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RULES FOR
A FLOATING-RATE REGIME

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AND
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INTERNATIONAL FINANCE SECTION

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Rules for a Floating-Rate Regime

Prior to August 1971, only a handful of economists gave serious consideration to a general system of floating rates. To central bankers and finance ministers, as well as to most commercial bankers, traders, and investors, such a system was regarded as incompatible with the maintenance and expansion of world trade and investment. But the experience with relatively free floating rates since March 1973 has shown that a general system of floating rates does not mean world financial chaos, and since then the idea of a more or less permanent system of floating rates has gained respectability, at least as a second-best alternative. Although the leaders of the international financial community cherish the hope of a return to some kind of a par-value system, and the representatives of the members of the International Monetary Fund have worked diligently over the last couple of years to plan a new monetary system based on the principle of stable relationships among the world's major currencies while avoiding the rigidities of the Bretton Woods par-value system, it is generally believed that the present fluctuating-exchange-rate regime is likely to persist for some time in the future. This was recognized in the final report of the Committee of Twenty (C-20), *Outline of Reform with Accompanying Annexes*, June 1974 (hereafter referred to as the *Outline of Reform*), in which it was recommended that certain guidelines for floating exchange rates should be put into operation during an interim period pending the establishment of a new exchange regime "based on stable but adjustable par values."¹ The *Outline of Reform* was submitted to the Board of Governors of the IMF in September 1974, and the Board of Governors has endorsed C-20's recommendations to the IMF and its members regarding guidelines for the management of floating exchange rates.

This essay examines the desirability of establishing a set of rules for managing floating exchange rates and the nature and rationale for alternative rules. Following this discussion, we shall examine critically the guidelines for managing floating exchange rates set forth in the *Outline of Reform*. It is not our intention to debate the issue of floating versus fixed

¹ The Committee of Twenty (formally "The Committee on Reform of the International Monetary System and Related Issues") was established by the Executive Directors of the International Monetary Fund in September 1972. For the text of the *Outline of Reform*, see *IMF Survey Outline of Reform Supplement* (June 17, 1974), and for the texts of the resolutions of the Board of Governors of the IMF relating to the recommendations contained in the *Outline of Reform*, see *IMF Survey 1974 Annual Meetings Issue Supplement* (Oct. 14, 1974).

rates, although inevitably some of the traditional arguments advanced in that debate will enter into our analysis.

Why Rules for Floating Exchange Rates Are Regarded as Necessary

Conceptually we may recognize two extreme kinds of floating-rate regimes: (1) a *pure* floating rate determined wholly by market forces with no market intervention by the national monetary authorities; and (2) a rate that is permitted to change in a manner completely predetermined and managed by constant intervention by the authorities. A pure floating rate is usually regarded as impractical except by a few economists, while a fully managed rate that is wholly insulated from market forces is tantamount to a continuously adjusted parity. Between these two extremes there is a wide spectrum of arrangements involving varying degrees of market influence and of market intervention reflecting government policies and management practices. The motivation for the formulation of international guidelines for managing floating exchange rates arises from two concerns. The first is that particular governments may intervene in the market for their currencies in a manner inimical to the interests of other countries. If this were the only concern, any consideration of rules or guidelines might be confined to eliminating official intervention entirely or restricting it to whatever limits could be agreed upon. But there is also the concern that a general pure float, or even individual pure floats, will lead to a nonoptimal pattern of exchange rates over time; this implies that official intervention is desirable, even if it were not inevitable. Indeed, some seem to suggest that a pure float might constitute "competitive exchange depreciation." Both of these concerns—about the consequences of deliberate official intervention in the exchange market, and about the consequences of failure to intervene in the exchange market—are reflected in the guidelines for floating rates contained in the *Outline of Reform*, as well as in communiqués issued by the Finance Ministers of the Group of Ten.²

There are several reasons why a government may engage in official intervention. First, it may want to protect or strengthen the national trade balance by preventing a basic-balance surplus or short-term capital inflow from causing an appreciation of its currency. Second, it may want to use reserve assets that it regards as excessive to acquire real resources. Third, it may want to use its reserves, or to borrow foreign exchange from the

² For example, in March 1973 the Finance Ministers of the Group of Ten agreed to limit official intervention in the exchange market to the degree necessary to facilitate the maintenance of orderly conditions, but to avoid massive intervention of the kind that had led to the huge accumulation of official dollar holdings (see Coombs, 1973, p. 215).

IMF or other sources, rather than permit its currency to depreciate in response to a deficit deemed to be temporary. Fourth, it may want to intervene because it believes that an appreciation of its currency would be incompatible with efforts to increase investment and employment by means of monetary expansion. Fifth, countries that have established joint floats and are moving toward monetary integration need to intervene in the market to maintain their exchange rates against currencies of other members of the joint float. Finally, financial officials of leading Western countries favor cooperative action by means of coordinated intervention in the exchange markets to cope with large capital movements generated by political and economic shocks or with disruptive shifts in trade balances such as those caused by the recent tripling of petroleum prices.

