FOR AGENDA

SM/89/164

August 9, 1989

To: Members of the Executive Board

From: The Acting Secretary

Subject: Use of SDRs in Foreign Exchange Market Intervention

Attached for consideration by the Executive Directors is a paper on the use of SDRs in foreign exchange market intervention which, together with the paper on further consideration of issues relating to post-allocation in the distribution of SDRs (SM/89/45, 2/24/89), will be brought to the agenda for discussion on a date to be announced.

The attached paper also provides background information to the discussion on international liquidity, the role of the SDR, and the question of SDR allocation (SM/89/158, 8/2/89) tentatively scheduled for Monday, August 28, 1989.

Mr. P. Clark (ext. 7800) or Mr. I. Kim (ext. 7809) is available to answer technical or factual questions relating to this paper.

Att: (1)

Other Distribution:
Department Heads

INTERNATIONAL MONETARY FUND

Use of SDRs in Foreign Exchange Market Intervention

Prepared by the Treasurer's Department

(In consultation with Research, Legal, and European Departments)

Approved by Gerhard Laske

August 7, 1989

Contents

I. Introduction

In its September 1988 communiqué, the Interim Committee encouraged the Executive Board "to continue its study of how to increase the usefulness of the SDR as a reserve asset." 1/ One of the issues falling under this broad objective relates to the potential role of the SDR as an instrument for foreign exchange market intervention. This issue was raised by Executive Directors in early 1986 in connection with the Board's discussions on the role and characteristics of the SDR, in which some Executive Directors commented that the increased usability of the SDR in foreign exchange market intervention would be helpful in enhancing the attractiveness of the instrument as a reserve asset. 2/ In their recent discussion of issues relating to the role of the SDR and the international monetary system, a number of Directors expressed their interest in ways in which wider use of SDRs might contribute to exchange rate stability. 3/ The potential contribution of the SDR in achieving this objective in part motivated a proposal for a sizable SDR allocation that was put forward in February 1988 by the Institute of International Finance. This paper is intended to respond to the Board's continued interest in the potential use of the SDR in connection with exchange market intervention and to discuss certain issues associated with such use as part of the Fund's efforts to examine possible improvements in the monetary character of the SDR.

At the outset, it is useful to recall the conventional definition of foreign exchange market intervention which is given in the Jurgensen Report:

> The narrowest operational definition [of intervention] embraces any sale or purchase of foreign exchange against domestic currency which monetary authorities undertake in the exchange market. Such transactions are commonly intended to influence the exchange rate of the domestic currency.... This definition... includes all central-bank purchases and sales of foreign exchange against domestic currency, whatever form of financing is effectively used (reserves, swaps, EMS financing, official borrowing, etc.). 4/

1/ "Communiqué of the Interim Committee of the Board of Governors of the International Monetary Fund," September 26, 1988, p. 4.

2/ See EBM/86/128 and EBM/86/129 (8/4/86), which discussed "The Development of Voluntary Transfers of SDRs Among Participants and Prescribed Holders," SM/86/142 (6/18/86) and "Considerations of Alternative Approaches to Influencing the Share of SDRs in Members' International Reserves," SM/86/169 (7/9/86).

3/ These issues were addressed by a staff paper, "The SDR and the International Monetary System," SM/89/32. See EBM/89/28 (3/6/89).

4/ "Report of the Working Group on Exchange Market Intervention," March 1983, p.4.

As noted in the Report, this is a narrow definition in that it excludes transactions which take place outside the foreign exchange market, such as customer transactions between the central bank and specific entities (e.g., the central bank's own government), the receipt of interest earnings on foreign exchange reserves, and exchange market transactions carried out by other entities (e.g., banks and public or private corporations) that are directed by the government or central bank. To restrict the scope of the discussion, the same narrow definition of foreign exchange market intervention has been adopted in this paper, i.e., purchases or sales of foreign exchange against domestic currency undertaken by a monetary authority with private financial institutions. 1/ Through such operations the monetary authority affects the relative sizes of the stocks of assets denominated in foreign and domestic currencies, with the aim of thereby affecting the exchange rate of the domestic currency.

The magnitude and frequency of intervention depend primarily on the exchange rate policy pursued by a national authority. The objectives of this policy can range from pegging to another currency or basket of currencies, participating in the exchange rate mechanism in the European Monetary System, or achieving some form of float with varying degrees of "management." A host of considerations bear on the exchange rate policy chosen, as well as on the use of other policy instruments (e.g., monetary policy) to achieve the desired exchange rate. These are, however, beyond the scope of the paper.

As discussed in more detail below, it is relevant to distinguish two aspects of exchange market intervention. The first aspect relates to the instrument bought or sold directly in transactions with private participants (banks) in the market, which will be referred to as the vehicle for intervention. Typically, the instrument used by a central bank is a demand deposit denominated in one of the major reserve currencies. Thus, to support the exchange rate of its currency in the foreign exchange market, for example, a monetary authority (central bank) generally sells a demand deposit in one of the reserve currencies and debits the account of the commercial bank that is the counterparty to the transaction. The second aspect, as noted in the definition of intervention cited above, relates to the form of financing used for the intervention transaction. The financing may come from stocks of reserve assets already held in fully liquid form, i.e., demand deposits. In addition, reserves assets that are less liquid, e.g., U.S. Treasury bills, can finance intervention when they are sold and converted into demand deposits that are then used directly in the foreign exchange market. Alternatively, rather than immediately draw down its reserve assets, a central bank or monetary authority may draw

---

1/ In those countries where highly developed foreign exchange markets do not exist and exchange rates tend to be controlled by the monetary authorities, intervention may more typically take the form of direct government payments for imports and administrative allocations of foreign exchange to commercial banks.

on short-term financing facilities, e.g., swaps or EMS financing; in this case, however, reserve assets must eventually be used to settle the liabilities arising from the intervention operations.

