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REQUIREMENTS
OF AN
INTERNATIONAL RESERVE SYSTEM

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INTERNATIONAL FINANCE SECTION

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The present essay is a revised version of the paper presented by Professor Scitovsky in March 1964 as the Frank D. Graham Memorial Lecture at Princeton.

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International Finance Section

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REQUIREMENTS OF AN INTERNATIONAL RESERVE SYSTEM

To be invited to deliver this year's Frank Graham Memorial Lecture was not only an honor but also a benefit. It made me read Graham's work on the international-payments mechanism written during and immediately after the war; and the excellence of his work is strikingly attested by the fact that his conclusions and recommendations are fully acceptable today, although they were based on conditions and designed to deal with problems that could not have been more different from those obtaining today. In his *Gold Avalanche*, Graham writes about the great secular rise in the purchasing power of gold, the appalling excess supply of monetary gold reserves (sufficient to replace all the ordinary currency of the entire world with gold coins), its incredibly fast rate of accumulation (annual output nearly half the total monetary gold accumulated from the beginning of time to the mid-nineteenth century), its tremendous concentration in the United States, and the intolerable burden imposed on the American economy by the outflow of the resources that are the payment for this stupendous inflow of gold. If in this sentence one multiplied every statement by minus one and so reversed all the signs, then and only then would Graham's account acquire a familiar ring. It is all the more remarkable that Graham's recommendations should seem quite so reasonable and acceptable in today's very different world.

But, while remarkable, it is not surprising; for Graham knew that monetary conditions can change very drastically in a very short time and remarked upon how the appalling excess of U.S. and world monetary gold reserves of his time was preceded only a few years earlier by a very real shortage of supply. We who have witnessed conditions coming full circle should take this especially to heart.

Freedom and Stability

What Graham wanted of an international payments mechanism was freedom and stability: freedom for each country to pursue its own independent economic policy unhampered by balance-of-payments considerations; and stability of exchange rates to encourage international relations. The two are incompatible, of course, but Graham wanted the

ideal compromise, with as much of both as possible. Considering that he was a great advocate of price stability, his insistence on freedom to pursue independent national economic policies is remarkable. He objected strongly to price stability imposed from the outside, by balance-of-payments pressures. I was pleased to learn that I had been a Grahamite all along—and slightly embarrassed not to have known it.

Any compromise between exchange-rate stability and freedom to pursue national economic policies must needs exclude the extremes of both freely variable and immutably fixed exchange rates. Among the latter, one must exclude the system of key currencies, which freezes the value of the key currencies and so denies Graham's freedom to the key-currency countries; and one must also exclude the system of mutual currency holdings, which generalizes the disadvantage suffered by key-currency countries and extends it to many more countries. Graham was also critical of the scant provision for exchange-rate readjustment in the White and Keynes plans; and events have certainly borne out the validity of his criticism. His ideal was a floating exchange rate stabilized against excessive fluctuations by an exchange-equalization account on the British model; but this, while proven feasible for one country in a world of stable exchange rates, has never been tried as a universal policy and would probably create some very difficult problems. In the following, I shall bypass this question and address myself to applying Graham's principles to the problem of reserves, although this problem will be seen to have some relevance also for the question of exchange-rate adjustment.

The Function of Reserves

The function of international reserves, surely, is to render exchange-rate stability compatible with freedom for individual countries to pursue their national economic goals. Indeed, one might think that reserves would accomplish this the better, the larger they were and the faster they grew. One gains this impression from hearing mainly the clamor of the deficit countries for more freedom of action and more reserves, the better (and the longer) to pursue domestic economic goals free from balance-of-payments considerations. To create additional reserves and put them at the disposal of deficit countries will enable them to combine exchange-rate stability with freedom to pursue national policies but only at the cost of the freedom of the surplus countries to pursue *their* national economic policies. For the surplus of a surplus country exerts expansionary influences, both because it represents an excess of aggregate effective demand over aggregate supply, and also because it creates a cumulative increase in the stock of financial assets, which, being unac-

accompanied by a parallel cumulative increase in income and output, is likely to increase the excess of aggregate effective demand over supply yet further.

