

ESSAYS IN INTERNATIONAL FINANCE

No. 100, September 1973

THE LINK BETWEEN
SPECIAL DRAWING RIGHTS
AND DEVELOPMENT FINANCE

Y. S. PARK



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

This is the one-hundredth number in the series ESSAYS IN INTERNATIONAL FINANCE, published from time to time by the International Finance Section of the Department of Economics of Princeton University.

The author, Y. S. Park, is a Korean economist in the Treasurer's Department of the International Bank for Reconstruction and Development. He received a doctorate in international finance from Harvard University's Graduate School of Business Administration. Among the author's publications are "The Asia-dollar Market" (Asian Forum, 1973) and a forthcoming book, The Euro-bond Market: Its Functions and Structure. The opinions expressed in this essay are the author's alone and should not be interpreted as representing the views of the World Bank or of his colleagues in the Bank.

The Section sponsors the essays in this series but takes no further responsibility for the opinions expressed in them. The writers are free to develop their topics as they wish. Their ideas may or may not be shared by the editorial committee of the Section or the members of the Department.

PETER B. KENEN, *Director*
International Finance Section

ESSAYS IN INTERNATIONAL FINANCE

No. 100, September 1973

THE LINK BETWEEN
SPECIAL DRAWING RIGHTS
AND DEVELOPMENT FINANCE

Y. S. PARK



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

Copyright © 1973, by International Finance Section
Department of Economics
Princeton University
L.C. Card No. 73-10880
ISSN 0071-142X

Printed in the United States of America by Princeton University Press
at Princeton, New Jersey

The Link between Special Drawing Rights and Development Finance

The question of a link between Special Drawing Rights and development finance is only one of the many issues facing the reformers of the international monetary system. According to the International Monetary Fund (1972), the current agenda for monetary reform includes a new exchange-rate mechanism to improve the balance-of-payments adjustment process; better arrangements to settle payments imbalances among countries; a redefinition of the roles of various reserve assets such as reserve currencies, gold, and SDRs; and solution of the problem of disequilibrating capital movements.

The IMF also recognizes, however, that international monetary reform should include consideration of new measures directly addressed to the needs of developing countries, and most controversial among them is the suggestion that the flows of development aid be supplemented by linking creation of SDRs with assistance to developing countries. This controversy is unique because the link has become a major point of confrontation between the wealthy industrial countries and the poor developing countries.

The case for a link derives fundamentally from an analogy between official reserves and private money balances in a national monetary system. In addition to the primary effect of increasing liquidity, issuance of national money is also associated with a transfer of resources to the government, or with the financing of real expenditure within the country through the lending activities of the banking system. As Professor Tinbergen (Netherlands National Committee, 1972) argues, the creation of new money always implies that the first recipient gets the money without having produced something, and this privilege should be given to the poor countries of the world community rather than to the rich. Opponents of the link argue contrarily that the liquidity-creating and liquidity-distributing functions of a banking system are conceptually distinct and that the primary emphasis in the creation of SDRs should be placed on the liquidity-creating function (Group of Ten, 1965). This latter view prevailed in 1969 when the Special Drawing Account was established in the IMF and, as a result, the link was not incorporated in the present SDR system.

Controversy over the link has increased in recent years, involving academic economists as well as officials of governments and international organizations. Discussions of the link are proceeding concurrently at two levels: At one level, there is debate concerning acceptance or rejection of the link. At a second, there is debate as to the form the link should take if it is accepted. The first debate is concerned with arguments for and against the link; the second deals with the plethora of link proposals that have been advanced. The two questions are interrelated, however, because some of the objections to the link are concerned only with certain aspects of some link proposals. Thus, in order to evaluate arguments for and against the link, it is necessary first to understand the various link proposals.

Development of the Link Concept

The link concept is not necessarily tied to a particular reserve medium such as SDRs. In fact, the original proposal for a link developed well before the birth of the SDR. The pre-SDR link proposals have little practical importance today, but it is useful to trace the development of the link concept to gain a better understanding of the post-SDR proposals.

Perhaps the oldest proposal for a link between international reserve creation and economic development was contained in the so-called "Keynes Plan" for an international clearing union (ICU) made during World War II. In preparation for the postwar international monetary system, a group of experts at the British Treasury, led by Keynes, proposed to set up an ICU with the power to issue international currency, tentatively named "bancor." In addition to its primary function as world central bank, the ICU would help to finance several international organizations pursuing such internationally desired objectives as postwar relief, rehabilitation, and reconstruction; the preservation of the peace and maintenance of international order; and the management of commodities (*ICU*, 1943).

The British experts were careful to point out that their suggestion of a link was not an essential part of the plan for the ICU. It is interesting to note, however, that they envisaged a far more extensive link between international reserve creation and other internationally desired objectives than is implied by more recent proposals.

It was not until 1958 that the link concept was first proposed in its present form. At that time, Maxwell Stamp (1958) urged that the IMF be empowered to issue Fund Certificates to supplement international liquidity. In addition to its primary role as an international reserve asset, the Fund Certificate would also be used in development finance by the

International Bank for Reconstruction and Development and the International Finance Corporation. [In 1961, Stamp (p. 11) described his proposal for credit creation by the IMF but mentioned neither the IBRD nor the IFC; instead, he suggested simply an aid-coordinating agency to allocate Fund Certificates to the less-developed countries.] In an elaboration of his link proposal, Stamp (1962) suggested that member countries of the IMF be obliged by an agreement to receive Fund Certificates in settlement of international obligations and treat them as foreign-exchange reserves. The IMF would then put the Fund Certificates into circulation by lending them on a long-term basis to the International Development Association for use in IDA development credits to the less-developed countries. The IDA would obtain the currencies required for loan disbursements by presenting Fund Certificates to the country from which either equipment or technology would be bought for a development project. If any member country was suffering from inflation, and therefore unwilling to accept additional export orders, it could notify the IDA that it did not wish IDA loans to be spent within its economy or could limit the purposes for which they could be spent.

The Stamp Plan for the link was given prominence by Triffin (1959, pp. 171-172), who also proposed his own version of the link. Since he thought that the use of *national* currencies as *international* reserves constituted a "built-in destabilizer" of the world monetary system, he advocated internationalization of the foreign-exchange component of monetary reserves by transforming them into currency deposits with the IMF. The currency deposits could be used by the IMF in a way similar to national central banks' credit operations: advances, standbys, and overdrafts undertaken at the initiative of the borrowing country on the one hand, and open-market operations and investments undertaken at the initiative of the IMF itself, on the other. Within the latter category, the IMF could make investments in the financial markets of member countries or in the long-term bonds of the IBRD or other institutions for economic development. This proposal was one of several link proposals considered in a report written by a group of economists in which they analyzed various plans for reform of the international monetary system and clarified differences among them (International Study Group, 1964, pp. 85-88). Two other link proposals were also mentioned in the report:

1. Special development certificates: As special support for development aid, the IMF could issue each year a predetermined volume of special certificates to be given to the IDA. These would be accepted in settlement by all members of the IMF. They would add them to

- their reserves but could not convert them into gold. Membership in such a scheme would be voluntary.
2. Special IMF account for aid: Member countries of the IMF receiving Fund Certificates like those proposed by Stamp would deposit a small fixed portion of their certificates in a special account at the IMF, to be lent to the less-developed countries. Countries receiving such deposits in payment for goods and services could transfer them to other countries to make payments settlements but could not convert them into gold.

A group of experts appointed by the United Nations Conference on Trade and Development (1965) issued a report supporting a link plan similar to the one proposed by Triffin. The UNCTAD report proposed an international monetary system in which the IMF would issue the Fund units to all its member countries against currencies deposited by the members. The IMF would invest a portion of these currency deposits in IBRD bonds. The IBRD would then transfer some of its additional resources to the IDA, as it is the IDA, not the IBRD, which needs additional resources most urgently, and its long-term low-interest loans are best suited to the basic needs of the less-developed countries. (The IDA does not issue bonds of its own.) This proposal by the UNCTAD experts was supported by the Inter-American Committee on the Alliance for Progress (1966).

