

## Comment on McKinnon's Monetary Rule

John Williamson

If the world wishes to return to fixed exchange rates, then McKinnon's monetary rule provides the right way to go about the task. Over the past year he has modified his longstanding proposals in order to accommodate the breakdown of monetarism: he no longer urges the participants to follow a *fixed* rate of aggregate monetary growth consistent with zero inflation, but instead to *vary* their aggregate monetary growth in a way that will achieve zero inflation, thus recognizing the variability in velocity. Similarly, he has widened his recommended band to 10 percent (at least initially) and now calls for interest rate variations to be used to manage rates except when they move to the margins, at which point symmetrical unsterilized intervention becomes mandatory. I see no reason to quibble with his analysis on the means to fix exchange rates.

The remaining question is of course whether the *end* of fixed nominal exchange rates is a sensible one. In questioning that, I am not challenging his analysis of the costs that floating rates have imposed on the world<sup>1</sup> or his judgment of their vast magnitude. I have tried to argue the same myself (Williamson, 1985, pp. 38–46). But that does not mean that there are not real social benefits from exchange rate flexibility. In this note I shall outline those benefits, and then proceed to describe my principal analytical disagreement with McKinnon.

The alternative which I shall contrast to the McKinnon Rule is the extended target zone proposal, developed in Edison, Miller and Williamson (1987) and sum-

<sup>1</sup>The only qualification I would offer is that options markets of longer maturity than currently function might enable producers to lay off much of the risk involved in the investment decision that McKinnon suggests to be inherently uncoverable.

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marized in Williamson (1987). This proposal involves a comprehensive set of rules for policy coordination among the main industrial countries. Each participating country would have an endogenous target rate of growth of nominal income  $\hat{y}^*$ , set equal to the estimated rate of growth of productive potential  $g$ , plus some fraction of the inherited rate of inflation,  $\hat{p}_{t-1}$  (to implement a gradualist disinflation strategy), plus a positive function of the deflationary gap  $d$ :

$$\hat{y}^* = g + \alpha\hat{p}_{t-1} + \beta d.$$

This would provide one intermediate target for each country. The other would be a target for the (real effective) exchange rate, where the target would be set at a level estimated to reconcile internal and external balance in the medium term.

This set of  $(2n - 1)$  intermediate targets would be pursued by the following set of assignment rules: (1) the *average* level of world interest rates would be revised up (down) if aggregate growth of nominal income is threatening to exceed (fall short of) the aggregate target growth of nominal income for the participating countries; (2) *differences* in interest rates among countries would be revised when necessary to prevent exchange rates deviating from their target levels by more than, say, 10 percent; (3) national *fiscal policies* would be revised with a view to achieving national target rates of growth of nominal income.

Rule (3) endorses Keynesian fiscal policy. Rule (2) embodies the target zone proposal. (Incidentally, these interest rate adjustments might well be supplemented by exchange market intervention, which could alternatively be described as the use of unsterilized intervention, or even replaced by sterilized intervention when market pressures are limited.) Rule (1) aims at assuring (in a manner inspired by McKinnon) that aggregate monetary policy should be guided by the collective need of the participating countries. In fact, Rule (1) may be termed “McKinnon without the monetarism.”

The set of “assignment rules” suggested above should be interpreted as policy guidelines rather than as inflexible commitments, for two reasons. The first is that it would be an enormous advance to persuade sovereign states that their policies ought normally to be designed not just to further their own interests but also in a manner consistent with the needs of the rest of the world economy, and to seek to deny countries the ultimate right to choose their own policies would certainly jeopardize the political acceptability of the proposal. The second is that the rules would need to be interpreted with a degree of flexibility. For example, Rule (1) might perpetuate an undesirably lopsided mix of tight money and lax fiscal policy if it were not supplemented by a joint resolve to superimpose a secular tightening of fiscal policy on Rule (3) when real interest rates seemed to be stuck above their historical norm. Indeed, an individual country with an undesirably large budget deficit should combine Rule (3) with a trend toward fiscal tightening. To take another example, Rule (1) should certainly not be interpreted to require central banks to push interest rates down aggressively against market resistance.

