## INTERNATIONAL MONETARY OPTIONS

# Robert A. Mundell

# Five Observations on the International Monetary System

The law of monetary evolution has not been unambiguously determined, yet a few observations stand out in the panorama of historical perspective.

- 1. The first is that monetary systems do not change without warning. There is usually substantial lead time. Thus the breakdown of the international monetary system in the 1790s occurred after the Revolution and the assignat inflation in France, then the most powerful country in Europe. The restoration of bimetallism in France in 1803, or gold monometallism in Britain in 1820, was predictable. The trend toward gold in the 19th century became evident soon after the Californian and Australian discoveries drove silver out of monetary circulation in France, the pivot bimetallic country, and silver was dislodged as a monetary metal in Austria-Hungary and the Russian Empire in the 1890s. The use of sterling as an overvalued supplement to gold under the gold exchange standard had decades of advance warning through imperial ties and nations associated with Britain; Keynes' first book, Indian Currency and Finance, was published in 1910 and had as its subject the gold exchange standard. The rise of the dollar was also easily foreseen. An aging John Stuart Mill could foresee the dominance of the U.S. in 1869, long before the currency of the new giant displaced the pound sterling as top international money.
- 2. America emerged from both world wars as the dominant power militarily, industrially, and financially, and the dollar became the global currency. It is a fact of historical tradition that the top currency is provided by the top power. Money is a political phenomenon that

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The author is Professor of Economics, Columbia University, New York, N.Y. 10027.

reflects—and partly conditions—the political configuration of the world. My second observation is thus: The top political power has usually had a commanding role in determining or vetoing the nature of the international monetary system.

It is that fact which reduces the plausibility of overly imaginative, theoretical, or speculative alternatives to the present system. The present international monetary system arose out of the ashes of Bretton Woods, burnt down in 1971. But the 1944 Bretton Woods construction only provided the legal veneer for the underlying market reality of the dollar standard. The dollar had become the main invoice currency, reserve asset, unit of account, quotation and contract, store of value, unit of deferred payment, medium of settlement, measure of world prices, and reference point for international transactions, displacing sterling—gradually, not instantly—after 1949. (Sterling would have retained its active position longer had the U.K. refrained from devaluation in 1949 and 1967.)

The suspension of convertibility by the U.S. in 1971 took the gilt edge off the dollar; already since 1968 the price of gold had been set free in the private market. Its price drifted upward, boosted by the 1971 suspension of convertibility, and then it soared with oil prices in 1974, and again with the end of the Gold Prohibition in the U.S., and once again with the renewed upsurge in oil prices in 1979 and the accommodating monetary policy of the Federal Reserve in 1980. The price of gold in the 1970s had given the appearance of being unstable. Over the centuries gold has kept its value relative to commodities. But gold is unstable in terms of currencies because of uncertainties concerning the disposition of the billion-ounce gold hoard of the central banks, of which the U.S. holds about one-fourth.

3. My third observation—almost a truism—is that U.S. monetary policy has a tremendous clout in determining the dollar values of the precious metals in terms of dollars. The easy monetary policy of 1979–80 put gold above \$850 in January 1980. But when the Fed tightened, gold dropped to \$300; and when it followed a middle course more recently, gold rested for a time in the \$400–\$500 trading range. The power to influence the price of gold is the power to control the effective size of international monetary reserves. The importance of the Federal Reserve System cannot be discounted. It is much more important today than was the Bank of England in the heyday of the gold standard. The creation of the Federal Reserve System in 1914 was possibly the most important event of the 20th century, playing an active role in the two world wars and in the cycles of inflation and depression.

Federal Reserve policy has a magnification effect on other central

banks. Despite attempts to demonetize or banalize gold in the 1970s, and despite the 1976 IMF Agreement at Jamaica, de-emphasizing gold and playing up the Special Drawing Right (SDR), gold survives as a private store of "flight money value" and a public abode of purchasing power, the most important in central bank reserves. For these reasons, gold is alert to expectations of changes in inflation. If the expected inflation increases by one percentage point per annum, the price of gold will rise perhaps by 10 percent, as portfolios are altered in favor of gold. The one billion ounces of gold held by central banks can be used as collateral for central bank borrowing and is thus cashable into dollar liquidity. The Federal Reserve thus has the power to determine not just the size of foreign exchange reserves abroad, but also the dollar value of gold reserves. In a practical sense, the Federal Reserve System is the lender of last resort to the international banking system, and the determinant of the dollar value of world reserves. In this sense, the position of Chairman of the Federal Reserve Board of Governors has usurped the position of Monetary Commander-in-Chief of World Finance.

I do not wish to deny the importance of the rise of the yen and the deutsche mark, and the continuing financial importance of the pound and franc—these four currencies, together with the dollar, make up the SDR; the existence of the other four impose some constraints on the dollar and prevent it from total monopoly. If U.S. monetary policy were to become hopelessly unstable, new attempts to thwart its hegemony would appear. This already happened once, in 1970, when the U.S. recession and collapsing U.S. interest rates—a phenomenon of the gold exchange standard combined with an inflationist Fedunleashed a flood of excess dollar liquidity that spilled into Europe and inspired the plans, since abortive, for a European currency; it occurred again when the European Monetary System (EMS) was founded. But European monetary integration seems to unravel whenever the Federal Reserve moves to or stumbles onto adept monetary policy. As long as the dollar provides a satisfactory international medium and the Federal Reserve good monetary leadership, taking into account the external consequences of its action on the exchange rates and the price of gold, the other powers seem content to accept U.S. monetary leadership.