As a reserve asset, the SDR has a role to play in such intervention operations. However, this role has to date not included the use of the SDR as a vehicle for intervention in the foreign exchange market. There are two reasons why the SDR has not been used in this manner. First, the Fund's Articles of Agreement stipulate that SDRs may only be held by participants, prescribed holders, and the Fund; consequently, there is no authority for the SDRs allocated by the Fund (i.e., "official" SDRs) 1/ to be held by or transferred to private entities, including commercial banks. This reflects the nature of the SDR as a monetary reserve asset that was designed to meet the long-term global need to supplement existing reserve assets and to be used by monetary authorities to finance payments imbalances; 2/ therefore, it was not intended to be exchanged between monetary authorities and private entities for direct intervention in foreign exchange markets. Second, there has not yet emerged a sufficiently broad market for other SDR-denominated instruments (i.e., "private" SDRs), which is a prerequisite for SDR-denominated instruments to be used as a vehicle for intervention.

While it was not envisaged that the SDR would be used as an intervention vehicle, i.e., in transactions with private market participants, the SDR has been frequently used as a means to finance intervention or settle intervention-related obligations. The Articles of Agreement and subsequent decisions provide specific and general arrangements for SDRs to be used by monetary authorities directly for this purpose or to acquire national currencies that can be used for balance of payments purposes, including intervention operations. Thus, the use of SDRs in connection with foreign exchange market intervention has to date been related exclusively to the financing of intervention, i.e., either in exchange for usable currencies which are subsequently used for intervention operations, or for the settlement of indebtedness arising out of exchange market intervention.

Against this general background of the SDR and exchange market intervention, the paper is organized as follows. Section II discusses the use of the official SDR in financing intervention and describes certain attributes of the SDR that some members have identified as factors influencing their use of SDRs for this purpose. Section III discusses certain issues relating to the possible use of SDR-denominated assets as a vehicle for intervention and briefly notes

---

1/ "Official" SDRs refer to the SDRs allocated by the Fund, namely, those maintained on accounts with the Fund's Special Drawing Rights Department, while "private" SDRs refer to all other SDR-denominated assets or instruments that may be issued by private or official entities.

2/ For this point, see M.G. de Vries, The International Monetary Fund, 1966-1971, Vol. I: Narrative, p. 177.

arrangements that have been suggested to facilitate such intervention in conjunction with use of the official SDR. Section IV provides some concluding remarks and sets out some of the issues on which Executive Directors may wish to comment as a possible basis for further work toward improvement in the characteristics and usefulness of the SDR.

II. Use of SDRs in Financing Intervention

This section first discusses the principal mechanisms by which official SDRs can be used to finance exchange market intervention. This is followed by an examination of actual or perceived constraints on the ability of members to use existing mechanisms to finance intervention with SDRs. The section concludes with a brief discussion of ways that might be considered to facilitate such use of the SDR. Unless otherwise indicated, references to the SDR in what follows are to the official SDR.

1. Mechanisms for financing intervention with SDRs

The first amendment to the Articles of Agreement in 1969 established the SDR to meet the long-term global need to supplement existing reserve assets. The SDR was designed to have the characteristics of other reserve assets, with the exception of not being traded in private financial markets. 1/ The Fund's Articles and decisions therefore provide for a large number of different uses of the SDR, including the direct transfer of the asset and its exchange for currencies which can, in turn, be used as the instrument for intervention in exchange markets. These arrangements are an essential part of the SDR mechanism, as they assure members that their SDR holdings constitute a fully liquid and usable reserve asset. Principal among these has been the designation mechanism, which assures participants that they can exchange SDRs for freely usable currencies, subject to the condition that they have a balance of payments need to use reserves. 2/

1/ In this respect the SDR is similar to gold as an international reserve asset in that both are readily convertible into currencies to be used for balance of payments financing, but neither can be used as vehicles for exchange market intervention.

2/ Countries with a balance of payments need to use reserves may ask the Fund to arrange for the exchange of SDRs they hold into a freely usable currency by designating a participant judged by the Fund to be in a strong balance of payments and reserve position. For a discussion of the balance of payments need to use reserves, see "Requirement of Need for the Use of Fund Resources and Special Drawing Rights," SM/76/197 (9/17/76). The designated participant is obligated to accept

Fund members that do not have a balance of payment need may use SDRs in a variety of voluntary transfers. These include transactions and operations among themselves and with prescribed holders: (1) to obtain any currency in transactions by agreement with other members, provided that the transaction is made at the official exchange rate against the SDR as determined by the Fund; 1/ (2) in swap arrangements, in which a member may transfer SDRs to another member in exchange for an equivalent amount of currency or another monetary asset, except gold, with an agreement to reverse the exchange at a specified future date and at an exchange rate agreed to by the participants; (3) in forward operations, in which members can buy or sell SDRs for delivery at a future date against currency or another monetary asset, except gold, at an exchange rate agreed to by the members; (4) to make loans of SDRs, at interest rates and maturities agreed to by the parties (repayments of loans and payments of interest may be made with SDRs); (5) to settle financial obligations; (6) as security for the performance of financial obligations, in either of two ways: (i) members pledging SDRs, which can be earmarked for the duration of the pledge by being recorded in a special register kept by the Fund, or (ii) members agreeing that SDRs will be transferred as security for the performance of an obligation and that the SDRs will be returned to the transferror when its obligation under the agreement has been fulfilled; and (7) in donations (grants).

