.

Pledged Assets—Item IV.(1)(c) of the Reserves Data Template

251 Pledged assets refer only to reserve assets and other foreign currency assets listed in Section I that are pledged. As mentioned in Chapter 2, pledged assets that are clearly not readily available should not be included in reserves or in foreign currency assets. However, if certain pledged assets remain in reserves and other foreign currency assets, their values should be reported in item IV.(1)(c) of the Reserves Data Template. Pledged assets do not include assets encumbered under repos, securities lending, and similar arrangements. The latter arrangements are to be separately reported under item IV.(1)(d) of the Reserves Data Template.

[1]The notional value of NDFs settled in foreign currency vis-à-vis domestic currency is to be included in item II.2 of the Reserves Data Template, and its market value is to be included in financial derivative assets under item IV.(1)(e) of the Reserves Data Template, preferably on a separate line.

Securities Lent and Repurchase Agreements

Securities Lent and on Repo—Item IV.(1)(d) of the Reserves Data Template

252 This memo item is to provide additional information on the repo and securities lending activities that are covered by the Reserves Data Template. It concerns such activities of the monetary authorities and the central government that are settled in foreign currency. Thus, whether or not the repo and securities lending activities have been included in Section I of the Reserves Data Template along with associated liabilities in Section II, the Reserves Data Template requires that securities lent and repoed be recorded in item IV.(1)(d) of the Reserves Data Template. The Reserves Data Template also requires that the securities lent and repoed be reported in two separate categories, depending on whether or not the repo and related activities have been included in Sections I and II. Such reporting is necessary in order to differentiate repos from traditional loans and from traditional securities transactions. The identification of repo activities would facilitate the assessment of the level of reserve assets before the repo activities and the extent of leverage the authorities have undertaken.

253 In addition, the Reserves Data Template calls for the separate reporting of securities provided as collateral under repo transactions and the securities collateral taken in reverse repos. The data to be reported are the values of the securities. Institutions normally use market values (bid side), including the amount of any accrued interest, to determine the price of securities sold under repos and in security lending transactions.

254 Securities lent/acquired with no cash involved should be recorded in Section IV of the Reserves Data Template. Similarly, foreign currency flows associated with repos and securities lending that fall due beyond the one-year time horizon and are not reflected in Section II of the Reserves Data Template; nonetheless, such securities lent or repoed should be reported in Section IV of the Reserves Data Template. So the value of securities provided (or lent) in repos and the value of securities received (or borrowed) in reverse repos are to be reported separately under item IV.(1)(d) irrespective of the time horizon of the related cash flows. As was discussed in paragraph 85(ii), securities borrowed or acquired in reverse repos should never be included in Section I but always need to be reported under item IV.(1)(d): "borrowed or acquired but not included in Section I." To inform the user of deviations from this guidance, the item "borrowed or acquired and included in Section I" can additionally be used to report repo assets recorded in Section I. But if this approach is taken, it should be clearly specified in the country notes.

255 As discussed in Chapter 2 (see also *BPM6*, paragraphs 7.58–7.59), gold swaps are to be treated similarly to repos. The gold that is swapped should be included, as appropriate, among securities lent or repoed in item IV.(1)(d) of the Reserves Data Template (see also Appendix 3). Notwithstanding that Section IV. (1)(d) refers to securities lent and on repo, gold should be reported in this section with additional information in country notes.

256 Note that under repos or securities lending, either initial or variation margins (or both) are usually paid. As a result, the purchaser of the securities normally pays less than the market value of the securities, including the amount of any accrued interest, with the difference representing a predetermined margin. Also, there are cases where the borrower of securities has a need for a specific security; the lender of the securities may receive cash collateral in excess of the value of the securities lent, with the difference representing the margin. That is, due to margining, the value of securities lent or repoed reported in Section IV of the Reserves Data Template may not be equivalent to the cash exchanged; the same applies for reverse repos. The level of the margin is usually determined by the size and maturity of the repos, the type and maturity of the underlying securities, and the creditworthiness of the counterparty. Margin requirements allow for the anticipated price volatility of the security until the repos mature. Less marketable securities often require an additional margin to compensate for less liquid market conditions.[2]

257 The Reserves Data Template calls for comprehensive information on repos and security lending because of the importance of these instruments in global financial markets. Repos can be a useful asset management tool for the authorities, but repos can

[2] Written repo contracts normally require that repo securities be marked to market and the gains and losses be settled daily. Margin calculations also usually consider accrued interest on underlying securities and the anticipated amount of accrued interest over the term of the repos, the date of interest payment, and which party is entitled to receive the payment.

expose the authorities to serious risks if they are not managed appropriately. In particular, the authorities can face credit risks if they do not have effective control over the securities collateralizing the transaction and the counterparty defaults. Such credit risk can be considerable if the authorities engage in repo transactions in volume and in large amounts of foreign currency and if the creditworthiness of the counterparty is uncertain. Similarly, the authorities can use repos to acquire funds, which is a useful tool for managing liabilities. In these circumstances, the authorities would not want to provide the counterparty with excessive margins.

258 As with repos, experience has shown that the collateral securities in security lending may not serve as protection if the counterparty becomes insolvent or fails and the purchasing institution does not have control over the securities. If control of the underlying securities is not established, the authorities may be regarded as an unsecured general creditor of an insolvent counterparty. Under these circumstances, substantial losses are possible.

Financial Derivatives Assets (Net, Marked to Market)

Financial Derivatives Assets, net—Item IV.(1)(e) of the Reserves Data Template

259 The market values of the authorities' financial derivatives are to be reported in Section IV of the Reserves Data Template under the memo items. Item IV.(1)(e) of the Reserves Data Template mentions only "financial derivatives assets," but data on financial derivatives liabilities also are to be included; the positive (+) sign should accompany the asset data, and the minus (–) sign should precede the liability data.

260 The "net, marked to market" designation refers to the following: the difference between asset and liability positions yields the "net"[3] asset position. Financial derivatives are to be shown at their market values on a marked-to-market basis. "Marking to market" refers to revaluing the financial derivative using the prevailing market price.

261 This memo item relates to all financial derivative positions of the monetary authorities and the central government that are settled in foreign currency, irrespective of whether the positions are vis-à-vis residents or nonresidents.

262 Financial derivatives are to be disclosed by types of instruments (viz., forwards, futures, swaps, options, and others). All financial derivatives settled in foreign currency are to be disclosed, regardless of whether they have been reported in other sections of the Reserves Data Template.

263 With netting by novation, the legal obligations of the counterparties to make payments under the terms of the financial derivatives are extinguished and a new contract that requires only a net payment is created. Netting by novation is allowed if offsetting positions are maintained with the same counterparty and have the same maturity, and insofar as there is a legally enforceable netting agreement in place allowing settlement in net terms. Netting by novation also is allowed for matched positions on organized exchanges. Netting refers to the right to set off, or net, claims between two or more parties to arrive at a single obligation between the parties.[4]

264 As alluded to in previous chapters, the market value of a financial derivative generally can be derived from the difference between the agreed contract price(s) and the prevailing, or expected prevailing, market price(s) of the underlying instrument, appropriately discounted. If the prevailing market price differs from the contract price, the financial derivative contract has a market value, which can be positive or negative, depending on which side of the contract a party is on. In addition, the market value of a derivative contract can be positive, negative, or zero at various points in the life of the contract. Financial derivatives can be recorded as assets if their market values are positive; they can be shown as liabilities if their market values are negative. Note that options usually have a market value but do not change from asset to liability, or vice versa.

265 Prevailing market prices of an underlying instrument ideally should be observable prices on financial markets. Where they are not, as in some over-the-

[3]This is different in this context from the term "netting by novation."

[4]In financial market transactions, netting can serve to reduce the credit exposure of counterparties to a failed debtor and thereby to limit "domino failures" and systemic risks. As concerns limiting credit exposure, the ability to net contributes to market liquidity by permitting more activity between counterparties within prudent credit limits. This liquidity can be important in minimizing market disruptions due to failure of a market participant.

counter contracts, estimates of the prevailing market price can be derived from other available information.

266 Key characteristics of internal models used to calculate the market values of financial derivatives are to be disclosed in country notes accompanying the data reported in the Reserves Data Template (see also Appendix 2, footnote 16 of the Reserves Data Template).

267 For purposes of the Reserves Data Template, the reference date for the market valuation should be the last day of the reporting period.

268 The market value of a forward or a swap can be derived from the difference between the agreed contract price and the prevailing market price or the expected market price discounted accordingly, but the market valuation of options can be complex.

269 Four factors influence the market value of options: the difference between the contract (strike) price and the value of the underlying item; the price volatility of the underlying item; the time remaining to expiration; and interest rates. In the absence of an observable price, market value can be approximated using a financial formula, such as the Black-Scholes formula, which incorporates the four factors.[5] An option contract at its inception has a market value equal to the premium paid. Its market value, however, is adjusted as the reference price changes and the settlement date approaches. During the life of an option, the writer of the contract has a financial derivative liability and the purchaser of the option has a financial derivative asset. An option contract can expire without value to the holder, that is, it is not advantageous for the purchaser to exercise the option.

270 Unlike forward contracts, futures contracts are marked to market at the end of each trading day and the resulting gains or losses are settled on that day.[6] This means that at the end of each trading day the value of outstanding futures contracts is zero. This is in contrast to forwards, for which settlement payments are not usually made on a daily basis and contracts can build up considerable marked-to-market positions.

Financial Derivatives that have a Residual Maturity Greater than One Year— Item IV.(1)(f) of the Reserves Data Template

271 Financial derivatives with a residual maturity of greater than one year are to be reported in item IV.(1)(f) of the Reserves Data Template. Derivatives instruments subject to margin calls should be separately identified from those not subject to margin calls.

272 Financial derivatives to be reported in this item of the Reserves Data Template are similar to those called for in items II.2 and III.5 of the Reserves Data Template. That is, they refer to foreign currency commitments in the various types of financial derivative contracts. Such contracts are in foreign currency vis-à-vis domestic currency. The data to be reported are the nominal/notional values of the contracts.

Currency Composition of Reserves— Item IV.(2) of the Reserves Data Template

273 Regarding the currency composition of reserve assets, the Reserves Data Template does not require listing of individual currencies; only groups of currencies are to be identified. At a minimum, data on currency composition are to be disseminated under two major categories: currencies in the SDR basket and currencies outside of the SDR basket. This reporting is required at least once a year, with more frequent reporting encouraged. Currencies in the SDR basket at the time of writing include the U.S. dollar, the euro, the Japanese yen, and the pound sterling. By convention, in the Reserves Data Template, gold and claims denominated in SDRs (including SDR holdings and reserve position in the IMF) are considered to be denominated in currencies in the SDR basket (see also *BPM6*, paragraph 5.108). Countries can provide detailed information in country notes accompanying the data on the currency composition of their reserve assets if they so choose.

[5] Institutions that undertake significant options operations often use more complex variants of the Black-Scholes formula.

[6] The price of a futures contract is set in such a way that no cash changes hands when a contract is entered into (outside of any margin arrangements). The payments associated with the contract occur as daily price movements are reflected in cash flows into and out of margin accounts of the contract parties. To ensure that market participants pay for their losses, the exchanges require futures contract users to pay an initial margin (collateral). If the daily settlement process results in a loss, which, in turn, reduces the initial margin below a specified amount, the user is required to restore the initial margin by paying additional sums of money. The level of margin called is set by the exchanges and is usually a function of the volatility of the cash market of the underlying asset.