4. My fourth observation concerns the asymmetry in the power of the Federal Reserve vis-à-vis gold, when a price for it is established. While the Fed can overvalue gold, it cannot undervalue it, except in the short run. If the U.S. restored convertibility at a very high price of gold and adapted monetary policy compatible with it, it would have to buy up the excess gold offered it, creating bank reserves and

low interest rates and a price level higher than would be desirable. If, on the other hand, the U.S. restored convertibility at a very low price of gold, it would have to sell gold, reduce bank reserves, and accept an equilibrium price level lower than would be desirable. Since, in practice, it would be politically impossible to force the U.S. price level below a certain point (and economically undesirable to do so, because of bankruptcy and unemployment problems), there is a minimum dollar price of gold below which gold would not trade. There is, on the other hand, no upper limit on the dollar price of gold except that imposed by the willingness of the Federal Reserve or Treasury to accept gold imports and inflation. The corollary of the proposition that the U.S. cannot for long undervalue gold (as it did between 1968 and 1971), is that it cannot for long overvalue the dollar.

5. My fifth and final observation is that more international reserves are necessary under flexible rates than under fixed rates; and that intervention in the foreign exchange markets is greater under flexible rates than under fixed rates. Sir Roy Harrod, among others, predicted this seemingly paradoxical feature of a system of flexible rates in the 1960s. In the 1960s, it was much more widely believed that the movement to a system of flexible exchange rates would eliminate balance of payments problems, the need for foreign exchange reserves, and intervention in foreign exchange markets, not to speak of artificial ways along monetary reform grounds for creating new liquidity. All these notions about the way in which a world of floating national currencies would behave should have been quickly dispelled, since generalized floating began in 1973. More international liquidity was created in one month of 1982 than had previously been accumulated by all the nations of the world from the beginning of time until the suspension of the gold exchange standard in 1971!

The world debt crisis of 1983 did not appear as a bolt from heaven. It took a long time for the debts of the less developed countries (LDCs) to rise to over half a trillion dollars, and the relation to the exchange rate system has not been perceived as accidental. Such a buildup of debt would be inconceivable under fixed exchange rates. The corollary, of course, is that the real value of these debts can be inflated away by U.S. dollar and Eurodollar inflation. The problem was discussed at several conferences in the 1970s, particularly on the way they created, and affected in return, the problem of stagflation.

Under the system of generalized floating exchange rates, there was no mechanism for international control over the quantity of international reserves. Countries could get the reserves they wanted simply by buying them. Monetary policy in every country became "accommodating." The balance-of-payments discipline collapsed. Money creation was constrained only by the fear of depreciation; and/or the fear of inflation. But after all currencies floated against gold, as they did after the Smithsonian agreement, the anchor of stability provided by gold disappeared. The barrier against inflation that had been provided by exchange rate parities did not work, provided that countries kept in step with one another with their inflationary policies. The new system was still centered around the dollar, but the dollar no longer had the discipline of gold convertibility that had always theoretically and practically provided the check on inflationary policies of the reserve center. World policy henceforth would be inflationary or not, depending on whether or not Federal Reserve policy enabled it to be.

The oil price increases of the 1970s would not have been possible without the accompanying rise in the price of gold (hence gold reserves) and foreign exchange holdings. As the system worked out in the 1970s, after the price of oil was raised, industrial countries and the LDCs faced the prospect of deficits which would have meant deflation or depreciation of their currencies against the dollar, had the U.S. not provided the reserves upon which the Eurodollar market could expand to finance the deficits in the great lending spree of 1973–81. When the private credit of the borrowing countries became exhausted, the governments of the borrowing countries took over, saturating the Eurodollar loan market with dollar-denominated government paper, backed often only by the signature of unconstitutional or undemocratic governments.

Thus, the floating rate system did not provide discipline or monetary restraint; on the contrary, it provided inflation, unrepayable debt and de facto bankruptcy of many countries. The problems of balance-of-payments equilibrium, which is the principal source of discipline under a fixed exchange rate system (when ultimately rooted to a reserve center disciplined in turn by gold), was replaced eventually by fiscal discipline, reached after a once-and-for-all explosion of lending exhausted government credit. Fiscal equilibrium is the only safeguard now against inflation, yet fiscal equilibrium cannot be achieved with the current debt financing commitments of most of the LDCs. Pumping more money into the hands of the LDCs can ameliorate the current debt repayment and service problems, but only at the expense of making the long-run problems of debt repayment even less manageable. Solutions lie elsewhere.

We can now see that the disparity between anticipated and actual outcomes associated with a shift from fixed to flexible exchange rates lay in the failure of the monetarist advocates of flexible exchange rates to understand the adjustment mechanism that has, in healthy systems, been associated with fixed exchange rates. A country that has a deficit in its balance of payments is experiencing an excess supply of its currency offered in exchange for foreign currency. To prevent depreciation, the authorities must supply foreign exchange reserves (or gold), taking the redundant currency out of circulation by automatically reducing the outstanding stock of cash in the hands of the public or the reserve base of the banking system. Obviously, the situation is self-correcting, since the public's holdings of its own currency will be reduced to that it wants to hold. Unfortunately, however, many governments introduced the practice of "sterilization" or "neutralization" operations that in effect thwarted the adjustment mechanism, sometimes under the silly guise of "defensive operations." Balance-of-payments problems in the strict sense do not arise between regions of the same common currency, because there is no opportunity to impede the adjustment process by neutralization or sterilization operations. If two countries, each of which has distinct money-creating powers, intervene only in the exchange market, adjustment will be as smooth as it is between regions of a country employing a common currency.

