III

SDR Department

The SDR Department was established to conduct all transactions in SDRs, following the creation of the new international reserve asset by the IMF in 1969. The Articles require that the General and SDR Departments be kept strictly separate, such that assets in one department cannot be used to meet liabilities of the other, except for the reimbursement of the General Department for the expenses incurred in conducting the business of the SDR Department.[1] This separation reflects the fact that the SDR facility is an entirely separate financial mechanism within the IMF. A member of the IMF need not be a member of the SDR Department, though currently all are.

The SDR itself is an international reserve asset created by the IMF to supplement other reserve assets whose growth was inadequate to finance the expansion of international trade and finance under the Bretton Woods system in the postwar period. The SDR is not a currency, nor is it a claim on the IMF. Rather, it is potentially a claim on the freely usable currencies of IMF members.

The SDR's value as a reserve asset derives from the commitments of members to hold and accept SDRs and to honor various obligations connected with the proper operation of the SDR system. The IMF ensures the SDR's claim on freely usable currencies in two ways: by designating IMF members with a strong external position to purchase SDRs from members with weak external positions, and through arrangement of voluntary exchanges between participants in a managed market. Thus, the functioning of the SDR Department, like that of the General Department, is based on the principle of mutuality and intergovernmental cooperation.

The value of the SDR and its yield, or interest rate, are not determined by supply and demand in a market, but are set by the IMF. They have been defined in terms of the prevailing exchange rate system in effect, in the early

[1] The IMF levies an assessment on each participant (in proportion to its cumulative SDR allocations) at the end of each financial year to cover the expenses of conducting the business of the SDR Department. The rate of assessment is generally very small; for the financial year ended April 30, 2001, it was 0.011198 percent of cumulative allocations (see Appendix I).

years being fixed under the Bretton Woods fixed exchange rate system and later as a value of and interest on a basket of currencies under the floating exchange rate regime. Currently, the SDR's value is calculated daily using a basket of four major currencies: the euro, Japanese yen, pound sterling, and U.S. dollar. The SDR interest rate was initially set at a low fixed level, but now is calculated weekly using market yields on short-term government securities denominated in the currencies in the SDR basket, except for the euro area where the Euro Interbank Offered Rate (Euribor) is now used in the absence of a short-term public sector security that is representative of the entire euro area. While both the valuation and yield of the SDR are linked to the prevailing markets of their component exchange and interest rates, there is no market for the SDR itself where excess supply or demand pressures can be eliminated by adjustments in the price, or value, of the asset. Rather, the IMF itself manages the flows of SDRs to ensure liquidity in the system.

Under certain conditions, the IMF may allocate SDRs to members participating in the SDR Department in proportion to their IMF quotas at the time by approval of 85 percent of the voting power of the IMF. Decisions to allocate SDRs have been reached only twice; a third, special "equity" allocation, is pending ratification. As SDRs accounted for less than 1½ percent of members' nongold reserves at end-April 2001, their role as a reserve asset has been quite limited.

The SDR is a purely official asset and can only be held and used by member country participants in the SDR Department, the IMF, and certain designated official entities. The SDR is used almost exclusively in transactions with the IMF and it serves as the unit of account of the IMF and a number of other international organizations. Efforts to promote its use in private markets have been largely ineffective.

Since the rate of interest paid by members using SDRs is the same as the rate of interest earned by members holding SDRs, the interest payments and receipts cancel out overall, so that net income in the SDR Department is always zero, as illustrated in the financial statements of the department.

In 1996, the IMF sponsored a seminar on the future of the SDR which concluded that the SDR was unlikely to become established as the principal reserve asset of the international monetary system in the near future in view of the globalization of private financial markets. However, there was considerable sentiment in favor of maintaining at least the present role of the SDR.

The remainder of the chapter expands upon these points by first explaining when, why, and how the SDR was created. This is followed by a description of the key characteristics of the SDR as a reserve asset, including the methods used to value the SDR and determine its yield. Next, the rules for allocating, holding, and using SDRs are discussed.

Most of the balance of the chapter deals with the operation of the SDR system as it functions in the official sector. The circular flow of SDRs among holders is described, highlighting the key role played by the IMF and the development of a managed market for SDRs among a number of relatively large holders with standing two-way (buying and selling) arrangements. The historical pattern of SDR holdings among debtors, creditors, and the IMF is shown, revealing persistent use of SDRs by IMF debtors, continuing large holdings of SDRs among a few IMF creditors, and periodic spikes in the flows of SDRs into the IMF resulting from the reserve asset payments associated with general quota increases. These developments underlie the need for the IMF to actively manage the circulation of SDRs through the quarterly financial transactions plan in order to maintain the system's liquidity.

The chapter concludes by showing how the previous discussion is reflected in the balance sheet and income statement of the SDR Department and by reporting on the outcome of an IMF seminar on "The Future of the SDR."

Background and Characteristics of the SDR

Creation of the SDR[2]

Gold was the central reserve asset of the international monetary system created at the Bretton Woods conference in 1944. Under the Bretton Woods system, the value of each currency was expressed in terms of gold (its par value) and member states were obliged to keep the exchange rates for their currencies within 1 percent of parity. In practice, most countries fulfilled this obligation by observing the par value against the U.S. dollar and by buying

[2]This section and the next rely on several papers in *The Future of the SDR in Light of Changes in the International Financial System*, ed. by Michael Mussa, James M. Boughton, and Peter Isard (Washington: International Monetary Fund, 1996), particularly the papers by Robert Solomon, "Creation and Evolution of the SDR"; Michael Mussa, "The Rationale for SDR Allocation Under the Present Articles of Agreement of the International Monetary Fund"; and K. Alec Chrystal, "The SDR and Its Characteristics as an Asset: An Appraisal," as well as "Evolution of the SDR: Paper Gold or Paper Tiger?" in James M. Boughton, *Silent Revolution: The International Monetary Fund, 1979–1989* (Washington: International Monetary Fund, 2001). See these sources for a more complete discussion of the issues addressed.

and selling their currencies for U.S. dollars, while the United States undertook to buy and sell gold freely for U.S. dollars at $35 a fine ounce, the par value of the U.S. dollar. This was also the "official price" of gold, at which all IMF transactions in gold were conducted.

In the early postwar years, the United States held about 60 percent of the world's official gold reserves and there was widespread concern over a "dollar shortage" as war-devastated countries sought to buy goods from the United States. Large capital outflows from the United States, exceeding its current account surplus, made it possible for these needs to be met. This net transfer of gold and dollars to the rest of the world helped other countries rebuild their reserves after the war. As the decade of the 1950s progressed, the dollar shortage ended and the European countries made their currencies convertible. By the late 1950s, the dollar shortage was replaced by what some observers called a "dollar glut," and in the 1960s an increasing number of countries sought to exchange dollars for gold from the United States, reflecting their fear that dollars were no longer "as good as gold."