There have been no transactions with designation since October 1987, as all prospective uses of SDRs through the designation process have been arranged through transactions by agreement with other participants. During this period, transactions by agreement have been facilitated by two-way arrangements for voluntary SDR transactions. These arrangements, of which there are currently nine, permit the Fund to effect potential purchases or sales of over SDR 1.2 billion in exchange for U.S. dollars, deutsche mark, French francs, pounds sterling, and Japanese yen. While maintaining the SDR holdings within the ranges desired by the participating members, these arrangements have facilitated the smooth functioning of the SDR system by accommodating on a voluntary basis changes in SDR holdings on the part of other participants and prescribed holders. In addition to two-way arrangements, five participants have standing arrangements with the

---

2/ (Cont'd from p. 4). the SDRs and to provide freely usable currency at the Fund's official value of the SDR three business days after the exchange amount is calculated and the designee is notified. A participant's obligation to accept SDRs and provide currency does not extend beyond the point at which its holdings of SDRs are three times its net cumulative allocation. The Articles prohibit the use of SDRs in designation for the sole purpose of changing the composition of the participant's reserves. See Article XIX, Section 3(a).

1/ This refers to the equal value provision, which states that the exchange rates for transactions shall be such that participants using SDRs shall receive the same value irrespective of the currencies provided. See Article XIX, Section 7(a).

Fund permitting it to sell SDRs on their behalf. While it is not possible to ascertain the extent to which the usable currencies obtained in exchange for SDRs were employed for exchange market intervention, these arrangements provide a convenient method for using SDRs to finance intervention.

Also facilitating the efficient conversion of SDRs into usable currencies has been the increased recourse by a number of participants to transactions arranged bilaterally. Since early 1987, three members have entered into bilateral arrangements which are related to the exchange of SDRs for specific currencies for intervention purposes. The total amount of transactions under these bilateral arrangements was about SDR 1.3 billion between April 1987 and July 1989. Such bilateral arrangements can provide a highly convenient means to use SDRs for intervention purposes, as the terms and conditions of such use can be tailored to the needs of participants.

2. Factors affecting the use of the SDR to finance intervention

As described above, existing mechanisms would appear to provide for the efficient use of SDRs to finance the acquisition of intervention vehicles, i.e., to acquire vehicle currencies in advance of intervention or settle indebtedness arising from borrowing vehicle currencies. Nonetheless, it is useful to discuss briefly some actual or perceived constraints that may interfere with the SDR playing a major role in the financing of exchange market intervention.

One limitation is the relatively small amount of SDRs that has been allocated to date. At the end of 1988, the cumulative allocation of SDRs (SDR 21.4 billion) accounted for only 4 percent of global nongold reserves and total SDR holdings by industrial countries represented 6 percent of their nongold reserve holdings. Moreover, the relative size of SDR holdings is significantly smaller in comparison with broader measures of international liquidity that include potential borrowing for intervention purposes by central banks in the markets or through official channels. For countries indebted to the Fund, the amount of SDRs immediately available for the financing of intervention is much smaller than the total amount of SDRs allocated to them, as SDRs have been used by them primarily to settle obligations to the Fund. 1/ The amount of SDRs is also quite modest in comparison to the size of intervention undertaken by major industrial countries.

1/ For a discussion of members' use of SDRs, see Samir Fawzi, "Holding and Use of SDRs by Fund Members," DM/86/48 (7/28/86). This study indicates that the principal use of SDRs by members has been to meet obligations to the Fund, such as repurchases, payment of charges to the General Resources Account, and net charges on the use of SDRs. This is also the conclusion of the paper, "The Development of Voluntary Transfers of SDRs Among Participants and Prescribed Holders," SM/86/142 (6/18/86).

For example, in 1987 when there was large-scale exchange market intervention to support the U.S. dollar, the total amount of intervention by G-10 and other European central banks was estimated to have exceeded $100 billion. 1/ This compares with total SDR holdings by industrial countries of $23.3 billion (SDR 16.4 billion) at the end of 1987.

The use of official SDRs in financing exchange market intervention may also be constrained by a number of operational and administrative factors. These factors, which have been mentioned on various occasions by Executive Directors and participants as well as by some respondents to a survey on the SDR in the reserve management practices of monetary authorities, 2/ are related to the nature of the designation mechanism, to confidentiality, to settlement dates, and to the use of official exchange rates. These are described in the following paragraphs.

Designation mechanism: The designation mechanism effectively assures the conversion of SDRs into currencies and this mechanism underpins the liquidity of the SDR system. However, the mechanism is applicable only to those participants that have a need for conversion because of a need arising from their balance of payments or reserve position, and there may in some cases be reluctance on the part of participants to make a representation of need, possibly out of concern that such action could call into question the strength of the participant's external position. Such concern could be especially strong if recourse to transactions with designation were thought likely to induce an adverse shift in market perceptions regarding a country's external position or currency.

Confidentiality: A concern that has been expressed in the past and was also conveyed in some of the responses to the reserve management survey is that the use of SDRs may not ensure the same degree of confidentiality as the use of other international reserve assets. Such concern is related to a number of the Fund's operational practices concerning SDR transactions. First, in transactions by agreement, each party to the SDR transaction is aware of the identity of the other party when the transaction is arranged. Second, internal Fund documents available to the Executive Board provide information on purchases and sales of SDRs by individual members with a delay of slightly less than one month following the month in which the transaction is undertaken. Finally, the Fund publishes information on individual members' SDR holdings, along with their holdings of foreign exchange, reserve tranche positions and gold, in IFS about one month following the end of the reporting month. Thus irrespective of whether SDRs are exchanged in transactions with designation or by agreement, a change in a member's holdings of SDRs is made public.

1/ This estimate is based on figures reported in news stories in the Financial Times and the Wall Street Journal.

2/ See "The SDR in the Reserve Management Practices of Monetary Authorities," SM/87/72 (3/17/87).

Three-day value: Although transactions by agreement can be accomplished on the basis of two-day value or less with the agreement of both parties, transactions with designation are made on the basis of three-day value, in contrast with market practice which normally calls for two-day settlement. The longer time period for executing transactions with designation, though slight, may place the SDR at a disadvantage in comparison with other types of reserve assets, which can generally be liquidated for two-day value to coincide with the value date for settlement of the intervention transaction. In effect, if SDRs are sold to finance exchange market intervention under the designation mechanism, the monetary authority's decision to sell must be made at least one business day in advance of its decision to intervene.

