

FOR RELEASE ON DELIVERY  
SATURDAY, APRIL 3, 1976  
3:30 P.M. LOCAL TIME  
(10:30 A.M. EST)

REFLECTIONS ON DEVELOPMENTS IN THE INTERNATIONAL MONETARY SYSTEM

Remarks by

Henry C. Wallich  
Member, Board of Governors of the Federal Reserve System

before the

Second Conference of the  
International Federation of Associations of Business Economists

King's College

Cambridge, England

Saturday, April 3, 1976

REFLECTIONS ON DEVELOPMENTS IN THE INTERNATIONAL MONETARY SYSTEM

Remarks by

Henry C. Wallich

Member, Board of Governors of the Federal Reserve System

before the

Second Conference of the  
International Federation of Associations of Business Economists

King's College

Cambridge, England

Saturday, April 3, 1976

-----

It is a particular pleasure to address the Second Conference of the International Federation of Associations of Business Economists here in Cambridge within the precincts of this great university. My topic here today is "Reflections on Developments in the International Monetary System." The system has undergone quite a bit of motion in recent weeks. I shall comment briefly on what I believe to be the meaning of these events. My main concern, however, will be with the evolution of the system and particularly with the processes of exchange market intervention and of the creation of international liquidity.

The events of the last few weeks show that exchange markets continue to be highly sensitive to any departure of exchange rates from what the market believes to be appropriate levels. Evidently

it is still not difficult for a currency to get itself into a position where the market believes that the only alternatives are either no change or a movement in only one direction. It was these unidirectional anticipations that played havoc with the old Bretton Woods system. The recent evidence suggests that under today's conditions similar reactions remain a possibility.

From the emphasis that the market places on differential rates of inflation, it would seem that the market takes these rates of inflation as given. In this, the market may be deceiving itself. The old Bretton Woods system, and the gold standard which preceded it, operated on the assumption that rates of inflation would adjust so as to make balance-of-payments positions adjust. Recent history has demonstrated that the latter assumption cannot be plausibly maintained. Nevertheless, we are witnessing strong efforts in most countries to come to grips with inflation even at considerable short-run sacrifices of employment, because the long-run consequences of inflation have been shown to be so damaging. Since these efforts, if persisted in, should yield positive results, markets eventually may be expected to feel increasingly uncertain about the appropriateness of discounting farther and farther ahead a specific future inflation rate.

I have seen reports that interpret the exchange rate movement of the last few weeks as a test of the principles of the

Rambouillet Agreement. I disagree with this interpretation. The Rambouillet Agreement stresses economic fundamentals. It as well as the proposed amendment of Article IV contain nothing to suggest that fundamental factors influencing exchange rates should be counteracted. The fundamentals of Rambouillet, to be sure, differ from the fundamentals of Bretton Woods. The old Bretton Woods agreement would not have regarded as a "fundamental disequilibrium" justifying an exchange rate movement, a short-term divergence of interest rates or aggregate demands due to differences in cyclical phase among countries. The pending Article IV of the IMF Agreement, as I interpret it, treats both of these factors as fundamentals.

The exchange rate movements of the last few weeks seem to me to have been a test primarily of the principle of bloc floating. This principle is backed up by a respectable economic theory -- that of "optimum currency areas." But that theory presupposes, of course, that countries are able and willing to coordinate their internal policies. We have seen how quickly failure to abide by this presupposition can undermine cohesion within a presumptively optimum currency area.

In passing, I would also like to note some of the effects that recent exchange rate movements have had on the trade-weighted rate of the dollar. As you know, the dollar depreciated from a rate of 86 per cent (May 1970 parities of 10 currencies weighted

by 1972 trade = 100) in September 1974 to 79 per cent in February 1975, appreciated from there to 87 per cent in September 1975, and remained approximately at that level until January 1976. Since then it has risen to approximately 89 per cent.

