The Coexistence of Three Types of Reserve Assets

Introduction

The first *Report of the Deputies* of the Group of Ten and the parallel *Report of the IMF*, as long ago as 1964, reached unanimous consensus on the basic deficiencies of our international monetary system and the general nature of the truly revolutionary reforms required for its satisfactory performance in the future.

The three years that have elapsed since then have unfortunately failed to elicit any similar agreement on the concrete measures and commitments needed to implement the broad recommendations of the two 1964 Reports. The 1965 " Ossola Report " was essentially a keen, but discouraging, record of the growing divergencies of views between the French, at one extreme, and the Anglo-Saxons, at the other. The 1966 " Emminger Report " tried desperately to disentangle some kind of consensus or semi-consensus around which further discussions could center. Its main emphasis, however, was placed on the most divisive of the various issues involved, i.e. the so-called " contingency planning " for deliberate reserve creation. Two thirds to three fourths of the report were devoted to this single issue, but the French refused to participate in the discussion and drafting of the various guidelines and alternative proposals about which other members themselves continued to press very different or even radically opposite views.

Diplomats, however, are rarely renowned for their candor. They do not try to sell their own negotiating positions to others by using the arguments which have really prompted their adoption, i.e. the real, or fancied, interests of their own countries. They do their best, instead, to cloak their true motives under the veil of technical discussions about the supposed merits and demerits of alternative approaches and procedures from an objective, worldwide point of view. As officially recorded, the disagreements of the Ten thus related to the size and composition of the group of countries that

should participate in the reserve-creation scheme, voting rights and procedures, the choice between " reserve units " and " drawing rights ", the rules governing the use, acceptance, and retention of these proposed instruments, the role to be retained by gold in global settlements, etc.

Lurking behind all these technicalities, and indispensable to their realistic understanding and appraisal, however, are the political motivations underlying different national preferences for emphasis on one or another of the three reserve assets. These broader political issues have indeed broken into the open, not around the negotiating tables of the Ten or of the IMF, but in the pronouncements of President de Gaulle and his Minister of Finance, on the one hand, and of the Secretary of the Treasury of the United States, on the other.

The United States is understandably concerned to maintain the traditional role of the dollar as an international reserve instrument and tends to consider any new reserve asset as an alternative to gold, rather than to dollar, accumulation by other countries. This attitude — and the concrete proposals which it inspired — is viewed by others, and particularly by the French, as designed to help finance U.S. deficits through central banks' credit extensions to the U.S. — through dollar accumulation — as much as possible, and to use the new reserve unit primarily as a substitute for subsequent conversions into U.S. gold of the dollar claims precariously piled up by central banks under the present system. Uneasiness about the political, as well as financial, implications of U.S. policies was fanned in 1966 and 1967 by the announcement that substantial balance-of payments deficits would persist as long as — and as a result of — the Viet Nam war, and by pressures on the European countries to refrain from gold conversions to the extent necessary to finance American investments in Europe — running at more than ten times their yearly rate in the 1950's — and the foreign-exchange consequences of the locations of our troops and those of our allies. Failing such cooperation, said Mr. Fowler in Pebble Beach, we might be forced to take unilateral action, undermining the international monetary system. Such action was spelled out by practical bankers as well as by academic professors as cutting the link between the dollar and gold, and forcing the rest of the world into an inconvertible " dollar area ".

These grim prospects of the ultimate consequences of protracted disunity and inaction induced, in late April of this year, the European

Economic Community countries to rally around a common program of action, acceptable to all of them, and which offered for the first time a chance to assure the participation of France in the proposed reforms of the international monetary system. Although widely described as a victory for France, this agreement involved considerable, and constructive, changes in former French proposals and attitudes. While France had, up to then, placed its main emphasis on a stricter gold standard as the only alternative to " unacceptable " surrenders of sovereignty to the international technocracy of a U.S.-dominated IMF, it now advocated substantial strengthening of the IMF lending potential and political authority. Contrary to the harsher, but unrealistic, line previously pursued, the French now recognized that some partial mergers of sovereignty into a jointly-run international institution had become the only practical alternative to either international anarchy or far wider and blinder surrenders of sovereignty to the United States.

It is still difficult to be very optimistic about the chances of agreement opened up by this new and dramatic development in the marathon negotiations in process since 1963. I remain convinced today, as I was then, that the most urgent and promising initial area of agreement lies in protecting the already existing level of international reserves against wanton conversions into gold metal of the huge foreign-exchange reserves accumulated over many years past, under the functioning of the ill-fated gold-exchange standard (1). Even such a limited agreement would be a powerful deterrent to current widespread gold speculation, thus removing at least an important factor of weakness for the United States — and United Kingdom — balance of payments. It would also give the negotiators the further breathing space necessary to explore, in a vastly improved atmosphere, the more controversial issues surrounding the concerted creation, allocation, and management of the additional fiduciary reserves needed to support the continued growth of world trade and production. Finally, the very machinery put in place to prevent undesirable *reductions* in present reserve levels could be easily amended and expanded, when the need for it is recognized — as it inevit-

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(1) See my article in this Review (March 1964) on " The Problem of International Monetary Reform: Major Questions and Prospective Area of Agreement ", and my more recent proposals in *Contingency Planning for U.S. International Monetary Policy*, Subcommittee on International Exchange and Payments of the Joint Economic Committee, Congress of the United States (Washington, D.C., December 1966), pp. 133-144.

ably will be, sooner or later — to *expand* such reserve levels at the desired pace.

These broad issues and perspectives are touched upon only incidentally in the present paper, written as a starting point for more technical discussions at a private meeting of international monetary economists and negotiators at Bellagio (2) in March of this year. The agenda of our meeting was: "The coexistence of three types of reserve assets". The paper that follows summarized very succinctly (Section I) the already familiar considerations regarding the impact of this trinity of reserve assets upon the growth of world reserves. Most of it (Section II) was devoted to its equally important, but less generally perceived and understood, impact on the balance-of-payments adjustment process. These two sections are reproduced here *verbatim* — except for the updating and fuller explanation of the estimates in the tables and text — and retain therefore the full flavor of the dry memorandum style appropriate to such occasions. The concluding section, however, has been completely re-written and attempts to extract from the previous technical sections my personal answers to the broader policy issues raised in this introductory section.