It has been argued that the Bretton Woods par value system had an inherent flaw, the so-called Triffin Dilemma.[3] As long as the U.S. dollar was the primary foreign exchange reserve asset, a growing level of world trade and finance required a growing supply of dollars. That growing stock of dollars, however, required a persistent deficit in the U.S. balance of payments and this itself was a threat to the value of the dollar. Official holders of dollars became concerned that the relative value of their reserve assets might decrease in relation to the value of gold.

The other possible source of reserve growth in the system was through rising gold production. While gold initially provided more than three-fourths of global reserve increases after the war, this share had dropped to one-fourth in the first half of the 1960s and subsequently became negative. The dwindling supply of gold and poor outlook for increased production put pressure on the official price of gold which the United States and the larger European countries maintained through intervention in the London gold market. By 1968, these countries' central banks announced that they would no longer intervene in the private gold market. This led to the segmentation of the market for gold into two tiers—an official market where transactions

[3]Robert Triffin, *Gold and the Dollar Crisis: The Future of Convertibility* (New Haven: Yale University Press, rev. ed., 1961).

were undertaken at the official price, and a private market where rising prices were determined by supply and demand.

The solution to the problem of inadequate reserve growth in the system lay in creating an international reserve asset to supplement dollars and gold in official reserve holdings. Some countries favored the creation of a new reserve unit, while the United States, out of concern that such a unit would be a competitor for the dollar, preferred to build on the existing automatic drawing rights (the gold tranche) in the IMF. Thus, a scheme was debated in the mid-1960s by the Group of Ten ministers to create "reserve drawing rights" in the IMF, but some European countries feared this mechanism could be interpreted as a replacement for gold and suggested instead "special" drawing rights, and the name stuck. A blueprint for the creation of a new international reserve asset, the SDR, in amounts necessary to supplement supplies of gold and foreign exchange reserves was agreed at the Rio de Janeiro meeting of the IMF Board of Governors in September 1967, and SDRs were first allocated by the IMF in 1970.

At the time the SDR system was agreed, it was thought that for the first time the total stock of international reserves and its rate of growth would reflect deliberate international decisions rather than being determined solely by the accumulation of balances in reserve currencies and gold. Thus, it was envisaged that the IMF would become a major source of supply of both conditional liquidity through its traditional means of providing financial assistance, and of unconditional liquidity through the functioning of the SDR system. These views were subsequently reflected in the Second Amendment to the Articles of Agreement in 1978, which established that the obligation of members to collaborate regarding policies on reserve assets should be consistent with the objectives of promoting better international surveillance of international liquidity and making the SDR the principal reserve asset.

SDR as a Reserve Asset

The SDR has value and usefulness as a reserve asset because holdings in the IMF's SDR Department can be exchanged with other participants for national currencies. Note that SDRs are not liabilities of the IMF. Participants with a balance of payments need may use SDRs to acquire foreign exchange in a transaction by designation—that is, one in which another participant, designated by the IMF because of its strong balance of payments and reserve position, provides a freely usable currency in exchange for

SDRs (Box III.1). Provision of such foreign exchange is an obligation of participation in the SDR Department. A participant's obligation to provide currency, however, is limited to twice its cumulative allocation of SDRs, unless both the member and the IMF agree on a higher limit.

The designation mechanism guarantees that a participant with a need to use SDRs for balance of payments purposes is able to obtain the requisite freely usable currency without delay. This mechanism constitutes the legal backing of the SDR system and demonstrates its cooperative basis. In its operation, the SDR designation procedure works very much like the currency exchange system in the General Department. Since September 1987, however, no transactions by designation have taken place because all exchanges of SDRs for currency have been accommodated through voluntary transactions by agreement, which are discussed below in the section "System of Two-Way Arrangements." The IMF, however, continues to prepare a designation plan each quarter, tied to the quarterly financial transactions plan, on a contingency basis and as added insurance for the liquidity of the SDR financing mechanism.

An allocation of SDRs by the IMF provides each recipient, a participating member country, with a costless asset on which the holder neither earns nor pays interest.[4] Countries holding SDRs can use these assets by exchanging them for freely usable currencies at a value determined by the value of the SDR basket. Countries using their SDRs necessarily hold fewer SDRs than they had been allocated, and they pay interest at the SDR interest rate on the difference between their cumulative allocations and their current holdings of SDRs. Other countries are effectively net creditors in the SDR system by holding more SDRs than their cumulative allocations, and they receive a corresponding amount of interest on their holdings of SDRs in excess of their cumulative allocations.

Valuing the SDR and Determining the SDR Interest Rate

The SDR was initially defined as equivalent to 0.888671 grams of fine gold. As this was the par value of the U.S. dollar under the Bretton Woods system, the SDR was also equivalent to one U.S. dollar. This outcome satisfied both camps in the negotiations that lead to the creation of the new international

[4]Technically, the recipient earns interest on its holdings and pays interest on its cumulative allocations, but the two interest rates are identical and the payments therefore net out as long as a recipient simply holds its cumulative allocation of SDRs.

Box III.1. The Designation Mechanism

Article XIX of the IMF's Articles of Agreement provides for a designation mechanism that underpins the usability of the SDR. Participation in the SDR Department entails the obligation to provide usable currencies in exchange for SDRs when designated, and accords the right to use SDRs in case of a balance of payments need.

Under the designation mechanism, the IMF designates certain participants, whose external positions are deemed sufficiently strong, to receive specified amounts of SDRs from other participants and, in exchange, to provide the latter with equivalent amounts of freely usable currencies (i.e., U.S. dollars, euros, Japanese yen, and pounds sterling). The designation mechanism ensures that, in case of need, participants can use SDRs to obtain foreign currency reserves at short notice.[1]

Quarterly designation plans, approved by the Executive Board, list participants subject to designation and set the maximum limits to the amounts of SDRs that can be designated to each. There are three basic criteria for designation:

- Participants are subject to designation only if their balance of payments and gross reserve positions are considered "sufficiently strong."
- The Executive Board determines the amounts of designation for individual participants in such a manner as to promote, over time, harmonization (or equalization) of the "excess holdings ratios" of participants.[2]
- A participant's obligation to provide currency against SDRs in designation is limited to the point at which its SDR holdings in excess of its cumulative allocation are twice its cumulative allocation of SDRs, unless the designee and the IMF agree on a higher limit.

[1] A participant wishing to sell its SDRs in transactions with designation is required to make a representation to the IMF that it has a need to use its SDRs because of its balance of payments position or developments in its reserves, and not for the sole purpose of changing the composition of its reserves (Article XIX, Section 3*(a)*).

