Improving the Framework for Reporting on International Reserves

During the international financial crises of the late 1990s, deficiencies were uncovered in the publicly available information on countries' international reserves. A new template and operational guidelines have been developed to promote improved disclosure of such data.

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INTERNATIONAL financial crises of recent years have underscored the importance of timely dissemination of accurate information on countries' international reserves. How countries measure reserve assets is not always clear. Current practices, by obscuring financial weaknesses and imbalances, have made it difficult to anticipate and respond to crises. Moreover, with the globalization of financial markets and the development of new financial instruments such as derivatives (so called because they are linked to underlying assets such as stocks, bonds, currencies, and commodities), the activities of central banks and government entities today take myriad forms, involve multiple domestic and foreign entities, and span the globe, complicating the task of compiling information on reserves. Yet accurate information on countries' official reserve assets and related obligations is critical to assessing countries' external vulnerability, especially for countries under managed or pegged exchange rate regimes.

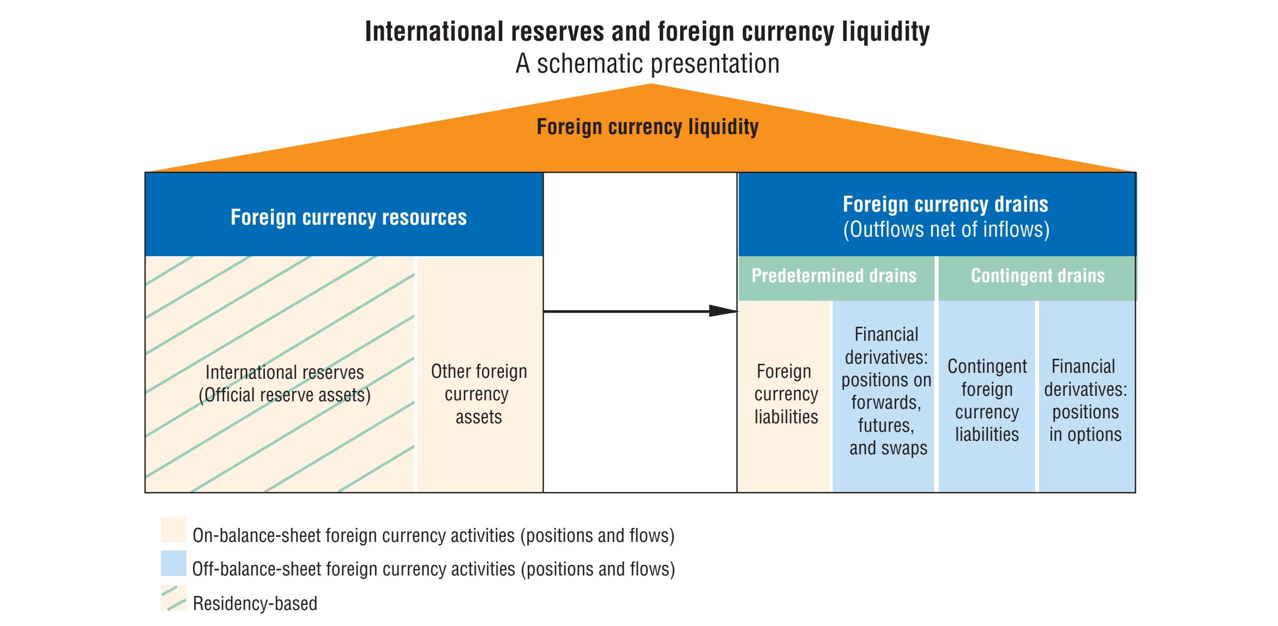
In an effort to help strengthen the international financial architecture, the IMF and a working group of the Bank for International Settlements (BIS) Committee on the Global Financial System, in consultation with government officials, statistics compilers, market participants, and data users, have jointly developed a new data template for use by countries in reporting on their international reserves and related information. Based on an innovative framework that integrates data on balance-sheet and off-balance-sheet activities with supplementary information, the template is designed to help countries compile a comprehensive account of their official foreign currency assets and liabilities, as well as their other obligations and commitments. The template has been made a component of the Special Data Dissemination Standard (SDDS) established by the IMF in 1996, which sets standards for good practice in the dissemination of economic and financial data. Countries that subscribe to the SDDS (subscription is voluntary) disseminate their template data at least once a month, with a lag of no more than a month.

