# The Reference Rate Proposal and Recent Experience

Widespread managed floating of exchange rates began in March of 1973. Since that time concern has been periodically expressed that nations might deliberately manipulate exchange rates in ways detrimental to the interests, or inconsistent with the exchange policies, of other countries. As a result, increasing attention has been devoted to possible rules to govern the management of the float by the leading industrial nations. Various economists have formulated proposed sets of rules. Interim guidelines for managed floating were actually adopted by the Executive Directors of the International Monetary Fund as early as June 1974. These guidelines were supplemented in April 1977 by a decision of the Executive Directors regarding principles and procedures for the guidance of members and for the exercise of IMF surveillance of the exchange-rate practices of members. This decision was taken to conform to the requirements of Article IV of the Second Amendment to the Articles of Agreement, which went into effect on April 1, 1978.

The purpose of the present paper is three-fold. We shall first examine the various proposals that have been put forward to regulate the management of the float. Next we shall examine recent international monetary experience in the light of these proposals. Finally, we shall develop further our own Reference Rate Proposal.

## I. The Proposals

### *General Approaches*

Several main approaches to, or strategies for, the management of the float can be distinguished in the recent discussion and decisions. One focuses on establishing "norms" or "targets" for exchange rates and on setting rules or standards for exchange policy in the light of these norms. This has been called the Targets Ap-

proach, though the terminology is somewhat misleading (for reasons discussed below). A second would limit exchange management to resisting or moderating, but not completely offsetting, market pressures on the exchange rate. This might be called Leaning Against the Wind. Still another approach, which is sometimes distinguished, is to concentrate exchange policy on preventing or moderating sharp, erratic, and disruptive short-term fluctuations in exchange rates. This might be called Maintaining Orderly Market Conditions. It is usually grouped with leaning against the wind, a procedure that will be followed below.

The IMF "Guidelines for the Management of Floating Exchange Rates" in fact incorporated all three of these strategies.[1] The first three guidelines correspond to the third, second, and first strategies, respectively. Most of the individual proposals that have been advanced can, however, be grouped under one or the other of the first two approaches.[2]

Foreign exchange policy is to be understood to comprise all policies undertaken by national authorities in order to influence exchange rates either directly or indirectly. But most proposals for rules for managing the float confine themselves to official intervention in the exchange market, to the exclusion of official policies that affect exchange rates only indirectly. The IMF guidelines, however, explicitly apply not only to spot exchange market intervention, but also to "other policies that exercise a temporary effect on the balance of payments and hence on exchange rates, and that have been adopted for that purpose. Such policies may take the form of official forward exchange market intervention, official borrowing or lending, capital restrictions, separate capital exchange markets, various types of fiscal intervention, and also monetary or interest rate policies."[3]

### *The Targets Approach: Alternative Proposals*

(1) The first example of the targets approach was the *Reference Rate Proposal*, advanced by the present authors in a paper[4] delivered

1 *IMF Survey*, June 17, 1974, pp. 181-3.
2 The third approach is also explicitly incorporated in "Text of Executive Directors' Decisions on Exchange Rate Policy Surveillance," issued April 29, 1977. See *IMF Survey*, May 2, 1977, pp. 131-2.
3 *IMF Survey*, June 17, 1974, p. 183.
4 "The Management of Floating Exchange Rates," in P. M. Boarman and D. G. Tuerck (eds.), *World Monetary Disorder* (New York, 1976). The proposal was further discussed in W. Ethier and A. I. Bloomfield, "Managing the Managed Float," *Princeton Essays in International Finance*, No. 112 (October 1975).



at the Conference on World Monetary Disorder, Pepperdine University, May 23-25, 1974. This proposal envisages the establishment for individual countries of reference rates, representing current estimates of "equilibrium" exchange rates, to which two rules would apply. (a) No country would be permitted to sell its own currency at a price below the lower end of a small band about its reference rate or buy its currency at a price exceeding the upper end of the band. (b) The structure of reference rates would be periodically revised according to some internationally agreed procedure.

Reference rates are not to be regarded as par values to be defended or as targets to be reached. They are simply points of reference towards which countries would be *entitled* to move market rates by official intervention and away from which they must not in similar fashion be pushed. No country would ever be *obliged* to intervene in the exchange market. If reference rates are reasonable approximations of true equilibrium rates, exchange-market intervention cannot then be of a competitive or aggressive kind, such as inducing or accentuating movements away from equilibrium or maintaining overvalued or undervalued market rates. Further, stabilizing speculation would be promoted. For if market rates moved away from reference rates, speculators would know that any future official intervention could only be in the direction of moving the market rate back towards the reference rate. They would also know that any revision of reference rates would not necessarily carry with it any particular level of market rates.

John Williamson has emphasized[5] two further potential benefits of the Reference Rate Proposal. It would facilitate the introduction of arrangements for compulsory reserve asset settlement as well as for multicurrency intervention. He regards both as desirable measures which would reduce the asymmetries of the present system of managed floating.

