Credit Facilities or Reserve Allotments?

In the international discussions about a contingency plan for the creation of "international liquidity", the most controversial question has been whether extension of credit facilities or deliberate creation and distribution of reserve units would be the better solution.

A few of the experts are indifferent, holding that there are no essential differences between the two techniques. Some, however, are zealous partisans of one of the proposed alternatives, convinced that the other would be either less likely to achieve desired objectives or more likely to have undesirable side-effects. Most of the experts, especially of the Group of Ten, seem willing to accept that proposal

which is more likely to gain unanimous consent.

Fronts have been shifting over the two years during which the alternatives have been debated. Changes in the official positions of the participating governments have been frequent and drastic. France, the first and foremost advocate of the creation of an additional reserve asset — the Collective Reserve Unit, CRU — has become the chief opponent of this or any similar proposal. The convertibility of some participants in the negotiations of the Group of Ten has been remarkable: at one time, an overwhelming majority — 17 out of 20, according to creditable reports — favored a plan for the deliberate creation of reserve assets, but a few months later most of them were converted to the alternative, the extension of credit facilities. Switches in official positions regarding different techniques of reserve creation have become as notable as the switches some monetary authorities have made in their official holdings of different reserve media.

Imperfect Substitutes

Plans for the extension of credit facilities to national monetary authorities and plans for the deliberate creation and distribution of reserve units are treated as alternatives because they are regarded as substitutes in achieving certain objectives. The only intelligent way of assessing the weights of the arguments for or against one or the other of the alternatives is to examine whatever differences there may be in their modus operandi and in the most probable effects and side-effects. In other words, one has to examine whether the alternatives are perfect or imperfect substitutes.

Umbrellas and raincoats are substitutes: both are gear protecting against rain. This does not mean that they are perfect substitutes in every respect. While either of them will keep you dry, a raincoat will also keep you warm — which may be desirable in cool weather but undesirable when it is hot; moreover, an umbrella may be troublesome when it is windy or when you have to carry several parcels; on the other hand, it may give you support in walking and may help you fend off or frighten away an unfriendly dog. The analogy of the umbrella and the raincoat is intended as a warning to him who, impressed with the substitutability of two instruments in one function, overlooks that they may not equally perform in other functions.

Just as umbrella and raincoat can serve equally well to keep a man dry when he is caught outdoors in a heavy rain, the use of credit facilities and the receipt of new reserve units can serve equally well to keep a country liquid when it is caught in a heavy drain on its foreign reserves. A country with depleted foreign reserves, faced with an excess demand for foreign currencies in its foreignexchange market, and with an excess supply of its own currency in foreign-exchange markets abroad, will be enabled, for the time being, to meet the excess demand and maintain the foreign value of its currency without resort to payments restrictions if it obtains foreign means of payment, either with or without obligation to repay. The availability of foreign means of payment can be secured either way - through extension of credit facilities or through distribution of new reserve units. In this respect, the two methods of creating international liquidity are equivalent. In several other respects, however, they are not.

Different Kinds of Credit Facilities

The differences between extension of credit and distribution of new reserves cannot be meaningfully discussed before it is understood that there can be several variants of each technique of liquidity creation and some of the variants may have the purpose of reducing the differences. A country may spend its owned reserves without submitting to stipulations or conditions and without concern about repayment obligations; moreover, deliberately created reserves need not be denominated in any national currency. Any and all of these qualities of reserve units can be matched or approached by credit facilities of the more conventional sort if special provisions are made, perhaps somewhat like the following:

- 1) By making drawing rights "unconditional", leaving it to the borrowing country whether it wishes to exercise its rights or not, while the lending institution the International Monetary Fund, IMF has no discretion in the matter, one can endow the credit facility with some of the quality of deliberately created reserves of being usable entirely upon the discretion of the country that owns them.
- 2) By making the loans (drawings, overdrafts) repayable only after five or more years, one can endow the credit facility with some of the quality of owned reserves of enabling the owner to spend without worrying about his ability to replenish them during the next years.
- 3) By changing drawing rights into overdraft facilities, that is, by transforming rights to draw foreign currencies from a pool held by the international agency into rights to overdraw a deposit account carried with the agency and denominated in reserve units, one can endow the credit facility with some of the quality of reserve units of being neither national foreign currencies nor bundles of national currencies but, instead, new reserve media freely transferable among central banks.

Even with all these arrangements — to create unconditional rights to very-long-term credits in the form of overdrafts denominated in new units — there would still remain several differences between extension of credit facilities and deliberate creation and distribution of new reserve units. Before discussing these differences, we ought to make sure that we fully understand the nature of reserve units and the mode of creating them.

