ESSAYS IN INTERNATIONAL FINANCE

No. 126, December 1977

LEANING AGAINST THE WIND: A STANDARD FOR MANAGED FLOATING

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INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

This is the one hundred and twenty-sixth number in the series ESSAYS IN INTERNATIONAL FINANCE, *published from time to time by the International Finance Section of the Department of Economics of Princeton University.*

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PETER B. KENEN, *Director*
International Finance Section

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Library of Congress Cataloging in Publication Data

Tosini, Paula A.
Leaning against the wind.

(Essays in international finance; no. 126 ISSN 0071-142X)
Bibliography: p.
1. Foreign exchange problem—Addresses, essays, lectures. I. Title.
II. Series: Princeton University. International Finance Section. Essays in international finance; 126.
HG136.P7 no. 126 [HG3821] 332s [332.4'5] 77-25868

Printed in the United States of America by Princeton University Press
at Princeton, New Jersey

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Leaning Against the Wind: A Standard for Managed Floating

Introduction

Managed floating is an intermediate exchange-rate regime between pegged and freely floating rates. In the boundary cases, the rules for market intervention are relatively straightforward. Under pegged rates, the monetary authorities are required to intervene in the market to maintain the officially announced values of their currencies. Under freely floating rates, they are required to refrain from intervening in the exchange market. Managed floating, by covering a spectrum of exchange-rate policies, has an array of potential intervention rules. The choice among them depends upon where along the continuum the floating-rate regime is to be located.

Two principal approaches to managed floating may be distinguished, and thus two types of rules for floating. These approaches can be classified in terms of the primacy accorded either to the market or to the officially determined price of foreign exchange. At one end of the spectrum, intervention may be limited to smoothing exchange-rate movements; managed floating will then resemble a freely floating regime. At the other end of the spectrum, officials may pursue an active intervention policy, based on strong views about "appropriate" exchange rates; managed floating will then resemble a pegged-rate system.[1]

The major difficulty in developing standards for a system based on target rates is how to determine, maintain, and revise the targets without offering a one-way option to speculators. Target rates thus involve many of the problems, discussed at length in official and academic circles, which

The author wishes to express her sincere appreciation to Paul Wonnacott, who sparked her initial interest in managed floating and whose advice helped guide this research.

[1] It is, of course, possible to construct intervention rules that give countries the option of managing their currencies anywhere along the spectrum. This was done in the interim guidelines on floating developed by the International Monetary Fund's Committee of Twenty (IMF Press Release No. 74/30, June 13, 1974; reprinted in IMF, 1974). However, when standards for exchange-rate management permit intervention both to moderate rate movements and to reach target levels, countries' exchange-market policies may be inconsistent. In cases of conflicting goals, one of the two approaches must be accorded primacy if mutually offsetting intervention is to be avoided.

led to the demise of the Bretton Woods system. There is also a problem, however, in developing standards for an exchange-rate regime located toward the market end of the continuum. It is to develop an appropriate definition of intervention. If rules are framed solely in terms of market intervention, then, although the letter of the law may be satisfied, its spirit may be violated by official actions in areas other than the exchange market.

The focus of this essay is exchange-rate management toward the freely floating end of the spectrum. This is an approach to management that has received relatively little attention in the literature.[2] It is one that needs attention, however, since it is the system that has been in force since March 1973. Such an exchange-rate regime may be prone both to the dangers of management and to the inherent defects of floating. The dangers of management are those arising from the possibility of competitive exchange-rate manipulation and from the maintenance of an outdated status quo. The defects of floating include volatile exchange rates, large swings of rates over relatively short periods, and inappropriate levels of rates established in the private market. The purpose of this essay is to develop intervention rules that can mitigate both the dangers of management and the defects of floating. After a brief review of the first four years' experience with managed floating among the major industrialized countries, criteria for intervention in the spot and forward exchange markets will be examined. The subsequent discussion will center on standards for indirect means of influencing exchange rates.