Use of official rates: Exchanges of SDRs for currencies are made on the basis of the Fund's official rates. The official value of the SDR in terms of its component currencies may, and normally does, differ from the value associated with exchange rates available in the market during the course of the day. Such differences arise from two factors. First, the SDR value of the dollar is established each day on the basis of exchange rates at noon in London, i.e., rates prevailing before the Fund's business day begins and which most likely will not prevail again during the course of the day. Second, the official SDR rates for the other freely usable currencies are based on their representative rates in terms of the dollar, which are ascertained at a particular time during the day, and therefore these representative rates will generally differ from actual dollar exchange rates during the course of the day. The difference between the official and market value of the SDR may be viewed as constraining the use of the SDR for intervention purposes. 1/

While these factors may be regarded by some participants as adversely affecting the usability of the SDR, as opposed to other reserve assets, in financing intervention, it seems doubtful that they actually constitute significant impediments. First, with regard to the possible adverse "signal" effects of using the designation mechanism, it should be recalled that transactions by agreement do not have a requirement of balance of payments need. All SDR transactions have been accommodated for some time using this method and, if there were a general desire on the part of monetary authorities to make greater use of the SDR in financing intervention, such a desire could presumably be met by increased recourse to transactions by agreement.

1/ In this connection, it should be noted that in "Possible Further Improvements in the Existing SDR," SM/82/92 (5/7/82), the staff proposed for Board consideration that the series of Board decisions authorizing specific operations in SDRs could be replaced with a single authorization for all participants and other holders to engage in any transaction or operation by mutual agreement, subject only to the specific limitations imposed by the Articles. However, the Board did not reach any decisions regarding this and other proposals contained in SM/82/92. See EBM/82/78 (6/7/82).

With regard to the issue of confidentiality, current practices ensure that there is no disclosure by the Fund regarding the purpose of a sale or purchase of SDRs, whether for exchange market intervention or otherwise. In transactions both with designation and by agreement, the purpose of sales by participants is not required to be revealed to the providers of currencies or to the Fund, and the Fund does not provide any such information in connection with transactions arranged by it; transactors may, of course, provide each other with whatever information they wish in connection with transactions arranged bilaterally. Thus, there would not appear to be a need for concern about the confidentiality of transactions undertaken for the purpose of exchange market intervention. Of course, changes in holdings of SDRs are published on a regular monthly basis, but as all major components of reserves are published at the same time, it is not clear why special attention would be focused on changes in SDRs as opposed, for example, to changes in foreign exchange reserve holdings.

In addition, it should be noted that if a member wishes to receive usable currency in exchange for SDRs with two-day value, transactions by agreement can also accommodate this desire. It is also worth noting that the possible costs or inconvenience associated with the use of official rates are at least partially offset by benefits which arise from the fact that the sale of official SDRs is always at par, with no transactions costs (except for telex costs), fees, or spreads. In this respect, the SDR compares favorably with reserves held in other forms, which may be subject to certain risks on liquidation and to transactions costs or other fees. For example, U.S. Treasury securities are subject to the risk of a change in capital value in response to interest rate changes, and there are transactions costs when such instruments are purchased and sold. The Fund's own costs of operating the SDR Department are quite small and are borne by participants in relation to their net cumulative allocations, so that the marginal cost to the user associated with any SDR transactions is virtually nil. 1/

3. Possible approaches to enhance the use of the SDR to finance intervention

The above discussion suggests that, apart from the relatively small amount of SDRs available, there would appear to be no significant practical constraints on the use of SDRs by members to finance exchange market intervention. In particular, some of the possible drawbacks associated with the use of SDRs in financing intervention that have been noted above relate exclusively or primarily to use in transactions with designation. To the extent that participants considered such

---

1/ It is possible that the administrative cost of using SDRs might be seen as relatively high by users who are unfamiliar with the Fund's procedures. Such perceived costs, however, can be mitigated by members' request for assistance from the Fund to obtain information on these procedures.

drawbacks important, they can avoid these drawbacks by engaging in transactions by agreement with other participants, which can be arranged through the Fund or bilaterally. The latter option provides an efficient mechanism for eliminating operational constraints associated with the transfer of official SDRs, as members can determine the terms and conditions of SDR transfers that best meet their needs; the participation by several members in bilateral arrangements since early 1987, which has involved transactions of some size, would seem to demonstrate that such arrangements can be effectively tailored to meet exchange market intervention needs.

It should be noted that any arrangements involving greater use of SDRs for the financing of exchange market intervention necessarily involve an increase in the SDR holdings of members providing the currency for intervention. Thus the cooperation of the major industrial countries, in particular, their willingness to hold larger stocks of SDRs, is essential for more widespread use of SDRs in financing the purchase of domestic currency with foreign currency. 1/

A specific suggestion has recently been made by an Executive Director to establish a mechanism to promote the use of the SDR to finance intervention. 2/ Under this proposal, surplus countries would agree on the portion of their newly-allocated SDRs they would be prepared to make available to this mechanism for rechanneling SDRs. These SDR resources would be made available for intervention purposes to other members on a revolving basis. More specifically, if a situation arises where a country needs financial resources to intervene in the foreign exchange market, the country could borrow SDRs from those members participating in this mechanism and acquire the currency needed for intervention by transferring these SDRs to the surplus countries. Under this scheme, those SDRs that have been transferred back to surplus countries could be used to finance further intervention on a revolving basis. In this way, the facility would provide resources for exchange market intervention over and above those resources available through existing arrangements. If it were considered appropriate to pursue this approach, a careful examination of a number of operational and legal issues would be required, especially with regard to the nature and extent of the Fund's involvement.

1/ In this connection it is worth noting the similarities with the ECU in the EMS; ECU balances in the European Monetary Cooperation Fund are used primarily in the settlement of short-term loans of currencies made available for obligatory EMS intervention. Thus, the lender of the currency will increase its holdings of ECU, up to certain limits.

