 Mr. Furth

L.5.2.

RFD 418

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Division of International Finance

REVIEW OF FOREIGN DEVELOPMENTS

April 23, 1963

Mundell on Stabilization Policy 3 pages

Robert Solomon, Associate Adviser,
Division of Research and Statistics

Robert Solomon*

April 23, 1963

Mundell on Stabilization Policy

Convertibility in Europe and the subsequent increase in the international mobility of capital has reintroduced another dimension in monetary policy formulation. Monetary authorities must, under a system of fixed exchange rates, take account of the effects of their actions on capital movements. As is well known, this consideration has had an important bearing on United States monetary policies in recent years. Furthermore, it has led to various proposals for alterations in the mix of fiscal and monetary policy.

In a recent paper, Mr. Robert A. Mundell, of the International Monetary Fund, pushes the analysis further by making the extreme assumption of perfect mobility of capital among countries.1/ With this assumption, he examines the effects, domestic and international, of fiscal and monetary policies, under both fixed and flexible exchange rates.

Mr. Mundell's elegant analysis is on a general plane and is not directed at a particular country. This critical note will, however, examine his paper from the viewpoint of what guidance it offers to policy in the United States.

Assumptions

In his analysis of fiscal, monetary, and foreign exchange policies, Mr. Mundell assumes greater mobility of funds among countries than in fact exists within the United States; that is, he assumes that the demand (and supply) for capital is infinitely elastic with respect to differentials in interest rates. As a result there can be no intercountry differences in interest rates, for international capital movements will instantly eliminate them.

His other assumptions are of a conventional Keynesian type. In particular, investment is a function of "the interest rate" but the latter is, as noted, assumed constant. Furthermore, there is no possibility in Mundell's model of an availability

---

1/ Robert A. Mundell, "The Significance of Capital Mobility for Stabilization Policy under Fixed and Flexible Exchange Rates," IMF Document DM/63/13, March 20, 1963.

*Associate Adviser, Division of Research and Statistics.

effect of monetary policy. Thus monetary policy can have no domestic impact.[2]

Analysis

If we turn to Mundell's analysis for a system of fixed exchange rates, we are not surprised that monetary policy is found to have no effect on the domestic economy but to be fully reflected in foreign exchange reserves. If interest rates are assumed to be equal throughout the world--and to be kept equal by perfect mobility of capital--expansionary monetary policy in one country can lower interest rates and stimulate expenditures there only if it lowers the level of world interest rates. (Although he recognizes this condition, Mundell does not explore its possibilities. He ignores the effects on interest rates in other countries of inflows of capital to them from the country on which his analysis is focused.)

If capital is completely responsive to interest rate differentials, open market purchases by the central bank are bound to worsen the balance of payments. If interest rates cannot decline, monetary policy cannot induce a rise in income. Thus newly-created money cannot be absorbed by either greater transaction needs or, with interest rates constant, increased idle balances. It must therefore go abroad. Thus the central bank loses gold in an amount equal to the original open market purchase.

Fiscal policy, on the other hand, permits us to have our cake and eat it. It induces both an increase in domestic output and a rise in gold reserves. The stimulation of income by increased government spending, with money supply assumed constant, puts upward pressure on interest rates. But, in view of the assumption regarding capital mobility, a capital inflow will keep interest rates from actually rising. Capital inflow will not only compensate for the increase in imports which accompanies rising output and income; it will exceed this amount and as the central bank acquires foreign exchange (or gold) it makes possible the rise in money supply to accompany the advance in GNP.

In the case of flexible exchange rates, Mundell finds that monetary policy is effective and fiscal policy alone is ineffective. Under his assumptions, monetary expansion leads to capital outflow

---

2/ Incidentally, he implicitly assumes a banking system with 100 per cent reserves. Monetary policy is conceived of as involving "an exchange of bonds for money" on a one-to-one basis. Incorporation of a fractional reserve banking system would not alter the analysis in any fundamental way.

and, consequently, exchange depreciation. This causes a rise in exports relative to imports, which in turn has an expansionary effect on domestic output and incomes. Under his assumption of constant interest rates, monetary policy can stimulate the domestic economy only by depreciating the exchange rate and thereby increasing the export surplus.

Critique

Suppose we alter Mundell's assumptions toward greater realism in order to attempt to apply his analysis to today's problems.

Clearly the major alteration needed is in the assumption regarding capital mobility. Instead of assuming that the U. S. demand for foreign securities and the foreign demand for U. S. securities are horizontal (i.e., infinitely elastic with respect to differentials between domestic and foreign interest rates), we would want to assume that these demand curves have a slope. But this throws us back to a problem that many analysts have been wrestling with. How responsive are capital flows to interest rate differentials?

If we allow for some slope in these curves--that is, for less than perfect mobility of capital--then the pure absolutism of the Mundell conclusions no longer applies. Expansionary monetary policy lowers domestic interest rates, thereby stimulating both higher spending at home and larger capital outflow. The major question is, what are the relative magnitudes of these two effects?

There is no question that the world has moved toward Mundell's vision of it in recent years (from, it may be noted, a condition in which capital flows were almost completely unresponsive to interest rate differentials). But one may guess that we are still far from Mundell's world. Even within the U. S., interest rate differentials persist. Until these disappear, it is difficult to begin to take seriously an assumption that international capital is perfectly mobile.

Policy Implications

Although we must reject Mundell's extreme assumption, the implications of his analysis for policy mix are plausible and, in fact, widely believed. Since capital flows have some degree of sensitivity to interest rates, there is much to be said for putting increased emphasis on fiscal relative to monetary policy in attempting to bring about a more rapid expansion of the U. S. economy today.