I. Impact on the Growth of World Reserves

A. The evidence (briefly summarized in Table 1) is so well known as to need no rehashing here. Let us merely note:

1. The increasing proportion of Soviet sales in the total accretions of monetary gold in the West (up to more than 165% in fact in 1965) and their sudden drying up in 1966 (see Table 1, line I, A);

2. The wide fluctuations in the contributions derived from foreign exchange, particularly for reserve growth outside the reserve-center countries themselves (from a peak of \$2.2 billion in 1963 to a trough of *minus* \$1.8 billion in 1965; see last line of Table 1);

3. The spectacular growth of IMF-BIS transactions (IMF reserve positions plus IMF-BIS gold sales) needed in 1965 to offset massive liquidations in the foreign-exchange component of gross reserves (see line II of Table 1) and produce a relatively modest increase in the latter;

(2) May I take this opportunity to express the deep appreciation of all participants at that meeting for the support of the Ford and Rockefeller Foundations which made it possible.

TABLE 1

SOURCES OF GROSS RESERVE INCREASES, 1960-1966

	In millions of U.S. dollars					% Contribution to Total		
	1960-66 Range		Annual Rate					
	Min.	Max.	1960-64	1965	1966	1960-64	1965	1966
I. *World Monetary Gold*	−90	835	575	240	−90	26	18	−7
A. From Soviet Sources	—	550	345	400	—	16	30	—
B. Other	−160	300	230	−160	−90	10	−12	−7
II. *IMF-BIS Transactions*	−115	2,015	210	2,015	50	9	148	4
A. Gold	−905	795	30	795	−905	1	59	−72
B. Reserve Position in the Fund		1,220	180	1,220	955	8	90	76
III. *Foreign Exchange*	−900	2,425	1,440	−900	1,285	65	−66	103
A. Dollars	−955	1,665	1,115	45	−955	50	3	−76
B. Sterling	−320	715	165	−320	715	7	−24	57
C. Euro-dollars, Euro-sterling, other, and discrepancies	−630	1,525	155	−630	1,525	7	−46	122
IV. *World Gross Reserves*	320	3,405	2,225	1,355	1,250	100	100	100
Foreign Exchange Reserves of Countries other than U.S. and U.K.	−1,810	2,245	1,365	−1,810	325	61	−133	26

Sources and Notes:
1. See Tables 2 and 3 and particularly Table 4 in Appendix.
2. Estimates have been rounded off to the next \$5 million.
3. The minimum and maximum estimates of the component and sub-component items in the first two columns do not, of course, add up to the minima et maxima for the combined estimates on lines I, II, III and IV.

4. The wide fluctuations in the growth of the total reserve pool (from a low of $300 million in 1962 to a peak of $3,400 million in 1963; see line IV of Table 1).

B. Previous discussions have led to a *wide consensus* on the following three points:

1. A more orderly growth of total reserves would require action to either *reduce* or *offset* — or both — excessive fluctuations in the growth of the three reserve components, and particularly of foreign exchange. The offsetting technique would involve primarily the rate of increase — or decrease — of the only component directly dependent on " concerted " decisions, i.e. fiduciary-reserve creation by the IMF, the BIS and/or any other similar agency that might be set up in connection with a new reserve asset.

2. The alarming decline in the foreign-exchange component of world reserves, over the last two years, should either be arrested, or continue to be offset by " concerted " reserve creation (IMF, new reserve assets, etc.).

3. In any case, future reserve growth cannot, and should not, depend as heavily on foreign-exchange reserves as it did until 1965. Substantial increases will thus be required either in the gold or the " concerted " component of world reserve creation.

C. The main unresolved questions are:

1. Whether efforts at assuring a more orderly growth of world reserves should focus on reducing the instability of their foreign-exchange component, or merely on offsetting it by compensatory increases, or decreases, in the volume of the new reserve-assets component;

2. Whether adequate reserve growth should be achieved in the future through a steep expansion of the gold component or through substantial resort to concerted reserve creation of an international character. One aspect of this choice, which has received relatively little attention so far, may be worth mentioning. While deflationary shortages of reserves could be met by either of these procedures, a permanent increase in the gold contribution to reserves might increase at times the risk of *inflationary* excesses whose control

would then require *politically difficult* (3) contraction in credit creation. (The monetary authorities may find it particularly difficult to explain that a contraction of their internal credit operations is needed to offset the excessive money creation resulting from larger disbursements to gold producers and gold speculators. Note the danger of massive dishoarding that might result from a substantial increase in gold prices in view of the $14 billion of gold estimated to have been privately accumulated in the last sixteen years only, of which $10 billion are estimated to have been bought for hoarding and speculation and $4 billion for the arts and industry.)

II. Impact on the Adjustment Process

A. *Gold settlements* fulfil the basic assumption of the traditional theory of the adjustment process, i.e. that the settlement of *international* imbalances should contract *domestic* liquidity in the deficit countries and expand it in the surplus countries. (Note, however, the assimilation of all gold production to exports and of all private gold purchases to capital exports.)

1. This automatic impact, however, may be reinforced, partially offset, or even more than offset, by the domestic credit operations of the national banking systems; and these are determined by a host of other policy objectives — many of which are perfectly legitimate or politically irresistible — as well as by deep-rooted institutional arrangements.

2. Contrary to the much vaunted " rules of the game ", central-bank operations often offset, at least partially, the impact of international settlements upon their domestic liabilities. As long as such offsets are not total, however, residual fluctuations in the domestic liabilities of central banks will affect the cash basis of the other banks and have a multiple impact on domestic liquidity insofar as such banks tend to operate relatively close to their legal, or traditional, fractional cash ratio to liabilities.

3. Persistent, or excessive, offsetting of the final impact of settlements upon domestic liquidity, by either surplus or deficit countries,

(3) Or even downright impossible in the case of a few central banks — such as in Switzerland and the Netherlands — with extremely low internal credit assets.

tends to frustrate the adjustment mechanism. Eventually, reserve depletion will *force* the deficit countries to change their policies, or to resort to restrictions and/or devaluation. While reserve increases do not exercise a similar constraint on surplus countries, domestic political pressures tend to discourage persistent offsetting (" sterilization ", " neutralization ", or " compensatory ") policies by them, while they tend to encourage them in the deficit countries. Contrary to a familiar economic slogan, the system does not lead to an effective " deflationary bias ", but rather to an " inflationary bias " sanctioned by a further " bias " toward restrictions and devaluation.

4. Gold settlements alone would limit net world surpluses to new accretions of monetary gold, i.e. to a small and decreasing fraction of the global reserve increases experienced under the present gold-exchange standard. They might even result in a net contraction of world reserves (see first line of Table 1). To the extent that some countries are willing — and even desirous — to increase their reserves by larger amounts, accretions to world monetary gold should either be expanded or supplemented by fiduciary reserves. (As shown by the sum of lines I and II of Table 1, these have supplied 74 to 107% of the — possibly excessive — reserve increases of the last seven years.)

