

1 One-year interest rates are 5% in the US and 8% in the UK. Currently the pound is worth \$1.50.

a. What should the 12-month forward exchange rate for the pound be to rule out arbitrage opportunities?

Answer: assume that forward exchange rate is X. Assume that now we have y dollars.

so $Y/1.5(1 + 8\%)/(X) = 1Y*(1 + 5\%)$ So x should be 1.458. SO one pound should be \$1.458

b. You read in the newspaper that the 12-month forward is actually \$1.40 /£. Explain in detail how to exploit the mispricing using only the following instruments: buying or selling US or British 12-month bills, and buying or selling the pound forward. Ignore transaction costs. If you could only borrow the equivalent of \$100,000, how much money would you make?

Answer: assume that we could borrow $100000/(1.5) = 66666\text{£}$, Then we change the european dollars to American dollars which is 100000 dollars. And we just buy the forward price of \$1.40 /£. and now I could by US 12-month bill. And in the end I could have $100000*(1 + 5\%) = 105000$ dollars. then cause we buy the forward price, so we can turn the American dollars to $105000/(1.4) = 75000 \text{£}$. so we can make $75000 - 66666 = 8334$ dollars.

2 Fill in the missing numbers in this table of exchange rates. The 6-month spot interest rate in the UK is 2.2% (annualized).

Answer: so we will assume that we have 100 UK dollars

so $100(1 + 2.2\%) = 100*(0.82)(1 + 1.7\%)/X$

**so $X = 100*(0.82)*(1 + 1.7\%)/(100*(1 + 2.2\%))$
 $= 0.88$.**

So the forward price of Germany would be 0.88 to UK

assume that 6-month spot interest rate is y

And $100*1.6*(1 + y)/1.59 = 100*(1 + 2.2\%)$

so $y = 1.561\%$

3 True or False? Explain your reasoning

a. A weak dollar is bad for U.S. exporters. Holding all else constant, a sudden weakening of the dollar will increase U.S. trade deficits.

Answer: False weaker dollars will be good for US exporters. because the weak dollar will attract more foreign consumers. And a sudden fall of dollar will increase US trade deficits is also false, when US will export more then import, which is import minus export, so the trade deficits will decrease.

b. A main cause of the Euro crisis is that countries like Spain ran large government deficits during the 2002-2006 boom.

False. this is mainly because Spain can not use the monetary policy to change it interest rate to adjust the economy. Even it the government ran large government deficits during 2002-2006, if the government can increase the interest rate, it can defend the crisis, but because countries like Spain do not have its now money. So it can not adjust its interest rate.

c. After the Argentinian crisis of 2001-02 and the East Asian crises of 1997-98, the extreme currency depreciation led to a strong export-driven recovery.

True. because the currency depreciation will attract more foreign costumers.

d. If a country (such as China during most of the 2000s) wants to keep its currency cheap to stimulate exports, its central bank must buy foreign reserves with newlyprinted currency and then, to prevent inflation, sterilize the monetary expansion by selling government or central bank bonds in the open market to soak up the excess money supply.

True. it is what China is doing now. But it also changes a little bit.