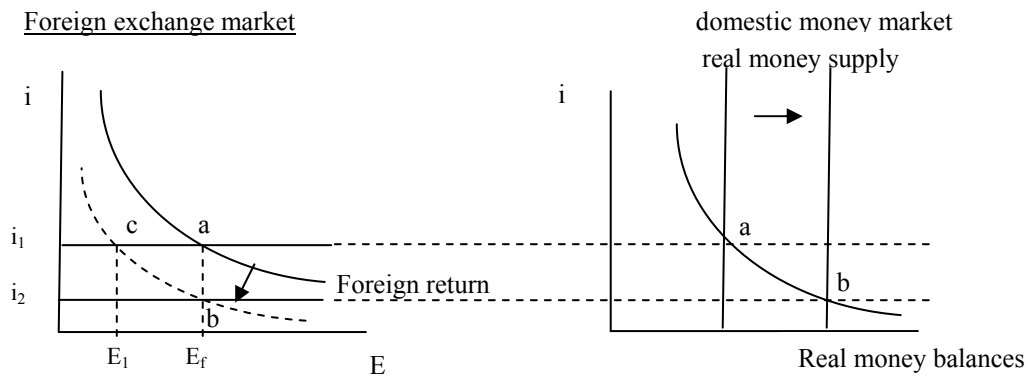


Answer key to Homework #3

1. Fixed exchange rates: The only way to keep the exchange rate (peso/\$) fixed at a lower rate than the market would bear on its own would be for the Mexican central bank to purchase pesos to keep its value high. This purchase of pesos lowers the amount of pesos in circulation, thereby reducing the money supply. The way they do this is by selling an equal value of their dollar denominated asset holdings.

2a. Fixed exchange rates: The initial effect is for the foreign return curve to shift down. On its own this would produce an equilibrium at point c with a drop in the exchange rate from E_f to E_1 (an appreciation in the value of the domestic currency). However, the domestic central bank is committed to maintaining an exchange rate of E_f by the use of monetary policy. To keep this exchange rate the domestic interest rate must also fall, implying that the domestic money supply must increase. This increase is shown above and moves the equilibria to points b.



b. To maintain this exchange rate, the quantity of domestic currency in circulation (a liability) increases as does the quantity of foreign denominated assets held by the domestic central bank (an asset).

3. Balance of Payments

As stated in the question, all transactions are as they would appear on the U.S. BOP accounts.

- a) A California computer manufacturer purchases a hard disk from a Malaysian company, using a bank account in Malaysia.

Description	BOP Account	Credit	Debit
Hard disk imported from Malaysia	CA (↓)		-
Withdrawal from Malaysian bank account	FA (↑)	+	

- b) The U.S. central bank sells some of its holdings of U.S. Treasury bonds to a British financial firm.

Description	BOP Account	Credit	Debit
U.S. Treasury bonds sold to British firm	FA (↑)	+	
U.S. central bank receives £ deposits in payment for bonds	FA (↓)		-

4. BOP Accounting

- a) $BOP = CA + FA + KA = 0$

$$CA + KA = -FA$$

Current account deficit of \$1 billion (\$1000 million) and the capital account is in a \$100 million surplus

$$-\$1000 + \$100 = -FA$$

$$FA = \$900$$

The financial account records financial flows into and out of the country. In this case, the FA surplus indicates that on net, foreigners purchased more Ikonoman assets (FAL) than Ikonomians purchased foreign assets (FAA). Therefore, net foreign assets for Ikonoman declined by \$900 million.

- b) The current account can be split into three components: the trade balance (final goods and services), net factor income from abroad (payments to/from factor services) and net unilateral transfers)

$$CA = TB + NFIA + NUT$$

$$-\$1000 = -\$800 + NFIA + 0$$

In the question, we are given the trade balance (-\$800 million) and the current account (-\$1000 million)

$$NFIA = -\$200$$

Net factor income from abroad is -\$200 million. This implies that foreign factors of production located in Ikonomania earned more than Ikonoman factors abroad.

$$NFIA = EX_{FS} - IM_{FS}$$

We know that Ikonoman factors abroad earned \$700 million.

$$-\$200 = \$700 - IM_{FS}$$

$$IM_{FS} = \$900$$

Foreign factors located in Ikonomania earned \$900 million.

- c) See above. NFIA = -\$200 million

- d) We know that $GDP = C + I + G + (EX - IM)$

$$GNI = GDP + NFIA$$

$$GNI = \$9,000 + (-\$200)$$

$$GNI = \$8,800$$

10/23/08