(2) *Guideline 3* of the IMF Guidelines for Floating, published on June 17, 1974, offered the second example of the targets approach. This guideline has some broad similarities to the Reference Rate Proposal, but also differs in a number of respects. The guideline is voluntary, not mandatory. A member may, with the Fund's

5 J. Williamson, "The Future Exchange Rate Regime," in this *Review*, June 1975, pp. 3-20. See also Williamson, *The Failure of World Monetary Reform 1971-1974* (New York, 1977), Chapter 8.

permission, establish a "target zone of rates" (within the range of reasonable estimates of the "medium-term norm for the exchange rate in question) and act aggressively to move its market rate toward that zone. If its market rate has moved too far from that zone, the member may also be encouraged by the Fund (1) not to moderate movements towards this range, or (2) to take action to moderate further divergence from this range. But there is no provision in the Fund guidelines for regular re-examination and, if necessary, revision of the target zone, as in the Reference Rate Proposal.

(3) Still another proposal utilizing a targets approach is the *OPTICA Plan*, which is based on a purchasing-power-parity rule.[6] The plan would establish, for each participating country, a reference rate (with a small margin around it) defined in effective terms. The reference rate would be altered periodically in proportion to the change in a moving average of its effective P.P.P. index (calculated by dividing the country's wholesale price index by a weighted average of the wholesale price indices of its competitors — the weights being those used to calculate the effective exchange rate). At the beginning of each period (month or quarter) the authorities in each country would calculate the extent of appreciation or depreciation of their reference rate relative to the preceding period. The authorities of a country with a relatively high inflation rate — and thus with a depreciating reference rate — would then be required to defend the lower end of the band, but they could not intervene to prevent an appreciation of the market rate above the upper end of the band if market pressures so dictate. Conversely, in the case of a currency with an appreciating reference rate, the authorities would defend the upper end of the band, but would not intervene in support of the lower.

The OPTICA rules are designed to prevent currencies from depreciating or appreciating by more than relative changes in purchasing-power-parities, and thereby avoid exchange-rate-wage-price spirals, which the authors of the report regard as the central danger of floating rates. A related purpose is to lessen the disparity in inflation rates among members. The scheme is designed for the European Community but could have a wider applicability. It is not specifically

6 COMMISSION OF THE EUROPEAN COMMUNITIES, *Inflation and Exchange Rates: Evidence and Policy Guidelines for the European Community* (Brussels, 1977), Chapter 2.



aimed at the problem of competitive exchange behavior, but might deal with it nonetheless.

*Leaning Against the Wind: Variations on a Theme*

The basic notion of leaning against the wind — that intervention should resist, but not completely offset or reverse, the market — characterizes broadly the foreign exchange policies of the major industrial nations since March 1973. Thus discussion in this vein has generally consisted of the suggestion of specific safeguards and modifications of present practices. Three contributions may be noted.

(1) *Guideline 2* of the IMF guidelines authorizes a member to moderate pressures on its exchange rate on a "month-to-month or quarter-to-quarter" basis and encourages it to do so when the pressures are recognized as temporary By the same token, it specifies that a member should not normally lean *with* the wind by accentuating market movements. The more recent IMF Executive Directors' Decision on Exchange Rate Policy Surveillance appears to be primarily concerned with the prevention of excessive leaning against the wind. For example, the circumstances calling for Fund "discussion with a member" (e.g., large and persistent intervention in one direction or balance-of-payments motivated changes in restrictions on capital flows or current transactions) all entail evidence of systematic attempts to influence exchange rates. The only circumstances explicitly mentioned under which intervention *should* take place are "to counter disorderly conditions."

In general, the Decision on Surveillance seems to reflect an acceptance for the indefinite future of managed floating and therefore a concern to limit abuses such as excessive leaning against the wind; by contrast, the earlier guidelines seemed to be looking forward to a return to a modified system of adjustable pegs. The precise situation is rendered ambiguous by the IMF statement[7] "that the guidelines for floating established by the Executive Directors... will remain in effect in all respects in which they are consistent with the new decision."

(2) A detailed case[8] for this approach is provided by *Richard Cooper*, who bases his argument on the view that "we do not know

7 *IMF Survey*, May 2, 1977, pp. 129, 136.
8 R. N. COOPER, "Exchange Rate Surveillance" in *The New International Monetary System*, edited by R. A. Mundell and J. J. Polak (New York, 1977).

what the equilibrium exchange rate over any time period is, but it allows for the likelihood that the 'market' does not know either. The monetary authorities, therefore, intervene to prevent rapid movements in exchange rates except when those are clearly justified by the underlying economic conditions."[9] He acknowledges the difficulty of distinguishing movements of exchange rates that call for intervention from those that do not. He is also aware of the danger of excessive leaning against the wind to keep an exchange rate unduly low or unduly high. He advocates a method of correction for this. If, for example, an exchange rate was kept unduly low, this would be reflected in increases in that country's reserves above targeted changes. In such a case the country would be required under specified guidelines to sell the excess reserves whenever it could do so without causing disorder in the exchange market.[10] This would thereby push the exchange rate in the direction that the market had earlier been moving it.

(3) *Paula Tosini*[11] finds a number of advantages in leaning against the wind in the case of exchange-rate movements that appear likely to reverse themselves over a reasonable time. In cases of "apparent one-way movements extending beyond the horizon," however — if and when they can be identified — she admits that such a policy may not be appropriate. She regards leaning against the wind as an especially attractive way to minimize the possibility of aggressive intervention. For it would carry with it the obligation, which could be made explicit, to oppose rather than reinforce movements of exchange rates, to reduce rather than neutralize market pressures, and to intervene with comparable force when exchange rates are falling as when they are rising.[12] Effective monitoring of these obligations would require the exchange among governments of timely data on

9 *Ibid.*, p. 77-8.

