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# Flexible Exchange Rates and Excess Capital Mobility

FROM 1980 to early 1985 the dollar appreciated 60 percent in real terms. Since then it has depreciated about 20 percent.<sup>1</sup> These exchange rate movements have made many observers wonder whether more is at work than mere changes in fundamentals, and if so, whether such large and persistent swings should be arrested by a return to the gold standard, by rigidly fixed exchange rates among the major monetary areas, or at least by target zones, either hard zones with bumpers or soft zones, implicit and discretionary. Discussion of these possibilities involves two sets of issues, views on which can be combined in a variety of ways. The issues are whether large exchange rate movements primarily reflect extravagant macroeconomic policies or poorly working markets and whether exchange rate fluctuations can be contained without the need for subordinating macroeconomic policies to the exchange rate objective.

There is only one purely market-oriented combination of views: "yes, freely flexible rates work efficiently" and "no, there should be no intervention." The agnostic position concedes that markets may not work efficiently but dismisses the possibility that managed rates would improve the performance. A third combination of views is that exchange markets do not function properly and that policymakers can and should intervene to improve performance.

> Exchange markets function efficiently Yes No

Yes	Branson-Tobin	Marris-Bergsten		
No	Sprinkel-Samuelson	Agnostic		

Manage rate movements

1. Measured according to the International Monetary Fund's Multilateral Exchange Rate Model (MERM) index.

The final position is that markets work reasonably but that there can nonetheless be a case for intervention. Capital flows, for example, may have to be influenced for macroeconomic reasons. Or exchange rate target zones may be useful in educating governments not to pursue policies inconsistent with more or less rigid exchange rates. The premise in both cases is that differential speeds of adjustment in goods and assets markets magnify the effects of monetary and fiscal policies beyond what would arise in a rational expectations market-equilibrium world and thus call for market intervention to avoid undesired effects on employment or inflation.

This note argues that standard theory easily explains the pattern, though perhaps not the magnitude, of exchange rate fluctuations. It argues against target zones because they would lock up monetary policy in a way that is sometimes undesirable. Ad hoc controls of international capital flows via interest equalization taxes or dual rates may be an alternative, although they are not clearly preferable to freely floating exchange rates.

# **Objections to Large Exchange Rate Movements**

There are three basic objections to large exchange rate movements. The first is primitive, but widespread: anything that moves a lot moves too much. Asset markets, exchange markets in particular, are seen as highly speculative and not necessarily rational. Asset prices easily detach themselves for extended periods from fundamentals to go on a bubble that has important effects on resource allocation and on the macroeconomy. The argument has been applied to interest rates, and it might be applied to the stock market, but it has an extraordinary attraction when applied to exchange rates. Presumably the reason is that when wages are relatively fixed in home currency, exchange rate movements mean changes in competitiveness and hence in employment. This argument is, of course, particularly persuasive when applied to appreciation, which ultimately generates unemployment. Such unemployment may be only temporary, but there may also be permanent job loss as firms close down, move abroad, or at the very least, slow their investment. Moreover, the mere presence of exchange rate volatility might mean lower average wages because of adverse effects on profitability and investment.

The second objection involves inflation. Movements in exchange rates, and accompanying movements in commodity prices, represent the most important shock to an otherwise stable inflation process. Sharp appreciation is welcome from an inflation point of view because it improves the inflation-unemployment trade-off. But a bottomless decline in the home currency is rightly seen as an open-ended threat to inflation stability.

The third objection concerns the political reaction to misaligned exchange rates. Overvalued currencies often generate threats of protectionist trade policies—threats that are not, unfortunately, counterbalanced by threats of greater trade liberalization in countries with undervalued currencies. Exchange rate misalignment therefore poses a risk to an open trading system.

These objections, even though loosely stated, make it clear that there are trade-offs. There is the question of what is "too large," and there is the issue of the costs and benefits of limiting exchange rate movements. Finally there is the practical question of whether the recommended policy instruments will work.

# Why Exchange Rates Move So Much

A discussion of exchange rate management presupposes an understanding of how a well-functioning exchange market should behave and a methodology for recognizing excessive volatility when it exists. In particular, one should be able to judge whether the recent volatility in the dollar can be explained by models with perfect markets and rational agents or whether it reflects a serious market failure. The same question has often been asked about bond and stock prices without ready acceptance of the market failure argument.