When there is unemployment, these expansionary influences are not unwelcome; but at times of full employment they are, for then they exert inflationary pressures. At such times, a payments surplus aggravates or creates domestic economic problems and in this sense restricts the surplus country's freedom of action in the realm of domestic economic policy.

Here is a theoretical possibility of which little is heard in actual practice. The conflict between stability and freedom of action seems chronically to plague the deficit, and almost never the surplus, countries. The explanation lies, of course, in the fact that one country's surplus is another country's deficit, so that if deficit countries resolve their conflicts first, they also resolve thereby the conflicts of the surplus countries—sometimes even before these become aware of the existence of such conflicts. And for one reason or another, the deficit countries have usually been the first ones to feel and have to resolve their conflicts, and so bear all the burden of payments adjustments. Why this has been so is the first question we have to answer.

Forces tending to remove a payments imbalance and restore balance-of-payments equilibrium used to be exerted, or were believed to be exerted, by the invisible hand of the market. External reserves merely enabled countries to survive payments deficits while automatic market forces exerted their equilibrating influence and so restored payments equilibrium. The movement of reserves also had the further function of putting pressure on banks to supplement and strengthen the automatic equilibrating forces.

Influences on Payments Policy

Today, the invisible hand has been stayed, if not quite amputated, by government policy directed at domestic economic goals. Reserves, therefore, and their movement from deficit to surplus countries have acquired a new function. They still provide breathing space in which to restore payments equilibrium; but the equilibrating function is performed not so much by the automatic forces of the market as by the deliberate economic policies of government. This means that reserves, though they still provide breathing space, must do this without removing, or while also providing, the inducement for government to restore payments equilibrium.

What are the pressures on government exerted by balance-of-payments disequilibria? A deficit represents net absorption, which is a

welcome stabilizer in inflationary times but a deflationary force otherwise; whereas a surplus is an inflationary force when the labor force is fully employed but a welcome expansionary influence when it is not. The drawing down of the stock of liquid assets during payments deficits and their accumulation during payments surpluses further reinforce these pressures. Yet, even when the deflationary influence of a deficit or the inflationary pressure of a surplus is unwelcome, even then it seems to put little or no pressure on governments to eliminate the payments disequilibrium. West Germany in the late '50's was concerned over the inflationary effects of her export surplus, but nevertheless employed a restrictive credit policy in order to exert a diffused restraint throughout the economy rather than try to eliminate the payments surplus and so concentrate all the burden of adjustment on her export and import-competing industries. Likewise, countries with the twin problems of unemployment and payments deficit often choose to stimulate employment in ways that do not relieve their balance of payments. In short, the deflationary or inflationary influences of payments disequilibria exert only intermittent, and even then not too powerful, pressures on government to restore payments equilibrium.

The most powerful pressure to combat external disequilibrium is placed on government by a deficit country's dwindling reserves and consequent fear of external bankruptcy. It must be noted that this is a man-made equilibrating force, imposed on deficit countries by the outside world and its unwillingness to let them run deficits beyond the limits set by their reserves. The pressure of this equilibrating force is the stronger the smaller the supply of reserves and the harder to supplement them out of external credits. Apart from this outside pressure imposed on government to remove payments deficits (and apart from the latter's deflationary influence), a deficit country has no reason, and its government no inducement, to remove the deficit.

Very different is the situation of a surplus country. This is under no artificial stimulus, no outside pressure to restore payments equilibrium; but it can have a natural and very real inducement not to maintain a surplus too long. This inducement stems from the realization that a payments surplus implies an inefficient use of economic resources. For it represents an excess of domestic production over the domestic utilization of goods and services; and an excess not consciously and deliberately lent to foreigners or given as foreign aid. It is best described as involuntary foreign lending, unasked for and unremunerated. The outside world benefits little from such lending and will not be thankful for it; from the surplus country's own point of view it is a mere hoarding of resources that might have enhanced future output and welfare if

added to domestic capital formation, or created present welfare if used to augment domestic consumption or government spending. (A measure of the surplus country's loss is the difference between what the return would have been on the surplus, had it been invested at home, and the zero or low rate of interest earned on the reserves accumulated.)

