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THE CRAWLING PEG

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Introduction

By historical standards, the record of the international economy in the postwar period is unquestionably one of outstanding progress. There has been unparalleled economic growth and a rapid expansion in world trade. International integration has progressed beyond what all but the most optimistic would have prophesied in 1945. Most countries have enjoyed tolerably high levels of employment for most of the time, and those with the good fortune to have undervalued exchange rates have been able to afford very high levels. It may seem paradoxical that the international monetary system that has fostered this record should have engendered such intense debate on its defects and dangers. Nevertheless, one of the few things that the participants in this debate would agree on is that there is a need for further discussion if the system is to continue evolving at a pace adequate to meet the expanding demands being made upon it.

During the course of the debate, the nature of the political constraints that inevitably circumscribe the possibilities of reform have gradually become apparent. In particular, three basic features of the present system are, for the time being at least, regarded as sacrosanct. One of these is the fixed price of gold. A second is that owned reserves should continue to consist primarily of gold, supplemented in some way by the national currencies of some or all of the major economic powers. The third is that the par value of each currency should normally be fixed, but that there should remain a loophole to enable changes to be made in cases of "fundamental disequilibrium."

Whether or not one personally believes that these constraints are particularly intelligent ones, the fact is that they exist; to ignore them may be a valuable intellectual exercise, but it is unlikely to be of relevance to policy formulation in the foreseeable future. In recognition of this situation, attention has recently tended to shift away from the radical original proposals—floating exchange rates, the transformation of the IMF into a world central bank, a doubling of the price of gold—toward more modest proposals designed to improve the working of the system within the context of the constraints listed above. The new discussion has concerned composite reserve units, widening the band of permissible exchange-rate fluctuations, increasing the automaticity of access to IMF quotas, intervention in the forward market, exchange guarantees, and cooperation among central banks.

The proposal to be analyzed in this paper is, likewise, concerned with a mutation of the present system. In the form in which it has been presented by Professor Meade (*Three Banks Review*, September 1964) it conflicts with the third of the politically imposed constraints. But there is no reason why it should not be modified to remedy this defect; it has long ago been discovered that almost any of the proposals advanced can be subjected to a near-infinite number of permutations. The particular version that will be discussed in this paper is:

> That those countries accepting the obligations of Article VIII (sections 2 to 4) of the Articles of Agreement of the International Monetary Fund (i.e. those with convertible currencies) should undertake that any changes in par value needed to correct a "fundamental disequilibrium" would be carried out gradually, at a maximum rate of 1/26 of one per cent per week, rather than in a sudden discrete jump.

The essential corollary of the proposal is that countries should maintain interest rates at levels adequate to prevent such creeping changes in exchange rates from giving rise to capital flows.

The reason for burdening this proposal with the inelegant label of the "crawling peg" should be apparent. The "adjustable peg" has come to mean that system under which par changes are carried out infrequently, suddenly, and in a sizable discrete step. The "crawling peg" will be used to mean a system under which such par changes as occur are implemented slowly, in such a large number of small steps as to make the process of exchange-rate adjustment continuous for all practical purposes; a system, therefore, under which the peg crawls from one level to another.

Operation of the Proposal

If the proposal were to be implemented in this form, it would mean that, at any given time, the exchange rates of all countries with convertible currencies would be fixed within a narrow range, as at present. For most currencies this range would stay the same from one week to the next. However, certain countries—those where a persistent payments deficit or surplus had emerged at the optimum level of employment—would have a range that altered, in a preannounced manner, from week to week. Central banks would intervene in the market to stabilize the rate when it approached its current limits.

The incentive to transfer funds out of a currency undergoing devaluation (or into a currency undergoing upvaluation) would be neutralized by interest-rate differentials. Suppose that country A had an-

nounced that it was going to lower its peg at the maximum permissible rate, 2 per cent per annum, for two years, in order to adjust to a realistic parity, and that no other country felt the need for an adjustment of its exchange rate. To appreciate the relevant principles, it is sufficient to assume that there are only two types of securities in each country—bills, and consols with a nominal yield of 5 per cent. Suppose that the interest rate in the rest of the world was 4 per cent on bills and 5 per cent on consols. Then, assuming perfect markets and an absence of tax complications, the necessary condition for investors to be indifferent between holding their funds in the devaluing country A, or abroad, is that the bill rate in country A should rise to 6 per cent and that the yield on consols should rise to 7 per cent. In two years time these yields would fall back to the level prevailing elsewhere, so that the price of consols would again be equal to that in the rest of the world. At the outset of the downward crawl of the exchange-rate peg, the price of consols in A would have to decline to about 96, so as to make the total yield 7 per cent (5 per cent plus 2 per cent capital appreciation). In other words, both long and short-term interest rates would be determined by those prevailing elsewhere, but the price of bonds would not have to decline to anywhere near the level needed to raise the long-term interest rate to 7 per cent. (The long-term interest rate is defined as the coupon rate divided by the price of the bond.) In practice, since income is generally taxed more highly than capital gains, it is probable that the interest-rate differential needed to prevent capital flows would be rather greater than the rate of depreciation of a currency.