Accordingly, it is clear that the leading IMF members have an interest in agreeing on rules or guidelines for official intervention in order to avoid conflict, on the one hand, and to coordinate their actions in the pursuit of common objectives, on the other. Some of the guidelines put forward by C-20 in the *Outline of Reform* are positive; others are negative in that they rule out official intervention that would tend to harm the interests of other countries. The C-20 guidelines also include collateral rules relating to controls on trade and capital movements and to the choice of intervention currencies.

Alternative Rules for Official Market Intervention

In the light of the various motivations for official intervention just enumerated, let us examine several alternative guidelines that have been suggested. These include (1) no official intervention, (2) neutral intervention to moderate exchange-rate fluctuations, (3) intervention to offset the effects of political and economic "shocks," (4) intervention to offset the effects of nonrecurring events having a serious but temporary impact on the payments balances, (5) intervention to offset seasonal and cyclical movements in the trade balance, (6) extensive intervention to maintain exchange rates at levels judged to be consistent with long-run basic balance, (7) intervention to adjust the volume or composition of official reserve assets, and (8) intervention to maintain joint floats or pegged currencies.

Any effective rules for floating exchange rates to be established and monitored by an international organization such as the IMF must provide for objective measures of performance. General principles to be interpreted and applied by the monetary authorities of individual countries as their particular judgments dictate are unlikely to prove satisfactory. Depending upon the nature of the rule, there are three possible objective indicators: First, there is the change in official reserves, however

defined. (In addition to the change in official reserves, a nation's *stock* of reserves may be employed as one of the performance criteria.) Second, a range may be established within which exchange rates are expected to be maintained over a given period of time or under certain specified conditions. Third, there may be a specifically defined accounting balance, such as the basic balance. Conceivably, more than one of these indicators could be combined in administering a set of rules for floating exchange rates. For example, the permitted range of exchange fluctuations might be adjusted in response to a change in official reserves or to a change in the basic balance.

1. No official intervention. Although we have already ruled out the non-intervention rule as a policy alternative that governments will in fact accept, the arguments for such a rule should still be considered. Floating-rate purists have long advocated a system in which monetary authorities in each participating country commit themselves to a complete avoidance of official sales or purchases in the exchange market undertaken for the purpose of influencing the rate for their own national currency. (Government nonmonetary international transactions, for example, purchases and sales of state enterprises or government purchases or sales of military goods, would take place in the private or nonofficial exchange market and not with the monetary authorities.) Such a system, they contend, would encourage a maximum of stabilizing private speculation, since private transactors would no longer have to anticipate the scale and scope of official intervention but would be guided solely by their assessment of the probable impact on the exchange rate of changes in fundamental economic conditions.

In a free market, the rate will be determined by a balance of bullish and bearish sentiment. As sentiment changes in response to an ever-changing stream of new information, so will the exchange rate. Supporters of pure floating rates argue that if the "fundamentals" remain stable so will the exchange rate, but if they vary sharply (as with an unanticipated tripling of petroleum prices), the exchange rate will follow suit. Under both conditions, the changes in question will be desirable, since they will stimulate shifts in resource allocation, in consumption patterns, and in investment flows that promote overall economic efficiency.

A nonintervention rule has the further virtue of permitting easy policing by the participating member countries. If a country violates the non-intervention agreement, its official reserves will tend to rise or fall accordingly. (Within a given reporting period, the authorities might make offsetting purchases and sales that would not be detected from the reported end-of-period reserve figures. If the reporting periods are frequent,

however, such violations would have negligible effects on the prevailing pattern of rates.) Assuming that participating countries do not falsify their reserve holdings and do not engage in secret reserve swaps with other countries, the general extent of official intervention will be readily available information.

On theoretical grounds, those favoring rules providing for some form of intervention must answer the arguments of the floating-rate purists.³ Some of the counterarguments favoring official intervention in a floating-rate system border on those advanced for a fixed parity regime; others emphasize the destabilizing activities of speculators under a pure floating-rate system; and still others contend that completely uncontrolled rates will give rise to exchange-rate movements that serve no economic purpose and would prove harmful to world trade and orderly balance-of-payments adjustment.

