

Problem Set 2: The Specific Factors Model

1. Eurolandia, a small economy, uses a mobile factor (labor) and two specific factors (capital and land) to produce two goods, cars and beens. Holding car prices constant, suppose that the price of beens increases by 20% and wages rise by 10%.
 - a) How does the increase in the price of beens impact the rentals on land, capital and the welfare of labor?
 - b) Summarize your finding in problem 1 using notational format.
2. If, instead of the situation in problem 1, the price of cars would fall:
 - a) Would landowners or capital owners be better off? Explain why or why not.
 - b) How would the fall in the price of cars impact labor?
3. Country Z is considering whether to engage in international trade of potatoes and computers. Suppose that the world price of potatoes is lower than country Z's autarky price but its autarky price of computers is lower than the world price. Assume that land is specific to the production of potatoes and that labor is free to move across sectors. Do you think the landowners will support the move to free trade? Explain.
4. When labor shifts from agriculture to manufacturing, how does the marginal product of capital and land change?
5. In the context of the specific factors model, assume that labor is perfectly mobile across sectors. Can wages differ across sectors? Explain.
6. Fantasyland, a small economy, uses a mobile factor (labor) and two specific factors (capital and land) to produce two goods, motorbikes and corn. Suppose that the world price of motorbikes is higher than the autarky price in Fantasyland, but the world price of corn is lower than the autarky price in Fantasyland. Determine the effect of opening up to trade on the real wage and real returns on capital and land.
7. Suppose that a country engages in free international trade, and as a result some worker types are made worse off. In the context of the specific factors model, what policy options would you consider to compensate the losers from trade?