There are three popular explanations for the large movements in exchange rates. The first is that monetary tightening and fiscal expansion both cause an immediate large appreciation; the second focuses on safe haven effects; the third assumes that markets are irrational. According to the first two explanations, current exchange rate variations reflect a healthy floating rate regime. The theory is that exchange rate movements will be large when policy disturbances are extreme, although the exact quantitative correspondence between rate movements and disturbances remains to be established. According to the third, the dollar's volatility reflects the harsh reality of a market that makes mistakes.

## TIGHT MONEY AND FISCAL EXPANSION

The easiest explanation for large exchange rate variability comes from a Mundell-Fleming model of the effects of monetary and fiscal policy under flexible exchange rates with perfect capital mobility.

The model assumes that asset prices and exchange rates adjust instantly, while goods prices adjust sluggishly. Monetary and fiscal disturbances thus have large effects on real exchange rates. A highly simplified model of the goods and assets markets makes this point:

(1) 
$$m-p=-\lambda i,$$

(3) 
$$\dot{p} = \theta[\phi(e-p) + g],$$

(4) 
$$\dot{g} = -\zeta(g-\overline{g}),$$

where m, p, and e are home nominal money, the price of domestic output, and the exchange rate. The home and foreign interest rates are iand  $i^*$ ;  $\dot{e}$  is the expected rate of depreciation of the home currency; g is the real level of government spending. The model assumes a given output and a given foreign interest rate and ignores foreign repercussion effects of domestic disturbances. Complications are possible in all directions, but they do not substantially alter the conclusions. Equation 1 describes monetary equilibrium, and equation 2 imposes international arbitrage of interest rates, which implies that the home interest rate must equal the foreign rate plus the expected rate of depreciation. The third equation states that prices move in proportion to the excess demand for domestic output, where demand depends on the real exchange rate and on the level of government spending. Finally equation 4 specifies that government spending adjusts gradually to its steady state level.<sup>2</sup>

<sup>2.</sup> For a more complete treatment, see Rudiger Dornbusch, *Open Economy Macro-economics* (Basic Books, 1980).

#### Figure 1. Effects of a Transitory Fiscal Expansion

Domestic prices



Nominal exchange rate

The central feature of this extended Mundell-Fleming model is the fact that goods prices adjust only gradually, certainly not in a forwardlooking manner. The sluggishness of price adjustment means that exchange rates overshoot: the nominal and real exchange rates immediately appreciate in response to a monetary contraction, and proportionally more than the change in money. Over time, as goods prices decline, the real exchange rate depreciates until, in the long run, the initial real equilibrium is regained.

An unanticipated and transitory fiscal expansion, an increase in g above  $\overline{g}$  in equation 4, leads to an immediate real appreciation, as shown in figure 1. At point A', which is the short-run equilibrium, there is an excess demand for goods, and hence prices are rising. Since the interest

rate is initially unchanged (the price level being given at a point in time), the nominal exchange rate at A' is unchanging. Hence at A' there must be real appreciation, since prices are rising with an unchanging nominal exchange rate.

Over time as the level of government spending falls and prices rise, the nominal interest rate increases, and hence the nominal exchange rate will depreciate. At the same time there is a loss of aggregate demand because of overvaluation that is no longer offset by high government spending. Therefore the real exchange rate starts depreciating. The process continues until real spending reaches its initial level and with it interest rates, both nominal and real, as well as the real exchange rate.

Perfect substitutability of foreign and domestic capital, adjusted for expected depreciation, is expressed in equation 2 above. Adjusting nominal interest rates for the respective countries permits writing the real interest parity condition as follows:

$$r = r^* + \dot{q}.$$

The solution to equations 1 through 4 yields a relation between the expected rate of change of the real exchange rate and the deviations of government spending and the real exchange rate from their long-run equilibrium levels:<sup>3</sup>

(5) 
$$\dot{q} = \alpha(\overline{q} - q) - \beta(g - \overline{g}),$$

and hence, substituting in equation 2a, obtains a relation between real exchange rates, real interest rates, and fiscal variables:

(6) 
$$q = \overline{q} + \frac{1}{\alpha}(r^* - r) - \frac{\beta}{\alpha}(g - \overline{g})$$

Equation 6 explains why there is no simple linkage between the real interest rate and the real exchange rate. Fiscal variables and other determinants of aggregate demand also affect real exchange rates. The solution to the model shows that a transitory increase in real government spending leads to an immediate real appreciation, followed for some time by a continuing real appreciation before real depreciation starts. The adjustment path for the real exchange rate is shown in figure 2. The model thus produces a coherent explanation for the exchange rate pattern

3. The details of the solution are not of interest for the point made here and hence are suppressed. It suffices to note that the coefficients in equation 6 are functions of all the structural parameters in equations 1 through 4.

