

Footloose Factors of Production

International Trade

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Lecture Slides

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Some internationally mobile factors (such as football players, bankers, professors,..) are called footloose factors. They are attracted by the countries that can offer the highest return.

Consequence:

Both comparative and absolute advantage may matter for production and trade pattern.

An example:

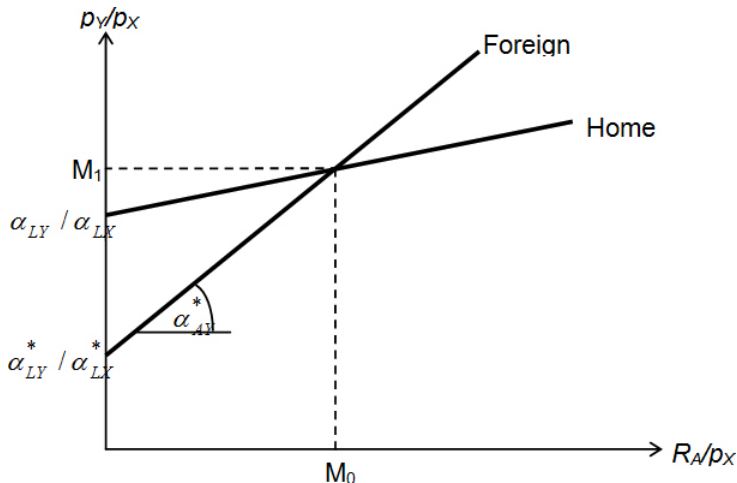
- Two goods: X and Y
- Two factors: L (local factor) and A (footloose factor)
- w is the unit factor payment for L , R_A for A
- $X = f(L)$, $Y = g(L, A)$

$$\alpha_{LX}w = p_X \quad (1)$$

$$\alpha_{LY}w + \alpha_{AY}R_A = p_Y \quad (2)$$

Dividing (1) into (2) yields:

$$\frac{\alpha_{LY}}{\alpha_{LX}} + \alpha_{LY} \frac{R_A}{p_X} = \frac{p_Y}{p_X}$$
$$\frac{\alpha_{LY}^*}{\alpha_{LX}^*} + \alpha_{AY}^* \frac{R_A^*}{p_X} = \frac{p_Y}{p_X}$$



Home has an absolute advantage in Y ($\alpha_{AY} < \alpha_{AY}^*$)

Foreign has a comparative advantage in Y ($\frac{\alpha_{LY}^*}{\alpha_{LX}^*} < \frac{\alpha_{LY}}{\alpha_{LX}}$)

Who produces what?

- Suppose the world relative price is higher than M_1 . Then Home can pay a higher price R_A to the footloose factor. So it attracts it and produces good Y . A price below M_1 would favour the production of Y in Foreign.
- Suppose now that the price of the footloose factor is given at some level \bar{R}_A . If $\bar{R}_A > M_0$ then the home country has a lower cost of producing Y and can charge a lower price. It will thus win over production of Y .
- Suppose that both p_Y/p_X and R_A are fixed on the world markets. Consider a combination that is to the right of M_0 and above M_1 , in between the two curves. The Home country can afford to hire the footloose factor and produce Y . But because the wage now is too "high" (see equation 2), Home cannot break even in X (see equation 1) so it does not produce any X .

Differences in the absolute level of productivity (AA), taxation, regulation (environmental standards, child labor, ...) matter for the location of economic activity internationally.

Applications:

- A change in technology (Dutch disease)
- The product cycle