Experience under Generalized Floating

Since March 1973, intervention under the floating-exchange-rate regime (excluding intervention required within the European Communities' currency bloc) has more closely approximated a system of moderation than one based on target rates. Such a tendency could have been expected, since the Bretton Woods system disintegrated in large part because officials no longer held firm views about the appropriate exchange rates for their currencies. It might be objected that the magnitude of market intervention has at times been comparable during the pegged- and floating-rate periods. However, movements of rates as well as levels of

[2] The principal works include Mikesell and Goldstein (1975), Wonnacott (1965, 1972), and Eastman and Stykolt (1956, 1957, 1958). Ethier and Bloomfield's (1975) reference-rate proposal and Williamson's (1975) extension of it are variants of the target-rate approach to float management.

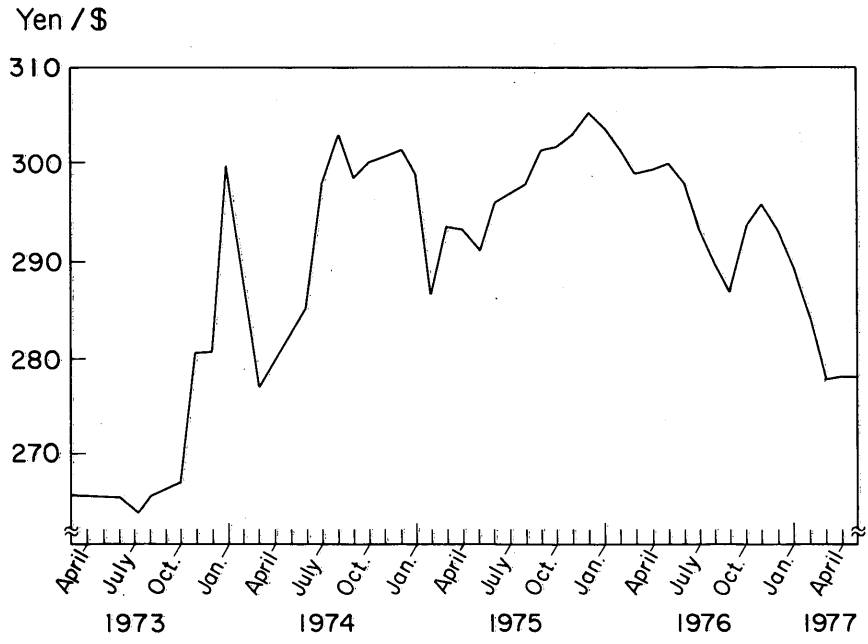
intervention must be considered when comparing exchange-rate regimes. During the years since March 1973, in contrast to the earlier period, the exchange rates of the major currencies have often fluctuated considerably over short periods rather than changing only at the time of infrequent parity adjustments. Market intervention during the floating-rate era, although sizable at times, has only moderated rather than arrested changes in most major countries' exchange rates (see Brown, 1976, especially pp. 22-25).

A study of the management practices of the principal trading nations offers interesting insights into the operation of such a system under conditions of worldwide inflation, global recession, and the sudden quadrupling of oil prices. The most widely used means of exchange-rate management since early 1973 have been official sales and purchases of foreign exchange in the spot market; foreign borrowing by governments, public authorities, and even commercial banks, in large part to meet increased payments for oil imports; the maintenance of relatively high domestic interest rates to attract capital inflows or discourage outflows; and the introduction or dismantling of capital controls. The Bank of England is the only major central bank which, according to the financial press, appears to have engaged in significant forward intervention—most notably during the summer and early fall of 1976.

The choice of particular policies for exchange-rate management by the major trading nations has depended upon several factors, including the degree of official control over the exchange market, the openness of the economy, and the domestic situation. The direction of policy actions has been determined by the general strength of the country's currency, which was in part a reflection of whether the oil-payments problem was superimposed on an underlying surplus or deficit in the current account. The Swiss franc, the Deutsche mark, and the currencies of several of Germany's smaller neighbors have been relatively strong during most of the period since March 1973, while the pound sterling, the Italian lira, and the French franc have been relatively weak. The Japanese yen and the U.S. and Canadian dollars have occupied intermediate positions between these two groups of European currencies. The oil crisis initially weakened the yen, but the Japanese currency rebounded considerably within several quarters (Figure 1). The U.S. and Canadian dollars moved within a range of approximately 8 per cent of each other during the first four years of the floating-rate era, but they experienced a tendency to depreciate against the stronger European currencies and a more pronounced tendency to appreciate against the weaker ones. Most sig-