Subject to a few qualifications and special cases, the reason countries like Italy, Japan, Mexico, and Costa Rica could maintain fixed exchange rates for decades under the Bretton Woods system was that these countries generally allowed reserve losses and gains to affect the rate of growth of the money supply; sterilization was, at worst, only partial, so the adjustment mechanism and financial discipline were effective. When these countries, however, abandoned fixed rates for flexible exchange rates—Italy and Japan in 1971, Mexico in 1976 and Costa Rica in 1981—they promptly lost that error signal or rudder that was the secret of their formerly stable monetary policy. These are only two examples from a vast number vividly illuminated in the annals of monetary statistics.

The same principle applies when the price of gold is sterilized; only the U.S. actually stabilized gold under Article IV-4-b of the original Articles of Amendment. Gold losses reflect themselves in a tighter monetary policy, gold gains in an easier monetary policy. This, again, will occur automatically, provided the central banker does not sterilize or neutralize the automatic effect of the gold losses or gains on cash or bank reserves (as the U.S. and Britain actually did). As long as the public is aware of and anticipates the link between gold or foreign exchange flows and the money supply adjustment mechanism, speculative forces will assist, rather than frustrate, the

achievement of a new equilibrium. The success of the gold standard over long decades was contingent on knowledge and anticipation of the consequences of the re-equilibrium mechanism. Rational expectations applied because all experts understood the model. The mechanism, rightly understood, did not require for its implementation either price level or employment changes, since adjustment was contingent on changes in domestic expenditure of one country in the opposite direction to the equivalent change in the rest of the world.

# Five Options for International Monetary Reform

### 1. The Monetarist Option of Freely Floating Exchange Rates

The first option to be considered is the monetarist option of floating exchange rates. This option seeks to control monetary aggregates in the sense of trying to fix the rate of growth of some specifically defined monetary concept. When each country does this, exchange rates have to fluctuate against one another, since there is no mechanism for ensuring that demand for money will equal the supply. The basic objective is to ensure monetary independence for each country to try to achieve its own "optimal" rate of inflation or growth of nominal GNP. If exchange rates are fixed, a disequilibrium will occur between demand and supply and the central bank will lose or gain reserves, eventually bringing on an exchange crisis and a forced devaluation. (Monetarists usually ignore the equilibrating effect of reserve changes and money expenditures.) To prevent disequilibrium from developing, the exchange rate should be allowed to rise or fall, according to the market forces of supply and demand, with monetary stability being ensured by the stabilization of the rate of growth of the quantity of money. The actual chosen growth rate for the money supply would differ for each country: It would depend on the desired rate of inflation and the income elasticity of demand for the particular concept of the monetary aggregate selected for stabilization. The means for achieving control of the quantity of money would be through an appropriately varying growth rate of government money, and the government order to the banks to keep a fixed legal reserve between private bank money and government cash; some adjustments might also be made to correct for inflationary and deflationary fluctuations in the desire to hold currency outside banks or to substitute the currency of foreign governments for the national currency.

This proposal would involve about 150 or more floating exchange rates. Variations of the proposal involve various kinds of "dirty floating," or exchange rate management, to smooth fluctuations around trends, cancel monopolistic attacks on currencies of small countries

by big banks or multinational giants, or to guard against destabilizing monetary policies originating outside the floating country.

To a certain extent, the monetarist proposal was tried after 1971, but especially after 1973, when the Committee of Twenty gave up on monetary reform "until the inflation problem had been solved." A system of "dirty floating" attained the status of international law in the Second Amendment to the Articles of Agreement of the International Monetary Fund, which agreed at the Jamaica meeting of the IMF Committee of Twenty in 1976 to adopt a managed flexible rate system. It received further support from the U.S. Gold Commission (which was monetarist-dominated). It was the approach taken by the Reagan government in its rejection of European proposals in 1982 to intervene in the foreign exchange market.

The monetarist approach depends on the use of the exchange rate as an adjustment device for correcting balance of payment problems. If a country had a deficit in its balance of payments, the exchange rate would fall, so the argument goes, and that would make the country's goods cheaper, and foreign goods more expensive to buy, shifting world demand to the goods of the country with the depreciating currency. For example, suppose the oil exporting countries have a surplus in their balance of payments. Under floating exchange rates, the currencies of the OPEC countries would increase (so the argument runs) and that would make oil more expensive; world demand would then shift from oil to other goods and bring about equilibrium in the balance of payments. Or suppose Japan has a surplus in its balance of payments with the United States; the yen should appreciate against the dollar until the surplus is eliminated. thus restoring the harmony of equilibrium. As a final example, suppose the heavily indebted countries like Mexico, Brazil, and Argentina have deficits in their balance of payments. The solution, according to the monetarists, is for these countries to allow their currencies to depreciate against the dollar until equilibrium in their external accounts is achieved, at the same time keeping their rates of monetary expansion constant, in accordance with the monetarist formula for achieving the desired rate of inflation (possibly zero, or even nega-

