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The Future of the Reserve System

John Williamson

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The reserve system is currently dominated by holdings of US dollars, as it has been for the postwar period (with the arguable exception of the early postwar years, when holdings of the pound exceeded those of the dollar in quantitative terms although the pound was not convertible and many of the sterling holdings were essentially involuntary). This is shown by Table 1, which values gold at its recent (September 30, 2009) market price and counts it as a reserve asset. The value of gold at its official price is derisory, but the table shows that it still amounts to only around 10% of the total when valued at market prices. Over 50% of total reserve assets consist of dollars.

Table 1
Reserves, end-September 2009 (in billions of SDR)

	Gold	Dollars	Euro	Other Currencies	SDR	Reserve Position in the Fund	Total
World	541	2,919	1,312	497	204	42	5,516
of which Advanced Economies	440	1,101	412	170	127	32	2,282
Emerging and Developing Economies	101	1,756	959	339	74	10	3,239

Sources: IFS, December 2009 and COFER
Note: The last two rows do not exactly sum to the first row of the Forex accounts.

In my view the most likely development is at most a slow erosion of the position of the dollar with its place being gradually taken by an expansion of other currencies, and perhaps further increases in the gold price. But I do not regard this development as anything like optimal. There seem to me to be three strong reasons which argue that such a development should be regarded as distinctly inferior to the alternative of expanded holdings of an internationally negotiated reserve asset.

The Advantages of an International Reserve Asset

The first reason relates to what is technically known as seigniorage. This term refers to the profit that accrues to the issuer of money as a result of its cost of production being less than the face value of the asset produced. In the case of dollar reserves, it amounts to the interest saving to the United States as a result of the fact that foreign monetary authorities decide to hold dollars. Because dollar interest rates are determined in a competitive market, this saving is generally held to be relatively small, but that does not mean that it is zero. But to go to the other extreme and describe it by de Gaulle's phrase of "exorbitant privilege" seems to imply two implausible hypotheses: that the saving is large, and that it has no (or unimportant) offsetting disadvantages. My own guess is that the offsetting disadvantage (increased vulnerability) is comparably important so that there is no net benefit in running the dollar as a reserve currency, but that does not imply that there is no gross benefit. In contrast, the alternative of an internationally-negotiated reserve asset would spread the seigniorage around the world in whatever way has been internationally negotiated. In the case of the SDR, the seigniorage is distributed in proportion to IMF quotas, which may not be optimal but is probably closer to it than any alternative we are likely to see.

The second reason relates to stability. Central bankers may assure you that they are immune to the temptation to speculate and switch between reserve assets in the light of their expectation of relative yields, but one may have difficulties believing them if one has listened to them arguing about the returns on negotiated reserve assets. Moreover, in the early days of the Institute I undertook a research project which aimed to investigate whether there had been destabilizing reserve switching by central banks in the early years of floating (basically the 1970s). Unfortunately the results were never published since the study was conceived as part of a broader piece which got pushed aside by more urgent questions, but I distinctly recall presenting the analysis and results at a mid-sized European central bank. Doubtless my amusement at the results (which found evidence of reserve switching) was ill-concealed, but they were greeted in stony silence by my audience. My host explained later the reason: this particular central bank had jumped on the bandwagon of the appreciating yen just before it crested in the late 1970s and lost the country a bundle in consequence. So don't believe central banks that tell you that they never speculate: they do, but they aren't very good at it, presumably at least in part because the ability to speculate successfully is not among the criteria by which one picks central bankers. It follows that a system with multiple reserve assets, especially in the form of multiple reserve currencies, is likely to be more prone to destabilizing switches and hence less stable than a system dominated by a single reserve asset. Since the ability to switch out of the SDR is limited to those occasions when a transactions need can be shown, this system is particularly likely to be stable.

The third advantage of a system in which the basic reserve asset is an international asset relates to adjustment. It is a fact that in recent years the demand for reserves has risen very rapidly because a large number of developing countries have sought to self-insure by holding high reserve levels, and this tendency appears likely to be accentuated by the relative tranquility with which countries holding high reserve levels came through the recent crisis. In principle reserves

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can be built up by running a surplus on either the current or the capital account of the balance of payments, but the experience of East Asia in 1997—when borrowed reserves were promptly withdrawn when a crisis broke out—means that many countries will only feel comfortable with reserves accumulated as a result of current account surpluses. That in turn implies that a dollar system would require a large continuing current account deficit by the United States, and a multi-currency system in which the dollar was joined by the euro (and perhaps one or two other currencies) would only be viewed as satisfactory by non-reserve countries if the Euro Area (and the issuers of any other reserve currencies) also moved into current account deficit. But this, as has been pointed out (Mateos y Lago 2009), threatens to create a modern version of the Triffin Dilemma: Either the world becomes starved of liquidity, or confidence in reserve currencies is threatened as their foreign debts increase. In contrast, a system in which liquidity is created by allocating an international asset around the world can satisfy reserve-accumulation objectives without imposing current account deficits on one or a few reserve centers.