FIGURE 1

CLOSING RATE (YEN/$) FOR THE LAST TRADING DAY OF THE MONTH



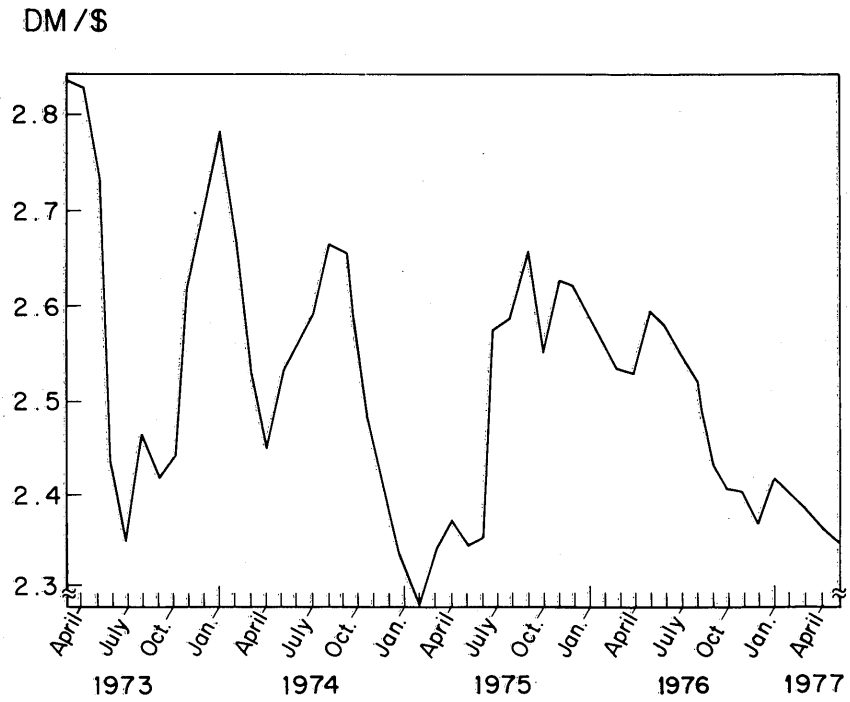
SOURCE: IMF, *International Financial Statistics.*

nificant, however, the floating U.S. dollar has undergone large swings in value with respect to the more robust European currencies. For example, the American currency appreciated by approximately 20 per cent with respect to the mark from July 1973 until January 1974, and then depreciated by approximately 15 per cent during the next four months (Figure 2).

During the floating-rate era, some observers have at times claimed to discern competitive exchange-rate practices. For example, Congressman Henry Reuss and C. Fred Bergsten questioned the propriety of the Bank of Japan's intervention to restrain the yen's appreciation when, during the first half of 1976, Japan had a significant trade surplus with the United States (see U.S. Congress, 1977). In early 1975, France and several smaller European countries claimed that the dollar's depreciation was ex-

FIGURE 2

CLOSING RATE (DM/$) FOR THE LAST TRADING DAY OF THE MONTH



SOURCE: IMF, *International Financial Statistics.*

cessive and resulted from an American policy of "benign neglect," which included low interest rates in the United States.

