

The Support Points Mechanism

Books describing and analysing the system of stable exchanges under the gold standard could fill a good-sized library. But very little has been done towards providing an adequate explanation of the support points system of stable exchanges that has been in operation in a large number of countries ever since the establishment of the International Monetary Fund. It is perhaps because stability under the post-War system bears in some respects much similarity to stability under the gold standard that the need for a thorough-going description and analysis of the former is not realised sufficiently. Yet in many respects the support points mechanism differs considerably from the gold points mechanism.

That the law of inertia tends to maintain a time-lag between institutional changes in the economic system and their adequate treatment by economic literature is shown by the fact that in most textbooks it is still the defunct gold points mechanism that is explained in great detail instead of the support points mechanism. Examination papers still compel students to calculate gold points and to study in great detail the mechanism that had operated before 1914 and again for a few years in the inter-War period, even though it is most unlikely ever to return. It is high time to abandon thinking in terms of gold points and to pay more attention to support points which, unlike gold points, are actually with us and are likely to stay with us. There is a great deal to know about the peculiar technique of the post-War system and its broader theoretical implications.

Under the gold standard stability of exchanges was maintained by private gold arbitrage through which the gold points mechanism operated. Whenever exchange rates appreciated or depreciated beyond gold points it became profitable to withdraw gold from the Central Bank of the country whose exchange depreciated and to sell it to the Central Bank of the country whose exchange appreciated. The

immediate effect of such transactions was buying pressure on the weak exchange and selling pressure on the firm exchange. Gold movements continued until the exchange rate appreciated or depreciated to within gold points. Such direct effect of foreign exchange transactions, arising from gold shipments, on exchange rates was reinforced by their indirect effects produced through the intermediary of interest rates and the volume of credit in both countries concerned. An outflow of gold tended to raise interest rates, while an inflow of gold tended to reduce interest rates. The result was transfers of short-term funds from the country that was gaining gold to the country that was losing gold, causing more buying of the depreciated exchange and more selling of the appreciated exchange.

Finally, the rise in interest rates and the contraction of credit in the country with a depreciated exchange tended to cause its prices to fall and tended to reduce domestic demand for goods, while the decline in interest rates and the expansion of credit in the country with the appreciated exchange tended to cause its prices to rise and domestic demand for goods to expand. These effects of gold movements tended to change the trade balance in favour of the former country and against the latter country.

Under the post-War system, too, exchange movements tend to affect the gold and foreign exchange reserves of Central Banks. Countries with depreciating exchanges lose gold and countries with appreciating exchanges gain gold, as under the gold standard — but not through the automatic operation of private arbitrageurs, who are not now entitled to withdraw gold from Central Banks. Stability of exchange rates is maintained through systematic official intervention in the foreign exchange markets, made obligatory by the rules of the International Monetary Fund and leading to the post-War equivalents of the pre-War international gold movements. Central Banks of countries associated with the I.M.F. have to intervene in their respective foreign exchange markets to prevent an appreciation or depreciation of the U.S. dollar in terms of their respective currencies beyond 1 per cent on either side of their parities, by selling or buying dollars to the full extent required for achieving that end.

In practice most Central Banks have imposed on themselves much stricter obligations than those imposed on them by the I.M.F.

They fixed their actual support points — the limits at which they hold their exchanges in terms of dollars against buying or selling pressure — nearer to their parities than the official limit of one per cent. Moreover, they have adopted the practice of intervening systematically long before their exchanges have even approached their self-imposed support points.

The direct role of official intervention is confined to limiting the fluctuations of member currencies in terms of dollars, but indirectly this goes a long way towards limiting also the fluctuations of non-dollar member currencies in terms of each other. This latter task is accomplished by private arbitrage which is able to perform it very effectively, precisely because stability of the non-dollar currencies in terms of dollars is ensured by systematic official intervention. More will be said about this below.