Despite such disadvantages of running a payments surplus, governments have seldom been known to adopt policies aimed at removing or reducing a surplus. One reason is that up to a point the accumulation of external reserves confers a benefit: it lengthens the period for which the country will be able, at some future time, to run a deficit. The more the burden of payments adjustment rests on the shoulders of the deficit countries, the greater the benefit of postponing or avoiding such burden through the accumulation of reserves; and the more this benefit is valued by the surplus countries, the greater their willingness to accumulate surpluses, which in turn places the burden of adjustment more squarely on the shoulders of the deficit countries. This mutual enhancement of the adjustment burden of the deficit countries and the benefit to the surplus countries from escaping this burden is a vicious circle. We got caught in it, because the inadequate supply of international reserves already put so great a pressure on the deficit countries to remove their imbalances that surpluses never accumulated long enough to put much pressure on the surplus countries. This may again be traced back one step further to the interest of the surplus countries in keeping the total supply of reserves small.

Options of the Surplus Countries

Surplus countries wishing to avoid the loss that payments surpluses can inflict on them have two courses of action. They can eliminate the surplus and bear the burden of payments adjustment themselves; but they can also shift the burden of adjustment onto the shoulders of the deficit countries by pressuring them into eliminating their deficits. This last is clearly the better alternative from the point of view of the surplus countries; and they can opt for it by exerting their influence to limit the world supply of reserves. Hence their conservatism on this subject; their preference for a smaller over a larger supply of reserves; their niggardliness in granting credit to deficit countries in need.

This helps to, but cannot quite, explain the inadequacy of the world supply of reserves and the paradoxical situation it has created. The surplus countries are the ones to suffer economic loss from payments imbalances; yet it is the deficit countries on whom alone is imposed the burden of removing imbalances. That this state of affairs and the system (and volume) of reserves responsible for it should have been unques-

tioningly accepted for quite so long can be fully explained only in terms of a moral justification. This is to be found, I think, in our deep-seated puritan objection to giving, or accepting, something for nothing. Public opinion considers this wrong; and it is in the name of righting or preventing this wrong that the world has accepted the desirability of long-run balance-of-payments equilibrium and adopted the principle of a limited supply of reserves that must be either earned beforehand or repaid afterwards.

We regard these notions as self-evident, so much so that we need to be reminded that they are not grounded in economics. In the realm of macro-economics, they lose their generality and moral force. An underemployed economy can produce additional goods and services at no (or even negative) cost to society; and if such costless output is produced as an export surplus, in response to foreign demand, there can be no moral objection to the outside world's obtaining it free. In our type of economy, we can often have something for nothing; and at such times we might easily give it away for nothing, especially when the having depends on the giving. If this is so, long-run payments equilibrium as a universal moral imperative must be abandoned, just as we have abandoned, and for very similar reasons, the moral imperative of a balanced budget. It is to the great credit of the United States under the Truman Administration to have recognized this in a specific instance (the postwar world dollar shortage), and to have acted upon it at a time when, as a surplus country, she was on the giving end. It remains yet to be recognized by all countries as a general principle.

Long-run payments imbalance is not wrong because one country gets, and another gives, something for nothing; it is undesirable and should be corrected when, but only when, one or more countries suffer economic loss as a result. And since payments adjustment is always painful for whichever country does the adjusting, it seems reasonable and equitable that the task and burden of adjustment should be shared and shared alike by both deficit and surplus countries. The question is how and with what system of reserves this can best be accomplished.

The Nature of Reform

It will be obvious by now that I favor increasing the world supply of reserves in order both to put pressure on surplus countries and to relieve pressure on deficit countries. It is natural to make the additional reserves available to countries with payments difficulties. This is usually done in the form of credit, with no *quid pro quo* other than the interest on the loan; but the trouble with such an arrangement is that money easily gained is easily spent, and if deficit countries can obtain external

credit whenever they need it, all incentive to remove their deficits may forever be destroyed.