[2] The excess holdings ratio is calculated as the member's actual SDR holdings minus its cumulative allocation as a percent of its quota.

reserve asset—those who sought a replacement for gold and those who sought a replacement for the U.S. dollar. When the dollar was devalued against gold in 1971, the SDR retained its nominal gold value and was termed "paper gold." In keeping with the SDR's character as paper gold, the interest rate on the SDR was initially fixed at the relatively low level of 1.5 percent a year.

With the final collapse of the Bretton Woods par value system in 1973, most major countries adopted floating exchange rate regimes. As gold no longer played a central role as the anchor of the international monetary system, the rationale for defining the SDR in terms of gold was weakened, and in 1974 the SDR was redefined as a basket of currencies. Initially, the currencies of the 16 IMF members with at least 1 percent of world trade were included in the basket. At the same time, the interest rate on the SDR was raised to 5 percent, consistent with a new policy of setting the rate semiannually at about half of the level of a combined market interest rate which was defined as a weighted average of interest rates on short-term market instruments in France, Germany, Japan, the United States, and the United Kingdom.

The 16-currency SDR basket provided a poor unit of account because it was difficult and costly to replicate and it included some currencies that were not widely traded. It was a poor store of value because it had a lower yield than substitute reserve assets. As a result of these shortcomings, in 1981 the valuation of the SDR was simplified to the same five-currency basket on which the SDR interest rate was based, while the interest rate itself was raised to 100 percent of market rates. Formally, the selection criterion for inclusion in the valuation basket was changed to the currencies of the five member countries with the largest exports of goods and services over the previous five years. These changes resulted in a unification of the SDR valuation and interest rate baskets composed of the five freely usable currencies recognized by the IMF: the U.S. dollar, the Japanese yen, the deutsche mark, the French franc, and the pound sterling. The currencies that determine the value of the SDR, the amount of each of these currencies in the basket, and the financial instruments used in determining the interest rate, are reviewed every five years.

The five-currency basket was simple enough to be readily replicable by financial markets while still ensuring that the value of the SDR would be fairly stable in the face of wide swings in exchange rates. The increase in the yield on the SDR made it more attractive to hold compared with other reserve assets and thereby increased creditor incentives to finance the IMF as the rate of remuneration was linked to the interest rate on the SDR. With the introduction of the euro in 1999, the deutsche mark and French franc in the SDR basket were replaced with equivalent amounts of euro, without changing the relative weight of the continental European currencies in the basket.

Current Method of SDR Valuation

The most recent revision of the SDR basket took place on January 1, 2001. The adoption of the euro as the common currency for several member states of the European Union necessitated a change in the criteria for selecting currencies for inclusion in the SDR valuation basket. In particular, the previous criterion was extended to include exports by a monetary union that includes IMF members. In the case of monetary unions, exports of goods and services exclude trade among members of the union.

A second selection criterion was also introduced to ensure that the currencies included in the SDR valuation basket are among the most widely used in international transactions. For this purpose, the IMF formalized the requirement that a currency selected for inclusion in the basket be "freely usable" in accordance with the criteria specified in Article XXX*(f)* of the IMF's Articles. Under this provision, a currency is "freely usable" if the Executive Board determines that it is, in fact, widely used to make payments for international transactions and is widely traded in the principal foreign exchange markets. The weights assigned to the currencies in the SDR basket continue to be based on the value of the exports of goods and services and the amount of reserves denominated in the respective currencies that are held by other members of the IMF over the previous five years.[5]

Four currencies met both selection criteria for inclusion in the SDR valuation basket and were assigned the weights shown in Table III.1, based on their roles in international trade and finance.

The amounts of each of the four currencies included in the new SDR valuation basket were calculated on December 29, 2000 in accordance with the new weights. The calculation was made on the basis of the average exchange rates for these currencies over the three months ending on that date in such a manner as to ensure that the value of the SDR was the same on December 29, 2000 under both the old and new valuation baskets.

The value of the SDR in terms of the U.S. dollar is calculated daily by the IMF as the sum of the market values in terms of the U.S. dollar of the amounts of each of the five currencies in the valuation basket. The actual, or effective, share of each currency in the valuation of the SDR on any particu-

[5]As the euro had been in existence for less than two years when the 2000 review of the SDR basket was undertaken, reserve holdings at end-1999 were used.

TABLE III.1. CURRENCY WEIGHTS IN SDR BASKET, 1996 AND 2001
(In percent)

Currency	Effective January 1, 2001	Previous Revision January 1, 1996
U.S. dollar	45	39
Euro[1]	29	
Deutsche mark		21
French franc		11
Japanese yen	15	18
Pound sterling	11	11

[1]On January 1, 1999, the deutsche mark and French franc in the SDR basket were replaced by equivalent amounts of euro.

lar day depends on the exchange rates prevailing on that day. An example of the valuation of the SDR is shown in Box III.2. The actual shares of currencies in the basket over the past decade are shown in Figure III.1. The valuation of the SDR is posted each morning, Washington time, on the IMF's website.[6]

Current Method of Determining the SDR Interest Rate

In 2000, the IMF also reviewed the method for determining the SDR interest rate and decided to continue to set the weekly interest rate on the basis of a weighted average of interest rates on short-term instruments in the markets of the currencies included in the SDR valuation basket. However, it changed the financial instruments used as the representative interest rates for the euro and Japanese yen.

The representative interest rate for the Japanese yen was changed from the three-month rate on certificates of deposit to the yield on Japanese Government 13-week financing bills. In keeping with the shift to a currency-based system of SDR valuation, the representative rate for the euro, the three-month Euribor, replaced the national financial instruments of France and Germany. The interest rate on the three-month U.S. and U.K. Treasury

[6]See http://www.imf.org/external/np/tre/sdr/basket.htm.

Box III.2. SDR Valuation: Determination of Currency Amounts and Actual Daily Weights

Currency amounts are calculated on the last business day preceding the date the new basket becomes effective. On that day, currency amounts are derived from the weights decided by the Executive Board using the average exchange rate for each currency over the preceding three months. Currency amounts are adjusted proportionally to ensure that the value of the SDR is the same before and after the revision.

The currency amounts remain fixed for the subsequent five-year period. As a result, the actual weight of each currency in the value of the SDR changes on a daily basis as a result of changes in exchange rates.