The system of exchange stability thus created differs materially from any other foreign exchange system that has ever been in operation. It differs from the gold standard not only because it is based on official intervention instead of an automatic functioning of its mechanism, but also because in most countries some degree of exchange control is in force, at any rate for the time being. It differs from the stable system that existed between the principal Allied exchanges during the greater part of the First World War when exchange rates were rigidly pegged by means of unlimited official intervention at an unchanging rate. Under the present system, too, there is pegging from time to time, but the peg is removed or changed whenever this is possible or expedient. Rates are very often allowed to fluctuate freely between support points — though not so freely as they had been allowed to fluctuate between gold points under the gold standard. The present stable system differs also from that of the Second World War when it was achieved through a much stricter exchange control and a monopoly of exchange dealings at fixed official rates.

Official intervention to prevent a rise or a fall of member currencies in terms of dollars is liable to entail heavy buying or selling of dollars by the Central Banks concerned. They are entitled to convert into gold the dollars thus acquired at the official price of \$35 per ounce plus a small handling charge, and they are entitled to replenish their dollar holdings by selling gold to the U.S. authorities at the same price minus the handling charge. If they have no

more gold or dollars to sell, or even if their reserves have declined to danger level, they may obtain assistance from the I.M.F., enabling them to continue their intervention. This, together with other forms of official foreign assistance which are now obtainable, makes it possible to maintain exchange stability even in face of strong and persistent pressure.

The post-War system of exchange stability is thus based (a) on the obligation of the U.S. to buy and sell gold freely at a fixed price, (b) on the obligation of non-American member Governments to intervene whenever necessary in order to prevent movements of the dollar rate beyond support points, and (c) on the availability of external assistance to enable these Governments to fulfil this task.

It took some time before this system came to emerge in its present well-defined form. Between the establishment of the I.M.F. in 1946 and the return to foreign exchange dealings in the early 'fifties stability of most exchanges continued to be maintained by the system that operated during to Second World War. During the 'fifties the rules of the system of stability achieved through intervention gradually developed, assisted largely by the European Monetary Agreement. Article 9 of that Agreement, on Exchange Rate Margins, contains the following passage:

“Each contracting party shall, for the purpose of limiting the fluctuations of its currency, fix buying and selling rates for gold, the U.S. dollar, or some other currency, and shall notify each of the Contracting Parties and the Organisation of the rates so fixed...” (1).

It was not until 1958 that this provision of the E.M.A. came into actual operation between the signatories of that agreement. Under it the limits of fluctuations of their currencies were fixed in most cases well within the maximum I.M.F. limits of one per cent on either side of parity. This maximum was only applied, however, to the dollar rate in terms of the other member currencies. For rates between non-dollar member currencies the spread between maximum and minimum support points was much wider. As the E.M.A. Annual Report for 1959 states, it could be theoretically as wide as 3½ per cent for the Swiss franc, for instance. For most

(1) European Monetary Agreement 1955, as amended in subsequent agreements. Paris, 1962, p. 16.

exchanges it was about $1\frac{1}{2}$ per cent, their support points having been fixed at about $\frac{3}{4}$ per cent on either side of parity (2).

The I.M.F. Annual Report for 1959-60 explains the arithmetics of the support points for non-dollar member currencies in relation to each other that have resulted from their decision to fix their support points in terms of dollars at or about $\frac{3}{4}$ per cent on either side of their dollar parities. "The rates of exchange between the currencies which had been made externally convertible were... left to market arbitrage. The margins from par for the exchange values between these currencies in the market would therefore be the sum of the margins prevailing for each currency against the U.S. dollar. If one currency were to move to the maximum permitted premium against the U.S. dollar while another currency moved to the maximum discount, the rate of exchange between the two currencies would move to a point approximately 1.5 per cent from the respective par values" (3).

