

APPENDIX II TO CHAPTER 17

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The Monetary Approach to the Balance of Payments

The close link discussed above between a country's balance of payments and its money supply suggests that fluctuations in central bank reserves can be thought of as the result of changes in the money market. This method of analyzing the balance of payments is called the monetary approach to the balance of payments. The monetary approach was developed in the 1950s and 1960s by the International Monetary Fund's research department under Jacques J. Polak, and by Harry G. Johnson, Robert A. Mundell, and their students at the University of Chicago.²⁸

The monetary approach can be illustrated through a simple model linking the balance of payments to developments in the money market. To begin, recall that the money market is in equilibrium when the real money supply equals real money demand, that is, when

$$M^{s}/P = L(R, Y). \tag{17AII-1}$$

Now let F^* denote the central bank's foreign assets (measured in domestic currency) and A its domestic assets (domestic credit). If μ is the money multiplier that defines the relation between total central bank assets $(F^* + A)$ and the money supply, then

$$M^{s} = \mu(F^* + A). \tag{17AII-2}$$

The change in central bank foreign assets over any time period, ΔF^* , equals the balance of payments (for a nonreserve currency country). By combining (17AII-1) and (17AII-2), we can express the central bank's foreign assets as

$$F^* = (1/\mu)PL(R, Y) - A.$$

If we assume that μ is a constant, the balance of payments surplus is

$$\Delta F^* = (1/\mu)\Delta [PL(R, Y)] - \Delta A.$$
 (17AII-3)

The last equation summarizes the monetary approach. The first term on its right-hand side reflects changes in nominal money demand and tells us that, all else equal, an increase in money demand will bring about a balance of payments surplus and an accompanying increase in the money supply that maintains money market equilibrium. The second term in

²⁸ Many original articles using the monetary approach are collected in Jacob A. Frenkel and Harry G. Johnson, eds., The Monetary Approach to the Balance of Payments (London: George Allen and Unwin, 1976), and International Monetary Fund, The Monetary Approach to the Balance of Payments (Washington, D.C.: International Monetary Fund, 1977).

the balance of payments equation reflects supply factors in the money market. An increase in domestic credit raises money supply relative to money demand, all else equal: so the balance of payments must go into deficit to reduce the money supply and restore money FINAN LAL market equilibrium.

Because the balance of payments equals the sum of the current and (nonreserve) capital account surpluses (see Chapter 12), much of the economics literature that appeared before the monetary approach was developed explained balance of payments movements as the result of current or capital account changes. An important contribution of the monetary approach was to stress that in many situations, balance of payments problems result directly from imbalances in the money market and a policy solution that relies on monetary policy is therefore most appropriate. A large balance of payments deficit may be the result of excessive domestic credit creation, for example. Even though this balance of payments deficit will generally involve deficits in both the current and private capital accounts, it would be misleading to view it as fundamentally due to an exogenous fall in relative world demand for domestic goods or assets.

There are many realistic cases, however, in which a balance of payments analysis based on the monetary approach is roundabout and possibly misleading as a guide to policy. Suppose, for example, that a temporary fall in foreign demand for domestic products does occur. This change will cause a fall in the current account and in the balance of payments. but these effects can be counteracted (when rigid capital account restrictions are not in place) by a temporarily expansionary fiscal policy.

Because output and thus money demand fall, the monetary approach also predicts that a balance of payments deficit will result from a fall in export demand. It would be wrong, however, for policymakers to conclude that because the balance of payments deficit is associated with a fall in money demand, a contraction of domestic credit is the best response. If the central bank were to restrict domestic credit to improve the balance of payments, unemployment would remain high and might even rise.

While the monetary approach is an extremely useful analytical tool, it must be applied with caution in seeking solutions to macroeconomic problems. It is most useful for formulating solutions to policy problems that are a direct result of shifts in domestic money demand or supply.