A Substitution Account: Precedents and Issues

In March, the Interim Committee of the International Monetary Fund (IMF) instructed the IMF Executive Directors to present at the next Committee meeting on October 1 their conclusions regarding the establishment of a Substitution Account to be administered by the Fund. Such an account would accept deposits of foreign exchange, primarily United States dollars, from Fund members in exchange for an equivalent amount of claims denominated in special drawing rights (SDRs).[1] Broadly, the account could facilitate the evolution of a more smoothly functioning international monetary system. It might further serve to enhance the prospects for the SDR as the principal reserve asset in the international monetary system, a goal set forth in the recently amended IMF Articles of Agreement.[2]

The concept of a Substitution Account is not new. The idea has been discussed periodically in one form or another throughout the postwar years. Before focusing on the current discussion, therefore, this article reviews the historical precedents for creating a Substitution Account and the contexts in which the idea has been explored From that review, it is clear that creation of a Substitution Account raises important technical as well as economic and political questions. Perceived national interests and priorities are involved. In its final section, the article seeks to outline the major issues that might be considered in the current Fund discussion, without anticipating specific proposals or positions by any of the participants.

Historical precedents

A Substitution Account in the IMF would serve to increase the centralization of world monetary reserves in an international institution by increasing the SDR share of official reserves. The notion of reserve centralization traces its intellectual origins to the International Clearing Union proposed by Lord Keynes in 1943.[3] Today, a modified version of the idea is embodied in the Fund itself.

Under the Keynes proposal, countries were to hold their reserves solely in the form of gold and a new international currency unit, called bancor. Bancor was to be convertible into gold at a fixed, although alterable, rate and created by the member countries either against deposits of gold in the Clearing Union or by using their overdraft facilities. Bancor was to be used only in transfers among the accounts of central banks. Quotas were to be set limiting a country's ability to make use of its overdraft facilities.

The majority of countries involved in the postwar planning, however, were reluctant to rely on such an

[1] The special drawing right (SDR) is an official international reserve asset which was created by the IMF and first distributed to participating member countries on January 1, 1970 The asset is held by central banks and governments and used by them much like foreign exchange holdings for the financing of balance-of-payments surpluses and deficits When created, the value of the SDR was equivalent to 1/35 of an ounce of gold Since July 1974, the value of the SDR has been tied to a basket of the sixteen most important currencies of the member countries of the Fund The United States dollar currently accounts for approximately one third the value of the SDR

[2] The revised amendments were approved by the Board of Governors of the IMF on April 30, 1976 and entered into force on April 1, 1978

[3] *Proposals for an International Clearing Union* Presented by the Chancellor of the Exchequer to Parliament, April 1943 (London H M 's Stationery Office, Cmd 6437)

artificially created unit of account as bancor to meet their future reserve needs. Moreover, partnership in the Clearing Union would have obliged any one member to extend credit to all the others up to the total of their combined quotas. In effect, the United States could have been called upon to provide up to $30 billion through an international institution whose policies it could not fully control. The United States proposed instead, and the Bretton Woods conference of 1944 accepted, a more limited IMF. Under the Fund agreement, no member was obliged to extend credit to the others beyond 75 percent of its own quota.

Throughout the ensuing years, the world community came to rely increasingly on the United States for financial resources that the Fund itself was unable to provide but that countries greatly needed to rebuild their wartorn economies. The notion of strengthening the resources and ability of the Fund to create liquidity was not seriously considered until the late 1950's and early 1960's. By this time, the United States was persistently building up such large official liabilities that the viability of the international monetary system, primarily dependent for its reserve growth on the more or less accidental by-product of continuing American balance-of-payments deficits, was called into question.

Perhaps the most notable critic was Robert Triffin of Yale University. If the United States attempted to balance its external accounts, Triffin reasoned, a contraction in the growth of world reserves and hence in world trade and payments would ensue. If, on the other hand, the United States continued to provide liquidity to the world community as it had, at the expense of its own net reserve position, other countries might lose confidence in the value of the dollar and seek to convert their dollar holdings into gold or other currencies This could lead potentially to a collapse of the postwar payments system.