10 Such a suggestion is hardly new. It is basically a specified version of the American advocacy of "objective indicators" in the C-20 negotiations and a similar suggestion had been made by R. F. MIKESELL and H. N. GOLDSTEIN, "Rules for a Floating-Rate Regime," *Princeton Essays in International Finance*, No. 109 (April 1975).

11 PAULA TOSINI, "Leaning Against the Wind: A Standard for Managed Floating," *Princeton Essays in International Finance*, No. 126 (December 1977).

12 In the case of the last, Tosini makes an exception, already incorporated in guideline 4 of the IMF guidelines, to the effect that asymmetrical intervention would be permitted in cases when countries want to correct unduly low or high reserve levels.



reserve changes and market intervention. Leaning against the wind would also constitute the rule, as far as possible, for indirect as well as direct official measures to influence the exchange rate.

We have examined the two principal approaches suggested for the regulation of the managed float. It is not to be concluded of course that the one is completely distinct from the other. Under the Reference Rate Proposal, for example, a country could lean against the wind if it chose to do so, but only in one direction at any given time (unless the market rate is within the reference rate band). Thus, if the market rate is below the reference rate, the authorities could resist only downward pressure on their currency. Conversely, if the market rate is above the reference rate, they could resist only upward pressure. In short, they could resist only pressures tending to drive the market rate away from the reference rate, not toward it. On the other hand, a set of rules based on the leaning-against-the-wind approach would permit (oblige or encourage) a country to resist market pressures in either direction, regardless of where the market exchange rate actually is. Any such rules, that attempted to distinguish exchange-rate movements calling for intervention from those for which intervention would be inappropriate, would necessarily involve calculations not substantially different from those required to establish "norms" or "targets".

Cooper and Tosini have both asserted[13] that the targets approach is closer to the adjustable-peg end of a spectrum along which leaning against the wind is closer to the pure-floating end. This assertion is false. The Reference Rate Proposal, for example, mandates no intervention at all and serves rather to prohibit some types of intervention, whereas leaning against the wind requires, or at least strongly encourages, systematic resistance to the dictates of the market.[14] Unfortunately this incorrect assertion has had more than semantic significance. For the mistaken view has arisen that the targets approach attempts to resurrect the more unworkable features of the defunct adjustable-peg system and is therefore subject to its defects, such as the acknowledged difficulty of forecasting equilibrium exchange rates and the impossibility of defending non-credible pegs in the face of a large stock of highly liquid capital.

13 COOPER, *op. cit.*, p. 74, and TOSINI, *op. cit.*, p. 1.

14 Thus the term "Targets Approach" is unfortunate.

## II. Some Aspects of Recent Experience

Let us now examine general experience with managed floating in recent years and also the foreign exchange policies actually pursued by the leading industrial countries since March 1973.

*Recent Foreign Exchange Policies*

In general, exchange-market intervention has been very substantial throughout the period of the managed float. Several studies have revealed little, if any, reduction in the amount of intervention, relative to the pegged-rate period, during the early years of the float.[15] More recent years appear to have witnessed no reduction either.

With respect to individual countries, there have been wide differences in exchange policies. First, the *degree* of management of exchange rates has varied from country to country. The United States, for example, has followed a relatively passive exchange policy. Its intervention in the exchange market has been limited, though this has increased somewhat since the beginning of 1978. At the other end of the spectrum, Great Britain, Italy, and Japan have pursued active exchange policies throughout nearly all of the period. The countries in the European joint float have had to intervene often and sometimes on a large scale to keep their currencies within the snake, but, following the lead of Germany, they have generally allowed their currencies to float jointly with comparative freedom against the dollar and other outside currencies.

Second, the mix of policies actually used to influence exchange rates has also varied from country to country. Some countries have relied more than others on direct intervention in the exchange market (e.g., the United States and Germany) relative to capital controls (e.g., Japan, Switzerland), or monetary policy (e.g., Great Britain), or borrowing abroad (e.g., Great Britain and Italy).

Third, some countries have operated for much of the period to resist upward pressures on their currencies — Switzerland and Germany being the best examples — whereas others, notably Italy and

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[15] J. Williamson, "Exchange-Rate Flexibility and Reserve Use," *The Scandinavian Journal of Economics* 78, No. 2, 1976 pp. 327-39; E.C. Suss, "A Note on Reserve Use Under Alternative Exchange Rate Regimes," *IMF Staff Papers*, July 1976, pp. 387-94; W.M. Brown, "World Afloat: National Policies Ruling the Waves," *Princeton Essays in International Finance*, No. 116 (May 1976).



Great Britain, have operated most frequently to support their currencies against downward pressures.

Finally, the pattern of management of several individual countries has varied over the period. For the first two years of its float Switzerland, for example, completely abstained from official intervention in the exchange market, relying mainly on control of capital movements; thereafter she relied on both. France dropped out of the European joint float in January 1974, returned in July 1975, and withdrew again in March 1976. Other examples could be cited.

