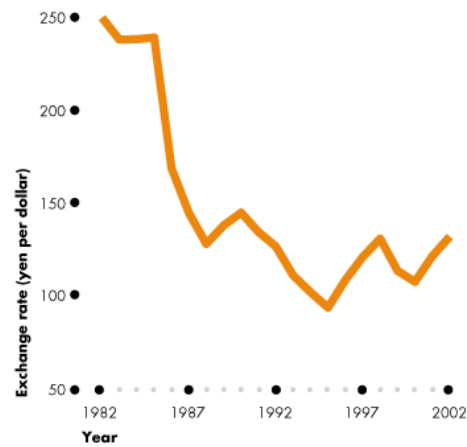


Problem Set 3: National Income and Product Accounts; Balance of Payments Accounts; Exchange Rates

1. Define the trade balance and the current account balance. What is the difference between the two?
2. Does the sale of a domestic security (asset) to a foreign resident represent a capital inflow or capital outflow? Why?
3. What is the definition of “official settlements balance”? Why might one be interested in this measure?
4. Record the following transactions in the balance of payments accounts for country A by constructing a table of credits and debits:-
 - a. Exporters of country A send \$6000 of goods to country B, receiving in exchange a short term bank deposit of \$6000 in country B.
 - b. Residents of country A send \$1000 of goods to country B’s citizens as a gift.
 - c. Country B’s commercial banks sell \$800 to country B’s central bank. The foreign central bank’s dollar accounts in country A banks are increased and foreign commercial banks have reduced their dollar balances in country A banks.
5. Record the following transaction in the balance of payment: You visit England and a local pickpocket steals £100 from you.
6. Recall in lectures that we saw that: $I = S - CA = S_p + S_g - CA = S_p + (T - G) - CA$, where I is (gross) investment, S is national savings, S_p and S_g represent private and public savings, T, G and CA stands for taxes, government purchases and the current account respectively. The equation tells us that to reduce a current account deficit, a country must increase its private savings, reduce domestic investment, or cut its government budget deficit. Nowadays, some people recommend restrictions on imports from China (and other countries) to reduce the American current account deficit. How would higher US barriers to imports affect its private saving, domestic investment and government deficit? Do you agree that import restrictions would necessarily reduce a US current account deficit?

7. Consider the graph below which plots the value of the Yen-Dollar exchange rate from 1982 till 2002:



- a. Defining the exchange rate, E , as: $E = \text{¥}/\text{\$}$, what do upward movements in the exchange rate represent for the dollar:- appreciation or depreciation?
 - b. Which currency has gained value? Which currency has lost value?
8. In Munich a bratwurst costs 5 euros; a hot dog costs \$4 at Boston's Fenway Park. At an exchange rate of \$1.50 per euro, what is the price of a bratwurst in terms of hot dogs? All else equal, how does this relative price change if the dollar appreciates to \$1.25 per euro? Compared to the initial situation, has a hot dog become more or less expensive relative to a bratwurst?
9. A US dollar costs 7.5 Norwegian kroner, but the same dollar can be purchased for 1.25 Swiss francs. What is the Norwegian krone/Swiss franc exchange rate?
10. Calculate the dollar rates of return on the following assets:
- a. A painting whose price rises from \$200000 to \$250000 in a year?
 - b. A bottle of rare Burgundy, Domaine de la Romanée-Conti 1978, whose price rises from \$225 to \$275 between 2007 and 2008?
 - c. For parts (a) and (b) above, what would the real rate of return be, if the price changes described above were accompanied by a simultaneous 10 percent increase in dollar prices?