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Target Zones and the Management of the Dollar

By March 1986 the dollar had fallen about 25 percent from its peak level in February 1985.¹ According to the model of Stephen Marris, perpetuation of the rates prevailing last March would leave the U.S. trade deficit well above \$100 billion until 1989, when it would start to increase again.² A further decline in the dollar will thus be necessary to produce a sustainable current account. My own estimate is that the dollar must fall another 10 percent or so to reach what I term “fundamental equilibrium.”³

While it is important that the dollar complete its realignment, it is also important that it avoid overshooting, for too low a value would renew inflationary pressure in the United States and increase pressures on employment and the tradable goods industries in other industrial countries. In my view the way to pursue the goal of completing the realignment while avoiding overshooting is by prompt introduction of a system of target zones for the major currencies. In the first section of this paper I outline such a system. In the second section I describe eight factors that lead me to favor this approach. In the final section I examine the relevance of prospects for the U.S. fiscal deficit to the advisability of adopting a target zone approach to currency management.

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

2. Stephen Marris, *Deficits and the Dollar: The World Economy at Risk* (Washington, D.C.: Institute for International Economics, 1985), chap. 4.

3. John Williamson, *The Exchange Rate System* (Washington, D.C.: Institute for International Economics, 1985). See note 5 for a definition of fundamental equilibrium.

A Target Zone Proposal

I favor a limited number of the major countries⁴ negotiating a set of mutually consistent targets for their effective exchange rates. These targets should be selected by estimating the real exchange rate that would secure basic balance in the medium term while maintaining economic activity at the highest level consistent with the control of inflation.⁵ The nominal exchange rate targets corresponding to the agreed real targets should be regularly updated in the light of new data on differential inflation rates between countries. The real targets should be revised to accommodate both secular trends such as superior productivity growth in the tradable sector⁶ and real shocks or new information.

Exchange rates should be permitted to move within a zone some 10 percent above and below the target. A country participating in the target zone system would not have an absolute obligation to keep its exchange rate within the target zone, but as the rate approached or breached the limits of the target zone, the country would be obliged to consult its partners. If only one currency were to threaten to break out of its target zone, the presumption would be that, unless there were reasons for revising the target zone, the country that issued that currency should amend its policies with a view to pushing its rate back toward the middle of its target zone. The principal instrument to be used for that purpose should be monetary policy, reinforced by exchange rate intervention.⁷

4. The minimum number of countries that would be needed to create a meaningful system would be the three majors, the United States, Japan, and Germany. I would prefer it to cover the SDR five (adding the United Kingdom and France) or the summit seven (adding Italy and Canada). Conceivably members of the exchange rate mechanism of the European Monetary System might enter collectively. The managing director of the International Monetary Fund should be present at the negotiations to represent the interests of the smaller countries.

5. In *The Exchange Rate System*, I refer to basic balance as a current account outcome equal to the "underlying capital flow over the cycle" and also discuss the concept of the underlying capital flow. The exchange rate that satisfies the criterion in the text is subsequently described as the "fundamental equilibrium" rate.

6. Bela Balassa, "The Purchasing Power Parity Doctrine: A Reappraisal," *Journal of Political Economy*, vol. 72 (December 1964), pp. 584-96.

7. If interest equalization taxes were administratively feasible, they would provide an attractive additional instrument, but they seem to be ruled out as impractical.

If the implied monetary action were to threaten internal balance, it should be complemented by fiscal action.

If more than one currency were to threaten to breach its target zone simultaneously, and the target zones appeared to remain appropriate, it would become necessary to decide which of the issuing countries should change its exchange rate. Several solutions are conceivable:

—a rule whereby the strong-currency countries would act if aggregate monetary expansion were below a predetermined target rate, and the weak-currency countries would act in the converse case—sometimes known as a McKinnon-type rule;⁸

—a commodity-type standard whereby the strong-currency countries would act if the price of a basket of primary commodities were falling, and the weak-currency countries would act in the converse case;

—a regime of discretion, whereby the strong-currency countries would act if the participating countries judged that deflation posed a more serious global threat than inflation, and the weak-currency countries would act in the converse case;

—*a rule of automatic sharing, whereby all countries would be expected to act in proportion to the deviation of their rates from the targets.*⁹

My own inclination is to doubt whether it is possible to do better than use discretion, but the question of whether at least a presumptive rule on one of the other three principles might be worthwhile deserves investigation.

A related question is whether exchange rate management needs to be supplemented by international coordination of other policies. It would be foolish to try to coordinate so many policies as to overdetermine the system, but an attempt at international coordination of either growth, unemployment, or fiscal policy might be worthwhile. Such coordination may not achieve much, however, since Keynes and White were probably correct in their judgment that national interests would coincide with

8. Ronald I. McKinnon, *An International Standard for Monetary Stabilization* (Washington, D.C.: Institute for International Economics, 1984).

