Furthermore, a protracted reluctance of surplus countries to revalue promptly in accordance with a devaluation-bias hypothesis could lead to accelerated price inflation within the surplus countries. In that situation, the statistical correlation of a devaluation-bias could take the form of an adjustment of internal prices in them. In both these cases, the statistical results could fail to record the effects of the devaluation-bias merely because the adjustments did occur within the observation period, even though the processes of adjustment were admitted delayed in ways consistent with a devaluation-bias hypothesis.

We come therefore to the conclusion that the statistical evidence that is available cannot be interpreted as a categorical denial of the existence of a devaluation-bias in current international monetary arrangements, either as a general bias in the way par values have been adjusted or as a particular bias against the United States. But it cannot be regarded as categorical support for such an hypothesis either. Accordingly, support for the devaluation-bias hypothesis must continue to be looked for in the concepts of international economic theory which postulate that the greater part of the adjustment burden under a fixed-rate system is likely to be borne by the deficit country and in the practical world of affairs where officials in surplus countries widely regard it as appropriate that deficit countries ought to bear the greater part of the burden of international payments adjustments.

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SDRs, Interest, and the Aid Link*

One probable consequence of the Dollar Crisis is the initiation of an attempt to effect a major reform of the International monetary system. The agenda for any future discussions on reform is bound to be long and varied: it will no doubt include the parity practices that are best calculated to facilitate the adjustment process, the conditions necessary for a restoration of dollar convertibility, the form of reserve assets, and the proposal to create an aid link. It is not the purpose of the present paper to attempt a comprehensive survey of these important issues. Its aim is much more modest: to sketch a relationship between two of the proposed reforms that appears to have escaped attention up to now.

Judging by the 1971 Annual Meeting of the International Monetary Fund, one of the reforms that is most likely to command widespread support is the proposal to make the SDR the basic reserve asset in the system. Two important purposes would be served by this step. The first is that of eliminating the danger — to which Professor Triffin has repeatedly drawn attention, often in the pages of this Review — of confidence crises giving rise to destabilizing shifts between different reserve assets. The second purpose is that of making it possible to bring the total volume of international liquidity under purposive international control, so as to avoid a recurrence of future events like those of 1971, when the planned modest increase in liquidity from SDR issues was swamped by the outflow of dollars from the United States.

Both of these purposes require that holdings of reserve currencies be stabilized. The simplest way of accomplishing this would be to require that holdings of reserve currencies be limited to operational needs, or minimum working balances. If holdings in excess of this

* The author is grateful for the opportunity to think about these questions provided by a consultancy at the OECD. The views expressed are, however, entirely his own.
were funded with the IMF for SDRs and the United States then resumed its obligation to convert dollars subsequently acquired by foreign central banks into SDRs, the possibility of destabilising reserve shifts would be eliminated and the growth of world liquidity would truly depend upon the rate of SDR creation.\(^1\) In principle the level of reserve-currency balances could be stabilised at some level other than that dictated by operational needs, but this would have two disadvantages. The first is that payments imbalances — either between the United States and a third country, or between two third countries that wished to hold different proportions of their reserves in dollars — would tend to change world liquidity or would create an unwillingness to hold the outstanding stock of reserves in the proportions in which they were supplied. This could be overcome by a determined use of the designation principle embodied in the SDR scheme, but it remains a disadvantage. The second drawback is that it would perpetuate the "seignorage" privileges that are presently enjoyed by the reserve-currency countries. To the extent that destabilising shifts out of reserve currencies are not a problem, a reserve centre is able to make what are, in effect, long-term borrowings at short-term interest rates. The resulting profits of financial intermediation can legitimately be considered as seignorage, and are likely to be envied by other countries.

The aim of eliminating reserve-currency holdings in excess of operational needs is therefore important to any satisfactory reform. However, so long as the interest rate on SDRs remains a nominal 1.5%, per annum, rather than a commercial rate comparable to that paid on dollar assets, there will be an incentive for individual profit-conscious central banks to hold reserve currencies rather than SDRs. Worse still, their profit-maximising strategy would involve holding reserve currencies most of the time and then switching into SDRs when depreciation of the reserve currency appeared probable. A rule which forbade such behaviour by prohibiting reserve-currency holdings in excess of operational needs would be easy to circumvent by any unscrupulous country that chose to use one of the many techniques available for concealing reserves. Even if this were not true, the principle of imposing rules that oblige people, or countries, to act contrary to their interests is a dubious one. Finally, any such rules could be legally evaded by refusing to enter the SDR scheme — and this would indeed be profitable for any country that expected to be a net holder of SDRs in excess of those issued to it.