Critics of the monetarist approach dispute the arguments advanced on theoretical, practical, and political grounds, although—as with every other proposal—the enemies of floating rates do not all object on the same grounds. A first objection is theoretical. Exchange rate changes may not alter relative prices. The fact that Saudi Arabia has a surplus in its balance of payments and, under floating, lets the riyal rise relative to the dollar—as it would if there is no intervention—

does not mean that Saudi Arabian goods like oil become more expensive for the rest of the world. More likely, the dollar price will be unchanged and the only consequence of the exchange rate change is that prices of all goods denominated in rivals will fall, raising the dollar value of financial assets denominated in riyals; thus, to some extent, raising domestic expenditure, provided that this adjustment is not offset by the countering reduction in expenditure caused by loss in the rival value of foreign exchange reserves held by the government and monetary authorities. The monetarist adjustment theory, like the Keynesian theory, is contingent on fixed prices and wages of the goods produced in the country whose currency has appreciated. For these and other reasons, exchange rate changes may have no effect on the balance of payments. Instead, they are more likely to reflect a ratification of a prior change in overall prices or, worse, instigate a change in the levels of both money and prices. There is no evidence linking low exchange rate values to the balance of trade, balance of current account, or balance of payments. When the issue has been given serious attention by economists, the evidence is ambiguous.

A second objection to flexible exchange rates is that they cause a loss of financial discipline, as experience in Mexico, Costa Rica, Argentina, Brazil, and—after October 1982—Uruguay, suggest. The threat of bankruptcy posed by a run on foreign exchange reserves and speculation is a far more ominous discipline than the thin reed of depreciation or inflation after the public has become accustomed to depreciation. Flexible exchange rates allow room for mismanagement up to the point of loss of government credit and thus represent an open invitation to corruption.

A third objection is that a system of generalized floating exchange rates would create an information chaos in a world of more than 160 currencies. Clearly, the benefits of a common currency system are absent in the confusion. Fortunately, countries have not gone so far as this, but have in actuality linked themselves in an approach more closely reflecting a system of optimum currency areas. The only case where this system applied in practice was during the bimetallic confusions of the Middle Ages, where each city-state in Italy and Germany made the pretension to its own independent metallic money (under the charters granted, up to A.D. 1355, of the Holy Roman Emperor), and even then dominant gold currencies like the florin or sequin developed. The proposal for separate fluctuating currencies simply does not deal with the world as it is at present or is likely to be in the foreseeable future. To have floating exchange rates between the currencies of tiny countries like Vanuatu (the vatu) and the dollar

and yen serves no useful purpose, and the actual practice of linking the vatu to the SDR, probably at a depreciating rate, is simply an invitation to inflation. For the small countries, the exchange rate policy is simply inflation policy. The significance of the domestic currency lies more in its political role as a symbol of nationalism and sovereignty than in the tiny driblets of seigniorage that can be exacted by monetary expansion and the inflation tax.

In fairness, it should be said that many economists who once believed in universal floating have now altered their prescription to allow zones of fixed exchange rates. The fact is, however, that unless all the less developed countries linked their currencies to the same monetary leader, they too would float with respect to one another. A fixed exchange rate with respect to a less inflationary country can, however, introduce a monetary discipline that would otherwise be absent. In our present reality, however, the most important fact is still the leading role played by the dollar which, in practice, makes the monetarist approach unrealistic. Perhaps the most significant objection to floating rates is that the basis for predicting the future value of money—and hence the basis for incorporating the right "inflation premium" into interest rates—is lacking. The practice, at least in the United States, has shown that monetary aggregates do not provide an effective guide to stabilizing the rate of inflation, and any attempt to fix the rate of growth of a particular concept of money introduces the need to either alter its rate of growth or else change the components of the monetary basket, vitiating the basic purpose of the exercise which, in the first instance, was to eliminate the need for discretion on the part of the central banker. Today, in 1983, the U.S. does not have a gold standard, or a Keynesian commodity standard, or a Friedman paper standard. It has a Volcker standard. But who can predict the future value of the pound, the dollar, or the yen on the basis of a Thatcher standard, a Volcker standard, or a Nakasone standard? Whatever the defects of the gold standard or a convertible dollar standard, they are no more arbitrary or discretionary than the arbitrary system into which we have been led by the monetarist position on the currency standard. The uncertainty premium built into the long-run interest rate structure imposes needless costs on capital market transactions and is the surest route to the undermining of the capitalist—or any other—system.

#### 2. The New Gold Standard Option

The monetarist option of floating exchange rates of each currency in the world is anathema to proponents of the gold standard. Money is more than an economic artifact; it is an idea, a central feature of civilization, the health of which depends, in a liberal society, on the predictability of its value, its stability, not only today but in the distant future. Money is as Keynes said, a link between the past, present, and future, in order that long-term commitments and contracts can be made and kept at interest rates that express the real scarcity of capital and the urgency of time, with as little chance of forecasting error as humanly possible. The presence of a stable money acceptable over the widest possible domain—preferably the whole world—is the surest way to engage every individual in the productivity of a widely extended division of labor, in the externalities of information, commitment to long-term planning, and fulfillment of reasonable expectations. The extension of the use and benefits of national money to the international sphere is akin to the extension of the gains from free trade and self-realization to the global domain. Whereas the focus of the national monetarists is on the home market, the internationalists stress the gains from the common usage of a common currency. And if it is not yet possible politically for a single world money to exist, the closest metaphor to it, through which its beneficial properties can be simulated, is a system of currencies that are convertible into one another at a fixed or predictable rate of exchange. While in practice the commodity standard could be a basket of commodities as proposed by Irvin Fisher in 1912 and by John Maynard Keynes in 1930—the only practical solution today would be to use the precious metals and, in particular, gold. Gold is the only commodity now held by governments capable of performing a serious monetary role; and while one might not want to rule out alternatives to gold for the future, in the next century, it would not at the present time be feasible to construct a commodity standard around any commodity except gold.