APPENDIX 1

The Special Data Dissemination Standard and the Data Template on International Reserves and Foreign Currency Liquidity

A1.1 The IMF's Special Data Dissemination Standard (SDDS) was established by the Fund's executive board in March 1996, with the aim of enhancing the availability of timely, reliable, and comprehensive economic and financial statistics. The SDDS is intended to guide member countries that have, or might seek, access to international capital markets in their provision of economic and financial data to the public. It was anticipated that the SDDS would contribute to the pursuit of sound macroeconomic policies and aid the functioning of financial markets.

A1.2 Subscription to the SDDS was and remains voluntary, and subscribing members agree to provide information on data categories that cover the four sectors of the economy (national income and prices, the fiscal sector, the financial sector, and the external sector). Within these sectors, the SDDS prescribes the coverage, periodicity (or frequency), and timeliness with which the data are to be disseminated. The SDDS coverage also prescribes the advance dissemination of release calendars for the data categories and that the data be simultaneously released to all interested parties. More information on the SDDS can be found on the Dissemination Standards Bulletin Board (DSBB) on the IMF's Website: http://dsbb.imf.org.

A1.3 The original (March 1996) specification of the SDDS included, as a prescribed category, the presentation of information on gross international reserves (reserve assets) with a periodicity of one month and a lag of no more than one week. The provision of these data with a periodicity of one week was encouraged. The SDDS also encouraged, but did not prescribe, the provision of information on reserve related liabilities.

A1.4 At the time of the executive board's first review of the SDDS in December 1997, events in international financial markets had underscored the importance of the timely provision of information on a country's reserves and reserve related liabilities. It became clear that monthly information on gross international reserves alone did not allow for a sufficiently comprehensive assessment of a country's official foreign currency exposure, and hence its vulnerability to pressures on its foreign currency reserves. At this time the executive board asked the staff to consult with SDDS subscribing countries and with users of the SDDS to determine what might be done to strengthen the coverage of reserves and reserve-related liabilities in the SDDS. The results of this consultation were initially considered by the executive board in early September 1998 and were further discussed in December 1998 (at the time of the second review of the SDDS), including review of an initial proposal for a data template on international reserves and related items.

A1.5 The executive board reached a decision on the means of strengthening the provision of information on international reserves and foreign currency liquidity within the SDDS in March 1999 by ratifying the dissemination of data on reserves through the Reserves Data Template. In addition to providing for more explicit specification of the constituents of official reserve assets, the Template provides for the inclusion of details on other official foreign currency assets and on predetermined and contingent short-term net drains on foreign currency assets. It is thus much broader in coverage than the original SDDS specification of gross reserves assets and established the new standard for the provision of information to the public on the amount and composition of reserve assets, other foreign exchange assets held by the central bank and the government, short-term foreign currency liabilities, and related activities that can lead to demands on reserves (such as financial derivatives positions and guarantees extended by the government for private borrowing).

A1.6 In reaching its decision on the Reserves Data Template, the executive board took account of the widespread interest in increasing the transparency of information on international reserves and related information. It was also conscious of the concerns expressed by member countries about the resource costs of compiling and disseminating detailed, frequent, and timely data and the possibility that this would reduce the effectiveness of exchange market intervention. The final decision reflected a balancing of these objectives and concerns. The Template was finalized in cooperation with a working group of the Committee on the Global Financial System of the G10 Central Banks.

A1.7 The Reserves Data Template was modified in April 2009 to be consistent with an IMF board decision on strengthening the effectiveness of Article VIII, Section 5 of the IMF Articles of Agreement. The IMF executive board saw the need for the Reserves Data Template to cover all derivatives denominated in foreign currency and settled by other means (e.g., in domestic currency), Section IV.(1)(b), and not just nondeliverable forwards as previously. The changes in the Reserves Data Template became effective in August 2009, starting with data reported for July 2009. The *Guidelines* have been updated to ensure consistency with the modifications to the Reserves Data Template and the text of the *BPM6*.

A1.8 The SDDS prescription for completion of the Reserves Data Template calls for the full dissemination of data on a monthly basis, with a lag of no more than one month, although data on gross international reserves are still prescribed for dissemination on a monthly basis with a lag of no more than one week. The dissemination of the full template on a weekly basis, with a lag of no more than one week, is encouraged.[1]

[1]See *The Special Data Dissemination Standard: Guide for Subscribers and Users*, International Monetary Fund.

APPENDIX

2 Sample Form for Presenting Data in the Template on International Reserves and Foreign Currency Liquidity

Information to be Disclosed by the Monetary Authorities and Other Central Government, Excluding Social Security[1, 2, 3]

I. Official reserve assets and other foreign currency assets (approximate market value)[4]	
A. Official reserve assets	
(1) Foreign currency reserves (in convertible foreign currencies)	
(a) Securities	
of which: issuer headquartered in reporting country but located abroad	
(b) Total currency and deposits with:	
(i) other national central banks, BIS, and IMF	
(ii) banks headquartered in the reporting country	
of which: located abroad	
(iii) banks headquartered outside the reporting country	
of which: located in the reporting country	
(2) IMF reserve position	
(3) SDRs	
(4) Gold (including gold deposits and, if appropriate, gold swapped)[5]	
—volume in fine troy ounces	
(5) Other reserve assets (specify)	
—financial derivatives	
—loans to nonbank nonresidents	
—other	
B. Other foreign currency assets (specify)	
—securities not included in official reserve assets	
—deposits not included in official reserve assets	
—loans not included in official reserve assets	
—financial derivatives not included in official reserve assets	
—gold not included in official reserve assets	
—other	

II. Predetermined short-term net drains on foreign currency assets (nominal value)					
			Maturity breakdown (residual maturity)		
		Total	Up to 1 month	More than 1 month and up to 3 months	More than 3 months and up to 1 year
1. Foreign currency loans, securities, and deposits[6]					
—outflows (–)	Principal				
	Interest				
—inflows (+)	Principal				
	Interest				
2. Aggregate short and long positions in forwards and futures in foreign currencies vis-à- vis the domestic currency (including the forward leg of currency swaps)[7]					
(a) Short positions (–)					
(b) Long positions (+)					
3. Other (specify)					
—outflows related to repos (–)					
—inflows related to reverse repos (+)					
—trade credit (–)					
—trade credit (+)					
—other accounts payable (–)					
—other accounts receivable (+)					

III. Contingent short-term net drains on foreign currency assets (nominal value)				
		Maturity breakdown (residual maturity)		
	Total	Up to 1 month	More than 1 month and up to 3 months	More than 3 months and up to 1 year
1. Contingent liabilities in foreign currency				
(a) Collateral guarantees on debt falling due within 1 year				
(b) Other contingent liabilities				
2. Foreign currency securities issued with embedded options (puttable bonds)[8]				
3. Undrawn, unconditional credit lines[9] provided by:				
(a) other national monetary authorities, BIS, IMF, and other international organizations				
—other national monetary authorities (+)				
—BIS (+)				
—IMF (+)				
—other international organizations (+)				
(b) banks and other financial institutions headquartered in the reporting country (+)				
(c) banks and other financial institutions headquartered outside the reporting country (+)				
4. Undrawn, unconditional credit lines provided to:				
(a) other national monetary authorities, BIS, IMF, and other international organizations				
—other national monetary authorities (–)				
—BIS (–)				
—IMF (–)				
—other international organizations (–)				
(b) banks and other financial institutions headquartered in the reporting country (–)				
(c) banks and other financial institutions headquartered outside the reporting country (–)				
5. Aggregate short and long positions of options in foreign currencies vis-à-vis the domestic currency[10]				
(a) Short positions				
(i) Bought puts				
(ii) Written calls				
(b) Long positions				
(i) Bought calls				
(ii) Written puts				

III. Contingent short-term net drains on foreign currency assets (nominal value) *(continued)*				
		Maturity breakdown (residual maturity)		
	Total	Up to 1 month	More than 1 month and up to 3 months	More than 3 months and up to 1 year
PRO MEMORIA: In-the-money options[11]				
(1) At current exchange rates				
(a) Short position				
(b) Long position				
(2) +5% (depreciation of 5%)				
(a) Short position				
(b) Long position				
(3) –5% (appreciation of 5%)				
(a) Short position				
(b) Long position				
(4) +10% (depreciation of 10%)				
(a) Short position				
(b) Long position				
(5) –10% (appreciation of 10%)				
(a) Short position				
(b) Long position				
(6) Other (specify)				
(a) Short position				
(b) Long position				

IV. Memo items	
(1) To be reported with standard periodicity and timeliness:[12]	
(a) short-term domestic currency debt indexed to the exchange rate	
(b) financial instruments denominated in foreign currency and settled by other means (for example, in domestic currency)[13]	
—derivatives (forwards, futures, or options contracts)	
short positions	
long positions	
—other instruments	
(c) pledged assets[14]	
—included in reserve assets	
—included in other foreign currency assets	
(d) securities lent and on repo[15]	
—lent or repoed and included in Section I	
—lent or repoed but not included in Section I	
—borrowed or acquired and included in Section I	
—borrowed or acquired but not included in Section I	
(e) financial derivative assets (net, marked to market)[16]	
—forwards	
—futures	
—swaps	
—options	
—other	
(f) derivatives (forward, futures, or options contracts) that have a residual maturity of greater than one year	
—aggregate short and long positions in forwards and futures in foreign currencies vis-à-vis the domestic currency (including the forward leg of currency swaps)	
(a) short positions (–)	
(b) long positions (+)	
—aggregate short and long positions of options in foreign currencies vis-à-vis the domestic currency	
(a) short positions	
(i) bought puts	
(ii) written calls	
(b) long positions	
(i) bought calls	
(ii) written puts	
(2) To be disclosed at least once a year:	
(a) currency composition of reserves (by groups of currencies)	
—currencies in SDR basket	
—currencies not in SDR basket	
—by individual currencies (optional)	

Footnotes

[1]In principle, only instruments denominated and settled in foreign currency (or those whose valuation is directly dependent on the exchange rate and that are settled in foreign currency) are to be included in Sections I, II, and III of the Template. Financial instruments denominated in foreign currency and settled in other ways (for example, in domestic currency or commodities) are included as memo items under Section IV.

[2]Netting of positions is allowed only if they have the same maturity, are against the same counterparty, and a master netting agreement is in place. Positions on organized exchanges could also be netted.

[3]See definition of monetary authorities in paragraph 21 of the *Guidelines*.

[4]In cases of large positions vis-à-vis institutions headquartered in the reporting country, in instruments other than deposits or securities, they should be reported as separate items.

[5]The valuation basis for gold assets should be disclosed; ideally this would be done by showing the volume and price.

[6]Including interest payments due within the corresponding time horizons. Foreign currency deposits held by nonresidents with central banks should also be included here. Securities referred to are those issued by the monetary authorities and the central government (excluding social security).

[7]In the event that there are forward or futures positions with a residual maturity greater than one year, these should be reported separately under Section IV.

[8]Only bonds with a residual maturity greater than one year should be reported under this item, as those with shorter maturities will already be included in Section II, above.

[9]Reporters should distinguish potential inflows and potential outflows resulting from contingent lines of credit and report them separately in the specified format.

[10]In the event that there are options positions with a residual maturity greater than one year, these should be reported separately under Section IV.

[11]These "stress tests" are an encouraged, rather than a prescribed, category of information in the IMF's Special Data Dissemination Standard (SDDS). Results of the stress tests could be disclosed in the form of a graph. As a rule, notional value should be reported. However, in the case of cash-settled options, the estimated future inflow/outflow should be disclosed. Positions are "in the money" or would be, under the assumed values.