B. The impact of *foreign-exchange settlements* upon domestic liquidity does not differ materially from that of gold settlements, as far as countries other than reserve centers are concerned.

For reserve-center countries, however, they modify radically the central assumptions underlying the adjustment process, both with respect to use of reserve currencies in settlements and to subsequent shifts in the composition of reserve assets (4).

1. *Use of reserve currencies in settlements.*

(a) Insofar as a reserve-center country finances its deficits through the accumulation of its own currency by foreign central banks, or finances its surpluses by the redemption of its previously accumulated indebtedness to them, the country's *gross* reserves remain unchanged,

(4) Note, however, that any reforms that might be proposed regarding the *composition* of reserve assets and settlements would bear primarily on the so-called " primary " impact of settlements, and would still leave open many questions regarding possible improvements in the adjustment process as a whole.

destroying therefore the automatic primary impact assumed in the classical adjustment mechanism.

(b) Yet, the settlements may exercise some impact upon domestic liquidity, depending on the following factors:

(i) Whether the monetary authorities change their policies in the light of the evolution of the country's *gross* reserves or *net* reserves. In fact, monetary authorities are likely to pay more attention to other pressing policy objectives than to either *gross* or *net* reserves, as long as their reserve levels are considered to be well above expected requirements. When net — and particularly gross — reserves decline at an excessive rate, or to levels regarded as dangerously low, the volatility of reserve liabilities (see 2 below) is likely to focus attention on net, rather than gross reserves, but also to elicit attempts to reduce this volatility by agreements — formal or informal — with the creditors, as well as to reduce further losses of net reserves.

(ii) Whether the reserve-currency liabilities accumulated, or drawn upon, by foreign central banks are in the form of Treasury obligations, deposit-bank obligations, or other parties' obligations. As of last September, Treasury obligations accounted for over 57% of total U.S. liabilities, and about 86% of U.K. total liabilities, to foreign monetary authorities.

2. *Subsequent shifts in the composition of reserve assets.*

Even more crucial is the fact that foreign-exchange settlements may be largely divorced from the current surpluses or deficits of the reserve-center country:

(a) Foreign central banks may increase their holdings of a reserve-center currency — through net gold transfers to it, for instance, or IMF transactions — at a time when the center country is experiencing overall surpluses in its balance of payments.

(b) Even more likely, however, and far more disturbing, is the possibility of large conversions into gold, or other assets, of previously accumulated reserve-currency holdings, at the most inconvenient time, i.e. at a time when the center country is experiencing large deficits in its overall balance of payments. This is precisely what has been happening to the United States and the United Kingdom over the last two years. Over the last two years (1965 and 1966) the *net* reserve losses of the reserve-center countries are estimated

TABLE 2

THE CREATION OF MONETARY RESERVES, 1938-1966

(years, or yearly rates in millions of $)

Periods	1938-49	1950-59	1960-64	1965	1966
I. *World Gross Reserves*	1,490	1,180	2,225	1,355	1,250
A. *Monetary Gold*	810	520	575	240	−90
1. Western Sources	820	385	230	−160	−90
a. Production	965	940	1,290	1,440	(1,440)
b. Absorption (−)	−145	−555	−1,060	−1,600	(−1,530)
(i) Arts and Industry (−)		−160	−325	−465	
(ii) Hoarding and Speculation (−)		−395	−735	−1,135	
2. Soviet Sales	−10	135	345	400	—
B. *IMF-BIS Transactions*	15	80	210	2,015	50
1. EPU-EF-BIS	−5	15	−15	485	−120
2. IMF	15	65	225	1,530	170
C. *Foreign Exchange*	670	580	1,440	−900	1,285
1. U.S. Liabilities	215	735	1,115	45	−955
2. U.K. Liabilities	395	−20	165	−320	715
3. Euro-currencies and discrepancies	55	−135	155	−630	1,525
II. *Net Reserves of Reserve Centers*	230	−970	−2,670	−1,065	−1,930
A. Gold	745	−385	−885	−1,275	−1,155
B. IMF (Net)	115	15	−420	−1,600	−450
C. Foreign Exchange (Net)	−630	−600	−1,365	1,810	−325
III. *Gross Reserves of Other Countries*=A+B+C=D+E	585	1,530	3,290	1,885	1,725
A. Gold	−65	830	1,485	2,310	160
B. IMF Reserve Positions	15	100	440	1,385	1,235
C. Foreign Exchange	635	600	1,365	−1,810	325
D. Net Reserve Losses of Reserve Centers=−II	−230	970	2,670	1,065	1,930
1. United States	890	1,240	2,145	1,305	−215
2. United Kingdom	−600	130	370	395	615
3. Euro-currencies and discrepancies	−55	135	155	−630	1,525
E. Other Sources	820	555	620	825	−210
1. World Gold=IA	810	520	575	240	−90
2. IMF-BIS Transactions *minus* IMF lending to U.S. and U. K.	10	35	45	585	−120

Sources and Notes:

1. See Table 4 in Appendix.

2. Estimates on the sources of monetary gold are from *International Financial Statistics* and the *Annual Report* of the Bank for International Settlements (particularly the June 1966 *Report*, p. 34). Reported Chinese purchases of $150 million in 1965 are deducted from reported U.R.S.S. sales on line IA2.

3. Lines IIIA, B, and C, on the one hand, and D and E on the other provide *alternative* breakdowns of line III. IMF lending to the U.S. and the U.K. is deducted from other IMF-BIS transactions in line IIIE2 in order to avoid double counting, since such lending is already accounted for on lines IIID1 and 2.

Brief Comments:

1. The sharp decline in monetary gold increases from Western sources (to negative entries in 1965 and 1966) is not due to a slowdown of production, but to the *abrupt* near doubling of private absorption — and of hoarding and speculative purchases — in 1960 — i.e. the year of the gold price flare-up on the London Market — and another *abrupt* rise of nearly 50% in 1965.

A spectacular but unsustainable increase of IMF-BIS transactions offset only partly the decline of new accretions to monetary gold and the sharp reversal from foreign-exchange accumulation to foreign-exchange liquidation by central banks — particularly of the developed countries.