April 30, 2001

Currency	Initial Weight Decided in 2000	Currency Amount Under Rule O-1	Exchange Rate[1] April 30, 2001	U.S. Dollar Equivalent	Actual Weight April 30, 2001
Euro	29	0.4260	0.8871	0.377905	30
Japanese yen	15	21.0000	123.53	0.169999	13
Pounds sterling	11	0.0984	1.4318	0.140889	11
U. S. dollars	45	0.5770	1.0000	0.577000	46
				1.265793	100
US$1 = SDR				0.790019[2]	
SDR 1 = US$				1.26579[3]	

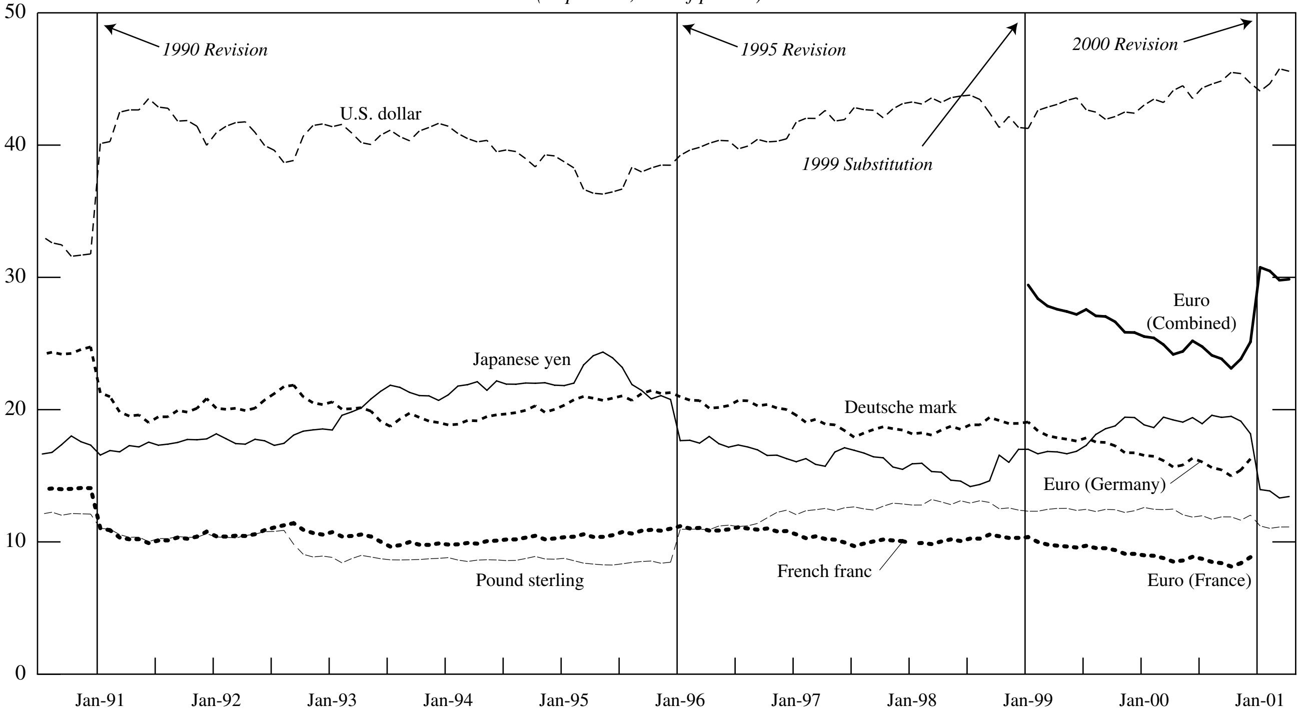
[1]The exchange rate for the Japanese yen is expressed in terms of currency units per U.S. dollar; other rates are expressed as U.S. dollars per currency unit.

[2]IMF Rule O-2(a) defines the value of the U.S. dollar in terms of the SDR as the reciprocal of the sum of the equivalents in U.S. dollars of the amounts of the currencies in the SDR basket, calculated on the basis of exchange rate quotations at noon in the London market, rounded to six significant digits. If the London market is closed, quotations are taken from the New York market; if both of these markets are closed, reference rates of the European Central Bank are used.

[3]The reciprocal of the value of the U.S. dollar in terms of the SDR, rounded to six significant digits.

FIGURE III.1. ACTUAL CURRENCY WEIGHTS IN SDR BASKET, JULY 1990–APRIL 2001

(In percent; end of period)[1]



[1]Except for January 1, 1991, 1996, 1999, and 2001.

bills continue to serve as the representative interest rates for the U.S. dollar and pound sterling, respectively.

The SDR interest rate is calculated weekly by the IMF as the sum of the yields on the respective financial instruments in the basket, in terms of SDRs, using the currency amounts in the valuation basket as weights. Thus, the effective weights of the financial instruments representing each component currency reflect the level of interest rates in each currency as well as the level of exchange rates and the currency amounts in the basket (Box III.3). As a result, these weights differ from the effective weights of the same currencies in the SDR valuation basket, which reflect only the level of exchange rates and the currency amounts in the basket. For example, the weight of the Japanese yen in the interest rate basket is much lower than in the valuation basket, reflecting Japan's currently low interest rates. The SDR interest rate for the current week is posted on Monday morning, Washington time, on the IMF's website.[7]

Allocations and Cancellations of SDRs

The IMF has the authority (Article XV, Section 1, and Article XVIII) to create unconditional liquidity through general allocations of SDRs to participants in the SDR Department in proportion to their quotas in the IMF. The IMF cannot allocate SDRs to itself or to other holders it prescribes. The Articles also provide for the cancellation of SDRs, although to date there have been no cancellations. In its decisions on general allocations of SDRs, the IMF, as prescribed under its Articles, has sought to meet the long-term global need to supplement existing reserve assets, while promoting the attainment of the IMF's purposes and avoiding economic stagnation and deflation, as well as excess demand and inflation.[8]

Decisions on general allocations of SDRs are made for successive basic periods of up to five years.

- The first basic period was for three years (1970–72), when a total of SDR 9.3 billion was allocated.
- There were no general allocations in the second basic period, 1973–77.

[7] See http://www.imf.org/external/np/tre/sdr/rates.

[8] The Articles of Agreement use only the term "allocation," and not "general allocation," which is used in this pamphlet to emphasize the difference with the one-time special allocation that will take place when the Fourth Amendment of the Articles becomes effective and with selective allocations that have been proposed.

BOX III.3. SDR INTEREST RATE: CALCULATION AND ACTUAL WEEKLY WEIGHTS

The interest rate on the SDR is defined as the sum of the multiplicative products in SDR terms of the currency amounts in the SDR valuation basket, the level of the interest rate on the financial instrument of each component currency in the basket, and the exchange rate of each currency against the SDR.

As in the valuation of the SDR, the currency amounts remain fixed for the five-year period following a revision in valuation basket. As a result, the actual weight of each financial instrument in the SDR interest rate changes on a weekly basis as a result of changes in both interest rates and exchange rates.

See example below. Note that these weights can differ from those in the valuation basket on the same date (see Box III.2) because the weights in the interest rate basket reflect changes in the levels of interest rates in each currency as well as change in exchange rates.