This dilemma, how to relieve the pressure on deficit countries without destroying their balance-of-payments discipline, has never been solved by the postwar world, although it is not particularly difficult to solve. All it requires is to make the additional reserves available at a cost greater than mere interest payments. The classical gold standard achieved this for some countries, since it enabled them to add to their external reserves at the cost of allocating resources to gold production. The only trouble was the low elasticity of supply of gold, which became lower with the continued accumulation of the monetary gold stock; and, besides, not every country had gold deposits out of which to augment its reserves.

To remedy this shortcoming of the gold standard and increase the supply and elasticity of supply of international reserves, many of the current proposals for reform would supplement gold with a new international currency, Bancor or Unitas, to be issued by a reformed IMF. If this new currency were to replace key-currency reserves, it would render exchange rates less rigid and bring within the realm of economic policy the decision how big the supply of reserves should be and how fast they should grow. All this is to the good. It might become possible at last to put pressure on surplus countries to play their part in the balance-of-payments-adjustment process. What would happen to the pressure on deficit countries to maintain their balance-of-payments discipline depends, however, on the details of the plan, on which way, against what security, and on whose initiative Bancor would be issued.

The original Keynes plan would have given the deficit countries overdraft facilities, enabling them to obtain additional reserves at their own initiative and at no cost (other than interest). It would have destroyed their balance-of-payments discipline. Most of the other plans provide for some emergency credit for deficit countries but have other arrangements for creating the bulk of the new international reserves.

The Triffin plan would give the IMF the initiative to buy in the open market the debt of member countries and the World Bank; and, by specifying no rules on whose debt to buy and in which markets, it leaves the crucial issues wide open. For example, if the IMF were regularly to engage in the open-market purchase of the debt of deficit countries, it would recreate the Keynes plan with all its drawbacks. If, on the other hand, the IMF kept its portfolio of member-country debts in fixed proportions, balance-of-payments discipline would be maintained but the IMF would not fulfil the central banker's traditional role, the role of lender of last resort. Indeed, we seem to be back at the old dilemma.

The new reserves created are either given to deficit countries, in which case all the latter's incentive to adjust is destroyed, or they are not given to deficit countries, in which case their main benefits are lost.

There are two plans that resolve the dilemma, the commodity-reserve plan, and a slight amendment of the Stamp plan. The commodity-reserve plan was first proposed for the United States by Frank and Benjamin Graham; it has been revived as an international-reserve plan by Kaldor, Hart, and Tinbergen.¹ According to this plan, the new IMF would issue Bancor against a reserve, partly of gold, partly of a composite bundle of some 30 commodities. This would enable any producer of one or more of the reserve commodities to obtain additional Bancor reserves in exchange for reserve commodities, not at a fixed, but at a fairly stable, price. The plan is designed for automatic operation on the model of the gold standard; but it is clear that any government in need of external reserves could buy reserve commodities in the home market and sell them abroad, at a somewhat lower price if necessary, in exchange for Bancor.

The principle involved is brought more clearly into relief by the amended Stamp plan, which is also a more rational and perhaps more reasonable plan. The Stamp plan, as you will recall, consists in issuing international certificates to developing countries, which can spend these for development purposes in countries that express their willingness to accept them.² In the original version of this plan, the initiative lies with the international agency granting aid to underdeveloped countries. Much can be said, however, in favor of shifting the initiative to countries in need of additional reserves.

Let a deficit country in need of reserves make a budgetary appropriation for grants-in-aid to developing countries and hand over this grant to Triffin's reformed IMF in the form of its national currency or government debt. The IMF in turn would issue international currency, Bancor, against the security of this country's national currency or debt; but make it available not to the deficit country itself but to a developing nation for the specific purpose of financing its imports connected with a development project approved and perhaps supervised by some agency such as the IDA. The developing country receiving the Bancor could spend it *only* in the country against whose currency or debt it was issued; but once in this country's hands, it would become unrestricted international liquidity, spendable and acceptable anywhere. In other

¹ Cf. UN Conference on Trade and Development, background document E/conf. 46/P/7, Geneva, 1964.

² Cf. Fritz Machlup, "Plans for Reform of the International Monetary System" (International Finance Section, Princeton University, 1964), p. 47.

words, the developing country would receive a tied grant (far preferable to a tied loan); the deficit country would receive additional external reserves, but only in exchange for real resources (the equipment exported to the developing country). This last proviso would keep reserves from being too easily acquired and rule out their acquisition at times of full employment, when this way of obtaining reserves would be very costly and create inflationary pressures. At such times restrictive policies to eliminate a payments deficit are clearly preferable and would certainly be recognized as such.