#### Figure 2. Real Exchange Rate Adjustment to a Transitory Fiscal Expansion





Time

experienced in the United States over the past few years. Superimposing the relative tightening of U.S. monetary policy, as measured by shortterm real interest differentials, compared with policy in the rest of the world reinforces that point.

The empirical support for this interpretation comes from recent changes in the structural budget deficits of the leading industrialized countries. The 1980–85 appreciation of the dollar reflects a vast shift in the international monetary-fiscal mix, with fiscal policy in the United States shifting to a massive deficit, while fiscal consolidation abroad was unprecedented. Table 1 shows the extent of deficits and the cumulative shift in structural deficits.

The model predicts that the anticipation of a return to smaller budget deficits in the United States and of a looser stance abroad would lead to dollar decline. Where the Kemp-Roth tax cuts of 1981 brought about

	1974–79 average	1980–84 average	1985	Change in structural deficit, 1980–85ª
United States	1.1	2.7	3.7	4.3
Japan	3.4	3.6	1.4	-3.2
Germany	3.0	3.1	1.5	-4.2

Table 1.	Government	Budget	Deficits,	United	States,	Japan,	and	Germany,	1974-85
Percent	of GNP								

Sources: Organization for Economic Cooperation and Development, Economic Outlook, various issues, and OECD Economic Studies, no. 3 (Autumn 1984).

a. Cumulative change in inflation-adjusted structural budget deficit.

appreciation, the anticipation of a balanced budget brought about by the Gramm-Rudman bill of 1985 must lead to depreciation.<sup>4</sup>

## THE SAFE HAVEN ARGUMENT

A second explanation for the dollar's strength focuses on international portfolio shifts. Increased political uncertainty in Europe, a strengthening of the relative economic position of the United States under the Reagan administration, and economic disintegration in Latin America are the motivating forces in this international asset shift toward the United States. The vehicles are many: a shift in bank lending from the less developed countries (LDCs) to the U.S. capital market, direct investment in the United States, and flight into U.S. currency and deposits from the IMF-occupied territories.<sup>5</sup>

As a single explanation for the recent movements in exchange rates the safe haven argument is plainly inadequate. It works for the appreciation but has trouble explaining the sharp decline of the dollar unless it postulates an inevitable overshooting.

4. See Rudiger Dornbusch, comments on Jeffrey R. Shafer and Bonnie E. Loopesko, "Floating Exchange Rates after Ten Years," *BPEA*, 1:1983, pp. 79–85, for a discussion of this point.

5. Capital flight from debtor countries is particularly emphasized in the recent paper by Martin Dooley and Peter Isard, "Tax Avoidance and Exchange Rate Determination" (International Monetary Fund, 1986). The more traditional safe haven argument was reviewed in Peter Isard and Lois Stekler, "U.S. International Capital Flows and the Dollar," *BPEA*, 1:1985, pp. 219–36.

#### IRRATIONALITY

The irrationality argument in its newest form is that markets seem not to recognize the incompatibility of a strong dollar and relatively small long-term interest differentials, which, from equation 2a, imply a low rate of real depreciation. The implication is that, starting from a high real value, the dollar will decline only gradually to a more competitive level and that, accordingly, the large current account imbalance will persist and accumulate with interest to give the United States, ultimately, a huge debt-to-GNP ratio. Such a debt accumulation would make the United States a worse debtor than, say, Mexico. The argument goes on to say that since such an eventuality is impossible, exchange rate adjustments must come sooner and faster than is reflected in long-term real interest differentials. The irrationality of the market lies in the failure to detect the unsustainability of the path of gradual decline and the inevitability of an exchange rate collapse.<sup>6</sup>