2/ "Statement by Mr. de Groote on the SDR and the International Monetary System (Preliminary)," EBM/89/28 (3/6/89).

Another potential avenue for facilitating the use of the SDR to finance intervention would be to enlarge the range of the Fund's transactions of SDRs through the General Resources Account. The Articles of Agreement (Article V, Section 6) permit the Fund to buy and sell SDRs against the currencies of other members with the concurrence of the members whose currencies are used. However, the decisions taken to date by the Board have been limited to authorizing the Fund to sell SDRs from the General Resources Account against the currencies of other members only for very specific and restricted cases. These cases have been related to the sale of SDRs to assist members in paying charges in the SDR and General Departments, making the reserve asset component of quota subscriptions, and meeting the reconstitution requirement for their SDR holdings when this requirement was in effect. With regard to purchases of SDRs by the General Resources Account against currencies of other members, no decisions have yet been taken to authorize the Fund to engage in such transactions. Increased buying and selling of SDRs against the currencies of other members through the General Resources Account could widen the scope for transactions of SDRs in general.

The possible extent of enlarged use of SDRs through the General Resources Account would appear to be limited, however, by a number of factors. First, the GRA cannot be the residual seller of SDRs because its holdings of the reserve asset are limited. Second, the members whose currencies are used to purchase SDRs must concur in their use, 1/ and the Fund's holdings of these members' currencies must not be raised above the level at which the Fund would levy charges. Third, since the purchases and sales of SDRs by the General Resources Account against currencies of other members affect the creditor positions in the Fund of those members whose currencies were used, such operations would need to be conducted so as to maintain an appropriate balance in the distribution of creditor positions among members.

III. Use of the SDR as an Intervention Vehicle

While there are currently no significant operational constraints on the use of the SDR for financing exchange market intervention, the scope for the use of the SDR as an intervention vehicle is currently limited with respect to both official and private SDRs. Under the Fund's Articles of Agreement, SDRs allocated by the Fund can be held only by participants in the SDR Department, the Fund, and prescribed holders. As commercial banks and other private entities are not permitted to hold official SDRs, there is no possibility under the

---

1/ In general, the Fund acts only on the initiation of participants and is not empowered to engage in transactions with them on its own initiative. However, the Fund may enter into prescribed transactions with prescribed holders.

Articles to use the official SDR directly as a vehicle for intervention in the foreign exchange market, i.e., for buying and selling SDRs for currencies directly with private parties.

Moreover, the development of the market for SDR-denominated instruments issued by private entities (especially commercial banks) has been so limited in terms of the types and volume of instruments that there has been little scope for making use of these private SDRs as an intervention vehicle. The private SDR market, which first emerged in 1975, expanded significantly in 1981 in response to the adoption of the five-currency basket, but the development of the market has fallen off in subsequent years. The market is comprised mostly of SDR-denominated bank deposits, which stood at about SDR 2 billion at the end of 1988. 1/ There were active issuances of SDR-denominated certificates of deposits, bonds, and notes in early 1980s, but interest in these instruments diminished after this initial activity. No SDR-denominated bonds or syndicated loans have been arranged since 1981 and 1982, respectively. 2/

While the current stage of development in the official and private SDR markets makes it impractical for private SDR-denominated instruments to be used as a vehicle for intervention, there are two issues which are worth considering in this connection. The first issue is related to the general question of what economic considerations influence the selection of the vehicle used for intervention in exchange markets. Discussion of this issue provides an important perspective for evaluating the extent to which the SDR, official or private, has a useful role to play as an intervention vehicle. The second issue is concerned with the steps that might be taken to improve the usability of official SDRs within the Fund's existing Articles by promoting the development of the market for private SDRs. Such a development would contribute to strengthening the role of the SDR as a principal reserve asset in the long run and would enhance the possibility of using the SDR as a vehicle for foreign exchange market intervention. In the absence of changes in the Articles that would permit private holdings of official SDRs, measures to encourage expansion of the private market for the SDR and foster links between official and private SDRs might be seen as appropriate and desirable, as they would support the more active use of official SDRs. These issues are discussed in more detail below.

1/ This estimate is based on information provided by the BIS, the United Kingdom, and Belgium.

2/ For a description of these developments, see The Role of the SDR in the International Monetary System (Part Two), Occasional Paper 51, March 1987, International Monetary Fund, Washington, D.C.

1. Choice of an intervention vehicle and the SDR

A monetary authority's decision concerning the choice of an intervention vehicle depends on a number of factors associated with both economic and institutional arrangements concerning the international payments of the country and its exchange rate arrangements. The following two factors would appear to have a particularly important bearing on the choice of an intervention vehicle: (i) the exchange rate arrangement adopted by the monetary authority, and (ii) the cost and convenience of using a particular intervention vehicle.

Turning to the first factor, it is important to note that for exchange market intervention to have an effect on the exchange rate of the domestic currency in terms of foreign currencies, domestic and foreign currencies must be imperfect substitutes such that changes in relative asset supplies have some exchange rate impact. 1/ This would appear to be the case for most currencies. In order to achieve a particular exchange rate objective or maintain an exchange rate arrangement in terms of one or more of the major currencies, a monetary authority buys or sells one of these currencies for domestic currency, thereby changing the supply of instruments denominated in domestic currency relative to the supply of instruments denominated in foreign currency held by the public.