Despite these differences, there have also been striking similarities in patterns of management among the industrialized countries. One of the objectives of exchange market intervention in all cases has been to counter actual or impending disorderly market conditions. There has long been official agreement as to the desirability of intervention for this purpose. As far back as March 16, 1973 the communique of the ministerial meeting of G-10 and EEC countries in Paris had stated that the ministers and central bank governors "agreed in principle that official intervention in exchange markets may be useful at appropriate times to facilitate the maintenance of orderly conditions." This statement was reaffirmed at a meeting of central bankers in Basle in July 1973. In the Rambouillet Declaration of November 1975 it was agreed that "monetary authorities will act to counter disorderly market conditions or erratic fluctuations in exchange rates." This principle, as noted earlier, has also been embodied in guideline 1 of the IMF Guidelines for Floating and in the Fund's Decision on Surveillance.

Nearly all the industrialized countries have also pursued a common strategy of leaning against the wind in the face of strong, one-way pressures in the exchange market stretching over longer periods, generally without seeking to nullify fundamental market trends. They have thus acted broadly in accord with guideline 2 of the Fund guidelines, although that guideline is permissive rather than mandatory. A recent econometric study of Japanese intervention policy from March 1973 to October 1976 confirms that that policy was indeed of this kind.[16] Similar studies for other industrialized countries would doubtless yield similar results — although different countries have leaned against the wind with different degrees of intensity and

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[16] P.J. Quirk, "Exchange Policy in Japan - Leaning Against the Wind," *IMF Staff Papers*, November 1977, pp. 642-64.

sometimes asymmetrically in periods of upward and downward market pressures.

Typical of statements supporting the view that leading central banks generally acted in accord with guidelines 1 and 2 is that provided in 1975 by the German Bundesbank and doubtless applicable also to the later interventions of that bank:

> " In its intervention policy the Bundesbank's guiding principle is that interventions should be made only for the purpose of maintaining ' orderly market conditions ', and that fundamental trends in the market should not (and cannot) be counteracted. However, interventions have not only served to maintain orderly market conditions and avoid hectic exchange rate fluctuations from day to day. Rather, the attempt has been made to moderate excessive fluctuations in the Deutsche Mark rate vis-a-vis the U.S. dollar over extended periods of time." [17]

A number of countries have nevertheless on occasion leaned against the wind to such an extent as to constitute an abuse of the principle, sometimes arousing international resentment in the process. Both Japan and Great Britain have at times completely offset market pressures for months on end. In 1977, Switzerland, the United Kingdom, Japan, Germany, and Holland, despite appreciations of their currencies against the dollar, and on an effective basis, leaned against the wind much more sharply than seemed justified in light of the upward pressures on their currencies and thus pursued what could be described as aggressive foreign exchange policies. More recently, an American bank publication has concluded:

> "Recent experience indicates that European and Japanese authorities are reluctant to see their currency values appreciate by much more than necessary to offset their favorable inflation differentials. They evidently do not want to allow the United States a competitive advantage large enough to increase its share in world export markets and to help pay for the rise in U.S. net oil imports from a few billion dollars at the beginning of this decade to about $ 43 billion per annum at present.
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> " In other words, exchange rates are only nominally floating and are heavily managed. This management has limited the role of exchange rate adjustments in reducing international payments imbalances. Thus, the present situation appears to be inconsistent with the understandings reached in the November 1975 Rambouillet Agreement and with the revised Article Four of the IMF Articles of Agreement..." [18]

[17] *Annual Report of the Bundesbank*, 1974, p. 60.



There is little evidence that the exchange policy of any of the industrial countries has been guided by a " targets approach ", or that something like guideline 3 has been operative. Individual countries have doubtless had definite views at times as to what their exchange rates, or zone of rate fluctuations, should be, and may possibly in some cases have agreed on these with the IMF. A number of leading countries, as just noted, at times even kept their exchange rates fixed against the dollar, or on an effective basis. But this is hardly sufficient evidence of a targets strategy.[19]

### *Aggression in Foreign Exchange Policies*

A major concern long expressed by advocates of pegged exchange rates is that their abandonment would lead to aggressive foreign-exchange management by individual countries for nationalistic purposes.

Until 1976 there was, however, little evidence of deliberate exchange depreciation or currency undervaluation on the part of any of the major countries in order to gain competitive trade advantages. In the first two years of the float, when the dominant issue was inflation, this is not altogether surprising. Indeed, if there was any evidence at all of aggressive exchange-rate policy in those years it pointed rather in the opposite direction: a number of countries, notably Japan, Italy, and Great Britain, may have kept their exchange rates too " high " by selling foreign exchange on a large scale in order to minimize the inflationary pressure that too sharp a depreciation would have involved. But even in the period that immediately followed, when in most countries the focus of concern shifted towards unemployment, there was no strong evidence of deliberate currency undervaluation.

Since 1976 accusations of aggressive foreign-exchange behavior have become more frequent. Examples have been noted above. In

[18] Morgan Guaranty Trust Company of New York, *World Financial Markets*, April 1978, p. 5.