3. Central banks of countries other than reserve centers liquidated in 1965 $1,885 million of *currently* acquired foreign exchange (line III) *plus* $1,810 million of *previously* acquired foreign-exchange reserves (line IIIC), i.e. a total of $3,695 million, shifted in part into gold (line IIIA: $2,310 million), and in part into gold-valued claims on the IMF (line IIIB: $1,385 million). Their gold acquisition that year was nearly ten times the amount available from gold production and was thus fed principally by gold losses of the reserve centers (line IIA: $1,275 million) and of the IMF and BIS ($797 million: by difference from 1964 to 1965 on lines IB1 an IB2d of Table 1). Needless to say, such shifts would not be sustainable for long.

at about $3 billion, but their losses of gold ($2.4 billion) and recourse to the IMF ($2.0 billion) at a total of $4.3 billion, the difference ($1.5 billion) being due to massive liquidation by foreign countries of previously accumulated dollar and sterling reserves. (See lines II and II A, B and C of Table 2.) These conversions would have been even larger if it had not been for central-bank assistance to the U.K. and other similar forms of cooperation aiming at reducing the burden of gold conversions for the two reserve centers.

(c) These shifts from previously accumulated foreign exchange into gold — or vice versa — may be the by-product of foreign-exchange settlements between *third* countries with different traditional preferences for gold *vs.* foreign exchange. They may also be induced by purely economic motivations — such as interest-rate fluctuations or speculative expectations about gold prices and exchange rates — but also by political motivations. (Professor Mundell has recently pointed out a mixed type of motivation which may well account for many of the recent gold conversions: they are one of the few weapons at the disposal of non-reserve centers to try to induce the reserve-center countries to change their policies and correct balance-of-payments deficits deemed by others to exercise an inflationary impact upon their own economy.)

Professor Kindleberger is right, however, in deploring the haphazardness entailed in the use of such an instrument, but his own solution — an *Atlantic* open-market committee determining domestic monetary policy in the United States — would require far wider mergers of sovereignty than other, more modest, suggestions aiming at "multilateral surveillance" of the use of national currencies as international reserves.

(d) Shifts in foreign-exchange holdings from Treasury obligations to bank or non-bank private obligations, or vice versa, may also offset the domestic liquidity of reserve centers, while bearing little or no relation to current developments in their balance of payments.

3. *We may conclude* that the uncoordinated use of foreign-exchange reserves in settlements may give the reserve centers excessive facilities, at times, for the settlement of their deficits, but at the risk of aggravating considerably their difficulties at a later stage. The importance of this problem, from the point of view of the adjustment mechanism, is highlighted by the fact that countries other than reserve centers accepted, on the average, foreign-exchange reserves

for as much as 42% of their surpluses in 1960-64, but *liquidated* in 1965 $1,810 million of such foreign-exchange accumulation, *adding* thereby 96% to the amounts of gold and IMF reserve claims needed for settlements. (See line III C of Table 2 and line III C of Table 3.) As for the reserve centers, foreign-exchange settlements financed about 51% of their deficits in 1960-64, but added in 1965 170% to their foreign payments financed by gold losses and recourse to the IMF. (See line II A of Table 3.)

C. *Other fiduciary settlements* — via the IMF or any "new" reserve asset — also modify the working of the adjustment process, but with some important differences:

1. *Initial use in settlements.*

As far as initial settlements are concerned, deficit countries would also be given some additional settlement facilities insofar as they would benefit from the credits involved in the acceptance of fiduciary reserves by others:

(a) Under the present IMF policies, drawings on the gold tranche are unconditional, but the gold tranches themselves constitute "earned" reserves, assimilable to gold reserves. The use of IMF credit proper is conditional upon agreement on the borrowing country's policies, and the negotiations entailed presumably aim at strengthening *desirable* adjustment policies, and at discouraging policies perpetuating net reserve losses or avoiding them through "undesirable" corrective policies, such as trade or exchange restrictions.

(b) The reforms envisaged in the last report of the Group of Ten deputies, however, would create unconditional — or far less conditional than now — credit facilities in favor of the recipients of new reserve units, or special reserve drawing rights, distributed on the basis of some pre-agreed formula, such as the relative size of IMF quotas. The actual use of such credit facilities would thus be largely divorced from any attempt to strengthen internationally agreed readjustment policies, and tend to shift more of the adjustment "burden" to the surplus countries.

Previous to their actual use, the new credit lines assigned to the various countries would increase their *gross* reserves, but leave their *net* reserves unaffected insofar as their own currency deposits or lending commitments are regarded by them as true liabilities (even

TABLE 3

PATTERN OF RESERVE CREATION AND RESERVE SETTLEMENTS, 1938-1966

(in % of each area's total)

Period	1938-49	1950-59	1960-64	1965	1966
I. *World Reserves*	100	100	100	100	100
A. Monetary Gold	54	44	26	18	−7
1. Western Sources	55	33	10	−12	−7
2. Soviet Sales	−1	11	16	30	—
B. IMF-BIS Transactions	1	7	9	148	4
C. Foreign Exchange	45	49	65	−66	103
1. U.S. Liabilities	14	62	50	3	−76
2. U.K. Liabilities	27	−2	7	−24	57
3. Euro-currencies and discrepancies	4	−11	7	−4	122
II. *Net Reserve Losses (−) of Reserve Centers*	100	−100	−100	−100	−100
A. Foreign-Exchange Settlements	−274	−62	−51	170	−17
B. Gold and IMF Settlements	374	−38	−49	−270	−83
1. Gold	324	−40	−35	−120	−60
III. *Gross Reserve Gains of Other Countries* = A+B = C+D	100	100	100	100	100
A. Net Reserve Losses of Reserve Centers (− = increases)	−39	64	81	57	112
B. World Reserves Increase	140	36	19	44	−12
1. Gold	139	34	18	13	−5
2. IMF-BIS Lending *minus* U.S.-U.K. Liabilities	2	2	1	31	−7
	100	100	100	100	100
C. Foreign-Exchange Settlements	109	39	42	−96	19
D. Gold and IMF Settlements	−9	61	58	196	81
1. Gold	−11	54	45	123	9
2. IMF	3	7	13	74	72

Sources and Notes: See Table 2 above, and particularly Table 4 in Appendix.

Brief Comments:

I. *World Reserves*:

IA: Note the regular decline in the contribution of monetary gold — particularly from Western sources — to the annual growth of reserves, and the increasing dependence of monetary gold increases upon Soviet sales. World monetary gold stocks actually *decreased* in 1966.

IB and IC: Foreign exchange — particularly U.S. liabilities — contributed about half, or more, of world reserve increases until 1965, but wholesale liquidation of foreign-exchange holdings would have resulted in a sharp decline of world reserves that year, if IMF and BIS transactions had not grown spectacularly to offset such liquidations. The 1966 increase in reserves was fed nearly entirely by sterling and Euro-currencies increases — more than offsetting further declines in U.S. liabilities — but these estimates must be regarded as highly provisional and inaccurate in view of the imperfect reporting of swap and other transactions, and of the impact of the liquidation of dollar securities by the U.K. and the incorporation of $885 million of the proceeds in reported U.K. reserves.

