AcF305: International Financial and Risk Management

Week 4 tutorial questions

1. Suppose that the CAD/GBP exchange rate is 2 and that the 360-day interest rates are 10% for the CAD and 21% for the GBP.

    a. What is the forward rate for 360 days?
    b. What is the swap rate?
    c. What is the (percentage) forward premium?
    d. What is the annualized forward premium?
    e. How well does the simple interest differential (-11%) perform as a yardstick for evaluating the forward premium quoted by a bank?

2. Given the following data, compute the value today of an outstanding forward purchase contract initiated at t0 for 1,000,000 units of foreign currency (where the exchange rate is HC/FC). Does the new value represent a gain or loss to the holder of the old contract? (Hint: First compute the new forward rate.)

	HC/FC	St	$F_{t0,T}$ (old)	$r_{t,T}$	$r^*_{t,T}$
a.	THB/NZD	20.5	22.0	3.50%	2.5%
b.	INR/EUR	57.5	54.2	1.25%	3.0%
c.	JPY/GBP	283.0	289.4	4.50%	3.5%
d.	CHF/GBP	2.2	1.8	2.00%	3.0%

3. You are given the following data: the spot exchange rate is INR/NOK 21; the p.a. simple interest rate on a three-month deposit is 8% in India and 6% in Norway. Compute:

    a. The time-T NOK value of a time-t NOK 100 investment.
    b. The time-t INR value of a time-T INR 100 loan.
    c. The forward rate for a three-month forward contract.
    d. The time-T INR proceeds from a time-T NOK 100 forward sale, given the forward rate computed in c.
    e. The present value of the proceeds in question d.
    f. The time-t INR value of a time-t NOK 100 spot sale.
    g. The time-t value, in INR, of the proceeds of a time-T NOK 100 loan.

4. Given the following data, are there any arbitrage opportunities? If so, how would you make a risk-free profit?

	HC/FC	S_t	$F_{t,T}$	$r_{t,T}$	$r^*_{t,T}$
a.	INR/NOK	20.5	20.60	3.50%	2.5%
b.	JPY/NZD	57.5	57.10	1.25%	3.0%
c.	ZWD/USD	283.0	285.73	4.50%	3.5%
d.	CHF/GBP	2.2	2.18	2.00%	3.0%

5. How do you evaluate the following claim: "**The forward rate, if computed from IRP (CIP), entirely ignores expectations**. In reality, the market evaluates the currency's prospects, and takes into account not just the expected value but also the risks. Any theory which would have us mechanically compute the forward rate from the current spot rate and the interest rates is totally crazy." Before formulating your comments, think about the direction of causality (if any) implied by IRP.