

EDITOR'S NOTE:

The following "Comment" is in response to the article, "International Monetary Reform and the 'Crawling Peg'" by George W. McKenzie, which appeared in the February 1969 issue of this REVIEW. J. Herbert Furth is Faculty Associate in Residence, School of Professional Studies, for the Foreign Service Institute in the Department of State, and was formerly an adviser to the Board of Governors of the Federal Reserve System. The "Comment" reflects his personal opinion, and should not be interpreted as representing the views of the Foreign Service Institute.

Professor McKenzie is Assistant Professor of Economics at Washington University in St. Louis. His "Reply" follows immediately after Mr. Furth's "Comment."

## International Monetary Reform and the "Crawling Peg"—Comment

by J. HERBERT FURTH

PROFESSOR MCKENZIE, in his article on the "crawling peg,"<sup>1</sup> believes that the replacement of fixed par values by a "crawling peg" would

- (a) "increase the effectiveness of monetary policy in achieving domestic goals";
- (b) "avoid the periodic exchange crises and uncertainty of the present system"; and
- (c) reduce "the incentive for countries to impose controls on international transactions."<sup>2</sup>

The following comments are designed to show that the institution of a "crawling peg" is unlikely to achieve the first two results, and that the third result would be achieved at excessive cost.

Professor McKenzie bases his reasoning mainly on an application of the Mundell theorem,<sup>3</sup> according to which monetary policy, under conditions of fixed exchange rates, has no impact on the level of domestic economic activity. It therefore becomes necessary first to discuss the conditions under which the Mundell theorem may be applied in practice.

<sup>1</sup>George W. McKenzie, "International Monetary Reform and the 'Crawling Peg,'" in the February 1969 issue of this *Review*, pp. 15-23.

<sup>2</sup>*Ibid.*, pp. 15 and 16.

<sup>3</sup>*Ibid.*, p. 17.

### Assumptions Underlying the Mundell Theorem

This highly interesting and important theorem is valid (as Professor Mundell himself realizes) only under the following assumptions:

- (1) All international capital flows are exclusively determined by interest rate differentials.
- (2) Exchange rates are so rigidly fixed that there is no forward exchange premium or discount.
- (3) International capital is so flexible that the smallest interest rate differential sets flows in motion.

It should be unnecessary to point out that, as a rule, none of these assumptions conforms even approximately to economic reality.

### *Interest Sensitivity of International Capital Flows*

International capital movements include primarily three types: flows of money-market funds; credits financing international trade; and equity investments, including both portfolio and "direct" investments.

Of these three types, only the first is interest-sensitive. The volume of trade credits depends almost exclusively on the volume of trade. The volume of

equity investments depends on expected profit (not interest) rates: that of portfolio investments mainly on short-run, that of "direct" investments mainly on very long-run expectations. While it is true that an autonomous rise in market interest rates may indicate a rise in expected profit rates, this is not true of a rise in interest rates resulting from restrictive monetary policies. Such policies actually tend to reduce the expected profit rate, at least in the short run: when the Federal Reserve tightens its policies, the stock exchange turns bearish (unless the market believes that the policies will be ineffective). Hence, restrictive monetary policies tend to induce an *outflow* rather than an inflow of portfolio investment funds. Finally, temporary fluctuations in interest rates are extremely unlikely to affect very long-run profit expectations, and therefore extremely unlikely to influence the volume of "direct" investments.

### *Rigidity of Exchange Rates*

The only main category of capital movements that is highly interest-sensitive, the flow of money-market funds, is sensitive to "covered" rather than "uncovered" interest rate differences.<sup>4</sup> As any table showing changes in "covered" interest rate differences will prove, the movements of interest and forward exchange rates tend to offset each other — in part, completely, or even more than completely. Hence, a rise in gross money-market rates is not much more likely to set in motion a large inflow of money-market funds than to set in motion an outflow, or — most often — to leave the flow substantially unchanged. Moreover, even if a large inflow were to occur, it would "finance" rather than "correct" the payments deficit since a flow of money-market funds creates liquid liabilities in exactly the same amount as liquid assets, and thus does not affect the country's net international liquidity position.