[12]Distinguish between assets and liabilities where applicable.

[13]Identify types of instrument; the valuation principles should be the same as in Sections I–III. The nominal/notional value of derivatives should be shown in the same format as for the nominal/notional values of forwards/futures in Section II and of options in Section III.

[14]Only assets included in Section I that are pledged should be reported here.

[15]Assets that are lent or repoed should be reported here, whether or not they have been included in Section I of the Template, along with any associated liabilities (in Section II). However, these should be reported in two separate categories, depending on whether or not they have been included in Section I. Similarly, securities that are borrowed or acquired under repo agreements should be reported as a separate item and treated symmetrically. Market values should be reported and the accounting treatment disclosed.

[16]Identify types of instrument. The main characteristics of internal models used to calculate the market value should be disclosed.

APPENDIX

3 Summary of Guidelines for Reporting Specific Data in the Reserves Data Template

	Reserves Data Template			
Type of transaction	Section I (a)	Section II (b)	Section III (c)	Section IV (d)
Securities[1]				
1. Repurchase agreements (repos)—securities provided to counterparty for cash received from counterparty.[2] The securities cease to be readily available to you as the securities lender.	Record cash received as an increase in currency and deposits in I.A.(1)(b). Deduct securities collateral from I.A.(1)(a).			Record market value of securities collateral in IV.(1)(d) as securities lent or repoed but not included in Section I of the Template.
2. Repurchase agreements (repos)—securities provided to counterparty for cash received from counterparty. However, the securities continue to be recorded as reserve assets.	Record cash received as an increase in currency and deposits in I.A.(1)(b). Leave securities collateral in I.A.(1)(a).	Enter loan repayable related to repos as predetermined cash outflows in II.3 of the Template (outflows related to repos).		Record market value of securities collateral in IV.(1)(d) as securities lent or repoed and included in Section I of the Template.
3. Reverse repos—securities received from counterparty for cash provided to counterparty, where the repo asset (loan receivable) is liquid and readily available to the new owner/holder of the securities.	Record cash provided as a decrease in currency and deposits in I.A.(1)(b). Do not add securities collateral in I.A.(1)(a). Record a repo asset (loan receivable) in I.A.(5).			Record market value of securities collateral in IV.(1)(d) as securities acquired but not included in Section I of the Template.
4. Reverse repos—securities received from counterparty for cash provided to counterparty, where the repo asset (loan receivable) is NOT liquid and NOT readily available to the new owner/holder of the securities.	Record cash provided as a decrease in currency and deposits in I.A.(1)(b). Do not add securities collateral in I.A.(1)(a). Do not record a repo asset in I.A.(5) if your loan receivable is not readily available.	Enter loan receivable related to reverse repos as predetermined cash inflow in II.3 of the Template (inflows related to reverse repos).		Record market value of securities collateral in IV.(1)(d) as securities acquired but not included in Section I of the Template.

[1] Market value of securities may differ from cash exchanged.

[2] If additional securities are provided under the repo (perhaps because of a margin call), the treatment of securities is the same as for the initial transaction.

Reserves Data Template

	Securities (*continued*)	Section I (a)	Section II (b)	Section III (c)	Section IV (d)
5.	Reverse repo followed by a repo.	Record transactions in two steps: Step 1: as shown in cell 3(a) or 4(a) above. Step 2: as shown in cell 2(a) above. In Step 2, the securities collateral are not deducted from item I.A.(1)(a) when provided as collateral, because these securities were not included in official reserves when received under Step 1.	Record transactions in two steps. Step 1: as shown in 3(b) or 4(b). Step 2: as shown in 2(b).		Record transactions in two steps: Step 1: record market value of securities collateral in IV.(1)(d) as securities acquired but not included in Section I of the Template. Step 2: record market value of securities collateral in IV.(1)(d) as securities lent or repoed but not included in Section I of the Template.
6.	Reverse repo followed by a sale of securities received.	Record transactions in two steps: Step 1: as shown in cell 3(a) or 4 (a) above; Step 2: add cash received from sale of securities to I.A.(1)(b), total currency and deposits.	Record transactions in two steps: Step 1: as shown in cell 3(b) or 4(b); Step 2. A predetermined cash outflow in II.3 of the Template (outflows related to repos) (see paragraph 87).		Record market value of securities received in IV.(1)(d) as securities acquired but not included in Section I of the Template.
7.	Securities lent accompanied by cash received as collateral.	Record transaction as a repo, as shown in cell 1(a) or 2(a), as appropriate.	Enter loan repayable, as shown in cell 2(b), if appropriate.		Record market value of securities, as shown in cell 1(d) or 2(d), as appropriate.
8.	Securities acquired and cash paid under a securities lending arrangement.	Record transaction as a reverse repo, as shown in cell 3(a) or 4(a), as appropriate.	Record loan receivable, as shown in cell 4(b), if appropriate.		Record market value of securities, as shown in cell 3(d) or 4(d), as appropriate.
9.	Securities lent, securities collateral received (no cash received).	Do not deduct securities lent from I.A.(1)(a) of the Template. Do not add securities collateral received in I.A.(1)(a) of the Template.			Record market value of securities lent in IV.(1)(d) of the Template as securities lent and included in Section I of the Template. Record market value of securities collateral received in IV.(1)(d) as securities acquired but not included in Section I of the Template.

		Reserves Data Template			
	Securities (*continued*)	Section I (a)	Section II (b)	Section III (c)	Section IV (d)
10.	Securities acquired with securities provided as collateral (no cash paid).	Do not add securities acquired to I.A.(1)(a) of the Template. Do not deduct securities collateral provided from I.A.(1)(a) of the Template.			Record market value of securities acquired in IV.(1)(d) of the Template as securities acquired but not included in Section 1 of the Template. Record market value of securities collateral in IV.(1)(d) as securities lent and included in Section I of the Template.
Gold					
11.	Gold deposits (with or without collateral received)	Leave gold on deposit with bullion bank in I.A.(4) of the Template (record at market value). Do not record securities collateral as official reserve assets.			
12.	Gold swaps (treat as repos or reverse repos, as appropriate)—gold provided to counterparty for cash received from counterparty. Gold provided: keep the gold in Section I. Gold received under a reverse repo from the original owner should be excluded from the template of the new holder.	Record cash received as an increase in currency and deposits in I.A.(1)(b). Record cash provided as a decrease in currency and deposits in I.A.(1)(b). Either record a repo asset (loans receivable) in I.A. (5)	Enter loan repayable, as appropriate related to repos as predetermined cash flows in II.3. Or enter loan receivable as appropriate related to reverse repo as prede-termined cash flow in II.3.		Record market value of gold in IV.(1)(d) of the Template, as shown in cells 2(d), or 4(d), as appropriate. Indicate in country notes that the transaction pertains to a gold swap.
Financial derivatives					
13.	Net, marked-to-market values of forwards, futures, swaps, options, and other financial derivative instruments.	Monetary authorities' net marked-to-market values of highly liquid financial derivatives used in reserve management, vis-à-vis nonresidents and settled in foreign currencies, should be recorded in I.A.(5) of the Template; those of the monetary authorities and the rest of the central government vis-à-vis residents, in I.B.			Net marked-to-market values of **all** financial derivatives vis-à-vis residents and nonresidents and settled in foreign currencies should be recorded in IV.(1)(e) of the Template by instrument.[3]

Reserves Data Template

	Financial derivatives (*continued*)	Section I (a)	Section II (b)	Section III (c)	Section IV (d)
14.	Nominal/notional value of forwards, futures, and swap contracts maturing within one year.		Record in II.2, under the relevant maturity breakdown, the nominal values of the foreign currency flows that need to be met at settlement with long and short positions separately. However,in cases of nondeliverable forwards, record notional value of contract settled in foreign currencies, long and short positions, in II.2 and, as with the notional value of futures settled in a foreign currency, identify them separately through country notes.		Record nominal/notional value of contracts denominated in a foreign currency but settled in domestic currency, long and short positions, in IV.(1)(b) of the template. Futures and nondeliverable forwards are recorded at notional value.
15.	Notional value of options contracts maturing within one year.			Record long and short positions, and options bought and written, separately in III.5 under the relevant maturity breakdown.	
16.	Nominal/notional value of financial derivative contracts with residual maturity greater than one year.				Record the nominal/notional value of such forwards, swaps, futures and options contracts in IV.(1)(f). Futures, nondeliverable forwards and options are recorded at notional value.

[3]Should cover those undertaken by both the monetary authorities and the central government (excluding social security funds), and for any purpose (i.e., not limited to those used for reserves management).

APPENDIX

4 Stress Testing of "In-the-Money" Options under the Five Scenarios Shown in the Reserves Data Template*

A4.1 All options should, if necessary, first be converted into puts and calls in foreign currency. For this conversion, the strike price is used. For example, the central bank has written a call option whereby the purchaser of the option has the right to buy LC100 million at a strike price of LC90 = $1.00[1] (in this example, the dollar is a foreign currency to the central bank that wrote the call option). As it is written, this is a local currency call option. In converting it into a foreign currency option, the right to buy LC100 million at a price of LC90 = $1.00 is equivalent to the right to sell $1.11 million (100 million/90) at the same strike price of LC90 = $1.00. In terms of the Template, this will be treated as a put option that the central authorities have written with a notional value of $1.11 million. Similarly, if the central bank has purchased a local currency put option with a notional value of LC200 million and a strike price of LC110 = $1.00, this will be treated as a purchased foreign currency call option with a notional value of $1.818 million (200 million/110).

A4.2 To aggregate the notional values, the options need to be expressed in a common currency. For purposes of this Template, that common currency is recommended to be the one in which the Template data are reported. For example, if the reporting currency is the U.S. dollar, to convert the notional values to U.S. dollar, the current market exchange rates are used, not the strike prices. Suppose, for example, that the central authorities wrote a call option to buy JY1.0 million with a strike price of JY1.4 = LC1.00. Assuming the exchange rate of JY 125 = $1.00, this would translate into an $8,000 call option (JY1,000,000 × 1/125). The strike price should not be used when converting from one foreign currency to another.

A4.3 To sum up, in computing the notional value of the options, neither the current nor the future local currency market exchange rate is used. When options written in terms of a given amount of local currency received or delivered in exchange for foreign currency are converted into foreign currency options, the strike prices are used. When options are written in terms of a foreign currency other than the foreign currency used in reporting the Template data, the market rate between the reporting currency and the foreign currency of the contract should be used to convert the notional value of the options to the reporting currency.[2]

A4.4 After all options have been converted to puts and calls in the reporting currency (say, U.S. dollars) and maturities have been determined, filling in the Template requires entering the relevant data.

A4.5 In the Pro Memoria section of the Template, five simple scenarios for the local currency exchange rate are used to gauge the potential impact of the options on foreign exchange resources. This appendix illustrates the foreign currency flows under the five scenarios.

A4.6 The first scenario assumes the local currency exchange rate remains unchanged relative to all foreign currencies. The second scenario assumes an immediate 5 percent depreciation of the local currency relative to all foreign currencies and no further change in exchange

* This Appendix was provided by Charles Thomas of the U.S. Federal Reserve Board of Governors.

[1] In the examples that follow, we denote the local currency as LC and assume the following for the current market exchange rates: LC100 = $1.00; JY125 = $1.00; $1.10 = EUR1.00. If market exchange rates are not readily available, the rates used should be indicated in the notes accompanying the data in the Template.

