CHAPTER 15

CONCEPT REVIEW QUESTIONS

1. Explain how a rise in the euro might affect a French company exporting wine to the United States, and compare that with the impact on a German firm importing semiconductors from the United States.

A rise in the euro makes French wine more expensive to U.S. consumers, but it would make U.S. semiconductor imports cheaper for the German firm.

2. Holding all other factors constant, how might an increase in interest rates in Sweden affect the value of the Krona?

An increase in real Swedish interest rates should attract investors to the Sweden and push up the value of the Krona.

3. If someone says, “The exchange rate between yen and pounds increased today,” can you know with certainty which currency appreciated and which depreciated? Why or why not?

You cannot say which currency appreciated and which depreciated unless you know how the currency was quoted (e.g., yen per pound or pounds per yen).

4. Define spot and forward exchange rates. If a trader expects to buy a foreign currency in one month, can you explain why the trader might prefer to enter into a forward contract today rather than simply wait a month and transact at the spot rate prevailing then?

The spot rate is the exchange rate for an immediate trade, and the forward rate is the exchange rate that applies to a trade that will occur later. A trader expecting to transact in one month might prefer to enter a forward contract to lock in a known exchange rate rather than taking the risk that the exchange rate might move in an adverse way.

5. Explain the logic behind each of the four parity relationships.

Forward spot parity establishes a kind of breakeven point at which traders are indifferent between locking in a forward exchange rate or waiting to transact at the spot rate on a later date. PPP is a condition that must hold if similar goods sell at the same price in a common currency in different countries. Interest rate parity says that the interest rate on a risk-free investment must be the same around the world as long as the investor covers their foreign exchange exposure with a forward contract. Finally, real interest rate parity says that the real interest rate should be the same around the world.

6. Explain the role of arbitrage in maintaining the parity relationships.

If parity relationships are violated, then it may be possible for traders to make a profit. For example, if PPP is violated because the same good sells at different prices in a common currency in different countries, then a trader could buy the good where it is cheap and sell it where its price is high and make a profit. This process can only work if traders are in fact able to buy and sell goods (or to borrow and lend money in the case of interest rate parity) freely in different countries and at low transactions costs.

7. In what sense is interest rate parity an application of the law of one price?

IRP says that the price (or return) on a risk-free investment should be the same in a common currency everywhere in the world. That is very much like saying that the price of a commodity should be the same everywhere.

8. An investor who notices that interest rates are much lower in Japan than in the United States borrows in Japan and invests the proceeds in the United States. This is called uncovered interest arbitrage, but is it really arbitrage? Why or why not?

The trader is exposed to currency risk because they are not covering their exposure with a forward contract. Therefore, this strategy is not so much arbitrage as it is speculation that the exchange rate will not move in a way that wipes out the profit from borrowing and lending at different interest rates in different currencies.

9. Why does discounting the cash flows of a foreign investment using the foreign cost of capital, then converting that to the home currency at the spot rate, yield the same *NPV* as converting the project's cash flows to domestic currency at the forward rate and then discounting them at the domestic cost of capital?

Essentially these two methods yield the same result because interest rate parity holds. Recall that IRP says that the interest rate, expressed in a common currency, is the same on similar investments in different countries. In this context, we are talking about one investment project with one particular risk profile, and whether we express that investment's cash flows in dollars and discount using a dollar interest rate, or whether we express cash flows in foreign currency and discount at a foreign interest rate doesn't matter.

10. Why is it not surprising to find that the risk premium on the world market portfolio is lower than the domestic risk premium?

The world market portfolio is a broader portfolio than the domestic market portfolio. This means that it is more diversified and has less systematic risk, so its risk premium should be lower.