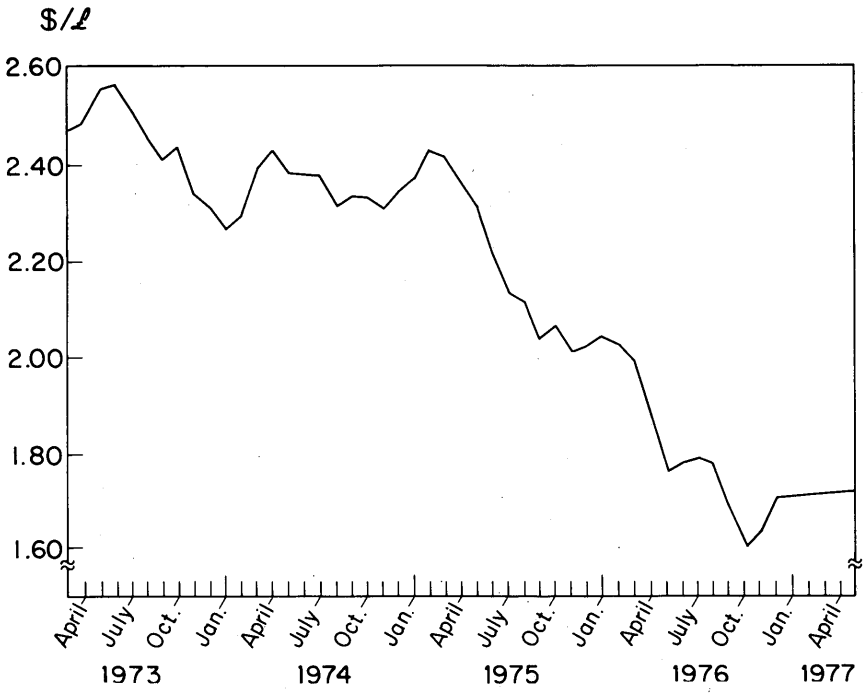
At times since March 1973, central banks have intervened to such an extent that their exchange rates remained virtually unchanged for several months—the other potential problem of float management. Beginning in the spring and continuing into the fall of 1973, for example, the Bank of Japan sold large quantities of dollars and maintained the yen at approximately 265 per dollar. Japanese intervention policy during these early months of floating may have been motivated in part by a desire to reduce the "excess" reserves accumulated during the Bretton Woods era. With the onset of the oil crisis in late 1973, the Bank of Japan first appeared to raise its selling rate for dollars and then retreated from an intervention program seemingly based on unilaterally determined target

rates, adopting instead the aim of moderating or smoothing exchange-rate fluctuations (Figure 1).

The Bank of England intervened heavily in the exchange market during late 1976 and throughout the spring of 1977, and over this period the pound remained between $1.71 and $1.72 (Figure 3). This intervention, following the British currency's rebound from its historic lows of October 1976, consisted primarily of sterling sales as the pound strengthened in the market. The counterpart purchases of dollars helped to raise the Bank of England's depleted reserves to record levels.

FIGURE 3

CLOSING RATE ($/£) FOR THE LAST TRADING DAY OF THE MONTH



SOURCE: IMF, *International Financial Statistics.*

Despite these selective problems of management, the most serious systematic difficulty of generalized floating during much of the period since March 1973 has been the tendency toward significant fluctuations in exchange rates. Although the large cycles of rates observed during the first two years of floating have subsided considerably, substantial swings in

rates have continued into the more recent period (see IMF, 1976, Chap. 2, for a discussion of the large oscillations of exchange rates during the floating-rate period).

Standards for Exchange-Market Intervention

One conclusion of this essay will be that a rule permitting "leaning against the wind" in the spot and forward markets is the most appropriate standard for market intervention. Such a rule prohibits intervention in an aggressive direction; intervention must oppose rather than reinforce market movements of exchange rates. In addition, if significant intervention has taken place over a period, exchange rates should have changed during that time. Stated differently, a policy of leaning against the wind implies that the status quo should not be maintained firmly by market intervention; the strength of the wind is to be reduced but not neutralized. A second conclusion will be that intervention should, in general, be symmetrical; central banks should normally intervene with comparable vigor, or to a similar degree, when their exchange rate is falling as when it is rising.

The appropriateness of leaning against the wind, as defined above, can be assessed from two vantage points. First, would such a policy be beneficial on balance or at least not harmful to the country that pursues it? Second, from the standpoint of the international community as a whole, would such a rule be a reasonable guarantee against the perceived dangers of managed floating?

The Standard of Nonaggressive Intervention from the Intervening Country's Standpoint

Whether a policy of nonaggressive intervention is considered appropriate by a particular country should depend upon two factors: the nature, over time, of the exchange-rate sequence that is being managed and the expected reactions of private currency dealers to the government's purchases and sales of foreign exchange. These issues will be discussed initially in terms of spot-market intervention; the relationship between spot and forward rates will be examined subsequently.

