COWLES FOUNDATION FOR RESEARCH IN ECONOMICS

AT YALE UNIVERSITY

Box 2125, Yale Station New Haven, Connecticut 06520

COWLES FOUNDATION DISCUSSION PAPER No. 506

Note: Cowles Foundation Discussion Papers are preliminary materials circulated to stimulate discussion, and critical comment. Requests for single copies of a Paper will be filled by the Cowles Foundation within the limits of the supply. References in publications to Discussion Papers (other than mere acknowledgment by a writer that he has access to such unpublished material) should be cleared with the author to protect the tentative character of these papers.

A PROPOSAL FOR INTERNATIONAL MONETARY REFORM

by

James Tobin

October 20, 1978

Forthcoming in: Eastern Economic Journal

A PROPOSAL FOR INTERNATIONAL MONETARY REFORM*

James Tobin

Over the last twenty years economists' prescriptions for reform of the international monetary system have taken various shapes. Their common premise was dissatisfaction with the Bretton Woods regime as it evolved in the 1950s. Robert Triffin awakened the world to the contradictions and instabilities of a system of pegged parities that relied on the debt in reserve currencies, mostly dollars, to meet growing needs for official reserves. Triffin and his followers saw the remedy as the internationalization of reserves and reserve assets; their ultimate solution was a world central bank. Others diagnosed the problem less in terms of liquidity than in the inadequacies of balance of payments adjustment mechanisms in the modern world. The inadequacies were especially evident under the fixed-parity gold-exchange standard when, as in the 1960s, the reserve currency center was structurally in chronic deficit. These analysts sought better and more symmetrical "rules of the game" for adjustments by surplus and deficit countries, usually including more flexibility in the setting of exchange parities, crawling pegs and the like. Many economists, of whom Milton Friedman was an eloquent and persuasive spokesman, had all along advocated floating exchange rates, determined in private markets without official interventions.

^{*}Presidential address, given at the April 1978 Annual Meeting of the Eastern Economic Association, Washington, D. C.

By the early 1970s the third view was the dominant one in the economics profession, though not among central bankers and private financiers. And all of a sudden, thanks to Nixon and Connally, we got our wish. Or at least we got as much of it as anyone could reasonably have hoped, since it could never have been expected that governments would eschew all intervention in exchange markets.

Now after five to seven years -- depending how one counts -- of unclean floating there are many second thoughts. Some economists share the nostalgia of men of affairs for the gold standard or its equivalent, for a fixed anchor for the world's money, for stability of official parities. Some economists, those who emphasize the rationality of expectations and the flexibility of prices in all markets, doubt that it makes much difference whether exchange rates are fixed or flexible, provided only that government policies are predictable. Clearly flexible rates have not been the panacea which their more extravagant advocates had hoped; international monetary problems have not disappeared from headlines or from the agenda of anxieties of central banks and governments.

I believe that the basic problem today is not the exchange rate regime, whether fixed or floating. Debate on the regime evades and obscures the essential problem. That is the excessive international -- or better, inter-currency -- mobility of private financial capital. The biggest thing that happened in the world monetary system since the 1950s was the establishment of de facto complete convertibility among major

A Proposal For - 3 -

currencies, and the development of intermediaries and markets, notably Eurocurrency institutions, to facilitate conversions. Under either exchange rate regime the currency exchanges transmit disturbances originating in international financial markets. National economies and national governments are not capable of adjusting to massive movements of funds across the foreign exchanges, without real hardship and without significant sacrifice of the objectives of national economic policy with respect to employment, output, and inflation. Specifically, the mobility of financial capital limits viable differences among national interest rates and thus severely restricts the ability of central banks and governments to pursue monetary and fiscal policies appropriate to their internal economies. Likewise speculation on exchange rates, whether its consequences are vast shifts of official assets and debts or large movements of exchange rates themselves, have serious and frequently painful real internal economic consequences. Domestic policies are relatively powerless to escape them or offset them.