[19] Quirk, *op. cit.*, finds little evidence of such a strategy in the case of Japan.

no case, to be sure, have the accused "sinners" admitted guilt, and indeed there is question whether the alleged "sins" have had effects of a significant magnitude. But the suspicion is very real and in itself a potentially serious threat to international economic harmony. Furthermore, the incidents are indicative of the nature of the weaknesses in present foreign exchange arrangements. Three additional specific cases may be cited.

(1) In the first half of 1976 there were complaints in many circles that Italy, France and Great Britain, all facing serious balance-of-payments difficulties, had encouraged "excessive" falls in their exchange rates, a charge all three countries denied. The U.K. authorities, for example, were widely believed to have "signalled" a depreciation of the pound by a decline in the Bank of England Minimum Lending Rate, and to have then leaned only nominally against the resultant wind. The French Finance Minister in fact announced that he would bring before a meeting of EC finance ministers the question of whether Britain had thereby violated the Treaty of Rome.[20]

(2) In the latter half of 1976 complaints were made, particularly in the United States, that Japan and Germany — and to some extent Switzerland — were keeping their exchange rates unduly low by resisting too strongly the upward market pressures on their currencies. These criticisms subsequently abated, and no substantiation of the charges was offered in testimony before the U.S. Joint Economic Committee in October 1976.[21] A U.S. Treasury official, indeed, testified that he did not think "there has been a persistent pattern in the case of the yen, or in another major currency, of intervention that would suggest achievement of an artificial competitive position."[22] The Joint Economic Committee stated in a report in the spring of 1977 that, even if the criticisms of Japan and Germany in 1976 were valid, "such practices have now been curtailed if not eliminated."[23] By November 1977, however, the committee expressed sharp concern:

"...official intervention in exchange markets has had a major role in frustrating real economic adjustments... This intervention by a growing list of industrial countries... has often been to promote domestic anti-inflation or employment goals. Such intervention is a growing threat to the efficacy of the IMF..."[24]

(3) Intense pressure on the mark and the yen, relative to the U.S. dollar, developed in the summer of 1977, at least partly in response to public statements by American officials, notably Treasury Secretary Blumenthal. Despite "clarifications" and, ultimately, countervailing statements, the U.S. was widely interpreted to have "talked down" the dollar (or, rather, to have "talked up" the yen and mark). The apparent purpose of this verbal foreign-exchange policy was not merely to improve the U.S. competitive position, but also to increase pressure upon the German and Japanese authorities to adopt more stimulative internal policies.

### *Implications for International Monetary Reform*

What are the implications for international monetary reform of the more than five years' experience with the managed float? First, the float has been quite successful in the sense that there has been little if any limitation of the exchange markets' ability to service international trade and investment. There is little sentiment, in either official, business, or academic circles, for any attempt to resurrect pegged exchange rates, or for fundamental reforms generally. There is general acceptance of the view, reflected in the recent amendment to the IMF Articles of Agreement, that, for the time being at least, the managed float constitutes a broadly acceptable state of affairs and that any reforms should be evolutionary rather than revolutionary.

Second, there is nevertheless substantial, and perhaps growing, dissatisfaction with certain features of the actual functioning of the managed float — in view of the above, this dissatisfaction should perhaps be labelled "of the second order". There are two principal sources of complaint. One is the recent spate of alleged instances of aggressive exchange policies noted above. The other is the substantial and prolonged fluctuations in major exchange rates, apparently often unrelated to underlying economic developments, since the begin-

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[20] *New York Times*, March 17, 1976, p. 63.

[21] U. S. Congress, *Guidelines for Exchange Market Intervention*, Hearings before the Subcommittee on International Economics of the Joint Economic Committee, 94th Congress, 2nd Sess., October 18, 1976 (Washington, 1977).

[22] *Ibid.*, p. 47; also pp. 39, 45.

[23] U. S. Congress, *Issues at the Summit*, Report of the Joint Economic Committee, 95th Congress, 1st Sess., May 4, 1977 (Washington, 1977), p. 18.

[24] U. S. Congress, *Living with the Trade Deficit*, Report of the Subcommittee on International Economics of the Joint Economic Committee, 95th Congress, 1st Sess., November 18, 1977 (Washington, 1977), p. 7.

ning of the float. These fluctuations have received continual, widespread attention in the financial press.[25]

The relevant scope for international monetary reform in the foreseeable future would seem to be limited to rules for the managed float, and thus to the two classes of proposals described in the last section: leaning against the wind and the targets approach.

## III. Which Type of Rules?

As we have seen, recent exchange-rate policies can be broadly classified as leaning against the wind. Current debate thus centers around whether rules for managed floating should be formulated to shift to a targets approach or else to strengthen leaning against the wind, as suggested by Cooper and Tosini and as vaguely hinted at in the IMF's innocuous Decision on Surveillance. It is our opinion that continued adherence to the leaning-against-the-wind principle would be a mistake. There are several reasons for this. Our earlier papers[26] offered some analysis of leaning against the wind which remains relevant. We confine ourselves here to further points specifically suggested by recent experience.