On the face of it, this appears to conflict with the I.M.F. rule fixing at 1 per cent the maximum limit of premiums and discounts. But insistence on applying the spread of 2 per cent to rates between non-dollar currencies would have been an arithmetical absurdity. This was realised by the I.M.F. and it amended its rule accordingly. It waived any right to object to fluctuations of rates between non-dollar currencies beyond the 2 per cent limit so long as such rates result from the maintenance of margins of no more than 1 per cent in relation to the dollar (4).

In the case of the sterling-dollar rate the support points were fixed immediately on the resumption of exchange dealings in 1951 at the round figures of \$2.78 to \$2.82, which was equal to a spread of 1.4 per cent, or .7 per cent on either side of the dollar parity of \$2.80. If Britain adopted a spread of 1.5 per cent the support points would have been \$2.7790 to \$2.8210, while the limits permitted under the I.M.F. rule are \$2.7720 to \$2.8280. Greece chose to fix the support points for the drachma at $\frac{1}{2}$ per cent from parity.

(2) Owing to the need for rounding up or down the decimal fractions resulting from the calculation of that percentage, or to the wish of the authorities concerned to fix reasonably round figures for their support points, the percentage of the resulting spread was in many cases not precisely $1\frac{1}{2}$ per cent. The reason why the spread is so wide for the Swiss franc is that Switzerland, not being a member of the I.M.F., chose to fix wider limits for the franc, even though in practice it maintains the franc-dollar rate well within those limits.

(3) International Monetary Fund Annual Report for the Year ended April 1960 (p. 31).

(4) I.M.F. Annual Report, op. cit., p. 31.

In the case of the lira they were fixed at .720 per cent, in the case of the D.mark at .714 per cent, though on the occasion of the revaluation of 1960 they were adjusted to $\frac{3}{4}$ per cent. A number of countries which are not associated with the E.M.A. followed the example by fixing their support points well within the I.M.F. limits, mostly at or about $\frac{3}{4}$ per cent. Finland, Ecuador and Honduras, among others, however, fixed their support points at the maximum limit. On the other hand, Kuwait's support points are at $\frac{1}{4}$ per cent from parity. Some Governments permit transactions at par only, though banks are of course entitled to charge a fixed commission to buyers and sellers. In some instances the two support points are not equidistant from parity. But the general rule, subject to many exceptions, is a limit of $\frac{3}{4}$ per cent on either side of parity. Japan, which fixed the support points of the yen originally at $\frac{1}{2}$ per cent, broadened them subsequently to $\frac{3}{4}$ per cent. The Central Banks of the countries concerned have notified the markets of their respective countries that they are buyers of dollars at the minimum support point and sellers at the maximum support point.

Member Governments are entitled to widen their spreads by unilateral decision up to the maximum limit of 1 per cent on either side of parity. They are also at liberty to reduce the spread and even eliminate it altogether by fixing both buying and selling price of the dollar at par. In practice adjustments of support points have been very few and far between.

As I pointed out above, in practice exchange rates are usually maintained within an even narrower range than the ones chosen by the Governments themselves when fixing their support points. They have drifted into the practice of intervening systematically before support point is reached, in order to prevent them from being reached. This is due largely to the view adopted by the authorities that the unfavourable psychological effect of having to intervene at support point tends to accentuate the pressure which they have to resist.

Before the war official intervention in the foreign exchange market was looked upon as an exceptional emergency measure. During the 'fifties it was mostly regarded as a matter of necessity arising from the I.M.F. rule. Today it is regarded as a matter of normal routine, an integral part of the present foreign exchange system. For instance, the Deutsche Bundesbank, in addition to having notified to the market its maximum and minimum rates

under the E.M.A. rule, quotes every day its official buying and selling rates for the day at which it is prepared to deal. It often takes the initiative for intervening at rates between its own buying and selling quotations if it finds that there is an excess of supply or an excess of demand in the market. The name of Mr. Roy Bridge, the distinguished head of the Bank of England's foreign exchange department, confirms the proverb *nomen est omen*, because his task is to *bridge* the gap between the supply of dollars and the demand for dollars in the London foreign exchange market. Like his opposite numbers of other Central Banks, he frequently intervenes at the prevailing dollar rates even if they are far removed from support points, whenever some unwanted discrepancy develops between supply and demand.

