ECON 463 Spring 2006

Quiz 1: 30 minutes

According to Bloomberg.com, the direct spot price ($/£) for the British Pound Sterling was $1.752 on Feb. 28, 2006, while the yields on a one-year government bond were 4.7% in the United States and 4.3% in the United Kingdom.

a) Assuming both countries are equally safe places to own government bonds, what is the one-year forward price for Pounds?

b) Suppose the one year forward price for Pounds was $1.765. Explain how you could lock in a higher return with a spot-forward swap. Assuming many investment funds took advantage of this opportunity, explain how this would affect the spot and forward prices for the Pound.

c) Suppose that you just signed a contract to export goods to the U.K. in one year, and the contracted price is denominated in Pounds. If you decide to wait until next year to convert the Pounds you will be paid into Dollars, are you speculating or hedging? If you purchase a one-year forward contract to buy Dollars with Pounds, are you speculating or hedging?

d) If you purchase a one-year forward contract to buy Dollars with Pounds, but have no export contract, are you speculating or hedging? Are you long or short in Pounds?

e) If the spot exchange rate between Pounds and Euros (£/€) equals 0.6796, what is our direct spot price ($/€) for the Euro? How does arbitrage ensure this is true?

f) Suppose that you just heard news today that makes you think U.S. interest rates will increase next year, while British interest rates will remain constant. Use a diagram to predict how this would affect the direct spot price for the Pound next year. Then use another diagram to predict how this change to the forward rate should affect the current direct spot price for the Pound.

g) Suppose you decide that the current forward price for Pounds is currently overpriced, and you want to try to make money on this knowledge by going short on Pounds and purchasing a forward contract to sell Pounds for the current forward premium. However, to avoid the chance that you might be expensively wrong, you decide to buy an option. What type of option would you buy, a call or a put for Pounds? Which would cost you more, a strike price of $1.80 per Pound or $1.70? Suppose you buy a European option with a strike price of $1.80, and on the strike date the spot rate is 1.71. Are you in or out of the money? Would you exercise the option? Did you make money on the forward contract?