Triffin's proposed solution was to concentrate increasingly monetary reserves in the IMF, which would henceforth be able to control the expansion of world reserves. Under Triffin's scheme, all members of the Fund would substitute a portion of their existing official reserves for IMF deposits. In subsequent years, countries experiencing an increase in reserves would further substitute a portion of those additions for IMF deposits. The idea was for countries then to use their IMF deposits as international reserves. In addition, IMF deposits could be created through Fund operations in the open market and through borrowing by member countries. Such reserve-creating activity was to be subject to conditions intended to safeguard against inflationary effects and to promote balance-of-payments adjustment.

Essentially, Triffin wanted to find a way to increase world liquidity over time that would be independent of the balance-of-payments position of the United States. In so doing, he hoped to remove short-term and long-term threats to the stability of the dollar and the international monetary system. Implicit in Triffin's plan to centralize monetary reserves in the Fund was a gradually reduced reserve role for gold and the dollar and an increased role for IMF deposits to meet the future liquidity needs of the world economy.[4]

In subsequent years, economists and officials alike came to accept Triffin's diagnosis of the dollar problem, although the majority of them were not prepared to accept his proposed solution In part, they feared the potential inflationary consequences of increased balance-of-payments financing by the IMF. Nevertheless, as the issue of monetary reform became more widely discussed during the early 1960's, a number of prominent economists, some of whom had been officially involved in the working of the international monetary system, substantially endorsed the basic goal shared by both Triffin and Keynes, namely, to centralize monetary reserves in an international institution.[5]

The first official to support the notion of centralizing monetary reserves in the IMF was the British Chancellor of the Exchequer, Reginald Maudling At the 1962 annual meeting of the Fund, Maudling endorsed a proposal—somewhat comparable to a Substitution Account —to enable surplus countries to deposit with the Fund unwanted balances of reserve currencies and receive in return gold-value guarantees against any subsequent losses from devaluation. His theoretical conception was to provide an alternative to any worldwide contraction in official reserves resulting from the conversion into gold of reserve currencies by the surplus countries[6]

[4] Robert Triffin, "Tomorrow's Convertibility Aims and Means of International Policy", *Banca Nazionale del Lavoro Quarterly Review* 49 (June 1959), pages 131-200 See also his *Gold and the Dollar Crisis* (New Haven, Conn Yale University Press, 1960), pages 102-20

[5] Maxwell Stamp, "The Fund and the Future", *Lloyds Bank Review* (1958), pages 1-20 Also, see his "Changes in the World's Payments System", *Moorgate and Wall Street* (Spring 1961), pages 3-22 A C L Day, "Memorandum of Evidence" (Radcliffe) *Committee on the Working of the Monetary System*, Principal Memoranda of Evidence, Vol 3 (London H M 's Stationery Office, 1960), page 75 James E Angell, "The Reorganization of the International Monetary System An Alternative Proposal", *Economic Journal* 71 (December 1961), pages 691-708 Sir Roy Harrod, *Alternative Methods for Increasing International Liquidity* (Brussels European League for Economic Cooperation, 1961) Edward M Bernstein, "Statement" in United States Congress, Joint Economic Committee, *Outlook for United States Balance of Payments*, Hearings before the Subcommittee on International Exchange and Payments, 87th Congress, Second Session, 12-14 December 1962, pages 205-18 and 221-40

[6] Address of Rt Hon Reginald Maudling at the Annual Meeting of the Board of Governors, International Monetary Fund, *Summary Proceedings of the Seventeenth Annual Meeting of the Board of Governors*, September 1962 (Washington, D C International Monetary Fund, 1962), pages 61-68

Although Maudling's proposal received no support from the official community, it was apparent to many analysts by the following year that the international monetary system was soon likely to face some serious liquidity problems. By this time, the position of the system's primary reserve currency—the United States dollar— was perceived by many to be under increasing strain At the end of 1962, reserves of gold and foreign exchange held by countries other than the United States and the United Kingdom totaled $40 billion, of which more than half was in foreign exchange, including $12 billion in the American currency. Under the commitment of the United States to exchange dollars for gold at $35 an ounce, conversions of these foreign-held dollars could have depleted most of the $16 billion gold stock of the United States.

The problems raised by the progressive accumulation of dollars by foreign monetary authorities were compounded by the decline in offsetting postwar debts due to both the Fund and the United States by the major surplus countries of Europe. This meant that one of the means by which the gold stock of the United States had been protected from dollar conversions would no longer exist. It thus became clear that continued deficits of the United States would soon have to be absorbed entirely by additional increases in already swollen foreign dollar holdings, by borrowings from the Fund, or by depletion of the United States gold stock.[7]

The urgency, therefore, of restoring equilibrium in the payments position of the United States was recognized both here and abroad. At the same time, it was equally clear that adjustment of the United States balance of payments could result in serious dislocation to the world economy unless new measures were simultaneously taken to ensure that world reserves were not placed under pressure. In short, other means of liquidity creation had to be found. As the United States launched a major program in July 1963 to reduce its payments deficits, the delegates to the annual meeting of the Fund that autumn agreed to institute a high level study of future liquidity problems.