In 1964, Scitovsky proposed a link plan different from those of Triffin and others in several respects (see Scitovsky, 1965). He suggested that a new international currency be issued to deficit countries in need of reserves. They would make national currency deposits at the IMF in payment for the issue. But international currency issued in this way would not be given directly to the deficit country. It would be allocated first to an LDC for the specific purpose of financing imports connected with a development project approved and perhaps supervised by some such agency as the IDA. The LDC receiving the currency could spend it *only* in the country against whose currency it was originally issued. Once in that country's hands, the currency would become unrestricted international liquidity, spendable and acceptable anywhere. In this way, the LDC would receive a "tied grant," which Scitovsky thought far preferable to a tied loan, and the deficit country would receive additional external reserves, but only in exchange for real resources supplied to the developing country. Two years later, Scitovsky (1966, p. 1218) changed his initial link plan slightly; instead of handing the currency directly to an LDC, the IMF would transfer it first to the IDA, which would in turn use it to finance development projects approved by the

World Bank's regular screening machinery as technically feasible and economically sound. The IDA would then spend the currency only in the deficit country against whose own currency it was originally issued.

While various link proposals were thus being debated among academic and international experts, the U.S. Congress was also urged to endorse the concept in 1961. Day (U.S. Congress Subcommittee, 1961, p. 329) advocated a link plan similar to that of Triffin in a statement before the Subcommittee on International Exchange and Payments of the Joint Economic Committee. In 1965, the Subcommittee itself observed that, while new international reserves could not be used as a primary foreign-aid device "because securing them by the credit of less developed countries might impair their acceptability," the need to promote economic development could be recognized by selecting suitable standards for allocating new reserves (U.S. Congress Subcommittee, 1965, p. 11). Representatives Reuss and Ellsworth (1965, p. 16) wanted to go further. They stated that the World Bank, as an experienced and well-regarded international development agency, "should take the initiative in asking the IMF to dedicate some part of reserve creation to long-term aid. Once the IMF and the Group of Ten have tentatively agreed on a new mechanism for creating reserves, the World Bank should propose that the International Development Association be financed in part by the conventional national contributions and in part by IMF purchases of IDA bonds, guaranteed by the World Bank, with a portion of the new reserve assets." Two years later, the Subcommittee (1967, pp. 7-10) expressed its unanimous support for these same views.

The link proposal did not find favor, however, with most of the officials engaged in actual negotiations on international monetary reform. The Group of Ten opposed the link in 1965, on grounds to be described later on. Systematic international reserve creation came under consideration by the Group of Ten as early as 1963, when meetings of the Deputies of the Group of Ten became a permanent forum for discussion of international monetary matters (Haan, 1971, p. 78). During the early stages, the Group of Ten toyed with the idea of creating reserves only within a limited group of developed countries. This appeared justifiable to the industrial countries, because they thought that an international asset should be based on the credit of participants and that this credit should be unquestioned. Furthermore, the Group of Ten believed that their countries, as the chief holders of reserves, should be allowed to create additional reserves without having to "earn" them through transfers of real resources (Machlup, 1965, p. 355). For this reason, other members of the IMF were virtually excluded from deliberations on international reserve creation until 1966, when the Min-

isters and Governors of the Group of Ten, in an apparent change of heart, instructed their Deputies to confer with the Executive Directors of the IMF. They "thought it appropriate to look for a wider framework in which to consider the questions that affect the world economy as a whole" (Group of Ten, 1966). Four joint meetings of the Deputies of the Group of Ten and the Executive Directors of the IMF were then held in 1966 and 1967. These meetings enabled the developing countries to participate in the discussions to a limited extent, albeit against a double representation of the Group of Ten countries, both as members of the Group of Ten and as members of the IMF. During these meetings the idea of limiting reserve creation to a group of developed countries was abandoned (Haan, 1971, p. 78).

The Ossola Report (Group of Ten, 1965, par. 121) contains the rationale used by the Group of Ten for dropping the limited-group approach:

[The] limited arrangement would be exposed to disadvantages which would outweigh the advantages claimed for it. For a group of industrially-advanced countries to increase, by a stroke of the pen, as it were, their own monetary reserves and appear to make themselves thereby the richer, would invite criticism from other countries, who would declare that their own need for more elbow room in their international payments was, proportionately, no less than that of the members of the group. A number of the smaller countries could show that they have maintained a good reserve position and their balance of payments' record compared favorably with that of countries within the group. It would be arbitrary to deny participation to such countries. In any limited membership, the difficulty of borderline cases is likely to arise. For this reason, those who hold this view favor an approach that is not strictly limited in the width of membership. They prefer an approach that embodies a self-qualifying element and would therefore be more open than a grouping that is strictly limited to a small number of countries. They point out that many countries throughout the world feel, or will feel, a need for growing reserves; yet countries excluded from the group would be able to increase their reserves only by surrendering real resources or attracting capital inflow. To exclude these countries would risk creating a sense of discrimination which would hamper monetary cooperation and understanding and which might well lead to demand for compensation in other ways. As a technical matter, the more limited the group the more likely it is that individual members of the group will accumulate an undue amount of the new asset; this would occur if such members, even when in payments' balance with the entire world, had a surplus with the group and a deficit with the rest of the world.

In this sense, the Group of Ten made a concession to the developing countries. Even if no link plan were to be built into the SDR system,

inclusion of the LDCs in the system was indeed a major improvement over the limited-group approach.

Main Types of Link Proposals

There is more than one way to achieve a link and a number of link plans have been proposed, but those which were proposed before establishment of the SDR facility have little relevance to the present discussion. In the early monetary discussions, "backing" for new reserves was considered essential to the success of any scheme for reserves. Such backing would take the form of currency deposits held by the IMF. Thus, Triffin's link proposal required currency deposits against which international reserves such as SDRs would be issued; the IMF would then invest the currency in long-term IBRD bonds. Since the present SDR system has disposed of "the old myth of backing" (Machlup, 1968, p. 65) and the SDRs are distributed "free" and directly to participating countries without any currency deposits, the Triffin-type link is not likely to be accepted now. Similarly, the tied-grant link proposed by Scitovsky (1966) envisaged an SDR scheme in which *all* new SDRs would be turned over to the IDA to finance development projects. This type of link, however, is also not compatible with the present SDR system, where all the SDRs are first distributed among the participating countries.

Once the present SDR scheme obtained official blessings at the 1967 annual meeting of the IMF in Rio de Janeiro, new link proposals were put forward, taking into consideration the new arrangements and premises. These proposals are usually grouped into two categories: those involving a direct or "organic" link and those involving an indirect or "inorganic" link. Under an organic link, provisions for development assistance would be directly incorporated into the SDR system itself, requiring an amendment to the Articles of Agreement of the IMF to achieve the link. Under an inorganic link, wealthy countries would make *voluntary* contributions of currencies or SDRs to development agencies at the time of each SDR allocation.

The Inorganic Link

The inorganic link was first introduced by Patel (1967). He suggested that the simplest way to establish a link would be an agreement among the rich countries that they would make voluntary contributions to the IDA whenever new SDRs were allocated. The contributions would be in national currencies, but would represent a uniform proportion of each contributor's SDR allocation. Scitovsky (U.S. Congress Subcommittee, 1969a, p. 39) has suggested a slightly different version

of an inorganic link. At the time of an SDR allocation, the developed countries would make tied contributions (perhaps in their own currencies) for development aid; these funds would be spent *only* in the contributing countries. The advantage of these link proposals is ease of implementation; no amendment to the IMF Articles of Agreement is required. For this reason, Colombo (1968, p. 81, and 1969, p. 71), Dell (U.S. Congress Subcommittee, 1969a), and Prebisch (U.S. Congress Subcommittee, 1969a) have supported an inorganic link. As establishment of the SDR facility had already necessitated a substantial amendment of the IMF Articles, they thought it would be difficult to obtain support for an organic link involving additional amendments. In fact, among many objections to the link in general, perhaps the strongest is based on the argument that the link, especially the organic link, would immensely complicate reserve creation. Haberler (1971) and Johnson (U.S. Congress Subcommittee, 1969a, pp. 19 and 20), among others, have suggested that it will be hard enough to establish the SDR system firmly and manage it properly without the additional complications created by the link. This argument has also been used by officials from developed countries as a major cause for opposing the link, and the inorganic link was proposed precisely to meet this objection. Some supporters of the inorganic link believe that an organic link should be adopted in the long run (see U.S. Congress Subcommittee, 1969a, pp. 4 and 30).