Creating New Reserve Units

Although the experts studying this method of creating reserves have not decided whether the function of operating the new system should be assigned to the IMF or an affiliate or a special depart138

ment (or trust account) of the IMF, we assume here that all book-keeping in connection with its operation will be separated from the old accounts. We shall use the initials IRA, for International Reserve Agency, as the heading of the balance sheet exhibiting the new accounts. For purposes of illustration we assume that under the agreement new reserves in an initial amount of one billion dollars are to be created, and that its distribution among the participating countries will be in the proportion of their IMF quotas.

Each country will send to the IRA its own national "currency" in an amount of its share in the total amount to be created at this time and will receive in exchange a credit on its reserve account with the IRA denominated in reserve units, RU's. For example, since Italy's share in the total of quotas in the IMF is 3.2 per cent and the initial amount of reserve units is assumed to be i billion RU (the equivalent of 1 billion U.S. dollars), Italy will participate in the creation and distribution of this amount of reserves to the extent of 32 million dollars. With one dollar equal to 625 lire, Italy will "deposit" with the IRA an amount of 20,000 million lire and will be credited on its account with 32 million reserve units. However, the lire handed over to the IRA will be neither banknotes nor sight liabilities of any sort, but rather a debt without stated maturity, payable only when Italy wishes to withdraw from the organization or when the IRA (or IMF) decides to liquidate and dissolve. On the other hand, the reserve units - Italy's credit balance on its account with the IRA -- constitute deposit liabilities of the Reserve Agency, transferable upon demand to any other central bank.

The transaction from the point of view of Italy is an exchange of a "dormant debt" for a liquid claim; from the point of view of the Reserve Agency it is an exchange of a current liability for a dormant claim — in a sense, a token claim carried on the books in order to satisfy banking traditions, accounting principles, and legal rules relevant in the case of liquidation. However, Italy's deposit balance on its account with the IRA will be a genuine foreign reserve, because other central banks will stand ready to accept such balances in exchange for their own national currencies.

In the same manner, the United Kingdom, having 12.6 per cent of the total IMF quotas, will participate in the reserve creation to the tune of 126 million dollars. With one pound sterling equal to 2.80 dollars, the United Kingdom will issue to the IRA a nonmaturing debt security of 45 million pounds and will receive in exchange

a credit balance of 126 million RU. The United States, likewise, will issue a dormant debt to the IRA in an amount of 266 million, its quota being 26.6 per cent of the total, and will receive a reserve balance of 266 million RU.

The IRA will carry on the assets side of its books claims against all participating countries (central banks), denominated in the different national currencies but neither presented for payment or conversion (except in the case of the withdrawal of a country from the system or of the liquidation of the organization) nor sold, lent, or transferred to others. On the liabilities side of its books will be the deposit claims of the participating countries (central banks), transferable on demand among the members of the group, though never to outsiders or private parties.

The Balance Sheets of Central Banks

The balance sheets of the participating central banks will, of course, mirror the balance sheet of the IRA. The deposit balances in the IRA will be reserve assets held by the central banks, and the dormant claims against them which the IRA carries as assets will be noncurrent liabilities of the central banks. These liabilities should be treated quite differently from their note issue, from their sight liabilities to commercial banks and others, and from any short-term or long-term debts to foreign or domestic creditors. In a way, the dormant liabilities of central banks to the IRA should be regarded as items on the liabilities side of their balance sheets similar in nature to their capital and surplus: the latter two items become significant only upon liquidation of the central banks, the former upon liquidation of the International Reserve Agency.

The balance sheets of the central banks will exhibit the reserve balances on their IRA accounts among the international and foreign assets, that is, together with their gold holdings and their holdings of convertible foreign exchange. That the deliberately created reserve units are clearly shown among assets of the central banks distinguishes this technique of creating international liquidity from the extension of credit facilities. Borrowing rights, even unconditional borrowing rights, cannot by usual accounting practices be shown as assets; lines of credit, overdraft facilities, or drawing rights—none of these sources of liquidity is shown in the balance sheet;

140

at best, there may be a footnote or memorandum item calling attention to the availability of funds when needed.

The different treatment of the two forms of newly created liquidity is regarded by some as of no significance. Others, however, consider it highly important. They attach importance to it because they believe that the central bankers (and the politicians on whose views and pressures the central bankers may depend) are more impressed with the current assets exhibited in their balance sheets than with footnotes and mere memorandum items. Whether these beliefs are justified is a factual question not easy to test. Even if the behavioral inclinations and propensities were ascertainable at one time, one could not be sure that the same inclinations and propensities would prevail at another.

This skeptical attitude about the predictability of political behavior may be commendable scientific caution, but it would prevent us from arriving at any practical judgment about the different effects of different institutions. We must evaluate whatever clues are available concerning the most probable political reactions to particular situations and events. Among such clues are the opinions expressed by some of the men whose reactions are relevant, that is, for the question in point, the central bankers themselves. It happens that a number of central bankers have expressed themselves to the effect that it would make a difference to their policies if all of their reserves were in the form of assets and that they are disinclined to treat borrowing rights as full-fledged reserves.