The negotiations which ensued led to a decision in 1968 to create within the Fund a new reserve asset, the special drawing right. A major impetus leading to this decision was the initiative of Secretary of the Treasury Henry Fowler in July 1965 committing the United States to such a potential reform of the international monetary system. The equivalent of $3.5 billion in SDRs was distributed for the first time on January 1, 1970. A further $3 billion was distributed in each of the following two years. The creation of SDRs represented a step toward the centralization of monetary reserves in an international institution. The asset itself was intended to supplement the use of dollars and gold as official reserves and to reduce the dependence of the world community on continued United States deficits to meet future liquidity needs. The reform measure did not, however, provide for either any substitution of dollars or a Substitution Account.

[7] Richard N Cooper, *The Economics of Interdependence, Economic Policy in the Atlantic Community* (New York McGraw Hill, 1968), page 47 Also, Robert Triffin, "The Latent Crisis of the Reserve Currencies", *The Banker* (August 1963), pages 527-35

The Substitution Account proposal

A proposal to establish a Substitution Account within the Fund, and thereby to strengthen further the basis for centralizing world monetary reserves in an international institution, was first put forth at the annual meeting of the Fund in the fall of 1971, following the decision of the United States in August to end the gold convertibility of the dollar. In the previous two years, official holdings of dollars had tripled. This led monetary authorities and academic economists alike to review more intensively the question of how the reserve role of the dollar might be modified in connection with reform of the international monetary system.

One suggestion was that central banks be allowed to deposit dollars and pounds in excess of anticipated needs for those currencies as working balances into the Fund in exchange for SDRs. That would involve a move away from the use of national currencies as reserves and the simultaneous development of the SDR.

The idea of creating such an account was supported the following year by the Fund's Executive Directors, who had been asked at the 1971 meeting to report to the Governors on the means by which the international monetary system might be reformed. Their study, *Reform of the International Monetary System* (September 1972), suggested a Substitution Account with two main features. First, the account was to enable countries to alter the composition of their reserves by allowing the Fund to sell to them, or stand ready to sell, newly created SDRs in exchange for reserve currencies. Second, it was to allow the reserve currency countries themselves to earn SDRs through their payments surpluses. This could be accomplished by allowing the Fund to buy their currencies from them in exchange for newly created SDRs to the extent that other countries' holdings of their currencies declined.

The study revealed, however, considerable disagreement, particularly between the United States and some major surplus countries, as to whether the United States should permit settlement of its deficits in gold and foreign exchange assets in the future and what role a Substitution Account should play in this setting. Traditionally, United States balance-of-payments defi-

cits had been financed in considerable part through increases in liabilities to official institutions abroad. Those liabilities arose as the passive result of the intervention obligations under the Bretton Woods system of fixed but adjustable exchange rates. In this respect, the United States was in a position different from other countries with balance-of-payments deficits. Other countries had either to draw down owned reserves or to negotiate borrowing facilities to finance their deficits.

The major surplus countries wanted all countries, including the reserve centers, to adhere to the same rules in settling payments deficits. They supported this position largely because they believed that the United States would thereby be subjected to greater discipline than it then was in the adjustment of its balance-of-payments deficits.

To help resolve the issues discussed in the 1972 Fund report and to provide a forum in which the momentum toward monetary reform would be maintained, the Governors of the Fund appointed a ministerial committee in July 1972 composed of representatives of each of the twenty constituencies choosing an Executive Director for the Fund. This Committee on Reform of the International Monetary System and Related Issues, or C-20 as it subsequently became known, was instructed to report to the Governors on all aspects of monetary reform.

In the C-20 negotiations the United States was prepared to accept conditionally some form of convertibility. Its proposed conditions were that arrangements would also be adopted assuring both symmetrical balance-of-payments adjustment on the part of surplus and deficit countries alike as well as the avoidance of excessive reserve hoarding by particular countries. To these ends, the United States endorsed a reserve indicator system that would trigger timely remedial action. If a country's reserves increased or decreased disproportionately, reaching specific indicator points, that country would be expected to adopt policy measures to correct its surplus or deficit. The country could also be refused the right to convert any excessive accumulation of dollars. If the country failed to take adequate measures, it could ultimately be subjected under Fund surveillance to graduated pressures or sanctions.