Despite apparent ease of implementation, the inorganic link has several major disadvantages. As originally proposed by Patel and subsequently supported by others, the proposal calls for a "voluntary" contribution by developed countries. That is why the inorganic link is sometimes called the voluntary link. As long as it is on a voluntary basis, however, there is always the danger that one or two major countries may not contribute, or that a country may make its contribution contingent on the condition of its balance of payments. This difficulty has been cited by the Inter-American Committee on the Alliance for Progress (1966, p. 33). Furthermore, in order to make currency contributions to international development agencies such as the IDA, the governments of developed countries would have to budget their contributions in the ordinary way. Their parliaments would have to approve those contributions, and this would create the same difficulties as regular foreign-aid appropriations. This being so, there would be little reason to push for a link. One might just as well urge countries to furnish more development aid in the name of enlightened self-interest, humanitarianism, etc. This was why the Subcommittee on International Exchange and Payments of the U.S. Congress, sympathetic to a link, recommended

adoption of the organic instead of the inorganic form (U.S. Congress Subcommittee, 1969b). The *raison d'être* for a link is precisely to avoid the budgetary process; that process has proven inadequate to raise sufficient funds for development aid. Foreign aid has no political constituency and has been losing support in the parliaments of the rich countries in recent years. The dilemma inherent in an inorganic link was expressed most lucidly by Representative Reuss during a Congressional hearing on the link:

If you pursue the so-called nonorganic link, I do not see at this moment how you have accomplished very much in political terms that could not be accomplished by a more heroic frontal attack, namely induce the U.S. Congress to pass a law which says we up our miserable present IDA contribution by three times, having in mind that we are now better able to do this, because we have now a regime of SDRs and much of our reserve problems will therefore be alleviated. I do not think that in a nonorganic or so-called parallel way of proceeding with the link we accomplish very much. If, however, we get organic, then you may be able to achieve some fiscal monkey business, which would be all to the good (U.S. Congress Subcommittee, 1969a, pp. 70-71).

The Organic Link

A number of proposals for an organic link were put forward before the final format of the SDR facility was decided. Proponents of an organic link thought that, since a new system for reserve creation was to be set up anyway, the link provision should be incorporated into the new reserve system at the same time. Thus, the early link proposals of Stamp (1958), Triffin (1959), Scitovsky (1965), and others were of the organic type. After the SDR resolution was passed in 1967, other organic-link proposals were also advanced. Most comprehensive among them was one recommended in 1969 by the Subcommittee on International Exchange and Payments of the Joint Economic Committee. The Subcommittee (1969b) proposed that the IMF Articles be amended to allow the IMF to retain as "treasury stock" 25 per cent of the SDR allocations of the eighteen wealthy countries which are Part I members of the IDA. The SDRs retained would be "cashed" at the joint direction of the IMF and IDA to finance expanded IDA development assistance.

In general, we can classify the current proposals for an organic link into four groups:

1. *Increase in the SDR quotas of the less-developed countries.* This proposal looks to a change in the distribution formula for SDRs. At present, SDRs are allocated to each participating member country according to its quota in the IMF. Distribution in this way has been criticized

as unjust by most developing countries and some economists. They urge a new formula to allocate more SDRs to the developing countries than they receive under the present system. This would mean raising the share of the developing countries in IMF quotas or devising a new distribution formula for SDRs separate from IMF quotas. Either way, the main disadvantage of this approach is that it would be extremely complicated and time-consuming to arrive at a formula for distribution that would be acceptable to all the participating countries. However, it has one important advantage in not involving any outside intermediaries such as development agencies; the link could be achieved entirely within the internal framework of the IMF.

2. *Direct allocation of SDRs to development agencies.* On the occasion of each general SDR allocation, a certain proportion of the total to be issued might be assigned directly to development agencies to be used for development aid. The SDRs so allocated might be transferred as straight grants or be made subject to whatever "reconstitution" constraint applied to other SDR holdings. The development agencies could use these funds for long-term loans to the developing countries at a low interest rate, perhaps the regular SDR interest rate of $1\frac{1}{2}$ per cent plus a small service charge, such as the three-fourths of 1 per cent now applied to a fifty-year IDA credit. The SDRs would not join the world's stock of reserves until they were transferred from the development agencies to the exporting country supplying equipment and services for a development project. The development agencies would have accounts in the IMF Special Drawing Account, to which the SDRs would be credited at the time of each general allocation. When goods or services for a development project were purchased from exporters in a particular country, the IMF would transfer the SDRs required for payment from the account of a development agency to the exporting country's account in the IMF Special Drawing Account. The country would then pay its exporters in its domestic currency. Advantages of this plan are many. First, it is relatively simple and easy to understand by all concerned. Second, it can be implemented with minimal amendment of the IMF Articles. The development agencies would be treated as "other holders" within the meaning of Article XXIII, Section 3, of the IMF Articles of Agreement, and unlike the "participants" of Article XXIII, Section 1, would not be obliged to accept from other participants SDRs up to three times their net cumulative allocations. Finally, no budgetary and parliamentary approval would be required each time to accomplish a transfer of real resources from developed countries to the developing countries.

3. *Contribution of SDRs by developed countries to development agencies.* Under this approach, member countries might be divided into two categories: developed and less-developed countries. On the occasion of each general SDR allocation, the less-developed countries would be allocated their full quotas of SDRs according to the present distribution formula, but the developed countries would be asked to contribute a fixed proportion, such as 25 or 30 per cent of each allocation, to development agencies. All the other provisions would be the same as in (2). In addition to the advantages mentioned in (2), this approach is also more beneficial to the developing countries. SDR contributions to development agencies would now be made only by developed countries from their own shares, not from the total issue of SDRs. Since the developing countries already feel that their shares in the total SDR allocation are too small, they will be more sympathetic to this type of link.

4. *Transfer to development agencies of reserve currencies received by the IMF in exchange for a special issue of SDRs.* There has been some discussion of the possibility of replacing national reserve currencies such as U.S. dollars and sterling by international reserve assets through a special issue of SDRs. In that event, the IMF might lend the national currencies to development agencies or transfer to the agencies some of the interest paid to the IMF by the issuers of the reserve currencies. This type of link could be additional to other proposals and could be instituted separately, when and if the consolidation of currency reserves was undertaken, without affecting the other proposals under discussion in this paper.

Arguments for and against the Link

Broadly speaking, arguments over the link may be grouped into two types—those based on economic and theoretical grounds and those based on procedural and political grounds. The former deals with the question of neutrality in the international distribution of wealth, and how the social savings from the SDR creation should be distributed among the participating countries. The latter is concerned with such questions as the effect of a link on the operation of the SDR system itself, the “additionality” of aid flows, and the appropriateness of parliamentary controls on development aid.

Economic and Theoretical Issues

Originally, the Group of Ten based its argument against the link on the desirability of neutrality: Deliberate reserve creation is not intended to effect permanent transfers of real resources between countries (Group

of Ten, 1965, par. 40). Since a link would enable developing countries to purchase real resources from developed countries, it would violate the original intention of deliberate costless reserve creation. It would impose two types of cost upon developed countries—the direct national cost of the real resources transferred to developing countries and the indirect global cost of the inflation resulting from the financing of extra spending by the LDCs without an increase in world productivity. The fundamental point, in this view, is that the international reserves required for the world economy *can* be created not only at no real resource cost but also without the need for transfers of real resources from one country to another (Johnson, 1972). This proposition is based on the following rationale: Since reserves allow countries to reduce the speed with which they have to accomplish adjustment through exchange-rate realignments, income changes, or direct controls, a unit increase in a country's reserve holdings yields a potential real saving, called the marginal liquidity yield of reserves. A country attempting to maximize national wealth will seek an average level of reserve holdings at which the marginal productivity of the real resources that could be obtained by spending reserves is just equal to the real interest rate plus the marginal liquidity yield of reserves (Grubel, 1972, p. 1010). Therefore, as long as the IMF supplied through the SDR facility only the exact amount of additional reserves necessary to allow each country to satisfy this condition, on the average and in the long run, countries would hold onto the SDRs allocated to them and not use them to acquire permanently any real resources from other countries. The distribution of SDRs would not lead to any permanent redistribution of wealth among countries, and each country would benefit simply from the convenience of holding SDRs, according to its own need for additional reserves.

This idealized account of SDR distribution invites analogy with a group of thirsty hikers who finally find a large spring and satisfy their thirst by drinking its cool water. The more thirsty or bigger hikers will require more water to drink than the less thirsty or smaller hikers, but every hiker's thirst will be satisfied without taking away any water from other hikers. The spring is large enough to satisfy fully each and every hiker. While it is legitimate, of course, to ask whether IMF quotas accurately reflect member countries' thirst—their equilibrium demands for additional reserves—it makes no sense to call the distribution formula of SDRs "unjust" simply because rich countries receive more SDRs than poor ones. In the view of many experts (Grubel, 1971), IMF quotas are appropriate, if crude, proxies for countries' long-run average demands for reserves. Furthermore, the rich countries collectively have

not only retained reserves over the years but have added to their holdings (Haberler, 1971, p. 15).

