Econ 434 Professor Ickes

Fall 2003

Review Question: Volume I

1. Carefully explain why the discovery of oil in Norway led to several periods of deficit in Norway's current account followed by periods of surplus in the current account.

2. What is meant by the term domestic absorption (A)? Why is the current account equal to the difference between national income and A? Why is the current account also equal to the difference between savings and investment? Explain. Why is the current account also equal to the change in net foreign assets? Explain.

3. Country X had a current account deficit of $1 billion and a nonreserve capital account surplus of $500 million in 2000.

   (a) What was the balance of payments of X in that year? What happened to the country's net foreign assets?

   (b) Assume that foreign central banks neither buy nor sell X's assets. How did the central bank of X's foreign reserves change in 2000? How would this official intervention show up in the balance of payments accounts of X?

   (c) How would your answer to (b) change if you learned that foreign central banks had purchased $600 million of X's assets in 2000? How would these official purchased enter foreign balance of payments accounts?

4. Consider the two-country model of interest-rate determination with savings and investment. Suppose that at the initial world interest rate the home country has a current account surplus. Draw the savings-investment diagram and the equilibrium world interest rate for both countries. Now suppose that preferences in the home country shift so that savings declines at every interest rate (in the home country). What happens to the equilibrium world interest rate? What happens to the equilibrium levels of savings and investment in the home country? What happens to savings and investment in the foreign country?

5. During WWII Japan' capital stock was decimated. Using the dynamic model of the current account what patter would you expect for the Japanese trade balance?

   (a) What should this be in the early postwar period?

   (b) Given your answer in (a) what should you expect the current account to look like after the postwar recovery?

6. Consider the dynamic model of the current account balance. Now suppose that we add a government in each country that taxes workers by an amount t (t^* for the foreign country). Then the total amount taxed in a generation is $f = Nt$. We want to analyze how this alters capital accumulation.

(a) What happens to the volume of assets accumulated by young workers in each country?

(b) How does the equation for the world capital labor ratio change? What happens to the steady state world capital-labor ratio?

(c) Suppose that f rises but f^* falls by an equal amount. Show that if the home country is larger than the foreign country that the steady-state value of k falls.

7. Consider the economy of Macronesia (which is small despite its name). Here people have access to world capital markets but they choose neither to borrow or lend. In a two-period diagram draw production opportunities and indifference curves for Macronesia, and draw the world interest rate. Label the consumption point as A.

   (a) Imagine that a great innovation is discovered which will greatly increase future income in Macronesia. How does the production opportunities set shift? What would happen to consumption if Macronesia did not have access to world capital markets? Label this consumption point B.

   (b) What happens to the autarky rate of interest in Macronesia? Explain.

   (c) If Macronesia has access to the world capital markets what happens to production and consumption? Explain. Label the new consumption point C.

   (d) Suppose Macronesia was a large economy. What would happen to the world interest rate given this discovery?

8. What is the Feldstein-Horioka puzzle? Explain why it is a puzzle? Why is this finding taken to be a sign of the lack of capital market integration? Why might this interpretation be misleading? What other explanations can you think of?

9. From 1990 through 1996 Thailand experienced large current account deficits of approximately 8 to 9% of GDP. Subsequently, the current account has gone into a surplus of about 8% of GDP. Why has this shift been associated with a sharp recession in Thailand?

10. College students typically run current account deficits. After graduation their current accounts eventually go into surplus. Given the experience of Thailand (discussed in the previous question) does this mean that college graduates go into recessions? What is the key difference in the two situations? Explain

11. Suppose that I have a long position in yen and I wish to hedge my currency risk over the next three months. Carefully explain how this risk can be hedged using the futures market and the currency options market, respectively. What are the key advantages and disadvantages of these two types of hedging strategies? Explain.

12. Explain how each of the following factors affects the price of a call option on a foreign currency, everything else held constant.

    - a decrease in the expected volatility of the exchange rate.
    - an increase in the term of the option.
    - news reports of increased terrorist activity on that country's frontiers.

- an increase in the T-bill rate.

13. Carefully explain the difference between covered interest parity and uncovered interest parity. Which is more likely to be observed? Explain.

14. Suppose that traders in asset markets learn that the interest rate on dollars will decline in the near future. Use the diagrammatic analysis of the asset approach to the exchange rate to determine the effect on the current dollar/euro exchange rate, assuming that current interest rates on dollar and euro deposits do not change.

15. Suppose that the dollar exchange rates of the euro and yen have equal volatility and that this is expected to continue in the future. The euro, however, tends to depreciate against the dollar when the return on the rest of your wealth is unusually high. The yen, on the other hand, tends to appreciate against the dollar when your wealth is unusually high. As a US resident, which currency is a better bet for your portfolio? Explain.

16. Suppose that expectations of future exchange rate changes are given. What is the short-run impact on the exchange rate of an increase in domestic real income?

17. (25%) What does it mean when someone says that the path of the exchange rate (or tulip prices, or stocks) is a bubble? Try to be precise.

    (a) Does a steadily rising price for an asset necessarily mean that there is a bubble? Explain.

    (b) No bubble can expand forever, so does the existence of a bubble signify that investors are irrational? Can there be a rational bubble? Explain how this is possible. Is is possible to infer the market's expectation of the likelihood of the bubble's collapse? How?

    (c) If an asset price follows a bubble path people are making money. So why is a bubble bad, if at all? Explain.