It is not the policy of Central Banks to peg the dollar rate rigidly and permanently. They merely aim at ironing out even the limited fluctuations that would occur within support points if the market were left to its own devices. Under the gold standard most monetary authorities seldom actually intervened in the market for the sake of resisting exchange movements within gold points, and left the task of readjustment to private arbitrage even if the rates went slightly beyond gold points. Under the post-War system some of them are at times almost constantly, or at any rate very frequently, in the market in order to prevent or reduce even fractional exchange movements. As a result, the range of fluctuations of spot rates is now most of the time even narrower than it had been under the gold standard. This in spite of the fact that the spread between the support points of the dollar rate is in relation to most currencies distinctly wider than it had been between gold points (5).

There are no official support points for exchange rates between non-dollar member currencies. As already remarked, the maintenance of their stability is the by-product of the maintenance of the dollar rate within the self-imposed limits for the non-dollar currencies. The arithmetical limits resulting from the operation of official support points for the dollar may conveniently be called

(5) For instance, the gold points for the sterling-dollar rate were \$4.8509 to \$4.8900 in 1913, \$4.8491 to \$4.8949 in 1925, and \$4.8534 to \$4.8873 in 1930, in each case rather less than one per cent, compared with the present spread of 1.4 per cent between support points. Nevertheless, in recent years the range of actual fluctuations was distinctly narrower than before the War.

“arbitrage support points” because they are maintained not by official intervention but by private arbitrage.

Both support points and arbitrage support points are more stable than gold points had been under the gold standard. Gold points had been influenced by changes in interest rates or by the length of the time required for the shipments, or by changes in freight, insurance and incidental expenses, so that they could never be depended upon absolutely. There was always a possibility of reducing the cost through discovering some cheaper route, or of additional cost through non-availability of the cheapest route. Insurance rates were affected even by the amount of gold carried on the same steamer or air liner. On the other hand, changes in support points are so infrequent that for practical purposes they may safely be disregarded. It is true, from time to time the possibility of changes in support points through changes in parities has to be envisaged. But the same was true also about gold points, at any rate under the precarious short-lived gold standard in the inter-War period.

As a general rule the dollar rate is maintained within support points by means of intervention by Central Banks in their local foreign exchange markets. There are, however, many exceptions. Owing to differences in market hours and to differences in holidays, intervention has to be effected on many occasions in New York while the local market is closed. On such occasions the Federal Reserve Bank of New York acts as agents for the Central Banks concerned. On the other hand, even though the Federal Reserve authorities are under no obligation to intervene, they often deem it expedient to do so on their own initiative and on their own account. On many occasions the Federal Reserve Bank of New York instructed other Central Banks to intervene on its account in their own markets when New York was closed — an outstanding instance was the dollar scare that followed President Kennedy's assassination — or when it considered it expedient to intervene before the Central Bank concerned decided to intervene on its own account (6).

(6) The series of articles by Mr CHARLES A. COOMBS, head of the foreign department of the Federal Reserve Bank of New York, published in the *Monthly Review* of that bank, are a goldmine of first-hand information on official intervention.

Intervention need not necessarily be confined to operations in dollars, even though Central Banks are under no obligation to buy or sell other currencies. Scandinavian Central Banks often find it more convenient to intervene in sterling, and other Central Banks too may prefer at times to buy or sell currencies other than dollars. They have, however, no official support points for those exchanges. The idea of a systematic intervention in other currencies was deemed to be superfluous, on the ground of the mathematical axiom that if A equals B and B equals C then C must equal A . If both sterling and D.mark are kept stable in relation to the dollar, sterling is bound to be stable in relation to the D.mark.