The basic problems are these. Goods and labor move, in response to international price signals, much more sluggishly than fluid funds. Prices in goods and labor markets move much more sluggishly, in response to excess supply or demand, than the prices of financial assets, including exchange rates. These facts of life are essentially the same whether exchange rates are floating or fixed. The difficulties they create for national economies and policy-makers cannot be avoided by opting for one exchange rate regime or the other, or by providing more or different

international liquidity, or by adopting new rules of the game of balance of payments adjustment. I do not say that those issues are unimportant or that reforms of those aspects of the international monetary system may not be useful. For example, I still think that floating rates are an improvement on the Bretton Woods system. I do contend that the major problems we are now experiencing will continue unless something else is done too.

- 4 -

There are two ways to go. One is toward a common currency, common monetary and fiscal policy, and economic integration. The other is toward greater financial segmentation between nations or currency areas, permitting their central banks and governments greater autonomy in policies tailored to their specific economic institutions and objectives. The first direction, however appealing, is clearly not a viable option in the foreseeable future, i.e., the twentieth century. I therefore regretfully recommend the second, and my proposal is to throw some sand in the wheels of our excessively efficient international money markets.

But first let us pay our respects to the "one world" ideal. Within the United States, of course, capital is extremely mobile between
regions, and has been for a long time. Its mobility has served, continues to serve, important economic functions: mobilizing funds from
high-saving areas to finance investments that develop areas with high
marginal productivities of capital; financing trade deficits which arise
from regional shifts in population and comparative advantage or from
transient economic or natural shocks. With nationwide product and labor

A Proposal For - 5 -

markets, goods and labor also flow readily to areas of high demand, and this mobility is the essential solution to the problems of regional depression and obsolescence that inevitably occur. There is neither need for, nor possibility of, regional macroeconomic policies. It would not be possible to improve employment in West Virginia or reduce inflation in California, even temporarily, by changing the parity of a local dollar with dollars of other Federal Reserve Districts. With a common currency, national financial and capital markets, and a single national monetary policy, movements of funds to exploit interest arbitrage or to speculate on exchange rate fluctuations cannot be sources of disturbances and painful interregional adjustments.

To recite this familiar account is to remind us how difficult it would be to replicate its prerequisites on a worldwide basis. Even for the Common Market countries, the goal is still far, far distant. We do not have to resolve the chicken-egg argument. Perhaps it is true that establishing a common currency and a central macro-economic policy will automatically generate the institutions, markets, and mobilities which make the system viable and its regional economic consequences everywhere tolerable. The risk is one that few are prepared to take. Moreover, EEC experience to date suggests that it is very hard to contrive a scenario of gradual evolution towards such a radically different regime, even though it could well be the global optimum.

At present the world enjoys many benefits of the increased worldwide economic integration of the last thirty years. But the integration is partial and unbalanced; in particular private financial markets have A Proposal For - 6 -

become internationalized much more rapidly and completely than other economic and political institutions. That is why we are in trouble. So I turn to the second, and second best, way out, forcing some segmentation of inter-currency financial markets.

My specific proposal is actually not new. I offered it in 1972 in my Janeway Lectures at Princeton, published in 1974 as The New Economics

One Decade Older, pp. 88-92. The idea fell like a stone in a deep well.

If I cast it in the water again, it is because events since the first try have strengthened my belief that something of the sort needs to be done.

The proposal is an internationally uniform tax on all spot conversions of one currency into another, proportional to the size of the transaction. The tax would particularly deter short-term financial round-trip excursions into another currency. A 1% tax, for example, could be overcome only by an 8 point differential in the annual yields of Treasury bills or Eurocurrency deposits denominated in dollars and Deutschmarks. The corresponding differential for one-year maturities would be 2 points. A permanent investment in another country or currency area, with regular repatriation of yield when earned, would need a 2% advantage in marginal efficiency over domestic investment. The impact of the tax would be less for permanent currency shifts, or for longer maturities. Because of exchange risks, capital value risks, and market imperfections, interest arbitrage and exchange speculation are less troublesome in long maturities. Moreover, it is desirable to obstruct as little as possible international movements of capital responsive to long-run portfolio preferences and profit opportunities.

