

PROBLEM SET 7

CHP 13 #2

The relevant formula is given in equation (13.5) in the text.

- a)  $E=0.204$
- b)  $E=0.200$
- c)  $E=0.196$

CHP 13 #8

- a) Use equation (13.4).
- b) The exchange rate is expected to decrease by  $(0.67-0.7)/0.7=0.043=4.3\%$ . Equivalently the dollar is expected to appreciate by 4.3 %

CHP 13 #9

- a) With  $a=0$  the US interest rate has no impact on the foreign interest rate  
With  $a=1$  the foreign rate is completely determined by US interest rate  
With  $a=1/2$  the foreign rate is the average of foreign and US interest rate
- b) With US interest rate equal to 4%, the foreign interest rate will equal 5%  
With US interest rate equal to 5%, the foreign interest rate equals 5.5%
- c) In a closed economy, monetary policy works entirely through its impact on the domestic interest rate, rather than through the exchange rate. The larger the parameter  $a$ , the more monetary policy will influence the foreign interest rate, and, therefore, the less it will affect the exchange rate. Thus, with a larger value for  $a$ , the more monetary policy works as it does in a closed economy

CHP 14 #1

- a) Each French good invested obtains  $1/(=1/1.25=0.8)$  worth of British goods immediately, in the foreign exchange market. When these are invested for one year, the French citizen will have earned 0.84 British goods.
- b) In one year, the French citizen will have 1.176 goods.

c) Since each French good invested will return 1.176 French goods, the rate of return is 17.6 %

CHP 14 #3

The interest parity condition for this problem relates five times the five-year domestic rate to five times the foreign rate and the expected depreciation of the exchange rate over five years' time.

We are solving for the percentage rise in the exchange rate which we call X.

Letting US to be the domestic country, we have

$$5(0.07-0.04)=5(0.10-0.04)+X$$

$$X=-0.015$$

Over the next five years, the exchange rate is expected to fall, that is, the dollar is expected to undergo a real appreciation of 15%.