Research Department
Federal Reserve
Bank of
San Francisco

March 7, 1980

Weekly Letter

Substitution Account

A major innovation in the international monetary system has appeared on the horizon. The Executive Board of the International Monetary Fund (IMF) is now working on a proposal to establish an "SDR Substitution Account," at which member countries could convert their foreign-reserve holdings now denominated in national currencies (mostly U.S. dollars) into claims denominated in IMF Special Drawing Rights (SDRs). The IMF's Interim Committee on the International Monetary System agreed upon the plan in principle at the IMF Annual Meeting in Belgrade last October. Furthermore, the Committee instructed the IMF Executive Board to submit detailed plans for implementation at the Committee's meeting in Hamburg next month. Prospects are still uncertain, but the proposal has attracted considerable attention among those interested in the stability and smooth functioning of the international monetary system.

The idea of a reserve-substitution account goes back to the 1943 "Keynes Plan" of an International Clearing Union, under which an international reserve asset (the "bancor") would be created to provide for international payments clearance as well as overdraft facilities. For almost forty years, the idea of an international reserve asset has recurred in various forms and (as discussed below) has been realized in the form of SDRs. However, the more immediate impetus for the substitution-account proposal stems from the world's growing concern over the rapid increase in foreign-exchange reserves, and over the potential disturbance to the exchange market caused by massive shifts of reserves from one currency to another.

Reserve increase

The increase in foreign-exchange reserves has been rapid indeed, reflecting the uncertainties created by OPEC price increases, soaring inflation, and other factors. From $18 billion in 1960, the total amount rose to $45 billion in 1970 and roughly $300 billion in September 1979. The rate of increase accelerated from 9 percent a year during the 1960's to 24 percent a year in the 1970's. Surprisingly, the general floating of exchange rates did not result in any slowdown of world-reserve accumulation. On the contrary, under managed float, world foreign-exchange reserves rose at 17 percent a year from 1973 to 1979, considerably faster than the 9-percent annual average rate of the 1960's. The expansion since 1973 was widespread: from $66 billion to more than $150 billion for industrial countries, from $12 billion to $57 billion for oil-exporting countries, and from $44 billion to $94 billion for non-oil developing nations.

These foreign-exchange reserves all represent claims against individual countries. It is impossible to identify fully all the debtor countries involved. However, according to IMF data, the bulk of official foreign-exchange holdings has consisted of U.S. dollar assets throughout the 1970's. At the end of 1978, for example, $219 billion (or 76 percent) of the total was denominated in U.S. dollars, including Eurodollars. At the same time, the total identifiable reserve assets denominated in major currencies other than the dollar amounted to about $35 billion, of which more than half consisted of Euro-currency deposits.

Reserve diversification

Although dollar assets amounted to roughly three-fourths of identifiable foreign-exchange assets throughout the 1970's, there is little assurance that the ratio will remain stable in future years. Central banks generally are not profit-seeking institutions, but they cannot be completely oblivious of any sustained erosion of the real purchasing power of their reserve assets. And no matter what central banks do, private international-asset holders would not feel obligated to retain an asset in their portfolios if its yield has become much less favorable relative to other assets.

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In this regard, the attractiveness of dollar holdings has deteriorated perceptibly over the last few years, as a result of accelerated inflation in the United States and a precipitous decline of the dollar against other major currencies. According to Morgan Guaranty's *World Financial Markets* (September 1979), when exchange-rate gain was added to interest yield, reserves held in U.S. dollars earned 7.4 percent annually between January 1975 and August 1979—considerably less than the 12.6-percent return for the Japanese yen, 12.5 percent for gold, 11.8 percent for the Swiss franc, and 10.0 to 10.6 percent for the German mark, British pound and French franc. When adjustment was made for world inflation (in terms of world manufactured-goods prices) reserves held in U.S. dollars earned a *negative* 2.3 percent a year, compared to annual gains ranging between 0.1 percent (the British pound) to 2.4 percent (the Japanese yen).

Past performance is not necessarily a reliable guide to future prognostication, but there may be some justification for the concerns expressed about the danger to the foreign-exchange market of any massive reserve diversification out of the dollar, from either private or official portfolios. As stated above, these concerns have helped stimulate the movement to create an international asset that could be substituted for reserve holdings denominated in national currencies, in a manner that would completely short-circuit the foreign-exchange market.

SDR-denominated asset

The balances in the proposed Substitution Account are intended to serve that purpose. They would be denominated in SDRs, but kept in a separate account from the IMF's SDR Account. Participating member countries could freely convert their foreign-exchange holdings into the new asset issued by the Account without going through the foreign-exchange market.

The new assets would be denominated in SDRs, but would not themselves be SDRs. The latter were created on January 1, 1970, with an initial distribution to participants of an equivalent of $3.5 billion, and additional $3-billion equivalents were created and distributed on each of the following two New Year's Days. Each SDR is valued at the weighted-average value of 16 major currencies: the U.S. dollar (33 percent), the German mark (12.5 percent), the British pound (7.5 percent), etc. As a weighted average, the value of the SDR tends to be more stable than the constituent currencies.

An SDR credit-balance at the IMF can be used by a deficit country to purchase other participating countries' currencies, either by agreement with the latter countries or at the "designation" of the IMF as the Account Manager. Net users of the Account are under obligation to "reconstitute" the credit balance within a designated number of years. Finally, credit balances in the SDR Account pay an interest rate equivalent to 72 percent of a weighted average of the interest rates in five major national markets (the U.S., U.K., France, Germany, and Japan), while debit balances are charged an interest rate equivalent to 80 percent of the weighted-average rate. Because of the restrictions on its transferability, its lower interest yield, and reconstitution obligation, the SDR is generally considered to be a less desirable asset than, say, a dollar asset.

