Imported Inflation and Monetary Policy: A Comment

1. In the December 1964 issue of the Banca Nazionale del Lavoro's *Quarterly Review* Messrs. Ira O. Scott Jr. and Wilson E. Schmidt criticize the argument that monetary policy cannot be used as a weapon against inflation in a surplus country under a regime of fixed exchange-rates. The present note examines their criticism and finds it wanting in several respects.

2. The authors distinguish between an "internal" and an "external" constraint on the use of monetary policy. The "internal constraint" is the fact that open-market operations and/or other conventional instruments are not always powerful enough to enable the authorities to offset large increases in commercial-bank liquidity. The "external constraint" is that under conditions of fixed exchange rates and high capital mobility a tight-money policy tends to be frustrated by the inflow of funds from abroad to which it gives rise.

The authors deny the validity of both these alleged constraints. So far as the internal one is concerned, they argue that central-bank instruments are capable in principle of absorbing any amount of liquidity, provided they are used on a sufficient scale. The real "internal constraint" (if there is one) is the tolerability ceiling on interest rates; and such a ceiling amounts to a refusal to employ monetary instruments beyond a certain point. It does not indicate any inherent defect in the instruments themselves.

As to the "external constraint", the authors point out that its existence requires not only mobility of capital (a necessary condition) but also perfect elasticity of supply of capital (the sufficient condition). For if foreign capital is not in perfectly elastic supply, then interest rates inside the country can rise above the level prevailing abroad. In that case restrictive monetary policy will be possible and need only be used with sufficient vigour to achieve its objectives. Now in fact, it is argued, the international

supply of capital to any single country will not be perfectly elastic, because the risk involved in lending to a country increases with the ratio of the country's foreign debt to its debt-servicing capacity. Beyond a certain point foreigners will demand a higher return on additional loans or investments. In other words, no country can attract unlimited sums at a given rate of interest.

3. The most obvious weak spot in the authors' case is their critique of the "external constraint". The distinction between capital mobility and elasticity of supply is perfectly valid as a matter of logic. But the question that policy-makers want answered is, how soon will the required inelasticity in the supply of funds make itself felt, particularly when the borrower is a surplus country? *Ceteris paribus*, a country in balance-of-payments surplus will inspire a high and perhaps increasing degree of confidence in foreign lenders. Not only will its existing debt-servicing capacity look satisfactory, but also expectations may be set up of an even more favourable position in the future. The country's external debt will then have to reach very high levels indeed before the increasing-risk principle comes into play. Hence the supply of capital *will* be perfectly elastic over a considerable range, and it will take time — months, a year, perhaps several years — to work this off. A policy-maker faced with the task of keeping inflation under control will have little use for a weapon which he is told must bite "eventually", but only after some unspecifiable time period.

The only circumstances in which foreign capital will be in rather inelastic supply from the start is where a large majority of all countries (as weighted by their economic and financial importance) are pursuing tight-money policies simultaneously Such circumstances might arise, though somewhat unusually. But in any case this shows that the possibility of national monetary policy is highly dependent on what other countries are doing.

If a country's external surplus is large, there may also be speculative inflows of funds hoping to profit from a currency revaluation. Such inflows can occur even with a quite modest surplus, if some other country is in very large deficit and therefore expected to devalue. Movements of this kind do not limit monetary policy in the same way as those discussed above, since they are (by definition) invariant with respect to the rate of interest. But

they do add to the volume of internal liquidity which the authorities must mop up if they wish to tighten credit. This brings us to the "internal constraint".

4. Scott and Schmidt maintain that the monetary authorities can absorb any amount of liquidity internally provided they are willing to employ the usual instruments with full vigour. It is wrong, therefore, to suggest that inflows of foreign exchange can in themselves exhaust the resources of monetary control.

This argument is clearly incorrect with regard to commercial-bank reserve requirements. Scott and Schmidt assert that statutory maxima on reserve requirements can be ignored, since they do not exist "at the parliamentary level" (1). True enough, but there is one level at which limits must exist, namely when reserve ratios have reached 100 per cent. The construction of a model in which "reasonable" or "common-sense" constraints are discarded in favour of pure logic must involve taking matters to the limit; and in the limit cash- or security-reserve requirements cannot rise higher than 100 per cent of deposits. The reserve requirement weapon, therefore, *is* instrinsically exhaustible.