[2] In other words, the dollar notional value of all options is independent of the local currency exchange rate.

rates thereafter. The third scenario posits an immediate 5 percent appreciation of the local currency against all foreign currencies and no further change in exchange rates. The fourth and fifth scenarios examine 10 percent depreciation and appreciation, respectively.

A4.7 As noted in Chapter 4 of this document, a foreign currency call option gives its holder the right to buy foreign currency at a given local currency strike price. If the strike price is below the market price, the call option holder can exercise his option and receive (buy) foreign currency at the below-market strike price. Thus, a call option will be exercised, and is "in the money," when the market price is above the strike price. A foreign currency put option gives its holder the right to sell foreign currency at a given local currency strike price. If the strike price is above the market price, the put option holder can exercise his option and sell foreign currency at the above-market strike price. Thus, a put option will be exercised, and is "in the money," when the market price is below the strike price.

A4.8 If the central bank buys a call option and then exercises it, this results in an inflow of foreign currency. Similarly, if the central bank writes (sells) a put option and it is exercised, this also results in an inflow of foreign currency. As such, for purposes of this Template, bought calls and written puts are considered long foreign currency positions because their exercise results in an inflow of foreign currency. On the other hand, if the central bank writes (sells) a call option, and if it buys a put option, and they are exercised, this results in outflows of foreign currency. As such, for purposes of this Template, written calls and bought puts are considered short foreign currency positions.

A4.9 In the tables that follow, the convention of expressing the exchange rate as local currency (LC) per unit of foreign currency (viz., LC/$) is applied. That is, appreciation of the local currency is associated with a decline in LC/$; and vice versa, for a depreciation of the local currency. In Table A4.1, these are shown as +5% (depreciation); –5% (appreciation); +10% (depreciation), and –10% (appreciation), respectively, under pro memoria items (2), (3), (4), and (5). Table A4.1 shows the notional value of the options that are in the money at current exchange rates and under the four additional scenarios of currency depreciation and appreciation.

A4.10 In the tables, the sign (+) is used to indicate inflows of foreign currency; and the (–) sign, outflows of foreign currency.

A4.11 In Table A4.1 the results shown for pro memoria items (1)(a) short position (viz., –300, –50, 0) and (1)(b) long position (viz., +200, +300, +300) at current exchange rates correspond to short and long positions under exchange rates of LC/$ = 100, as depicted by figures that are in *italics* in supporting Tables A4.2–A4.4.

A4.12 Results shown in Table A4.1 for pro memoria items (2)(a) (viz., –1200, –700, –400, –100) and (2)(b) (viz., +1300, +400, +400, +500) correspond to figures that are in **bold** in supporting Tables A4.2–A4.4. The "total" in Table A represents the sum of each row.

A4.13 Figures A4.1–A4.5 present graphically the results shown in Tables A4.1–A4.4 under long and short positions for the three periods under the one-year horizon.

Table A4.1 Results of An Illustration of In-the-Money Options and Related Stress-Testing Under Specific Assumptions of Exchange Rate Changes (Nominal Value)

	Maturity breakdown (residual maturity, where applicable)			
	Total	Up to 1 Month	More than 1 month and up to 3 months	More than 3 months and up to 1 year
5. Aggregate short and long positions of options in foreign currencies vis-à-vis the domestic currency				
(a) Short position	–2850	–1000	–1250	–600
(i) Bought puts	–1050	–300	–350	–400
(ii) Written calls	–1800	–700	–900	–200
(b) Long positions	2500	1000	700	800
(i) Bought calls	1800	800	400	600
(ii) Written puts	700	200	300	200
PRO MEMORIA: In–the–money options				
(1) At current exchange rates				
(a) Short position	–350	–300	–50	0
(b) Long position	800	200	300	300
(2) +5 % (depreciation of 5%)				
(a) Short position	–1200	–700	–400	–100
(b) Long position	1300	400	400	500
(3) –5 % (appreciation of 5%)				
(a) Short position	–650	–100	–350	–200
(b) Long position	900	300	300	300
(4) + 10 % (depreciation of 10%)				
(a) Short position	–1800	–700	–900	–200
(b) Long position	1800	800	300	700
(5) –10 % (appreciation of 10%)				
(a) Short position	–1050	–300	–350	–400
(b) Long position	700	200	300	200
(6) Other (specify)				
(a) Short position				
(b) Long position				

Table A4.2 Foreign Currency Flows Resulting from Options Positions with Possible Exercise Date Less Than One Month Hence

	Options positions		Exchange rates (LC/$)							
	Strike price (LC/$)	Position size ($-million)	90	95	100	102.5	105	107.5	110	112.5
			Currency flows ($-million)							
Short Position		1000	–300	–100	***–300***	–300	**–700**	–700	–700	–700
Total bought puts		300	–300	–100	0	0	0	0	0	0
Bought put	93	200	–200	0	0	0	0	0	0	0
Bought put	97	100	–100	–100	0	0	0	0	0	0
Total written calls		700	0	0	–300	–300	–700	–700	–700	–700
Written call	98	300	0	0	–300	–300	–300	–300	–300	–300
Written call	104	400	0	0	0	0	–400	–400	–400	–400
Long Position		1000	200	300	***200***	400	**400**	600	800	800
Total bought calls		800	0	100	100	300	300	600	800	800
Bought call	93	100	0	100	100	100	100	100	100	100
Bought call	102	200	0	0	0	200	200	200	200	200
Bought call	106	300	0	0	0	0	0	300	300	300
Bought call	109	200	0	0	0	0	0	0	200	200
Total written puts		200	200	200	100	100	100	0	0	0
Written put	96	100	100	100	0	0	0	0	0	0
Written put	106	100	100	100	100	100	100	0	0	0
Exchange rate change			–10	–5	0	2.5	5	7.5	10	12.5

Table A4.3 Foreign Currency Flows Resulting from Options Positions with Possible Exercise Date One to Three Month Hence

	Options positions		Exchange rates (LC/$)							
	Strike price (LC/$)	Position size ($-million)	90	95	100	102.5	105	107.5	110	112.5
			Currency flows ($-million)							
Short position		1250	–350	–350	*–50*	–400	**–400**	–900	–900	–900
Total bought puts		350	–350	–350	–50	0	0	0	0	0
Bought put	96	300	–300	–300	0	0	0	0	0	0
Bought put	102	50	–50	–50	–50	0	0	0	0	0
Total written calls		900	0	0	0	–400	–400	–900	–900	–900
Written call	101	400	0	0	0	–400	–400	–400	–400	–400
Written call	105	500	0	0	0	0	0	–500	–500	–500
Long position		700	300	300	***300***	300	**400**	300	300	400
Total bought calls		400	0	0	100	100	200	300	300	400
Bought call	97	100	0	0	100	100	100	100	100	100
Bought call	103	100	0	0	0	0	100	100	100	100
Bought call	106	100	0	0	0	0	0	100	100	100
Bought call	111	100	0	0	0	0	0	0	0	100
Total written puts		300	300	300	200	200	200	0	0	0
Written put	96	100	100	100	0	0	0	0	0	0
Written put	106	200	200	200	200	200	200	0	0	0
Exchange rate change			–10	–5	0	2.5	5	7.5	10	12.5

Table A4.4 Foreign Currency Flows Resulting from Options Positions with Possible Exercise Date Three Months to One Year Hence

	Options positions		Exchange rates (LC/$)							
	Strike price (LC/$)	Position size ($-million)	90	95	100	102.5	105	107.5	110	112.5
			Currency flows ($-million)							
Short position		600	–400	–200	***0***	–100	**–100**	–200	–200	–200
Total bought puts		400	–400	–200	0	0	0	0	0	0
Bought put	93	200	–200	0	0	0	0	0	0	0
Bought put	97	200	–200	–200	0	0	0	0	0	0
Total written calls		200	0	0	0	–100	–100	–200	–200	–200
Written call	102	100	0	0	0	–100	–100	–100	–100	–100
Written call	106	100	0	0	0	0	0	–100	–100	–100
Long position		800	200	300	***300***	300	**500**	500	700	600
Total bought calls		600	0	100	100	200	400	400	600	600
Bought call	93	100	0	100	100	100	100	100	100	100
Bought call	102	100	0	0	0	100	100	100	100	100
Bought call	104	200	0	0	0	0	200	200	200	200
Bought call	109	200	0	0	0	0	0	0	200	200
Total written puts		200	200	200	200	100	100	100	100	0
Written put	101	100	100	100	100	0	0	0	0	0
Written put	111	100	100	100	100	100	100	100	100	0
Exchange rate change			–10	–5	0	2.5	5	7.5	10	12.5

Figure A4.1 Foreign Currency Flows from Options Positions (up to 1 month)

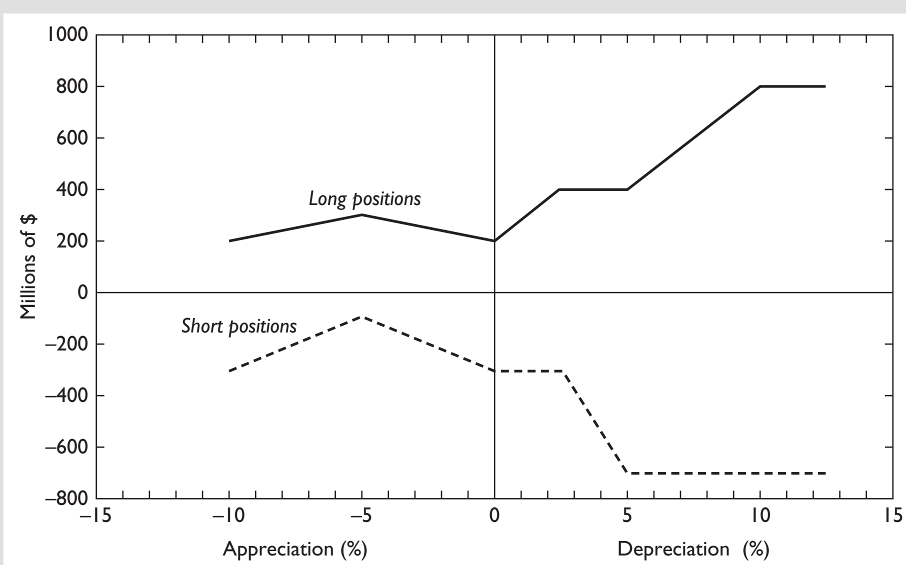


Figure A4.2 Foreign currency Flows from Options Positions (1 to 3 month)

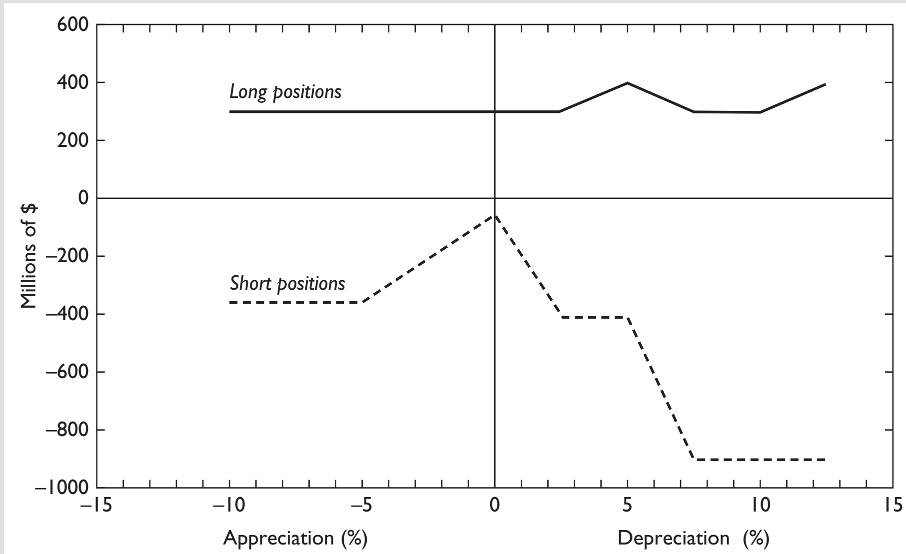


Figure A4.3 Foreign currency Flows from Options Positions (3 months to 1 year)