2. *Neutral intervention to moderate exchange-rate fluctuations.* Governments desiring to moderate exchange-rate fluctuations without interfering with long-run trends might undertake moderate official interventions that on balance would be neutral over relatively short periods of time. The appropriate rules relating to this purpose should limit the volume of intervention in either direction within a given period, say a month. In addition, monetary authorities might be required to restore their original reserve position within a reasonable period of time or at least move strongly in that direction. (If monetary authorities were required to restore fully their original reserve position within a fixed period, speculators would on occasion know in advance the exchange operations of the monetary authorities.) Alternatively, the limitation on the magnitude of net intervention within a given month might be supplemented with a rule that net reserve changes in a given direction could not persist for more than three consecutive months, except when reserve levels were believed to be excessive or deficient. The monthly ceiling would necessarily differ among countries in accordance with the magnitude of their external transactions. During a given month, for example, Germany's reserves would be permitted to vary in absolute terms by more than Sweden's. The maximum monthly change in reserves should be proportional to the estimated volume of the country's external transactions, not to the volume of its reserves, since countries have inherited levels of reserves that bear little relation to the normal turnover in their respective exchange markets. The United Kingdom's external transactions are comparable in size to

³ For a systematic description and evaluation of proposals for exchange-rate flexibility, see Machlup (1973) and Marris (1970).

Germany's; yet Britain's gross reserves are only one-fifth as large as those of Germany.

The rationale for a policy of neutral intervention is that the monetary authorities can improve the operation of the exchange market by intervening to smooth out irregularities in the movement of exchange rates caused by random and reversible factors, but that such intervention need not trap them into prolonged efforts to counter a change in the market's underlying trend. A policy of neutral intervention appears to have been successfully pursued by Canada during most of the 1950s. The Canadian authorities frequently intervened on both sides of the market, but the net monthly and quarterly changes in their reserve position were quite small. The Canadian authorities' role during this period is described by Plumtre (1970, p. 5) as follows:

The authorities stood ready, at any time, to "make a market" on either side of the existing rate. They formed no opinion about where the market ought to go, or even as to where it was in fact going to go. The only opinion they held and on which they acted was that the market ought not to move sharply in either direction at any time. In giving effect to this opinion they may have lessened the likelihood of self-aggravating speculative movements of the rate. Further, they did establish that it is possible for an authority to "tend" a floating exchange rate without engaging in battles with the private market and without provoking market speculation about the nature and intentions of their own dealings.

3. *Intervention to offset the effects of political and economic "shocks."* Political or economic developments that threaten to weaken a country's competitive position temporarily will typically stimulate short-term capital outflows. Central bankers may want to offset or to moderate the effects of these flows on the exchange rate, since these events may have little fundamental significance for the basic balance. After a time the short-term capital outflow may be reversed, but not necessarily by the amount of the initial capital outflow. Such developments have been a principal motivation for market intervention by the Federal Reserve authorities since March 1973, largely financed by the activation of swap credit lines. Foreign currencies were sold against the dollar in response to a series of rather superficial events tending to weaken the dollar, but when the dollar strengthened in the fall of 1973, these transactions were reversed and the obligations under the swap credits liquidated.⁴ Apparently most,

⁴ It is interesting to observe that the great bulk of speculatively induced outflows from the dollar from the end of 1969 through the first quarter of 1973 have never been reversed. Over this thirteen-quarter period, net recorded private capital outflows from the United States, plus errors and omissions, totaled \$51 billion and accounted for most of the growth in the so-called "dollar overhang" at foreign central banks. It seems safe to assume that at least \$30 billion of this sum comprised capital

if not all, of the Federal Reserve initiatives were preceded by consultations with the countries whose currencies were involved. The Bank of England similarly intervened from time to time in response to speculative pressures against the pound sterling. In most cases, intervention was at the initiative of the countries whose currencies were under downward pressure. Surplus countries such as Germany and the Netherlands tended to take other measures, including formal revaluation and internal monetary actions.

We believe this experience suggests some possible rules for intervention to offset political and economic shocks. First, the initiative should be taken by the country whose currency is under downward pressure. This would avoid the charge that the recipients of speculative capital were seeking to maintain a market advantage by preventing an appreciation of their currencies. Second, there might be a limitation on the amount and duration of the support but, unlike the case of neutral intervention to moderate exchange-rate fluctuations described in paragraph 2 above, the intervening country should not be required to reverse its reserve position. Third, there might be a preconsultation requirement for intervention. This approach implies a built-in limitation on the amount of intervention arising from the availability of the country's reserves and access to foreign credits.