This suggests that SDRs ought to pay a rate of interest comparable to that on short-term dollar assets, so that countries will be at least as happy to hold SDRs as dollars. There are other considerations which reinforce the case for paying a competitive interest rate on SDRs. There is, for example, the theory of the optimum quantity of money, which argues that SDRs are costless to produce and should therefore be created so long as they yield positive liquidity benefits, but that countries will only be willing to hold rather than spend such a large volume of SDRs if they yield a competitive interest rate.\(^2\) There is also the resentment which creditor countries feel at suffering a transfer of income to debtor nations as a result of a payments disequilibrium which is financed by a transfer of low-yielding assets (although this transfer does serve some social function in providing an incentive for the creditor nation to play its part in the adjustment process).

There are at present two other reserve assets besides SDRs and reserve currencies; and it is therefore necessary to ask whether they can be allowed to co-exist with SDRs, or whether they also need to be suppressed. So far as reserve positions in the Fund are concerned, there seems no reason to doubt that undesirable shifting would be forestalled by extending any revised interest-rate provisions on SDRs to cover the traditional form of Fund liquidity as well. The other reserve asset is gold. Despite the emotion that gold still generates, there is no reason to suppose that it need present a problem. So long as enough countries prefer holding gold to other reserve assets, gold will simply sink to the bottom of each country's reserve pile; it will not circulate so long as deficit countries have other reserve assets available. This is a perfectly acceptable state of affairs so long as no country has a right to demand gold. If and when gold becomes an inferior reserve asset (on account of its zero interest yield), the IMF can be empowered to issue SDRs in exchange for gold that is sold to it.

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1. For a discussion of the technical issues involved in such a funding operation, see J. Meade Fleming, "The SDR: Some Problems and Possibilities," IMF Staff Papers, March 1977.

2. This has been argued by several writers; the most comprehensive analysis is that of H.G. Geoffrion, "Interest Payments and the Efficiency of the International Monetary System," mimeographed, 1977.
The important steps in making the SDR the basic reserve asset are therefore funding all reserve-currency holdings in excess of operational needs and paying a competitive rate of interest on SDRs. The payment of a competitive interest yield will, of course, require that funds be made available for this purpose. Under present arrangements, countries pay interest on their net use of SDRs (i.e., the shortfall of their holdings from the sums that have been allocated to them) and receive interest on their holdings in excess of allocations. If this arrangement were perpetuated with higher interest rates, it would simply increase the sums transferred from countries which draw on their SDRs to countries which build up their SDR holdings through payments surpluses. This would reduce the element to seignorage which net users of SDRs currently enjoy.

This has a significant, and apparently overlooked, implication for the proposal for an "aid link." The idea of an "aid link" is that new issues of SDRs should be allocated to less-developed countries in a proportion greater than they can be expected to hold SDRs: the developed countries would then have to earn their liquidity increases through payments surpluses, while the developing countries would obtain the benefit of the seignorage that results from creating SDRs. If one reduces the magnitude of the seignorage by raising interest rates, one will also reduce the benefit of an aid link. But this benefit will not be eliminated entirely, because few less-developed countries could hope to borrow long-term on international capital markets at short-term dollar interest rates, and the difference between these two rates represents the seignorage that would still exist. Hence one could expect the pressure for an aid link to remain.

But an aid link coupled with competitive interest rates poses a danger of default. Countries which received large SDR allocations would build up a big interest charge over the years. So long as they were continuing to receive substantial new SDR allocations, it would not pay them to default. But if those allocations were to dry up — perhaps because the country passed out of the category of deserving claimants, or perhaps because the need for increases in world liquidity tailed off — the present value of default could easily become positive. Given the weakness of the framework of international law, it is surely prudent to make the SDR scheme self-policing by avoiding placing countries in situations where a narrow interpretation of national interest would suggest default.