### *Interest Rate Differentials*

Finally, even insofar as capital flows might be sensitive to interest rate differences, the costs and risks of international placements make it unlikely for capital flows to become significant unless the differences exceed some minimum, usually estimated at about  $\frac{1}{2}$  of 1 per cent. As long as monetary policy is conducted so moderately (and successfully) that a larger jump is avoided, it is not likely to induce substantial capital flows, even in the absence of conflicting movements of forward exchange rates. And even

<sup>4</sup>"Covered" interest rate differences are gross differences plus (minus) forward exchange premiums (discounts).

when the minimum limit is exceeded, the flows cannot be expected to be so large as to offset completely the change in domestic liquidity resulting from the policy action. In the United States, for instance, the volume of domestic bank deposits may change by as much as \$25 billion in one month — an amount larger than the total of all deposits with U.S. banks held by foreigners, and about 15 times as large as the largest monthly change in U.S. liquid liabilities to foreigners recorded in recent years.

For these reasons, the Mundell theorem cannot be applied for policy purposes, except perhaps under rather unique conditions: say, within the Common Market after its complete monetary integration (a situation which obviously would exclude the use of a "crawling peg"); or at best — as Professor Mundell himself believes — to Canada in relation to the United States.

### **Limits to Domestic Effectiveness of Monetary Policy**

This is not to deny that international capital flows may well limit the effectiveness of monetary policies; but unfortunately, institution of a "crawling peg" would not eliminate such countervailing flows — on the contrary, it would tend to magnify them.

Domestic banks will always seek to nullify the effects of tight monetary policies by replenishing the funds withdrawn from the market by the central bank. The recent "borrowing" of Eurodollars by U.S. banks, for instance, reached a peak of more than \$10 billion, although interest rates in the Eurodollar market have been uniformly higher than those in the U.S. market.

Professor McKenzie himself states that under the "crawling peg" system, too, tight monetary policies will result in a capital inflow; with the difference, however, that the flow will result in an appreciation of the country's exchange rate.<sup>5</sup> This "crawling" appreciation will indeed tend to increase imports and reduce exports; but at the same time, it will accelerate the capital inflow as long as the market believes that the rise in rates will continue: the effect of the gross interest rate differential resulting from the action of the central bank will be magnified by the effect of the rise in the forward exchange rate, resulting from the expectation of continued appreciation.

Professor McKenzie asserts that the inflow of capital, while sufficient to offset exactly the deterioration

<sup>5</sup>McKenzie, p. 21.

in the trade balance (so that there would be "no balance-of-payments deficit or surplus"), will *not* be sufficient to offset the contractive effect of that deterioration on the level of domestic economic activity — so that there would be a "further decrease in aggregate spending."<sup>6</sup> But this remarkable relationship of the magnitudes involved is asserted without any theoretical or empirical evidence.

Actually, it seems more likely that the effect of the appreciation on exports and imports will be small,<sup>7</sup> while a forward exchange premium equivalent to 2 per cent per year, added to an interest rate difference of, say,  $\frac{1}{2}$  of 1 per cent, may well attract large amounts of money-market funds — in any case, much larger amounts than would be attracted by the gross interest rate difference without the addition of a forward exchange premium! Hence, anti-inflationary monetary policy would probably be less effective, not more effective, than under the present system.

### Avoidance of Exchange Crises

Under the present system, "exchange crises" have been neither as numerous nor as severe as the critics of the system believe: none of them has seriously interfered with the continuous expansion in international commerce nor with the continuous improvement in economic welfare — the only meaningful standard of economic institutions. Actually, since 1958 — when the present system began to operate with the re-establishment of convertibility of the major European currencies — there have been only four events that could be called "exchange crises" of major currencies: the revaluation of the German mark (and the Netherlands guilder) in 1961; the difficulties of sterling since 1964; the difficulties of the French franc since May 1968; and the difficulties of the U.S. dollar over virtually the entire period.

The problem of the U.S. dollar will be discussed in the next section. The problem of the French franc has been obviously unconnected with the present payments system: until the outbreak of political unrest in May 1968, the French economy was in reasonable external as well as domestic equilibrium, and under no conceivable payments system would the franc have been "crawling" downward in exchange markets before that date. True, after the outbreak of the unrest, the franc would presumably have sharply

depreciated under a system of freely fluctuating exchange rates. But if the assessment of the difficulties by the French authorities (sudden capital flight triggered by political rather than economic fears) was correct, such depreciation would have been an unnecessary and harmful disturbance of the French economy; and if the assessment was wrong, the appropriate remedy would have been an immediate devaluation (which under the present system was not only possible but actually recommended), not a chronic downward "crawling" of the franc.