## The Social Functions of Exchange Rate Flexibility

A first important function of exchange rate flexibility is that of reconciling differential inflation. McKinnon will deny that there is any need to have differential inflation, except in countries with a fiscal requirement for the inflation tax, since we now know that the long-run Phillips curve is vertical and hence that faster inflation does not buy worthwhile output gains. This seems to me too simplistic. It is one thing to agree that the appropriate inflation target is zero and that it should be taken seriously. It is another to feel confidence that such a target will always be achieved.

Suppose that a participating country experiences a burst of inflationary pressure from any cause other than a sudden urge of the central bank to print money (which would of course be repressed by the McKinnon Rule). Arbitrage is not sufficiently perfect to prevent prices rising in the afflicted country, as shown by McKinnon's (1979) work involving the distinction between differentiated manufactured products, as opposed to homogeneous primary commodities. The inflation comes to an end when the joint effect of (imperfect) arbitrage pressures in tradables and the recession induced by the loss of competitiveness in tradables is sufficient to offset the initial inflationary thrust. This process necessarily involves exposing the tradables sector to the sort of pressures that McKinnon so rightly deplors in the second paragraph of his paper. Hence only those who are convinced that inflation can originate in no way except by printing money<sup>2</sup> should accept the McKinnon route to restoring price stability.

The nominal income target in the extended target zone proposal provides an alternative (Wicksellian) strategy for restoring price stability. Even if the real exchange rate were maintained approximately constant by adjustments in the nominal rate designed to neutralize differential inflation, the deflation required to prevent the nominal income target being exceeded would bring inflation to an end, while generalizing the necessary deflationary pressures over the whole economy rather than concentrating them on tradables. (If some modest appreciation is needed to equalize the pressure on tradables and nontradables, that is allowed by the wide band.) This strategy seems to me vastly preferable to McKinnon's, since it avoids the pressures that produced deindustrialization in the United States over the years of the high dollar (as in Britain in the early 1980s or Argentina in 1979–81).

A second social function of exchange rate flexibility is that of facilitating payments adjustment when this proves necessary—for example, in response to “permanent” real shocks—by changing the incentives to export and import. My main analytical disagreement with McKinnon, on which I dwell later, concerns his implicit theory of payments adjustment, which leads him to reject any role for exchange rate changes in facilitating that process. Suffice it to note here that in his discussion of “The Transfer Problem” he does recognize that even under fixed exchange rates a flow of capital from Japan to the United States would involve “some (slow) bidding up of nontradable prices (largely services) in the United States . . . and a slower rate of

<sup>2</sup> Presumably everyone agrees that perpetuation of inflation requires monetary accommodation, but that is not the point at issue.

increase in Japanese nontradables prices... Although," he adds, "these relative price movements within both countries would be modest... as with past experiences with fixed exchange rate regimes approximating a common currency area." Some of us think that it was because these movements were so modest as to result in no adjustment that Bretton Woods broke down.

A third function of exchange rate flexibility is to liberate monetary policy to pursue interest rate targets at variance with those in the rest of the world. If one country is suffering a deeper recession than its partners, it may legitimately wish to ease monetary policy relative to other countries, and that will be feasible only if its currency can depreciate so as to create an expectation of a subsequent rebound that will compensate investors for the temporarily low interest rates. Conversely, a country with abnormally severe inflation may legitimately seek to raise interest rates temporarily, which will require an appreciation. A wide band within which exchange rates are allowed to move around parity provides scope for such temporary variations in monetary policy to pursue anticyclical objectives. (As it happens, the definitive analysis of this issue was provided by McKinnon, 1971.)

The final legitimate function of exchange rate flexibility is that of absorbing a part of speculative pressures. Instead of requiring that every change in speculative sentiment lead to a change in international reserves and/or interest rates, one can allow changes in the exchange rate to take some of the strain. Provided these changes do not lead to the prolonged and substantial movements away from equilibrium that constitute misalignments, they do little harm.