II. *Net Reserve Losses of Reserve Centers*:

Foreign-exchange settlements financed 50% or more of the reserve-center countries' deficits over the years 1950-1964, and a modest 17% in 1966. In 1938-49 sharp increases in foreign-exchange *liabilities* (primarily sterling) ran counter to the *surpluses* of the reserve centers, thus raising their gold receipts and accumulation of IMF claims to nearly four times their total surpluses. In 1965, massive liquidations of foreign-exchange liabilities, at a time when the reserve-center countries were in deficit, increased their gold losses and the deterioration in their IMF position to nearly three times their overall deficit.

Throughout this period of nearly thirty years, the foreign-exchange component of settlements under the gold-exchange standard thus played havoc with the classical adjustment mechanism, either by decreasing by half (in 1950-64) the pressures of settlements upon the center countries' gross reserves, or by multiplying them, on the contrary, in an upward direction (in 1938-49), or in a downward direction (1965).

III. *Gross Reserve Gains of Other Countries*:

IIIA and B: The reserve increases of other countries have been largely, or even overwhelmingly, dependent ever since 1950 on the persistent deficits of the reserve centers (line IIIA). The decline in the contribution of gold production to these reserve increases (line IIIB 1) is particularly striking.

IIIC and D: The role of foreign-exchange settlements accentuating and weakening, alternatively, the classical mechanism of balance-of-payments adjustment for the surplus countries parallels the similar observation made above (lines IIB and C) for the deficit countries.

though they could be called upon only to finance later surpluses, or to handle problems arising from members' withdrawals from the system, or from its liquidation). Later use of these facilities would then reduce the gross as well as the net reserves of the deficit countries and increase those of the surplus countries.

2. *Multilateral use in initial and subsequent settlements.*

The multilateral usability of these international fiduciary means of settlement requires that the lending commitments of the countries in actual surplus be large enough to finance the global borrowing of the countries in deficit, even in the case of convergence of deficits upon one or a few surplus countries. The present Articles of Agreement of the Fund rely for this purpose on members' gold contributions, but admit — in Article VII — the possibility that further measures may be needed to preserve the multilateral character of the Fund's drawing rights, or to limit it through rationing if these measures prove inapplicable or insufficient.

The General Arrangements to Borrow provide, in addition, for an increase of lending commitments by some members over and above their prospective borrowing rights. A similar margin between lending commitments and borrowing rights is contemplated in the last report of the Ten deputies, but its exact size — and distribution among members — can only " hope " to meet the unpredictable pattern of future disequilibria.

Negotiators have shied away so far from a more logical solution of the problem, relating lending commitments to actual surpluses and reserve increases, but this is the solution which the IMF tries in fact to approximate through the choice of currencies to be used in drawings and repayments.

3. *Reconciliation of liquidity with protection against volatility.*

The reserve liabilities entailed in the fiduciary means of settlement created by the IMF — or contemplated in current proposals for reform — are *not* exposed to the same *volatility* risks as those that plague the use of national reserve currencies for the same purpose (see paragraph II B 2 above). Protection against such volatility results from the fact that:

(a) repayment obligations by the *debtors* would be spelled out in advance through specific maturities plus extraordinary amortization whenever later surpluses ease this repayment problem for all concerned; the CRU proposals would even retain only the latter of these two forms of repayment, except in the event of withdrawal or liquidation;

(b) the claims accumulated by *creditors* would be fully liquid for balance-of-payments settlements with any member, but would not be convertible on sight into gold metal. Thus, later transfers of such reserve claims among members would not create the types of problems raised by similar transfers of reserve currencies among countries with different preferences as to reserve composition (paragraph II B 2 above).

4. *Regional arrangements.*

Multilateral arrangements of a similar character can also be organized among a limited number of countries, as long as the group includes sufficient commitments by *actual* surplus countries to preserve a wide acceptability of the fiduciary reserves created thereby. The failure of the sterling area to meet this latter requirement was met, in recent years, by the cooperation of other countries — non-members of the sterling area — in various schemes of central-bank assistance.

Regional cooperation of this sort is likely to develop further, in EEC and in Central and Latin America particularly, and may provide a useful adjunct to worldwide arrangements insofar as it can elicit broader credit commitments and underlying policy coordination commitments among members than are yet negotiable in a worldwide context.

III. Concluding Questions and Tentative Answers

A. At an earlier meeting, nearly three years ago, our " group agreed to distinguish three major problems concerning the present international monetary system:

1. the problem of payments adjustment, deriving from the need for correcting persistent imbalances in the payments position of individual countries;

2. the problem of international liquidity, connected with the need for long-run adaptation of the total volume of world reserves to the full potentialities of non-inflationary economic growth; and

3. the problem of confidence in reserve media, implied in the need for avoiding sudden switches between different reserve media."

It also stressed that these three "problems of payments adjustment, international liquidity, and confidence in reserve media are closely interrelated."

Finally, it expressed a clear consensus on the view that "the protection of the large outstanding foreign-exchange component of the world reserve pool against sudden or massive conversions into gold should receive a high order of priority." (5)

B. The last report of the Group of Ten (July 1966) also recognized these three problems, but curiously focussed most of its attention on the least urgent and most controversial (i.e. specific proposals for increasing international liquidity in the future) rather than on the more urgent and negotiable problem of protecting already existing levels of liquidity against de-stabilizing gold conversions.

Rather than bringing out into the open the basic issues that are blocking concrete agreement on contingency planning for reserve increases, the report tended to bury them, diplomatically, under a mass of technicalities regarding the choice between alternative procedures.

Finally, the problem of the "adjustment process", although referred to also in the report of the Deputies, was essentially passed on to a different group (the so-called Working Party No. 3 of the Economic Policy Committee of the OECD) (6). An unfortunate by-product of this procedural division of work was to preclude sufficient emphasis on the "close interrelationship" between the three major problems, and particularly on the dependence of agreement on "concerted reserve increases" upon parallel agreements concerning the preservation and strengthening of the balance-of-payments adjustment pressures on countries experiencing persistent surpluses or deficits in their balances of payments.

(5) *International Monetary Arrangements: the Problem of Choice.* Report on the Deliberations of an International Study Group of 32 Economists (Princeton, 1964), pp. 20, 36 and 102.

(6) The report of this Working Party was published in August 1966 under the title: *The Balance of Payments Adjustment Process.*

C. I would submit the following suggestions as most susceptible to break the deadlock into which the chances for wide and meaningful agreement now seem to have strayed.