The existence of a spread between the maximum and minimum support points of each exchange in terms of dollars makes, however, the situation somewhat more complicated. The fact that holders of sterling who are entitled to convert them into dollars can always buy dollars in London at a rate not less favourable than \$2.78, and that they can always convert their dollars into D.marks at a rate not less favourable than Dm. 3.97 fixes a limit to the depreciation of sterling in terms of D.marks even in the absence of an official support point, or of voluntary official intervention to that end, either in sterling in Frankfurt or in D.marks in London. That limit is Dm. 11.0366 to the pound. Neither the Bank of England nor the Bundesbank is under any obligation to intervene to maintain the rate at that rate. But the fact that arbitrageurs are in a position to buy dollars against sterling in London at \$2.78 and re-sell them in Frankfurt to the Bundesbank at Dm. 3.97 prevents the sterling-D.mark rate from declining below that figure, except fractionally and quite temporarily. For any decline below that figure would make space arbitrage between London and Frankfurt profitable, and arbitrageurs would not fail to take advantage of it. In fact the mere possibility of profitable arbitrage is usually sufficient even in the absence of actual operations to keep the rate from moving beyond its arbitrage support point.

Conversely, the fact that holders of D.mark can always depend on being able to buy dollars from the Bundesbank at a rate not less favourable than 4.03 and to resell the dollars in London at a rate not less favourable than \$2.82 prevents sterling from appreciating in terms of D.marks beyond Dm. 11.3646. Any appreciation beyond that arbitrage support point would set arbitrage operations in motion, and their mere anticipation is sufficient to prevent it.

The mechanism of arbitrage support points is seldom in actual operation, for an appreciation of the dollar to its maximum support point in relation to one currency does not often coincide with its depreciation to its minimum support point in relation to some other currency. Arbitrageurs do not have frequent opportunities to buy dollars from one Central Bank at its minimum support point and to resell them to another Central Bank at its maximum support point. But the possibility is there, and the fact that intervention is confined to operations in dollars gives rise to other arbitrage opportunities which ensure that the effect of one-sided intervention in dollars is not confined to the value of the dollar but is spread evenly over all leading exchanges. This is an essential feature of the new system which is, therefore, a combination of official intervention and private arbitrage, though the former plays a much more important part in its operation than the latter.

The effect on non-dollar exchanges of the practice whereby official intervention is confined to dollars depends partly on the circumstances in which the selling pressure on the local currency arises. In so far as it is due in London to domestic demand in the U. K. for dollars the official operations merely meet the excess of local demand over local supply, so that the intervention need not affect other exchange rates except in a negative sense. In the absence of official selling of dollars U. K. demand might tend to raise the London dollar rate above the cross rate in continental centres. Continental arbitrageurs would then sell dollars in London and would sell the sterling proceeds, thereby causing an appreciation of their currencies against sterling. The same effect would be produced if some of the U. K. buying of dollars were diverted to continental markets.

In the absence of intervention British demand would have mopped up some of the supplies of dollars available in the international markets, so that buyers all over the world would have to offer more attractive rates to induce additional supplies to come to the market. The result would be an appreciation of the dollar in terms of all currencies as well as in terms of sterling. As a result of British intervention, the U. K. demand is met out of British reserves and it leaves the supply of dollars in the international markets unchanged.

Whenever a Central Bank pegs the dollar rate in its market, irrespective of whether at support point or somewhere between

support points, so long as it is pegged arbitrageurs in all markets base their quotations on that fixed rate. Any departure of an exchange rate from the cross rate between the pegged exchange and some other exchange gives rise to space arbitrage. In the absence of specific influences affecting the other exchanges, their rates should be derived from the pegged rate and the respective cross rate which normally should remain unaffected by the one-sided intervention in dollars that should only affect the cross rate in a negative sense.