Why These Advantages Remain Unexploited

There are therefore three major advantages in increasing liquidity through an international asset rather than through one or several reserve currencies: that it permits fairer distribution of the seigniorage benefit of reserve creation, that it is less prone to destabilizing reserve shifts, and that it permits solution of the adjustment problem. Given these benefits, one has to ask why the world has so far stuck with the reserve currency system rather than plump for increasing liquidity through allocating international assets.

I would argue that the answer is not to be found in the fact that the existing international reserve asset, the SDR, can only be used for precautionary purposes and not in a transactions role for intervention in the exchange markets (as has been argued, most authoritatively by Barry Eichengreen, 2009). It is of course perfectly true that the SDR cannot be used for transactions, like intervention, with the private sector, and that permitting such an extension of its use would require that the SDR be widely held and used by the private sector. The point is that most reserves are currently held for precautionary rather than transactions purposes, and that if and when a country needs to use its SDRs for transactions purposes then it is easy, cheap, and reliable to convert them into the necessary dollars. (When a country finds that it may need its SDRs for intervention, it can request the IMF for conversion. The IMF may name a member country which holds more dollars than it currently needs to make the conversion, which it is obliged to do, or else it may make the conversion itself.) It is therefore unnecessary to contemplate amending the SDR agreement at this time.

The answer, I would conjecture, is that decisions are made by national officials on the basis of national considerations. Consider the typical industrial country (these countries still dominate decision-making in the Fund). They pay essentially the same expected real interest rate as the SDR rate, so there is no seigniorage benefit for them. They kid themselves that they would never dream of speculating with public money, though they are convinced that if they did they would be rather good at it. And since they are not major participants in the reserve build-up, they dismiss that as someone else's business. For the non-typical advanced country, the United States, there is a plus as well as a minus in present arrangements, and hence no strong reason to risk upsetting the apple cart by advocating change.

It is the emerging markets and developing countries, which are building up reserves at breakneck speed, that would benefit significantly on the seigniorage front if they were able to borrow long-term at the short-term interest rates of reserve-currency countries. But realizing this gain would require collective action on their part, which—presumably because of their past impotence—they have not begun to contemplate. Reserve shifts are seen as offering a potential gain rather than being a force whose suppression would contribute to the common good, while their emphasis lies on exploiting rather than resolving the adjustment problem. Apart from Governor Zhou (see his remarkable 2009 paper), the only people who seem to think beyond the interests of their particular nation-state are the employees of international organizations. Emerging markets and developing countries still lack enough senior individuals in that capacity, and formerly in that capacity, to have had much influence on the attitudes of their countries.

Why Use the SDR Rather Than Create a New International Reserve Asset?

Clearly it would be inappropriate in this paper to adopt a nationalistic rather than global standpoint in evaluating what is desirable. Using that criterion, it has so far been argued that the advantage lies in increasing international reserves through supplying an international reserve asset rather than relying on the dollar or a multicurrency system. But there seem to be those who hanker after creating some new international reserve asset rather than exploiting the one that the world created some forty years ago, the SDR. For example, the Managing Director of the Fund is reported to have said in a speech at the Fund on Feb 27 that it would be "intellectually healthy to explore the creation of a new global reserve currency". One immediately confronts the problem of deciding how such a currency should be valued: a collectively exhaustive set of alternatives are presumably in terms of goods, in terms of currencies, or by the market. If it is to

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be in terms of goods, the alternatives would seem to be a traditional monetary asset like gold, a bundle of commodities, or the price levels of major countries. One could in principle return to the Gold Standard, although it would seem odd to speak of "creating a new global reserve currency" if that is the intention, and anyway most of us see strong disadvantages in resurrecting this particular system. The proposal to base the value of bancor on a basket of commodities was made by Keynes, but that was in an era when most trade took the form of commodity trade. It has become seriously outdated since, because in the postwar period trade came to be dominated by the exchange of manufactures. If one wishes to ensure stability of the value of the reserve asset in terms of a broad basket of goods such as now dominate trade, then the obvious procedure is to express the value of the reserve asset in terms of an indexed basket of currencies, with the indexation of each individual currency being in terms of an appropriate national price index. This would mean that the day to day value of the SDR would be determined as it is now. Of course, one could also perpetuate the procedure currently used to value the SDR, i.e. define the monetary asset in terms of an unindexed basket of national currencies. But those who advocate creating a new global reserve currency often seem to envisage it being valued by the market. Clearly this is possible only if there is a market, so one then has to develop proposals in which there would be demands from those who need to hold such an asset, because only then would a market trading SDRs for private-sector assets come into being. But if such an asset was not widely used to define the value of goods (although it is conceivable that homogeneous primary commodities would be priced in terms of it), its value would not be closely pinned down by the real economy. This means that its value in terms of other currencies could fluctuate wildly, which also appears an undesirable characteristic.