The Propensity to Spend

That the form in which liquid funds are available to a nation may influence its policies in particular situations seems quite plausible. Since few of us, writing or reading about the subject, have ever been governors of central banks, ministers of commerce, chancellors of the exchequer, or even members of parliament, the feeling of plausibility is probably due to an inescapable analogy with the behavior of a head of household or manager of business. For we can be almost certain that in our decisions to spend or not to spend, and to invest or not to invest, we are often influenced by the forms in which funds are available to us. To be able to write checks on a bank account with a sufficient balance is one thing; it is another to make use of a credit facility, say, a charge account in a large store or a credit card of a finance company. Reducing one's cash balance or increasing one's debts are different in some respects and the differences may affect decisions.

Perhaps one may say that such differences in behavior are irrational. Or one may find that the differences go in one direction for some persons and in the opposite direction for others — some people spending more freely if they have cash balances to run down, others if they can use credit to run up their debts. Or one may acknowledge that the differences are decisively in one direction, the possession of more cash being a more potent stimulus to spending than the assurance of borrowing facilities. (Whether one concludes that such stimulus is desirable or undesirable is another matter.)

Those who deny that there is any difference, holding that people are equally inclined or disinclined to run down their cash balances and to run up their debts, forget that different ways in which the cash and the credit are obtained by the decision makers may be important factors. If the analogy is to have any validity at all and to shed light on the question of new liquidity creation through either extension of credit facilities or distribution of additional reserve assets, one must make a similar distinction in considering the effects which additional cash or credit would have on personal decisions. Thus one must ask whether a head of household or manager of business would be likely to react equally or differently to an increase in his cash balance thanks to a distribution of some social dividend, and to an announcement that his line of credit had been increased enabling him to borrow more if he so desired.

Some persons (especially those who are affluent, liquid, and bearish at the same time) might use neither the cash nor the credit; others (especially those with urgent payment obligations) might use new credit just as eagerly as they would use new cash; but there would certainly be persons in a middle group, who would eagerly spend some of the new cash that accrued to them but would hesitate to incur larger debts. We conclude therefore that the propensity to spend out of a cash bonus received is greater than the propensity to spend out of a loan offered. It stands to reason that the difference will be the smaller the longer the term of the loan, and may disappear if the loan need never be repaid.

The Propensity to Stimulate Overspending

Having indulged at length in this purely analogical reasoning, we may now find that even the refined analogy employed was of questionable relevance. After all, both the spending behavior of a household and the investment behavior of a firm are different in essential respects from the lending and investment behavior of a central bank. Households and firms spend and invest money which they have earned or borrowed (or stolen or been given) but not themselves created (except if they are counterfeiters); central banks lend and invest money of their own creation and only later, as an indirect consequence or contingency, may they find themselves confronted with an excess demand for foreign exchange, or an excess supply of their currency in foreign-exchange markets abroad, causing them to sell foreign reserves, or buy back their own currency. Reduction of cash balances or increase in debts is an immediate concomitant of private spending and investing; reduction of net foreign reserves is only an indirect effect of a central bank's operations (if these are relatively more expansionary than those in other countries) and even this contingency can (in the short run) be averted or attenuated by governmental restrictions on imports, capital outflows, or foreign payments in general.

The effects of providing additional "international liquidity" to central banks may therefore be quite different from the effects of increasing the liquidity of private parties, certainly different enough to make the phrase "propensity to spend" unsuitable for the analysis of national policies. Since any monetary policy that may eventually lead to a loss of foreign reserves will even earlier produce consequences on the domestic scene - such as demand expansion, overemployment, wage boost, price inflation - it is quite possible that a central bank will accept increased liquidity and yet refrain from pursuing expansionary policies. A central bank determined to avoid inflations of credit, demand, incomes, and prices would keep additions to its foreign reserves untouched and additions to its international credit lines unused. In other words, the "propensity to stimulate and finance national overspending" may be zero in the case of a country in domestic as well as external balance.

On the other hand, where monetary and political authorities are dissatisfied with the rates of domestic production, employment,

investment, and growth and believe that matters could be helped by an expansion of effective demand, an increase in the "international liquidity position" of the country would encourage expansionary policies. This encouragement may well be the same whether the central bank receives an allotment of new reserve assets or an increase in its line of credit.

