

EE451

Chapter 4: (part 2)

Immobile factor

(or Specific-factor model)

Immobile Factors

- Leads to a specific-factor (SF) model
- Assumption: Three factors in the SR.
 - Labour (L): mobile between X and Y.
 - X-type Capital (K_X): specifically used in X.
 - Y-type Capital (K_Y): specifically used in Y.



Capital Immobility in the Edgeworth Box and Derivation of the PPF

The specific factor PPF will lie inside the normal PPF except at the initial point of efficient production.

Scenario of K-abundant country and full mobility of factors

- Given a K-abundant country and full mobility of factors, trade will allow price of labour to be higher and price of capital will be lower, compared to the autarky equilibrium.
- Then the ratio of K/L in each industry will be higher. In other words, each worker in each industry has relatively more capital to work with.
- So the worker is more productive, thus productivity and wages rise. The flip side of the rise in wages is the fall in the real return to capital.




Scenario of K-abundant country and full mobility of factors

- Therefore, the country's abundant factor (K) prefers free trade to autarky; and the country's scarce factor (L) prefers autarky to free trade.
- Even though the country as a whole gains from trade, some part of the economy (in this case, the scarce factor) will have an incentive to argue for protection.

Scenario of K-abundant country and **immobility of factors**

- Free trade provides incentive for the production of K-intensive goods to be expanded while the production of L-intensive good will be contracted (due to higher price of K-intensive and lower price of L-intensive after trade).
- Production tends to move along the contract curve (in the edgeworth box).
- But !!! The supply of capital is fixed, hence, the return to capital in X rises with the opening of the country to trade.




Scenario of K-abundant country and **immobility of factors**

- At the same time, demand for K in Y will fall because Y is now imported rather than produced at home.
- Demand for K in Y falls while the supply of K is fixed. So returns to K in Y falls.

Scenario of K-abundant country and **immobility of factors**: implication to income distribution

- The income distribution effects of trade are obviously different from those of the traditional H-O model.
- K in X gains and K in Y loses.
- The scarce factor of production will not be unanimously opposed to moving from autarky to trade. Owners of K in Y will argue against free trade, while those K in X will argue in favour of the free trade.

- This situation may indeed be more realistic than the traditional H-O type of model, especially in the short run, where all of one factor was opposed to trade and all of the other factor favoured it.



Scenario of K-abundant country and **immobility of factors**: implication to income distribution

- Let's look at return to labour (the scarce factor)
- Saying that money wage for labour has risen doesn't mean that real wages has risen.



Concept Check

- Explain how the opening of trade can lead to an increase in money wages in a capital-abundant country if capital is immobile between industries. Does this mean that labour is necessarily better off with trade?

Imperfect Competition

- (I) Monopolist acts as a price setter at home, but becomes a price taker on the world market.
 - Can lead to an increased difference between the domestic price and the world price, not a convergence to a single commodity price.
 - Inhibits product price equalisation and thus FPE.



Imperfect Competition

- (II) Monopolist exercising price discrimination to international trade.