Data deficiencies

The financial crises of the late 1990s revealed several major gaps in the information that was publicly available on reserve assets.

Some countries include pledged assets (for example, assets used as collateral for third-party loans) in reserve assets even though they are not liquid, but do not identify them as encumbered. Monetary authorities also often count their foreign currency deposits held in financially weak domestic banks and their foreign affiliates among reserve assets, although these assets are not available for use in crises. Moreover, reserve assets may not be valued at their market prices.

A lack of information on the monetary authorities' off-balance-sheet activities, which can affect foreign currency resources, can also distort assessments of international reserves. To determine the full extent of a country's official exposure to foreign exchange and other types of risk and to assess its potential inflows and outflows of foreign currency, policymakers and market participants need information on the outstanding financial derivatives contracts held by the monetary authorities.



Other deficiencies in the data include incomplete information on principal and interest payments in foreign currency on loans and bonds falling due in the short term, on government foreign exchange guarantees, and on callable debt (when provisions in debt instruments allow creditors to demand early payment in the event of changing economic conditions). Moreover, data on international reserves usually do not include information on unused unconditional lines of credit, which could represent either a source of foreign exchange in times of need or a potential drain on foreign currency resources.

Another problem that makes it difficult for markets and the international institutions to assess a country's vulnerability to external shocks is that the foreign assets that are included in international reserves vary from country to country, making cross-country comparisons difficult.

The new data framework

The new template captures several dimensions of a country's international reserves and related foreign currency obligations and addresses the inadequacies described above. In addition to traditional balance-sheet information on the external assets and liabilities of the monetary authorities and the central government, the template takes account of their off-balance-sheet activities (for example, contracts involving financial derivatives such as options, forwards, and futures; undrawn credit lines; and loan guarantees) and notes their future scheduled and potential inflows and outflows of foreign exchange emanating from balance-sheet and off-balance-sheet positions. Furthermore, the template includes information on the liquidity of a country's international reserves, identifying encumbered assets, and on its exposure to exchange rate fluctuations (for example, in connection with options contracts). In its *Operational Guidelines for the Data Template on International Reserves and Foreign Currency Liquidity*, the IMF has also developed a standard presentation to facilitate data comparisons among countries.

The template consists of four sections: (1) official reserve and other foreign currency assets, (2) predetermined short-term net drains on foreign currency assets, (3) contingent short-term net drains on foreign currency assets, and (4) related information (memorandum items). (See above.) This information could be useful in analyzing a country's external vulnerability, especially in gauging whether a country's official international reserves and other foreign currency assets are adequate to meet official short-term foreign currency obligations.

International reserves

The fifth edition of the IMF's *Balance of Payments Manual* defines a country's international reserves as "those external assets that are readily available to and controlled by monetary authorities for direct financing of payments imbalances, for indirectly regulating the magnitudes of such imbalances through intervention in exchange markets to affect the currency exchange rate, and/or for other purposes." This definition, based on the balance-sheet framework, applies to "gross" reserves and does not take account of the monetary authorities' external liabilities. It is limited to the monetary authorities' claims on nonresidents, excluding claims owned by the central government. (Nonresidents are generally defined as entities outside the geographical boundaries of the domestic economy. Residence as used here is based not on nationality or legal criteria but on the location of the economic interest of the transactor.)