More specifically, if a country's exchange rate arrangements or objectives are defined in terms of these major currencies, e.g., pegged to one of these currencies, pegged to the SDR or other currency composite, or involves limited exchange rate flexibility associated with the exchange rate mechanism of the European Monetary System, 2/ there is a tendency to use as an intervention vehicle the currency in terms of which the country's exchange rate arrangement is defined. Thus countries that peg their currencies to the U.S. dollar generally use this currency as the intervention vehicle; similarly, those countries that peg to the French franc use this currency as the vehicle for intervention. Countries participating in the exchange rate mechanism of the EMS used the U.S. dollar as the main intervention

---

1/ If assets denominated in the home currency are perfect, or close-to-perfect, substitutes for assets denominated in foreign currencies, then intervention will have little, if any, long-term impact on the exchange rate of the home currency. The extent to which exchange market intervention is in fact effective in altering exchange rates is not at issue in this paper. For a discussion of this topic, see the Jurgensen Report ("Report of the Working Group on Exchange Market Intervention," March 1983).

2/ For a description of members' exchange rate arrangements, see IMF, Annual Report on Exchange Arrangements and Exchange Restrictions, 1988, Washington, D.C.

vehicle in the first few years of the operation of the EMS, but more recently the currencies of the participating members have increasingly been used for this purpose.

If a country pegs its currency to one of the major currencies, it will tend to use that currency as its intervention vehicle in order to directly achieve its exchange rate objectives. However, if the country is small relative to the major industrial countries issuing reserve currencies, then the scale of its intervention activities is likely to have only a negligible influence on the relative supplies of the reserve currencies held by the public. Consequently, the exchange market intervention by a small country will have little, if any, impact on the cross rates of the major currencies, and roughly comparable exchange rate effects can be achieved by intervening in any of the major currencies. Thus, a small country intervening in U.S. dollars will achieve a change in the exchange rate of its currency relative to other major currencies that is comparable to the change in its U.S. dollar exchange rate. Alternatively, it could intervene in deutsche mark, for example, and attain roughly the same exchange rate effects. It could also achieve its exchange rate objectives--abstracting from transactions costs--by buying and selling the domestic currency against a basket of currencies, e.g., the SDR. 1/

In fact, a country whose exchange rate objectives are formed in terms of the SDR--e.g., a country whose currency is pegged to the SDR--would in principle find it attractive to use SDR-denominated instruments as an intervention vehicle, as this would directly alter publicly-held stocks of its currency and SDR-denominated assets. 2/ However, it is unlikely that the SDR would be chosen as an intervention currency until the private SDR market had developed to such an extent that there were no disadvantages in terms of cost and convenience in using the SDR. 3/ By the same token, in the absence of a sufficiently broad market for SDRs, countries having exchange rate arrangements unrelated to the SDR would find intervention in SDR-denominated assets more costly compared with intervention using the major reserve currencies. In other words, a country could achieve its exchange

---

1/ It should be noted that while intervention in official or private SDRs is currently not possible or practical, central banks could achieve the same exchange rate impact as intervening in SDRs by using a basket of currencies equal to the current SDR basket. There is, therefore, no obstacle under existing exchange market arrangements to central banks intervening "in effect" in SDRs.

2/ As of June 30, 1989, eight countries pegged their currencies to the SDR.

3/ Even if there were a functioning market in SDR instruments, a country which pegs its currency to the SDR might nevertheless find it less costly to intervene in another vehicle currency, e.g., U.S. dollars, as long as the market in U.S. dollar-denominated instruments were much more developed than that for SDR assets.

rate objective more efficiently by using a currency for which a well-developed market is available, e.g., the U.S. dollar. This would seem to be particularly true for major countries whose intervention operations have typically tended to focus on influencing a key bilateral exchange rate. In fact, the U.S. dollar has often been used by the major industrial countries as the intervention vehicle to influence the cross rates between reserve currencies.

The above discussion highlights the importance of the second factor influencing the choice of an intervention vehicle, namely, transactions costs. The relative convenience and costs of transacting in different reserve currencies would appear to be especially important for those countries for which the same exchange rate impact can be achieved irrespective of the vehicle currency employed and for those countries whose currencies are pegged to a currency basket. The magnitude of these transactions costs is primarily influenced by the extent of the private use of the currency, which in turn depends on the degree to which it is used, relative to other currencies, to invoice international trade of goods and services and to settle international payments for current and capital transactions. In general, the more widely a currency is used for these purposes, the wider the range of instruments in the private market for the currency and the larger the stock of the currency held by the public. As the U.S. dollar is the currency most widely used in international transactions, and as there is a wider range of, and deeper markets for, U.S. dollar-denominated instruments, executing transactions in these instruments tends to involve the lowest transactions costs and the greatest convenience. It is for these reasons that the U.S. dollar is by far the most commonly used intervention vehicle. However, if a country's international transactions are strongly dominated by some other currency, e.g., if it is a member of the CFA franc zone in Africa or participates in the exchange rate mechanism of the EMS, then a currency other than the U.S. dollar will often be used for exchange market intervention purposes.

As mentioned above, the limited development to date of the market for SDR-denominated instruments inhibits the use of SDR instruments as the vehicle for exchange market intervention. In addition, it should be noted that for those countries whose currencies are included in the SDR basket, exchange market intervention using an SDR instrument would be relatively inefficient in achieving their individual exchange rate objectives. For example, as the U.S. dollar is a large component of the SDR, purchases or sales of U.S. dollars against SDRs would be less effective in influencing the exchange value of the dollar against the four other currencies in the SDR than intervening in just these four currencies.

2. <u>Ways to promote the official and private use of SDRs</u>

The discussion in the previous section indicated that the use of an SDR-denominated instrument as a vehicle for intervention would not be feasible without a sufficiently well-developed private market in

SDRs. As already noted, the development of the private SDR market has been modest so far and it would appear to require increased efforts, especially by official entities, to encourage such development in order for an SDR-denominated instrument to be used directly for intervention. However, the ease with which the major reserve currencies can be used as intervention vehicles suggests that such efforts might be best directed at pursuing the broad objective envisaged under the Fund's Articles of fostering the role of the SDR as the principal reserve asset rather than the particular objective of promoting the use of the SDR as a vehicle for intervention. Of course, progress toward this broad objective of strengthening the role of the SDR as the principal reserve asset would, as a consequence, contribute to facilitating the attainment in the long run of the particular objective associated with exchange market intervention.