It was suggested by Meade that one might treat funds owned by central banks as part of their countries' reserves differently from the funds owned by private individuals. Meade envisaged the assets of central banks carrying a lower interest coupon but accompanied by an exchange guarantee. In order to implement this proposal, it would presumably be necessary to create special securities to be held by official institutions, since otherwise one would create unlimited possibilities of profitable arbitrage with the private sector. The idea seems quite unnecessary unless central banks have a unique disinclination to show a capital loss on their balance sheets even when this is compensated by a gain on current account. One would therefore be introducing rigidities into national security markets for no apparent purpose. Accordingly, it is assumed in this paper that no special treatment would be given to assets held by central banks.

An essential feature of the proposal is that the size of each individual change in the peg should be very small—well within the band of permissible exchange-rate variations. If the process were to occur in dis-

crete steps of any size, there would be difficulty in avoiding occasions, just before a peg change, when it would be worth switching out of the currency. Monthly changes would be feasible, but, in order to emphasize the inconsequential nature of the particular date on which a reduction in par value occurs, it seems advisable to choose even shorter intervals.

The proposal has been confined to those countries with convertible currencies for two reasons. By and large, it is only these countries that enjoy sufficiently diversified economies and sufficiently sophisticated monetary management to offer one any confidence that they will be able to avoid the occasional need for adjustment more rapid than can be provided through a crawling peg. Moreover, the problem of avoiding massive shifts into and out of inconvertible currencies is not acute; efforts to get out are relatively easy to control, and because people fear these difficulties in getting out they are unlikely to shift in.

If the proposal were to be implemented, it would be important to maintain (or possibly even strengthen) the right of the IMF to veto par changes that it enjoys under Article IV, section 5, of its Charter. Without this, there might be some danger of a revival of competitive depreciation. Under the adjustable peg it is virtually impossible to debate a proposed par change, because of the effect this would have on hot-money flows, but the principal advantage of a crawling peg is that such flows could be eliminated. It would therefore be perfectly feasible for the IMF to use its veto powers effectively; this would, in fact, permit a return to the original spirit of Bretton Woods.

There are three major problems concerning the present international monetary system: the problem of payments adjustment, the problem of international liquidity, and the problem of confidence in convertible currencies, particularly those used as reserve media.[1] The remainder of this paper will be devoted to an analysis of the impact the proposal would have in each of these areas, to a consideration of the equity aspects of the proposal, and to a discussion of the problems it would raise for the internal management of an economy.

Confidence

One cannot expect people to accept an avoidable capital loss. The present system threatens those holding a particular currency with a

[1] This classification follows that in *International Monetary Arrangements: The Problem of Choice*: Report of the Deliberations of an International Study Group of 32 Economists (Princeton: International Finance Section, 1964), p. 24. Incidentally, in the hope of contributing to the evolution of a common vocabulary, potentially ambiguous terms are used in the same way in the present paper as they were in that Report.

substantial overnight capital loss in the event of devaluation, and consequently it is not surprising to find that people attempt to protect themselves by moving out of a suspect currency. The magnitude of such speculative flows is already large, as witnessed by the British crisis of 1964-65, but there is no reason to believe that this represents the maximum extent of the problem. An indefinitely large part of a country's stock of money and quasi-money is potentially available for conversion. November 1964 marked the first occasion, other than in hyperinflation, when the man in the street experimented with converting his part of the money supply as a hedge against devaluation; many branches of British banks were denuded of their stocks of foreign currency. It is only realistic to assume that this type of practice will become commonplace as foreign travel becomes routine, and the potential consequences for the size of speculative flows do not need elaboration.