With open-market operations Scott and Schmidt are on stronger ground, since there are in principle no upper limits either to interest rates or to the volume of its own obligations which a central bank could create for sale in the open market. Even here, however, a qualification is necessary. It has often been remarked that demand for goods and services is not very elastic with respect to the rate of interest. Given the imperfection of the credit and capital markets, restricted availability of credit is often more important than dear credit in limiting expenditure. Now if a given rise in the rate of interest attracts additional funds from abroad, it follows that the cost of credit is increased but its availability is not reduced, or at least not reduced by as much as it would have been in the absence of a foreign inflow. Only in the limiting case where the whole of the inflow is invested in government securities (open-market paper) does this conclusion not hold. Short of the limiting case, therefore, a given degree of monetary tightening requires a larger rise in interest rates if there is an induced inflow of foreign funds

(1) Scott and Schmidt, *loc. cit.*, p. 395.

than if there is not. Of course, the fact that the authorities do not want interest rates to go up too far has nothing to do with the external surplus; the point is, however, that extraneously imposed limits on the use of monetary weapons are more likely to become operative if there is a large inflow of funds from abroad than if there is not.

5. Besides their *a priori* arguments, Scott and Schmidt adduce some statistical evidence which they claim supports their thesis. It consists of end-year figures for 1961-62-63 of foreign and domestic assets of the French, German and Dutch central banks. The authors remark:

> "One might suppose that if the external balance leads to an undesirable expansion in central bank assets, the monetary authorities would engage in offsetting operations. The actual record for three European countries for 1962 and 1963....shows that in no case was there a diminution in domestic assets, and actual increases occurred in the case of France and the Netherlands in 1962 and 1963, and in Germany in 1962. Apparently in these years the central banks felt they should acquire domestic assets, adding to the expansion of central bank assets caused by the inflow of foreign exchange. This seems to show that the expansion of central bank assets caused by the inflow of foreign exchange was not sufficient to meet the needs of the economy in the eyes of the authorities. In other words, insufficient 'inflation' was 'imported'." (2).

All this is quite fallacious. In the first place, for purely technical reasons end-year data are not a reliable guide to underlying trends, being subject to varying distortion caused by window-dressing and other special factors. Let us, however, ignore this point and accept the figures at face value. It will be noticed that the authors' argument quoted above implies a certain hypothesis about the way in which central bank assets come to expand (or contract). The hypothesis is that the change in foreign assets occurs autonomously, while the change in domestic assets represents a deliberate policy response of the central bank. The size of the response in any given period depends on the size of the change in foreign assets in the

(2) *Ibid.*, pp. 398-99.

same period and on the considered overall "needs of the economy". By asserting control over the volume of its domestic assets the central bank also determines the volume of its total assets.

The opposing hypothesis — well formulated by Professor Mundell in the passage quoted by the authors (3) — is that the change in a central bank's foreign assets partly depends on the change in its domestic assets (4). On this view the central bank is not necessarily able to determine the volume of its total assets, because a smaller expansion of domestic assets might have meant a larger increase in foreign assets. Hence the fact that its domestic assets have expanded is no ground for saying that "the expansion of... assets caused by the inflow of foreign exchange was not sufficient to meet the needs of the economy in the eyes of the authorities".

Now it does not matter what one thinks of these respective hypotheses. What matters is that the argument between them cannot be settled merely by extracting figures of domestic and foreign assets from central-bank balance sheets; the whole point of the dispute is that both hypotheses purport to explain these very same figures.

There is also another aspect, quite apart from the questionable nature of Scott and Schmidt's hypothesis. Even if their hypothesis is accepted as correct, they have drawn a mistaken inference from it. They infer, namely, that if the central bank chooses to create additional domestic assets on top of an inflow of foreign exchange, then the inflow by itself "was not sufficient to meet the needs of the economy in the eyes of the authorities. In other words, insufficient 'inflation' was 'imported'." The error in this is the implication that the central bank would have felt the need to expand its total assets by the same amount even in the absence of an external surplus, i.e. that if the inflow of foreign exchange had been $ x less than it was, then the central bank would have wished to add the equivalent of $ x more to its domestic assets. The truth may well be

(3) R. A. MUNDELL, "Capital Mobility and Stabilization Policy under Fixed and Flexible Exchange Rates", *Canadian Journal of Economics and Political Science*, November 1963, p. 479.