9. In applying this rule one might wish to normalize the deviation of the exchange rate from its fundamental equilibrium for country size. This would require that the percentage deviation be divided by $(1 - \alpha_i)$, where α_i is the weight of the i th country in the determination of effective exchange rates. A similar procedure is followed to construct the European Monetary System divergence indicator.

world interests once the possibility of beggar-my-neighbor exchange rate policies was excluded; but I retain an open mind.

Supporting Judgments

At the Claremont Monetary Conference on March 24–25, 1986, I listened to the debate with a view to identifying judgments that lead me to differ with some other economists in favoring a target zone approach. The list I compiled involves the following eight propositions.

—Changes in the nominal exchange rate have a major and systematic impact on the real exchange rate, even in the medium run. The Law of One Price has probably been more thoroughly discredited by empirical evidence than any other proposition in the history of economics.¹⁰

—Exchange rate misalignments impose major costs on the economy. Misalignments have generated inflationary pressures in countries with undervalued currencies, have crippled the tradable goods sectors of countries with overvalued currencies, and came close to destroying the liberal trading system last year.

—Asset-market models do not explain the behavior of exchange rates. Operators in the foreign exchange market take a short-term view of things. The market by itself cannot be relied on to place the exchange rate at the rational expectations equilibrium of the asset-market approach (the long-run equilibrium rate discounted by the compounded long-term interest differential).¹¹ If it is important to prevent the exchange rate from deviating from that level (at least on the side away from fundamental equilibrium), policy must be in part deliberately devoted to that end. Governments cannot hope to estimate either the current equilibrium¹²

10. See, for example, Irving B. Kravis and Robert E. Lipsey, “Price Behavior in the Light of Balance of Payments Theories,” *Journal of International Economics*, vol. 8 (May 1978), pp. 193–246; and Peter Isard, “How Far Can We Push the ‘Law of One Price’?” *American Economic Review*, vol. 67 (December 1977), pp. 942–48.

11. James M. Boughton, “Exchange Rate Movements and Adjustment in Financial Markets: Quarterly Estimates for Major Currencies,” *IMF Staff Papers*, vol. 31 (September 1984), pp. 445–68; Paul R. Krugman, “Is the Strong Dollar Sustainable?” Working Paper 1644 (National Bureau of Economic Research, June 1985); Jeffrey A. Frankel and Kenneth Froot, *The Dollar as an Irrational Speculative Bubble: A Tale of Fundamentalists and Chartists* (forthcoming).

12. The term “current equilibrium” is intended to connote the rate that would obtain if markets had full knowledge of all relevant facts and reacted rationally to that knowledge, that is, the rate that current conventional theory predicts will in fact hold.

or the fundamental equilibrium accurately, but they are far more likely to get an answer that is approximately correct if they pose the question directly rather than accept the market's answer while wringing their hands and declaring total abstinence from intervention, as they did from 1981 to mid-1985.

—Medium-run exchange rate targets do not involve serious conflicts of national interest. Although beggar-my-neighbor incentives for competitive appreciation (to control inflation) or depreciation (to stimulate demand) can prevail, depending upon the state of the world conjuncture, there is less reason to expect similar conflicts in a medium-run context. In particular, anti-inflation benefits are bought at the cost of a deterioration in the foreign balance and are thus inherently transitory.¹³ Mercantilist desires for trade surpluses have traditionally given rise to greater concern, but most of us believe that such desires are irrational rather than a true reflection of national interests, so that negotiation, while it may prove tedious, should be capable of achieving ultimate agreement.

—Fiscal policy is not necessarily independent of the exchange rate regime. The proposals outlined above envisage a fiscal policy directed to internal balance, given the monetary policy needed to manage the exchange rate. In practice one may not expect or even wish for frequent "fine-tuning," but the world economy will not function satisfactorily unless fiscal policy is broadly consistent with the agreed levels of competitiveness.

No one would claim that merely setting exchange rate targets will in itself ensure that the political process will deliver the responsible fiscal policies that have been conspicuously absent in recent years. But an international commitment to target exchange rates should be helpful in changing fiscal policy for two reasons. First, only a totally hypocritical government would sign an agreement to establish target zones unless it were prepared to modify its policies to push exchange rates toward those zones. Admittedly a successor government might not regard itself as constrained by such an agreement (although all reports indicate that the Mitterrand government was much influenced by its European Monetary System obligations in changing course in 1982–83), but international obligations should become increasingly difficult to ignore over time as

13. Willem E. Buiter and Marcus Miller, "The Thatcher Experiment: The First Two Years," *BPEA*, 2:1981, pp. 315–67.

they become an accepted part of the international system. The General Agreement on Tariffs and Trade does not always prevent governments from surrendering to protectionist pressures, but it helps. Second, the U.S. Congress has now learned that fiscal indiscipline can produce politically painful consequences for the tradable goods industries, not just for “our grandchildren.” As a consequence, a quasi crisis as the dollar threatened to break out of its target zone could provide an occasion to muster the political consensus needed to take fiscal action.