The advocates of the gold standard approach the problem of the international monetary system from the opposite perspective to that of the currency nationalists. They prefer to see an extension of the advantages of a common currency carried worldwide, or at least as wide as the political externalities permit. Starting from a United States comprised of 48 states and 12 Federal Reserve districts with each district issuing a distinct "dollar," convertible into each other at a flat rate, should the acceptance into the Union of two additional states (e.g., Hawaii and Alaska) be accomplished by two additional currencies with the Hawaiian and Alaskan dollars floating? Or should the exchange rates be kept fixed? Gold standard advocates emphasize the great advantages of fixed rates in this situation, and in their wisdom so did the currency experts in the U.S. Congress.

Now what holds for Hawaii and Alaska appears to hold likewise

for the Commonwealth of Puerto Rico, various island dependencies, Panama's canal zone, Panama itself, Liberia, and several other countries. What distinguishes Panama's Balboa from neighboring currencies is its comparative monetary stability, reflecting the U.S. inflation rate. The more the dollar bloc expands to include Venezuela, Mexico, Canada, U.K., etc. the more efficient it becomes as a basis for world money. Even though monetary stability in the U.S. is not as great as it was under the Bretton Woods system, it is far greater than that of most other countries in the world economy, and is now closely associated with about 60 other currencies.

In a world of n currencies, there are n-1 exchange rates. Most of the other countries in the Bretton Woods arrangements kept their currencies stable, directly or through another currency, in terms of the dollar, while the U.S. kept its currency stable in terms of gold. Stability in terms of gold was historically the means for achieving a stable price level, the anchor of paper money to the world of commodities. The Bretton Woods system broke down, however, after the credit inflations of three wars had boosted dollar prices and left gold, at \$35 an ounce, hopelessly undervalued. While some economists use the fact that gold did not discipline U.S. monetary policy sufficiently during wartime as an argument against gold, gold standard advocates argue that no other monetary system would have done better. The gold standard system did succeed in keeping interest rates below 7 percent for over 35 years, an experience that flexible exchange rates have never been able to duplicate.

The question arises whether it is feasible for every country to go into a gold standard. The answer is no. The choice of key currency or asset is closely linked to access to capital markets; most countries need stability of their currencies in terms of the currency in which they have to pay their bills, borrow, lend, or repay their debts. It is no accident that countries like Mexico, Brazil, and Argentina, which are having difficulty meeting debt commitments run up during a period of floating exchange rates, now have to repay debts incurred in dollars that cost billions more in terms of pesos or cruzeiros. Flexible exchange rates have destroyed the commercial habit and may make it necessary to inflate away some of the debt. In the 19th century, the sterling bill was the practical medium of exchange in international trade, the equivalent of the notes or certificates of the Eurodollar market. Today the dollar is the global medium of exchange, without denying the importance of the regional significance of the mark, pound, yen, and franc. But gold is not in the running as a medium of exchange to replace the dollar. For the world economy, it would be like trying to replace English with Latin as the language

of commerce. Nor is the SDR in the running; the SDR is the modern equivalent of Esperanto. Under the gold standard, as it is envisaged today by its advocates, no one expects merchants to tug gold coins on the backs of their asses as they did en route to the fairs of Bruges or Champagne in the Middle Ages. The prime function of gold in the new gold standard is to provide a safeguard against inflation, and a bulwark against over-expansionism, bearing in mind that gold, like oil, is an exhaustible resource. If other countries submit to the discipline of convertibility of their currencies into dollars or SDRs, as they must in order to achieve a fixed exchange rate and the benefits of a common global money, then the country that is relieved of the requirement to intervene in foreign exchange markets (the U.S.) should accept some constraint on its monetary sovereignty, in the form of a commitment to buy and sell gold within specified margins of a central parity.

If an agreement to stabilize gold prices could be made, the enormous destabilizing swings in the dollar value of international reserves would come to an end and a globally stabilizing monetary policy would emerge from the unstable experiences of the 1971–83 period. An international agreement on gold policy would be desirable because the U.S. now holds less than 25 percent of the world's monetary gold. The gold-holding propensities of Western Europe, Japan, and the Arab block would have to be considered because the U.S. would not want to be put into the position of selling off all of its gold or of buying up the stock now held in public and private hands in the rest of the world.

It may be possible to integrate some of the features of this new gold standard with the activities of a World Central Bank (discussed below), using the SDR as an instrument for centralization of exchange rates. If the yen, deutsche mark, pound, and franc were stabilized to the SDR so would, ipso facto, the dollar be stabilized; the U.S. could then restrict its intervention activities to open-market operations in gold. Alternatively, if the other four currencies were stabilized to the dollar, stability in terms of the SDR would be ensured. An SDR standard, in practice if not in name, amounts to a dollar standard at the present configuration of economic powers.

