KOM 9th

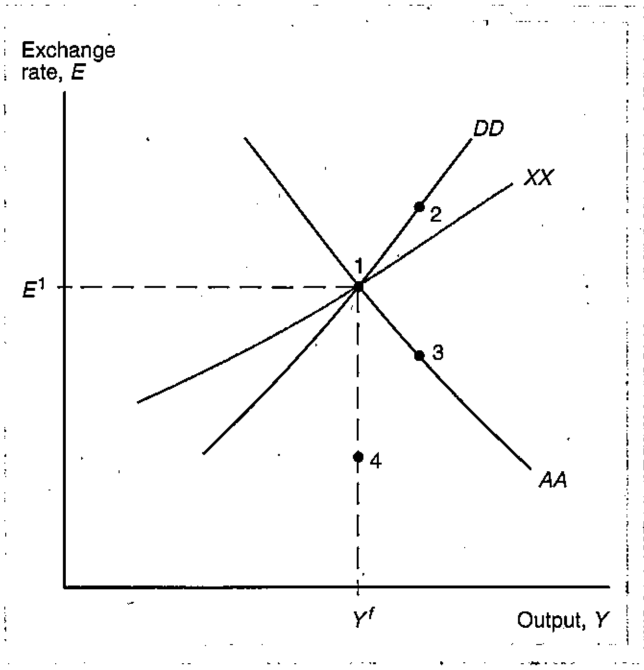


Figure 17-17

How Macroeconomic Policies Affect the Current Account

Along the curve XX, the current account is constant at the level $CA = X$. Monetary expansion moves the economy to point 2 and thus raises the current account balance. Temporary fiscal expansion moves the economy to point 3 while permanent fiscal expansion moves it to point 4; in either case, the current account balance falls.

current account has improved as a result of the policy action. *Monetary expansion causes the current account balance to increase in the short run.*

Consider next a temporary fiscal expansion. This action shifts DD to the right and moves the economy to point 3 in the figure. Because the currency appreciates and income rises, there is a deterioration in the current account. A permanent fiscal expansion has the additional effect of shifting AA leftward, producing an equilibrium at point 4. Like point 3, point 4 is below XX, so once again the current account worsens, and by more than in the temporary case. *Expansionary fiscal policy reduces the current account balance.*

Gradual Trade Flow Adjustment and Current Account Dynamics

An important assumption underlying the DD-AA model is that, other things equal, a real depreciation of the home currency immediately improves the current account while a real appreciation causes the current account immediately to worsen. In reality, however, the behavior underlying trade flows may be far more complex than we have so far suggested, involving dynamic elements—on the supply as well as the demand side—that lead the current account to adjust only gradually to exchange rate changes. In this section we discuss some dynamic factors that seem important in explaining actual patterns of current account adjustment and indicate how their presence might modify the predictions of our model.

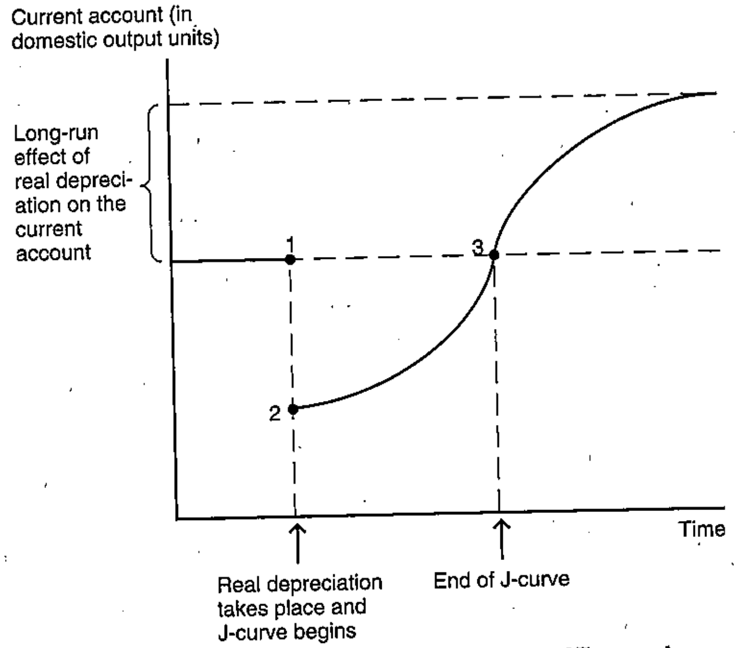
The J-Curve

It is sometimes observed that a country's current account *worsens* immediately after a real currency depreciation and begins to improve only some months later, contrary to the assumption we made in deriving the DD curve. If the current account initially worsens after a depreciation, its time path, shown in Figure 17-18, has an initial segment reminiscent of a J and therefore is called the **J-curve**.