The underlying exchange-rate movement. Two types of exchange-rate sequence are discussed below under the assumption that private participants in the exchange market are unaware of the government's intervention strategy: apparent one-way movements extending beyond the horizon and variations that are considered likely to reverse themselves in the

foreseeable future. In the first case, a policy of leaning against the wind may not be appropriate, particularly if the currency's managers believe that the exchange rate's one-way movement is roughly compensating, in direction and degree, for changes in the country's international competitiveness. With a rule that permits but does not require leaning against the wind, officials have the option of withdrawing from the market or, for that matter, of never entering it to moderate exchange-rate fluctuations. However, given great uncertainties concerning future trends of exchange rates, currency managers may consider it appropriate to temper apparent one-way movements of their rates, thereby buying time to assess underlying conditions and avoiding abrupt changes of their currency's foreign-exchange value.

Furthermore, a country's currency will normally be moving in one direction over a considerable period when that country's rate of inflation differs significantly from inflation rates in other major nations. When a country with a depreciating exchange rate has been experiencing significantly higher rates of inflation than its trading partners, the remedy rests primarily with domestic stabilization programs rather than with exchange-rate policies. Even so, the inflationary feedback of a depreciating exchange rate on the domestic economy may argue for some moderating intervention until domestic policies begin to produce results.

When it appears unlikely that a currency's foreign-exchange value will move in one direction over the horizon, a policy of leaning against the wind offers the advantage of reducing exchange-rate fluctuations without suppressing longer-run trends. Several arguments may be advanced for smoothing exchange-rate movements that appear likely to reverse themselves over a reasonable length of time. First, exchange-rate swings increase uncertainties and may give erroneous signals for the allocation of resources between production for domestic and foreign markets and between consumption of domestic and foreign goods. Second, inappropriate exchange rates, if they remain in existence over sufficiently long periods, may set in train forces that make them self-justifying. Fellner (Fellner *et al.*, 1966, p. 119) discussed this problem of freely floating rates a decade ago:

> . . . if temporary market forces lower the exchange rate of a country below the level which initially may be considered the long-run equilibrium level, and if for a while the rate stays lower because the market does not confidently expect a return to the higher level, then the prices of imports and of import-competing goods may rise, wages may rise, and the market may turn out to have been right in not expecting a return to the initial level.

One reason that freely floating rates may lead to resource misallocation is that the balance of payments contains two quite different accounts —one involving the flow of goods and services and the other involving the flow of financial assets. The current and capital accounts often respond to different variables, or at least differentially to the same variables, and normally there is a significant disparity in the speeds of response of these two accounts. Since the end of World War II, private capital has increasingly crossed international frontiers, in part in response to differences in interest rates. If countries whose business cycles are not synchronized rely heavily on monetary policy for domestic stabilization, differences in interest rates are likely to change over short periods of time. Such shifts in the returns on investments should be expected to cause substantial capital movements among major countries, particularly those whose foreign-exchange markets are relatively free of controls. For example, changing interest-rate differences between Germany and the United States appear to have contributed significantly to the sizable swings of the dollar-mark rate over much of the period since March 1973.

The case for official intervention requires more than the existence of changing flows of interest-sensitive capital or lumpy transactions by exporters, importers, or corporate treasurers hedging their foreign-exchange exposure. It is necessary to posit, in addition, a degree of market imperfection or obstruction. Under such circumstances, other private participants in the market—speculators—are limited in the degree to which they can or will take the opposite side of the market and thereby reduce exchange-rate fluctuations. At present, the principal "position takers" in the private exchange market are the major banks in New York, Chicago, Montreal, Toronto, Tokyo, and the leading financial capitals of Europe. In many countries, however, commercial banks' operations in the exchange market are substantially restricted by their central banks or by the banks themselves (see McKinnon, 1976, for a detailed discussion of possible reasons why stabilizing speculative activity by the private sector has been inadequate during the period of generalized floating).

Official controls may serve several useful purposes: to limit destabilizing speculation by banks in the foreign-exchange market,[3] to protect domestic economies from the effects of serious banking losses, and to

[3] A commonly used definition of destabilizing speculation is a capital flow that moves the market rate away from its "medium-term norm or natural rate." The difficulty with this definition is identifying an empirical counterpart to the "normal" or "natural" exchange rate.

give central banks greater autonomy in using monetary policy for domestic purposes. However, if commercial banks are required to balance their positions, for example daily and by currency and maturity, as is sometimes the case, the banking sector will be constrained in providing elasticity to the exchange market. In such cases, thin markets and large exchange-rate fluctuations are likely unless official flows fill the void.