The recent movement will not be without its effects on the U.S. balance of payments and prices. Research in progress at the Federal Reserve shows that a one percentage point change in the exchange rate normally produces, with a lag of several years, a change of from \$3/4 to \$1 billion in the trade balance, everything else, including price movements, being equal. Similarly, a one percentage point change in the exchange rate may change the U.S. price level, again with a lag of three to four years, by something of the order of one-eighth to three-sixteenths of a percentage point, depending upon other developments affecting the economy. Over time, of course, any disequilibrium that might have been created by such movements will tend, in a floating rate system, to be corrected by further exchange rate or price movements.

I shall now examine a little more closely the evolution of the international financial system as regards exchange market intervention not related to bloc floating. Over the last few years, we have observed two kinds of official influence on exchange markets. One has been exchange market intervention, which in principle has aimed at maintenance of orderly exchange markets with no attempt to influence the level or trend of exchange rates.

The other has reflected official or officially induced capital movements as well as the use or accumulation of exchange reserves. The second approach has been employed in order to shield balance-of-payments positions against massive disequilibria. Since late 1973, a major part of such disequilibria has been the result of the skyrocketing price of oil. In part, however, the disequilibria experienced also reflect domestic economic policies.

I shall begin by examining exchange market intervention. One possible test of an intervention policy that is oriented toward maintenance of orderly markets and avoidance of erratic fluctuations is absence of major changes in exchange reserves over some period of time, presumably the time over which a spell of disorder or potential disorder in the exchange market might extend. One could cite numerous examples. The Bank of Canada usually operates flexibly and speedily on both sides of the market, smoothing out very short-term elements of "disorder." The Federal Reserve likewise has moved in and out over time, although not necessarily over such short periods. It has only occasionally accumulated balances, usually of minimal size, and has reversed swap borrowings undertaken since the ending of gold convertibility of the dollar within one or two quarters. The Deutsche Bundesbank has likewise approximately balanced its purchases and sales, but over somewhat longer periods. Both in 1974 and in 1975 there were three periods

of about three months in which reserves increased or decreased by as much as DMark 5 billion or more, but net changes in reserves for the year were of the order of only DMark 2 billion, in both years reflecting a decline in reserves.

These various national practices reflect actions to forestall different types of "disorder" or "erratic behavior" in exchange markets, all of which are economically relevant. At one side of the spectrum are shortfalls from market efficiency such as paucity of bids and offers, wide spreads between bid and offer rates, and discontinuities in exchange rate movements. On the other side are shortfalls from market efficiency in the form of non-random behavior of exchange rates which are inconsistent with an efficient market. Part of this non-random behavior is the price dynamics to which the market refers as runs or bandwagons.

Earlier work at the Federal Reserve and elsewhere had suggested that exchange rate movements were almost entirely random, suggesting that exchange markets were efficient. Such randomness, of course, is a characteristic that has been examined in the stock market and in commodity markets many times and these markets have usually been found to be efficient. What that implies is that all new information is acted upon by a sufficiently large number of market participants so that prices change quickly to reflect new information. This ensures that the latest price reflects all available information

and that no predictions of the future course of prices can be made on the basis of this already discounted information, including information on the past behavior of the market itself.

More recent work done by the staff of the Federal Reserve Board<sup>1/</sup> suggests that these findings were premature. By applying so-called filter rules, the authors demonstrate that, since the beginning of floating, the exchange markets may have contained very significant non-random elements. These elements, presumably reflecting price dynamics, would have made it possible to ride a "bandwagon" profitably over varying periods in particular markets. It should be noted, however, that over the period of floating the market seems to have learned, with the result that the opportunity of profiting from bandwagon effects has diminished. A general conclusion to be derived from these findings is that periods of disorder, in the form of price dynamics, may extend well beyond day-to-day incidents.