The C-20 presented its *First Outline of Reform* a year later, at the fall 1973 meeting of the Fund. By this time, the dollar had been devalued for a second time (in February 1973) and the major currencies were freely floating. In this climate, there was some support for the Substitution Account proposal. It was viewed largely as a means of handling existing reserve currency balances once dollar convertibility was restored.

During the C-20 discussions, it is useful to note, substitution was widely viewed as a multilateral operation in which countries would replace short-term currency assets (primarily dollars) with liquid claims on the international community in the form of SDRs. The intended effect was to alter the composition but not the level of existing reserves. In contrast, funding of dollar balances was seen more as a bilateral operation in which countries would replace short-term currency assets (again, primarily dollars) with longer term and less liquid claims than SDRs. Unlike substitution, funding was not intended to involve the creation of additional SDRs but rather to reduce the volume and liquidity of existing reserves Both substitution and funding were considered means to consolidate outstanding reserve currency balances by altering the composition, volume, or liquidity of international reserves.

All these issues were of concern to the C-20 when it resumed its discussions during 1973-74. It was clear by early 1974, however, that the committee would be unable to agree upon a definitive reform plan. The shocks to the world economy stemming from the widespread inflation and the quadrupling of oil prices during the winter of 1973 provided the incentive for discontinuing the reform effort. Once the member countries recognized the dimensions of their oil-financing requirements, none were willing to commit their currency to a par value or central rate or to claim that their dollar reserves were excessive and in need of consolidation. Moreover, with the delays in implementing other aspects of monetary reform, notably a return to convertibility, any sense of urgency in introducing a Substitution Account also diminished. Nevertheless, many countries continued to believe that the reserve currency component in official liquidity would remain unsatisfactorily high and that some corrective provisions would eventually be required.

In its final report to the Governors of the Fund in June 1974, entitled *Outline of Reform,* the C-20 listed the goals it sought for a reformed system, together with some possible means of reaching them. These goals included: (1) the achievement of symmetry in the obligations of all countries, debtors and creditors alike, (2) the better management of global liquidity, (3) the avoidance of uncontrolled growth of reserve currency balances, and (4) the allowance of as much freedom for countries to choose the composition of their reserves as would be consistent with the overall objectives of reform.

To these ends, the *Outline* proposed, among its other conclusions, that provision be made to consolidate existing reserve currency balances. This was viewed as a means to reduce strains on the international monetary system which might result if the convertibility of the dollar were restored. In addition,

the *Outline* proposed arrangements under which reserve currency countries would be able to acquire reserve assets when in surplus instead of having to reduce their outstanding official debts. To accomplish these goals, as well as to permit countries that wished to do so to exchange official currency holdings for SDRs, the *Outline* proposed that the Fund be provided with the authority to administer a Substitution Account.

Further, the *Outline* confirmed the view that the SDR should become the *numeraire* of the international monetary system in terms of which the Fund's members could express the value of their currency. To assist this process, the *Outline* specified that the Executive Directors would periodically set the interest rate on the SDR in such a way as to maintain an appropriate effective yield in light of changing market interest rates In addition, the *Outline* proposed to value the SDR in such a way as to reduce fluctuations in its capital value resulting from exchange rate changes.[8]

The proposal to establish a Substitution Account failed to receive widespread support during the reform discussions, partly because many holders of reserve currencies were unwilling to exchange their reserve currencies for SDRs at a substantial reduction in interest rates The proposal also failed because the United States and the major surplus countries could not agree on the obligations debtor and creditor countries would accept in the management of their external accounts In these circumstances, the negotiations were never brought to the point where debtor and creditor countries could reach an agreement on the financial obligations they would undertake in the operation of a Substitution Account. More significantly, however, the proposal failed to be accepted because many of the concerns which had inspired the initiation of the reform discussions in 1971, such as the inconvertibility of the dollar and the desire for a more symmetrical payments system, receded in importance in view of the problems presented by the oil price increases, world inflation, and the emergence of floating exchange rates.