Is there again a middle group of countries that would react to a receipt of additional reserve assets with a more expansionary policy than they would be to a raise in credit lines? Countries heavily in debt to the Fund might hesitate to risk further increases in their repayment obligations, and might therefore want to avoid causing further payment deficits even if their borrowing limits were raised. The same countries might be less hesitant to risk losing additional reserves obtained from the IRA as their allotment without commitment to repay. Thus we arrive again at the conclusion that the free distribution of owned reserve assets could have a more expansionary influence than the extension of credit facilities to central banks. However, the middle group of central banks with differential reactions to credit facilities and to reserve assets is probably small relative to the two groups indifferent to the two techniques of providing additional liquidity. This is in contrast to our conclusion regarding the propensities of private spenders. There the differentially reacting middle group is probably dominant over the extreme groups whose rates of spending do not depend on whether they get more cash or more credit.

What we have called "encouragement of expansionary monetary policies" is often referred to as "reduction of discipline". Using these terms, we may summarize the preceding discussion by stating that the reduction of balance-of-payments discipline which may result from any provision of incremental international liquidity is probably less if countries are granted additional borrowing rights than if they are given additional reserve units in the same amounts. How much less, this is difficult to ascertain. But any such difference can be increased by appropriate "surveillance".

This may be seen as the greatest advantage of the credit-extension route to increased liquidity over the reserve-allotment route. Even if the new credit facilities are unconditional — because only then would central banks regard them as reliable elements of their reserve positions — the surveillance of international credit operations by international agencies and a group of national monetary author-

ities would reduce the danger that the creation of liquidity would unduly loosen balance-of-payments discipline among the nations.

Experts who in the discussions of monetary reform have placed major emphasis on the strengthening of monetary discipline and on prompter and more effective adjustment policies of countries in payments deficit are consistent in preferring the credit approach. If surveillance involves close observation of external transactions and internal policies of national monetary authorities as well as stern talks about financial contingencies and ways to avoid them, and if these talks become especially stern whenever a country intends to make use of its "unconditional" borrowing rights, then credit extension cum surveillance may be the scheme that can reconcile two conflicting objectives of international monetary reform: to provide more liquidity for the financing of payments deficits and to promote policies for the more rapid adjustment or correction of payments deficits.

The Propensity to Restrict Trade and Capital Flows

As just indicated, countries can pursue two kinds of policies to remove deficits in their foreign payments: adjustment, or general measures to align the ratios of domestic to foreign prices and incomes; and correctives, or selective measures affecting first and foremost specified sectors of the economy, particular industries, products or services, or types of capital.

There are two types of adjustment: exchange-rate adjustment and aggregate-demand adjustment. Thus, in a deficit country, adjustment means either reduction in the exchange value of its currency or reduction in the domestic level of prices and incomes relative to those abroad. Correctives take the form of higher tariffs, smaller quotas, special taxes or subsidies, and various controls and prohibitions. Under the conditions prevailing in most parts of the world, the total volume of trade and capital movements is more likely to be increased than reduced as a result of adjustment, but more often reduced than increased as a result of correctives. Thus, from the point of view of world production and trade, the use of correctives to restore balance in foreign payments is unfortunate. As a rule, correctives are injurious also to the country resorting to them, because a questionable success in reducing the payments deficit is bought

at a high cost through a less efficient allocation of the country's productive resources.

Pressure-group politics, however, regularly oppose adjustment measures and push for corrective measures. Exchange-rate adjustment is resisted by bankers and government officials; aggregate-demand adjustment is resisted by industrialists and labor leaders. Higher tariffs and smaller quotas, on the other hand, are always strongly demanded by special-interest groups, producers and workers in industries exposed to foreign competition. And to keep capital "at home" is a plank in the platforms of most parties in most countries.

Thus, any actual or potential deficit in a country's payments balance is quickly seized upon as potent campaign material by the high-tariff league, the low-quota union, and the keep-capital-at-home club. With legislators and cabinet ministers mostly unenlightened on economic principles but highly sensitive to political pressures and vociferous demands, restrictions on trade and capital seem to them the easiest way out. Where a payments deficit has been persistent but adjustment policies are regarded as too drastic, painful, and unpopular, resort to corrective measures is almost inevitable; and the line of least resistance usually leads to measures restricting imports of goods and exports of capital.

If countries prefer to combat imbalances of payments with restrictive correctives instead of policies of real adjustment, the calls for prompt and vigorous action to reduce deficits are misplaced. If deficit countries are not willing to sacrifice the attainment of such goals as full employment, accelerated growth, and fixed exchange rates to the objective of external balance, if the only instruments which governments are prepared to use in attempts to reduce payments deficits are restrictions on imports, capital movements, and foreign payments, then indeed one should not spur them on to impose these harmful restrictions. Conceivably, "discipline" and "surveillance" might be employed to change the countries' preferences from the use of administrative restrictions to the use of general "classical medicines". Surveillance combined with conditional borrowing facilities might succeed in this task. But if the drawing rights are to be unconditional and surveillance can at best be supplemented by moral suasion, it would be unduly optimistic to expect that "talks" with the borrowing countries could keep

Credit Facilities or Reserve Allotments?

them from adopting restrictions on the flows of goods and capital funds.