The argument that small long-term interest differentials must imply a collapse has already been demonstrated over the past year. But that may not be a vindication of the approach. The calculations are highly sensitive to assumed levels of real interest rates and growth rates in the United States and abroad. They are also sensitive to the assumption that there is no risk premium. Indeed, as Dooley and Isard have noted, the portfolio shift into dollars from less developed countries may well represent a reduction of the risk premium on U.S. assets.<sup>7</sup> Once the existence of a risk premium is recognized, the setting of equation 2—one of perfectly substitutable capital and risk-neutral asset holders—no longer applies. The Dooley-Isard argument permits recasting the real interest equation, now including a risk premium, R, on nondollar assets:

(2b) 
$$\dot{q} = r - r^* + R.$$

6. See Isard and Stekler, "U.S. International Capital Flows"; Paul R. Krugman, "Is the Strong Dollar Sustainable?" in Federal Reserve Bank of Kansas City, *The U.S. Dollar—Recent Developments, Outlook, and Policy Options* (FRBKC, 1985), pp. 103–32; Jeffrey A. Frankel, "The Dazzling Dollar," *BPEA, 1:1985*, pp. 199–217; and Jeffrey A. Frankel and Kenneth A. Froot, "The Dollar As an Irrational Speculative Bubble" (University of California, Berkeley, 1985).

7. Dooley and Isard, "Tax Avoidance."

An increase in the risk premium on nondollar assets means that at given real interest differentials the U.S. currency can depreciate more rapidly. There is accordingly no longer the strong presumption that the market is on an irrational course that must end in collapse. The path may be one of rapid anticipated real depreciation, which asset holders are prepared to accept because U.S. assets yield compensating returns, psychic or otherwise.

# Managed Exchange Rates: Coordination and Target Zones

The difficulties encountered last March by the United States, Germany, and Japan in obtaining a worldwide cut in interest rates dramatize the difficulty of securing international macroeconomic coordination, even in a situation where all players can come out ahead. Agreements involving sacrifices on growth or on inflation would be far more troublesome, and the near-impossibility of coordination spells trouble for any international agreement to limit the fluctuations of exchange rates. The fixed exchange rate system of the 1960s broke down because West Germany, or perhaps the United States, as one looks at it, was unwilling to agree on a consistent set of policies.

The European Monetary System might be taken as an indication that coordination works, but it is in fact nothing more than a German Monetary Area. The minor actors sacrifice their policy autonomy, presumably to improve inflation performance (perhaps at the cost of long-run fiscal problems), and attempt to adjust to the policy tone set by Germany. Occasional crises, realignments, and capital controls are the chief means by which policy incompatibility is handled.

Nevertheless, proposals to limit exchange rate fluctuations among the major currencies abound. Many seem to rest on the assumption that the job can be done without complementary domestic and international policy coordination. One especially favored proposal is a system of exchange rate target zones.

## EXCESS VARIABILITY

One argument for a target zone system relies on the alleged excess volatility of exchange markets. Asset markets, the argument goes, put

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prices on assets that need not correspond to fundamentals, but that have an important impact on the economy. For the United States, an overvalued dollar leads to undesirable external indebtedness and domestic deindustrialization. If intervention can be effective, then policymakers should step in and push the exchange rate in the direction of the equilibrium value that governments can identify and point out to speculators. By deliberately creating disorder in the exchange market, they scare speculators off the wrong price and in the direction warranted by fundamentals. The action in September 1985 by the Group of Five to lower the value of the dollar relative to other major currencies would be seen as an implementation and vindication of this view.

The difficulty is knowing what a disequilibrium price is, and whether and when intervention should take place in markets where mispricing is suspected. The point is best made by figure 3, which shows real stock prices for the United States in the past decade. What were the fundamentals that caused asset prices to be at a record low in 1982 and then to increase more than 50 percent in three years? Is the 1982 level too low, or the present level too high? From 1972 to 1985, stock market variability was twice as great as exchange rate variability.<sup>8</sup> Since the stock market is at least as significant as the exchange rate for the performance of the U.S. economy, should we have target zones to avoid erratic and irrational fluctuations in the stock market?<sup>9</sup> Exactly the same argument applies to long-term bond prices, which also show seemingly erratic fluctuations and have a major impact on the economy.

