13 THE OPEN ECONOMY IN THE LONG RUN

1. We have $\varepsilon = \frac{eP}{P^*}$ so using the rule of thumb for percentage changes:

$$\frac{\Delta\varepsilon}{\varepsilon} = \frac{\Delta e}{e} + \pi - \pi^*.$$

According to the interest parity condition $\frac{\Delta e}{e} + i = i^*$ and thus

$$\frac{\Delta\varepsilon}{\varepsilon} = i^* - i + \pi - \pi^*.$$

Substituting the numbers we get 0.02=0.04-*i*+0.03-0.02. Thus i=0.03: the interest rate must be three percent.

In real terms, the foreign real interest rate is 2 percent and the currency is expected to appreciate 2 percent, so the domestic real interest rate should be zero.

2.

a) An increase in the world real interest rate will raise the real interest rate and reduce domestic demand in the small open economy. For production to be on the natural level, net exports must increase, and this requires a real depreciation, that is, domestic goods must become cheaper compared to foreign goods.

b) A bad harvest in the small open economy reduces supply. Demand falls also but since the shock is temporary, demand falls less than supply. Net exports must decrease so the currency must appreciate in real terms.

c) A shift in export demand away from the goods exported by the small open economy implies that domestically produced goods must become relatively cheaper so that net exports remain unchanged.

3. Factors that limit international financial integration are lack of information and trust, legal differences between countries, capital controls, Tobin taxes etc.

4. Banks may contribute to the integration of financial markets between countries because they have knowledge about credit markets in different countries and can help investors to invest or channel funds to foreign markets.

Multinational companies can borrow where it is cheap and lend where the return is high, thereby equalizing returns in different markets.

© 2013

Pension funds help savers to invest in different markets so as to get a high return and reduce risks.

5. Savings ratios may differ because of differences in pension systems and taxes on savings. In some countries, individuals must save for their old age, for health care and to finance the education of their children. In other countries, much of this is financed via taxes.

   Investment ratios may differ because of differences in taxes, pre-existing capital stocks, access to technology etc.

© 2013