In these circumstances any higher degree of discipline under the credit approach — higher than under the reserve-allotment approach — might merely result in higher barriers to trade and capital movements. The concern about the imbalance of payments would not induce the classical restraints of national central-bank credit but, instead, restrictions on international trade and finance. The supposed advantage of the use of international credit facilities would thus turn into a disadvantage.

International monetary arrangements ought to be evaluated by the contribution they make toward the optimal use of world resources through facilitating international movements of goods, services, and capital funds. Any arrangement that liberalizes trade and payments makes a positive contribution; anything that hinders trade or payments directly or induces countries to put restrictions on the flow of goods, services, or funds makes a negative contribution to world prosperity.

Two Tasks: to Reduce Deficits and to Finance Deficits

Foreign reserves enable a country to finance deficits in its payments balance without reducing the foreign-exchange value of its currency. Arrangements to increase international liquidity may help participating countries to postpone adjustment and finance their deficits for longer periods. But since surplus countries will not go on forever giving up productive resources to countries that take no measures to stop their overspending, the latter must sooner or later reduce and remove their deficits. Some of the reformers try to design techniques which at the same time finance deficits and provide a stimulus for the authorities to take measures that will reduce deficits in due course. Believing that the credit-facilities approach can do this, and the reserve-allotment approach cannot, they advocate the former and reject the latter.

What has been widely misunderstood in this context is that the increase of international liquidity through the creation and distribution of new reserve units can serve a purpose that cannot be served by the extension of drawing rights or overdraft facilities. This purpose is to reduce the total of deficits of all countries through the very act of creation and distribution of reserve assets, quite apart

from any subsequent financing of any remaining deficits and from any still more distant measures to reduce such remaining deficits.

The role of reserve creation in reducing deficits and the role of created reserves in financing deficits have not been adequately distinguished in the discussions by the official experts. The issues involved can be clarified only after recalling some principles of balance-of-payments statistics.

How Total Surpluses May Exceed Total Deficits

Even economists of repute have been overheard making what they considered a self-evident statement to the effect that, with proper accounting techniques uniformly applied in all countries, the sum total of surpluses must equal the sum total of deficits in the balances of payments of all countries. This is far from self-evident; as a matter of fact and of logic, it is false. The statement will be true only if one uses very specific definitions and assumes very unusual conditions.

We shall not take the time here to show why, with the most widely used definitions of surplus and deficit uniformly and consistently applied, the sum of surpluses will ordinarily exceed or fall short of the sum of deficits of all countries. We shall confine ourselves to those definitions and assumptions which are most relevant to the issues before us. Since we are interested in the official reserves held by monetary authorities, we shall define a surplus in the balance of payments as that excess of "receipts" over "payments" ("above the line") which is offset by an increase in official monetary reserves ("below the line"). A deficit, conversely, will be such a constellation "above the line" as is offset by a reduction in official monetary reserves ("below the line"). If these definitions are uniformly applied, the sum of surpluses will equal the sum of deficits only in those years in which total monetary reserves have not changed. That is to say, the total surpluses of all surplus countries will equal the total deficits of all deficit countries if, and only if, the official monetary reserves of all countries together on December 31 are exactly equal in amount to the reserves they held on January 1.

It should now be clear that the saying "one country's surplus is another country's deficit" is wrong when world reserves are increasing. Only when total reserves remain unchanged will it be true that countries can gain no more reserves than are lost by others.

As long as all gains of reserves are losses of reserves by others, the surpluses of some are the deficits of others. However, in any period in which there was a net gain of total reserves, some countries must have gained what no other country has lost; the sum of surpluses in this case must, by logical necessity, exceed the sum of deficits.

Students of international trade are often required to demonstrate these principles of balance-of-payments accounting for the case of private and official purchases of gold. Assume first that the entire gold production is absorbed by private buyers for industrial or speculative purposes. The exports of gold from gold-producing countries will be part of their exports of merchandise, and the imports of gold by industrial users and private hoarders will be part of their countries' imports of merchandise. Now change the assumption and have some of the gold purchased by monetary authorities as additions to their official reserves. While the exports of newly mined gold will still be part of the trade balance of the gold-producing countries, the gold acquisitions by monetary authorities will not be entered as imports of merchandise but instead as additions to official reserves. These countries will have surpluses not matched by other countries' deficits.

The Importance of Increases in World Reserves

That increases in world monetary reserves constitute — by definition — net surpluses in the aggregate payments balances of the world has several implications. I regard the implications for freer trade and freer payments as the most important.