The evolution of the European Currency Unit (ECU), for which the private market has developed fairly rapidly since its creation, suggests that official efforts would probably play an important role in fostering the development of the private SDR market. 1/ In the case of the ECU, those efforts have included active official support for the use of the ECU in the private market through encouragement, through market operations in the unit, and in some cases through preferential treatment. More specifically, all EC member states now permit the use of the ECU for denominating financial instruments; 2/ various EC public entities (for example, the European Investment Bank, the European Coal and Steel Community, the European Atomic Energy, and the Council of Europe Resettlement Fund) have launched bond issues in ECUs and some of these public entities (especially the European Investment Bank) have become active depositors in these units; steps were taken by some member states to encourage their residents to make financial transactions in ECUs more than in other foreign currencies; controls on foreign investment and exchange transactions were relaxed with regard

1/ Official ECUs are created by means of revolving three-month swaps of gold and U.S. dollars between EMS members and the European Monetary Cooperation Fund (EMCF). The official ECU is designed to support the exchange rate arrangements of the EMS and is used primarily in settling loans of currencies made available through the Very Short-term Financing Facility (VSFF) of the EMS for obligatory exchange market intervention. Official ECUs cannot be used directly for intervention in foreign exchange markets, but they can be exchanged for currencies used for intervention. However, it is possible for EMS member countries to intervene in foreign exchange markets using private ECUs--ECU-denominated instruments created by private entities if they wish to do so, as noted by R. Masera ("An Increasing Role for the ECU: A Character in Search of a Script," Essays in International Finance, No. 167, June 1987, Princeton, New Jersey, p. 12). Some EMS central banks have intervened in private ECUs; in 1985 such intervention amounted to ECU 2.4 billion.

2/ The Bundesbank decided in June 1987 to permit the private use of ECUs by residents on the same basis as foreign currencies.

to the ECU; and the European Commission initiated the establishment of a banking group to study the possibility of a clearing institution in ECUs. 1/ These measures, together with a relatively low exchange risk on the ECU, are viewed as having contributed significantly in stimulating private demand for ECUs. 2/

In comparison with the ECU, support for the development of the private SDR market has been limited so far. 3/ However, a number of proposals have been recently made to encourage progress toward the development of a broader private market for the SDR. These proposals are essentially intended to alleviate the rigid separation between official and private SDRs and thereby contribute to the development of the private SDR market in the long run. To this end, they generally involve arrangements that facilitate the increased use of official SDRs while providing greater incentives for private entities (especially commercial banks) to create and use SDR-denominated assets. 4/

One of these proposals envisages the establishment of a clearinghouse scheme that is designed to promote the direct use of official SDRs in the settlement of net cross-border transfers of private SDRs among countries. 5/ Under this proposal, participants in the SDR Department would authorize their central banks to open SDR

1/ The study led to the establishment of an ECU Banking Association which concluded an agreement with the BIS to set up a multi-clearing system for private ECUs, and the clearing system came into operation in 1986.

2/ For further discussion of these points, see the Role of the SDR in the International Monetary System (Part Two), Occasional Paper 51, March 1987, IMF, Washington, D.C. For a discussion of recent developments in the market for ECU instruments, see Euromoney, January 1989, pp. 67-73.

3/ For the Executive Board's view on the Fund's role in supporting the development of the private use of the SDR, see "The Chairman's Summing Up at the Conclusion of the Discussion on the Potential Contribution of the SDR to Economic Stability and A Comparative Analysis of the Functioning of the SDR and the ECU," Buff Statement 86/42, March 3, 1986.

4/ The issues concerning methods for promoting the use of SDR-denominated instruments are discussed in more detail in "Further Considerations on International Liquidity, the Systemic Role of the SDR, and the Question of SDR Allocation," SM/89/158 (8/2/89).

5/ This proposal is discussed in Warren L. Coats, Jr., "The SDR as a Means of Payment," IMF Staff Papers, Vol. 29, No. 3, 1982; Peter B. Kenen, "Uses of the SDR to Supplement or Substitute for Other Means of Finance," in G.M. von Furstenberg (ed.), International Money and Credit: The Policy Roles, International Monetary Fund, 1983; Peter B. Kenen, "The SDR as a Means of Payment, A Comment on Coats," IMF Staff Paper, Vol. 30, No. 3, 1983; and Warren L. Coats, Jr., "The SDR as a Means of Payment, Reply to Comments by van den Boogaerde, Collier, and Kenen," IMF Staff Papers, Vol. 30, No. 3, 1983.

accounts for their own commercial banks; those accounts, which would be set up for transactions in private SDRs, would be used to clear SDR transactions among commercial banks in an individual country. At the same time, the central banks would deposit official SDRs with a clearinghouse (e.g., the SDR Department) and use these official SDRs to settle net balances of private SDRs between different countries; such settlement would be made through transfer of official SDRs among participants through internal bookkeeping operation at the clearinghouse. Under this proposal, private entities would remain unauthorized to hold official SDRs, but central banks could hold private SDRs. 1/ The establishment of such a clearinghouse scheme is viewed as facilitating transfers of private SDRs and thereby contributing to the expansion in the private SDR market, just as the development of the domestic banking market in most countries was importantly promoted by the introduction of payment clearing arrangements.

An alternative to the clearinghouse proposal has been made by Mr. Polak which is aimed at promoting the use of the SDR for exchange market intervention and other transactions through the issuance of SDR certificates backed by official SDRs. 2/ Under this scheme, prescribed holders of SDRs (e.g., the BIS) are envisaged to act as trustees and would issue SDR certificates to central banks in return for official SDRs from them. These certificates would carry the SDR interest rate and would be freely negotiable, and therefore could be sold by central banks against currency in the foreign exchange market. Arrangements also would be made to allow Fund members to purchase these certificates in the market and exchange them for official SDRs from the trustee. Transactions involving such SDR certificates between central banks and private entities would be expected to provide over time a stimulus to the development of the market for private SDRs. At the same time, it is envisaged that such a development would be reinforced if official institutions, such as the World Bank, would denominate their borrowings and loans, at least in part, in SDRs.