If intervention by the British authorities is made necessary by buying of dollars in London from abroad its effect on exchange rates other than the sterling-dollar rate depends on whether non-residents who buy dollars in London possess the sterling or have to acquire it in order to pay for the dollars. If they use existing holdings of sterling there is no reason why exchange rates should be affected, except in a negative sense, inasmuch as in the absence of official intervention foreign buying of dollars in London would cause an appreciation of dollars in terms of sterling and a sympathetic appreciation of other currencies in terms of sterling. If, on the other hand, continental buyers of spot dollars in London have to buy sterling the result is a tendency for sterling to appreciate in terms of continental currencies, while intervention keeps the sterling-dollar rate unchanged.

The situation is slightly more involved if pressure on sterling is due to demand for some continental currency. In the absence of intervention sterling would develop weakness not only in relation to the currency directly concerned but, to some extent, also in relation to the dollar. If the authorities intervene in the form of selling dollars, space arbitrage will spread the effect of their operations on the dollar over the continental markets. Since nowadays even the narrowest discrepancy is sufficient to initiate space arbitrage operations, the effect of intervention in dollars is soon spread on other currencies.

If intervention by the British authorities assumes the form of selling forward dollars its effect on the forward sterling-dollar rate is liable to attract continental buying of forward dollars in London, not only for speculation but also for space arbitrage if the one-sided support of forward sterling gives rise to fractional discrepancies against forward rates in continental markets. Since continental buyers of forward dollars in London need not buy sterling until

the contracts mature, the operations do not affect sterling in terms of continental currencies.

Space arbitrage is not the only form of arbitrage which tends to keep rates within support points. Its effect is reinforced in given situations by uncovered interest arbitrage. Under the gold standard this was an important factor if there was sufficient confidence in gold points to justify arbitrageurs to rely on them. Whenever profit from interest differentials exceeded the maximum of loss that could arise through exchange movements up to gold points arbitrageurs did not deem it necessary to cover the exchange risk (7). The calculation of the risk was based on the theoretical possibility of an appreciation of the exchange of the investing country to its gold import point in relation to the exchange of the borrowing country. The difference between the spot rate at the time of the transaction and the gold import point was regarded as the maximum of any possible capital depreciation which had to be offset against the profit from the interest differential on uncovered arbitrage. The wider was the interest differential and the longer was the period of the investment, the wider could be the maximum of discrepancy between the current exchange rate and gold import point without risk of a net loss.

Owing to the ever-present possibility of changes in gold points, uncovered interest arbitrage was never quite free of risk under the gold standard unless there was an adequate safety-margin between the interest differential and the maximum risk of depreciation within gold points. Such interest arbitrage can now be undertaken with a higher degree of assurance under the support points system because support points are much less likely to change. Of course both under the gold standard and under the support points system such operations are ruled out if the currency of the borrowing country is considered to be devaluation-prone or if the currency of the investing country is considered to be revaluation-prone.

Given confidence in support points, if the yield on a certain type of short-term investment in London is 1 per cent higher than the yield on the corresponding short-term investment in New York, holders of dollars deem it safe to transfer uncovered funds into

(7) This system was described and analysed in great detail at the beginning of this century by N. E. WEILL in his well-known work *Die Solidariüt der Geldmärkte* (Frankfurt, 1903).

sterling for 12 months so long as the sterling-dollar rate is under \$2.8080, because even if sterling were to depreciate to its minimum support point of \$2.78 the resulting capital loss would not exceed 2.8 cents per £1, equal to the 1 per cent interest differential for 12 months. If the investment is for 6 months only, the exchange rate has to be under \$2.7940, and if it is for 3 months only the exchange rate has to be under \$2.7870, because the profit from an interest differential of 1 per cent p.a. is earned only for 6 months or 3 months respectively, and against it we have to offset the flat rate of the possible maximum of capital loss, which is of course the same regardless of the length of the investment. Transfers of uncovered funds from New York to London — or, for that matter, from Euro-dollars into sterling — for investment in very short loans is only risk-free, even in the complete absence of devaluation risk, if sterling is actually at its minimum support point or a mere fraction above it (8).