In summary, there does not seem to be much alternative but to value an international reserve asset on the basis of a basket of currencies. One could if one so desires index the currency units in the basket, and in that way index the reserve asset, but in terms of day-to-day valuation there is no real choice but to value it as the SDR is valued. One could vary other features of the SDR in a similarly inessential way. For example, one of the less attractive features of the SDR is the divergence between the formula according to which it is allocated (in proportion to IMF quotas) and the demand to hold reserves, which would remain far stronger in most emerging markets even after IMF quotas were redistributed according to any of the criteria that have been suggested. Or one could reintroduce the reconstitution provision, either in a form identical to the one that prevailed until 1981, or in a modified form. And so on: there are possibilities of varying the detail. But basically if one wishes to use an international reserve asset it is going to look pretty similar to the SDR.

Given that fact, one needs to ask whether it is a good use of resources to invent an alternative rather than simply to use the SDR. Personally I am strongly in favor of doing that, while making two modifications to the SDR.

Modifications of the SDR

The first would be to give it a sensible name instead of calling it a “Special Drawing Right”, which was a linguistic compromise dictated by the desire of the negotiators who created it to avoid committing themselves as to whether they had created a monetary unit or an entitlement to credit (see Machlup 1968). One hopes that we are no longer hung up on that theological question, in which case we could indeed name it sensibly, if we can think of a sensible name (I have no candidate in mind).

The second modification would relate to the distribution formula. I am opposed to the usual suspects: having the advanced countries place part or all of their allocations in a pool for redistribution to those who are short of reserves, or introducing the link. The former seems to me to be inviting complications given that the SDR is an interest-bearing asset; one would have to make provisions for those who receive SDRs from the pool to make payments into it, and then redistribute these payments to those who had placed allocations in the pool. One would need to devise rules of thumb as to whose deposits in the pool had been redistributed, and rules as to what happens if some payments into the pool are not made in a timely fashion. And all this overlooks the prior question of deciding who qualifies to draw, and how much, from the pool! The link (or George Soros’s latest scheme, to use SDRs to finance a Green Fund, see Soros 2010) does not scandalize me but it has scandalized others, and is thus guaranteed to introduce a source of contention. The only hope of avoiding such contention is to treat the SDR as a strictly monetary asset whose allocation will be determined by strictly monetary considerations.

It seems to me that it would be possible to do this while avoiding the gross inequity that results from the present formula as a result of the fact that the majority of SDR allocations go to advanced countries while the bulk of the increased demand for reserves comes from emerging markets. Place members of the Fund (strictly speaking, participants in the Special Drawing Account, but nowadays all members participate) in two categories: advanced countries, and emerging markets and developing countries. The division could be made on the basis of the Fund’s own statistical distinction, or on the basis of membership of the OECD, or self-selection, whichever is preferred by the membership; I doubt that the results would differ much or penalize countries greatly if they were differently classified. The number of SDRs allocated to each group as a percentage of the total allocation would be determined by the respective demand

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of each group, say over the preceding five-year period. But the division of SDRs within each group would be made, as now, on the basis of IMF quotas. This would avoid the need for large purchases by those whose demand for reserves is increasing rapidly to buy reserves from the advanced countries, while also avoiding the perverse result of giving reserves free that would result if one simply presented all countries with the extra reserves that they had held in some preceding period. It preserves incentives while eliminating the really severe maldistribution, admittedly at the cost of accepting an arbitrary element in the distribution.

To give an idea of how such a formula would work, let us assume that SDR allocations were in fact made on the basis of reserve increases over the end-years 2003-08. The physical quantity of gold held by monetary authorities decreased over this period by 6.8%, i.e. at a rate of slightly over 1% per year; almost all changes in the value of gold reserves stemmed from fluctuations in the gold price. These were essentially ignored by monetary authorities, so we shall do the same and focus entirely on the increased holdings of non-gold reserves. These increased by SDR 2285 billion, or an average annual increase of SDR 457 billion. Of this, emerging markets and developing countries accounted for SDR 1901 billion in total, or SDR 380 billion per year, some 83.2% of the total. Suppose first that it was agreed to an annual allocation of SDR 457 billion per year. As an example, Algeria (a developing country) would receive an allocation of SDR 5.87 billion. (This is 1254.7/81,257.3 x 0.832 x 457 billion, where SDR 1254.7 million is the Algerian quota in the Fund and the total quotas of all EMs and developing countries are SDR 81,257.3 million, to be applied to 83.2% of the total allocation of SDR 457 billion.) Admittedly this seems a generous allocation, and it cannot be taken for granted that all developing countries will continue to accumulate reserves at the pace of recent years, even given the perceived advantages of self-insurance, since a number of countries now seem to have reserves that even they must surely judge to be superfluous. Suppose, as a second example, that on these grounds total allocations were cut to SDR 200 billion, i.e. by 55%. Emerging markets and developing countries would get SDR 166.4 billion, and Algeria would get SDR 2,642 million. Of course, some countries would still have to earn the bulk of their reserve increases, assuming that these continued at the breakneck speed of recent years. For example, China would receive an annual allocation of SDR 16.4 billion, whereas its average reserve increase over 2003-8 was SDR 198 billion. This illustrates that the proposed formula would not achieve anything like total neutrality, which could only be achieved at the cost of destroying incentive effects[1]. But substantial reserve increases would no longer be dependent either on