Since the proposed substitution of the SDR-denominated asset for dollar reserves would be entirely voluntary, the new asset must offer sufficiently attractive terms—including interest yields, liquidity, transferability, and safety from exchange risk—to make it competitive with existing assets denominated in national currencies. In other words, the new asset, though denominated in SDRs, must offer significantly more attractive terms than existing SDRs to achieve its intended purposes.

Issues to be resolved

Liquidity and transferability. The present official foreign-exchange reserves are held in assets of varying maturities, and possess vary-

ing degrees of liquidity and transferability. Given the wide range of choice, official asset-holders can tailor their asset portfolios according to their individual preferences. Obviously, it would not be feasible for the new asset to compete with the entire spectrum of existing reserve assets. However, policymakers might be well-advised to decide which specific types of existing assets the new asset would substitute for. For instance, the new asset conceivably could provide a better long-term store of value than existing reserve assets, in which case the integrity of capital value would be stressed more than its short-term liquidity. It might be both unrealistic and unnecessary to require the asset to possess both high liquidity and highly stable exchange value.

Exchange risk. If the store-of-value attribute of the new asset were to be its principal attraction, the Account must stand ready to assume at least a part of the exchange risk now borne by official reserve holders. If, for instance, dollar assets were converted into SDR-denominated assets in the Account, and subsequently the dollar depreciated against the SDR, the Account would suffer a paper loss even in the absence of any account withdrawals, and would suffer an actual loss in the event of liquidation. Who would then bear the loss? If all the participants were to bear the loss in proportion to their balances in the Account, their losses would be no less than they would have been if they had not converted their holdings into the new asset. Only if a non-participant—say, the U.S. or the IMF—were to share at least a portion of the loss, would the new asset confer greater exchange safety than existing dollar assets. But asking the IMF to share the cost would be tantamount to asking all IMF member nations—haves and have-nots alike—to share the cost of protecting the asset value of the haves. Also, asking the U.S. to share the cost would raise a question of political acceptability to the U.S. Congress.

Interest payment. How to balance exchange-value safety against interest-rate attractiveness is a technical question that would require careful analysis. Since an exchange guarantee would be equivalent to providing a forward cover, the interest-rate differentials between the new asset and existing assets might offer interesting opportunities of covered arbitage. Moreover, as past experience with SDRs has shown, setting an appropriate interest rate is no mean task. Unattractive yields would keep asset-holders away, and excessively generous rates might threaten the Account's financial viability.

Size of account. To do any good, the size of the Account must be substantial relative to the size of existing official foreign-exchange holdings of more than $300 billion. Other reserve-asset positions in 1979 were relatively small: the IMF General Resource Account totaled only $9 billion, the SDR Account $18 billion, the Agreement to Borrow $9 billion, the Oil Facility Account $4 billion, and the Supplementary Financing Facility $10 billion. Would the proposed Substitution Account also be of limited size, or would it be open-ended on demand of the participants? Herein lies a dilemma. A small size would be no more than tokenism, yielding little real benefit to the international monetary system; an open-ended account would mean exposing the U.S. or the IMF to the possibility of incurring substantial costs in providing for exchange risk—a proposition of dubious political acceptability.

Altogether, the Substitution Account is a bold, ambitious plan to tackle a potentially serious international financial problem. The IMF staff is now working intensively to have the plan ready for submission to the IMF Interim Committee on April 25. Several issues remain to be resolved, and how they are resolved will determine the plan's feasibility and usefulness. Financial experts everywhere will be watching with interest what kind of a proposal, if any, will emerge from the Interim Committee's meeting.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 2/20/80	Change from 2/13/80	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	138,574	+ 390	+ 17,047	+ 14.0
Loans (gross, adjusted) — total#	116,149	+ 420	+ 16,813	+ 16.9
Commercial and industrial	33,634	+ 204	+ 4,596	+ 15.8
Real estate	44,557	+ 98	+ 8,808	+ 24.6
Loans to individuals	24,419	− 13	+ 3,774	+ 18.3
Securities loans	1,569	+ 138	− 366	− 18.9
U.S. Treasury securities*	6,922	− 42	− 733	− 9.6
Other securities*	15,503	+ 12	+ 967	+ 6.7
Demand deposits — total#	45,088	+1,349	+ 3,829	+ 9.3
Demand deposits — adjusted	30,806	− 477	+ 2,354	+ 8.3
Savings deposits — total	28,131	− 1	− 1,669	− 5.6
Time deposits — total#	58,996	− 346	+ 7,950	+ 15.6
Individuals, part. & corp.	50,340	− 307	+ 8,891	+ 21.5
(Large negotiable CD's)	20,860	− 479	+ 1,987	+ 10.5

Weekly Averages of Daily Figures	Week ended 2/20/80	Week ended 2/13/80	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves (+)/Deficiency (−)	78	− 23	− 12
Borrowings	291	181	75
Net free reserves (+)/Net borrowed(−)	− 212	− 205	− 87
Federal Funds — Seven Large Banks			
Net interbank transactions [Purchases (+)/Sales (−)]	+2,911	+2,212	+2,129
Net, U.S. Securities dealer transactions [Loans (+)/Borrowings (−)]	+ 23	− 59	+ 572

* Excludes trading account securities.
# Includes items not shown separately.

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