The basic objective should therefore be to create SDRs for member countries to "hold" rather than to "spend" (Bergsten, 1973). The SDR system allows the IMF to increase world reserves sufficiently to inspire security on the part of national monetary authorities—to deter them from adopting widespread controls over international transactions in an effort to build up their reserves by aggressively running balance-of-payments surpluses. As a practical matter, however, it would be extremely difficult to achieve full neutrality in the actual distribution of SDRs. Even if the IMF could create the optimum number of SDRs each year, the formula for distribution of SDRs might still violate their neutrality. One of the main arguments raised by supporters of the link is that IMF quotas are not only inappropriate as a basis for distributing SDRs but also biased in favor of rich industrial countries at the expense of developing countries. They claim that a link should be adopted in order to redress this bias. In their view, therefore, the link would not be a revolutionary step forward, but only a conservative step necessary to correct a reactionary step backward.

IMF quotas were not developed to serve as the basis for distributing internationally created reserve assets such as SDRs. They were originally designed to fulfill three functions: They assigned voting power in the IMF, determined each member's contribution to the Fund's resources, and regulated maximum drawings from the Fund in case of balance-of-payments need. The determination of IMF quotas was therefore influenced by the degree of convertibility of the nations' currencies, since these provided the IMF with "drawable" resources. Furthermore, the quotas constituted an implicit limit on the number of dollars, the "scarce" currency of 1945, that the United States could be forced to provide. Two of the principal components of the quota formula that reconciled these various objectives were pre-war national incomes and mid-war stocks of gold and currency reserves. The original formula stipulated that a country's quota would be equal to 2 per cent of national income in 1940 plus 5 per cent of gold and U.S. dollar holdings in mid-1943 plus 10 per cent of average imports in 1934-38 plus 10 per cent of the maximum year-to-year change in exports for 1934-38, this sum to be increased by the average percentage of exports in national income for 1934-38 (see Altman, 1956; Horsefield, 1970). This formula gave large IMF quotas to industrially advanced countries.

Hawkins and Rangarajan (1970) observe that there are two principal reasons why IMF quotas are an inappropriate basis for the allocation of

SDRs. First, as explained above, the original purpose of quotas was not to allocate "owned" reserves but to determine and finance drawing rights, and was thus biased toward countries with relatively large reserves and convertible currencies. Second, the original formula employed relative economic relationships prevailing before 1945. Although some adjustments in the quotas of particular countries have been made since then, these have not been extensive and resulted more from political pressures than from systematic analysis of changes in the ingredients of the formula. Hawkins and Rangarajan regard SDRs as part of a nation's wealth, representing a command over the real and financial resources of other countries, and also as a means of financing balance-of-payments deficits. Taking this view of SDRs, they have conducted a quantitative study into the appropriateness of IMF quotas as the basis for SDR allocations, taking into account relative costs of coping with balance-of-payments problems. Their study shows that the distribution of reserves according to quotas tends to favor rich industrial countries at the expense of low-income developing countries, which are generally primary producers with high costs of adjustment. They conclude that a new allocation formula should be devised for SDR distribution to redress the injustice to developing countries. It may be argued, however, that this is not necessarily an argument for a link but simply points up the need for a better formula for distributing SDRs.

Granting that an ideal distribution formula could be devised to achieve a strict neutrality in the distribution of world wealth, some may still question whether such a strict neutrality is really "desirable" for the world community. If neutrality is achieved, the social savings or "seigniorage" from the creation of SDRs are distributed among countries in proportion to their demand for additional reserves (Grubel, 1972). The SDR facility has indeed yielded two major benefits for the world community. First, it has assured in principle an orderly and adequate growth in international liquidity. Second, it has produced social savings through the substitution of SDRs, with costs of production and administration near zero, for gold, which requires real resources to be mined, refined, transported, and guarded. But the pursuit of neutrality is not costless in terms of other aims. Since the creation of SDRs is not an end in itself but one means among others to establish a better framework for international economic cooperation and to promote higher living standards, the social savings derived from internationally agreed SDR creation should be used for internationally agreed objectives. The link, they say, can accomplish one of the most respectable and agreed objectives (Triffin, 1971).

Supporters of the link are divided on the amount of social savings being realized currently from SDR creation. This question is related to whether the SDR is a credit or an asset. To the extent that SDRs must be "reconstituted" (or paid back at a fixed time), they may be considered a credit. But they need not be reconstituted totally and, to this extent, they should be regarded as an asset. Under the present SDR system, only 30 per cent of SDR allocations must be reconstituted; hence 70 per cent of SDR allocations should be considered an asset and the allocations themselves tantamount to grants. Some may still argue that SDRs are credits because interest is charged the country using them, even if the country has received the SDRs "free" from the IMF. On this view, SDRs may be considered similar to "consols." Even so, the "grant" element in the SDR allocations is substantial. As Polak (1971, pp. 12-13) points out, the interest rate on SDRs is below the market interest rate, imparting a grant element to the SDR allocation. This grant element may be calculated as $G = 100 (1 - i/r)$, where G is the grant content of the SDR (in %), i is the interest rate on SDRs (1.5%), and r is the market-related reference interest rate. If we use as r the World Bank's 1972 average borrowing cost of 7.38 per cent, about 80 per cent of the SDR allocation should be considered a grant.

Many supporters of the link go further, contending that SDRs are "owned" reserves, not credit facilities like traditional IMF drawing rights. Although the term "Special Drawing Rights" implies a kind of credit, SDRs have in fact been treated and used as front-line reserve assets by the IMF and its member countries. [Gold (1971, pp. 13-19) gives us a fascinating account of the background for adopting the term "Special Drawing Rights."] In any case, the lower-than-market interest rate on SDRs implies a substantial grant element and therefore strengthens the argument for the link. It weakens the argument against the link because it impairs the presumed neutrality of SDR allocations. Johnson (1972) admits that international transfers of real resources *can* occur to the extent that the rate of interest on SDRs is below the rate of return on alternative investments of capital. Some countries will run their SDR holdings down to invest in higher-yielding capital, while others will run their holdings up and in effect be lending to the others at interest rates below the rates of return they could otherwise get.

Procedural and Political Grounds

The arguments based on procedural and political grounds are equally controversial. Opponents of the link are not opposed to development aid per se. Their point, put simply, is that liquidity creation and develop-

ment aid are two different and separate objectives and should not be mixed together. They discern definite disadvantages in the attempt to combine the objectives of long-term development finance with the needs of the international monetary system. From the viewpoint of international monetary management, flexibility is required in respect of decisions to create SDRs. From the viewpoint of development, on the other hand, planning by both donors and recipients requires firm commitments over a long period, and this could be achieved only by introducing an inflexibility into the SDR facility, impairing the monetary quality of SDRs. The force of this objection is somewhat reduced, however, by the fact that the timing of the disbursement of aid will not necessarily coincide with that of the SDR creation (Fleming, 1971, p. 38). Owing to technical and institutional difficulties in carrying out a development project in the LDCs, many years usually pass from the time a loan is committed until it is actually disbursed. This long lead time will allow a development agency to adjust the volume of its overall loan commitments to the fluctuating amount of link proceeds.

Some may fear that a link would cause more SDRs to be issued than necessary for the purposes of international liquidity. It would be difficult to resist demands for the creation of more SDRs. On the one hand, developing countries would demand more SDR creation to get more development aid. On the other, within the developed countries there would be pressure for more SDR creation from constituencies preferring to give aid in this form than through additional taxes. But the danger of pressure for reserve creation in excess of world liquidity requirements appears overplayed. The present IMF voting rules require an 85 per cent majority of the total voting power for a new allocation of SDRs; only 15 per cent of the total votes is needed to quell any such pressures. Indeed, some supporters of the link argue that the real danger is excessive conservatism rather than liberality in the creation of SDRs (U.S. Subcommittee, 1969a, p. 38). Supporters also emphasize that the amount of new SDR creation should be determined *only* by the monetary requirements of the world economy and not by the need for development finance (UNCTAD, 1965, pp. 30-31; U.S. Subcommittee, 1969a, p. 3; and Howe, 1972, pp. 108-109).