(4) The argument is quite clear in cases where open-market operations are the central bank's instrument. When changes in reserve requirements are brought in, things become more complicated because the central bank can then tighten (or ease) the domestic monetary situation without altering any of the items in its own balance sheet. But insofar as *any* monetary tightening at home tends to add to the external surplus, one can always say that changes in the central bank's foreign assets are partly dependent on its own policy.

the exact reverse — that if there had been less of an external surplus, the central banks would have added less to their domestic assets as well. It must be remembered that " the rules of the game " require surplus countries to inflate in order to promote the restoration of balance in international payments; and an important part of the Gilbert-McClam thesis in the paper quoted by Scott and Schmidt (5) is that European countries have accepted a degree of controlled inflation partly for this reason. Thus, the " imported " amount of monetary expansion might well have been sufficient by itself to meet the economies' needs in an ideal situation. What it was insufficient for was only to eliminate their external surpluses — which is a very different matter.

6. To sum up: (i) the " external constraint " *is* a significant barrier to the imposition of tight money in a surplus country — unless the supply of foreign capital is inelastic from a very early stage, which would be unusual. And (ii) the larger and more persistent the overall surplus, the greater the eventual risk of " internal constraints " becoming operative as well, thus putting another limitation on monetary policy at a subsequent stage.

In their conclusion Scott and Schmidt maintain that all they wish to refute is " the assertion that freedom of capital movements in a fixed exchange rate system *necessarily* eliminates the possibility of conducting national monetary policies " (6). If they mean this literally, then their position is watertight but they are fighting a straw man. For none of the authorities they quote in their introduction — Roosa, Holtrop, Blessing, Gilbert-McClam, Lutz and Mundell — has made such an extreme assertion. None of them, so far as I can see, would deny the possibility of a model in which national monetary policy could be used to fight inflation despite fixed exchange rates and an external surplus. What they do deny is rather the relevance of such a model to current problems of stabilisation policy. The quotation taken by Scott and Schmidt from Gilbert and McClam speaks of the " responsiveness of funds from abroad to internal monetary restraint " imposing " *a definite limitation* on the use of monetary policy for strictly domestic purposes " (italics mine). Nothing that Scott and Schmidt say requires this conclusion to be altered.

(5) Milton Gilbert and Warren McClam, " Domestic and External Equilibrium: European Objectives and Policies ", presented at the annual meeting of the American Economic Association, December 1964.

(6) *Loc. cit.*, p. 402. Italics mine.

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Imported Inflation and Monetary Policy: A Reply

We are pleased that Mr. Oppenheimer concedes us victory over a straw man. But we believe we are dealing with central bankers' tissue.

While he thinks our discussion of the external constraints is an " obvious weak spot ", we hold that he admits our argument precisely at this point. He writes that " The country's external debt will then have to reach very high levels indeed before the increasing-risk principle comes into play. Hence the supply of capital *will* be perfectly elastic over a considerable range, and it will take time — months, a year, perhaps several years — to work this off ". It would appear from this statement that Mr. Oppenheimer sees an end to the perfectly elastic range. Hence, the monetary authorities should, in the face of a threat of imported inflation, rapidly accelerate the application of measures for monetary restraint until the less-than-perfectly-elastic region is reached and monetary policy, therefore, becomes effective. Apart from the negligible administrative resources employed, there is no cost in increasing monetary restraint which is ineffective because it attracts foreign funds; so there is no reason why the monetary authorities cannot *quickly* reach the point where their policy becomes effective (1). If restraint will " bite "

(1) It is, to say the least, interesting to observe that in the United Kingdom offsetting action occurs automatically through the operations of the Exchange Equalization Account (E.E.A.). When the E.E.A. buys foreign exchange, it obtains the necessary sterling by selling government securities, thus automatically destroying the monetary effect of the balance-of-payments surplus. Such operations (which are analogous to the gold sterilization procedures of the U.S. Treasury in the late 1930's) may lead to higher interest rates, unless the central bank intervenes. In other words, the only way in which imported inflation can occur in the U. K. is through its validation by the Bank of England. But this is precisely the point we have tried to make, namely, that a rigid interest-rate policy may give rise to a problem of imported inflation.