A Proposal For - 7 -

Why do floating exchange rates not solve the problems? There are several reasons, all exemplified in recent experience.

First, as economists have long known, in a world of international capital mobility flexibility of exchange rates does not assure autonomy of national macroeconomic policy. The Mundell-Fleming models of the early 1960s showed how capital mobility inhibits domestic monetary policy under fixed parities and domestic fiscal policy under flexible rates. Moreover, the availability of the remaining instrument of macroeconomic policy in either regime is small consolation. Nations frequently face compelling domestic institutional, political, and economic constraints on one or the other instrument, or on the policy mix.

Second, it may seem that we should welcome an exchange rate regime that increases the potency of monetary policy relative to fiscal policy; after all, monetary pollcy is the more flexible and responsive instrument of domestic stabilization. But the liberation of domestic monetary policy under flexible rates is in large degree illusory. One reason is the attachment of central bankers to monetarist targets irrespective of exchange rate regimes and the openness of financial markets. More fundamentally, monetary policy becomes, under floating rates, exchange rate policy. The stimulus of expansionary monetary policy to domestic demand is limited by the competition of foreign interest rates for mobile funds. Thus much -- in the limit, all -- of the stimulus depends on exchange depreciation and its effects on the trade balance, namely on shifting foreign and domestic demand to home goods and services. The depreciation may occur all right, but its effects on the trade balance can be perverse for a disconcertingly long short run, during which further A Proposal For - 8 -

depreciation, perhaps reinforced by speculation, occurs. Meanwhile the effects of depreciation on domestic currency prices of internationally traded goods are inflationary, even for an economy with idle resources and no domestic sources of inflationary pressure.

on monetary policy in a floating rate regime. I quote from my 1972 lecture: "...[When the export-import balance becomes the strategic component of aggregate demand, one country's expansionary stimulus is another country's deflationary shock. We can hardly imagine that the Common Market will passively allow the U. S. to manipulate the dollar exchange rate in the interests of U. S. domestic stabilization. Nor can we imagine the reverse. International coordination of interest rate policies will be essential in a regime of floating exchange rates no less than in a fixed parity regime." The bickering between Washington and Bonn about these issues in the last year is just what I had in mind.

Third. governments are not and cannot be indifferent to changes in the values of their currencies in exchange markets, any more than they did or could ignore changes in their international reserves under the fixed-parity regime. The reasons for their concern are not all macroeconomic; they include all the impacts on domestic industries, export and import-competing sectors, that arise from exchange rate fluctuations originating in financial and capital transactions. The uncoordinated interventions that make floating dirty are the governments' natural mechanisms of defense against shocks transmitted to their economies by foreign exchange markets.

A Proposal For - 9 -

Fourth, another optimistic hope belied by events was the belief that floating rates would insulate economies from shocks to export and import demand. The same Mundell-Fleming type model that told us the relative impotence of fiscal policies and non-monetary demand shocks under floating rates also implied that trade balance shocks would be absorbed completely in exchange rates without adjustment of domestic output or prices. This will, of course, not be the case if the trade balance moves the wrong way (anti-Marshall-Lerner), or if for any of the other understandable reasons enumerated above, governments intervene to prevent full exchange rate adjustment. It will not be the case anyway if exchange rate movements have consequences for asset demands and supplies, as they will either via the capital gains or losses they produce for agents with long or short positions in foreign currency or via the expectations of future exchange rate movements which they generate.

The recent decline of the dollar against the Deutschmark, yen, and Swiss franc illustrates many of the above points. The U. S. on the one hand, and Germany and Japan on the other, clearly have divergent domestic histories, prospects, and objectives in terms of output growth and inflation. The changes in currency exchange rates have not served, as some proponents of flexible rates might have hoped, to permit these countries to pursue their differing policies without mutual interference. The Germans and Japanese have been reluctant to accept the effects of currency appreciation on their export industries, and so they have

A Proposal For - 10 -

intervened to limit the appreciation. The Americans, concerned about the effects of depreciation on price indexes, have tightened monetary policy and raised interest rates in an attempt to stem the anti-dollar tide in the foreign exchange markets.