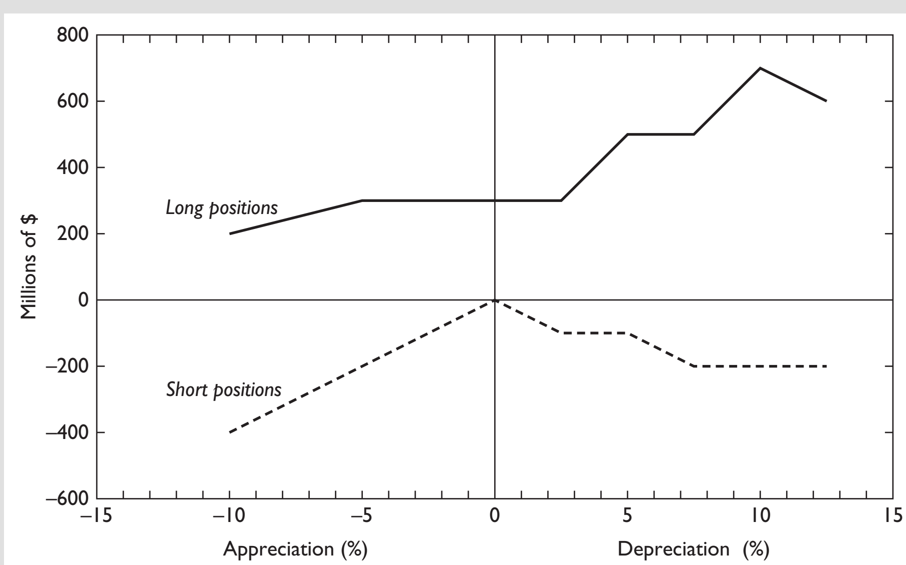


Figure A4.4 Foreign currency Flows from Short Options Positions

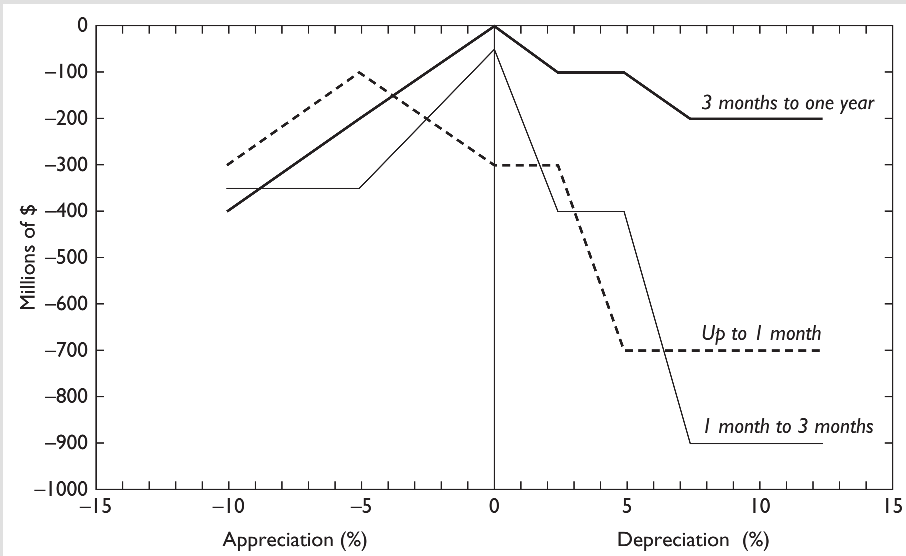
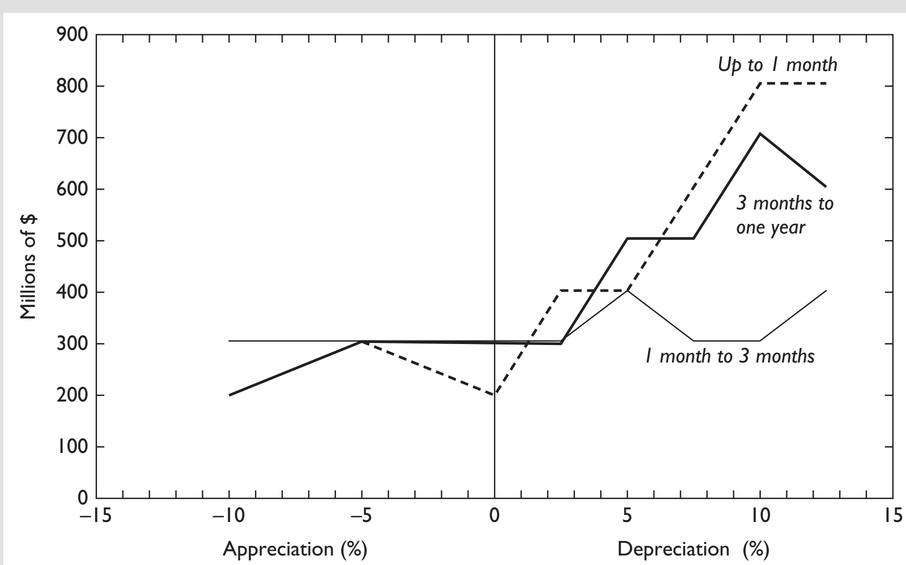


Figure A4.5 Foreign Currency Flows from Long Options Positions



APPENDIX

5 Reporting Data to the IMF for Redissemination on the IMF's Website

A5.1 The IMF's executive board in March 2000 approved the establishment of a common database for the collection of template data disseminated by SDDS-subscribing countries, and the redissemination of these data through the Fund's external Website. The "Data Template on International Reserves and Foreign Currency Liquidity" Website has been operational since October 2000 and is accessible at http://www.imf.org/external/np/sta/ir/IRProcessWeb/index.aspx.

A5.2 Submission of reserves template data to the IMF is voluntary. Countries subscribing to the SDDS provide data to the IMF soon after they disseminate the data in their national media. For example, countries that provide monthly data report such data within one month of the reference date. Non-SDDS-subscribing countries also are encouraged to report their reserves template data for dissemination on this Website.

A5.3 The data are presented in a common format and in a common currency, thereby enhancing the comparability of the Reserves Data Template data among countries, facilitating access by market participants and other users, and fostering greater transparency. The common format developed by the IMF is shown in Appendix 2 of this document. The common currency is the U.S. dollar. Periodicity of data is generally monthly, and for some countries, weekly.

A5.4 In addition to current data, the IMF Reserves Data Template Website provides times series data (historical data) by country on official reserve assets, other foreign currency assets of the monetary authorities and the central government, and predetermined and contingent net drains on foreign currency assets. To facilitate viewing, printing, and downloading information, the data are available in html (hypertext markup language), pdf (portable document format), and csv (comma-separated values) formats. The Website is updated continuously, that is, data are disseminated as they are reported to the IMF after undergoing data consistency checks.

A5.5 To facilitate processing of the data for dissemination on the IMF's Website, the IMF requests that countries transmit their data in specific reporting forms and follow certain accounting conventions. The notes below provide some guidance on such data reporting.

(1) Reporting forms may be requested by sending an email to RESERVESTEMPLATE@IMF.ORG.

(2) Countries are encouraged to submit their Template data by e-mail to RESERVESTEMPLATE@IMF.ORG.

(3) Data are to be submitted in either an Excel spreadsheet or by using SDMX standards. Form R1.xls is used for reporting consolidated data pertaining to the monetary authorities and the central government. Form R1a.xls is used in cases where, for legal and institutional reasons, countries present separate data for the monetary authorities and the central government. The structure of the reporting templates in Excel is protected from alteration by reporting countries.

(4) For data submitted using the Excel reporting forms, dropdown menus are to be used to select the country name, the month and year for which data are shown, and the currency and scale in which data are reported. "Day of the Month" is to be selected only if submitting weekly data.

(5) Data revisions are reflected in both current and historical time series. Reporters are strongly encouraged to report back revisions in time series in addition to updating the current template. Time series data are available at http://www.imf.org/external/np/sta/ir/IRProcessWeb/topic.aspx (selected items for all countries who reported on the Reserves Data Template) and at http://www.imf.org/external/np/sta/ir/IRProcessWeb/colist.aspx (all Reserves Data Template items in time series

format for an individual country—click on the name of an individual country, and then click on "Time Series Data").

(6) For items with a value of zero or near zero, the figure "0" should be entered. For items not applicable, the cells should be left blank.

(7) Inflows of foreign exchange should be reported as positive amounts. Outflows of foreign exchange should be reported as negative amounts, using a minus (–) sign.

(8) Countries are encouraged to provide additional information, such as country-specific exchange rate arrangements (e.g., the operation of a currency board or the implementation of dollarization), major sources of funding of reserve assets shown in Section I.A. of the Template, accounting treatment of certain financial transactions, information on pooled asset schemes, and specific treatment of the country's financial transactions. The information is to be provided in text form, with the extension "txt" and marked "Country Notes." The country notes are to be sent with the data submission (see also paragraph 42 of this document). Under the Reserves Data Template's "stress test," information on the value of "in-the-money" options can also be reported in the form of a graph.

(9) Item IV.(2), currency composition of reserves, should be disclosed at least once a year. Further, the amounts reported should be expressed as the value (and not as percentages) of reserve assets that are held in currencies in the SDR basket, and that are held in currencies that are not in the SDR basket. For this purpose, gold, SDRs, and Reserve Position in the Fund (RPF), should be considered to be denominated in SDR basket currencies. The total value of reserve assets held in SDR and non-SDR basket currencies shown in item IV.(2) should equal the amount shown in item I.A. Countries that want to disclose the composition by individual currency can do so by providing the information in the country notes (see item (8) above).

(10) To enhance data transparency, paragraph 84 (see Chapter 2 of this document) calls for the disclosure of the accounting treatment adopted by countries in the reporting of repos, securities lending, and related transactions. Detailed information of such accounting treatment is to be provided in country notes accompanying the data. In addition, to ensure data consistency across countries and to enhance the analytical usefulness of the information, item IV.(1)(d), "securities lent or on repo," is to be reported with the following sign conventions: minus (–) signs for securities "lent or repoed and included in Section I" and "lent or repoed but not included in Section I," and plus (+) signs for "borrowed or acquired and included in Section I" and "borrowed or acquired but not included in Section I."

(11) As noted in paragraph 255 (see Chapter 5 of this document), gold swaps are to be treated similarly to repos. The gold that is swapped should be included, as appropriately, among securities lent or repoed in item IV.(1)(d). Gold swaps are also to be disclosed in country notes.

APPENDIX

6 Reserve Assets and Currency Unions

A6.1 The purpose of this appendix is to provide further methodological guidance for reserve assets in the circumstance where an economy is a member of a currency union (CU). This appendix draws primarily from Appendix 3 of *BPM6*, "Regional Arrangements: Currency Unions, Economic Unions, and Other Regional Statements."