The sterling crisis has been due to a difference of opinion between the market, which considered the British payments deficit due to a structural weakness of the British economy, and the British authorities, which considered it due to monetary overexpansion. Apparently, both sides were right; hence, the British efforts to correct the deficit by tight domestic policies were in vain — incidentally proving that tight monetary policies do not necessarily lead to offsetting capital inflows under the present system! — but a "crawling peg" would have been equally unsuccessful: the inflationary stimulus given to British import-competing and export industries by the depreciation of sterling would have reinforced the existing inflationary pressures and thus made stringent anti-inflationary domestic policies even more necessary as well as more difficult; and at the same time, the certainty of a continuation of the "crawling" depreciation for many years to come would have reinforced the tendency toward capital flight. Since it appears that a 14 per cent devaluation combined with quite restrictive monetary and fiscal policies has not sufficed to restore the British economy to equilibrium over a period of 15 months, the effect of a "crawling" depreciation — which, at Professor Meade's rate, would have amounted to only  $2\frac{1}{2}$  per cent over the same period — would obviously have been even less satisfactory.

It might indeed have been better if the British devaluation had come in the spring of 1964 rather than in the fall of 1967; but the present system did not make such a move any more impossible in 1964 than it did in 1967 — and at a rate of "crawling" depreciation limited to 2 per cent per year, the pound sterling would now, in the first quarter of 1969, still be overvalued by about 5 per cent even if the depreciation had started at the time of the first difficulties! Hence, Britain's payments balance (and its domestic economic policies) would probably have been over the past five years in worse shape under a "crawling peg" system than under the present system.

<sup>6</sup>Ibid, p. 21.

<sup>7</sup>Professor McKenzie correctly points out that Professor Meade, the most eminent advocate of a "crawling peg," wants to limit the annual change in exchange rates to a maximum of 2 per cent.

Just as the sterling crisis should be attributed to the failure of the British authorities to bring about an adjustment in the British economy—in real as well as in monetary terms—to the loss of its capital income from abroad and of technological leadership at home, so the German mark “crisis” should be attributed to the failure of the German authorities to bring about an adjustment in German consumption and investment “mores” to the astonishing improvement in German productivity. True, a radical revaluation of the mark might have helped. But the 5 per cent revaluation of the mark early in 1961 failed to reduce the German export surplus—which amounted to 6.6 billion marks in 1961 as against 5.2 billion in 1960—; and under Professor Meade’s “crawling peg” system, the appreciation over a one-year period would have been less than half of the amount of the actual revaluation, and thus would have had even less of a dampening effect on the trade balance; while in the absence of a drastic change in the domestic policies of the German authorities, the continuing upward “crawl” of the mark, together with the continued rise in domestic output, would have sparked rather than retarded the inflow of foreign—equity as well as money-market—funds. If the mark had continued to “crawl” upward over the entire period elapsed since 1961, the appreciation of the mark would by now have reached about 16 per cent. In this case, Germany’s current-account surplus would indeed presumably have been smaller in recent years but the capital inflow would presumably have been larger. Hence, it is not at all certain that the aggregate payments surplus of Germany would have been substantially smaller than it has been under the present system.

Professor McKenzie cites the Canadian experiment over the period 1950-62 in favor of his proposal. Even Professor Mundell admits that this experiment was a failure.<sup>8</sup> If he attributes that failure to inappropriate monetary policies of the Canadian authorities, he merely echoes the defenders of the present system, who also attribute any difficulty to inappropriate policies rather than to the nature of the system. But there is one difference: under the present system, only political obstacles (and human error, inevitable under any system) prevent the authorities from choosing an appropriate policy mix, say, restrictive fiscal and monetary policies (with fixed exchange rates) if a payments deficit coexists with domestic inflation, and devaluation combined with expansionary policies when it coexists with domestic unemploy-

ment. But under the “crawling peg” system, the policy mix would be *necessarily* inappropriate: the expansionary effect of a “crawling” depreciation would counteract the contractive effect of restrictive monetary policies on the domestic economy whenever a payments deficit was associated with domestic inflation; and the need to hold domestic interest rates above those of other financial centers by an amount at least equal to the annual “crawl” rate (in order to avert capital flight) would make it difficult if not impossible to take the expansionary monetary measures needed to supplement the domestic effect of the “crawling” depreciation whenever the payments deficit was associated with domestic unemployment.<sup>9</sup>