1. Procedurally, priority should be given, at this stage, to an examination of the measures needed to protect *already existing reserve levels* against unnecessary and destabilizing gold conversions. Agreement on this urgent problem should be easier to reach in relatively short order than on the more complex and divisive issues raised by the long-term problem of concerted increases in fiduciary reserves in the future. This second problem could then be tackled in a better negotiating climate than is now the case, and without the undue hurry imposed upon the reserve-center countries by the threat of further gold conversions, speculative capital movements, and exchange crises. Moreover, its eventual solution could be greatly guided and helped by the machinery already put in place to avoid *declines* in existing reserve levels, and which could easily be adjusted, when the time comes, to produce desirable *increases* in reserves (7).

2. Such an agreement, however, would be greatly helped by the clarification of the status of national reserve currencies — primarily dollars and pounds — in future settlements. Reluctant dollar and sterling holders might indeed hesitate to contribute to the consolidation of existing balances, even in order to avoid a crisis, lest such consolidation encourage new dollar and sterling accumulation containing the seeds of further crises and recurrent calls for new consolidations in the future.

Some agreement in this respect would be even more vital for the later negotiability of firm and sizable commitments to the concerted creation of fiduciary assets. Prospective surplus countries, concerned about the inflationary potential of arbitrary reserve increases, will legitimately wish, first of all, to make sure that such concerted reserve increases do not add further fuel to the inflationary pressures associated with simultaneous, and now unpredictable, increases in the accumulation of reserve currencies as part of the global reserve pool.

Secondly, they will also be justifiably concerned with the interference which unregulated accumulation of reserve currencies has

(7) For more concrete suggestions on this first point, see the second of the two papers referred to in footnote 1, p. 109 above.

often run in the past, and might continue to run in the future, with the smooth functioning of the adjustment process. My 1959 proposals for international monetary reform were widely criticized, in conservative circles, for their failure to pay sufficient heed to this aspect of the problem. It is true indeed that I discussed, at that time, the need for reform primarily — although not exclusively (8) — in terms of the overall pace of needed reserve growth. The considerations developed in Section II above, however, clearly indicate that the defects of the gold-exchange standard with respect to the *adjustment mechanism* greatly strengthen the argument, and would even constitute by themselves alone a most compelling case for fundamental reforms. Excessive accumulation of dollar and/or sterling reserves may weaken unduly at times the pressures for corrective policies by the reserve-center countries, and perpetuate deficits imposing unwanted inflationary pressures on other countries. On the other hand, such excessive accumulation may finally lead to, and be followed by, wanton conversions of such assets from one reserve currency into another or into gold, and impose thereby unbearable strains on the reserve-currency debtors and on the world reserve structure.

3. Any contingency planning for concerted, international creation of additional fiduciary reserves should also be directed at strengthening, rather than weakening, adjustment pressures, for creditors as well as debtors, and at directing them toward compatible and agreed policies.

This principle is directly contravened by the large degree of automaticity proposed by the Group of Ten concerning both the initial distributive allocation of new reserve units and their later use in settlements. Deficit countries would be given thereby additional financing facilities to elude readjustment pressures and persevere in policies which may be deemed unacceptably damaging by the very countries called upon to finance them. Although attractive, at first view, to the less developed countries, this proposed relaxation of traditional IMF standards would fail to meet their most vital and legitimate concerns. The lion's share of the new reserves (about 75%) would be allocated to the developed world, and only a minor fraction (25%) to the less developed countries. Even more important is

(8) This should be clear to any reader of the opening pages (4-8) of *Gold and the Dollar Crisis*.

the fact that such a system would enable developed countries to accumulate " unearned " reserves, rather than have to earn them through transfers of real resources to the undercapitalized countries.

The main interest of the developing countries as well as of other deficit countries — such as the United States today — should be:

(a) to strengthen adjustment pressures on the surplus countries by forcing them to accept partial settlement, at least, of their surpluses in the form of reserve deposits with an international monetary institution, such as the IMF; and

(b) to authorize this institution to preserve the traditional link between fiduciary reserve creation and development financing — formerly assumed by the reserve-center countries — by channeling some of its expanded lending potential into investments in IBRD obligations, for instance, and on the major money markets specialized in such international financing.

In other words, deficit countries should not be given the right, through automatic financing, of imposing unwanted inflationary pressures upon the surplus countries. The latter, however, should be denied the right — which they now enjoy — to impose deflationary pressures upon the others through unsustainable gold-metal settlements. They should be forced *either* to reduce their surpluses — through more liberal import or lending policies — *or* to contribute to their international financing through the accumulation of reserve deposits with the Fund.

I am well aware that this would involve a difficult and " agonizing reappraisal " of the semi-consensus reached last year by the Group of Ten. Let us not forget, however, that this was the result of highly haphazard negotiating tactics, initially inspired by the desire to exclude the less developed countries from participation in the system, and to meet the French halfway by accepting the so-called CRU technique as a framework for needed reforms. Both of these motives have long disappeared with the recognition that developing countries should be included in any scheme of reserve creation and with the French total repudiation of CRU proposals originally put forth by them.

D. These broad considerations should guide the technical measures to be adopted with relation to each of the three types of reserve assets.

1. *Gold*: Gold is bound to be eventually demonetized internationally, as it has long been nationally. The only rational and operational justification for its survival as a reserve asset is the absence of international agreement on the setting up of an alternative form of reserve holdings. As long as such agreement is not reached, gold reserves will retain their role as the main practical alternative to foreign-exchange reserves, i.e. to the acceptance of *national* currencies — dollars and/or sterling, in fact — as *international* reserves, and to the transfers of sovereignty which this entails. After agreement is reached on a new type of international reserve asset, gold will retain a gradually tapering-off role in the system, until all countries have acquired sufficient familiarity with, and confidence in, the new reserve asset.

During this transition period, the main actions to be taken should be:

(a) to make clear to speculators that the new reserve asset commands sufficient acceptance to provide an alternative to gold purchases by central banks, and that the latter are even ready to dispose of some of their large present holdings to the extent necessary to control, in any way they wish, price fluctuations in the market;

(b) to multilateralize (through an enlarged Gold Pool, or a Gold Conversion Acount, or the IMF itself) the responsibility for gold conversions and coordinate the market interventions called for under (a) (9).