### *Leaning Against the Wind is Inherently Destabilizing*

Suppose that the exchange rate fluctuates in random fashion about a constant equilibrium level. Then a policy of symmetrically leaning against the wind, i.e., of intervening to the same degree to resist appreciations and depreciations, would imply that, on the average, intervention would tend to resist a movement towards equilibrium as often as to resist a movement away from it. Thus such a policy could be expected, over the long term, to be neither stabilizing nor destabilizing, and also to be neither profitable nor unprofitable for the central bank pursuing such a strategy. But in fact the equilibrium exchange rate (for any relevant concept of "equilibrium") will change from time to time, so that the path of the actual exchange rate should be thought of as one involving random fluctuations about a path towards equilibrium. In this case it is evident that symmetrical leaning against the wind must on the average involve resisting movements towards equilibrium more often than resisting movements away. That is, such a policy will be destabilizing (and unprofitable).

One would think that this simple argument, thus far overlooked, should be fundamental to any assessment of leaning against the wind. For years advocates of floating rates argued that private speculation could be expected to limit exchange-rate fluctuations. Since 1973 we have had *both* floating (in the sense of an absence of a peg policy) and a level of central-bank intervention roughly comparable to the earlier pegged exchange rate period. Yet fluctuations have notably increased. We do not wish to make the point too strongly,[27] but surely it is rash simply to assume that present intervention policy (leaning against the wind) *must* have served on balance to limit rather than accentuate exchange rate fluctuations.

### *Leaning Against the Wind and Alleged Aggression*

An examination of the alleged instances of aggressive foreign exchange policies discussed in the preceding section leads to a striking conclusion. None of the incidents involved the use of exchange-market intervention to push exchange rates in one direction or the other; instead they all involved abuses of the sort that are *predictable consequences of the leaning-against-the-wind rule.*

For example, "signalling", leading statements by officials, "leaks", and national attempts in general to give implicit direction to the exchanges must be particularly expected under such a regime. Market participants are always anxious to learn of official intentions, views, or policies. A system in which there are no official international

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[25] There has also been some discussion by academics. See R. I. McKinnon, "Floating Exchange Rates 1973-74: The Emperor's New Clothes," in K. Brunner and A. H. Meltzer (eds.), *Institutional Arrangements and the Inflation Problem*, 1976; also R. N. Cooper, "Five Years Since Smithsonian," *The Economist*, December 18, 1976, pp. 27-34. Some economists have also emphasized other possible deficiencies of the present system: the continuing asymmetrical role of the dollar [see Williamson, *op. cit.*, and also the comments by Peter Kenen in R. A. Mundell and J. J. Polak (eds.), *The New International Monetary System*, pp. 202-22], and the apparent lack of control over the volume of international liquidity [see Williamson, "The Benefits and Costs of an International Monetary Nonsystem" in E. M. Bernstein *et al.*, "Reflections on Jamaica", *Princeton Essays in International Finance*, No. 115 (April 1976), and R. Triffin, "'Europe and the Money Muddle' Revisited", in this *Review*, No. 124, March 1978, pp. 56-7].

[26] Ethier and Bloomfield, *op. cit.* See also Williamson, *The Failure of World Monetary Reform, 1971-74*, Chapter 8.

[27] A few economists, notably Milton Friedman, have in fact asserted that the sizable exchange-rate fluctuations since 1973 are largely due to central-bank intervention.

statements as to what structures of exchange rates might be expected to prevail (or be mutually acceptable to national authorities) constitutes a virtual invitation to aggressively-minded nations — or to those that believe defensive measures are called for — to attempt to influence exchange rates through such indirect means. Indeed in such a framework the market is very sensitive to official hints and statements regardless of the intentions of the authorities. This not only constitutes a source of instability but also enables officials to claim, as in the instances cited above, that they had been misquoted or misunderstood. Finally, the leaning-against-the-wind rule itself mandates that resulting exchange pressures not be reversed by official action. This enables aggressors to strike a pose of virtue. It also makes the market all the more willing to respond to such situations, since traders are well aware that central banks are to refrain from reversing the indicated movements.

The instances of prolonged intervention to resist underlying exchange-rate pressures also constitute behavior that should be expected under a leaning-against-the-wind rule. This danger, unlike the others discussed in this section, has in fact been recognized by advocates of the rule, and their proposals are largely motivated by such a concern.

### *Implications for Leaning Against the Wind*

The purported deficiencies in the actual operation of the managed float in recent years are thus due, at least in significant part, to the implicit management principle: leaning against the wind. We conclude that an extended and more formal reliance on this rule, as has been suggested in some quarters, would not constitute an improvement and could very well aggravate present problems. Likewise we believe that proposals to tighten up the leaning-against-the-wind principle, as discussed by Cooper and Tosini, could accomplish little and would likely be counter-productive.

For example, the use of target levels for reserves, or for reserve changes, to safeguard against prolonged leaning in one direction, and also of effective measures to ensure symmetric leaning, would both fail to deal with the potential destabilizing influence of the rule or with the use of signals and announcements to influence rates. Indeed these problems would be made worse. Reforms of this sort in effect set limits to the cumulative amount of potential intervention in one direction, limits that in turbulent times would become quickly self-fulfilling in the manner that became so familiar during the final years of the adjustable-peg system.