Even when a speculative attack does not succeed in forcing a devaluation, it is likely to have a number of undesirable consequences. In particular, it is bound to lead to a disruption of financial markets and may impose an arbitrary level of deflation in the losing country and inflationary monetary effects in the recipient country. More important still are the consequences if the attack succeeds. If devaluation was really needed and the authorities were simply unwilling to face the fact until the attack forced them to do so, then the speculators have performed a useful function, but one may reasonably hold that it is undesirable that they should be rewarded for this in the rather handsome and capricious manner that prevails under the present system. If the country was not faced with a "fundamental disequilibrium," but the attack nevertheless succeeded, the consequences would be near-disastrous: disruption of trade, a completely irrational bonus for the speculators, and the threat of inflation in the devaluing country and of deflation in other countries as the problem of adjusting back to a realistic parity came to the fore. The Basle agreements and the swap arrangements between central banks have arisen principally to avert these dangers of private speculation.

This raises the second aspect of the problem of confidence—the confidence of central banks that exchange rates will be maintained. It is important here to distinguish between that part of intercentral-bank lending that arises primarily to provide owned reserves to the lender and that part the purpose of which is to provide borrowed reserves to the borrower, because in practice the latter is subject to an exchange guarantee while the former is not. So far as the former is concerned, the central banks involved are subject to the same considerations as are private individuals, but have in the past reacted in a much more

restrained manner. (Even so, there is some evidence that they have tended to shift out of a threatened currency.[2]) But up till the present there is no historical instance of a reserve currency ever having been devalued in anything remotely resembling "normal" circumstances; devaluation has always appeared as a once-for-all response to a very special situation. One may reasonably doubt whether central banks, especially the peripheral ones, would continue to be as restrained in switching between reserve assets if it were demonstrated that a reserve currency could be devalued in "normal" times.

If switching by the peripheral central banks were to be added to speculation by private individuals, the magnitude of the offsetting operations required of the IMF and key central banks would be formidable. This is not to say that speculation would overwhelm the capacities of these institutions, because there is no limit to the extent to which a central bank is able to offset a flow into its own currency other than its willingness to do so, for it can always lend the sums being transferred to it back to the country from which they originated. This is precisely what happens under the type of intercentral-bank lending typified by the Basle agreements. Since such lending carries an exchange guarantee, the lending country is free of the fear of capital loss. Despite this, it is quite clear from the speeches and actions of the central bankers that they have no intention of providing unconditional credit in unlimited quantities to any country that is willing to offer an exchange guarantee on its borrowing. The condition for the provision of such credit is likely to remain that the borrowing country should be taking adequate steps to correct its payments imbalance.

The position, therefore, is that speculative flows are likely to be large; that the IMF and key central banks will technically be in a position to offset such movements; but that they will only be prepared to do so if they are satisfied as to the adequacy of the remedial measures being undertaken by the deficit country. It is apparent that what one may term "the international authorities" (by analogy with "the authorities" of domestic fiscal and monetary policy) are virtually certain to be thrust into an increasingly critical role in determining domestic economic policies, particularly of countries with overvalued exchange rates and convertible currencies. The proper extent of foreign influence on a country's domestic policy is a subject of substantial disagreement,

[2] Apart from the well-publicized activities of the French, Chinese, and other authorities in 1965, there is evidence of a shift out of dollars into gold in the last quarter of 1960. See Peter B. Kenen, *Reserve-Asset Preferences of Central Banks and Stability of the Gold-Exchange Standard,* Princeton Studies in International Finance No. 10 (Princeton: International Finance Section, 1963).

that will be considered later. It suffices at present to note that if one is prepared to accept the judgment of the international authorities (recognizing that the importance of this judgment is likely to increase substantially in future years) as to what constitute appropriate steps to correct a payments imbalance, one need not be unduly concerned with the confidence problem. For these authorities possess the power to counter speculative flows, and hence speculation will be offset when it should be and will force action only when action is called for.

Those who are less sanguine about the wisdom and enlightenment of central bankers may well fear the possibility of a deflationary bias being imparted to the international economy by the type of conditions they are likely to impose. The danger would seem to be that the initial response of central bankers, when confronted by a run on another country's currency, will be to extend credit almost automatically, whether or not the existing exchange rate is realistic. This is probable because it is much more comfortable to manage an undervalued than an overvalued currency, and if the central bankers do not have time to consider their appropriate response carefully they are likely to play it safe and so avoid any possibility of having their own enviable position undermined. Once large credits have been received by a country under speculative pressure, it becomes much more difficult to devalue: there is a greater cost in terms of real resources because of the exchange guarantee, there is a danger of magnified effects on future confidence, and—most important of all—the government of the threatened country has staked its prestige on maintaining the exchange rate. At this point the central bankers of the creditor countries are likely to recall their divine commandment to maintain discipline. The deficit country is caught helpless between the ignominious course of reneging on its promises by devaluing after all, and the painful course of following the deflationary dictates of its foreign creditors. All this is not a farfetched possibility: it is provoked by the realization that the experiences of Britain's Labour government are alarmingly likely to be a precedent.

