## END OF CHAPTER EXERCISES

## Chapter 15 : The Foreign Exchange Market

Investments : Spot and Derivatives Markets

(Keith Cuthbertson, Dirk Nitzsche)

1. What are the key differences between the spot and forward FX markets? Can you use both for speculation?
2. What is the key difference between the uncovered interest parity UIP and the covered interest parity CIP relationship?
3. Dealers are quoting the following rates for 'cable' (i.e. GBP/USD, 'base/quoted')

| Dealer-A | $1.5205 / 15$ |
| :--- | :--- |
| Dealer-B | $1.5207 / 17$ |
| Dealer-C | $1.5200 / 10$ |
| Dealer-D | $1.5202 / 12$ |

(a.) To which dealer would you sell GBP?
(b.) From which dealer would you buy GBP?
4. The current exchange rate is 0.90 (Euros per $\$$ ) and the price of Californian wine is $\$ 10$ (per bottle) and the price of Europlonk is 10 Euros (per bottle). The exchange rate now moves to 0.85 Euros per $\$$ but the local currency price of the Californian wine and the Europlonk remain the same. What are the likely consequences for the US economy and the Euroland economy?
5. A UK firm knows it will receive $\$ 10 \mathrm{~m}$ in 1-years time (from the sale of goods in the USA). Current interest rates are $r_{u k}=10 \%, r_{u s}=12 \%$ and the spot rate is $S=1.6$ ( $\$ / £$ ). Carefully explain the steps the UK firm would take to hedge this inflow of dollars, using the money markets (and the spot FX market).
6. Interest rates in the UK and USA are $r_{\mathrm{uk}}=12 \%$ p.a., $r_{\mathrm{us}}=10 \%$ p.a. and the current spot rate is $S=1.6(\$ / £)$. If you are a speculator, what is the expected value of the exchange rate in 1 -years time that will just make you indifferent between investing in the UK or the USA?
7. Given the following information :

Spot rate between US Dollar and Pound Sterling is 1.65 (\$/£)
3 month UK interest rates are at $7.5 \%$ per annum (assume actual / 365 day count basis)
3 month US interest rates are $6 \%$ per annum (assume actual / 365 day count basis)
(a.) Calculate the 30-day forward rate and the forward margin.
(b.) Is sterling at a forward discount or forward premium ?