Many economists would be coy in responding to proposals to set target zones for interest rates or for the stock market. They would ask immediately how these target zones are to be made to stick and would certainly be concerned if the answer were monetary policy. Fixing target zones for interest rates without regard for fundamentals, they would protest, would generate inflation. The same, they would add, applies to fixing the real value of the stock market. But what is different about target zones for exchange rates? The only difference I can see is that

8. The coefficients of variation of real stock prices and the U.S. real exchange rate for the period 1972–85, using quarterly averages, were, respectively, 20.8 and 10.3 percent.

9. This argument has, in fact, been advanced by Stanley Fischer and Robert C. Merton, "Macroeconomics and Finance: The Role of the Stock Market," in Karl Brunner and Allan H. Meltzer, eds., *Essays on Macroeconomic Implications of Financial and Labor Markets and Political Processes*, Carnegie-Rochester Conference Series, vol. 21 (Autumn 1984), pp. 57–108.



Figure 3. Real Value of Stock Prices, United States, 1974–85<sup>a</sup>

Sources: Quarterly data from Standard and Poor's Corporation and U.S. Department of Commerce, Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82 Statistical Tables* (Government Printing Office, forthcoming), and *Survey of Current Business*, vol. 66 (March 1986). a. Standard and Poor's composite index of 500 stocks, deflated by the implicit GNP price deflator.

target zones for interest rates or the stock market are discredited (perhaps excessively), while exchange rate fixing is a fad that has a way of coming back.

Even if it were quite obvious that an exchange rate was misaligned, there would still be a policy issue to be resolved. Moving the exchange rate would have macroeconomic effects on aggregate demand and on prices. Bursting an exchange rate bubble, in the U.S. case, would benefit manufacturing, which is certainly suffering from an overly strong dollar,

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but it would also bring about a swing of the U.S. external balance and hence create pressure on import prices. Correction of the exchange market therefore involves a macroeconomic adjustment that can easily push up inflation. In the absence of conclusive action to reduce the U.S. deficit, it is not obvious that a better-aligned exchange rate is a good trade-in for a significant increase in inflation. At a minimum, one must ask what macroeconomic policies, here and abroad, should accompany a realignment of rates. Lower world interest rates and U.S. fiscal contraction are, of course, the answer. Thus it may be impossible to avoid the coordination issue even when one thinks of bubble bursting.

## INSUFFICIENT INSTRUMENTS

If large changes in exchange rates primarily reflect fundamentals, the problem will be different. When fundamentals change, as in the case of a fiscal expansion, the equilibrium exchange rate also changes, and governments must explicitly or implicitly shift target zones. A serious political issue arises because now the government of a country undergoing fiscal expansion will quite overtly have to practice crowding out of the traded goods sector. The objective functioning of markets can no longer be claimed as an argument for a passive nonintervention stance. Pressures to use the target zones to counter movements in equilibrium rates will have to be resisted. The same pressures that call in the United States today for intervention or protection, rather than fiscal adjustment, will be vocal in calling for a determined effort to resist movements in market-determined exchange rates. It is difficult to see that making exchange rates more of a political issue will help make them move more often in the right direction.

The outcome would be much the same if target zones were hard rather than soft, a system that would be the practical equivalent of fixed nominal rates independent of fundamentals. Suppose a country sets out to stabilize inflation by reducing money growth. In the absence of wageprice controls, interest rates will have to rise to bring about the recession that slows inflation. The increase in interest rates in turn attracts capital and leads to currency appreciation. Pursuing a policy of rigid target zones would make it difficult to reduce inflation. To avoid the appreciation, monetary policy could not turn restrictive in the first place.

The argument is reinforced if at the very time of inflation stabilization

the economy is driven by expansionary fiscal policy. In such a case, to hold the exchange rate, monetary policy would in effect have to monetize the deficits. The exchange rate would remain unchanged; there would be no crowding out except on a world scale; and there would be a maximum of inflation. This is, of course, what would have happened in the United States in 1980–85 if monetary policy had defended the 1980 value of the dollar in the face of the Kemp-Roth tax cuts. The Volcker disinflation would simply not have occurred.