Opponents of the link sometimes argue that the "additionality" of aid through the link would be negligible, because developed countries would reduce their regular aid contributions by about the same amount that they would contribute through the link. There is some reason to hope, however, that offsetting reductions in national aid under an organic link would fall significantly short of the amount of financial assistance

provided through the link. First, governments have reasons for providing aid to specific recipients or for specific purposes, over and above the general desire to provide development assistance, and these reasons would continue to operate. Second, the provision of additional aid through the link might be attractive to governments and parliaments, in that participation in such a scheme would tend to encourage the participation of other countries as well and thus exercise a multiplier effect. Third, it would be difficult to measure the extent to which any country was providing aid through the link, hence difficult to offset precisely. On balance, therefore, the link is likely to increase the total amount of development aid accruing to the poorer countries; the rich countries will find it easier to give aid through the link than through the process of budgetary and parliamentary appropriations alone.

Opponents of the link believe that bypassing legislative authority over foreign aid would border on constitutional impropriety and subvert the ideals of democratic government. The aid a country is supposed to provide or wishes to give *should* be voted by its parliament and appropriated through the regular budgetary process. Furthermore, when foreign aid goes through the budgetary process, no extraneous inflationary elements are introduced (Haberler, 1971). Distribution of the burden of development aid among donor countries would also be changed by the link. Under traditional aid programs through national budgets, an attempt is made to approach a roughly equal distribution of the burden by striving for a uniform ratio of aid to gross national product for all industrial countries. The link might upset this equitable distribution of aid burdens by tying amounts of aid to IMF quotas. Some supporters of the link suggest, however, that it is not really desirable to have strong parliamentary controls over development aid. They claim that the link would raise the quality of development aid by getting rid of political controls over aid, because the resources would be channeled through multilateral aid agencies such as the World Bank and the IDA, rather than through national bilateral agencies. This argument is based on two assumptions: (1) that the link would be implemented via international development agencies rather than directly by an increase in the SDR allocations of developing countries, and (2) that transfers of development aid via multilateral aid agencies would be better in quality than transfers through national bilateral agencies.

Finally, there have been other strong objections to the link on procedural grounds. It took almost a decade to reach an agreement on the SDR facility. The agreement was the result of long, difficult international negotiation and of some painful compromises among the countries concerned. Therefore, most parties involved in the creation of the SDR

system are anxious, first of all, to see it accepted and established solidly in the international monetary system. In such circumstances, one of the strongest, and perhaps most effective, arguments against the link is that any attempt to burden the SDR system with a link would gravely weaken the SDR system itself, before it has been given a reasonable chance to survive and to grow strong. This "infant system" argument has been a powerful and convincing one, especially at the early stage of the SDR facility. It is why the Rio Agreements received support from most member countries, despite great reservations by many developing countries about what they considered unjust and discriminatory arrangements for SDR allocations. The infant-system argument is related to the concept of "confidence" in the SDR facility. Confidence in the SDR is a complex concept comprising such elements as willingness to become a participant in the system, willingness to support new allocations, and willingness to accept and hold SDRs. If participation in the SDR system involved, in addition, certain obligations with respect to development assistance, participation might become less attractive to certain member countries. To that extent, the SDR system itself must be weakened by the link.

Conclusion

The SDR facility has been in operation for several years. During its preparatory stage, the problem of *distribution* of SDRs did not receive much attention; the concern with *creation* of satisfactory reserves dominated international monetary discussions. Officials involved in the negotiations were concerned more with the successful establishment of the SDR facility than with equitable distribution of the SDRs. During the past several years, however, we have seen mounting criticism of the distribution formula. This was not unexpected. As early as 1969, the Subcommittee on International Exchange and Payments of the Joint Economic Committee warned that the present "inequity" in SDR distribution might not be politically viable. "While logical arguments can be advanced to support distribution of SDRs strictly according to IMF quotas, this arrangement appears discriminatory. Once the facility is in operation, its discriminatory aspect will be more obvious, and may become a source of intensified antagonisms on the part of developing nations toward wealthy members of the IMF" (U.S. Subcommittee, 1969b, p. 10).

This warning has been vindicated by subsequent events. In international forums dealing with monetary and development problems, such as UNCTAD symposiums or IMF/IBRD annual meetings, poor countries have repeatedly expressed their complaints on the subject. At the

1970 session of the UNCTAD Committee on Invisibles and Financing Related to Trade, for example, the developing countries issued a joint memorandum strongly arguing for the link (UNCTAD, 1970). At the 1970 and 1971 joint annual meetings of the IMF and the World Bank Group, a number of Governors from developing countries demanded the link. (At the 1971 joint annual meetings of the IMF and the World Bank Group, for example, representatives of at least twenty-three developing countries spoke of the urgent need for the link.) The link proposal was also one of the principal demands by the underdeveloped countries during the UNCTAD III, held in Santiago, Chile, in April 1972. The leading voice for the link has been the Group of 24, an intergovernmental group composed of eight countries each from Africa, Asia, and Latin America, representing ninety-six less-developed countries. It has repeatedly argued that the link should be regarded as an essential part of the new international monetary system.

Support has also been given by various groups in developed countries. The link received endorsement in principle from Italy at the 1968 and 1969 joint annual meetings of the IMF and the World Bank Group. It has also acquired important support in the United Kingdom; the House of Commons Select Committee on Overseas Aid recommended the link during its 1970-1971 Session (House of Commons, 1971). Furthermore, the British representative to the 1970 session of the UNCTAD Committee on Invisibles stated that his Government supported the link in principle, provided that a practicable scheme acceptable to the major countries concerned could be worked out. In March 1972, the British Labor Party supported the link in a statement released before the UNCTAD III meeting; its proposals were drawn up by the Overseas Development Study Group and endorsed by the Party's National Executive Council. France, Japan, West Germany, and the United Kingdom also told the UNCTAD III meeting of their support for the link.

In the United States, a link was formally recommended by the Subcommittee on International Exchange and Payments of the Congressional Joint Economic Committee (U.S. Subcommittee, 1969b), and two years later the proposal was endorsed by the Joint Economic Committee itself (U.S. Joint Committee, 1971, pp. 14-15). In early 1972, Senator Jacob Javits and Representative Henry Reuss introduced a joint resolution in the U.S. Congress urging the U.S. government to support the link. Around the same time, John Hannah, Director of the Agency for International Development, predicted that the Nixon administration would eventually support the link, and his optimism was echoed by a White House economic adviser, Robert Hormats, who said "some-

thing could be worked out" to provide more SDRs to the poor, if "the experts put their minds to it." A number of research reports and newspapers have also supported the link as a part of the new international monetary system.

In our survey of the various link proposals and the arguments for and against the link, we have seen that some of the economic and theoretical arguments over the link are controversial. While the objections based on practical and procedural difficulties are more convincing, the "infant system" argument may not be as strong as it used to be. There are many signs that the SDR facility has been established solidly in the world monetary system. [At the 1970 annual meeting of the IMF, the Managing Director, Mr. Schweitzer, observed: "In my judgment, the experience up to now with the operation of the Special Drawing Rights facility has been highly successful, and it can be stated that the SDR has become established as a reserve asset" (IMF, 1970, p. 17).] There is still a valid procedural difficulty to the extent that a link might obstruct flexibility and efficiency in the operation of the international monetary system, but this must be measured against the strong case for the link. That case can be made apart from political, even ethical, considerations. Triffin, Tinbergen, and Hawkins and Rangarajan have shown that the present formula for allocating SDRs is not suitable and also discriminates against many developing countries. Thus, the link is seen not only as a political and practical convenience to increase development-aid flows to poor countries, but also as an essential step toward equity in the international monetary system.

Among the various link proposals, the proposal to have industrial countries contribute SDRs to development agencies may be the best option in present circumstances. While implementation of the link through an increase in SDR allocations to the LDCs is also appealing (especially because this type of link can be achieved within the IMF system, without involving outside intermediaries), this method has a major drawback—the difficulty of devising a separate formula to distribute the link-related SDRs among the LDCs. A proportional increase of their present SDR allocations would not be equitable, because IMF quotas do not reflect the relative needs of LDCs for development assistance. The proposal to involve development agencies, on the other hand, is easy to understand and relatively simple to implement. Only the rich countries would be asked to contribute some of each SDR allocation, and they would find it easy to do so because no additional tax or parliamentary approval would be needed. Howe (1972) believes that transfers of SDRs through international development agencies would give the

poor countries an incentive for good performance, because they would have to meet the criteria of these agencies for sound projects.

Three specific questions must be answered, however, before this type of link can be established: Which countries should contribute SDRs? What fraction of their SDRs should they contribute? To which development agencies should they make the contributions? There are eighteen Part I member countries in the IDA, all of them rich enough to be included in the group of contributors. Some other countries might have comfortable reserve positions at the time of a particular SDR allocation and thus could be included in the contributing group on a voluntary basis. Conceivably, the number of contributing countries in this latter category would fluctuate from time to time, as reserve positions shift.