This conclusion will no doubt be welcomed in orthodox quarters, because the aid link has been deemed to offend sound banking practice. The lack of substance in this argument is most readily appreciated by reflecting that SDRs owe their acceptability entirely to the expectation that other countries will be willing to accept them, and not at all to any "backing." In fact, there are two powerful arguments for the aid link. The first rests entirely upon an irrationality — the apparent fact that industrialised countries like having current surpluses even if they do not need them to strengthen their reserve positions. If it is really true that advanced countries prefer giving up real resources in order to obtain liquidity rather than obtaining it gratis, then the world can move to a Pareto-preferred situation by allocating the SDRs to those who would prefer the real resources, which means the less-developed countries. But even if this is not true, the case for the aid link is little weaker: true, it rests on a distributional value-judgment, but a very weak one. International co-operation permits a social saving, by replacing a commodity money by SDRs, and this social saving can be distributed by the international community as it thinks fit. There is no technical reason for preferring one distribution to another: it is a pure value-judgment. The most appealing value-judgment is that the saving should go to the poor.

Opponents of an aid link customarily assert that monetary arrangements should not be encumbered by the pursuit of non-monetary objectives (like aid). That they should not be distorted by non-monetary objectives is an entirely reasonable proposition which deserves to be established as a basic principle. It would, for example, be detrimental to the monetary purposes of SDRs if their interest rate were held down so as to increase the seignorage available for the less-developed countries. It would also be detrimental if the recipients of aid-linked SDRs were given the power to decide the sums to be issued. Again, there is a clear need to have some outstanding SDRs allocated in accordance with a principle that would permit SDRs to be called in, since it is always conceivable that there will be a need to reduce liquidity at some future time. But none of these provide legitimate reasons for not seeking to distribute such seignorage as remains to those who would benefit the most.

3 See Paul Macrino, Remaking the International Monetary System: the Rio Agreement and Beyond; Johns Hopkins Press, Baltimore, 1985, p. 64.
There is, in fact, a possible way of retaining an aid link while paying adequate interest rates and avoiding the danger of default. The total value of the seignorage that would accrue to the less-developed countries is smaller than it would be under current circumstances, but this is an inescapable consequence of the monetary necessity to raise interest rates to a competitive level. The key to this alternative is to modify severely the “net use” criterion for payment (or receipt) of interest on SDRs. Instead of countries being charged interest on past allocations of SDRs, the interest would be paid out of the SDRs being newly created each year. (Clearly any such scheme would require a residual right to collect interest in proportion to cumulative allocations to cover years when monetary needs indicated a lower SDR creation than the interest bill.)

It may reasonably be asked whether there is really any difference between the “net use” principle and diverting part of the new SDR issue for the purpose of paying interest. It is easy to show that there would be no difference at all if the proportion of new issues allocated to each country were constant over time. A country with a large share of allocations would be excused a large interest charge, but this would be exactly counteracted by the large number of new SDRs it would otherwise have received. Conversely, however, there is a real difference where allocative shares change over time. Specifically, a country with a declining share would benefit from replacement of the “net use” principle, because it would be excused a bigger interest charge than the new issues it would lose.

Suppose that one were to use a first part of each year’s SDR issue for interest payments. What was left over would then be distributed on aid-link principles, with only a residual obligation to pay interest in any years when new issues of SDRs were not large enough to meet the interest charges. The probability of this obligation ever being large enough to give rise to a default risk is much smaller than the probability under the “net use” principle. The reason is that the interest charge as a proportion of new SDR issues would tend to rise over time (as the proportion of SDRs representing long-term loans to the former reserve-currency countries declined), and this would reduce the “allocative share” of the less-developed countries over time. But it is precisely in the case of a declining allocative share that countries benefit from replacement of the “net use” principle. Or, to put the matter more simply, there can be no advantage in defaulting if someone else will be paying the bulk of the interest whatever you do.

The conclusions of this analysis are that it is important for the monetary success of SDRs that they pay a competitive interest rate; that this will reduce the value of the seignorage that could be distributed to the less-developed countries through an aid link; but that there is no technical reason why such seignorage as remains should not be distributed on aid-link principles.

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