—Economic policy does not need a “nominal anchor.” Wicksell was not exactly an inflationist, but he believed that price stability should be secured by placing frictions on *changes* in the price level, rather than by anchoring the price level through exogenous specification of some key nominal variable. I share his position (except that I would prefer to use demand management and incomes policies rather than just interest rate policy to resist changes in the price level), and therefore regard it as unnecessary to have each country (or even one country) either target a monetary aggregate or peg the price of a commodity like gold. This is not to say that central banks should be prohibited from targeting a monetary aggregate: a target zone system will provide ample flexibility to accommodate the sort of monetary targeting practiced by Germany since 1974, in which the targets have been modified when necessary to limit misalignments.

—Target zones cannot force a stability-minded country to import inflation. If one country alone starts to expand its money supply excessively, it will be the one to breach its target zone and be expected to amend its policies. If half the countries in a target zone system start to inflate, both sets of countries are likely to reach the limits of their target zones at the same time, and the inflating countries will be the ones called to order unless the world manages to forget all the painful lessons of the 1970s. Only if a weighted majority of the countries in the system resort to renewed inflationary finance simultaneously could a stability-minded country find itself alone at the edge of the band. But even in this worst-case scenario the country could still fulfill its obligations to the target zone system, without threatening its own price stability, by a measured monetary expansion accompanied by fiscal contraction if that proved necessary despite the 10 percent real appreciation. And as prices started to rise in the other countries, the stability-minded country would experience a continuing nominal appreciation that would prevent any intensification of the pressure to import inflation.

—Speculative “testing” of the limits of properly chosen target zones will fail. Under the Bretton Woods system, fixed exchange rates that were initially appropriate became misaligned over time through differential inflation or real shocks that were not compensated by adjustment of the nominal exchange rate. Participating nations were reluctant to change pegged exchange rates, and speculators could see when a rate had become inappropriate. Since the cost of defending that rate indefinitely would have been prohibitive, a speculative attack could lead a government to recognize that its self-interest demanded a parity adjustment. Resistance to adjustment simply meant that the volume of adverse speculation would increase and the income transfer to the speculators would be larger, though delayed.

Matters will be entirely different if governments defend target zones that encompass the equilibrium rate by policies, such as interest rate changes, that increase the cost of adverse speculation. Resistance to a speculative attack on the lower margin will not result in a cumulative loss of reserves through the basic balance that must ultimately undermine the capacity to avoid devaluation, but in a cumulative gain in reserves that will make clear to the speculators that their attack was misguided and that they would be well advised to cut their losses. Even if the speculators push the rate temporarily outside the zone, they will not be able to reap collective profits, since there will be no one to whom they can sell out except other speculators. As long as the rate stays outside the zone, the authorities can make it increasingly costly to maintain the speculative position by raising interest rates. A speculative attack can thus succeed only if a government loses its nerve and devalues when it should not or if it tries to defend a zone that does not encompass the fundamental equilibrium rate. Both possibilities can be avoided by sticking to the criteria for selecting target zones outlined above. As speculators come to realize the futility of attacking target zones, the zones will become a focus for stabilizing speculation, not targets to test. That is why the zones should be published.

The Dollar and the U.S. Fiscal Deficit

The target zone system would be advisable under almost any scenario involving the U.S. budget deficit. If the deficit falls to zero over the next

five years, as programmed under the Balanced Budget and Emergency Deficit Control Act of 1985, more familiar as "Gramm-Rudman," the dollar will stay comfortably within its target zone as long as the Federal Reserve Board is willing to orient monetary policy to the exchange rate objective and to use sterilized intervention when necessary. The main evidence I would cite on behalf of this contention is the degree of stability of the exchange rate of the Swiss franc and the deutsche mark over the past few years since the Swiss authorities started to modify their monetary target with a view to stabilizing the rate against the mark. This stability is evident in figure 1, in which a higher value represents an appreciation of the mark.

Without some commitment to targeting the exchange rate, I see no reason to expect the dollar to stay close to its fundamental equilibrium even if the fiscal deficit is brought promptly under control. There are, after all, countries that have pursued convergent (and cautious) policies for the past decade, notably Germany and Japan. Yet the real yen-deutsche mark rate has gyrated much more than 10 percent margins would have permitted, for reasons that cannot be explained by "fundamentals," meaning the determinants of current equilibrium exchange rates. The instability of the yen-mark rate is contrasted with the stability of the Swiss franc-mark rate in figure 1. "Stable policies" are a necessary but not a sufficient condition for stable exchange rates; the additional requirement is that exchange rate targets be a significant determinant of policy. And since inconsistent exchange rate targets would be a disaster, an agreement along the lines of the target zone approach is indispensable for exchange rate stability and the limitation of misalignments.