This history also supports the assertion I made above, that goods "arbitrage" is very slow relative to inter-currency financial speculation and portfolio shift. The net result of exchange rate movements and domestic price movements over the past few years has been to improve dramatically the competitive position of the U.S. vis-a-vis Germany and Japan. This is true when wholesale prices indices, converted to a single currency at prevailing exchange rates, are compared. Our trade-weighted real exchange rate is about 5% below 1977, and 1973 March over 7% below 1976. Germany's is 7% above 1973, though still below 1976 and 1977. Japan's is 3% above 1973, 7% above 1976, 2% above 1977. The change is even more spectacular when labor costs are similarly compared. In 1970 U. S. hourly labor costs, including fringe benefits, were the highest in the world, 67% above Germany, 300% above Japan. In 1977 five countries had higher costs at exchange rates prevailing in December. Our costs were 16% below Germany, and now only 55% above Japan. * The U. S. is now a low-wage country! Yet we are suffering from the worst trade deficits in history.

I do not wish to be misunderstood. I think the hysteria over the

^{*}For these calculations, made at the Institut der Deutschen Wirtschaft,
Koln. I am indebted to Professor Herbert Giersch.

A Proposal For - 11 -

recent decline of the dollar is greatly overdone, and that the panicky pressure on our government to defend the dollar -- pressure from European governments, from financial circles here and abroad, from the media -- has been most unjustified. Moreover, anyone who thinks that the pre-1971 system of pegged rates would have handled better the recent flight from the dollar into marks, yen, and Swiss francs has a very short memory. Things would have been lots worse, with greater impacts on U. S. domestic policies and greater disruptions to international markets. My message is not, I emphasize again, that floating is the inferior regime. It is that floating does not satisfactorily solve all the problems.

One big reason why it does not is that foreign exchange markets are necessarily adrift without anchors. What we have is an incredibly efficient set of financial markets in which various obligations, mostly short-term, expressed in various currencies are traded. I mean the word "efficient" only in a mechanical sense: transactions costs are low, communications are speedy, prices are instantaneously kept in line all over the world, credit enables participants to take large long or short positions at will or whim. Whether the market is "efficient" in the deeper economic-informational sense is very dubious. In these markets, as in other markets for financial instruments, speculation on future prices is the dominating preoccupation of the participants. In the ideal world of rational expectations, the anthropomorphic personified

A Proposal For - 12 -

"market" would base its expectations on informed estimates of equilibrium exchange rates. Speculation would be the engine that moves actual rates to the equilibrium set. In fact no one has any good basis for estimating the equilibrium dollar-mark parity for 1980 or 1985, to which current rates might be related. That parity depends on a host of incalculables -- not just the future paths of the two economies and of the rest of the world, but the future portfolio preferences of the world's wealth-owners, including Arabs and Iranians as well as Americans and Germans. Reasonable economists and traders, not to mention unreasonable members of both species, can and do have diverse views. In the absence of any consensus on fundamentals, the markets are dominated -- like those for gold, rare paintings, and -- yes, often equities -- by traders in the game of guessing what other traders are going to think.

As a technical matter, we know that a rational expectations equilibrium in markets of this kind is a saddle point. That is, there is only a singular path that leads from disequilibrium to equilibrium. If the markets are not on that path, or if they don't jump to it from wherever they are, they can follow any of a number of paths that lead away from equilibrium -- paths along which, nonetheless, expectations are on average fulfilled. Such deviant paths are innocuous in markets -- as for rare coins, precious metals, baseball cards, Swiss francs -- which are sideshows to the real economic circus. But they are far from innocuous in foreign exchange markets whose prices are of major economic consequence.