The notion of establishing a Substitution Account was not raised again on the official level until April 1978 At that time, the Managing Director of the Fund, H Johannes Witteveen, felt that a second distribution of SDRs would be desirable in order to foster the SDR as the principal reserve asset in the international monetary system To allay any fears that the increase in liquidity would add to world inflationary pressures, Witteveen suggested that countries match all or part of the SDR allocation with deposits of reserves held in other forms in a Substitution Account in the Fund. In this way, the allocation of SDRs would not add to world liquidity but only affect its composition, increasing the share of the SDR

At the fall meeting of the Fund in 1978, the Interim Committee, which succeeded the C-20, agreed to endorse the resumption of SDR allocations at an annual rate of SDR 4 billion during 1979-81 but declined to support the creation of a Substitution Account. Nevertheless, to enhance the attraction of the SDR as a reserve asset, it did favor increasing the interest rate on SDRs, from 60 to 80 percent of the weighted average of short-term rates prevailing in the markets of five major countries These decisions were thus adopted by the Executive Directors of the Fund.

At this 1978 meeting, however, the Interim Committee did not entirely dismiss the proposal to create a Substitution Account, notwithstanding the differences of opinion about it. To the contrary, many on the Interim Committee seemed convinced that the creation of such an account might offer certain advantages. A Substitution Account could (1) promote further the reserve role of SDRs, (2) increase the centralization of monetary reserves in the IMF and, in so doing, lead to more effective control over international liquidity creation, and (3) provide the means for countries to diversify the composition of their reserve holdings without having a direct impact on the exchange markets For these reasons, the Interim Committee instructed the Executive Directors to keep the question of the Substitution Account under review. Subsequently, at its meeting in March 1979, the Interim Committee expressed broad support for active consideration of a Substitution Account and asked the Executive Directors to present conclusions about the matter at the next Committee meeting.

Issues to be considered

In preparing their report on the Substitution Account for the October 1 meeting of the Interim Committee and the Board of Governors, the Executive Directors of the Fund will be confronting a variety of issues. These will range in dimension from broad questions about the fundamental purposes and objectives of a Substitution Account to detailed technical questions about how the account would work, including how the financial obligations would be distributed. The issues are not only complex but also overlap. This means that choices made with respect to some issues would necessarily constrain choices that can be made with respect to others. The result is an intellectual puzzle that is both

[8] These steps were taken on July 1, 1974 At this time, the interest rate on the SDR was changed from a flat rate of 1½ percent initially to 60 percent of the weighted average of specified short-term interest rates in the markets of five major countries the United States, the Federal Republic of Germany, the United Kingdom, France, and Japan In addition, the value of 1 SDR was changed from 1/35 of an ounce of gold to a specified basket of the sixteen most important currencies of the Fund's member countries

challenging and frustrating. To simplify the following discussion as much as possible, the issues will be grouped into four categories: (1) the potential objectives of an account, (2) its structure, (3) its functioning, and (4) the nature of the exchange risks involved.

Objectives

There are basically two types of objectives that a Substitution Account might be designed to achieve. They are not mutually exclusive, but they do entail somewhat different approaches to the issue.

The first and potentially the most far-reaching objective would be to promote the SDR as the principal reserve asset in the international monetary system. In general terms, that goal is already set forth in the amended Articles of Agreement. Development of the SDR as the principal reserve asset could help lay the groundwork in the long run for arrangements providing more effective international control over the growth of world liquidity than currently prevails. Eventually, that could be a step toward an improved functioning of the international monetary system. At the same time, there would be other implications for the monetary system. The relative reserve role of the dollar could diminish, since the dollar would be the primary currency deposited in a Substitution Account in exchange for SDR-denominated claims. In addition, the substitution process would tend to strengthen the position of the IMF as the international institution that manages and oversees the functioning of the SDR.

To achieve the objective of promoting the role of the SDR by means of creating a Substitution Account, it would be useful to encourage broad participation by many countries in the account and to ensure that the SDR-denominated claims in the account were roughly similar to the existing SDR. In other words, it would not be constructive for the account to create yet another international reserve asset. By contrast, the actual size of the account would be less of an issue, since even a relatively modest-sized Substitution Account could be a step in the direction of promoting the role of the SDR.