April 30, 2001

Currency	Currency Amount (1)	Interest Rate (2)	Exchange Rate Against the SDR[1] (3)	Product (1x2x3)	Actual Weight April 30, 2001
Euro	0.426	4.8363	0.70905500	1.4608	39
Japanese yen	21.0	0.0230	0.00636558	0.0031	0
Pounds sterling	0.0984	5.0952	1.13403000	0.5686	15
U. S. dollars	0.577	3.8500	0.78583100	1.7457	46
Total				3.78	100

[1]Exchange rates are expressed in terms of SDRs per currency units.

- In the third basic period, 1978–81, a total of SDR 12.1 billion was allocated.
- There have been no general allocations of SDRs since the third basic period.

The decision for a general allocation of SDRs follows a set procedure. First, if the Managing Director has determined that a proposal for SDR allocation has widespread support among SDR participants, he or she is required to make such a proposal at least six months before the commencement of a basic period, or within six months of a request for a proposal from the Executive Board or Board of Governors, or at such other times as specified in Article XVIII. Second, the Executive Board must agree with the proposal. Third, the Board of Governors has the power, by a majority of 85 percent of its total voting power, to approve or modify the proposal.[9]

Recent Proposals for SDR Allocations

A number of proposals have been advanced in recent years to enhance the role of the SDR in the international monetary system and to address specific issues. The principal proposals included a resumption of general allocations, a special allocation to correct inequities in the system by an amendment of the Articles, and a selective allocation that would redistribute a general allocation to help finance crisis lending.

In 1993, the Managing Director of the IMF proposed a general allocation of SDR 36 billion based on the finding of a long-term global need to supplement existing reserve assets. He also suggested that a means be found to redistribute voluntarily a portion of the new SDRs, subject to conditionality, to selected countries, including the countries that had joined the IMF since 1981 and, therefore, had never been allocated SDRs. The management and staff of the IMF maintained that the demand for reserves to hold had continued to grow but that the vast majority of the IMF's membership, accounting for almost half of IMF quotas, faced net costs of acquiring and holding reserves that were higher, in many cases significantly higher, than the true economic cost of creating reserves through SDR allocations. The existence of such a margin for a large proportion of the IMF membership was viewed as evidence of a global need to supplement existing reserve assets and that an SDR allocation was preferable to alternative sources of reserves.

However, the arguments put forth by the IMF staff for a general SDR allocation did not garner the necessary 85 percent voting majority of members required for passage. The reluctance of some large members to go along with the proposal reflected fundamental changes in the world economy that

[9]The procedures for cancellations of SDRs are broadly the same as those for allocations, except that cancellations are based on cumulative allocations rather than quotas. This ensures a uniform proportionate reduction for all members, regardless of the number of allocations in which they have participated.

they believed put into question the concept of a potential shortage of international reserves:

- The move to floating exchange rates.
- The growth of international capital markets and the expanded capacity of creditworthy national authorities to borrow.
- A concept of international liquidity that had become much broader than international reserves.

In 1993/94, the Executive Directors for the United Kingdom and the United States proposed, as an alternative to the Managing Director's proposal for a general allocation, an amendment of the Articles to provide a special allocation of SDRs. The purpose of the amendment was to address a perceived inequity that more than one-fifth of IMF members had never received an SDR allocation because they joined the IMF after the last allocation in 1981. The size and scope of the proposal was modified during the course of Executive Board discussions before a consensus was achieved in 1997.

In September 1997, the IMF's Board of Governors adopted a resolution to amend the Articles to allow for a special one-time allocation of SDRs. The proposed Fourth Amendment of the Articles would equalize all members' ratios of cumulative SDR allocations to quota (based on quotas following the Ninth Review of Quotas) at a common benchmark of 29.3 percent, which would result in a doubling of the outstanding stock of SDRs to SDR 42.8 billion. The amendment includes provisions to allow future new members to receive equal treatment and places the allocations of members with overdue obligations to the IMF in escrow accounts until their arrears to the IMF are cleared. The amendment would not affect the IMF's existing power to allocate SDRs on the basis of a finding of a long-term global need to supplement existing reserve assets. As of July 15, 2001, 108 IMF members with 72 percent of the total voting power had accepted the amendment (out of the 110 members with 85 percent of the voting power required for adoption).

A number of proposals for selective allocations have been advanced to use the SDR as a source of finance for conditional lending, particularly to enable the IMF to serve as a financial safety net or lender of last resort during financial crises. Under one form of these proposals, a general allocation of SDRs would occur under the existing authority of the Articles but the major industrial countries would agree voluntarily to onlend their allocated SDRs to the IMF or directly to countries undertaking IMF-supported programs. Interest in these proposals waned following agreement in 1998 on an

IMF quota increase as part of the Eleventh General Review of Quotas and the subsequent improvement in the IMF's liquidity position.

Participants and Prescribed Holders

SDRs are allocated only to IMF members that elect to be participants in the SDR Department and to observe the obligations of participants. Since April 7, 1980, all members of the IMF have been participants in the SDR Department. SDRs can be held by, but not allocated to, the GRA of the IMF and prescribed holders.

The IMF has the authority to prescribe, as other holders of SDRs, non-members, 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. As of end-June 2001, there were 16 organizations approved as "prescribed holders."[10] These entities can acquire and use SDRs in transactions by agreement and in operations with participants and other holders. They cannot, however, receive allocations of SDRs or use SDRs in "transactions with designation." There is no general provision for prescribed holders to initiate transactions in SDRs with the GRA; however, in the case of those prescribed holders, if any, that are lenders to the IMF's GRA, it has been agreed that they may receive interest payments and repayments of principal from the IMF in SDRs.

Uses of SDRs

In the late 1970s and 1980s, the IMF took several measures to increase the liquidity and acceptability of the SDR. One step was to permit central banks to use SDRs freely on the basis of mutual agreement, without having to justify every transaction on the basis of balance of payments need. Another measure was to liberalize the requirement that countries that had used their SDRs

[10]The 16 prescribed holders are four central banks (the European Central Bank, the Bank of Central African States, the Central Bank of West African States, and the Eastern Caribbean Central Bank); three intergovernmental monetary institutions (the Bank for International Settlements, the Latin American Reserve Fund, and the Arab Monetary Fund); and nine development institutions (the African Development Bank, the African Development Fund, the Asian Development Bank, the East African Development Bank, the International Bank for Reconstruction and Development and the International Development Association (respectively, the "hard" and "soft" loan entities of the World Bank Group), the Islamic Development Bank, the Nordic Investment Bank, and the International Fund for Agricultural Development).

were expected eventually to partially "reconstitute" their holdings.[11] While the reconstitution requirement remained in place, the minimum required level of average holdings was reduced from 30 percent of cumulative allocations to 15 percent in 1979. In June 1981, the reconstitution requirement was suspended.