2. *Foreign Exchange*: Foreign-exchange assets will inevitably retain a role as working balances for stabilization interventions by central banks in the foreign-exchange market, as long at least as the use of the new reserve asset is reserved for central banks themselves, and barred from circulation among private traders and bankers (since such circulation might undermine and displace national currencies in domestic, as well as in international, settlements and be therefore unacceptable, at this stage of world history, to the national authorities of our so-called " sovereign " states). While such working balances can theoretically be held in any currency whatsoever, widely traded

(9) On this and other suggestions, see my report to the Economic Commission for Latin America: " International Monetary Reform ", *Economic Bulletin for Latin America* (United Nations), April 1966, pp. 10-41.

currencies, such as sterling and primarily the dollar, will undoubtedly continue to play, *de facto*, an overwhelming role in this respect.

Accumulation as well as liquidation of foreign-exchange reserves beyond working-balance levels, however, should either be barred, or at least brought under international controls similar to those applying to the creation and extinction of the new reserve assets discussed under (3) below. Whatever amounts are accumulated by international agreement should remain fully usable in settlements — and therefore automatically accepted in payment by the surplus countries — but should also be extinguishable — i.e. presented to the debtor country for gold payment — only by international agreement, rather than at the unpredictable whim of individual holders.

Some exceptions to this general principle might be unescapable, and indeed desirable, at least in the immediate future, to preserve the traditional functioning of major money centers. Reserves borrowed from such centers might be retained in the currency of the center until actually used in settlements, rather than converted into gold as soon as they exceed normal working balances. This exception to the " multilateral surveillance of all forms of reserve creation and deficit financing " advocated in the very first report of the Group of Ten deputies (August 1964) would be unlikely to have a major quantitative impact on the international reserve system as such. Reserves accumulated in this fashion could, moreover, be taken into account in the decisions called forth under (3) below.

3. *Internationally-Created Fiduciary Reserves*: Current discussions about the creation of a third type of reserve asset often tend to obfuscate the fact that such a type of reserve already exists: the so-called " gold and super-gold tranches " in the IMF, more recently dubbed " reserve positions in the Fund ". Similarly, they overemphasize the technical differences between proposed " reserve units " and " special reserve drawing rights ".

The real issues are quite different and are briefly commented on below.

(a) *Overall amount of reserve creation*: The proposals of the Group of Ten in this respect do not differ substantially from my original proposals in *Gold and the Dollar Crisis* and do not call for additional comments, except on one point. The " activation " of contingency planning should depend on the recognized need for world reserve creation rather than on the success or failure of U.S. and/or U.K. readjustment policies. New reserves might have to be

created, not to expand reserve levels, but for the more modest purpose of preserving them against the destabilizing impact of wholesale gold conversions of outstanding foreign-exchange balances by central banks.

(b) *Participation and voting rights*: Participation should not be limited to an arbitrarily defined group of " good " or " sound " countries. All countries in good standing with the IMF should participate in the decisions, but with voting rights reflecting — to a much fairer extent than is now the case — their effective contributions to the Fund.

(c) *Strengthening of the adiustment process*: The strengthening of the adjustment process, both for creditors and debtors, should bar any general, automatic allocation of unconditional drawing rights or reserve units as manna from heaven.

The Fund should support, through its loans and investments, the adoption of policies deemed appropriate to its long-term objectives, but should not finance or underwrite automatically national policies contrary to such objectives and unacceptable to other members.

These credits need not be made entirely, as is now the case, in the form of medium-term loans with fixed maturities of three to five years. Longer-term assistance might be provided, in appropriate cases, particularly indirectly through IMF investments helping to expand the lending potential of international institutions (such as the IBRD) and financial markets specialized in longer-term lending. The occasional reshuffling of this investment portfolio among the financial markets used as intermediaries might be used to support the general stabilization objectives of the Fund. The Fund could, for instance, shift its investments from countries whose reserves increase to countries whose reserves decline as the consequence of private capital movements, such as contemplated in the preamble to the General Arrangements to Borrow.

(d) *Multilateral usability of IMF credits*: The complicated " guesstimates " involved in the Group of Ten proposals for multiple " holding limits " or " lines of credit " designed to guarantee the multilateral usability of Fund credits would be totally unnecessary if all countries — or even merely the major prospective surplus countries — accepted the far simpler, safer, and commonsense criteria of holding an agreed proportion of their global reserves in the form of Fund deposits.

A rational view of such commitments should make them more easily negotiable in fact than the blinder and arbitrary commitments suggested by the Ten. They would, moreover, serve also the needed purpose — stressed under C3 above — of strengthening adjustment pressures on the creditor countries.

E. The traditional haggling process involved in the reconciliation of *incompatible* national " negotiating positions " multiplies the difficulties of reaching any rational solution primarily inspired by the *converging* interests of all countries in a sensible international monetary system. The final success of the present negotiations might be greatly facilitated by the adoption of procedures similar to those which proved so fruitful in the EPU and EEC negotiations. A small group of experts should be appointed *jointly* by the negotiating countries and charged with the exploration and elaboration of concrete proposals to be submitted later for final approval, rejection, or amendments by a full-bodied conference of all the prospective signatory countries. These experts would be instructed, of course, to develop proposals likely to prove acceptable to all countries, even though only as " second-best " to some, but would not be subject to daily " instructions " reflecting the maximum, but incompatible, objectives of their governments.

This would, if past experience is a guide, facilitate agreement at the expert level along the lines of the general, rather than narrowly national, interests of all the participants. No country could, of course, be expected to underwrite in advance the recommendations to be developed by the group. Formal action at a ministerial, or plenipotentiary, level and later ratification in accordance with the constitutional processes of each country would remain necessary. Agreement would be more likely, however, even in these higher instances, as any sensible proposals developed by the expert group could hardly be more damaging to any country than the only alternative to agreement, i.e. the further decay, or the utter collapse, of the world monetary system.

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APPENDIX

TABLE 4

THE STRUCTURE AND DISTRIBUTION OF MONETARY RESERVES, 1937-1966
(in millions of U. S. dollars)