A Proposal For - 13 -

This suggests that governments might contribute to exchange market efficiency by themselves calculating and publicizing estimates of equilibrium exchange rates, rates expected some years in future. The floating of the Canadian dollar in the 1950s was probably an empirical episode of considerable intellectual importance in solidifying economists' acceptance of the theoretical case for flexible rates. Floating rates had acquired a bad reputation, rightly or wrongly, in the interwar period. The Canadian experiment seemed to show that market speculation was stabilizing; certainly there were no gyrations greatly disturbing to Canadian-U.S. economic relations or to the two economies. One reason, among others, appears to have been a general belief in a longrun equilibrium not far from dollar-dollar parity, an equilibrium that accorded both with the interconnected structures of the two economies and with the policy intentions of the Canadian government. Those who extrapolated from the model to the world-wide floating of the 1970s have been disappointed. It is scarcely conceivable that the various OECD countries could individually project, much less agree on, much less convince skeptical markets of, a system of equilibrium or target exchange rates for 1980 or 1985. So I must remain skeptical that the price signals these unanchored markets give are signals that will guide economies to their true comparative advantage, capital to its efficient international allocation, and governments to correct macroeconomic policies. That is why I think we need to throw some sand in the wellgreased wheels. Perhaps one might have hoped that the volatility of
floating rates would do that automatically; given the limitations of
futures markets, uncovered risks might permit wedges between national
interest rates and currency diversification might limit intercurrency
movements of funds. In my 1972 excursion into this subject I was
skeptical on this point, and events since have vindicated my skepticism.
I said, "Increasing exchange risk will help, but I do not think we
should expect too much from it. Many participants in short term money
markets can afford to take a relaxed view of exchange risk. They can
aim for the best interest rate available, taking account of their mean
estimate of gain or loss from currency exchange. Multinational corporations, for example, can diversify over time. They will be in exchange markets again and again: there are no currencies they cannot use."

Let me return to my proposed tax, and provide just a few more details. It would be an internationally agreed uniform tax, administered by each government over its own jurisdiction. Britain, for example, would be responsible for taxing all inter-currency transactions in Eurocurrency banks and brokers located in London, even when sterling was not involved. The tax proceeds could appropriately be paid into the IMF or World Bank. The tax would apply to all purchases of financial instruments denominated in another currency -- from currency and coin to equity securities. It would have to apply, I think, to all payments in one currency for goods, services, and real assets sold by a resident of another currency area. I don't intend to add even a

A Proposal For - 15 -

small barrier to trade. But I see offhand no other way to prevent financial transactions disguised as trade.

Countries could, possibly subject to IMF consent, form currency areas within which the tax would not apply. Presumably the smaller EEC members and those ldc's which wished to tie their currency to a key currency would wish to do this. The purpose is to moderate swings in major exchange rates, not to break links between closely related economies.

Doubtless there would be difficulties of administration and enforcement. Doubtless there would be ingenious patterns of evasion.

But since these will not be costless either, the main purpose of the plan will not be lost. At least the bank facilities which are so responsible for the current troublesome perfection of these markets would be taxed, as would the multinational corporations.

I am aware of the distortions and allocational costs that can be attributed to tariffs, including tariffs on imports of foreign-currency assets. I don't deny their existence. I say only that they are small compared to the world macroeconomic costs of the present system. To those costs, I believe, will be added the burdens of much more damaging protectionist and autarkic measures designed to protect economies, at least their politically favored sectors, from the consequences of international financial shocks.

I do not want to claim too much for my modest proposal. It will, I think, restore to national economies and governments some fraction of the short-run autonomy they enjoyed before currency con-

A Proposal For - 16 -

vertibility became so easy. It will not, should not, permit governments to make domestic policies without reference to external consequences. Consequently, it will not release major governments from the imperative necessity to coordinate policies more effectively.

Together the major governments and central banks are making fiscal and monetary policy for the world, whether or not they explicitly recognize the fact. Recently, it is quite clear from the differences and misunderstandings among the so-called three locomotives, they have not been concerting their policies very successfully. I would hope that, relieved of the need to stay in lockstep in order to avoid large exchange rate fluctuations, these governments might approach the task of policy coordination with a longer-range and more global view of their responsibilities.