The moment there is the least suspicion that sterling might be devalued there would be an unlimited and incalculable risk attached to interest arbitrage involving the transfer of funds into sterling without covering the exchange risk. Few arbitrageurs would risk engaging in such operations which would mean having a long position in a devaluation-prone currency. On the other hand, the fact that sterling is regarded as devaluation-prone would not of course deter uncovered interest arbitrage involving the transfer of funds from sterling into dollars. Even arbitrageurs who do not anticipate a devaluation of sterling or who do not wish to speculate on it may engage in such operations so long as the sterling-dollar rate is above \$2.7920 for investment for 12 months, above \$2.8060 for investment for 6 months, and above \$2.8130 for investment for 3 months, on the basis of an interest differential of 1 per cent p.a. Likewise, uncovered transfers into revaluation-prone currencies may be undertaken by arbitrageurs who do not want to speculate on the revaluation, if the maximum of loss through a possible depreciation of the revaluation-prone currency to its minimum support point is less than the profit on the interest-differential.

(8) This technical point, as other technical points touched upon in this article, will be dealt with in greater detail in the author's forthcoming book *A Textbook on Foreign Exchange*, to be published early in 1966 by Macmillan & Co., London.

Although support points are only applied to spot rates, their operation tends in practice to keep down also fluctuations of forward rates. Central Banks are under no obligation to intervene in forward dollars, but in practice they very often find it expedient to do so. Even in the absence of such intervention forward rates of currencies which are not considered to be devaluation-prone or revaluation-prone tend to remain within the support points of spot rates, in the same way as under the gold standard forward rates tended to keep normally within gold points when the gold parities were trusted. So long as non-residents expecting to receive future payments in sterling and U. K. residents who expect to make future payments in foreign currencies take it for granted that spot sterling would not depreciate beyond \$2.78, they have no reason for selling forward sterling at lower rates or for buying forward dollars at lower rates. When spot sterling depreciates towards its minimum support point, and if its maintenance at that support point is trusted, the discount on forward sterling should become gradually narrower as and when the spot rate was approaching support point. It should disappear when support point is actually reached.

Needless to say, if the depreciation of sterling to support point is due to devaluation fears forward sterling remains at a discount even if it brings the forward rate below support point. But so long as the support point is trusted, the narrowing of the discount on forward sterling that accompanies the decline of spot sterling towards its minimum support point tends to give rise to covered inward interest arbitrage, because the forward discount tends to become narrower than the interest differentials. To this extent the support points system does give rise to automatic readjustment, because such inward arbitrage operations tend to halt and reverse the depreciation of spot sterling. From this point of view, as from the point of view of uncovered interest arbitrage in circumstances described above, the operation of the new system is even more efficient than the gold standard because support points, unlike gold points, are firmly fixed and their whereabouts are a matter of public knowledge. Once, however, a currency comes to be regarded, rightly or wrongly, as devaluation-prone or revaluation-prone this self-correcting effect ceases to operate.

But even in the case of devaluation-prone or revaluation-prone currencies abnormal deviations of forward rates from support points

are often mitigated if not prevented by official intervention in forward exchanges. Although there were instances of such interventions before the War, they were undertaken in special circumstances only. During the early 'sixties, however, intervention in forward exchanges has become the normal routine of many Central Banks. Prejudice against such tactics has practically ceased, and intervention in forward exchange has become a matter of expediency.

The system of intervention has thus progressed in the following stages:

- (1) Obligatory intervention at 1 per cent from I.M.F. parities.
- (2) Voluntary intervention at narrower support points.
- (3) Voluntary intervention between support points.
- (4) Voluntary intervention in forward exchanges.

In addition, some Central Banks intervene also outside the market, buying and selling foreign exchanges at rates different from those quoted in the market.