Next, let me turn to officially induced or executed capital movements, including the more lasting use or accumulation of reserves. Numerous countries, confronted with the large current account deficits of recent years, have chosen to finance, rather than adjust

---

<sup>1/</sup>Michael P. Dooley and Jeffrey R. Shafer, "Analysis of Short-Run Exchange Rate Behavior, March 1973 to September 1975," International Finance Discussion Papers, Board of Governors of the Federal Reserve System, No. 76, February 1976.



these imbalances. Given the difficulty of reducing the surplus of the OPEC countries very substantially in the short run, it would obviously have been very difficult and internationally undesirable for most oil-importing countries to achieve over-all payments balance by allowing their exchange rates to depreciate. Very severe depreciation no doubt would have induced some private capital inflows that might have made it unnecessary to achieve current account balance. But the threat of a deep drop in the exchange rate might also have induced capital outflows that could have further intensified the downward exchange rate movement. Thus Britain, France, Italy and many other countries borrowed heavily to finance their current account deficits and to prevent sharp declines in their exchange rates.

Some of these borrowings took the form of official loans, the proceeds of which were temporarily lodged in central bank reserves. Others were private borrowings, sponsored or induced in varying degrees by government action, the proceeds of which also went to the central banks. These foreign exchange assets, usually dollars, were then fed out into the exchange market. In addition, the proceeds of some borrowings went into the exchange market directly without passing through official channels.

I see no conflict between such balance-of-payments financing and the spirit of the Rambouillet Agreement. Capital

movements certainly are among the factors that can be regarded as fundamental or "underlying." As such, it would be appropriate to allow them to influence exchange rates, in this particular case in the direction of stability rather than of change. What is important, of course, is that these balance-of-payments financing operations be so conducted as "to avoid manipulating exchange rates or the international monetary system in order to prevent effective balance-of-payments adjustment or to gain an unfair competitive advantage over other members." The application of this clause in the proposed amendment of Article IV will require goodwill and cooperation on all sides, because the determination of what constitutes an unfair competitive advantage involves the concept of under- or over-valuation of a currency, which is not always easy to measure.

I now turn to examine briefly some interrelations between official exchange market intervention activity and monetary policy. Historically, exchange rate objectives have been viewed as in conflict with an independent monetary policy. Efforts to keep an exchange rate from rising by buying foreign currency, whether by obligation under fixed rates or by choice under floating, tend to expand bank reserves and the money supply. Many countries have experienced difficulty in completely offsetting these expansionary effects, whether by open market operations, by increases in reserve requirements, or by other techniques. Efforts to keep an exchange rate from falling by selling foreign currency can interfere with domestic monetary policy by posing a choice between permitting monetary contraction

to occur in order to protect exchange reserves and pursuing offsetting operations that threaten their exhaustion.

Allowing rates to float freely has been hailed as a means of liberating monetary policy from these constraints. This liberation, of course, has been less than total. Many countries have not been willing to accept the wide swings in exchange rates that might result from a monetary policy totally unconcerned with such effects. Countries in whose economies the exchange rate plays a role of primary importance may well find it necessary to constrain their domestically oriented monetary policies in order to forestall wide exchange rate fluctuations.

Under floating exchange rates, however, exchange market intervention poses less of a threat to monetary policy than it did under fixed exchange rates, and in some circumstances it can also be employed as an aid to monetary policy. Exchange market intervention and monetary policy are two separate instruments, with which two separate objectives could be pursued, such as an exchange rate and an interest rate target. The two instruments are not altogether independent, and hence the degree to which the two targets can be pursued independently likewise is limited.

The incomplete independence between exchange market operations and monetary policy derives from the fact that both affect bank reserves and the money supply. One could conceive of a situation in which the injection of bank reserves through the purchase of foreign currencies offsets completely the withdrawal of bank reserves through open market sales of securities, leaving no net effect on either exchange rate or interest rate. Technically, this would happen if foreign-denominated

securities were very good substitutes for domestic securities. However, under a regime of managed floating, home and foreign securities are unlikely to be such good substitutes. Research employing the data of particular industrial countries suggests that their monetary authorities can count on some degree of independence between exchange rate and interest rate policy.

Without exaggerating these possibilities, it is worth noting some implications of these results. If monetary policymakers find themselves constrained in taking action on interest rates by their concern over possible repercussions on the exchange rate, simultaneous use of the two instruments can be helpful. Unintended pressure on the exchange rate resulting from changes in interest rate policy can then, to some degree, be offset by exchange market action. Such exchange market intervention would not appear to be contrary to the principle that underlying factors are to determine exchange rates, since an unintended side effect of monetary policy can hardly be regarded as fundamental. In other situations, however, the authorities very well may regard their interest rate moves as a fundamental factor, the exchange rate repercussions of which should not be offset.

