

## THE MONETARY APPROACH AND DEPRECIATION

Proponents of the monetary approach have argued that depreciation of the exchange rate cannot improve the balance of payments except in the short run. The argument is that in the short run the depreciation does improve a country's competitive position and that this very fact gives rise to a trade surplus and therefore to an increase in the money stock. Over the course of time, the rising money supply raises aggregate demand and therefore prices until the economy returns to full employment and external balance. Devaluation thus exerts only a transitory effect on the economy, which lasts as long as prices and the money supply have not yet increased to match fully the higher import prices.

The analysis of the monetary approach is entirely correct in its insistence on a longer-run perspective in which, under fixed exchange rates, prices and the money stock adjust and the economy achieves internal and external balance. It is also correct in arguing that monetary or domestic credit restraint will improve the balance of payments. Typically, the tight money policy produced by slow domestic credit growth produces a recession.

The monetary approach is misdirected when it suggests that exchange rate policy cannot, even in the short run, affect a country's competitive position. More importantly, exchange rate changes frequently arise from a position of deficit and unemployment. In that case, a devaluation can be used to speed up the adjustment process.

We return now to the world of flexible exchange rates.<sup>14</sup>

## 21-4

## FLEXIBLE EXCHANGE RATES, MONEY, AND PRICES

In studying flexible exchange rates, we assume, as in Chapter 12, that capital is perfectly mobile. The only difference from that earlier treatment is that now prices are allowed to change. We examine how output, the exchange rate, and prices respond to monetary and fiscal policies and how that response evolves over time. Our starting point is a discussion of the adjustment of prices and the exchange rate to the state of the economy.

## THE ADJUSTMENT PROCESS

Figure 21-5 shows the interest rate and output, with full employment at  $Y^*$ . The assumption of perfect international capital mobility is reflected in the horizontal  $BB$  schedule. Only at an interest rate  $i = i_f$  will the balance of payments be in equilibrium. If the interest rate were higher, there would be net inflows of capital. Conversely, with a lower domestic interest rate, capital would flow out and the balance of payments would turn toward a deficit position.

We make two strategic assumptions to describe the adjustment process: First, prices are rising whenever output exceeds the full-employment level. Second, because capital is highly mobile, the interest rate in Figure 21-5 is always moving toward the  $BB$  schedule—our interest rate cannot diverge far from that in the rest of the world.

<sup>14</sup>See Ronald MacDonald and Mark Taylor, "Exchange Rate Economics: A Survey," *IMF Staff Papers*, March 1992, for a broad discussion of models of exchange rate determination and the empirical evidence.

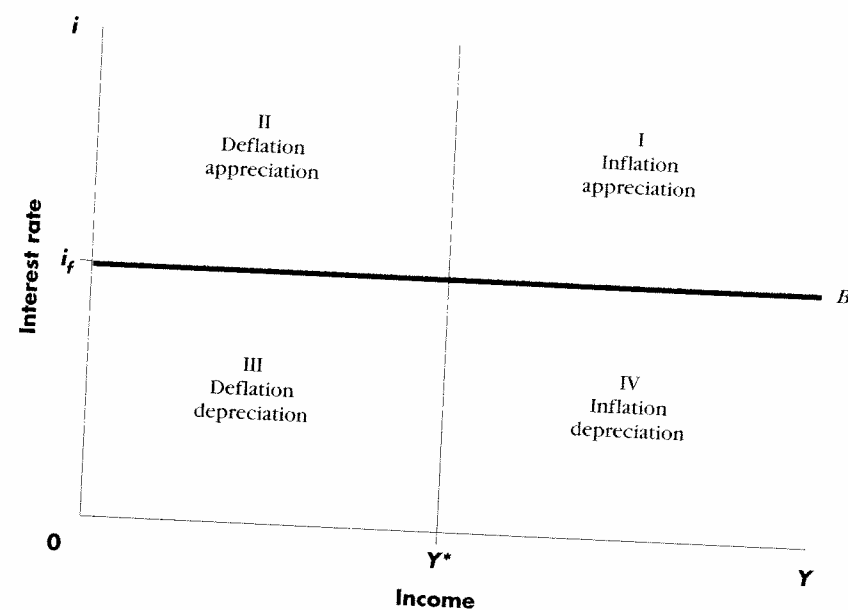


FIGURE 21-5 ADJUSTMENT OF EXCHANGE RATES AND PRICES.

There is a complicated set of adjustments in the background as the economy moves toward  $BB$ . For instance, say there is a monetary expansion that causes a decline in interest rates. Capital flows out, which means that people try to sell our currency to buy foreign currencies. Our currency depreciates, exports and income increase, money demand rises, and so do interest rates, thus moving us back toward  $BB$ . This mechanism works in reverse if domestic interest rates tend to rise because of a monetary tightening or fiscal expansion.

With these assumptions we can study the adjustment process using Figure 21-5. Anywhere to the right of  $Y^*$ , prices are rising; to the left, prices are falling. Points above  $BB$  lead to capital inflows and appreciation; points below, to capital outflows and depreciation. Moreover, with extremely high capital mobility, the exchange rate will adjust very rapidly, so we are always close to or on the  $BB$  schedule.

## A MONETARY EXPANSION: SHORT- AND LONG-RUN EFFECTS

With given prices a monetary expansion under flexible rates and perfect capital mobility leads to depreciation and increased income. We ask how that result is modified once we take adjustments in prices into account. The answer is that the output adjustment is now only transitory. In the long run a monetary expansion leads to an exchange rate depreciation and to higher prices with no change in competitiveness.

In Figure 21-6 we start at point  $E$  with full employment, a payments balance, monetary equilibrium, and equilibrium in the domestic goods market. Now a monetary expansion takes place and shifts the  $LM$  schedule to  $LM'$ . The new goods and money market equilibrium at  $E'$  involves an interest rate below the world level, and therefore the exchange rate immediately depreciates, raising home competitiveness and thus shifting