Originally, the IMF intended that SDRs be used only in spot transactions—that is, transactions with immediate settlement—between participants or participants and the IMF. But as part of the transition to a more market-oriented role for the SDR, the IMF broadened the scope of official transactions in SDRs to permit their use in swaps, forward transactions, loans, collateralization, and grants.[12] All of these steps were driven by the IMF's desire to promote the SDR as the "principal reserve asset" of the international monetary system, as required by the Second Amendment of the Articles. However, the IMF stopped short of issuing broad approval for the use of SDRs in any nonprescribed activity and thus retained a degree of control over the types of allowable transactions. In any case, the liberalized rules resulted in little new activity, as spot transactions have continued to account for almost all transactions in SDRs.

The SDR is used almost exclusively for transactions with the IMF and efforts to promote private uses have proven largely ineffective. A number of reasons have been advanced for this failure. As noted above, unlike currencies that represent a claim on their issuers, the SDR is not a claim on the IMF, but a claim on the freely usable currencies of IMF members. Moreover, the value of the SDR and its yield are not market determined, but reflect changes in the value or yield of its constituent currencies or financial instruments rather than a market clearing price. This means that the value and yield of the SDR are not free to respond to excess supply or demand pressures. As a result, the "market" for SDRs must be administratively managed by the IMF, as discussed in the next section. Finally, the private markets have developed alternative instruments that can provide the same kinds of currency hedge that could be achieved through use of the SDR.

[11]The reconstitution provision required that a country's holdings of SDRs must be at least a designated percentage of the cumulative allocation averaged over a five-year period.

[12]See *Users Guide to the SDR: A Manual of Transactions and Operations in SDRs* on the IMF website (http://www.imf.org/external/pubs/FT/usrgsdr/usercon.htm) for a detailed explanation of how SDRs can be used.

The IMF's own accounts are maintained in terms of SDRs and several other international organizations and conventions have also adopted the SDR as a unit of account.[13] As of April 30, 2001, the exchange rates of four IMF member countries were pegged to the SDR.

In summary, the SDR has not become more of a presence in the international monetary system for a number of reasons:

- First, the fixed exchange rate system for which the SDR was developed changed to a floating rate regime shortly after the introduction of the SDR. This, combined with the internationalization of capital markets, reduced the need for a central reserve asset like the SDR and helps explain why so few SDRs have been allocated.
- Second, the SDR is not a market-based asset. It has always been administratively controlled by the IMF in almost every respect, from its valuation and yield to who may hold it and what it may be used for. These restrictions, along with the development of new financial instruments in the markets themselves, help explain why the use of the SDR has not developed in private markets.

Operation of the SDR System

Flows of SDRs and the Central Role of the IMF

The IMF receives and disburses SDRs through the GRA, which is the focal point for the system-wide circulation of SDRs.

Inflows of SDRs into the GRA include:

- payments of charges (interest) owed to the GRA,[14]
- interest earned on GRA SDR holdings and assessments for the cost of conducting business with the SDR Department,
- repurchases, and
- the reserve asset portion (25 percent) of quota increases (Box III.4). [15]

[13] African Development Bank, Arab Monetary Fund, Asian Development Bank, Common Fund for Commodities, East African Development Bank, Economic Community of West African States, International Center for Settlement of Investment Disputes, International Fund for Agricultural Development, and Islamic Development Bank.

[14] The IMF's Articles require members to pay all charges due to the GRA in SDRs.

[15] The reserve asset portion of quota increases must be paid in SDRs, unless the IMF decides otherwise.

Box III.4. Borrowing of SDRs for Payment of the Reserve Asset Portion of a Quota Increase

Members are required to pay 25 percent of quota increases in SDRs or currencies specified by the IMF, or in a combination of SDRs and currencies. The balances of the increases are payable in their own currencies.

In cases where the gross reserves and SDR holdings of members are low, the IMF, if requested, can make arrangements to assist members in making the payment of the reserve asset portion of their quota increases. This is done via a same-day loan, free of any interest, fee, or commission. Under the Eleventh General Review, five members with relatively large SDR holdings agreed to lend SDRs totaling SDR 2.8 billion to other members that had a need to borrow such SDRs. Similar arrangements existed under the Eighth and Ninth Quota Reviews, and can be arranged for ad hoc or selective quota increases outside of general reviews if needed.

The mechanism functions as follows:

(1) The member borrows SDRs from a member willing to lend SDRs.

(2) The member uses the borrowed SDRs to pay the reserve asset portion of its quota subscription.

(3) The member makes a reserve tranche purchase in the same amount (i.e., it pays in domestic currency equal to 25 percent of the increase in its own quota) and receives SDRs.

(4) The member uses the SDRs from (3) to repay the SDR loan to the lending member in (1) on the same day.

Outflows of SDRs from the GRA include:

- purchases,
- remuneration payments,
- loan repayments,
- interest payments on outstanding loans, and
- SDRs acquired by members to pay charges and assessments.

Members are not obliged to accept SDRs in any transaction except replenishment.[16] However, the IMF generally offers SDRs as an alternative

[16] The IMF may decide to use its SDR holdings to replenish its holdings of the currency of a participant in the SDR Department.

to currencies in all payments it makes to its members. Virtually all members holding IMF-remunerated reserve tranche positions choose to receive SDRs in quarterly remuneration payments,[17] and SDRs have been accepted in the repayment of loans and the payment of interest on outstanding loans. Members may acquire SDRs from the GRA for the payment of charges to the GRA and SDR Department and to pay assessments. The main flows of SDRs into and out of the GRA are presented in Figure III.2, which shows the relative proportions of these flows since 1990 and compares them to the level of transactions among participants and prescribed holders.

Members may accept SDRs in purchase transactions, and they may request to convert these to a usable currency in transactions with designation or transactions by agreement with other members, as discussed below.

The IMF recycles the stock of SDRs held in the GRA by:

- channeling SDRs directly from the GRA to debtor members who are making purchases from the IMF; and
- channeling SDRs indirectly from the holders of SDRs to other members who need to acquire SDRs to make payments to the IMF (i.e., charges and repurchases). The IMF may also assist members in buying or selling SDRs for reserve management purposes. Such transactions are usually carried out under the two-way arrangements to the extent that SDRs received in purchases from the GRA are converted into freely usable currencies.

The GRA is thus the primary force behind the circulation of SDRs—both to debtor members in connection with their purchases from the IMF and to creditor members in the payment of IMF borrowing and remuneration. The GRA's holdings of SDRs are subject to sharp spikes in the wake of reserve asset payments of quota increases (Figure III.3). The GRA's SDR holdings are returned to within a desired range mainly through transfers of SDRs for purchases and payments on IMF borrowing under its quarterly financial transactions plan. The Executive Board has periodically reviewed the level of the IMF's SDR holdings, particularly when circumstances warranted changes in the IMF's target range of SDR holdings. The last review was completed following the payment of quota increases under the Eleventh Review, when the Executive Board agreed that the IMF's SDR holdings should be maintained within a range of SDR 1.0–1.5 billion, which had proved adequate to meet the IMF's operational needs.