4. *Intervention to offset the effects of nonrecurring events having a serious but temporary impact on the payments balances.* A nonrecurring event, such as a natural disaster, a prolonged strike, a major crop failure, or massive interruption of supplies of fuel or raw materials, may in the absence of official intervention result in a sharp fall in a country's exchange rate to a level below that believed to be consistent with long-run basic-balance equilibrium. It may be argued, therefore, that the rules should permit official intervention in support of the exchange rate in such cases. But there is a danger that a "nonrecurring event" will have significant implications for the long-run equilibrium rate. Take, for example, the British situation in the winter of 1973, when output and exports were reduced by shortages of coal and power because of a prolonged miners' strike. Imports were sustained by the strong demand for "emergency" imports of fuel and other items, with consequent downward pressure on sterling in the exchange market. But sterling's longer-run prospects also seemed bleak. At the time, employment and output were

transfers motivated mainly by anticipated exchange-rate changes. It is puzzling that most of these outflows were not reversed following the dramatic improvement in the U.S. current account in the first half of 1973 and before the huge rise in oil prices.

expected to return to normal levels, but only after wage settlements that were likely to promote a further round of cost-push inflation in Britain, accompanied by a decline in the equilibrium exchange rate for the pound. Under these circumstances, intervention to support the pound in the face of a nonrecurring event would have meant supporting the sterling rate at an untenable level. This example suggests that the rules should permit moderate intervention limited to some specified ceiling figure within a given month and for a limited number of months, along the lines suggested in paragraph 2 above. However, in such cases the country should not be required to reverse its reserve position within a given period of time.

5. Intervention to offset seasonal and cyclical movements in the trade balance. The original IMF Articles of Agreement specifically recognized that seasonal or cyclical movements in the trade balance justified use of the Fund's resources, if required, for exchange-rate stabilization. But should these periodic developments constitute a legitimate exception to the nonintervention principle in formulating rules for a floating-rate system?

Seasonal movements in the trade balance are usually anticipated by the exchange market and should produce no more than a ripple in the exchange rate. Cyclical movements, on the other hand, are of uncertain duration, and efforts by large industrial countries to offset their effects on exchange rates would constrain the equilibrating function of a flexible-rate system on the international economy. Such practices by one or more large countries could seriously limit exchange-rate movements in the currencies of other countries and hence impair the operation of the adjustment mechanism. Thus, if countries A, B, and C prevented their currencies from appreciating during a recession, as would occur if the income effects on imports outweighed the income effects on capital flows, they might prevent the freely floating currencies of countries D, E, and F from depreciating during a boom or in the face of other factors adversely affecting their basic balance. Consequently, we believe that the rules should not permit official intervention to finance cyclical movements in the trade balance.

6. Extensive intervention to maintain rates consistent with long-run basic balance. A far more liberal rule would be to permit unlimited intervention so long as the exchange rate was deemed by a country's monetary authorities to be compatible with long-term basic balance. One argument for substituting the judgment of the monetary authorities for that of the market is the existence of the J-curve phenomenon. The J-curve

refers to the fact that the immediate effect of a currency depreciation may be to worsen the trade balance, while the immediate effect of a revaluation may be to improve the trade balance. (The reason is that the devaluing country receives less foreign currency for its exports because the short-run demand for its exports tends to be inelastic, while paying out nearly the same amount of foreign currency for its imports because of the short-run inelasticity of import demand.) Thus it has been argued that a change in the free-market exchange rate may lead to exchange instability because of a short-run perverse effect on the trade balance. The J-curve argument for extensive intervention fails, however, to take into account the stabilizing operations of private speculators. Assume that a country with a floating exchange rate develops a deficit in its basic balance, with a consequent depreciation of its currency. If there is a lag in the adjustment of export and import volumes to the change in the exchange rate, the basic balance would tend initially to deteriorate still further, giving rise to a condition of static exchange-market instability. But such instability would be avoided if speculators made a reasonable assessment of the long-run equilibrium rate and behaved accordingly. Their actions would constrain the exchange rate within a narrow range containing the long-run equilibrium rate, and net capital inflows would offset any short-term weakening in the current account occasioned by the lag in adjustment. The case for intervention would be strong only if it is assumed that speculators do not act in response to a proper assessment of the long-run equilibrium rate but allow—and perhaps even encourage—the currency to depreciate well below this level. It has been suggested that official intervention to permit a slow adjustment of the rate to the equilibrium level might avoid this result.⁵

The argument for official intervention in the situation described above hinges on whether the market or the monetary authorities are likely to do a better job of estimating the long-run equilibrium rate. We do not believe that past experience weighs heavily in favor of the monetary authorities, even when they are free from political influences. Moreover, neither the existence of an initially perverse reaction of the trade balance to a change in the exchange rate nor the length of the period of such a perverse reaction has been well established,⁶ although there is considerable evidence that the full response of the trade balance to a change in

⁵ For a mathematical analysis of this problem and the conditions for stability in the presence of lags, see Britton (1970). Britton concludes that “the slower the adjustment of the rate, the more probable would be the stability of the system.” This conclusion seems, however, to ignore the feedback effects of delayed rate movements on speculative capital flows.

⁶ For a good discussion of this problem, including a review of the literature, see Magee (1973).