A6.2 The growth in the number of economies who are members of CUs, and, especially, the creation of the euro in the broader framework of the European Union, has led to an increased interest in questions about reserve assets of members of a CU. In particular, questions have arisen about how the methodological advice differs for economies that are residents versus nonresidents of a CU in regard to determining what is a domestic or foreign currency, what claims on nonresidents qualify for reserve asset treatment, and what are reserve-related liabilities. This appendix provides guidance on these and related topics.

What is a Domestic or Foreign Currency?

A6.3 From the viewpoint of national authorities of a currency union, the currency issued by the currency union has some characteristics of a foreign currency in that national authorities do not have the same degree of monetary autonomy as an economy that issues its own currency. Nonetheless, for members of a currency union, "the currency issued in a CU is the domestic currency of the CU. It should always be considered a domestic currency from the viewpoint of each member economy, even though the currency can be issued by a nonresident institution (either another CU national central bank (CUNCB) or the currency union central bank (CUCB))" (*BPM6*, paragraph A3.16).

A6.4 Reserve assets must be foreign currency assets (*BPM6*, paragraph 6.64). Claims denominated in the domestic currency are not reserve assets. According to *BPM6*, paragraph 3.95: "Domestic currency is that which is legal tender in the economy and issued by the monetary authority for that economy; that is, either that of an individual economy or, in a currency union, that of the common currency area to which the economy belongs. All other currencies are foreign currencies."

A6.5 One consequence of the above is that, in a CU, from a national perspective, holdings of domestic currency can be a claim on a nonresident, but it cannot be a reserve asset.[1]

What Claims on Nonresidents Qualify for Reserve Asset Treatment?

A6.6 Reserve assets, other than gold bullion, must be claims on nonresidents (*BPM6*, paragraph 6.65). *BPM6*, paragraph A3.29, states: "Reserve assets shown in the balance of payments and International Investment Position of the CU should include only those assets that (a) represent claims on nonresidents of the CU and (b) meet the criteria described in Chapter 6. Also, the definition of the reserve assets at the CU level and at the member country level should be the same; in other words, with respect to national data, reserve assets should include only those assets that qualify as reserve assets at the CU level."[2] This approach to reserve asset treatment reflects

[1]For IMF operational purposes, there may be instances where the IMF provides financial assistance under a Fund-supported program to a member of a currency union that ultimately results in the member holding increased amounts of its domestic currency to address its balance of payments needs. For instance, from a Fund legal perspective, the euros acquired by euro area members have a dual nature in that a common currency such as the euro has characteristics of both a "domestic" and a "foreign" currency to euro area members. Indeed, the sale of euros by the Fund to a euro area member drawn on another member's account with the Fund is regarded, for operational purposes, as a sale of another member's currency, which is authorized by the Articles of Agreement (Article V, Section 2(a)), as euros held by euro area member countries can be claims on nonresidents.

[2]The reference to Chapter 6 in this paragraph refers to that chapter in *BPM6*. For additional information, see also Appendix 7, "Frequently Asked Questions," in this document.

that the policy decisions for a currency of a currency union are taken at the currency union, not national, level. This treatment is consistent with current practice in currency unions.

A6.7 The above guidance means that reserve assets for a member of a CU must meet all of the criteria for reserve asset treatment that must be met by an economy that is not a member of a CU, and—except for gold bullion—an additional criterion that only claims by a member of a CU on nonmembers of the CU can meet the criteria for reserve asset treatment. Foreign currency claims that meet all the criteria for reserve asset treatment but are claims on residents of the CU should be included in Section I.B. (other foreign currency assets, under the relevant financial instrument) of the Reserves Data Template.

Treatment of National Agencies in a Currency Union

A6.8 The statistical treatment of national agencies in a currency union has implications for the compilation of the Template at the member country and union level. *BPM6* identifies two types of CUs, "centralized" and "decentralized."

A6.9. In the centralized model, a CUCB is owned by the member economies, the common currency is issued by the CUCB, and central bank operations in each economy are carried out by a national (resident) authority. Typically, the CUCB maintains a national office in each member country that acts as the central bank for that economy and that, for statistical purposes, is treated as an institutional unit, located in that economy, and that is separate from the headquarters of the CUCB. (In the rare case where this is not the case, a national office institutional unit is to be created for statistical purposes, to record the central bank transactions and positions with the residents of the domestic economy.) In recording reserve assets at the national level, assets held by the CUCB on behalf of its member economies (including gold, reserve position in the Fund, SDRs, and, more generally, any foreign assets meeting the criteria for reserve asset treatment) that are assigned to a member economy in the accounts of the CUCB, are to be shown in the Reserves Data Template of the member economy. This model is of the type observed in Africa and the Caribbean.

A6.10. In the decentralized model, the CU comprises a CUCB and CUNCBs of the member economies, with the CUCB owned by the CUNCBs. (Thus, in this model, the CUCB is owned by the CUNCBs, whereas in the centralized model, the CUCB owns the monetary authority in each member economy.) In the decentralized model, in each economy, monetary activities with residents of the CU are carried out by national central banks having their own assets and liabilities. Where reserve assets are held by the CUNCBs (i.e., the assets are actually recorded on their balance sheets), the institutional setting may in certain circumstances result in some restrictions on the effective control over these assets by the CUNCBs. That is, CUNCBs may be able to transact in some of the reserve assets only with agreement of the CUCB. Provided there is no transfer of ownership to the CUCB, and the foreign assets owned by the CUNCBs can be mobilized by the CU to meet balance of payments needs (i.e., they are reserve assets of the CU), the lack of complete control due to operational constraints at the CU level should not preclude a CUNCB from classifying them as reserve assets in the national Reserves Data Template. This model type was developed by the euro area in the 1990s.

What are Reserve-Related Liabilities?

A6.11 *BPM6*, paragraph A3.30, states: "Similarly, liabilities classified as reserve-related liabilities in the national data should include only those liabilities that qualify as reserve-related liabilities at the CU level." This means that, similar to the treatment of reserve assets (which includes selected claims on nonresidents of the CU and excludes all claims on residents of the CU), reserve-related liabilities should include selected liabilities to nonresidents of the CU and exclude all liabilities to residents of the CU.

A6.12 However, predetermined and contingent short-term net drains on foreign currency assets (reported in Sections II and III of the Reserves Data Template) should include the monetary authorities' short-term foreign currency obligations to all counterparties, including to other economies in the CU, to economies outside the CU, and to residents of the same economy. This treatment is consistent with that for economies that are not in a CU (see paragraphs 141 and 180 of these *Guidelines*).

APPENDIX

7 Frequently Asked Questions on the Characteristics of Reserve Assets

A7.1 This appendix provides frequently asked questions (FAQs) to assist countries in identifying reserve assets under international standards, consistent with the recommendations of the sixth edition of the *BPM6*.

A7.2 *BPM6*, paragraph 6.64, defines reserve assets as follows: "Reserve assets are those external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing)."[1]

A7.3 To qualify for classification as a reserve asset, the asset must be:

- a claim on a nonresident or in gold bullion of significant purity (*BPM6*, paragraph 6.65 and 6.78);
- owned or under direct and effective control of the monetary authorities (*BPM6*, paragraph 6.67);
- readily available in the most unconditional form (i.e., be liquid) (*BPM6*, paragraph 6.69)
- denominated and settled in convertible foreign currencies that are freely usable for settlements of international transactions (*BPM6*, paragraph 6.72);
- of high quality (in general) (*BPM6*, paragraph 6.70).

A7.4 Some elements of the definition of reserve assets can be applied objectively while others require informed judgment. For example, determining whether a claim is on a nonresident usually can be determined objectively. However, determining whether a claim is sufficiently liquid to qualify for reserve asset classification is partly judgmental.

[1]There are no substantive differences in the definition of reserve assets between the fifth and sixth editions of the Balance of Payments Manual.

A7.5 More guidance on the above characteristics, particularly on those that require judgment, is presented in the following FAQs.

Question 1: A reserve asset must be a claim on a nonresident or in gold bullion of sufficient purity. Are there any circumstances where foreign exchange-denominated claims of resident banks can be regarded as reserve assets?

A7.6 In accordance with the residence concept, reserve assets, other than gold bullion, must be claims on nonresidents (*BPM6*, paragraph 6.65).[2] The authorities' foreign currency claims on residents, including claims on resident banks, are not reserve assets.

A7.7 However, there may be cases where institutional units other than the monetary authorities (such as domestic banks) hold legal title to external foreign currency assets which are unencumbered, and such external assets can be considered reserve assets under the following conditions:

- the resident entity can transact only in those claims with nonresidents on the terms specified by the monetary authorities or only with their express approval; and
- the authorities have access on demand to these claims on nonresidents to meet balance of payments financing needs and other related purposes; and
- a prior law or an otherwise legally binding contractual arrangement confirms this agency role of the resident entity that is actual and definite in intent.

A7.8 In the above circumstances, it is not the authorities' claim on the resident bank that is included in reserve assets, but instead it is the resident bank's

[2]Gold bullion is an asset but it is not a claim, because no other entity has a corresponding liability.

claim on a nonresident that is regarded as a reserve asset, because the latter claim is under the direct and effective control of the monetary authorities.

A7.9 In the Reserves Data Template, liquid foreign currency claims on residents that do not meet the criteria for reserve asset treatment should be included in Section I.B. of the Template, "other foreign currency assets (specify)."

Question 2: A reserve asset must be readily available for meeting balance of payments financing needs. Some types of arrangements with the IMF, such as the Flexible Credit Line (FCL) and the Precautionary and Liquidity Line (PLL), are readily available for meeting balance of payments financial needs. Are these reserve assets?

A7.10 Paragraph 6.65 of *BPM6* states that reserve assets must be foreign currency assets that actually exist. Contingent or potential assets, such as undrawn lines of credit, are not assets and so therefore they also are not reserve assets. Undrawn, unconditional credit lines should be recorded in Section III of the Reserves Data Template. As described in the *Guidelines* (paragraph 216), in general, IMF arrangements are conditional lines of credit and thus should not be included in Section III of the Template.

A7.11 The FCL has conditions for access that include qualification criteria that must be met before the credit line is approved. In FCL arrangements with a one year duration, once the qualification criteria are met, the member can draw down funds throughout the entire one-year period of the arrangement. In two-year FCL arrangements, however, continued access to resources during the second year is also subject to completion of a review. In light of the above, the undrawn amounts under one-year FCL arrangements should be included in Section III from approval to the maturity of the FCL arrangement. Undrawn amounts under two-year FCL arrangements should be included in Section III from approval up until the scheduled review date under the FCL.

A7.12 PLL arrangements have different phasing and conditionality depending on the duration of the arrangement and the member's circumstances. However, all PLL arrangements of a six month duration are similar to the one-year FCL arrangements in that access to resources under such arrangements is subject to qualification criteria to be met before approval and once this is met, the member can draw down funds throughout the entire six-month period of the arrangement, with no other conditions applying for drawings after the approval of the arrangement. Therefore, undrawn amounts under six-month PLL arrangements should be included in Section III from approval to the maturity of the six-month PLL arrangement.

Question 3: The definition of reserve position in the IMF states that it includes ". . . any indebtedness of the IMF (under a loan agreement) in the General Resources Account that is readily available to the member country . . ." (*BPM6*, paragraph 6.85). What is the treatment when institutional units or parts of members (such as a central bank or a ministry of finance) holds the claim on the IMF, rather than the (entire) member country itself?

A7.13 In some circumstances, an institutional unit or part of a member may provide financing to the IMF's GRA under bilateral loan agreements, notes, or participation in standing borrowing arrangements such as the GAB or NAB. In these circumstances, the claim on the IMF held by the institutional unit on part of the member that results from drawing under these instruments should be included in the reserve position in the IMF provided that it is readily available to the member country at the time that the member represents that it has a balance of payments need.

