

Problem Set 3 Specific Factors Model

1. By now you have seen four 2-good models in this course: The Ricardian Model (RM), Heckscher-Ohlin Model (HO), the Extreme Specific Factors Model (XSF), and the (Standard) Specific Factors Model (SFM). Determine the validity of each of the statements below for each of these models. Since answers may depend on whether a country is specialized or diversified, you should assume in all models except RM that in any trading equilibrium the country or countries are diversified (producing two goods) and that any changes are small enough that the pattern of specialization does not change. In RM, assume that countries are producing only one good with trade. Assume also that relative prices with trade are always strictly different from relative prices in autarky.

Autarky vs. Trade:

- a. A country will export the good for which its autarky relative price was lower than the world price, and it will gain by doing so.
- b. In the move from autarky to free trade, a country increases its production of the good it exports.
- c. The real return to some factor of production must rise in the move from autarky to free trade.

Small Open Economy:

- d. If a country's endowments of all factors of production rise by 10%, none of its factor prices will change.
- e. If a country's endowment of labor (including labor in each industry in XSF) rises by 10%, the real wage of labor will fall and the output of any good that was already being produced will increase.
- f. If productivity increases (more output for any given inputs) in one sector only, only the output of that sector will change.
- g. If the world relative price of food rises, the country will increase its relative supply of food.

Two-Country World

- h. If productivity increases (as in part (f)) in the import-competing sector of the Home country, the country will be better off.
- i. If global warming causes a worldwide change in preferences away from cloth and toward food, the relative price of food will rise and relative output of food will increase.