As for the size of contributions out of SDR allocations, 25 per cent was suggested by the Subcommittee on International Exchange and Payments, but 30 per cent may be the better figure, on the basis of the following calculations. Invoking the simple principle of per capita equality, we might use population as the basis for distributing the 80 per cent portion of the SDR allocation that should be considered a "grant." On this basis, the eighteen developed countries would have received only 36 per cent of the total SDR allocation, rather than the 69 per cent they actually received according to their IMF quotas. The combined population of the eighteen countries is 631 million, or 27 per cent of the total population of 2.3 billion of all countries participating in the SDR system. Thus, the eighteen members' total share of the nongrant SDR allocation and the population-based SDR allocation would be $69\% \times (100 - 80)\% + 27\% \times 80\% = 36\%$. Supporters of the link may therefore argue that 33 per cent of the total SDR allocation (or 48 per cent of the developed countries' present share) was "unjustly" given to rich countries and should be returned to the LDCs. Accordingly, 30 per cent may be better than 25 per cent as a generous gesture by the industrial countries. As for the countries contributing on a voluntary basis, they should be encouraged to donate anywhere from 5 up to 30 per cent of their SDR allocations. The lower limit of 5 per cent would be necessary in order to screen out donors whose only aim is to see their names on the list of contributors.

Finally, which development agencies should administer these contributions? Since the SDRs would be "given away" rather than "lent" to development agencies by contributing countries, the funds could best be utilized for soft loans rather than for more conventional loans. As shown in the accompanying table, four international development banks are engaged in extending substantial amounts of soft loans to the LDCs.

	<i>IBRD/IDA</i>	<i>Asian Develop- ment Bank</i>	<i>Caribbean Develop- ment Bank</i>	<i>Inter- American Develop- ment Bank</i>
Commitments: 1966-71 (millions of U.S. \$)	2,342	107	2	2,185
Terms (approximate):				
Interest rate	0.75%	2.5-3%	4%	3-4%
Maturity (years)	50	15-30	—	15-30
Grace period (years)	10	3-10	—	3-14

Therefore, the first option would be to divide the SDRs contributed through the link among these four development banks plus the African Development Bank, which recently set up its own Special Fund for soft loans. Some might object to this idea, however, because it would be extremely complicated to devise an allocation formula for the five development banks. Conflicts could also arise concerning the regional allocation of link proceeds by the IDA itself, since some regions would be doubly covered by regional development banks. The second option, therefore, would be to designate the IDA as the sole administrator of link proceeds and let it manage them just as it manages its other lending resources. The experience and organization of the World Bank Group, as well as its close connection with the IMF, both geographically and operationally, might make the IDA ideal for handling link proceeds.

In any case, one should not be dogmatic about the operational details of the link at this stage. *How* to implement the link is subsidiary to the more important question of *whether* or not to accept the link. Currently, the Committee of Twenty is deliberating on a wide-ranging reform of the international monetary system. It is high time, therefore, to have a full discussion of the link.

References

- Altman, Oscar L., "Quotas in the International Monetary Fund," *IMF Staff Papers*, 5 (August 1956), pp. 129-150.
- Bergsten, C. Fred, "Comments," *Foreign Policy* (Spring 1973), pp. 185-187.
- Colombo, Emilio, "Statement by the Governor of the Fund for Italy," *Summary Proceedings of Annual Meeting*, Washington, International Monetary Fund, 1968 and 1969.
- Fleming, J. Marcus, "The SDR: Some Problems and Possibilities," *IMF Staff Papers*, 18 (March 1971), pp. 25-45.
- Gold, Joseph, *Special Drawing Rights: The Role of Language*, IMF Pamphlet Series No. 15, Washington, 1971.
- Group of Countries Participating in the General Arrangements to Borrow [Group of Ten], *Report of the Study Group on the Creation of Reserve Assets* [The Ossola Report], Rome, Bank of Italy Press, 1965.
- , *Communiqué of the Interministerial Meeting of the Group of Ten of July 25 and 26*, The Hague, 1966.
- Grubel, Herbert, "The Demand for International Reserves: A Critical Review of the Literature," *Journal of Economic Literature*, 9 (December 1971), pp. 1148-1166.
- , "Basic Methods for Distributing Special Drawing Rights and the Problem of International Aid," *Journal of Finance*, 27 (December 1972), pp. 1009-1022.
- Haan, Roelf L., *Special Drawing Rights and Development*, Leiden, The Netherlands, Stenfert Kroese, 1971.
- Haberler, Gottfried, "The Case against the Link," *Banca Nazionale del Lavoro Quarterly Review*, 24 (March 1971), pp. 13-22.
- Hawkins, Robert G., and C. Rangarajan, "On the Distribution of New International Reserves," *Journal of Finance*, 25 (September 1970), pp. 881-891.
- Horsefield, J. Keith, "Fund Quotas—What Does It Really Mean?" *Finance and Development*, 7 (September 1970), pp. 7-12.
- House of Commons, *Report from the Select Committee on Overseas Aid*, Session 1970-71, House of Commons Paper 299, London, Her Majesty's Stationery Office, Par. 180-181.
- Howe, James, "SDRs and Development: Let's Spread Them Around," *Foreign Policy* (Fall 1972), pp. 102-113.
- Inter-American Committee on the Alliance for Progress, *International Monetary Reform and Latin America*, Washington, Pan American Union, 1966.
- International Clearing Union*, Text of a Paper Containing Proposals by British Experts for an International Clearing Union, London, 1943, pp. 19-21.
- International Monetary Fund, *Summary Proceedings of Annual Meeting*, Washington, 1970.

- , *Reform of the International Monetary System*, A Report by the Executive Directors to the Board of Governors, Washington, 1972.
- International Study Group of 32 Economists, *International Monetary Arrangements: The Problem of Choice*, Princeton, N.J., International Finance Section, 1964.
- Johnson, Harry, "The Link That Chains," *Foreign Policy* (Fall 1972), pp. 113-120.
- Machlup, Fritz, "The Cloakroom Rule of International Reserves: Reserve Creation and Resources Transfer," *Quarterly Journal of Economics*, 79 (August 1965), pp. 337-355.
- , *Remaking the International Monetary System: The Rio Agreement and Beyond*, Baltimore, The Johns Hopkins Press, 1968.
- Netherlands' National Committee for Development Strategy, *UNCTAD III Symposium Report*, The Hague, 1972, pp. 32-33.
- Patel, I. G., "The Link between the Creation of International Liquidity and the Provision of Development Finance," *Report of the Committee on Invisibles and Financing Related to Trade: Further Consideration of the Report of the Expert Group on International Monetary Issues*, Geneva, UNCTAD, 1967.
- Polak, J. J., *Some Reflections on the Nature of Special Drawing Rights*, IMF Pamphlet Series No. 16, Washington, 1971.
- Reuss, Henry S., and Robert F. Ellsworth, *Off Dead Center: Some Proposals to Strengthen Free World Economic Cooperation*, Joint Economic Committee of U.S. Congress, 1965.
- Scitovsky, Tibor, *Requirements of an International Reserve System*, Essays in International Finance No. 49, Princeton, N.J., 1965.
- , "A New Approach to International Liquidity," *American Economic Review*, 56 (December 1966), pp. 1212-1220.
- Stamp, Maxwell, "The Fund and the Future," *Lloyd's Bank Review* (October 1958), pp. 1-20.
- , "Changes in the World's Payments System," *Moorgate and Wall Street* (Spring 1961), pp. 3-22.
- , "The Stamp Plan—1962 Version," *Moorgate and Wall Street* (Autumn 1962), pp. 5-17.
- Triffin, Robert, "Tomorrow's Convertibility: Aims and Means of International Monetary Policy," *Banca Nazionale del Lavoro Quarterly Review*, 12 (June 1959), pp. 131-200.
- , "The Use of SDR Finance for Collectively Agreed Purpose," *Banca Nazionale del Lavoro Quarterly Review*, 24 (March 1971), pp. 3-12.
- United Nations Conference on Trade and Development (UNCTAD), *International Monetary Issues and the Developing Countries*, Report of the Group of Experts, New York, 1965.
- , *Report of the Committee on Invisibles and Financing Related to Trade on Its Fourth Session*, Geneva, 1970, Annex III.