Question 4: Reserve assets must be readily available for meeting a balance of payments financing need. Can you clarify what this means? For example, if an external claim can be sold for a reserve asset, with settlement of the transaction occurring within a few weeks, is the claim sufficiently liquid to qualify as a reserve asset?

A7.14 The IMF does not specify a firm time period for meeting the reserve asset "readily available" requirement. The IMF has received questions from members over many years regarding specific external claims (i.e., claims on nonresidents) that are held by its members. In reply to these questions, the IMF has said that, if an external claim can be converted into a reserve asset currency to meet a balance of payments need only within several weeks, that is not sufficiently rapid for the external claim to qualify as a reserve asset, in consideration of the speed at which balance of payments crises could develop. Further, provided reserves are available at very short notice for times when they are needed most, the IMF has also said, the external claim that can be converted into a reserve asset currency to meet a balance of payments need within a few days could meet the readily available requirement.[3]

Question 5: We have seen the terms usable currencies, freely usable currencies, and convertible currencies used from time to time. Can you clarify the definitions of these terms? In particular, does the IMF maintain lists of each?

A7.15 Currently the IMF does not maintain a list of convertible currencies. In 1978, the Second Amendment of the IMF's Articles of Agreement entered into effect and the concept of "convertible currencies" was replaced by the term "freely usable currency," which is defined in the Articles of Agreement.

A7.16 In regard to the definition of a freely usable currency, Article XXX of the Articles of Agreement of the IMF provides, in paragraph (f), that "A freely usable currency means a member's currency that the Fund determines (i) is, in fact, widely used to make payments for international transactions, and (ii) is widely traded in the principal exchange markets." At present, the currencies determined to be "freely usable" are those specified as such under Executive Board Decision No. 11857-(98/130) of December 17, 1998, which says that "Pursuant to Article XXX (f), and after consultation with the members concerned, the Fund determines that, effective January 1, 1999 and until further notice, the euro, Japanese yen, pound sterling, and US dollar are freely usable currencies."

A7.17 In addition, for Fund GRA operations, a usable currency is a member's currency used in the IMF's Financial Transactions Plan (FTP). The inclusion of a currency in the FTP is based on judgments about the external positions of members and the currencies so included extend beyond those determined to meet the "freely usable currency" criterion under Article XXX (f) of the IMF's Articles of Agreement. The most current list is available at: http://www.imf.org/cgi-shl/create_x.pl?ftp. Please note that this is a list of "usable" foreign currencies, whereas reserve assets must be denominated and settled in a "freely usable" foreign currency.

A7.18 For the recording of reserve assets, *BPM6* states that "reserve assets must be denominated and settled in convertible foreign currencies, that is, currencies that are freely usable for settlement of international transactions" (*BPM6*, paragraph 6.72). Such currencies potentially extend beyond those currencies determined to meet the "freely usable currency" criterion under Article XXX (f) of the IMF's Articles of Agreement. Countries are required to disclose at least once each year the composition of reserves by groups of currencies (item IV.(2)(a) of the Reserves Data Template). The overwhelming majority (well over 95 percent at the present time) of reserve assets reported in the Reserves Data Template are denominated in the freely usable currencies determined by the Fund under Article XXX (f) (i.e., the currencies currently included in the SDR basket).

Question 6: Reserve assets should be of high quality. Can you explain what "high quality" means?

A7.19 *BPM6*, paragraph 6.70, clarifies that "To be readily available to the authorities to meet balance of payments financing needs and other related purposes under adverse circumstances, reserve assets generally should be of high quality." The *BPM6* discussion implies that securities included in reserve assets should generally be of high investment grade, because such securities can be converted to a freely usable foreign currency under adverse circumstances without substantial delay or loss in market value. As noted in paragraph 89 of these *Guidelines*, countries should indicate in notes accompanying the release of their data if reserve assets include securities below investment grade.

Question 7: What is the difference between nominal and notional value?

A7.20 According to *BPM6*, nominal value refers to the outstanding amount the debtor owes to the creditor, which is composed of the outstanding principal amount including any accrued interest. So the nominal value reflects the sum of funds originally advanced, plus any subsequent advances, plus any interest that has accrued, less any repayments (which includes any payments covering interest accrual). Nominal value in domestic currency of a debt instrument denominated in foreign currency also includes holding gains or losses arising from exchange rate changes. Nominal value for a derivative instrument is the amount underlying the contract that is to be exchanged—such as in a foreign exchange swap. On the other hand, the notional value of a financial derivative instrument is the amount that is used to calculate payments made on that instrument. This term is used commonly in the options, futures, and currency markets,

[3]In addition, paragraph 6.69 of *BPM6* states that the ability to raise funds by using an asset as collateral is not sufficient to qualify an asset as a reserve asset.

where settlement payments are based on principal that may not be exchanged.

Question 8: What is the difference in treatment between a repurchase agreement (repo) and a swap?

A7.21 Under the international statistical standards, repurchase agreements (repos) and swaps should be recorded in the following ways.

A7.22. Repos: A repo should be treated as a collateralized loan. The cash that a borrower receives under the repo should be included in its international investment position (IIP), and should be included in reserve assets if it involves a freely usable currency. In addition, the borrower should record a loan payable (predetermined drain), representing its requirement to return the cash (and interest) at a stated future time.

A7.23 To consider the recording of the securities from the perspective of the cash borrower under the repo, the securities should be assessed against the criteria for reserve asset treatment and, if they are not liquid or readily available for meeting balance of payments financing needs (or are available for meeting balance of payments financing needs only if a substitute reserve asset has to be provided as collateral), they should be excluded from the cash borrower's reserve assets. Nonetheless on practical grounds, the cash borrower may continue to record the securities in reserve assets, and *BPM6* allows for this possibility (paragraph 6.88)

A7.24 Analogously, the cash lender has exchanged cash for a loan receivable or deposit. The loan receivable or deposit should be assessed against the criteria for reserve asset treatment and, if it is not liquid or not readily available for meeting balance of payments financing needs, it should be excluded from the lender's reserve assets. Thus, a predetermined inflow should be recorded that indicates a loan receivable. The securities that are obtained by the lender should always be excluded from the lender's reserve assets. This is because the securities are collateral for the loan. The economic ownership of the securities continues to be with their original owner, not the cash lender, and therefore the securities should not be recorded in the IIP of the cash lender. As the securities are not recorded in the IIP of the cash lender, as noted above, they also should not be recorded in reserve assets of the cash lender, because reserve assets are a subset of the IIP.

A7.25 Swaps: Swaps take a variety of different forms. In the case where one or both counterparties receive cash, the recipient of the cash should include the cash in its IIP, and, similar to the treatment of cash under repos, the cash should be included in reserve assets if it involves a freely usable currency (but not the domestic currency of the holder).

A7.26 In the case where the swap involves the provision of securities for cash, sometimes the initiator of the swap pays interest to its counterparty, in which case the swap should be recorded as a collateralized loan or repo.

A7.27 Reciprocal currency arrangements are short-term arrangements (reciprocal credit lines) that allow the counterparties temporary access to the foreign currencies they may need. When credit lines are drawn, a swap transaction takes place, involving an immediate delivery transaction (in which case a counterparty draws cash and, in exchange, provides securities or cash as collateral), and a simultaneous forward (future delivery) commitment, in which the two counterparties agree to reverse the transaction at a specified date in the future. As noted above, in the case where one or both counterparties under any of the various forms of swaps receive cash, the recipient of the cash should include the cash in its IIP, and the cash should be included in reserve assets of its holder(s) if it involves a freely usable currency (but not the domestic currency of the holder(s)). In the case where securities are provided as collateral for the swap, it is recommended that the swap be recorded as a collateralized loan. See paragraphs 212–213 for additional detail on the recording of reciprocal currency arrangements.

A7.28 In the case of a gold swap, gold is exchanged for cash and a firm commitment is made to repurchase the gold at a future date. Although accounting practices for gold swaps vary among countries, for purposes of the Reserves Data Template, it is recommended that a gold swap be treated the same way as a collateralized loan or repo. Thus, the cash lender within the gold transaction should not include the gold in its IIP and in its reserve assets.

A7.29 Gold deposits of monetary authorities representing claims on nonresidents are to be included in gold and not in total deposits (assuming the gold is available upon demand to the monetary authority and is of high quality).With gold deposits and gold swaps, the original owner of the gold retains the risks and rewards of changes in the price of the asset. Accordingly, there is considered to be no change of economic ownership of the gold, so no transaction in gold is recorded.

APPENDIX 8

Statistical Treatment of Lending to the IMF, Lending to IMF Managed Trusts, and Special Drawing Rights

A8.1 The Appendix aims at clarifying the statistical treatment of lending to the IMF, lending to IMF managed trusts, and Special Drawing Rights (SDRs) in the Reserves Data Template. In these cases, the IMF is actively engaged as a principal, manager, or administrator of positions or transactions.

Background

A8.2 In response to the financial crisis and following a call by the International Monetary and Financial Committee (IMFC) in April 2009, the IMF took a number of actions aimed at substantially increasing its lending resources. In addition, the IMF put in place two new SDR allocations that totaled about $283 billion. Further, the IMF took steps to promote the liquidity of loans to IMF managed trusts that thereby made such loans suitable for classification as reserve assets.

A8.3 While permanent increases in IMF resources have traditionally been achieved through increases in quotas, borrowing has been used to bridge the time gap between seeking and gaining IMF membership approval of a general quota increase. In 2009, the IMF developed Note Purchase Agreements as a new form of borrowing arrangements to augment its lending capacity; and entered into a number of new Bilateral Loan Agreements. In addition, the IMF executive board approved a new concessional financing framework under which a new Poverty Reduction and Growth Trust (PRGT) replaces the PRGF-ESF Trust. The statistical treatment in the Reserves Data Template of the new borrowing through loans and notes with the IMF, of loans to IMF managed trusts including the PRGT, of commitments and drawings under the New Arrangements to Borrow (NAB) and the General Arrangements to Borrow (GAB), and of SDRs is discussed below.

Bilateral Loan Agreements with the IMF

A8.4 A Bilateral Loan Agreement (BLA) is an agreement under which an IMF member commits to lending funds, usually in its domestic currency, up to an agreed limit, to the IMF, upon demand by the IMF. The creation of the BLA, by itself, is not a claim, and so it should not be reported in Section I of the Reserves Data Template, but it can give rise to claims that may qualify for reserve asset treatment (see section on Loans under a Bilateral Loan Agreement with the IMF below).

A8.5 As noted, under a BLA, the IMF may require a member to lend domestic currency to the IMF at short notice. In exchange for these funds, the member would obtain a claim on the IMF denominated in SDRs. When the BLA is executed, a contingent claim is created. Similar to the treatment of commitments by countries to the IMF under the GAB and NAB (see paragraph 214 of these *Guidelines*), this contingent claim should not be reported as a contingent short-term negative net drain (nominal value) in Section III.4 of the Reserves Data Template. This is because Section III.4 of the Reserves Data Template covers contingent decreases in reserve assets resulting from undrawn, unconditional credit lines provided to the IMF (inter alia) and, in contrast, the execution of a BLA may result in an increase in reserve assets, which is not covered in this item.