Protectionists, nationalists, and control-minded politicians are always at work trying to have restrictions on imports, capital movements, and foreign payments introduced or escalated. The success or failure of their political pressures depends often on whether they can point to "balance-of-payments reasons" for the advocated restrictions and controls. When there is a series of fat surpluses, the free-traders, internationalists, and noninterventionists in their countries will be able to hold the restrictionists at bay. However, in times of conspicuous deficits in the balance of payments, resistance to the pressures weakens, barriers to imports are raised and controls on payments are made more stringent.

When world monetary reserves increase, there will be fewer deficit countries, smaller deficits, more surplus countries, and larger

surpluses. In consequence, there will be stronger resistance to restrictions and better chances for liberalization of trade and payments.

If no adequate annual increases in monetary gold reserves can be expected, governments interested in world trade and capital movements should search for some other suitable reserve asset, preferably one that can be increased systematically and at no cost. Reserve units issued by an IRA could fill this role. Indeed, these fiduciary reserves would have several advantages over gold; but, for the moment, let us focus on their place in balance-of-payments statistics.

The New Reserve Units in Balance-of-Payments Accounting

When we discussed the creation of new reserve units, we made it clear that this was an exchange of debts between the IRA and the central bank of each participating country. The central bank was to issue obligations without maturity, and was to receive in return a demand deposit with the IRA. When we discussed the place of these mutual debts and claims on the balance sheet of the central bank, we found that the sight liability of the IRA would figure among the liquid assets of the central bank while the bank's debt to the IRA would be shown as a dormant liability, next to the similarly dormant liabilities to the holders of the central-bank shares. In recalling these details, we have all but solved the question of the proper accounting in the country's balance of payments.

The increased liability to the IRA would be entered above the line as an inflow of long-term capital (long-term because this undated debt will not be repayable except if the country withdraws or if the IRA is liquidated). The increased deposit balance in the IRA would be entered below the line as an increase in the official monetary reserve (transferable on demand to other central banks). Thus, the balance of payments of the country would be improved by the amount of the allotment of new reserve units. In order to make sure that this important purpose of the operation is attained, the agreed rules of the game should stipulate that all participating countries will conform with this principle of balance-of-payments accounting.

A numerical example may help us comprehend the quantitative aspects of the scheme. For the sake of simplicity we shall assume the world to consist of only twelve countries, all participating in the reserve creation, all having the same quota. In the table below,

we start with an arbitrary dispersion of surpluses and deficits, under the assumption that no monetary reserves are created and none destroyed. The total of surpluses and the total of deficits are 2,400 million dollars each, so that 2,400 million dollars in reserves are transferred from seven deficit countries to four surplus countries. Now we assume that the twelve countries agree to create 1,200 million dollars worth of reserve units and to distribute 100 million to each. The results are shown side by side: there will be two more surplus countries, two less deficit countries, total surpluses will have increased by 550 and total deficits decreased by 650 million. Balance-of-payments pressures will have disappeared or substantially diminished in several countries.

Country	Total Reserves Increased by			
	0		1,200	
	Surplus	Deficit	Surplus	Deficit
A	1,000		1,100	
B	700		800	
c	500		боо	
D ,	200		300	
E	Brown B		100	
F		50	50	
G	:	100	_	_
н		150]	50
I		200		100
J		300		200
к		700		600
L		900		800
	2,400	2,400	2,950	1,750

If we assume that the allotment of new reserves took place at the end of the year, so that the actual settlements of balances were not made with the new reserve units, we can say that the creation of reserves has reduced the deficits but that the newly created reserves have not financed any deficits. Of course, they are now available to finance future deficits.

This function of reserve allotments, to reduce deficits even before the funds are used to finance deficits, cannot be carried out by the alternative method of increasing international liquidity. The raising of credit lines, the availability of increased credit facilities, will help finance deficits in the balance of payments but does not reduce them.

The Effects on Monetary Expansion

The enlargement of the surpluses and the diminution of the deficits is suspected of having inflationary effects. To examine this suspicion we shall first remember the three expansionary effects normally attributed to increases in reserves. There is 1) an automatic expansion of the domestic money stock as reserve assets are acquired by the central bank, and primary reserves by commercial banks; 2) an induced expansion by commercial banks as they make use of their increased lending capacity; and 3) a deliberate expansion by the central bank as it feels encouraged by the strengthening of its reserve position, which again may be followed by an induced expansion of commercial-bank lending.