### Reduction of Controls on Capital Flows

Neither under the present nor under any alternative payments system is it inevitable or (excepting the case of a clearly temporary emergency, in which a “crawling peg” would be obviously inapplicable) appropriate for a country to try to correct a payments imbalance by imposing controls on current-account transactions.

It is true, however, that under the present system there is one (and only one) case in which controls over capital flows become appropriate. Under the present system, the U.S. dollar is not merely a domestic but also an international currency, and its devaluation would put the entire international payments mechanism into jeopardy. Hence, when the United States suffers simultaneously from a persistent and large payments deficit and persistent and serious domestic unemployment, it cannot use the remedy of devaluation that would be the first choice for any other country under similar circumstances.

This is not the place to discuss whether this restraint on U.S. policies is too large a price to pay for the advantages of the present system—advantages not just for the United States but (perhaps even more so) for the world as a whole—or whether con-

<sup>9</sup>The effect of the “crawl” limit on the interest rate differential the monetary authorities must try to maintain in order to avert unwanted inflows or outflows of money market funds makes it impractical to replace the 2 per cent limit proposed by Professor Meade by a 4 per cent limit, as suggested by Professor McKenzie in his reply. It would be hard enough, say, for a country with an upward “crawling” currency to execute anti-inflationary policies while trying to prevent domestic money market rates from rising higher than 2 per cent *below* the rates prevailing in the rest of the world. But if the difference were to be widened to 4 per cent, and money market rates abroad were about 4 per cent, the country would have to prevent money market rates from rising above zero! On the other hand, a country with a downward “crawling” currency would have to try to execute anti-deflationary policies while preventing money-market rates from falling below 8 per cent!”

<sup>8</sup>McKenzie, p. 22.

trols over capital flows—admittedly an evil—seriously endanger a satisfactory working of the world economy. Suffice it to note that capital flows among industrial countries—and only these flows are important in this context—usually do not reflect wide disparities in the productivity of capital; that they are as often as not actually inconsistent with optimal resource allocation, being induced by differences in tariffs, taxes, and monopolization rather than by differences in productivity; and that they often pose political problems for all countries concerned that may well offset any economic advantage.

In any case, the reason that speaks against a devaluation of the U.S. dollar applies just as much to a depreciation by means of a “crawling peg.” No foreign country and no business concern or individual abroad can be expected to accept and hold a currency which is continuously depreciating in terms of its exchange value. In fact, if the dollar were one day devalued in such a manner that the financial community became convinced of its future stability, optimists might well believe that the international role of the dollar could survive the shock. But a “crawling” depreciation (at whatever rate) would be more likely than not to mean the end of the present international payments mechanism.

Opinions may (and do) differ about the possibility of replacing the present system with a fundamentally

different and better one; but the proponents of the “crawling peg” should realize that they are talking not of a minor improvement but of a revolutionary change; and they should explain how they intend to deal with problems such as the magnitude of international dollar obligations—probably about \$100 billion—that make the exchange value of the U.S. dollar—in contrast to that of any other currency—an international rather than a purely domestic concern.

### Conclusion

These comments have been restricted to Professor McKenzie's paper and thus are not a complete evaluation of the “crawling peg” proposal. For instance, they do not deal with the questions of whether (or rather, under what circumstances) the proposal will stimulate or inhibit currency speculation; make domestic policies more or less dependent upon balance-of-payments considerations; and tend to aggravate or to mitigate international financial disequilibrium.

The present international payments mechanism—like all human institutions—is clearly imperfect, and any effort to make it less imperfect is welcome. But in this observer's opinion, the introduction of a “crawling peg”—despite its endorsement by so many eminent theorists—would be more likely to impair than to improve its working.

*The Reply to this Comment begins on next page.*