- U.S. Congress Joint Economic Committee, *1971 Joint Economic Report*, Washington, 1971.
- U.S. Congress Subcommittee on International Exchange and Payments of the Joint Economic Committee, *International Payments Imbalances and Need for Strengthening International Financial Arrangements*, Hearings and Report, Washington, 1961.
- , *Guidelines for Improving the International Monetary System*, Report, Washington, 1965.
- , *Guidelines for Improving the International Monetary System—Round Two*, Report, Washington, 1967.
- , *Linking Reserve Creation and Development Assistance*, Hearing, Washington, 1969a.
- , *A Proposal to Link Reserve Creation and Development Assistance*, Washington, 1969b.

PUBLICATIONS OF THE INTERNATIONAL FINANCE SECTION

Notice to Contributors

The International Finance Section publishes at irregular intervals papers in four series: **ESSAYS IN INTERNATIONAL FINANCE**, **PRINCETON STUDIES IN INTERNATIONAL FINANCE**, **SPECIAL PAPERS IN INTERNATIONAL ECONOMICS**, and **REPRINTS IN INTERNATIONAL FINANCE**. **ESSAYS** and **STUDIES** are confined to subjects in international finance. **SPECIAL PAPERS** are confined to surveys of the literature suitable for courses in colleges and universities. An **ESSAY** should be a lucid exposition of a theme, accessible not only to the professional economist but to other interested readers. It should therefore avoid technical terms, should eschew mathematics and statistical tables (except when essential for an understanding of the text), and should rarely have footnotes. Most important, it should have a certain grace of style and rhythm in its language.

This does not mean that a **STUDY** or **SPECIAL PAPER** may be awkward and clumsy, but it may be more technical. It may include statistics and algebra, and may have many footnotes. **STUDIES** and **SPECIAL PAPERS** may also be longer than **ESSAYS**; indeed, these two series are meant to accommodate manuscripts too long for journal articles and too short for books.

To facilitate prompt evaluation, please submit three copies of your manuscript. Retain one copy for your files. The manuscript should be typed on one side of 8½ by 11 strong white paper. All material should be double-spaced—text, excerpts, footnotes, tables, references, and figure legends. More complete guidance appears in the Section's style guide; prospective contributors are urged to send for it before preparing their manuscripts.

How to Obtain Publications

A mailing list is maintained for free distribution of all publications as they are issued to college, university, and public libraries and nongovernmental, nonprofit research institutions.

Individuals and organizations—including governmental organizations that do not qualify for free distribution—can obtain **ESSAYS** and **REPRINTS** as issued and announcements of new **STUDIES** and **SPECIAL PAPERS** by paying an annual fee of \$5 to cover the period July 1 through June 30. Alternatively, for an annual contribution of at least \$25 to the publication program of the International Finance Section they can receive all publications automatically—**SPECIAL PAPERS** and **STUDIES** as well as **ESSAYS** and **REPRINTS**.

ESSAYS and **REPRINTS** ordered from the Section are \$1 per copy, and **STUDIES** and **SPECIAL PAPERS** are \$1.50. (These charges are waived on orders from persons or organizations in countries whose foreign-exchange regulations prohibit such remittances.)

All manuscripts, correspondence, and orders should be addressed to:

International Finance Section
P. O. Box 644
Princeton, New Jersey 08540

(Customers in England, Scotland, and Ireland may find it more convenient to order Section publications from the Economists' Bookshop, Portugal Street, London, W.C. 2. This bookseller will usually have Section publications in stock.)

List of Publications

The following is a list of the publications of the International Finance Section. The issues of the four series marked by asterisks, and Essays Nos. 1 through 60, are no longer available from the Section.¹ They may be obtained in Xerographic reproductions (that is, looking like the originals) from University Microfilm, Inc., 300 N. Zeeb Road, Ann Arbor, Michigan 48106. (Most of the issues are priced at \$6.00.)

ESSAYS IN INTERNATIONAL FINANCE

- No. 61. Charles P. Kindleberger, *The Politics of International Money and World Language*. (Aug. 1967)
62. Delbert A. Snider, *Optimum Adjustment Processes and Currency Areas*. (Oct. 1967)
- * 63. Eugene A. Birnbaum, *Changing the United States Commitment to Gold*. (Nov. 1967)
- * 64. Alexander K. Swoboda, *The Euro-Dollar Market: An Interpretation*. (Feb. 1968)
- * 65. Fred H. Klopstock, *The Euro-Dollar Market: Some Unresolved Issues*. (March 1968)
66. Eugene A. Birnbaum, *Gold and the International Monetary System: An Orderly Reform*. (April 1968)
67. J. Marcus Fleming, *Guidelines for Balance-of-Payments Adjustment under the Par-Value System*. (May 1968)
68. George N. Halm, *International Financial Intermediation: Deficits Benign and Malignant*. (June 1968)
- * 69. Albert O. Hirschman and Richard M. Bird, *Foreign Aid—A Critique and a Proposal*. (July 1968)
- * 70. Milton Gilbert, *The Gold-Dollar System: Conditions of Equilibrium and the Price of Gold*. (Nov. 1968)
71. Henry G. Aubrey, *Behind the Veil of International Money*. (Jan. 1969)
72. Anthony Lanyi, *The Case for Floating Exchange Rates Reconsidered*. (Feb. 1969)
- * 73. George N. Halm, *Toward Limited Exchange-Rate Flexibility*. (March 1969)
74. Ronald I. McKinnon, *Private and Official International Money: The Case for the Dollar*. (April 1969)
75. Jack L. Davies, *Gold: A Forward Strategy*. (May 1969)
- * 76. Albert O. Hirschman, *How to Divest in Latin America, and Why*. (Nov. 1969)
77. Benjamin J. Cohen, *The Reform of Sterling*. (Dec. 1969)
- * 78. Thomas D. Willett, Samuel I. Katz, and William H. Branson, *Exchange-Rate Systems, Interest Rates, and Capital Flows*. (Jan. 1970)
- * 79. Helmut W. Mayer, *Some Theoretical Problems Relating to the Euro-Dollar Market*. (Feb. 1970)
- * 80. Stephen Marris, *The Bürgenstock Communiqué: A Critical Examination of the Case for Limited Flexibility of Exchange Rates*. (May 1970)
- * 81. A. F. Wynne Plumtre, *Exchange-Rate Policy: Experience with Canada's Floating Rate*. (June 1970)
82. Norman S. Fieleke, *The Welfare Effects of Controls over Capital Exports from the United States*. (Jan. 1971)
- * 83. George N. Halm, *The International Monetary Fund and Flexibility of Exchange Rates*. (March 1971)
- * 84. Ronald I. McKinnon, *Monetary Theory and Controlled Flexibility in the Foreign Exchanges*. (April 1971)
85. Robert A. Mundell, *The Dollar and the Policy Mix: 1971*. (May 1971)

¹ A list of the titles of Essays Nos. 1 through 60 is available from the Section, or consult the complete publications list in earlier essays.

- * 86. Richard N. Cooper, *Currency Devaluation in Developing Countries*. (June 1971)
- * 87. Rinaldo Ossola, *Towards New Monetary Relationships*. (July 1971)
- 88. Giovanni Magnifico, *European Monetary Unification for Balanced Growth: A New Approach*. (Aug. 1971)
- * 89. Franco Modigliani and Hossein Askari, *The Reform of the International Payments System*. (Sept. 1971)
- 90. John Williamson, *The Choice of a Pivot for Parities*. (Nov. 1971)
- 91. Fritz Machlup, *The Book Value of Monetary Gold* (Dec. 1971)
- 92. Samuel I. Katz, *The Case for the Par-Value System, 1972*. (March 1972)
- 93. W. M. Corden, *Monetary Integration*. (April 1972)
- 94. Alexandre Kafka, *The IMF: The Second Coming?* (July 1972)
- 95. Tom de Vries, *An Agenda for Monetary Reform*. (September 1972)
- 96. Michael V. Posner, *The World Monetary System: A Minimal Reform Program*. (October 1972)
- 97. Robert M. Dunn, Jr., *Exchange-Rate Rigidity, Investment Distortions, and the Failure of Bretton Woods*. (Feb. 1973)
- 98. James C. Ingram, *The Case for European Monetary Integration*. (April 1973)
- 99. Fred Hirsch, *An SDR Standard: Impetus, Elements, and Impediments*. (June 1973)
- 100. Y. S. Park, *The Link between Special Drawing Rights and Development Finance*. (September 1973)