The most immediate and important advantage that the proposal for a crawling peg offers concerns the elimination of these problems of confidence. If a change in peg were to occur gradually, the prospect of impending devaluation would provide no incentive for a withdrawal of funds, since the value of a currency on the day after devaluation was announced would not differ materially (if at all) from its value the day before. There would, of course, be an incentive to withdraw funds after the announcement if interest rates in the devaluing country were not sufficiently above those elsewhere to maintain the same net yield, and this fact would force an upward revision in interest rates

whether or not the devaluing country welcomed such an occurrence. This in turn means that the *prospect* of a devaluation would be sufficient to lower the price of long-term securities (and possibly of equities). In most cases this would act as a desirable corrective, since the threat of devaluation normally emerges through a country indulging in inflationary excesses. On the other hand, it is possible for overvaluation to emerge for other reasons, such as an autonomous shift in demand away from a country's exports. More important in practice, an overvaluation that results from inflationary policies can persist even after elimination of the excessive demand that caused it, because of the downward inflexibility of costs. In such circumstances the need for high interest rates to permit depreciation of the exchange rate could conflict with the desire to pursue a monetary policy appropriate to the domestic situation of the country. This problem is discussed subsequently.

So far as the confidence issue is concerned, the impact of the crawling peg is clear. The incentive for massive shifts of liquid funds, owned either by individuals or central banks, would be removed; the shocks this imposes on the system would end; and a deficit country would have much less need to rely on the benevolence of foreign central bankers. This would be an important gain in the short run, but its crucial significance lies in the impact it would have on the long-term survival prospects of the system. If, as seems probable, par changes tend to lead to a cumulative decrease of confidence in the future permanence of exchange rates, then the adjustable peg is unlikely to be viable indefinitely. Ever increasing destabilizing speculation will result if pegs are apt to jump; and if they lethargically sit in their holes, they will have ceased to be adjustable. Crawling pegs can resolve the dilemma.

It has recently been suggested by Fred Hirsch that, while there is a strong case for introducing the crawling peg as soon as the opportunity occurs

> . . . . . that opportunity may not come before a major exchange upheaval itself. The essence of any successful operation in the exchange market, as in nuclear deterrence, is to achieve credibility: and if at a time when speculators have been guessing that your currency may be devalued by 10% you introduce a complicated scheme allowing it to be devalued by 1%, few people will believe that this is the finish. (F. Hirsch, *The Pound Sterling*, London: Victor Gollancz, 1965, p. 116.)

The short answer to this is that the scheme's success is not dependent

on asking people to believe that 1 per cent is the finish. All one need ask them to believe is that countries would be content to seek a gradual cure. It would not even be essential to convince the public of this; it would be possible to launch the scheme safely as soon as one had convinced the international authorities. In practice, there does not seem to be any reason for believing that it would be particularly difficult to achieve credibility with the public. If the latter can be convinced, even in 1965, that the existing exchange-rate structure is not doomed, it is not apparent why they should believe that its amendment is so urgent as to preclude taking several years in the process. Indeed, by providing an alternative to the traditional form of devaluation that the public could believe would be acceptable to "radical" governments, one might hope that the proposal could add credibility to the present position of the reserve currencies in a manner that promises of incomes policies and deflation cannot hope to.

Adjustment

Many economists believe that in the postwar period too little use (or, more accurately, perhaps, too infrequent use) has been made of exchange-rate variations in promoting balance-of-payments adjustment. The objections to alternative methods of adjustment—deflation and inflation, trade controls, tailoring government spending, aid, or long-term capital movements to payments considerations—are so familiar as to need no repetition. These alternatives are all deemed undesirable because of their direct and inevitable consequences—consequences that would continue to follow irrespective of the form of the international monetary system. The situation is slightly different with exchange-rate variations. There are three objections to their use. One is the disruption of trade and international integration that they entail, but this is essentially an objection to large and/or unpredictable rate changes. The changes in relative international costs that would be involved in a crawling peg are no greater than those that arise at present from divergent national monetary policies, so that it seems legitimate to discount this objection as regards the present proposal. The second objection is that their use weakens the discipline on national monetary authorities to follow responsible policies—this point will be discussed in due course. The third, and probably most important objection, is that prospective par changes cause massive speculation and, where reserve currencies are concerned, also threaten to destroy international liquidity. This is a defect that arises out of the present structure of the international monetary system and would disappear if the problem of confidence were to be solved by adoption of the crawling-peg proposal.