Let me conclude with some comments on international liquidity, a subject closely related to exchange market intervention. During the time of troubles preceding floating, and while the Committee of Twenty was seeking a basic reform of the international monetary system, international liquidity was very much in the foreground of the discussion.

Has the situation changed so drastically under floating that concern with international liquidity should be set aside as much as it has been recently?

"International liquidity" is not a happy concept because it embraces so many dimensions. In the domestic sphere, at the time of the Radcliffe Report in the late 1950's, we also spoke about liquidity, seeking to analyze the effects of finance on incomes, prices and the balance of payments in terms of liquidity. Domestically, "liquidity" has not proved functional. It has largely been replaced by emphasis on the monetary aggregates, which empirically have been shown to be much more closely related to income and prices. This has been found to be true despite the many obvious objections to concentrating attention on variables, such as  $M_1$ ,  $M_2$ , or  $M_3$  that reflect only a small segment of the spectrum of total financing.

In the international sphere, unfortunately, there is no analogue to the domestic monetary aggregates. To be sure, the objections that can be raised against gross reserves as a measure of international liquidity are not all that different from those that can be raised against the monetary aggregates -- each represents a gross rather than a net concept, and neither really limits spending power, since both money and reserves can be borrowed. But instead of what has been shown to be a fairly stable relation between money on one side and income and prices on the other, the relation of any form of international liquidity, including gross reserves, to trade and balances

of payments seems to be very loose. Official reserves are not transactions balances, but precautionary balances. Trade can be, and usually is, financed by the private sector. Only at minimum levels do reserves seem to become important for a country's balance-of-payments policy.

Nevertheless, reserves matter. There are transmission mechanisms from reserves to other parts of the financial system and to the real sector. Acquisition of reserves through intervention expands bank reserves and the domestic money supply. Acquisition of reserves -- but also an increase in credit facilities, i.e., non-reserve liquidity -- affects the propensity to import of some, but by no means all, countries. This underscores the importance of reserve distribution. Reserves also influence countries' policies with respect to exchange rates, but again far from universally. One is bound to conclude that effective control of an important part of international liquidity such as gross reserves, if it were possible, would indeed influence economic policy and behavior, but that the degree of this influence would be far less predictable than the influence exerted by control over the domestic money supply.

This conclusion seems no less valid under floating than under fixed rates. A country seeking a pure float would need no reserves. But the great majority of countries apparently do not wish to float in that manner. Nor do they probably want to be unprotected against the possibility of externally imposed drains,

such as the oil deficits. Even though such needs could be met from borrowing instead of from reserves, the private capital market seems to be more willing to lend to countries that have the reserves than to countries that do not. Floating, on the other hand, makes it easier to acquire reserves, since a country can buy them in the market.

Clearly, international liquidity in general and reserves in particular do matter. Hence, there can be reasonable concern about their appropriate level. That concern today has shifted in good part from earlier worries about inadequate liquidity to an emphasis on the dangers of excessive liquidity. Existing concern is reflected in a desire to phase out gold, the price appreciation of which has created an enormous potential increase in liquidity, and in the fact that no new SDR allocation has been voted since 1969.

It has often been said that international reserves cannot be controlled under today's conditions in which countries can largely, although not entirely, have any level of reserves they want. That is a political, not an economic, statement. Technically, the means to control international reserves are available -- a rigorous asset settlement system or a total prohibition on intervention. To mention such techniques suffices to reveal the obstacles to their implementation. The recent proposal of the Managing Director of the International Monetary Fund suggesting reserve requirements for international reserves in the form of SDRs is somewhat less rigid, but the problems it raises are not

fundamentally different. No obvious answer is in sight. Unless and until an answer can be developed, inflation will have to be controlled mainly by means of appropriate domestic policies within the context of a floating rates system.

#