PRINCETON STUDIES IN INTERNATIONAL FINANCE

- *No. 1. Friedrich A. and Vera C. Lutz, *Monetary and Foreign Exchange Policy in Italy*. (Jan. 1950)
- * 2. Eugene R. Schlesinger, *Multiple Exchange Rates and Economic Development*. (May 1952)
- * 3. Arthur I. Bloomfield, *Speculative and Flight Movement of Capital in Postwar International Finance*. (Feb. 1954)
- * 4. Merlyn N. Trued and Raymond F. Mikesell, *Postwar Bilateral Payments Agreements*. (April 1955)
- * 5. Derek Curtis Bok, *The First Three Years of the Schuman Plan*. (Dec. 1955)
- * 6. James E. Meade, *Negotiations for Benelux: An Annotated Chronicle, 1943-1956*. (March 1957)
- * 7. H. H. Liesner, *The Import Dependence of Britain and Western Germany: A Comparative Study*. (Dec. 1957)
- * 8. Raymond F. Mikesell and Jack N. Behrman, *Financing Free World Trade with the Sino-Soviet Bloc*. (Sept. 1958)
- * 9. Marina von Neumann Whitman, *The United States Investment Guaranty Program and Private Foreign Investment*. (Dec. 1959)
- * 10. Peter B. Kenen, *Reserve-Asset Preferences of Central Banks and Stability of the Gold-Exchange Standard*. (June 1963)
- * 11. Arthur I. Bloomfield, *Short-Term Capital Movements under the Pre-1914 Gold Standard*. (July 1963)
- 12. Robert Triffin, *The Evolution of the International Monetary System: Historical Reappraisal and Future Perspectives*. (June 1964)
- 13. Robert Z. Aliber, *The Management of the Dollar in International Finance*. (June 1964)
- 14. Weir M. Brown, *The External Liquidity of an Advanced Country*. (Oct. 1964)
- * 15. E. Ray Canterbery, *Foreign Exchange, Capital Flows, and Monetary Policy*. (June 1965)
- 16. Ronald I. McKinnon and Wallace E. Oates, *The Implications of International Economic Integration for Monetary, Fiscal, and Exchange-Rate Policy*. (March 1966)

17. Egon Sohmen, *The Theory of Forward Exchange*. (Aug. 1966)
18. Benjamin J. Cohen, *Adjustment Costs and the Distribution of New Reserves*. (Oct. 1966)
19. Marina von Neumann Whitman, *International and Interregional Payments Adjustment: A Synthetic View*. (Feb. 1967)
20. Fred R. Glahe, *An Empirical Study of the Foreign-Exchange Market: Test of A Theory*. (June 1967)
21. Arthur I. Bloomfield, *Patterns of Fluctuation in International Investment before 1914*. (Dec. 1968)
22. Samuel I. Katz, *External Surpluses, Capital Flows, and Credit Policy in the European Economic Community*. (Feb. 1969)
23. Hans Aufricht, *The Fund Agreement: Living Law and Emerging Practice*. (June 1969)
24. Peter H. Lindert, *Key Currencies and Gold, 1900-1913*. (Aug. 1969)
25. Ralph C. Bryant and Patric H. Hendershott, *Financial Capital Flows in the Balance of Payments of the United States: An Exploratory Empirical Study*. (June 1970)
26. Klaus Friedrich, *A Quantitative Framework for the Euro-Dollar System*. (Oct. 1970)
27. M. June Flanders, *The Demand for International Reserves*. (April 1971)
28. Arnold Collery, *International Adjustment, Open Economies, and the Quantity Theory of Money*. (June 1971)
29. Robert W. Oliver, *Early Plans for a World Bank*. (Sept. 1971)
30. Thomas L. Hutcheson and Richard C. Porter, *The Cost of Tying Aid: A Method and Some Colombian Estimates*. (March 1972)
31. The German Council of Economic Experts, *Toward a New Basis for International Monetary Policy*. (October 1972)
32. Stanley W. Black, *International Money Markets and Flexible Exchange Rates*. (March 1973)

SPECIAL PAPERS IN INTERNATIONAL ECONOMICS

- No. 1. Gottfried Haberler, *A Survey of International Trade Theory*. (Sept. 1955; Revised edition, July 1961)
- * 2. Oskar Morgenstern, *The Validity of International Gold Movement Statistics*. (Nov. 1955)
- * 3. Fritz Machlup, *Plans for Reform of the International Monetary System*. (Aug. 1962; Revised edition, March 1964)
- * 4. Egon Sohmen, *International Monetary Problems and the Foreign Exchanges*. (April 1963)
- * 5. Walther Lederer, *The Balance on Foreign Transactions: Problems of Definition and Measurement*. (Sept. 1963)
- * 6. George N. Halm, *The "Band" Proposal: The Limits of Permissible Exchange Rate Variations*. (Jan. 1965)
- * 7. W. M. Corden, *Recent Developments in the Theory of International Trade*. (March 1965)
8. Jagdish Bhagwati, *The Theory and Practice of Commercial Policy: Departures from Unified Exchange Rates*. (Jan. 1968)
9. Marina von Neumann Whitman, *Policies for Internal and External Balance*. (Dec. 1970)

REPRINTS IN INTERNATIONAL FINANCE

- *No. 1. Fritz Machlup, *The Cloakroom Rule of International Reserves: Reserve Creation and Resources Transfer*. [Reprinted from *Quarterly Journal of Economics*, Vol. 79 (Aug. 1965)]

- * 2. Fritz Machlup, *Real Adjustment, Compensatory Corrections, and Foreign Financing of Imbalances in International Payments*. [Reprinted from Robert E. Baldwin et al., *Trade, Growth, and the Balance of Payments* (Chicago: Rand McNally and Amsterdam: North-Holland Publishing Co., 1965)]
- * 3. Fritz Machlup, *International Monetary Systems and the Free Market Economy*. [Reprinted from *International Payments Problems: A Symposium* (Washington, D.C.: American Enterprise Institute, 1966)]
- 4. Fritz Machlup, *World Monetary Debate—Bases for Agreement*. [Reprinted from *The Banker*, Vol. 116 (Sept. 1966)]
- * 5. Fritz Machlup, *The Need for Monetary Reserves*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, Vol. 77 (Sept. 1966)]
- 6. Benjamin J. Cohen, *Voluntary Foreign Investment Curbs: A Plan that Really Works*. [Reprinted from *Challenge: The Magazine of Economic Affairs* (March/April 1967)]
- 7. Fritz Machlup, *Credit Facilities or Reserve Allotments?* [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 81 (June 1967)]
- 8. Fritz Machlup, *From Dormant Liabilities to Dormant Assets*. [Reprinted from *The Banker*, Vol. 117 (Sept. 1967)]
- 9. Benjamin J. Cohen, *Reparations in the Postwar Period: A Survey*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 82 (Sept. 1967)]
- 10. Fritz Machlup, *The Price of Gold*. [Reprinted from *The Banker*, Vol. 118 (Sept. 1968)]
- 11. Fritz Machlup, *The Transfer Gap of the United States*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 86 (Sept. 1968)]
- 12. Fritz Machlup, *Speculations on Gold Speculation*. [Reprinted from *American Economic Review, Papers and Proceedings*, Vol. LVI (May 1969)]
- 13. Benjamin J. Cohen, *Sterling and the City*. [Reprinted from *The Banker*, Vol. 120 (Feb. 1970)]
- 14. Fritz Machlup, *On Terms, Concepts, Theories and Strategies in the Discussion of Greater Flexibility of Exchange Rates*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 92 (March 1970)]
- 15. Benjamin J. Cohen, *The Benefits and Costs of Sterling*. [Reprinted from *Euro-money*, Vol. I, Nos. 4 and 11 (Sept. 1969 and April 1970)]
- 16. Fritz Machlup, *Euro-Dollar Creation: A Mystery Story*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 94 (Sept. 1970)]
- 17. Stanley W. Black, *An Econometric Study of Euro-Dollar Borrowing by New York Banks and the Rate of Interest on Euro-Dollars*. [Reprinted from *The Journal of Finance*, Vol. XXVI (March 1971)]

SEPARATE PUBLICATIONS

- * (1) Klaus Knorr and Gardner Patterson, eds., *A Critique of the Randall Commission Report*. (1954)
- * (2) Gardner Patterson and Edgar S. Furniss Jr., eds., *NATO: A Critical Appraisal*. (1957)
- (3) Fritz Machlup and Burton G. Malkiel, eds., *International Monetary Arrangements: The Problem of Choice*. Report on the Deliberations of an International Study Group of 32 Economists. (Aug. 1964) [\$1.00]