The price of gold should be set between \$300 and \$600. Some fluctuation in the price would be desirable, in order to exploit the not inconsiderable amount of information contained in even small variations between outer limits around the central parity, by which signals about the appropriate direction of monetary policy can be sent between the authorities and the markets. The Secretary of the Treasury could commence open-market operations in gold without

any prior fixed commitments about the ultimate resting price for stabilization; it is in this field that the U.S. could restore, to some extent, the monetary leadership it vacated in August 1971. There is no economic need to perpetuate the malaise that spread across the world economy when the U.S. gave up its economic leadership.

In the tug-of-war that has existed between Europe and America since the 1960s, the struggle might have been put in terms of the automaticity of adjustment versus the automaticity of convertibility. We should now know that flexible exchange rates do not necessarily mean adjustment. To the extent that the dollar may have been overvalued in the 1960s, it was not an overvaluation vis-à-vis other currencies; it was overvaluation with respect to gold, which was undervalued with respect to all currencies. In hindsight, the best solution in the 1960s would have been a universal change in currency par values, the same solution that would have saved us from the pitfalls of the Great Depression and its horrible aftermath.

"Recovery is just around the corner," as people used to say. But the restoration of health to the world economy requires low interest rates, comparatively small budget deficits, reflective of high employment, and an end to the expectations of the acceleration of inflation. The policy mix needed to achieve that assortment of goals requires confidence in the dollar, stimulative tax cuts, stable exchange rates, and gold convertibility. The budget deficit in the 1940s, which was 25 percent of GNP, did not cause high interest rates, but the high gold price (then) did cause low interest rates, and would again.

The policy mix advocated, but only partially implemented, in 1981 to combat inflation, low growth, and excessive unemployment included tighter money, stimulative tax cuts, fixed exchange rates, and gold convertibility—the four engines necessary to make the plane fly efficiently. Two of the engines were never started and the stimulative tax cuts were delayed, emasculated and finally, in the summer of 1982, transmogrified, leaving only one engine to make the plane go. Economists should remember that tax cuts in a depression follow from the dictates of both Keynesian theory and supply-side theory, but one hopes they are also aware that in a world of capital mobility and flexible exchange rates, the multiplier is (almost) zero. To the extent that the tax cuts were effective, they increased the budget

¹R.A. Mundell, "Capital Mobility and Stabilization Policy Under Fixed and Flexible Exchange Rates," Canadian Journal of Economics & Political Science 29 (November 1963): 475–85; "Capital Mobility and Size," loc. cit. 30 (August 1964): 421–85; reprinted in International Economics (New York: Macmillan, 1968), chap. 18 and app. More exactly, the multiplier is exported to the rest of the world to an extent that is in inverse proportion to the size of the country in the world economy.

deficit, raised interest rates (along with tight money), attracted capital from abroad, appreciated the dollar, and worsened the trade balance, offsetting the Keynesian stimulus, and leaving the tight money policy isolated.

Fortunately, the arguments raised against the gold standard in the United States have recently been getting less puerile, partly as a consequence of the findings of the Gold Commission; economists are no longer content with apocryphal quotations from Keynes and Lenin! There are political arguments. One argument is that the U.S. would have to sell wheat or butter to buy Soviet gold; another is on balance-of-power grounds, to preempt the creation of a franc-mark-rouble gold bloc on the European continent. These issues lie outside the scope of the present discussion. But the question of U.S. leadership of the Western World does not.

#### 3. The Private Money Option

It has been urged that the era of government money has not successfully produced an efficient money and that, therefore, the provision of national or international banks and national currencies would be one way of achieving a private money; an alternative would allow free entry into the industry, removing discriminatory taxation on the production and sale of coins.

I should say at the outset that I sympathize with the objectives of a private money system, but I am skeptical that they can be realized in the political world in which we live. I doubt that many governments would be willing to relinquish the enormous power implied in the money prerogative.

Money has become, and perhaps government money always has been, an instrument of national power, traditionally guarded jealously whatever form of government has existed. It has traditionally been a source of deficit finance, a substitute for taxes, earning seigniorage, or the inflation tax. It has recently become a means by which, under flexible exchange rates and the progressive income tax, an expansionary monetary policy can increase the share of government spending in GNP. It has also been a means by which the government can issue interest-bearing debt to finance deficits, and then by inflation, erase part of the real value of government debt, a process that can continue until expectations of inflation catch and undermine the government credit. The money power gives government the ability to command real resources and then alter unilaterally the terms of any prior commitment to pay for them. It is also through the use of the monetary option that the government achieves the ability to pay for unexpected commitments such as arise in the case of war. Most wars would not be possible if they had to be paid for by current tax levies.

Some countries have, of course, altered their monetary systems to acknowledge the formal existence of private money. Part of money in all capitalist states is private. Credit cards and commercial bank deposits are close private-money substitutes. But instances are rare where the right to issue notes has been left in the hands of banks.

The program for a generalized money system is not realistic in the world at present or in the foreseeable future. The tradition of genuine democracy has historically been slipping, rather than increasing, and only a handful of truly democratic states exist. The authoritarian and totalitarian regimes that now occupy the central power use government money as an instrument of the state or its entrenched henchmen, sometimes to further the hold of the central power over its captive citizens, but often merely to use the taxes of seigniorage to line the pockets of the prevailing regime. Whatever the merits of a system of free enterprise competitive money are—and I acknowledge them to be considerable in a truly liberal society—I do not see any political path through the transition to its enactment, and I must, therefore, discard the idea as a distraction more suitable for gardens of Utopia than for a world of *real politique*, where the proposal is not worth a "Hayek."

Although I sympathize philosophically with the idea of private money, I would not like it to offer a distraction from current alternatives.