End of Year	1937	1949	1959	1964	1965	1966
I. *World Gross Reserves*	27,655	45,515	57,325	68,445	69,800	71,050
A. *Monetary Gold*	25,290	34,975	40,195	43,060	43,300	43,210
1. Countries	25,285	33,470	37,880	40,890	41,925	40,930
2. International Organizations	5	1,505	2,315	2,170	1,375	2,280
B. *IMF-BIS Transactions*	−5	155	940	1,985	4,000	4,050
1. EPU-EF-BIS Gold (−)	−5	−54	94	7	494	373
2. IMF: equally measured by *either*	x	207	844	1,976	3,507	3,679
a. Net Loans + Investments	x		908	2,236	3,825	4,075
b. Surplus (−)	x		−64	−260	−317	−397
or						
c. IMF Reserve Positions	x	1,658	3,250	4,155	5,376	6,331
d. IMF Gold Holdings (−)	x	−1,451	−2,406	−2,179	−1,869	−2,652
C. *Foreign Exchange*	2,370	10,390	16,195	23,400	22,500	23,785
1. U.S. Liabilities	430	3,025	10,390	15,975	16,020	15,065
2. U.K. Liabilities	1,700	6,440	6,225	7,065	6,745	7,460
3. Euro-currencies and discrepancies	240	925	−420	365	−265	1,260
II. *Net Reserves of Reserve Centers*	14,560	17,330	7,610	−5,730	−6,795	−8,725
A. *Gold*	16,930	25,884	22,021	17,607	16,330	15,175
B. *IMF (Net)*	x	1,403	1,562	−547	−2,145	−2,593
1. Reserve Positions	x	1,461	2,062	769	604	326
2. Liabilities (−)	x	−58	−500	−1,316	−2,749	−2,919
C. *Foreign Exchange (Net)*	−2,370	−9,960	−15,975	−22,790	−20,980	−21,305
1. Assets	—	431	222	611	1,520	2,480
2. Liabilities (−)	−2,370	−10,390	−16,195	−23,400	−22,500	−23,785
a. Recorded $ and £ = −(IC 1+2)	−2,130	−9,465	−16,615	−23,035	−22,765	−22,525
b. Euro-currencies and discrepancies = −IC 3	−240	−925	420	−365	265	−1,260
III. *Other Countries (Gross)*	10,725	17,740	33,020	49,460	51,345	53,070
A. Gold = IA 1 − IIA	8,355	7,585	15,860	23,285	25,595	25,755
B. IMF Reserve Positions = IB 2c − IIB 1	x	195	1,190	3,385	4,770	6,005
C. Foreign Exchange = IC − IIC 1	2,370	9,960	15,970	22,790	20,980	21,305

Sources and Notes:

1. All the above estimates are derived from the International Liquidity Tables of *International Financial Statistics* (April 1967, pp. 14-18, beginning with 1959, and the latest annual Supplement for earlier years; for other 1937 sources and for earlier years, see also my study on *The Evolution of the International Monetary System: Historical Reappraisal and Future Perspectives*, Princeton, 1964). Note, however, that:

(a) U.S. liabilities (line IC 1) differ slightly from the IFS series, and are based on Tables 3 and 7 of the balance-of-payments articles in the June 1966 and March 1967 issues of *The Survey of Current Business*.

(b) U.K. liabilities (line IC 2) have been recalculated for 1964 from the March 1967 issue of the *Bank of England Quarterly Bulletin*, and pre-1959 estimates have been personally calculated on as comparable a basis as possible.

(c) Line IC 3 is derived residually as the excess of line IC over the sum of lines IC 1 and 2. Its large variations in 1965 and 1966 are due in part to different accounting of swap arrangements by the creditor and debtor countries (see p. 347 of April 1967 IFS), to the incorporation of $885 million of dollar securities into official reserves by the United Kingdom, in the first quarter of 1966, and to large-scale shifts of central banks' foreign-exchange holdings to the Euro-currencies markets in the latter part of 1966.

2. The BIS gold holdings (−) included in line IB 1 are shown net of the gold deposits with the BIS in order to avoid double-counting, since such deposits are usually included in the gold reserves reported by the depositing countries. This accounts for the fact that entries may be positive as well as negative.

3. Note that line I is *not* the sum of lines II and III, but of lines IIA, IIB 1, IIC 1, and III, and that most totals are rounded up to the next $5 million. Estimates of the *net* reserves of countries other than reserve centers would require time-consuming calculation and would differ only slightly from their gross reserves. Their liabilities to the IMF, however, can be obtained by deducting line IIB 2 from line IB 2a ($1,156 million as of the end of 1966). Note also that *all* foreign-exchange liabilities have been incorrectly ascribed to reserve centers, under the assumption that *most* of the discrepancy between the reporting of foreign-exchange assets and that of U.S. and U.K. reserve liabilities arises from Euro-dollar and Euro-sterling liabilities to foreign monetary authorities.

Brief Comments:

I. *World Gross Reserves* are broken down into its three sources: monetary gold (A), concerted fiduciary reserve creation by international organizations (B), and fiduciary reserve creation resulting from the widespread acceptance of the *national* liabilities of reserve centers — primarily the U.S. and the U.K. — as *international* reserves (C).

II. and III. World reserves were about evenly divided between the reserve centers and other countries in 1949 (about $17.5 billion), but have declined to *minus* $8.7 billion for the first in 1966, while increasing to $53.1 billion for the latter. This contrasting evolution was possible only because of the operation of the gold-exchange standard and was indeed indispensable to the satisfactory functioning of the system as a provider of world reserves. Yet, it obviously could not continue indefinitely, and is at the root of the present international monetary crisis.

Table 5

THE STRUCTURE OF GROSS RESERVES, 1937-1966
(in % of each area's total reserves)

End of Year	1937	1949	1959	1964	1965	1966
I. *All Countries*	100	100	100	100	100	100
A. Gold	91	74	66	60	60	58
B. Reserve Positions in IMF	x	3	6	6	8	9
C. Foreign Exchange	9	23	28	34	32	33
1. Dollars	2	7	18	23	23	21
2. Sterling	6	14	11	10	9	10
3. Euro-currencies and discrepancies	1	2	−1	1	−1	2
II. *Reserve Centers*	100	100	100	100	100	100
A. Gold	100	93	91	93	89	84
B. Reserve Positions in IMF	x	5	8	4	3	2
C. Foreign Exchange	—	2	1	3	8	14
III. *Other Countries*	100	100	100	100	100	100
A. Gold	78	43	48	47	50	49
B. Reserve Positions in IMF	x	1	4	7	9	11
C. Foreign Exchange	22	56	48	46	41	40

Sources and Notes: See Table 4.

Brief Comments:

1. *Line IIC*: the substantial increase in the foreign-exchange holdings of reserve centers are mostly made up, of course, of *reciprocal* holdings of sterling by the U.S. and dollars by the U.K., increasing the *gross* reserves of the group.

2. *Lines IIIA, B, and C*: These lines show a gradual but pronounced shift from gold (or "commodity") reserves (line A) to fiduciary reserves (lines B and C). These fiduciary reserves were first accumulated in various *national* currencies (primarily sterling and, later, dollars). At a second stage, they shifted to *centralized* reserve holdings in the form of guaranteed claims on the IMF (line B).

This evolution is still in process, but parallels closely a similar shift, in the national monetary systems, from commodity money (gold and silver) to currencies and deposits issued by several private banks, and later on to *centralized* reserve holdings with a single national bank in each country.

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