Loans under a Bilateral Loan Agreement with the IMF

A8.6 In order for a loan that is created under a BLA with the IMF to meet the definition of a reserve asset, the claim must be readily available to meet a balance of payments financing need. This condition would be met if the IMF will repay the loan, or someone stands ready to purchase the original lender's claim on the IMF, within a very short period, through the existence of a liquid market, such as market makers who stand ready to buy and sell at all times. In addition, all of the preceding transactions must involve (or be capable of involving) a freely usable currency (other than the member's own currency). In this circumstance, the loan that is created under a BLA should be recorded in item I.A.2 of the Reserves Data Template, Reserve Position in the Fund (RPF).[1]

A8.7 If the loan can be repaid over a protracted period (some loan agreements might allow repayment up to one year), or does not allow repayment in a reserve asset currency, the loan does not qualify as a reserve asset and there are no entries in the Reserves Data Template.

Note Purchase Agreements with the IMF

A8.8 A Note Purchase Agreement (NPA) is an agreement under which an IMF member commits to purchase an IMF promissory note from the IMF on demand, up to an agreed limit. The creation of the NPA, by itself, is not a claim, and so it should not be reported in Section I of the Reserves Data Template, but it can give rise to claims that may qualify for reserve asset treatment (see Section E below).

A8.9 As noted, under a NPA, a contingent claim is created under which the IMF can require a member to purchase an IMF promissory note at short notice. In exchange for these funds, the member would obtain a claim on the IMF. Similar to the treatment of commitments by countries to the IMF under the GAB and NAB (see paragraph 214 of these *Guidelines*), this contingent claim should not be reported as a contingent short-term negative net drain (nominal value) in Section III.4. of the Reserves Data Template. This is because Section III.4. of the Reserves Data Template covers contingent decreases in reserve assets resulting from undrawn, unconditional credit lines provided to the IMF (inter alia) and, in contrast, the execution of a NPA may result in an increase in reserve assets, which is not covered in this item.

Series A and Series B Notes

A8.10 Two classes of notes were designed under the NPAs, Series A and Series B. These notes are identical, with the exception that Series A notes are eligible for immediate early repayment if the member country declares that it requires repayment due to a balance of payments financing need (the IMF would give such declarations the overwhelming benefit of doubt). Series A notes meet the liquidity criterion for classification as a reserve asset. Holdings of Series A notes should be recorded in item I.A.2 of the Reserves Data Template, Reserve Position in the Fund (RPF). This classification reflects that these notes are claims on the IMF that meet all criteria for recording as reserve assets.

A8.11 Series B notes are encashable as soon as practicable within 12 months of recognition of a balance of payments need. Holders of these notes therefore are not assured that the notes will be encashed promptly at the time of a balance of payments financing need, and so these notes do not meet the statistical definition of official reserve assets, and are not recorded in the Reserves Data Template.[2]

Loans to IMF Managed Trust Accounts

A8.12 Lending to IMF managed trust accounts, such as the PRGT, if readily available to meet a balance of payments financing need, should be included in official reserve assets, in item I.A.5 of the Reserves Data Template (other reserve assets). These claims are not classified in item I.A.2, RPF, because claims on IMF managed trusts are not claims on the IMF General Resources Account. Lending to IMF managed trusts that is not readily available to meet a balance of payments financing need does not qualify as an official reserve asset and should not be reported in the Reserves Data Template.

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[1]For a statistical definition of the Reserve Position in the Fund, see paragraph 6.85 of *BPM6*.

[2]At the time of preparing the updated text of the *Reserves Data Template Guidelines*, no Series B notes were outstanding.

Commitments and Drawings under the General Arrangements to Borrow and under the New Arrangements to Borrow

A8.13 The General Arrangements to Borrow (GAB) are long-standing credit arrangements under which 11 advanced economies stand ready to loan domestic currency to the IMF for the purpose of forestalling or addressing situations that could impair the international monetary system. The New Arrangements to Borrow (NAB) are a set of credit arrangements with selected member countries, which stand ready to lend to the IMF.[3]

A8.14 A contingent claim results from participation in the NAB or GAB, equal to the undrawn amount of credit. However, consistent with paragraph 214 of these *Guidelines*, this contingent claim should not be reported as a contingent short-term negative net drain (nominal value) in Section III.4. of the Reserves Data Template. This is because Section III.4. of the Template covers contingent decreases in reserve assets resulting from undrawn, unconditional credit lines provided to the IMF (inter alia) and, in contrast, commitments under the GAB and NAB may result in increases in reserve assets, which are not covered in this item.

A8.15 As noted, the IMF may require a member who participates in the NAB or in the GAB to lend to the IMF at short notice. When funds are lent, the member obtains a claim on the IMF that qualifies as a reserve asset and which should be reported in Section I.A.2 of the Reserves Data Template.

Treatment of SDRs

A8.16 This section clarifies the statistical treatment of Special Drawing Rights (SDRs), as relevant for reporting in the Reserves Data Template. It is consistent with recommendations in *BPM6* and *2008 SNA*, although the main changes introduced by these new methodological standards do not affect reporting in the Reserves Data Template.[4]

A8.17 SDR holdings are recorded in official reserve assets in Section I.A. of the Reserves Data Template, and interest on SDR holdings and allocations are recorded in predetermined net drains in Section II.1.

Allocations and Holdings of SDRs

A8.18 Under *BPM6* and the *2008 SNA*, holdings of SDRs by an IMF member are recorded as claims in official reserve assets, and allocations of SDRs are recorded as long-term debt liabilities.[5] For an economy that received SDRs, the claims are on, and the liabilities are owed to, the other participants of the IMF's SDR Department collectively.

A8.19 Only IMF members as SDR Department participants and other official holders (so-called prescribed holders) can hold SDRs.[6] The SDR position of a member is shown in the balance sheet of the monetary authorities. Holdings of SDRs should be recorded in the item "SDRs" in Section I.A.(3), because the Reserves Data Template captures holdings of reserve assets by monetary authorities, and all monetary authority holdings of SDRs are reserve assets. Interest that accrues on SDRs should be reflected in Section II of the Reserves Data Template (see below), but unless a member has a set date to repay the SDR allocation, no predetermined drains are recorded under principal because allocations of SDRs have no fixed maturity date.

Accrual of SDR Interest

A8.20 Interest on SDR holdings and allocations[7] accrue on a daily basis and are settled after the end of each financial quarter (on May 1, August 1, November 1,

[3]For more information on GAB and NAB, see http://www.imf.org/external/np/exr/facts/gabnab.htm.

[4]More specifically, *BPM6* recommends that allocations of SDRs to the IMF member countries be shown in the balance of payments accounts as the incurrence of a liability by the recipient country in Other Investment, SDRs, with a corresponding entry in Reserve Assets, SDRs (see *BPM6*, paragraph 8.50.)

[5]In regard to the rationale for the treatment of SDR allocations as debt, according to *BPM6*, paragraph 5.31: "Debt instruments are those instruments that require the payment of principal and/or interest at some point(s) in the future." SDRs meet this definition because
they incur interest (at the SDR interest rate). Also, interest arrears accrue if not paid when due. The liability is fixed in amount. SDRs do not meet the definition of equity, because they do not provide for participation in the distribution of the residual value of the issuer on dissolution (see *BPM6*, paragraph 5.21).

[6]Prescribed holders are member countries that are not SDR Department participants, institutions that perform the functions of a central bank for more than one member, and other official entities that have been designated by the IMF as eligible for acquiring and using SDRs in transactions, by agreement, in operations with participants and other holders.

[7]For IMF administrative purposes, interest payments on SDR allocations are referred to as "charges."

Table A8.1 Summary of Recording in the Reserves Data Template

Claim or commitment to lend	Statistical treatment
Bilateral Loan Agreements (BLAs; undrawn amounts) for loans that would be readily available to meet balance of payments financing needs	Do not report in the Reserves Data Template. (They should not be reported as contingent drains in Section III.4.)
Loans (readily available to meet a BoP financing need) drawn by the IMF under BLAs	Increase in RPF in Section I.A.
BLAs (undrawn amounts) for loans that would not be readily available to meet BoP financing needs	Do not report in the Reserves Data Template
Loans (not readily available to meet a BoP financing need) drawn by the IMF under BLAs	Do not report in the Reserves Data Template
Note Purchase Agreements for Series A notes (readily available to meet BoP financing needs)	Do not report in the Reserves Data Template. (They should not be reported as contingent drains in Section III.4.)
Holdings of Series A Notes (available to meet balance of payments financing needs)	Increase in RPF in Section I.A.
Note Purchase Agreements for Series B notes (not readily available to meet balance of payments financing needs)	Do not report in the Reserves Data Template
Holdings of Series B Notes	Do not report in the Reserves Data Template, because the notes do not qualify as reserve assets
Lending to IMF managed trust accounts (readily available to meet balance of payments financing needs)	Include in other reserve assets (item I.A.(5))
Lending to IMF managed trusts (not readily available to meet balance of payments financing needs)	Do not report in the Reserves Data Template, because these loans do not qualify as reserve assets
Commitments under the GAB and NAB	Do not report in the Reserves Data Template
Drawings under the GAB and NAB	Increase in RPF in Section I.A.(2).
SDR holdings	Report in Section I.A.(3), SDRs
SDR allocations	Do not report in the Reserves Data Template
SDR accrued interest	The preferred reporting treatment is to omit accrued interest on holdings from Section I.A.(3), and to report the net amount of interest receivable or payable in future periods either as a predetermined outflow (if negative) or inflow (if positive) in Section II.1. Alternately, it is acceptable to include accrued interest on holdings in Section I.A.(3), and to report the gross amount of interest that will be payable in future periods on allocations in Section II.1, as an outflow of interest.

and February 1) through a debit or credit to each member's SDR account. On these dates, interest that is payable on SDR allocations is netted against interest that is receivable on SDR holdings of the participant in the SDR Department, and the net amount is settled through this debit or credit entry.

A8.21 Under *BPM6*, interest is reinvested in the same financial instrument in which it accrued, and so it can be argued that the level of SDR holdings in Section I of the Reserves Data Template should increase as interest accrues and is not yet paid.[8] However, SDR holdings are reserve assets, and reserve assets are defined to be readily available for meeting balance of payments financing needs. Accrued interest on SDR holdings may not be readily available at

[8]See *BPM6*, paragraphs 11.48–11.49.

the time of a balance of payments financing need, particularly in the circumstance where allocations exceed holdings because, as described above, interest on SDR holdings and allocations is settled only once a quarter, and interest on SDR holdings are netted against interest on SDR allocations at settlement.

A8.22 For this reason, the preferred method of reporting accrued interest in the Reserves Data Template is as follows. Interest that has accrued on SDR holdings may be omitted from Section I of the Template, and in Section II.1, interest, the net amount of interest receivable or payable by an economy in future periods should be recorded, either as a predetermined short-term drain outflow (if negative) or inflow (if positive).[9] Alternately, it remains acceptable to include interest that has accrued on SDR holdings up to the Reserves Data Template reporting date in Section I. In this case, the gross amount of future interest payable on SDR allocations should be reported in Section II.1 as outflows of interest. (There is no entry in Section II.1 for future inflows of interest on SDR holdings, because Section II pertains to assets of the authorities not covered in Section I of the Template—see paragraph 140 of these *Guidelines*.)

A8.23 Table A8.1 presents a summary of the recording in the Reserves Data Template of lending to the IMF, lending to IMF managed trusts, and SDRs.

[9]As the rate of interest earned by economies holding SDRs is the same as the rate of interest owed by those with SDR allocations, if the levels of holdings and allocations are equal for an economy, no settlement payment is made.

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Entries refer to corresponding paragraph numbers within the text.

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