The upshot of all this is that as long as legislatures or administrations reserve the privilege of enacting extravagant fiscal policies, market prices, from exchange rates to interest rates, will adjust; fixing some will quite possibly make others move even more. The lesson is that large international divergences in monetary or fiscal policy will be reflected in exchange rates. To avoid these fluctuations, bad policies must be avoided. Accommodating a poor fiscal policy by exchange-rate-oriented monetary policy simply adds yet another folly.

#### INSTITUTION-BUILDING

Some analysts who favor target zones understand that an effective system of target zones requires international coordination of monetary and fiscal policies.<sup>10</sup> They also recognize that as yet there is no effective method of coordination. But they argue that setting target zones for exchange rates would be a first step in educating governments to pursue good policies. They seem to envision a scenario in which, when the Kemp-Roth tax cuts led to exchange rate problems, the U.S. Congress, recognizing the target zone commitment, would simply have rescinded the tax cuts. Europe, in the same way, would have abstained from fiscal consolidation.

It is difficult to believe that such conditions for international monetary and fiscal coordination are at hand. No government in a large country easily sacrifices its fiscal autonomy to an exchange rate target. The United States will not, nor will Germany, Japan, or even the United Kingdom. Promoters of target zones should be quite frank to admit that

<sup>10.</sup> See, for example, John Williamson, *The Exchange Rate System* (Washington, D.C.: Institute for International Economics, 1985).

without fiscal coordination their scheme will more often than not involve abuse of monetary policy. It therefore may well introduce even more instability. The lack of fiscal convergence so far makes this almost a certainty.

It is entirely correct to try to build institutions that ultimately help promote reasonable policies. But in this respect the world economy is at a very early stage, in which the negotiation of an ad hoc consensus, for example the present one on interest rates, is the best we can hope for.

# **Directing and Containing Capital Flows**

Whether the safe haven argument or the Mundell-Fleming model applies, when excessive incipient capital inflows move currency values, the traded goods sector, and possibly the entire macroeconomy, suffers. There are several ways out. The first is to impose a rigid exchange rate system, a prescription that assumes that fixed exchange rates can accommodate any disturbances. This is the "discipline" argument for fixed rates.

A second solution is to avoid international interest differentials by using monetary policy: whenever a fiscal expansion drives up exchange rates, a monetary expansion would keep interest rates in line internationally and thus take the pressure off exchange rates. The third possibility is to break the tight international interest rate linkages, rather than sacrifice fiscal autonomy or subordinate monetary policy to exchange rate targets.

There are in principle three ways to tamper with international interest rate linkages. The first is direct control of capital flows. A country with an incipient currency appreciation would limit capital inflows by restricting borrowing from abroad for some or all classes of assets and by precluding the repatriation of assets held abroad. Whether the strategy would work is another question. The record on capital controls is hard to interpret. The common argument is that they are circumvented the moment they are imposed, but of course the same argument was used for the income tax when it was first suggested as an important source of revenue. Some evasion is inevitable; the question is whether the controls substantially work. Even though capital controls are practiced by most countries in one form or another, they are difficult to apply for a large country with many firms that have extensive international transactions.<sup>11</sup>

Given these difficulties, attention centers on two market-oriented measures, the "Tobin tax" and a real interest equalization tax as proposed, for example, by Liviatan.<sup>12</sup> A more radical form would be a dual exchange rate regime, in which trade is conducted at a fixed rate while all capital account transactions occur in a separate market at a flexible rate. The purpose would be to reduce the dominance of capital flows over real activity and the inflation process.

The Tobin tax would reduce the incentive for short-term capital flows by imposing a small uniform tax on all foreign exchange transactions. Such a tax would tend to penalize short-term capital flows, or "hot money," and reduce their impact on exchange rates. An interest equalization tax would also narrow the net return to nonresidents and reduce incipient inflows. Of course, it would not eliminate these inflows unless it also applied to repatriation. Administrative complications could be considerable, but so are the disruptions that follow from the laissez-faire system or from second-best policies under target zones.

Ultimately, a more severe control of international capital flows may be unavoidable. Most international capital flows today involve tax sheltering or tax evasion rather than socially productive resource transfers. Shifting capital internationally in search of tax havens has become a nasty evasion of ordinary tax discipline, as is obvious in light of the massive capital flight from debtor countries—easily \$100 billion—in the past ten years. This footloose capital is parked tax free in shelters, helping promote an overvalued dollar and serious fiscal and social problems in the countries of origin.