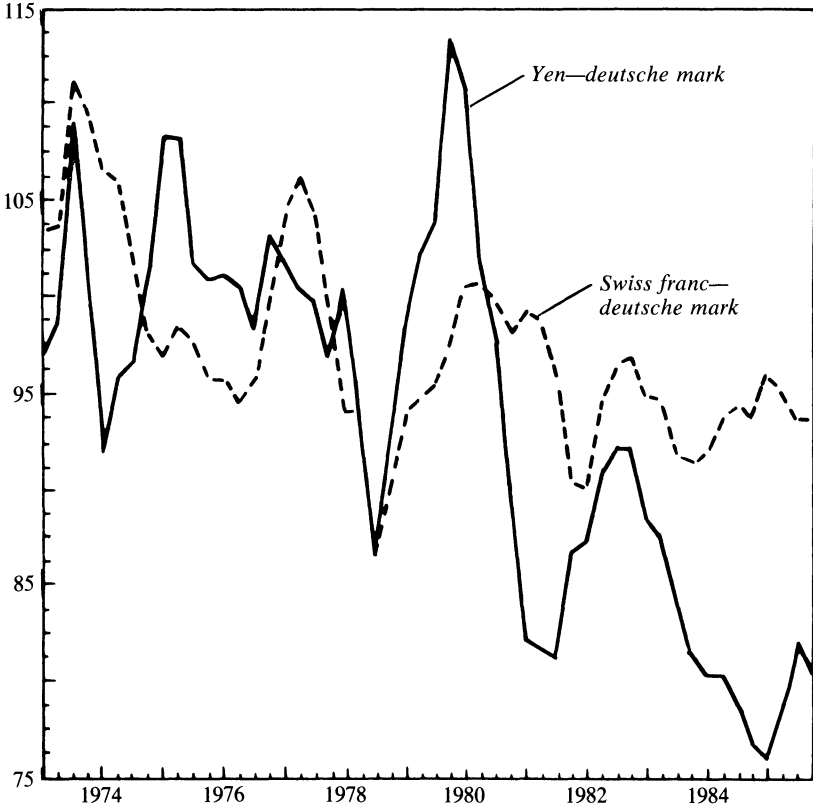
Several outcomes are conceivable if the effort to restore U.S. fiscal probity fails.

In the first case, the exchange rate remains where it is or falls a little, the expansion in net exports generates a rise in output, and the budget deficit declines endogenously (and private saving increases) as a result of the rise in income. Deregulation and the fall in unionization have produced a fortuitous but as-yet undetected decline in the natural rate of unemployment, inflation does not resume, and we all live happily ever after.

The second scenario is the same as the first, except that the natural rate has not fallen. Inflation resumes, and the Federal Reserve tightens monetary policy. The rise in interest rates pushes the dollar to the top of

Figure 1. Bilateral Real Exchange Rates between Germany and Switzerland and between Germany and Japan, 1973-85^a

Index, 1980 = 100



Source: Quarterly data from the International Monetary Fund.
a. Computed using relative wholesale prices.

the target zone. The resulting quasi crisis induces the political system to do the necessary on the fiscal front, and again we all live happily ever after.

The third case is a repetition of the second, except that the quasi crisis does not suffice to restore fiscal discipline. Then either the Federal Reserve monetizes the deficit, which would presumably lead to the final case, or, a lesser evil, the dollar breaks through its target zone. Maintenance of a target zone even though the dollar went above it would at least warn the foreign exchange market that the authorities judged the

rate too high and would be seeking to reduce it, which should serve to avoid a recurrence of the speculative bubble that took the dollar into the stratosphere from mid-1984 to September 1985. It would in my view be a great mistake to view the zone as so rigid that any instance of a rate straying outside it was treated as an ultimate disaster that prompted abandonment of the system.

The final case resembles the second, but the Federal Reserve does not tighten monetary policy soon enough or sufficiently. Confidence erodes and the dollar collapses to the bottom of the target zone,¹⁴ a quasi crisis that could at least be expected to stiffen monetary policy, and might also be the occasion for fiscal action.

A target zone approach could worsen the consequences of failure to correct the U.S. fiscal deficit only if it induced the Federal Reserve to monetize the deficit. Forewarned is forearmed; in that unhappy event the soft buffers should be called into play and the rate allowed to rise above the target zone for a time.

14. The effect of an increased fiscal deficit is both theoretically ambiguous and apparently of opposite sign between the United States and many other countries. My belief is that the major reason for that difference is in fact differing confidence as to whether the deficit will be monetized rather than the relative slopes of the *LM* and *BP* curves that cause the theoretical ambiguity.