This progressive extension of the scope of official intervention in the post-War foreign exchange system necessarily restricts the scope for its automatic operation in the technical sense. But under the post-War system the more fundamental self-correcting influences that had existed under the gold standard have also ceased to function. We saw at the beginning of this article that under the gold standard gold movements affected exchanges not only through the direct effect of foreign exchange transactions arising from private gold arbitrage but also through their indirect effect on international movements of short-term funds as a result of their influence on interest rates. Even under the gold standard automatic adjustment of forward rates to changes in their interest parities reduced that indirect effect. Under the new system discrepancies that are liable to cause covered interest arbitrage are now often prevented through the official manipulation of forward margins. But neither under the gold standard nor under the support points system can the authorities prevent by means of intervention any movements of short-term funds through uncovered interest arbitrage. Moreover, the multiplicity of interest parities — there are now many more than before the War — makes it arithmetically impossible to adjust forward margins to all interest parities, so that official intervention in forward exchanges is unable to prevent covered interest arbitrage altogether.

We also saw earlier that under the gold standard disequilibrium tended to become readjusted as a result of the indirect effect of gold movements on the volume of credit, the relative price levels and the trade balance. Under the support points system the extent to which such automatic forces operate is very much reduced. Losses of reserves by Central Banks do not now contract credit automatically, nor does an influx of gold lead now to an automatic expansion of credit. This is due in part to the fact that in most countries the volume of credit is now entirely divorced from the volume of the gold or foreign exchange reserves. This change does not arise from the new foreign exchange system but from the change in the monetary role of gold and foreign exchange reserves. It is partly because of this change that the new foreign exchange system does not possess the automatic self-adjusting qualities of the gold standard.

What is even more important, there has been in recent years an increasingly pronounced change in the official attitude in most countries towards the need for official policy to aim at replacing automatic self-correcting effects by policies tending to pursue the same end. Under the gold standard the authorities frequently took steps to reinforce the self-correcting effects of gold movements. They changed the Bank rate and influenced the volume of credit in order to accentuate and accelerate the automatic effects produced by the gold points mechanism. Under the new system, too, some Central Banks, faced by an unwanted loss or an unwanted gain of gold, behave in a similar way to how they had behaved in similar circumstances under the gold standard. But the extent to which this is the case has declined considerably in recent years. In particular the authorities of some countries are anxious to avoid checking an outflow of gold with the aid of higher interest rates and credit restrictions. This attitude has been greatly facilitated by the ease with which foreign assistance is now forthcoming and by the new spirit in which such assistance is sought as a matter of course.

This availability of external assistance itself arises from the support points system. Central Banks are expected to engage in unlimited intervention, and the means for it are provided almost as a matter of routine. As a result there is a high degree of temptation and a high degree of opportunity for abstaining from pursuing official policies which would take the place of the self-correcting effects of the gold standard. It is true, in theory assistance from the I.M.F. and from Central Banks is to some extent conditional

on the adoption of measures similar to those that were adopted under the gold standard as a result of an outflow of gold. At any rate pressure is exerted to that end. In the case of Italy in 1963-64, for instance, it actually did operate in that sense. But in other instances, such as that of Britain in 1964-65, the strong desire of the authorities approached for assistance to prevent a devaluation of sterling had weakened their bargaining power by which to induce the British authorities to emulate the gold standard effects in their policies towards domestic expansion.

This is a point which deserves the utmost attention. Although it is now fashionable to agitate for even larger external assistance that should be obtainable even more easily than it is at present, it might be worth while to stop to consider whether or not it is already too easy to obtain assistance in circumstances in which such assistance would obviate the necessity for correcting the disequilibrium leading to the loss of gold. The non-automatic character of the new foreign exchange system can only justify itself in the long run if it is not allowed to lead to an aggravation and perpetuation of disequilibria which would have been corrected by the operation of the old automatic system.

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