[17] Only one member has opted to receive remuneration payment in its own currency at present.

FIGURE III.2. SELECTED SDR TRANSACTIONS, FINANCIAL YEARS ENDED APRIL 30, 1990–2001

(In billions of SDRs)

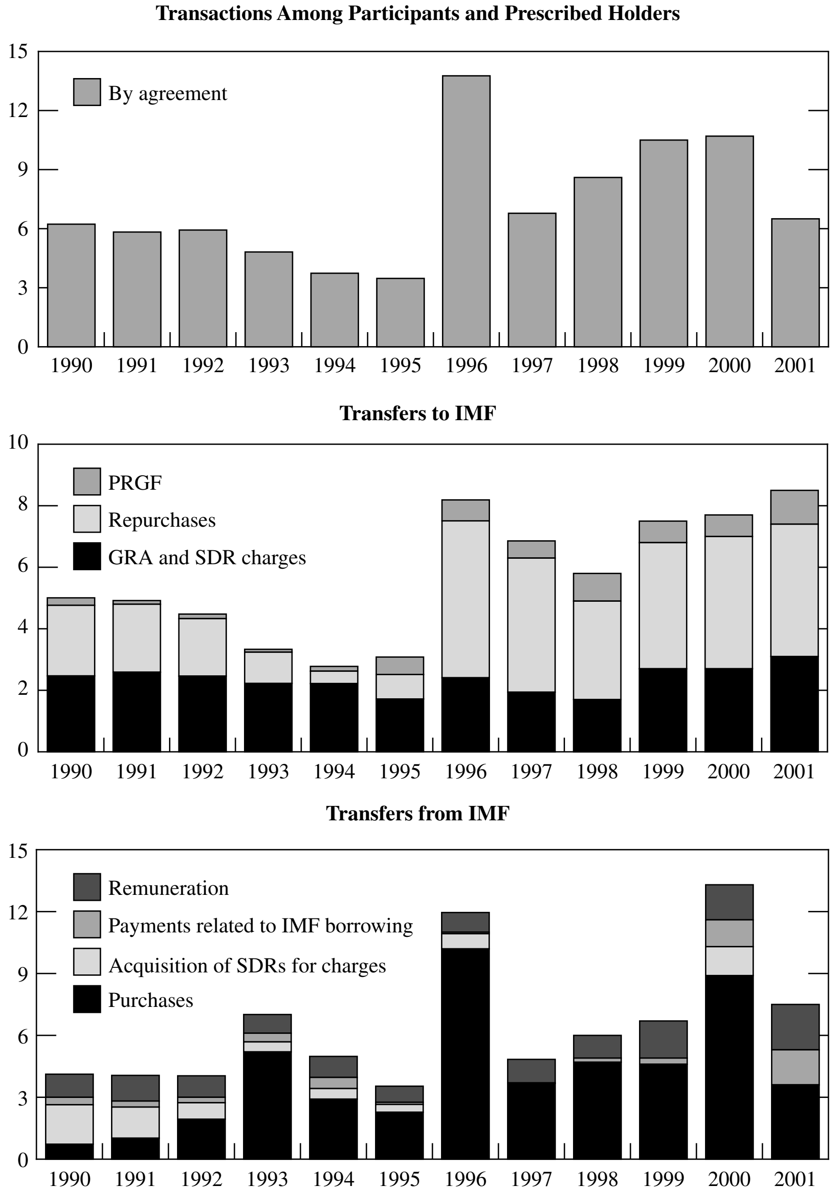


Figure III.3. IMF's Holdings of SDRs, January 1990–April 2001

(In billions of SDRs; end of period)

[1]Years in which quota increases went into effect.

System of Two-Way Arrangements

The two-way (buying and selling) arrangements are another important mechanism for circulating SDRs. The members with two-way or one-way arrangements effectively make a market in SDRs and increase the SDR's usability. The two-way arrangements enable members to acquire SDRs in exchange for freely usable currencies (mainly U.S. dollars and euros in practice), without having to claim a balance of payments need. Since the main attraction of the SDR as a reserve asset is the claim it represents on freely usable currencies, the system of two-way arrangements enhances the attractiveness of the SDR.

Each two-way arrangement specifies a range of SDR holdings within which transactions may be initiated, the specific currencies to be exchanged, the date of settlement (normally two or three business days), the minimum and maximum amounts of individual transactions, and the notice period required before initiating a particular transaction. The first two-way arrangement was created in February 1986, and, by the end of 1987, nine two-way arrangements were in place. At present, there are 13 market-makers with two-way arrangements and one sell-only arrangement. The combined holdings ranges of these arrangements total about SDR 3½ billion. The sell-only arrangement stipulates a floor and any holdings in excess of that minimum are available for sale.

The supply of SDRs for the two-way arrangements comes mainly from the resale of SDRs from members receiving SDRs in purchases from the IMF. The demand for SDRs comes from members that need them for the settlement of their financial obligations to the IMF. The scope of recirculation of SDRs under the two-way arrangements is limited by three factors:

- the size of SDR transfers under new IMF credits;
- the extent to which members receiving such credits convert SDRs into currency; and
- the absorptive capacity (i.e., the difference between members' current holdings and the maximum limits) available under the two-way arrangements.[18]

[18]For example, in a period of little or no new extensions of IMF credit, such as in the late 1980s, members requiring SDRs to settle their IMF obligations had to turn to the IMF itself or resort to ad hoc approaches to other members.

In general, the scope for recirculation of SDRs is much greater when they are held by members with two-way arrangements (Box III.5).

The role of the IMF in transactions by agreement is to act as an intermediary matching participants in this managed market. The two-way arrangements allow the IMF to initiate purchases and sales of SDRs on behalf of any participant in the SDR Department against usable currencies, subject to the constraint that all transactions take place at the official SDR exchange rate for the currency involved. As the market does not always clear, the supply and demand for SDRs must be managed through the judicious design of the quarterly financial transaction plans. The limited supply of SDRs is assigned primarily to meet the demand for members' obligations that must be paid in SDRs. Ad hoc requests from members to acquire SDRs for reserve management purposes are frequently difficult to meet.

Pattern of SDR Holdings

The use of SDRs in certain transactions (e.g., payment of charges, repurchases, related payments on IMF borrowings, and remuneration) has resulted in increasing imbalances in the distribution of SDRs among members. The distribution of SDR holdings is skewed toward a few creditor members, mainly the industrial countries. One member holds over one-third of the current outstanding stock of SDRs. Another relatively large group of members—predominantly debtor countries who have experienced balance of payments difficulties over a long period of time—typically holds relatively small amounts of SDRs in terms of its cumulative allocations. A third group of members has shifted between creditor to debtor positions, and maintained its holdings of SDRs at an average level of about 60 percent of its cumulative allocations in recent years (Table III.2).