We favor regulation and surveillance based on a targets approach, and, in particular, the Reference Rate Proposal. The IMF Decision on Surveillance, by comparison with the earlier guidelines, appears to constitute a step away from the targets approach towards leaning against the wind.[28] For example, W. F. Duisenberg, the Governor of the World Bank for the Netherlands, has commented:

> " The new rules for fund surveillance contain no reference to exchange rate targets at all; this is in contrast to the 1974 guidelines which asked countries to form — if possible — a reasonable estimate of the medium-term norm for their exchange rates, and to resist movements in the market that appear to deviate substantially from that norm. In the new rules for Fund surveillance these ideas have been completely eliminated."
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> " I deplore this development and I would urge that we try to find a better compromise between the pre-1971 system and the present proposals." [29]

There are many variants of the targets approach and not all are appropriate to present needs. In particular, we are concerned that any step in this direction should not constitute a movement back towards pegged exchange rates to any degree. Indeed we feel that standards for exchange-rate management should explicitly affirm the right of any nation to conduct a "clean" float. This would not be the case with explicit, mandatory versions of the leaning-against-the-wind principle, and is not really true of the present implicit version. Sizable countries attempting to refrain from intervention during periods of exchange turbulence may find themselves subject to serious external pressures to intervene. For example, in the summer of 1973 and again in late 1977 and early 1978, the United States was subjected to heavy criticism from European authorities for not supporting the dollar.

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[28] It is not clear that this is so, partly because of the ambiguous implication, noted above, of the Decision for the status of the guidelines, and also because the comparative flavor of the two documents is dominated by the shift in sentiment from a desire to return to pegged rates to an acceptance of the managed float. As argued above, this latter shift in no way implies an increased preference for leaning against the wind relative to the targets approach (*supra*, p. 217).

[29] IMF, *Summary Proceedings of the Thirty-Second Annual Meeting of the Board of Governors* (Washington, 1977), p. 45.

Our views on this matter are embodied in the Reference Rate Proposal, which has been discussed at length elsewhere.[30] The earlier discussion remains relevant and will not be repeated. However, the experience of recent years indicates several ways in which the original proposal might be elaborated.

## *The Reference Rate Proposal Further Elaborated*

The proposal is summarized by rules (a) and (b) presented earlier. Rule (a) is already quite specific. We shall now further specify the proposal by elaborating rule (b) and by adding a rule (c).

Rule (b) concerns the fixing and revision of reference rates. We propose that this task be undertaken by the IMF as part of its surveillance procedure. The structure of reference rates of the participating nations would be set (although not necessarily changed) every month, or quarter, on the basis of a multilateral consultation with the participants. The latter would supply, as best as they can, information about expected developments and about their intentions for all policy measures likely to influence exchange rates (e.g., planned fiscal measures, intended growth of monetary aggregates, contemplated foreign borrowings, interest-rate targets, desired changes in reserve stocks, etc.). The reference rates would then be negotiated on the basis of all available information, and the result formally announced by the IMF in the form of a reference rate for each participant, expressed in terms of SDRs. There could be provision for extraordinary consultations in the event of unexpected developments or sudden changes in national policy objectives.

The nations participating in this procedure should include, at a maximum, the dozen or so industrialized countries with independently floating currencies; at a minimum they should include the United States, Germany and Japan. Of the remaining IMF members, those with currencies pegged to other currencies or to currency composites could simply have the pegs designated as reference rates,[31] and countries with pegs which adjust according to objective indicators would have as their (possibly varying) reference rates the values mandated by those indicators.[32]

The additional rule (c) concerns measures other than exchange intervention which also influence exchange rates. As part of the multilateral consultation, the participating nations will have communicated their intentions regarding relevant policy moves. Their stated intentions for some of the more significant policy tools (as many of these tools as proves practicable) would then play a role analogous to that which rule (a) mandates for the reference rates with respect to intervention. That is, the participating nations would accept an obligation to refrain from aggressively deviating from their stated targets for these policy measures in a direction that would tend to force exchange rates away from reference rates. Suppose, for example, that the rate of growth of some monetary aggregate is one of these tools. Then a nation whose exchange rate was in fact below the floor of its reference rate band would not take steps to accelerate the growth rate of the monetary aggregate above the intended rate it had communicated at the most recent consultation. This rule would apply to as many of the more important policy tools as possible. The collection of measures subject to the rule would vary somewhat from country to country due to institutional differences. Also the rule would require a more liberal interpretation for some tools than for others. This is because, while some measures (e.g., tariff rates, controls of capital flows, interest rates) can be precisely formulated and directly implemented, others (e.g., some fiscal measures, growth of monetary aggregates) are subject to only imperfect short-run control, and others (e.g., various forms of moral suasion) cannot be expressed in precise form at all.

We can now summarize the amended Reference Rate Proposal in the following three rules.

(a) No country would be permitted to sell its own currency at a price below the floor of its reference rate band or to buy its own currency at a price above the ceiling of its reference rate band.

(b) The structure of reference rates, expressed in SDRs, would be periodically revised by the IMF through a multilateral

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[30] See ETHIER and BLOOMFIELD, *op. cit.*, and also WILLIAMSON, *op. cit.* See also comments and discussion by FRED HIRSCH and JOHN WILLIAMSON in R. A. Mundell and J. J. Polak (eds.) *The New International Monetary System* (New York, 1977) pp. 95-102, and, in addition, B. J. COHEN, *Organizing the World's Money* (New York, 1977) pp. 194-5, and *passim*.

[31] This could include members of the European snake other than Germany, which should participate in the procedure.