Figure 17-18

The J-Curve

The J-curve describes the time lag with which a real currency depreciation improves the current account.



The current account, measured in domestic output, can deteriorate sharply right after a real currency depreciation (the move from point 1 to point 2 in the figure) because most import and export orders are placed several months in advance. In the first few months after the depreciation, export and import volumes therefore may reflect buying decisions that were made on the basis of the old real exchange rate: The primary effect of the depreciation is to raise the value of the pre-contracted level of imports in terms of domestic products. Because exports measured in domestic output do not change, while imports measured in domestic output rise, there is an initial fall in the current account, as shown.

Even after the old export and import contracts have been fulfilled, it still takes time for new shipments to adjust fully to the relative price change. On the production side, producers of exports may have to install additional plant and equipment and hire new workers. To the extent that imports consist of intermediate materials used in domestic manufacturing, import adjustment will also occur gradually as importers switch to new production techniques that economize on intermediate inputs. There are lags on the consumption side as well. To expand significantly foreign consumption of domestic exports, for example, it may be necessary to build new retailing outlets abroad, a time-consuming process.

The result of these lags in adjustment is the gradually improving current account shown in Figure 17-18 as the move from point 2 to point 3 and beyond. Eventually, the increase in the current account tapers off as the adjustment to the real depreciation is completed.

Empirical evidence indicates for most industrial countries a J-curve lasting more than six months but less than a year. Thus, point 3 in the figure is typically reached within a year of the real depreciation, and the current account continues to improve afterward.[12]

The existence of a significant J-curve effect forces us to modify some of our earlier conclusions, at least for the short run of a year or less. Monetary expansion, for example,

[12] See the discussion of Table 17A2-1 in Appendix 2 of this chapter.

can depress output initially by depreciating the home currency. In this case, it may take some time before an increase in the money supply results in an improved current account and therefore in higher aggregate demand.

If expansionary monetary policy actually depresses output in the short run, the domestic interest rate will need to fall further than it normally would to clear the home money market. Correspondingly, the exchange rate will overshoot more sharply to create the larger expected domestic currency appreciation required for foreign exchange market equilibrium. By introducing an additional source of overshooting, J-curve effects amplify the volatility of exchange rates.

Exchange Rate Pass-Through and Inflation

Our discussion of how the current account is determined in the *DD-AA* model has assumed that nominal exchange rate changes cause proportional changes in real exchange rates in the short run. Because the *DD-AA* model assumes that the nominal output prices P and P^* cannot suddenly jump, movements in the real exchange rate, $q = EP^*/P$, correspond perfectly in the short run to movements in the nominal rate, E. In reality, however, even the short-run correspondence between nominal and real exchange rate movements, while quite close, is less than perfect. To understand fully how *nominal* exchange rate movements affect the current account in the short run, we need to examine more closely the linkage between the nominal exchange rate and the prices of exports and imports.

The domestic currency price of foreign output is the product of the exchange rate and the foreign currency price, or EP^*. We have assumed until now that when E rises, for example, P^* remains fixed so that the domestic currency price of goods imported from abroad rises in proportion. The percentage by which import prices rise when the home currency depreciates by 1 percent is known as the degree of **pass-through** from the exchange rate to import prices. In the version of the *DD-AA* model we studied above, the degree of pass-through is 1; any exchange rate change is passed through completely to import prices.

Contrary to this assumption, however, exchange rate pass-through can be incomplete. One possible reason for incomplete pass-through is international market segmentation, which allows imperfectly competitive firms to price to market by charging different prices for the same product in different countries (recall Chapter 16). For example, a large foreign firm supplying automobiles to the United States may be so worried about losing market share that it does not immediately raise its U.S. prices by 10 percent when the dollar depreciates by 10 percent, despite the fact that its revenue from American sales, measured in its own currency, will decline. Similarly, the firm may hesitate to lower its U.S. prices by 10 percent after a dollar appreciation of that size because it can thereby earn higher profits without investing resources immediately in expanding its shipments to the United States. In either case, the firm may wait to find out if the currency movement reflects a definite trend before making price and production commitments that are costly to undo. In practice, many U.S. import prices tend to rise by only around half of a typical dollar depreciation over the following year.

We thus see that while a permanent nominal exchange rate change may be fully reflected in import prices in the long run, the degree of pass-through may be far less than 1 in the short run. Incomplete pass-through will have complicated effects, however, on the timing of current account adjustment. On the one hand, the short-run J-curve effect of a nominal currency change will be dampened by a low responsiveness of import prices to the exchange rate. On the other hand, incomplete pass-through implies that currency movements have less-than-proportional effects on the relative prices determining trade volumes. The failure of relative prices to adjust quickly will in turn be accompanied by a slow adjustment of trade volumes.