Integral to the concept of international reserves are the criteria "readily available to" and "controlled by" the monetary authorities. Readily available assets are liquid and marketable—that is, they can be bought, sold, and liquidated quickly and at little cost, and there are ready and willing sellers and buyers. They must be denominated in convertible foreign currencies so they can be used to finance payments imbalances and to support the exchange rate.

Gold, SDRs, and a country's reserve position in the IMF are reserve assets because they are owned assets readily and unconditionally available to the monetary authorities. Foreign exchange (consisting of foreign currency holdings and foreign currency deposits and securities) and other claims are equally available and therefore also qualify as reserve assets.

Reserve assets must actually exist. Lines of credit that could be drawn on are not reserve assets because they do not constitute existing claims. Such lines of credit, however, can be reported in the supplementary information.

Assets pledged that are not readily available and assets that are encumbered in other ways are excluded from reserves or must be identified in supplementary information. Real estate owned by the monetary authorities is not included in reserve assets because it is not considered liquid.

Only external claims (that is, claims on nonresidents) 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 are permitted to do so only on terms specified by the monetary authorities or only with their express approval, such assets are considered reserve assets because they are under the effective control of the monetary authorities.

Transfers of foreign currency claims to the monetary authorities from other institutional units in the reporting economy immediately before certain accounting or reporting dates with accompanying reversals of such transfers soon after those dates (a practice commonly known as "window dressing") are not counted as reserve assets. Their inclusion in reserves should be disclosed in supplementary information accompanying the data.

Foreign currency liquidity

Foreign currency liquidity is a broader concept than international reserves in several respects.

First, in addition to reserve assets at the disposal of the monetary authorities, it includes foreign currency assets of the central government. Together these assets determine the official foreign currency resources that can readily be mobilized to meet demand for foreign exchange. The demand for foreign exchange, in turn, encompasses both actual (scheduled) and potential demands ("net drains" on foreign currency resources) that could arise from short-term foreign currency liabilities and off-balance-sheet activities of both the monetary authorities and the central government. Underlying the liquidity concept is the notion that governments must prudently manage liabilities along with assets to minimize vulnerability to external shocks. Second, while international reserves refer to the monetary authorities' claims on nonresidents only, foreign currency liquidity relates to both the monetary authorities' and the central government's foreign currency claims on, and obligations to, both residents and nonresidents.

The concept of foreign currency liquidity is also broader than that of net international reserves. While the latter refers to reserve assets net of outstanding reserves-related liabilities at a point in time, foreign currency liquidity takes account of foreign currency drains on existing resources arising from the authorities' financial activities in the coming 12-month period.

Key features of the template

The template facilitates assessments of whether a country has sufficient international reserves and foreign currency liquidity by providing information on the relevant institutions and their international financial activities.

Institutions. The template covers all public sector entities responsible for, or involved in, responding to currency crises. In practice, such entities include the monetary authorities, which manage or hold the international reserves, and the central government.

The template defines "monetary authorities" as "a functional concept" encompassing the central bank (and other institutional units such as the currency board and monetary agency) and certain operations usually attributed to the central bank but sometimes carried out by other governmental institutions or commercial banks. Such operations include issuing currency; maintaining and managing international reserves, including those resulting from transactions with the IMF; and overseeing exchange stabilization funds. In conformity with existing international guidelines, the template defines the central government as including "all government departments, offices, establishments, and other bodies that are agencies or instruments of the central authority of a country." The definition excludes state and local governments and social security funds at all levels of government.

Financial activities. For the purpose of liquidity analysis, the template specifies that only instruments settled (that is, redeemable) in foreign currency are to be included in resources and drains. The rationale is that, as far as inflows and outflows of foreign currency arising from the authorities' contractual obligations are concerned, 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 and domestic currency debt indexed to foreign currency) but settled in domestic currency, will not directly affect liquid resources in foreign exchange. They can exert substantial indirect pressure on reserves during a crisis, however, particularly when expectations of a sharp depreciation of the domestic currency lead holders to exchange the indexed liabilities for foreign currency. They are, therefore, reported as memorandum items.