[32] The IMF would presumably exercise surveillance over the choice of pegs and/or objective indicators by these remaining countries.

consultation with the participants which would utilize all available information and at which the participants would communicate their intentions for all relevant policy measures.

(c) No country would be permitted deliberately to deviate from its stated targets, for a stipulated collection of policy measures other than exchange-market intervention, in a direction that would tend to depreciate its currency when the exchange rate was below the floor of its reference rate band, or that would tend to appreciate its currency when the exchange rate was above the ceiling of its reference rate band.

### *Discussion of the Amended Proposal*

Reference rates would constitute *neither* pegs that countries would be obligated to defend *nor* targets towards which they would be expected or obligated to attempt to force exchange rates. If advocates of free floating were to succeed in converting the authorities in some country or countries to their position, such a course of action would be completely acceptable. This is in contrast to mandatory versions of leaning against the wind, which require resistance to market forces, and also to present arrangements where authorities may in fact be subject to international pressure to resist substantial exchange-rate changes. The reference rates instead play two different roles. First, they serve to exclude, via rule (a), certain types of intervention. The proposal would be expected to help stabilize the exchanges, for reasons discussed in our earlier papers and briefly indicated in Section I above. Furthermore, to the extent that the reference rates in fact reflect true equilibrium rates, rule (a) will prevent destabilizing official intervention. This is also in contrast to leaning against the wind, which, as we have seen, implies that intervention will be destabilizing more often than not. In any event, in view of the manner in which reference rates are revised according to rule (b), rule (a) will prevent intervention that is aggressive or destabilizing in a policy sense, as will rule (c) with respect to various other measures.

Second, rule (b) implies that the reference rates will supply guidance and information to the market, since they would constitute an official statement of what structure of exchange rates the authorities perceive to be appropriate in the light of existing information, much of which, presumably, would be unavailable to the public at the time. This would make the exchange markets less volatile as it



would reduce the present extreme sensitivity of the public's asset-preferences to real or perceived variations in official attitudes. This would also substantially reduce the ability of, and temptation for, national authorities to manipulate the exchanges through "signalling" or public statements. The existence of reference rates would give such attempts far less credence with the public than is now the case, and would impart a more significant stigma to such a country. This is true both because the attempt would in effect violate an international agreement, and also because the existence of the reference rates would facilitate the identification of aggressive behavior of this sort.[33]

Some might feel that it would be important to simply convey to the public all the information on which the reference-rate consultations are based. We would not object, but we doubt that nations would agree to such a practice. It would, for example, be inconsistent with the present policy of the U.S. Federal Reserve System. And we *would* object to any publicity requirement that had the effect of limiting the amount of information available to the consultations.

We emphasize that the proposal allows individual nations full independence with respect to internal economic policy. Note that rule (b) requires countries to communicate their intentions; it does not require them to seek approval. Of course, one would expect that the consultation process would involve international debate, and even negotiation, about national policies. This occurs now. The proposal would formalize and ensure such interaction, while insulating the exchange markets from the process. Rule (c) allows countries to pursue the policies they have indicated they wish to pursue; the rule forbids only deviations from intentions that would be disruptive of the internationally agreed structure of exchange rates. The provision for periodic consultation, and also extraordinary ones, would allow countries to change their policies with sufficient frequency. And the freedom even to instantaneously execute sudden changes in policy intentions could always be acquired by a willingness to intervene to prevent the exchange rate from leaving the reference rate band.

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[33] Peter Kenen has also argued that the existence of reference rates would help deal with the asymmetry of the dollar, and he concludes: "I would urge the rapid, complete articulation of explicit rules to regulate intervention, rules proscribing any intervention designed to drive exchange rates away from target rates or zones that the IMF, acting on its own initiative, would promulgate from time to time... Proposals to impose rules for floating that do not include well-defined procedures for setting and altering target rates or zones miss the basic point at issue. The *n*th country problem will not go away." KENEN, *op. cit.*, p. 208.

## IV. Conclusions

The managed float has operated well enough to cause little pressure either to return to pegged exchange rates or to restructure existing arrangements boldly. But at the same time there is sufficient concern with the working of the float — particularly the volatility of exchange rates and the indications of international conflict in exchange policies — as to generate a desire for more formalized arrangements. Both attitudes are reflected in the recent amendment to the IMF Articles of Agreement, which both legitimizes current exchange rate practices and also assigns the IMF a (vague) watchdog role.

Current proposals fall into two groups. The proposals in one group, which are often labelled "leaning against the wind", share the view that central banks would resist, but not neutralize or reverse, market pressures. These proposals constitute an extension of present practices. Proposals in the second group, called the "targets approach", all assign a role to official exchange-rate norms of some sort.

We have argued that the perceived problems of the managed float are logical consequences of a leaning-against-the-wind rule. Thus we feel that these problems are, at least in part, due in fact to the implicit adoption of that rule, and consequently that formalizing and extending the principle offers little hope for improvement and considerable danger of deterioration. We have instead elaborated our earlier Reference Rate Proposal, the first of the plans that have come to be collectively labelled the "targets approach." In our opinion this approach is the appropriate one in view of both underlying logic and actual international monetary experience in recent years. We urge that IMF surveillance be conducted in such a way.

*Philadelphia*

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