A second type of objective would be perhaps less visionary but more concrete: to contribute to exchange market stability by removing a source of uncertainty related to potential changes in the composition of official reserve holdings. In practical terms, the dollar is expected to remain the principal reserve asset in the international monetary system for the foreseeable future. But it may be increasingly supplemented in its reserve use by other national currencies. Under normal exchange market conditions, this kind of diversification of reserves would pose no special problems. Individual central banks, however, have occasionally sought to shift a portion of their reserves out of dollar assets into other currencies during times of unsettled market conditions. The extent of actual diversification may easily be exaggerated by the market, and this perception may aggravate existing pressures against the dollar by private market participants.

A Substitution Account could help reduce or even eliminate this sequence of reactions by providing central banks with an alternative way outside the market to diversify the composition of their reserves. This could diminish destabilizing capital flows which may distort exchange rates among the major currencies. The account could therefore serve to reduce both the magnitude of potential exchange rate volatility and one of the motivations for diversification on the part of the official community. It would not, however, directly address problems stemming from diversification on the part of private market participants.

To recapitulate, the objectives of promoting the role of the SDR and internationalizing currency diversification are neither exclusive nor incompatible. The priority that each country attaches to a specific objective, however, may color choices regarding the technical features of the account. Moreover, because of their implications for achieving the basic objectives of the scheme, even seemingly specialized technical decisions deserve thorough exploration in the development phase of a Substitution Account proposal. These technical features are described in the next section.

Structuring the Substitution Account

Legal basis. There are a number of ways to establish the account legally. One way is already provided for in the amended Fund Articles. Under these terms, the account would be administered by the Fund acting in a fiduciary or trust capacity.[9] An alternate way would be to establish the account as a separate legal entity by international agreement and appoint the Fund to act as administrator. A third possibility would be to allow the account to function as a separate legal entity in the form of a Fund affiliate, in much the same way as the International Development Association and the International Finance Corporation currently relate to the World Bank.

Participation. In designing a Substitution Account, countries will have to decide whether participation in the facility would be mandatory for all Fund members

[9] Article V, section 2 (b) of the Fund's amended Articles states "If requested, the Fund may decide to perform financial and technical services, including the administration of resources contributed by members, that are consistent with the purposes of the Fund Operations involved in the performance of such financial services shall not be on the account of the Fund Services under the subsection shall not impose any obligations on a member without its consent"

or voluntary. If the scheme were mandatory, changes would be needed in the Fund's Articles. Some countries might, however, reasonably judge that they do not possess sufficient amounts of reserve currency to make deposits in the account. Further, opinions might vary widely among countries as to the nature of their participation. These differences might be better accommodated by a voluntary rather than a mandatory scheme.

Yet, if participation were voluntary and either a majority of countries or some of the major reserve holding countries declined to join, the account might fail to achieve any of its objectives. It might not effectively constrain reserve diversification or promote the position of the SDR.

Size of the account. As noted above, the size of the account is an important issue bearing on the purposes envisaged for the account. A relatively large account to provide for substantial substitution would do more than a small account to reduce the likelihood of reserve diversification in the market. A large account would also promote the position of the SDR relatively more than a small account as well as allow countries to restructure the composition of their reserves more comprehensively. A large account, however, may be heavily dominated by the deposits of just a few major reserve-holding countries. Thus, the optimal size of the account is not obvious. In any case, countries will have to decide whether the total amount of dollars to be substituted should be specified in advance or whether decisions as to the account's magnitude should be left to each participant's choice. To avoid token participation, for example, it might be desirable to require minimum deposits, and to avoid domination by just a few countries it might be desirable to impose maximum deposits.

Frequency of substitution. How often substitution would be permitted is a related question. For example, participants might be allowed to substitute dollars for SDR-denominated claims on an ongoing basis, on a periodic basis, or only on a once-and-for-all basis. An ongoing facility would most fully accommodate desires to reduce reserve diversification in the market by allowing countries to substitute dollars for SDR claims at any time they wished. Substitution offered on a periodic basis (such as once a year) would be roughly similar in effect and might have certain advantages in terms of administrative simplicity. By contrast, a once-and-for-all substitution facility would be appropriate to the objective of enabling countries to achieve a major restructuring in their reserve holdings.

Termination and liquidation. This issue raises questions as to whether the account would have a fixed maturity or whether it would exist indefinitely. A fixed maturity for the account, and therefore for the SDR claims in the account, might be seen as a means of assuring the ultimate liquidity of the SDR claims, irrespective of whatever conditions on transferability and usability might be agreed upon for the period in which the account is operating. However, there is a danger that, as the fixed maturity approached, the original problem of the currency composition of reserves that the Substitution Account was intended to address would simply recur.