Under this plan, Bancor would be created against and backed by the deficit country's currency or debt; in the long run, the IMF would probably acquire a balanced portfolio of the debt of many such countries—and these, of necessity, would be the industrial, highly developed, financially sound, and responsible countries. To link the creation of international money to the financing of development would follow a respectable and well-tried tradition: on the national level deposit money was created against bank credit that helped to finance industrial development.

The Inflationary Pressure

To discuss the other requirement of a satisfactory reserve system, that it exert pressure on surplus countries to remove their surpluses, it is convenient to begin by analyzing the oft-voiced charge that an increase in the supply of international reserves would be inflationary. Such charges are usually based on a naive and all-too-sweeping acceptance and extension to the international sphere of the quantity theory of money. On analyzing this inflationary influence, one realizes that it can affect only surplus countries and only when their income and output are close to the full-employment or full-capacity maximum. When this is not the case, additional reserves exert expansionary but not inflationary influences; and it is the failure to expand reserves that exerts a world-wide *deflationary* influence. Indeed, this is the situation in the world today.

But even when reserve creation would put inflationary pressure on surplus countries, refusing to create additional reserves in response to deficit countries in need is not necessarily the best policy. To do so would force restrictive policies on deficit countries for the sake of avoiding or relieving inflationary pressure on their neighbors, the surplus countries—a curiously roundabout approach that might make sense in a world-wide inflationary situation but is unduly wasteful and painful under any other circumstance.

Indeed, the inflationary pressures should be welcomed as part of the

pressure on surplus countries to eliminate their surpluses. An important reason for increasing the supply of reserves is precisely that it will create or increase such pressure and so induce surplus countries to play their part and pull their weight in the adjustment process. It is true that, in the past, surplus countries have often countered inflationary pressures in other ways than through the elimination of their surpluses, either because they were anxious to continue accumulating reserves, or because they found payments adjustment too painful. As to the former, the mere expansion of reserves and their easier availability to countries in need would go a long way toward improving matters. For one thing, the more easily deficit countries can supplement their reserves, the less attractive is the accumulation of reserves to surplus countries. For another, the larger the world's supply of reserves, the larger, on the average, is the individual country's; and large reserves help to drive home the folly of running a surplus. The abolition of interest-bearing key-currency reserves and their replacement by noninterest-bearing Bancor reserves would also help to drive home this lesson.³