#### 4. The Optimum Currency Areas Option

Another important option is a system of currency areas—"optimum" currency areas if they are designed to maximize some constrained welfare criterion. It is helpful to think of each nation-state as a common currency area. Two or more nation-states may choose to link their currencies, embarking on a joint float against the other countries. This raises the optimum currency question. Starting from a world of individual national floating currencies, what criteria would prompt countries to link their currencies together in joint float arrangements?

At one extreme would be the monetarist ideal of each national currency floating freely; at the other is a global currency such as would prevail under global monetary integration, as would be implied by a universal gold standard or world currency. What are the gains from currency integration or independence?

The size of the country is an issue. A small country next to a large country would find that minor shifts from one currency to the other would alter the price level of the small country in inverse proportion to its size, relative to the big country. It can reduce the damage from these shifts by fixing exchange rates and allowing reserve fluctuations to cushion the shocks. The same holds for shocks from outside the system. One large lake can insulate itself against random shocks better than two small lakes; the convoy principle holds. And what is true for two currencies holds even more for three currencies, and so on.

The countries comprising any given currency area have certain things in common. First—and in a sense most important because it is a sine qua non—any two countries with fixed exchange rates must have price levels that correspond to one another and, therefore, over a period of time, similar rates of inflation. If this were not the case, one country's goods would be persistently cheaper than the other, balance of payments disequilibrium would ensue, forcing a monetary correction or a breakup of the currency area (devaluation). Fixed exchange rates are, after all, a means for two countries to share a common monetary policy, whether that common policy is asymmetrical, as in hegemonic relations, or shared, as in cooperative agreements or monetary unions. In the global village of rapid communication, geographical propinquity may be irrelevant. The geography of inflation is drawn on a global map of currency areas.

Countries also share a common "basket" of commodities or currencies to which their currencies are pegged. Countries that are completely isolated from one another would nevertheless be in the same currency area and have about the same rate of inflation or deflation if, for example, they opted for a single commodity basket, such as gold or silver, to which they pegged their currency. The dollar area is another example; also the CFA franc area or the "SRR area." The countries in a currency area march to the same drummer.

Third, empires traditionally have been single currency areas, sharing the same capital market in the metropole, and perhaps the same language.

Fourth, factors of production may move more readily between countries in the same currency area, either as a prior condition or a consequence.

Fifth, currency areas may reflect political arrangements such as mother country and colony, conqueror or vanquished, or incipient political union. Often currency unions form as a device for, or further step toward political union, as in the case of the Common Market or the Gulf states.

Sixth, currency areas may reflect complementary trading partner-

ships, such as may exist between manufacturing and primary producing countries, or temperate and tropical countries.

Seventh, currency areas may reflect power relationships where currency leagues form to lay the groundwork for defensive or aggressive alliance potentials.

Eighth, currency areas may reflect planning areas. Exchange rate changes may be useful for achieving basic balance of payments adjustment only when there are rigidities upon which prices can act to change real wages. Planning areas imply some degree of integration so this criterion overlaps with the political choices.

It is just this sort of bandwagon effect that leads countries to use the same "outside" or trading currency. In the middle of the last century, but especially after France relinquished its role as the pivot country of bimetallism, countries joined the gold brigade following the lead of Great Britain, then France, and the German Empire. A similar case occurred after the breakdown of the joint European float in 1973, when many countries elected to join the dollar standard. The dollar area today constitutes perhaps 60 individual currencies of the non-communist world. It represents, long after generalized floating began in 1973, the principal currency bloc of the world economy. What emerged from the general agreement to float was a system of fluctuating currency areas revolving around the dollar.

The European Monetary System has its roots in the attempts in the 1960s for Western Europe to free itself from the magnet of stability represented by a gold-convertible dollar. With the immobilization of gold caused by the "two-tier" system, after 1968 European countries needed more foreign exchange reserves and acquired dollars to replace gold when interest rates fell as a consequence of the 1970–71 recession. After August 15, 1971, the Europeans could not agree on a joint float, which led then to the Smithsonian arrangement—in reality a global dollar area. No country would sell gold at the new official price of \$38 an ounce. The devaluation of the dollar in 1973 did not accomplish anything worthwhile. It established a higher official price at which the U.S. would not sell gold of \$42,20 an ounce; and it redefined the basis of the U.S. dollar, Another useless reform. After that, the European countries tried again to work out a joint float agreement, but Britain would not join and by June the "optimum" currency area broke down. The third attempt at a European joint float came in 1979, which set up the EMS, but this attempt has been likewise unsatisfactory. At this stage, it must be questioned, following three failures, whether Western Europe without Britain does constitute an optimum currency area, or whether Western Europe and Japan both belong in a greater dollar and Eurodollar system. I leave aside the dangerous specter of an Orwellian franc-mark-rouble triangle emerging.

The monetarist solution of national currency areas with floating rates without intervention is unstable; it tends to fuse into a system of larger currency areas. The optimum currency area has proved historically to be larger than the isolated nation-state. At the other extreme, however, it has never been quite as large as the world economy. A gold standard at the present time, for example, could not include the entire world economy.

Existing currency areas may, for the time being, conform fairly closely to optimum feasible currency areas. The Eastern European Currency bloc has given no indication that it wants to join the dollar area, although some of the East European countries have indicated a desire to join the IMF when they have been permitted to do so. Western Europe is restive under the financial umbrella of the dollar area. A Japanese yen area has potential for development, as does a yuan area, based on the Renminbi or "people's currency," in the future. A Gulf currency area may develop and expand into a wider Arab currency if sufficient centralizing forces emerge in the Arabic countries. The CFA franc area linked to the French franc may continue until a better alternative arrives for West Africa.