[1] Total neutrality would be achieved if and only if the increased allocation of reserves was exactly equal to the increased reserves a country chooses to hold. This can be accomplished only by a policy of allocating each country reserves equal to its increased reserve holding during the

the United States running a continuing current account deficit or on countries being content to accept capital inflows as the basis for their reserve buildups.

The Impact of the Reserve System on the Real Economy

Suppose that the first of those possibilities was chosen by the international community, i.e. that it was decided to allocate SDR 457 billion per year in newly-created SDRs. Two polar possibilities of the consequences can be envisioned. First, it is possible that countries do have a well-defined demand for reserves, and really desire to hold an additional SDR 457 billion of them. Second, it is possible that what really drove them was the desire to export and that it just happened that reserves increased by SDR 457 billion.

In the first case the crucial question is whether countries are content to hold an additional SDR 457 billion of reserves in the form of SDRs. If they are willing to hold their increment of reserves in the form of SDRs instead of dollars, then there will be an adjustment such that (I – S) increases in the countries that now have more reserves and decreases in the countries (notably the United States) that are no longer expected to supply new reserves, and the exchange rates of the former countries appreciate in terms of those of the latter country or countries. Those countries that receive more SDRs than they wished to add to their reserves would have a larger proportionate increase in (I – S) and (ceteris paribus) a bigger currency appreciation, and those that received fewer would adjust less, but the group as a whole would on average adjust to offset the US adjustment and leave world demand unchanged.

In the second case, there is no adjustment induced. The world carries on with a higher reserve level than in the alternative situation but this induces no action.

The fear that underlies the traditional opposition to additional SDR creation is not that there is no effect, but a belief that the demand for reserves is well-specified plus a belief that the supply is equally well-specified, presumably by an exogenous (with respect to the policy of third countries) US payments deficit. It then follows that additional reserve creation would induce additional expenditure in the rest of the world, and this might end up stoking inflation until it had inflated reserves back to their same real value.

The supposition that seems natural is some mix of these two cases. It is surely not that every country knows exactly how many reserves it wishes to hold

reference period. But that makes reserve holding a free good, since one gets extra reserves after the initial period without making any sacrifice, so one destroys incentive effects. The key to avoiding this is to make the allocation dependent upon something largely exogenous to the actions of the particular country, such as the increase in reserve holdings of all countries, or all developing countries.

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and gives priority to establishing that reserve level, for reserves fulfill their main social objective by varying, but that large and persistent departures of reserves from the target level will ultimately induce adjustment action. To the extent that this is true, it means that the failure to create reserves in recent years has condemned the world to a choice between large continuing balance of payments deficits by the United States and a shortage of liquidity by other countries. If the US has really determined that it will no longer tolerate payments deficits, as a number of Administration figures have asserted, then the necessary result in the absence of an alternative source of reserve supply will be global deflation. In particular, if the US is serious about not accepting a deficit being imposed on it, then if a deficit threatens it will have to deflate.

Final Remarks

Most of this note has been devoted to an exposition of what I perceive to be the efficient way of accommodating the evident desire of countries to have secular expansions in their reserve holdings. This is to use the SDR for the purpose for which it was created, and allocate new SDRs on a substantial scale.

I remarked early on that I do not regard this as the most probable evolution of events. Unfortunately I think it far more likely that policymakers will try to muddle through without anything so demanding as agreeing major changes. Presumably the share of the euro in reserves will creep up again, if and when the fears that have been raised by Greece and other PIGS subside, but I would doubt whether we shall witness a spontaneous flight from the dollar or the emergence of a new and more effective competitor in the next decade or two. A continued expansion of reserves will depend upon continued non-adjustment of the US balance of payments, and perhaps on a parallel euro-area current account deficit. The last crisis did not take the form that was feared by those of us who worry about these developments, but it seems to me over-complacent to dismiss this danger.

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