11. For a discussion of U.S. attempts at controlling capital outflows in the early 1960s, see Richard N. Cooper, "The Interest Equalization Tax: An Experiment in the Separation of Capital Markets," *Finanz Archiv N.F.*, vol. 24 (December 1965), pp. 447–71.

12. See James Tobin, "A Proposal for International Monetary Reform," in *Essays in Economics: Theory and Policy* (MIT Press, 1982), ch. 20; N. Liviatan, "Anti-Inflationary Monetary Policy and the Capital-Import Tax" (Warwick Economic Research Papers 171, 1980). See, too, Mario Monti and others, *Capital Controls and Foreign Exchange Legislation*, Occasional Papers (Euromobiliare, Milano, June 1985); Charles Wyplosz, "Capital Controls and Balance of Payments Crises" (INSEAD, Paris, 1984); and Rudiger Dornbusch, "Special Exchange Rates for Capital Account Transactions," *World Bank Economic Review* (forthcoming).

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Rather than attracting capital from debtor countries by offering a tax haven, thus undermining already precarious efforts at stabilization, the United States should charge rent on the place in the sun. The same argument applies to politically motivated capital flows. And in the process of constructing a system of reasonable taxation of footloose capital, the United States would create an administrative framework that would make it possible to implement ad hoc temporary interest equalization taxes that are complements of major macroeconomic shifts in monetary or fiscal policy.

Once such policies are accepted as feasible, two issues remain. First, the international coordination necessary to help implement the scheme would raise many of the problems of achieving agreement that arise in connection with target zoning. Second, limiting the degree of exchange rate movement would affect the distribution of crowding out. For example, in the context of a fiscal expansion, exchange appreciation crowds out net exports. But if an interest equalization tax were used to limit the appreciation, home output and employment would be greater and the world interest rate higher. Crowding out would tend to take place abroad as a result of increased world interest rates, and the impact of exchange appreciation on inflation would be limited. It is not certain that such an eventuality is to be preferred to an overvaluation that crowds out net exports and contains inflation, with adjustment costs postponed until the policy comes to an end.

The main difference between target zones, reinforced by monetary accommodation, and interest equalization taxes, a Tobin tax, or dual rates is that in the latter cases monetary policy remains free for domestic stabilization. Such flexibility is to be preferred to a habitual subordination of monetary policy to exchange rate targets. Occasional ad hoc interest equalization taxes and occasional ad hoc monetary coordination seem to be a better system among the unconverged industrial countries than a promise of target zoning without an idea of how to make it stick.

# **Concluding Remarks**

Even though ad hoc policies toward capital flows can, in principle and perhaps in practice, achieve a more favorable adjustment to disturbances, what is finally at issue is not the exchange rate system but the policy shocks. At this stage the priority must be to reduce world real interest rates, taking advantage of the leeway provided by the oil price decline to solve fiscal problems, LDC debt problems, and the problems of financial institutions.

It is worth noting that the most fervent advocates of target zones invariably have in mind sharply increased budget deficits in Japan and a much stronger yen. It is true that under a system of target zones Japan will have trade problems, which larger budget deficits and currency appreciation might be a way of preventing. We may think the average Japanese household saves too much, but it is difficult to believe that better resource allocation or full employment requires such a shift in Japan's policies. A much better case could be made for Germany, at least on the basis of the high levels of unemployment prevailing there. There is no indication, however, that either Germany or Japan sees deficit spending as a priority. Nor does sound public finance or anything else suggest that they should go on a Kemp-Roth fling. If we do not like Japanese net foreign lending and feel that we suffer because of it, we should tax it, if necessary at exorbitant rates. If that is administratively difficult we should ask our Japanese friends to do so for us and to spend the proceeds. In that way we reduce the incentives to Japanese savers or at least direct the lending to Europe or capital-starved LDCs. Insisting on their building sewers is at best a roundabout way of solving the problem.

But the main puzzle remains this: what makes it so difficult to recognize that lower interest rates, not bigger foreign deficits or an appreciating yen, are economically and politically attractive, free, and feasible? Lower interest rates solve the world's problems better than getting an extra dollar of budget deficits abroad or raising the yen another penny, whether by target zones or otherwise.