

INTERNATIONAL TRADE (ECON 720a)
Final exam, Fall 2004

Question 1 (25 points)

Consider the Heckscher-Ohlin model with 2 countries, 2 factors and n goods (with $n > 2$).

1. Suppose that both countries overlap in the production of two goods (meaning they both produce those two goods). Does that mean that factor prices are equal across countries?
2. What happens with factor prices in the case in which they only overlap in the production of one good? (No algebra needed; explain intuitions in both cases)

Question 2 (20 points)

Consider Krugman's and Melitz's models of monopolistic competition with one factor of production, CES utility function and two identical countries. Explain how firms' profits change when going from autarky to free trade in each model. Explain what the assumptions that cause those results are. (No algebra needed)

Question 3 (55 points)

Consider a hypothetical communist country that was closed to FDI until switching to a market economy in 2000. You have a panel of domestic firms in different industries with accounting data (sales, value added, stock of capital, labor) for 1999 and 2001 (no data for 2000); you also have data on FDI by industry in 2001 (it was zero in 1999). You want to measure if there are productivity spillovers from FDI to domestic firms by estimating TFP at the firm level.

1. What kind of regression would you run?
2. What are the identification problems that you face?
3. What assumption(s) would allow you to use a fixed effects estimator when estimating TFP?
4. Based on the nature of the data and the estimation method, is it possible to disentangle between technical spillovers and market spillovers?
5. Suppose that you had data for 1999, 2001 and 2003. How would the additional information help? (Other than by increasing the number of observations)
6. Suppose that you also have accounting data for foreign firms during 1999 and 2001. You now want to compare the productivity of domestic firms vs. foreign firms. How would you do that? What selection problem is there? What additional information would you need to solve it? (There can be many answers to this last question, just make up your own data and method).