In his discussion of my proposal for target zones, McKinnon charged that the option of occasional changes in the target real effective exchange rate, designed to facilitate adjustment, would expose a target zone system "to speculative attack as international investors tried to guess how exchange rates in the future might differ from those now prevailing," as under the Bretton Woods system. In fact, the target zone proposal envisages bands more than wide enough to preempt any danger of a return to the speculative crises of Bretton Woods. There is a fundamental difference between an adjustable peg and a crawling peg in terms of their consistency with asset market equilibrium, and therefore their vulnerability to speculative pressures. The analytical distinction between an adjustable peg and a crawling peg is whether the band width is less or greater than the size of parity changes. A target zone system falls in the category of a crawling peg, since it is highly unlikely that markets would come to expect changes of target exchange rates of more than 10 percent (let alone 20 percent). Hence expectations could be continuously satisfied.

A target zone system would permit exchange rate flexibility to fulfill all four of its genuine social functions. It could reconcile differential inflation, by virtue of the provision for automatic adjustment of the nominal target to maintain the target zone constant in real terms. It could facilitate payments adjustment, by changing the real zone in response to permanent real shocks. It would permit a degree of independence for anticyclical monetary policy, by virtue of the wide band. And it could absorb speculative shocks, through the wide band. What target zones do *not* do is rely upon the fantasy that markets are better than governments at thinking about where exchange rates ought to be—a fantasy because the time horizon of most market

operators is about 5 hours, whereas it needs to be about 5 years if exchange rates are to be set at levels consistent with satisfactory macroeconomic performance.

Despite this substantial element of flexibility, target zones could alleviate both of the great inadequacies from which floating has been revealed to suffer—misalignments, and the lack of pressure to coordinate policies among governments. While a zone of  $\pm 10$  percent is wide, it would have constrained much of the erratic variation that has been experienced under floating, and as shown in McKinnon's Figure 1. And of course, the incorporation of the proposal in the comprehensive scheme of policy coordination already sketched illustrates how far this proposal is from the *laissez-faire* policy of 1973–85. Even if it were to be adopted initially without nominal income targets and fiscal commitments, it could be expected to exert pressures toward coordination in those areas.

## The Analysis of Payments Adjustment

Conventional theory argues that both exports and imports, and therefore the current account, are functions of income/absorption levels at home and abroad and of the relative price of domestic inputs/output in terms of foreign inputs/output, with lower domestic prices ultimately leading to bigger net exports (provided the Marshall–Lerner condition is satisfied). A domestically generated increase in income/absorption is expected to lead to a reduction in net exports of some fraction of the initial change, because the marginal propensity to import is a fraction. These are all partial equilibrium relationships which have to be embedded in some appropriate general equilibrium model before one can draw conclusions about the ultimate impact on the current account of such changes as a reduction in the U.S. budget deficit or a depreciation of the dollar.

McKinnon claims that the U.S. “trade deficit of \$150 billion to \$200 billion a year merely reflects the savings-investment gap in the American economy created by the not coincidentally equally large U.S. fiscal deficit” and that “getting rid of this chaos in the American public finances is the only satisfactory way by which the trade deficit can be reduced” since “exchange rate changes have no predictable effect on net trade balances.” These statements appear to imply that he believes that changes in the budget deficit are always reflected one-for-one by changes in the trade balance whatever the level or change in relative prices. The condition for this to be true with constant prices is that the marginal propensity to import multiplied by the Keynesian multiplier be equal to unity.<sup>3</sup> Since the marginal propensity to import is probably around 0.2 and the multiplier around 1.5, this hardly appears likely.

The conventional analysis argues that what is needed to correct the trade balance is a combination of more competitive relative prices, which can be induced by depreciation provided that inflation is prevented from completely neutralizing the initial change, and a cut in absorption. It is indeed possible that a depreciation

<sup>3</sup>A conventional import function includes the term  $\Delta M = m \Delta Y$  (plus the effect of changes in relative prices), while  $\Delta y = k \Delta D$  where  $k$  is the Keynesian multiplier,  $m$  is the marginal propensity to import,  $\Delta D$  is the change in the budget deficit,  $\Delta M$  is the change in imports and  $\Delta Y$  is the change in income.