The optimum currency areas option is the most likely outcome if no conscious steps are made to establish a new world monetary system.

#### 5. The World Central Bank Option

One purpose of creating a world central bank is to provide a global money when it does not exist and it is desirable to create one. Another is to provide a source of international money when it is unduly scarce, and to curb its growth when it is excessive. A third purpose is to act as risk-bearing intermediary between surplus and deficit countries. A fourth purpose is to reduce, if not eliminate, unnecessary and undesirable fluctuations in exchange rates. And a fifth purpose is to provide an intermediary between debtor and creditor countries for rescheduling or funding debt service commitments when ordinary channels and bilateral solutions no longer work. Some extent of these functions is already partially filled by existing institutions such as the IMF, the IBRD, the BIS and various regional banks, national agencies, and private consortia. But the prevalence of arbitrary international reserve growth, undisciplined debt growth, the insecurity of the international commercial banking community, the invasion of private fields by international institutions, not to speak of the debt crisis, clearly reveals the gaps in the international structure. A crisis was narrowly averted in 1982, but there is no guarantee that a solution has been found for the rest of the decade and after.

I shall suggest below a plan for establishing a trillion-dollar World Central Bank (WCB).

The WCB would be empowered to accept among its assets gold, foreign exchange, and debt obligations of the member countries. It could accept deposits of national currencies or selected debt instruments and, in exchange, open accounts for the member governments denominated in the World Reserve Unit, cheques upon which would be accepted by other members up to a multiple of its quota, which would be established by initial agreement among the participating countries. The WCB would extend credit at the bank rate under specified conditions that would reflect market conditions. The activities of the WCB would be coordinated with and help coordinate the activities of the IMF and IBRD.

The new bank could play a role in the gold market, in the event that the major countries wanted to establish the new gold standard or reestablish the gold convertible-dollar standard. This could be effected through the use of existing SDRs, as the new currency unit, or a new currency unit. Suppose the WCB's initial position is as follows:

Assets (\$trillion)		Liabilities (\$trillion)	
Gold	0.50	Reserve Deposits	1.0
Currencies	0.25		
Debts	0.25		
	1.0		1.0

The WCB could take the lead in accepting gold from national central banks that desire more central bank liquidity or in selling gold to those central banks which wish to reduce their holdings of the world reserve currency. The actual transactions could be carried out between the WCB and a member, or through one of the national central banks operating as an agent for the WCB.

A country would then have the option of stabilizing its currency in terms of the world currency, which would be convertible into gold, or of buying and selling gold directly. New credit lines opened up to countries by the WCB would earn an interest rate related to market (say Eurodollar rate or Libor) while liquid deposits at the WCB would earn a lower interest rate.

The existence of such an institution would go far toward alleviating the current difficulties of debt rescheduling and illiquidity crises. It also would mitigate the gigantic swings in dollar exchange rates when diversification takes place (or its opposite), and would prevent the destabilizing fluctuations of international reserves caused by fluctuating gold prices.

Although some of these functions would be carried out in the absence of a world central bank, they would not be carried out as efficiently or with an equivalent amount of multilateral risk-spreading. The difficulties of establishing such a bank are considerable, but no more insurmountable than the difficulties of setting up the Bank of England or the Federal Reserve System. The path has already been broken by the comparatively successful establishment of the IMF and IBRD at Bretton Woods. After 40 years, these institutions are thriving, the more so as the debt crisis deepens. But the pace of financial development over these 40 years has been so phenomenal that a framework is needed to cope with the foreseeable difficulties of the next few decades. Gold alone cannot be the solution with prices of gold likely to be negotiable. Eventually, too, dollar liabilities cannot continue to accelerate without eventually undermining the U.S. currency. Eventually, the problem will have to be faced of the need for a new multilateral world central bank.

## Conclusions

I have now discussed five major options for international monetary reform, some more critically than others. In arriving at judgments concerning them, it is necessary to bear in mind that it does little good to wish for a system that cannot be implemented. It is necessary to question the degree of discretion the authorities actually have in determining the outcome.

The fact is that the world in the future will probably contain elements of all five options. Some countries will have flexible exchange rates for the simple fact that they cannot control their monetary policy; central bank credit may be earmarked to finance budget deficits. If that is the case, there will exist in that country no financial discipline that could possibly make a fixed exchange rate regime work.

It is equally true that as long as there are flexible exchange rates, there will be currency areas. Some currencies could not exist under a floating rate system, and if they could not, they will not. Joint floats will be inevitable, and as long as they are, countries will seek to optimize the domain over which they have influence.

Private money will exist wherever it is not prevented from doing so by explicit government action. Governments can control things

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that are called money, but the public determines what it will accept in payment of debt; and if the government seeks to alter that thing which is acceptable, the public will seek to avoid those contracts subject to effectuation by an unacceptable medium of payment.

We have today features of a world central bank and still have vestiges of a gold standard, though some might call them atavisms. It is, nevertheless, here that I believe the most progress can actively be made. Stabilization of the price of gold would be a gigantic step toward stabilizing the value of international reserves, and the creation of a suitable world central bank would be, over the future, an indispensable instrument for the resolution of the world debt crisis.