An alternative possibility would be to allow the account to exist indefinitely. In this way, the dollar assets of participants deposited in the account would be permanently taken out of reserves and the SDR-denominated claims held in place of dollars would correspondingly occupy a greater proportion of official reserves. Under that alternative, arrangements would need to be agreed upon to maintain adequate liquidity for the SDR claims over time.

Functioning of the Substitution Account

How substitution would work. As already suggested, countries agreeing to participate in a substitution facility would deposit reserve currencies—mostly dollars—in the account. In return, they would receive SDR-denominated claims. They would hold these SDR-denominated claims in their official reserves together with dollars and other reserve currencies, the regular SDRs they already hold, and gold. They would receive interest from the account on their SDR assets.

There is a wide range of options on the central characteristic of the investment facility for the account's dollars—that is, the interest rate to be paid by the United States Government. For example, the account might receive an ordinary long-term interest rate much like any long-term bond, a floating interest rate based on market rates for short-term United States Government issues, a floating interest rate based on long-term United States Government securities, or even a floating rate based on interest rates prevailing for SDRs. The account could receive interest payments in dollars. Alternatively, it could receive interest in SDRs or some combination of dollars and SDRs based on prearranged conditions.

The manner in which the account would receive interest is important. If, for example, the United States were to pay interest in SDRs, it would have to have a means to acquire sufficient SDRs to meet its obligations to the account. It could do so either through SDR allocations from the Fund or through the maintenance of a balance-of-payments surplus that permitted purchases of SDRs from countries which needed dollars to cover their own balance-of-payments deficits. The magnitude of a United States surplus would have significant implications for the overall functioning of the interna-

tional monetary system. Under certain conditions, it could involve some contractionary effects on both the domestic and world economy.

The nature of the liabilities owed by the account. The liabilities owed by the account would consist of SDR-denominated claims. The characteristics of these claims might be like those of currently existing SDRs and subject to comparable conditions. Alternatively, the account might owe SDR-denominated claims to which might be attached conditions somewhat different from those currently applicable to existing SDRs.

The characteristics of the SDR claims offered by the account are important because they will influence countries in their decision to participate. For example, if the SDR-denominated claims owed by the account are inferior to existing SDRs, this would do little either to attract participants or to promote the SDR as a reserve asset. The more complicated the conditions attached to the account's SDR liabilities, the less workable the scheme might be and hence the less wide the participation it would attract.

A feature of considerable importance is the interest rate the account would pay on its SDR liabilities. One option would allow the account to apply the same interest rate as that currently applied to existing SDRs. This is a floating rate equivalent to 80 percent of the combined short-term rates prevailing in the markets of five major countries. There are other options, however. For example, the account might pay a slightly higher rate to compensate for potential restrictions on the usability and/or liquidity of the new SDR claims. Alternatively, the account might pay a fixed rate for a specified period of time, a long-term rate, a short-term rate, or a combination of these.

The higher the interest rate the account would pay, the more attractive the scheme to those considering participation. Yet, the argument could work in the opposite way. Thus, the attractiveness of the SDR as a reserve asset might be compromised if the interest rate the account were to pay on its SDR liabilities were substantially higher than that paid by the Fund on outstanding SDRs. Moreover, the higher the interest rate paid, the more difficult it might be to reach agreement on apportioning the financial obligations and ensuring that earnings on the account's assets were sufficient to cover its interest commitments.

The way in which the account would pay interest to participants is also of concern. One option would be to enable the account to increase each participant's account. This would be comparable to the way in which individuals receive interest on their savings deposits. Another possibility would be to allow the account to pay interest to participants periodically in the form of an outright payment.

The medium in which the account would pay interest is a related question. There are basically three options. First, interest could be paid in terms of currently existing SDRs. The account could also pay interest in the form of dollars at the prevailing dollar-SDR rate, using the dollars deposited with it. Finally, interest payments could take the form of new SDR-denominated claims.

Transferability and usability of SDR assets held by participants. Participants might be allowed to use their SDR-denominated claims in the Substitution Account subject to the same conditions that apply to existing SDRs. Currently, SDRs are used in exchange for national currency. In general, a country is expected to use its SDRs only if it has a need because of its balance-of-payments or reserve position, rather than solely to change the composition of its reserves. A country may use its SDRs either in direct agreement with another country or by going to the Fund and having the Fund designate another country to receive the SDRs in exchange for currency. Under current procedures, no country is designated to receive SDRs unless it is in a sufficiently strong balance-of-payments or reserve position.