If the implementation of these proposals proved to be feasible, they could contribute to progress toward promoting more active use of official and private SDRs and strengthening the linkage between the two types of SDRs. However, the implementation of these proposals would give rise to three issues worth noting. First, the more active use of official SDRs envisioned under these proposals entails a significant change in the present mechanism for transfer of official SDRs in that the range of financial instruments for which official SDRs could be exchanged would be widened to include not only members' currencies but

---

1/ A variation of this clearinghouse scheme was proposed by Kenen, "The SDR as a Means of Payment, A Comment on Coats," IMF Staff Paper, Vol. 30, No. 3, 1983.

2/ See Jacques J. Polak, "The Impasse Concerning the Role of the SDR," in Wietze Eizenga et al. (eds.), The Quest for National and Global Economic Stability, Dordrecht: Kluwer Academic Publishers, 1988.

also private SDRs (the clearinghouse scheme) or SDR certificates (the Polak scheme). In consequence, the distribution of official SDRs among members would be influenced increasingly by transactions in the private sector (the case of the clearinghouse scheme), or the total amount of official SDRs that would be available for the current transfer mechanism could be reduced substantially (the case of the Polak scheme). This implies that it is important that due consideration be given to the possible impact of these proposals on the functioning of the SDR Department and the role of designation. Second, problems might arise to the extent that the valuation of the private SDR diverged from that of the official SDR. Such a divergence could be associated with the settlement of private SDR balances between different countries through the use of official SDRs under the clearinghouse scheme, or with the sale or purchase of SDR certificates, at a market exchange rate. Third, the proposals rely heavily on the willingness of official institutions, whether participating national monetary authorities or a prescribed holder designated to serve a special function, to accept official SDRs in exchange for other assets.

IV. Summary and Concluding Remarks

Intervention in the foreign exchange market by a monetary authority is generally designed to influence the exchange rate between domestic and a foreign currency by altering the relative supplies of assets denominated in the two currencies held by the public. It is important to distinguish two aspects of the role of reserve assets in intervention operations: the vehicle used for intervention, i.e., the foreign currency instrument that is directly exchanged for domestic currency in transactions with private participants, and the use of reserve assets for financing intervention, i.e., for obtaining currencies that are used for intervention or for settling intervention-related obligations. In other words, it is useful to distinguish between the vehicle of intervention and the asset used to acquire the vehicle or to settle indebtedness arising from intervention. So far, the role of the SDR in connection with foreign exchange market intervention has been exclusively related to the financing of intervention, reflecting the Fund's Articles of Agreement and subsequent implementing decisions, which provide for various arrangements for the conversion of SDRs into national currencies that can themselves be used as vehicles for intervention and the use of SDRs for settling intervention-related obligations. In contrast, the official SDR has not been used as a vehicle for intervention; such use would require the transfer of SDRs to private entities, but the Articles of Agreement do not permit official SDRs to be held by or transferred to private entities. In addition, as a well-developed private market for SDR-denominated instruments does not exist, it is currently not cost effective for monetary authorities to intervene with privately-issued SDR-denominated instruments.

Under the Articles of Agreement, the liquidity and usability of SDRs for financing intervention is assured by the designation mechanism. Moreover, the role of the SDR to finance intervention has been enhanced significantly in recent years as a result of a widening in the scope of transactions by agreement, the inception of two-way arrangements, and the increased recourse to bilateral arrangements by members. In particular, bilateral arrangements appear to have considerable potential for facilitating further the use of the SDR for financing intervention, as they can be tailored to meet the terms and needs of participants.

While operational constraints on the use of SDRs to finance intervention would now appear to be minimal, the extent to which the SDR can play a significant role in such use depends on the amount of SDRs available for intervention. SDRs allocated to date, however, have been relatively modest compared with the scale of intervention indicated by recent intervention operations by industrial countries. In this context, the establishment of a scheme along the lines proposed by Mr. de Groote described in Section III, which involves the pooling of existing SDRs that can be lent to countries wishing to finance intervention, might deserve further examination as a way to alleviate the quantitative constraint on the use of official SDRs to finance intervention. Pursuing this approach would require a careful examination of operational and legal issues, including the nature and extent of the Fund's potential involvement.

The extent to which privately-issued SDRs could be used as a vehicle for intervention would depend on the development of a sufficiently broad and deep private market for SDRs, i.e., a market with a wide range of instruments and in which transactions costs are low. Moreover, the SDR would not appear to be as effective in achieving the exchange rate objectives of the G-5 countries as using as intervention vehicles the individual currencies that comprise the basket. These considerations imply that the scope for the wide use of the SDR (private or official) as a vehicle for intervention will be limited in the foreseeable future, and that the principal role of the SDR in connection with foreign exchange market intervention will remain the financing of intervention.

Nonetheless, the development of a market for private SDRs remains important for achieving the goal of making the official SDR the principal reserve asset in the international monetary system, a major objective envisaged in the Fund's Articles of Agreement. A number of proposals, including the establishment of a clearinghouse mechanism and the issuance of SDR certificates backed by official SDRs, have been made with the aim of making progress toward this broad objective. These proposals are designed to encourage a more active use of official SDRs, strengthen the links between official and private SDRs, and thereby stimulate the development of the private SDR market in the long run. If it were contemplated that the Fund should support the development of the private SDR market to strengthen the role of the official SDR as the principal reserve asset, it would be for consideration to examine further these proposals. In doing so, issues relating to the effects on the distribution of official SDRs, the substitutability between private and official SDRs, and the valuation of official and private SDRs would have to be addressed.