The effects of intervention on speculators' expectations. A second prerequisite for an effective policy of leaning against the wind is that official intervention, to the extent that the market knows about it at the time, does not normally cause speculators to revise their expectations in a perverse direction and to such a degree that private capital flows completely or more than completely offset official intervention. This assertion appears reasonable both on *a priori* grounds and in light of exchange-market experience since March 1973. With managed floating, the government is not forced to choose between an all-out defense of its existing parity and an announcement of where the next battle line for the currency has been drawn. As a result, official intervention should not provide speculators with a one-way option—unless governments intervene strongly to maintain exchange-rate targets. Instead, heavy speculative betting on one side of the market should normally change an exchange rate managed by a policy of leaning against the wind, and this movement of the rate should lower the expected value of the wager.

In addition, the floating-rate period provides evidence that participants in exchange markets react favorably to intervention that is well known or publicized. On three occasions, when the U.S. dollar had depreciated substantially against the stronger European currencies, central bankers announced their intention of supporting the dollar. The first announcement was a communiqué issued by the central bankers of the Group of Ten plus Switzerland following their July 1973 meeting at the Bank for International Settlements. The other statements of joint support for the U.S. dollar were made in May 1974 and February 1975 by the heads of the Swiss, German, and American central banks. The trends of the dollar–Deutsche mark and the dollar–Swiss franc exchange rates were reversed in the weeks following these announcements of concerted support. At those times, private capital flows reinforced the exchange-rate effects of official purchases of dollars rather than offsetting them.

Rules for Floating as a Safeguard Against the Actions of Other Countries

If national officials are unwilling to relinquish a significant degree of autonomy in international monetary affairs, no set of market intervention

rules can preclude the possibility of competitive exchange-rate practices. Such practices are possible under a pegged-rate regime, as the history of the Bretton Woods period illustrates. A country subscribing to the IMF's Articles of Agreement could hold to an exchange rate even when, over time, underlying conditions had changed. Thus, during the Bretton Woods era the exchange rates of some major currencies became substantially undervalued. When these currencies' pegs were not adjusted or the adjustments were too small and too late, the competitive positions of other countries were adversely affected. Under a freely floating system, moreover, officials can influence exchange rates indirectly by capital controls or monetary policy. It is therefore only in a relative sense that rules for managing floating rates can be expected to safeguard countries against the predatory actions of other nations.

Before the advent of generalized floating, many advocates of floating, as well as opponents, stressed the potential danger that governments might engineer competitive depreciations of their currencies. The introduction to the IMF's guidelines on floating also emphasizes avoiding the beggar-my-neighbor policies associated with the 1930s. The introduction states that, in view of the ". . . importance in present circumstances of avoiding competitive depreciation, particular attention would be attached to departures from the guidelines in the direction of depreciation" (IMF Press Release No. 74/30, June 13, 1974, p. 2). However, as previously noted, there were few charges of competitive undervaluing of exchange rates during the first four years of floating.

Why has competitive depreciation not been a serious problem since March 1973? One explanation is that all major countries experienced significant inflationary pressures during 1973 and 1974. Under such circumstances, the undervaluation of a currency will aggravate the domestic situation by increasing inflationary pressures within the economy. In addition, the huge increase in the price of oil in late 1973 created an aggregate deficit for the industrialized countries which, it was realized, could not be removed over the short run by exchange-rate depreciations.

Even so, during the subsequent serious recessions and weak recoveries experienced by the industrialized countries, widespread attempts at competitive undervaluing of currencies did not occur. One possible reason is that inflation did not disappear with the onset of global recession. Furthermore, most major industrialized countries currently have at their disposal more appropriate tools than their trade balances to stimulate domestic employment. Finally, the experience of the 1930s may have taught officials that the benefits of predatory exchange-rate practices are, at best, ephemeral when other nations have the ability to retaliate.