*unaccompanied by other measures* might increase the trade deficit, if an undervalued dollar touched off an investment boom in the United States that increased imports and an overvalued yen depressed investment and hence led to recession in Japan. But this is not an argument for correcting the whole deficit by income deflation, since this would certainly require a recession in the United States. It is an argument for combining the dollar depreciation with a reduction in the U.S. fiscal deficit and, given the weakness in the world economy, a fiscal stimulus in Germany and Japan and other surplus countries. I find it depressing that it remains necessary to spell out such an elementary point at such length 36 years after Meade's (1951) definitive analysis (which was a general equilibrium analysis that it is a caricature to describe as the "elasticities approach to the balance of trade").

McKinnon's view that current account balances change one-for-one with changes in the fiscal stance is a reincarnation of the doctrine propagated by the New Cambridge school in Britain in the early 1970s. This view would be valid if, but only if, the gap between private savings and investment were constant, which it most certainly is not (Marris, 1985, Figure 1.1). Moreover, one wonders whether this proposition is supposed to be affected by changes in the foreign fiscal stance. If the rest of the world applies an equal fiscal stimulus as the United States restores fiscal discipline, is the U.S. current account balance supposed to improve twice over? Or is the action of the rest of the world irrelevant?

Yet it is McKinnon's eccentric view that the U.S. current account balance changes one-for-one with changes in the U.S. fiscal stance that is responsible for his espousal of the PPP criterion as the basis on which to estimate "correct" exchange rates. With a more conventional view, one recognizes that the desirable level of competitiveness depends, for example, on the size of transfer that it is desired to effect, and on real factors such as the price of oil. There is no basket of goods whose price necessarily has to be equal in the two countries in order to achieve macroeconomic equilibrium. Nor, for that matter, will equal inflation on any measure generally preserve macroeconomic balance at a fixed exchange rate in the presence of real shocks, including the need to make a different real transfer.

In fact, the McKinnon and Ohno (1986) criterion for identifying a "correct" PPP, on which McKinnon relies, does not involve either equality of the prices of a particular basket of goods nor some base period being identified as a period of equilibrium. Essentially what they do is search for that exchange rate which exerts neither inflationary nor deflationary pressure on the price level; that is, at which actual inflation is equal to domestically generated inflation. They interpret imported inflation as evidence of an undervalued exchange rate, and vice versa. The problem with this criterion is that ultimately an economy may adapt to a wide range of values of the real exchange rate. Income earners may come to acquiesce in depressed real incomes and inflation may disappear despite an undervaluation (in the sense defined in the next paragraph). Subsequent appreciation may then lead to falling prices for a time, even though after a time income aspirations will adjust and a quite different real exchange rate would then be identified by the McKinnon-Ohno PPP criterion. In other words, if imported inflation depends on *changes* in the exchange rate rather than its deviation from some PPP level, their criterion is hopelessly ambiguous.

However, the alternative to the PPP criterion for identifying “correct” exchange rates should most certainly not be labelled the “balanced trade” principle, for two reasons. In the first place, its application (as in Williamson, 1985) does not require pursuit of balanced trade: some agreed set of target current account balances is required as an input, but these need not be zero balances, nor imply zero trade balances. Second, and more fundamental, the alternative principle involves seeking *macroeconomic balance*—an exchange rate consistent with simultaneous achievement of internal and external balance in the medium run. It should accordingly be labelled the “macroeconomic balance” or “internal-external balance” criterion, rather than the “balanced trade criterion.”

## Conclusions

While McKinnon’s criticisms of the regime of floating exchange rates are almost entirely justified, I have argued that both his analysis and his diagnosis are flawed. His analysis presupposes a very special set of parameters which result in changes in the budget deficit leading to equal changes in the trade balance while leaving output unchanged. In fact, achieving this result requires also changes in relative prices, which are best induced by changes in exchange rates. This points to one of the four important social functions of exchange rate flexibility that are denied or ignored by McKinnon and that would be forfeited under his proposal. In contrast, target zones offer escape from the major costs of floating while retaining the important advantages that flexible rates offer.

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