

## Footloose Factor Model I

Suppose the home country can produce clothing with two units of capital and one unit of labor. It can produce food with one unit of labor. The foreign country can produce clothing with one unit of capital and four units of labor. It can produce food with one unit of labor. The world price of food is given by 1\$. Capital is internationally mobile ("footloose").

- a) If the world price of clothing is 5.5\$ and the world capital rent 2\$, which good(s) are produced at home and abroad? What is the wage in each country?
- b) Now suppose the world price of clothing rises to 8\$ and the world capital rental rate increases to 4\$. Determine the production pattern and wages in both countries.
- c) Starting from the situation in b), what happens if labor productivity in the food sector increases in the foreign country?

## Footloose Factor Model II

Consider the footloose factors model. There are two goods: Clothing and Food. Labor is needed to produce both goods while capital is needed only for clothing production. Capital is footloose. The graph on the next page shows the maximal capital rental rate ( $R$ ) that the two countries A and B can pay, in dependence of the relative price of clothing  $P_C$  (the price of food is set to one).

- a) Which country can use capital more efficiently?
- b) Suppose that countries A and B are part of a larger world market, and both the world relative price of clothing as well as the world capital rental rate are given. Draw a combination of  $R$  and  $P_C$  in the graph where country A produces only food and country B only clothing (label this point X). Draw another point where country A produces only clothing and country B both goods (label this point Y).