The inflationary impact of payments surpluses - sometimes called "imported inflation" - is chiefly seen in the first two of these expansionary effects. We would be mistaken, however, if we expected these effects to arise as a result of new reserve allotments. Automatic increases in sight liabilities of the central bank, and thus in centralbank reserves of commercial banks, occur only when foreign exchange is obtained by individuals and corporations and sold to the central bank. By and large, it is exporters of merchandise and recipients of capital funds or of transfer payments from abroad who will be getting the new domestic money - proceeds from selling foreign funds to commercial banks — and the commercial banks will get new central-bank reserves as proceeds from reselling the foreign funds to the central bank. None of this, however, will happen if the central bank obtains reserve units directly from the IRA as its share in a general distribution. The new foreign reserves shown on the asset side of the central bank's balance sheet will be matched, not by new deposit liabilities to commercial banks, but by the dormant liabilities to the IRA. Hence, there will be no increase in the domestic money stock and no increase in the lending capacity of commercial banks in the process (1). The only monetary

⁽¹⁾ I explained this first in my Wicksell Lectures on Involuntary Foreign Lending (Stockholm: Almqvist & Wiksell, 1965).

152

expansion that may arise from the reserve allotment would be due to a deliberate policy of the central bank, easing domestic credit on the strength of its improved foreign-reserve position. Surveillance could perhaps cope with such deliberate policy where self-discipline does not do the job.

We must not deny, however, that the reduction of balance-ofpayments pressures in several countries may strengthen the influence of those pressing for liberalizing domestic credit just as it should promote the cause of liberalization of trade and foreign finance.

This is, perhaps, the point at which to dispel the suspicion that the two present reserve-currency countries favor the reserve-allotment system because it would relieve them of some of their balance-ofpayments difficulties. That such an insinuation or suspicion is untenable becomes clear as soon as we look at the magnitudes involved. The quota of the United Kingdom is 12.6 per cent and that of the United States is 26.6 per cent. If deliberate reserve creation were \$1,000 million per year, the two countries would receive \$126 million and \$266 million, respectively. It would be ridiculous to believe that these countries would advocate a novel and involved international monetary system just for the purpose of securing for themselves sums of that size, or even twice that size. In relation to their current foreign liabilities, reserve accruals of the given order of magnitude do not make a great difference to the two countries. To hold that the United States would plug for any kind of system just because it would provide a "pay-off" covering one-fifth, or perhaps even one-third, of the country's annual deficit, and much less than one-tenth of one per cent of its gross national product, is to insult the intelligence of all persons involved. If the U.S. Government has favored the reserve-allotment system over the credit-extension system, it is because its advisors have understood the implications for the economy of the world.

Systematic Reserve Allotment versus Haphazard Credit Extension

The most significant difference between reserve allotment and credit extension by an international agency lies in the deliberate and systematic character of the former and the adventitious and haphazard character of the latter. The upper limit of loans to the central banks can of course be set with all due intelligence and wisdom,

but the extent to which the loans will actually be taken up and will remain outstanding is unpredictable.

Loans will be taken, or drawings or overdrafts made, only when countries with low reserve positions suffer deficits in their payments balances. Deficits that can be met out of sufficient reserves will not result in a use of the credit facilities, nor will low reserves prompt a central bank to increase its borrowings when it suffers no further drains. Thus, the increase in reserves resulting from the credit facilities established may be large in some years, but small or zero in others. There may even be years when reserves are destroyed through repayments of loans by central banks of countries that have gotten into surplus positions.

It has often been recognized that a system in which the growth of total monetary reserves depends on the fortuitous conjunction of deficits with reserve inadequacy in particular countries is poorly designed to provide for steady economic growth at stable price levels. Indeed, we could quote repeated declarations in the ministerial statements as well as the deputies' reports of the Group of Ten to the effect that the system of the future should do away with the link between reserve creation and deficits of particular countries. Some of the ministers of the Six, who now favor the credit-extension approach, have evidently forgotten their previous declarations or have never fully understood their meaning.

Credit facilities for central banks are clearly designed to provide means to meet payments deficits; hence, they establish a direct link between balance-of-payments deficits and reserve creation, making the creation of monetary reserves a function of the occurrence of deficits in countries with low reserves, and the destruction of reserves a function of the occurrence of surpluses in countries in debt to the Fund.

An international system of creating monetary reserves by extending credit to central banks that wish to borrow would be modeled after national systems in which the money supply is determined chiefly by domestic credit creation and credit destruction. Too few students of monetary theory and monetary history have comprehended the unfortunate implications of that system for economic stability. The late Irving Fisher explained the Great Depression of the 1930's by what he called the "debt-deflation theory", that is, by the large-scale repayment of bank loans which destroyed a large portion of the money supply. What commercial bankers have for hundreds of years regarded as the only sound principle of banking, namely, that loans should be payable on short term and preferably "self-liquidating", is a most unsound principle if commercial-bank lending is the chief determinant of changes in the money supply. To provide for stability and growth, the system must not permit the destruction of a substantial portion of the money supply, and hence should not be based chiefly on the extension of repayable loans.