In designing the Substitution Account, however, it might be desirable to vary the freedom of choice available to participants in the use and transfer of their SDR claims. More or less stringent conditions might be applied depending upon the type of transfer. For instance, voluntary transfers among participants might be permitted with minimal limitations. In contrast, transfers involving some form of designation might require demonstration of a balance-of-payments need by a participant wishing to use its SDR claims to acquire dollars from other participants. Still other conditions might be applied if a participant wished to acquire dollars directly from the account in exchange for its SDR claims.

More generally, provisions might be required to prevent participants from using their SDR claims solely as a means to speculate on foreign exchange rate changes. For example, a repurchase provision might be imposed. This would oblige participants using their SDR claims to reacquire and redeposit these claims in the account after some agreed period. Such an obligation would be analogous to the reconstitution requirement under the existing SDR provisions in the Articles of Agreement. Those provisions oblige member countries to hold on an average daily basis 15 percent of the SDRs allocated to them over any five-year period.

Finally, countries might decide to attach similar acceptance limits to the SDR claims created by the Substitution Account as those currently applied to the SDR. This provision is intended to ensure that

only a limited amount of SDRs need be accepted by any member. Under existing rules, no participant in the SDR facility need accept more SDRs in exchange for currency than twice its net cumulative allocation, although it may accept more if it wishes. Comparable provisions might be applied to the SDR claims created by a Substitution Account as a means of reducing the obligation of potential net creditors to hold more claims than they might wish.

Nature of the exchange risk

Exchange risk questions would arise in the event that the account were terminated and liquidated. At that time, the dollar assets of the account would revert to the participants. The dollar-SDR exchange rate would likely be different from that which prevailed at the time of the substitution. Whether this rate were favorable or unfavorable to the account would depend on the relationship between the cumulative interest paid by the account, the cumulative interest the account had earned, and the changes which had taken place in relative exchange rates.

One possibility is that relative interest rate differentials and changes in exchange rates may balance out over time. In that case, the difference between interest paid and received by the account would about offset the change in the capital value of the account's dollar assets resulting from the overall change in the dollar-SDR rate. Thus, the question of exchange risk would be effectively neutralized.

If, however, interest rate differentials and exchange rate changes do not balance out over time, countries must make choices as to how best to deal with the exchange rate risk involved. One approach to resolve this problem would be to arrange a form of risk sharing among the participants and the account at the outset of the agreement. At one extreme, the United States could assume all the potential exchange risk by agreeing to maintain the dollar value of the SDR liabilities held by the account. At the other extreme, the United States could assume no maintenance of value obligation and the exchange risk would reside with the participants in the account. Alternatively, some intermediate course might be selected which would oblige all participants in the account and the United States to share whatever exchange rate cost might prevail at the time the account was liquidated and terminated. The way this question is resolved has to be considered in connection with all other issues bearing on the distribution of financial obligations among participants in the account and the United States—especially the interest rate to be paid and received on the account's assets and liabilities.

One point to underscore is that there can be no way to measure or to assess the magnitude of the exchange rate exposure ahead of time. Therefore, arrangements would have to be specified in advance as to the obligations participants in the account would assume at some future date.

Conclusion

As this review has shown, the concept of a Substitution Account has been considered in various forms in virtually all the discussions of international monetary reform, beginning with the Anglo-American negotiations during World War II as well as during the multilateral discussions of the 1960's and 1970's. Under the Keynes plan and also in the C-20's *Outline of Reform,* the proposals were presented as an integral part of comprehensive schemes to reshape the international monetary system. In that context, the fundamental problems involved in reforming the system could not be avoided. These problems concern the provision and control of international liquidity, the maintenance of convertibility between primary reserve assets (*e.g.,* SDRs) and national currencies, and perhaps most important the adoption of such arrangements for economic adjustment among national economies that would assure the smooth functioning of the international monetary system.

Perhaps because of inability to resolve them on earlier occasions, these fundamental problems have not thus far been confronted directly in the current Substitution Account discussions. A piecemeal approach has the potential disadvantage of obscuring disagreement among countries on how to resolve the fundamental problems. The approach may have advantages, however. Namely, it may be preferable to deal with one problem at a time. By doing so, gradual improvement of the international monetary system might best be achieved.

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