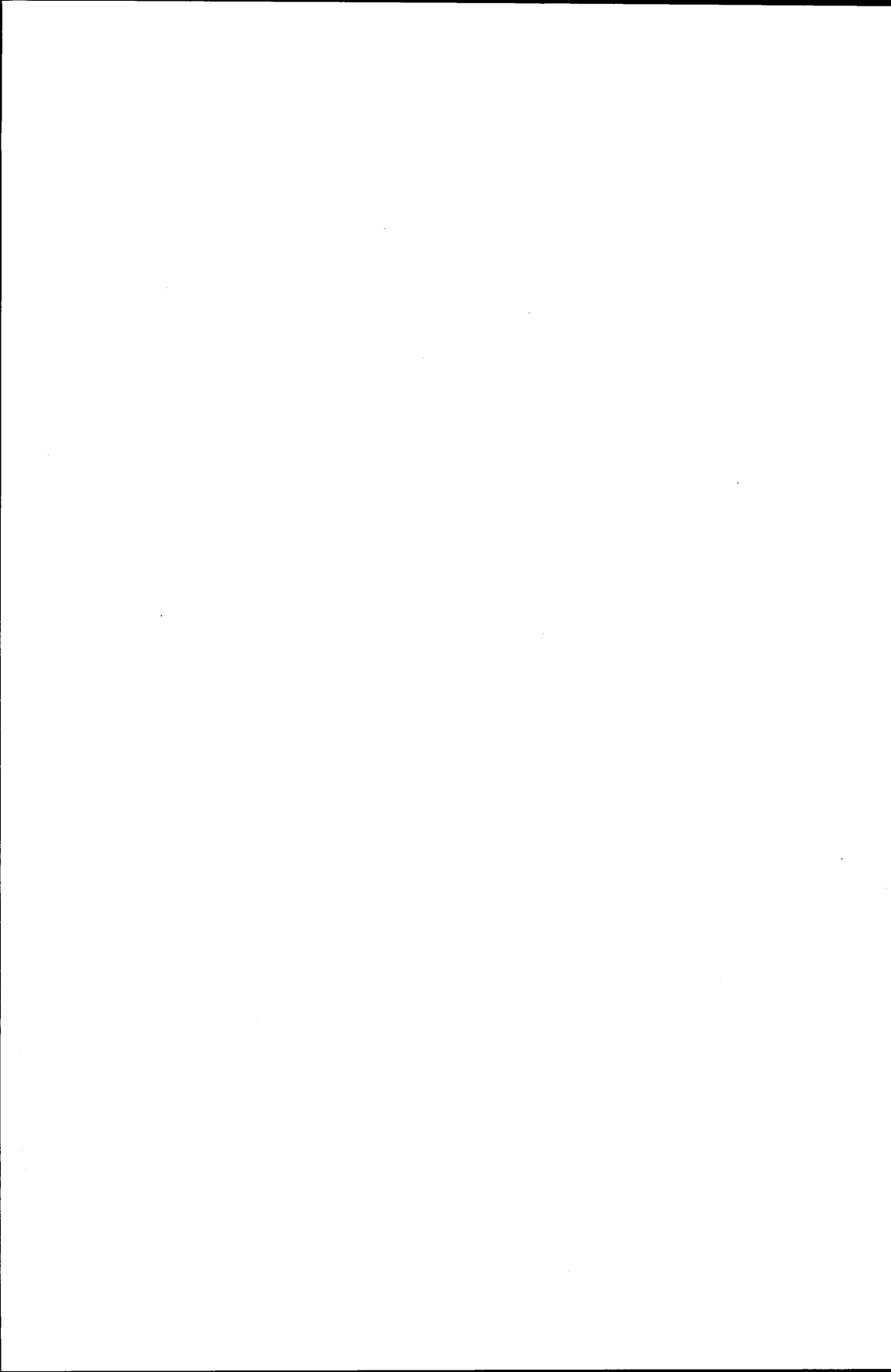
As to payments adjustment being painful, it would be desirable to make it less so by every means at our disposal; and especially exchange-rate adjustment should be made easier by widening the gold points or adopting other forms of limited exchange-rate flexibility. For exchange-rate readjustment is by far the simplest and most effective anti-inflationary-policy tool. In one fell swoop it can eliminate excess effective demand, stop asset accumulation, and directly lower part of the price level. Its use for this purpose, therefore, should be encouraged.

In summary, the ideal system of international reserves would both reduce pressure on deficit countries and increase or put pressure on surplus countries to eliminate their imbalances; and part of such pressure is the expansionary, and sometimes inflationary, influence of the surplus. Should such pressure become excessive, this could be guarded against by setting a limit to reserve creation; but under both the commodity-reserve and the amended Stamp plan, reserve creation is automatically limited, first by the action of surplus countries after they try to eliminate their surpluses, second by the cost of new reserves after the deficit countries decide to acquire them. Besides, it seems premature to worry over an excess of something we never had in sufficiency.

Let me repeat in closing that this approach is based on the notion, Graham's notion, that individual countries ought to be freer than they are now to determine their national economic destinies. We now live in a world where the international monetary mechanism imposes a

³ An excellent feature of the Keynes plan is worth mentioning here: it required countries to *pay* interest on their reserves.

lot of constraints, all on the side of restriction and deflation—as though all countries were economically irresponsible, inflation-happy, in need of restrictive pressures from outside to offset these tendencies and assure more reasonable and balanced economic policies. Governments must be trusted to have their own judgments and restraints if the constraints of the international-reserve system are to be lessened or minimized. And minimizing these constraints necessarily means having, not all of them on one side, but a mixture or alternation of restrictive and expansionary, deflationary and inflationary, pressures.



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