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Treatment of financial derivatives. The template covers various activities and transactions involving financial derivatives, including (1) predetermined foreign currency flows pertaining to the authorities' forwards, futures, and swap contracts; (2) potential flows arising from their options positions; and (3) the net, marked-to-market (that is, adjusted to market prices) value of outstanding financial derivatives contracts. Financial derivatives activities are extensively covered in the template, because 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.

The template's focus is on financial derivatives settled in foreign currencies. Such information is especially important in times of crisis when there is strong pressure to devalue and when a country already has substantial outstanding liabilities in foreign currencies. Because inflows and outflows of foreign currency related to the authorities' financial derivatives activities may involve different counterparties, risks, and maturities, the template calls for reporting separate information on short and long positions. Long positions correspond to inflows that augment the foreign currency resources of the authorities; short positions represent outflows that diminish such resources. The net, marked-to-market values of financial derivatives to be reported are those of outstanding contracts settled in foreign currency, regardless of whether the counterparty is a resident or a nonresident.

The template incorporates "stress testing" on the authorities' options positions to assess the authorities' exposure to exchange rate fluctuations. Stress testing involves examining the effect on a portfolio of large movements in key financial variables. It is different from historical simulation in that it may cover situations that have never occurred.

Valuation. The template calls for the valuation of foreign currency resources to be based on the prices they would command in the market on the reference date if they were liquidated. In cases where determining market values on a frequent basis is impractical, approximate market values can be substituted during the intervening periods.

Drains on foreign exchange resources, including predetermined and contingent drains, are to be valued in nominal (actual) terms—that is, the cash-flow value when the currency flows are due to take place. Generally, principal repayments reflect the face value of an instrument and interest payments reflect contractual amounts due to be paid.

Inflows and outflows of foreign currency related to forwards, futures, and swaps are to be reported in nominal terms. With regard to options, the template requires disclosure of the notional value. The notional value of an options contract is the amount of foreign exchange that can be purchased or sold when the holder exercises the option. Market values of outstanding financial derivatives contracts are to be disclosed on a net, marked-to-market basis.

Time horizon. Consistent with the template's focus on liquidity, the horizon covered is short term, which, for practical purposes, is defined as up to one year. Finer breakdowns of up to one month, more than one month and up to three months, and more than three months and up to one year are included to enable policymakers and market participants to assess the authorities' liquidity positions within the one-year time frame.

The template calls for the reporting of short-term foreign currency flows for the various subperiods of the one-year time horizon based on the "residual maturity" of the financial instruments. Residual maturity is commonly referred to as the time remaining until the final repayment of the outstanding obligations. The flows that should be reported according to the residual-maturity concept are those emanating from short-term instruments with original maturities of one year or less and those arising from instruments with longer original maturities whose residual (remaining) maturity is one year or less. For purposes of this template, this concept also includes principal and interest payments falling due within one year on instruments with original maturities of more than one year.

Forestalling future crises

Timely disclosure of information on international reserves and related information serves a number of purposes. It can strengthen the accountability of the authorities by apprising the public of the authorities' policy actions and foreign currency exposures. It can spur a timelier correction of unsustainable policies and may even limit the adverse effects of contagion in times of financial turbulence. It allows market participants to form a more accurate view of the condition of individual countries, the vulnerability of different regions, and possible international consequences, thereby limiting uncertainty and the associated volatility in financial markets. Access to more transparent data also may enhance the effectiveness of the multilateral organizations. F&D

The publication Operational Guidelines for the Data Template on International Reserves and Foreign Currency Liquidity *(Washington: International Monetary Fund, 1999) is available from the IMF's Statistics Department upon request or may be found on the IMF's website (http://dsbb.imf.org/guide.htm). The* Operational Guidelines *provide more detail about the analytical framework of the template as well as guidance to countries in completing the template.*