Financial Statements of the SDR Department

The strict separation of the IMF's General and SDR Departments implies that their financial accounts be kept separately. The basic structure of the SDR Department's balance sheet (Table III.3) is quite simple. Since interest payments and receipts cancel out for the department as a whole, it is convenient to keep the accounts on a net basis.

Box III.5. The Circulation of SDRs

- All IMF members and participants in the SDR Department receive SDRs at the time of SDR allocations.
- The GRA receives SDRs from members meeting obligations (A) and making reserve asset payments associated with periodic quota increases (B).
- The GRA transfers SDRs mainly to members under IMF arrangements (C) and makes remuneration payments to creditor members (D).
- Most transactions intermediated through two-way arrangements stem from the resale of SDRs received under IMF arrangements (E) or through the purchases of SDRs to meet obligations to the IMF (F).
- Receipt and payment of net SDR interest occurs among members (G), although the IMF and prescribed holders also receive interest on their SDR holdings.

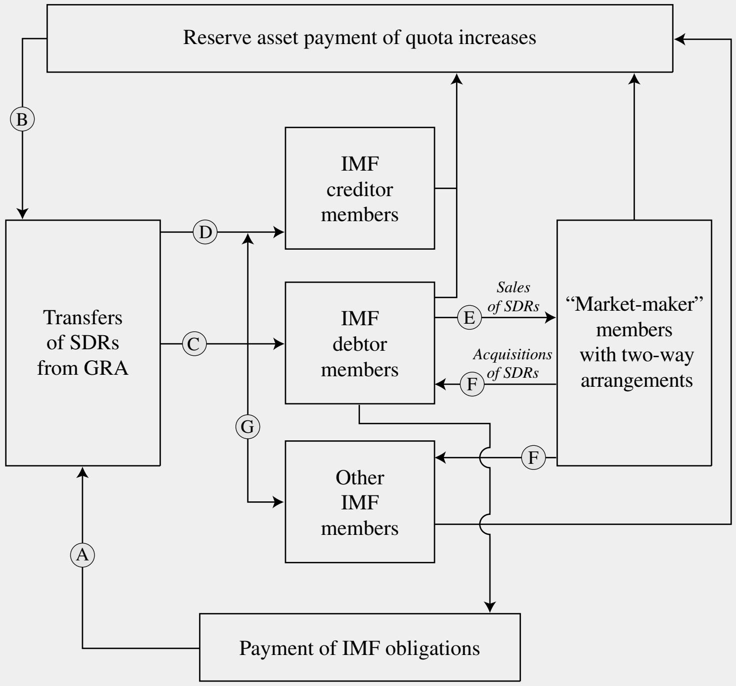


TABLE III.2. SDR HOLDINGS OF SELECTED GROUPS OF COUNTRIES[1]

(In percent of cumulative allocations)

			October			June			April
	1983	1987	1992[2]	1997	1998[2]	1999[3]	1999	2000	2001
IMF creditors (26)	86	120	123	113	115	107	104	101	105
IMF debtors (103)	10	22	18	48	41	34	39	40	29
Other members (54)	58	73	59	81	75	60	68	80	82

[1]Number of members is shown in parentheses.
[2]Before quota increase (Ninth and Eleventh Reviews).
[3]After quota increase (Eleventh Review).

The asset side of the balance sheet shows the position of debtors to the SDR Department—that is, members who have exchanged some of their SDRs for freely usable currency and whose holdings of SDRs therefore fall short of their cumulative allocations. The accrued interest receivable from these debtor members on the asset side is the mirror image of the accrued interest payable to creditors on the liability side.

The final entry on the asset side represents interest and assessments due from members in arrears to the SDR Department. If sufficient SDRs are not received when these payments are due, additional SDRs are temporarily created to pay them. When the arrears are cleared, these temporary SDRs are canceled.

Participants with holdings above allocations assume a creditor position in the department and therefore their SDR holdings in excess of their cumulative allocations are liabilities of the department, as are any holdings of prescribed holders and the IMF (GRA), which do not receive allocations. Interest payable to these creditors is accrued and paid on a quarterly basis.[19]

The income statement of the SDR Department is equally straightforward (Table III.4). The department's income consists of interest payments from

[19]As the balance sheet is shown on the last day of the financial year, the interest accrued over the previous three months is shown. This amount would be paid out to creditors on May 1, with the figure reverting to zero to begin accruals for the next quarter.

TABLE III.3. BALANCE SHEET OF THE SDR DEPARTMENT,
AS OF APRIL 30, 2001
(In millions of SDRs)

Assets		Liabilities	
Participants with holdings below allocations:		Participants with holdings above allocations:	
Allocations	12,646	SDR holdings	14,690
less: SDR holdings	3,866	less: allocations	8,787
Allocations in excess of holdings	8,780	Holdings in excess of allocations	5,903
		Holdings by GRA	2,437
		Holdings by prescribed holders	538
Interest receivable	215	Interest payable	216
Overdue assessments and interest	98		
Total assets	9,094	Total liabilities	9,094

Note: Numbers may not add to totals due to rounding.

debtors and assessments paid by members for the administrative expenses incurred in operating the department. The department's expenses consist of interest payments to the creditors in the system and the reimbursement to the IMF for the administration of the department. As revenue and expenditure are always equal, net income is always zero.

Seminar on the Future of the SDR

In 1995, the IMF Interim Committee (now the IMFC) "requested the IMF to initiate a broad review, with the involvement of outside experts, of the role and functions of the SDR in light of changes in the international financial system." The IMF convened a seminar in March 1996 involving the participation of policymakers, academic economists, and other influential leaders,

TABLE III.4. INCOME STATEMENT OF THE SDR DEPARTMENT,
FINANCIAL YEAR ENDED APRIL 30, 2001
(In millions of SDRs)

Income	
Net interest from participants with holdings below allocations	400
Assessment on SDR allocations	2
	403
Expenses	
Interest on SDR holdings	
Net interest to participants with holdings above allocations	261
GRA	113
Prescribed holders	27
Administrative expenses	2
	403
Net income	0

Note: Numbers may not add to totals due to rounding.

along with the IMF staff, to examine the role of the SDR, the rationale for allocating SDRs, the criteria for distributing SDRs, and the characteristics of the SDR.[20] The seminar helped to inform the subsequent Executive Board discussions on the principal allocation proposals even though the seminar participants were divided on many key issues and expressed doubt about whether it was realistic to expect the SDR to become the principal reserve asset in the international monetary system. There was, however, general support to maintain the present role of the SDR.

[20]The *Future of the SDR in Light of Changes in the International Financial System*, ibid. (see footnote 2).