

Homework 2 (5 points, each problem is graded 1 point)

Please calculate the following problems:

1. What should be the 2-year forward rate to prevent arbitrage? The spot exchange rate is ¥132.192/£.

	1. U.K.	Japan
1 year	1.105	0.370
2 year	1.770	0.430

What should be the 2-year forward rate to prevent arbitrage?

2. Carla Heinz is a portfolio manager for Deutsche Bank. She is considering two alternative investments of EUR10,000,000: 180-day euro deposits or 180-day Swiss francs (CHF) deposits. She has decided not to bear transaction foreign exchange risk. Suppose she has the following data: 180-day CHF interest rate, 8% p.a., 180-day EUR interest rate, 10% p.a., spot rate EUR1.1960/CHF, 180-day forward rate, EUR1.2024/CHF. Which of these deposits provides the higher euro return in 180 days? If these were actually market prices, what would you expect to happen?
3. Suppose the spot rate is CHF1.4706/\$ in the spot market, and the 180-day forward rate is CHF1.4295/\$. If the 180-day dollar interest rate is 7% p.a., what is the annualized 180-day interest rate on Swiss francs that would prevent arbitrage?
4. As a trader for Goldman Sachs, you see the following prices from two different banks:

1-year euro deposits/loans:	6.0% – 6.125% p.a.
1-year Malaysian ringgit deposits/loans:	10.5% – 10.625% p.a.
Spot exchange rates: EUR/MYR	MYR 4.6602 / EUR – MYR 4.6622 / EUR
1-year forward exchange rates:	MYR 4.9500 / EUR – MYR 4.9650 / EUR

The interest rates are quoted on a 360-day year. Can you do a covered interest arbitrage?

5. You are a sales manager for Google Nexus and export cellular phones from the United States to other countries. You have just signed a deal to ship phones to a British distributor. The deal is denominated in pounds, and you will receive £700,000 when the phones arrive in London in 180 days. Assume that you can borrow and lend at 7% p.a. in U.S. dollars and at 10% p.a. in British pounds. Both interest rate quotes are for a 360-day year. The spot exchange rate is \$1.4945/£, and the 180-day forward exchange rate is \$1.4802/£.