National monetary arrangements usually include several instruments to make the supply of money less dependent on the demand for bank loans. Among the alternative methods of influencing the money supply are 1) open-market operations of the central banks, which shift the initiative from the borrowers to the lender, from the demand side in the credit market to the supplier of high-powered money, and 2) foreign-exchange operations, allowing payments surpluses from abroad to increase the domestic money supply. These factors in the growth of the supply of money have been important in some countries and have usually offset the destabilizing effects of the creation and destruction of commercial credit.

In an international system in which only small accruals of monetary reserves can be expected from gold production, and none from balance-of-payments surpluses accruing from other planets, it would be highly improvident to rely solely on the exercise of borrowing rights by central banks to regulate the growth of total reserves. To secure a modicum of stable growth, reserves must be created deliberately and systematically either through investments by the international reserve agency or by means of some other method of allocating newly created deposits. Reserve allotments to central banks according to predetermined quotas is one of the workable alternatives. To be sure, it does not guarantee that the reserves would actually be "used" — for they would be used only when "needed" to meet deficits — but the important thing is that they are received in annual (or quarterly) distributions and give the recipient banks a sense of affluence and security.

The Prejudice in Favor of Earned Reserves

Many monetary experts are instilled with a puritanical spirit against things not earned by hard effort or sacrifice. They are suspicious of anything that can be had "gratis", anything that has

not to be worked for through labor or abstinence. Allotments of monetary reserves in exchange for nonmaturing obligations are in the nature of "getting something for nothing" and, hence, ought to be rejected.

There is no sound economic reason why means of payment, domestic or international, should be obtained only at a cost, except if the fact that it costs nothing were to lead to its creation in excessive quantity. If we know how to limit the creation of money, it is wasteful to use precious metals for it — Adam Smith and David Ricardo were quite explicit on this point — and inexpedient to distribute it through lending operations. Of course, as an existing stock of money circulates, most who spend do so in exchange for value received and most who collect do so in exchange for value surrendered. But this may be different for the distribution of new money, of increments to the existing money stock. The selection of the first spender of new money is necessarily arbitrary.

The same is true for international money, for official monetary reserves. As existing reserves circulate, each recipient country will obtain them in exchange for value surrendered. This is usually expressed by saying that the countries earn their reserves. But when new reserves are created, there is no need for countries to earn them, and it is silly to frown in moral indignation about countries receiving unearned reserves.

One may, of course, champion the cause of poor countries and hold that the creation of new monetary reserves ought to be linked with assistance to developing economies. The new reserve could, for example, be first distributed among poor countries, either directly or through development banks (such as the IBRD, IFC, or IDA), and the richer countries would afterwards earn these reserves by selling goods to the poor countries. Or one could hand the new reserves over to the United Nations, which could use them to meet all its expenses, including the cost of additional services to developing nations. All these are matters of political expedience. If the decision is to distribute the new reserves among the central banks of all member countries of the IMF, there is nothing immoral and nothing unsound in such a plan. There has to be some way of distributing the new reserves and there is no way that is not arbitrary. The chief considerations in the choice of method should be 1) that flagrant discrimination be avoided and 2) that the newly

created reserves have as permanent a life as possible, so that the danger of reductions in the total volume is excluded.

At one time several negotiating experts favored a plan under which new reserves would be distributed only among a small group of countries. This plan came under fire as grossly discriminatory. The scheme would have been politically inexpedient; however, it would not have discriminated against poor nations or nonmembers in general, for it would not have transferred real resources from one part of the world to another. Where the participating countries manage to hold on to the new reserves in the long run, so that the relative holdings after some years are still in approximately the same proportions in which they were initially allocated, the reserve-allotment scheme does not involve transfers of real resources even among members. Thus the charge of discrimination is unfair (2).

The advocates of the credit-facilities approach can reasonably claim that their plans are the least discriminatory ones. To be sure, it provides for new funds to be created by way of loans to countries in deficit, and it forces countries in surplus to earn the new reserves by supplying real resources to the deficit countries. However, the obligation to repay the loans in due course ensures that the transfers of resources are in fact only temporary. Quite so; but the same device that ensures the desirable transitoriness of one nation's use of other nations' resources produces also an undesirable transitoriness of the life of monetary reserves. Thus, the best performance with regard to non-discrimination would be associated with the worst performance regarding permanence in the existence of monetary reserves, required for a steady growth in world trade and production.

I plead with the parties negotiating the new international monetary arrangements that they reconsider their positions and do not allow prejudice — moral, political, or economic — to influence their decisions.

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⁽²⁾ See Fritz Machlup, "The Cloakroom Rule of International Reserves: Reserve Creation and Resources Transfer", *Quarterly Journal of Economics*, Vol. LXXIX (August 1965). pp. 337-355.