

Midterm Exam

This is a 60 min exam. There are four equally weighted questions. Please read them carefully and answer each of them. If you have any questions do not hesitate to ask. We will be outside. *Good luck, viel Glück, bonne chance, y mucha suerte !!!*

Question 1: Consider a two-sector economy that trades with the rest of the world.

- a) Suppose this is a “small” country. Analyze how an import tariff affects different groups inside the country. Does the country as a whole benefit or lose from the import tariff?
- b) Assume now that we are dealing with a “large” country. Show how this country can gain by introducing the tariff. Characterize the optimal tariff. Describe what happens as the tariff increases beyond its optimal level.
- c) On the export side, analyze the effects of an export subsidy for a small country. If instead the country is large, do you see the possibility of an optimal export subsidy?

Question 2: We observe considerable migration from Mexico into the United States.

- a) Explain the concepts of absolute and comparative advantage. Does the observed migration imply anything about absolute and/or comparative advantage?
- b) Explain the concept of factor price equalization. Migration for economic reasons is strong evidence against FPE. How could you explain violations of FPE in the Heckscher-Ohlin model?
- c) Use the Neary-bucket to analyze the effects this migration flow has on those who stay in Mexico and on U.S. residents. Who would favor a move from Nafta to a common market?

Question 3: Old vs. new trade.

- a) Explain the difference between inter-sectoral and intra-industry trade. How are both types of trade related to the old and new strand of trade theory?
- b) Actual trade data shows that industrialized countries trade mainly with each other. What does this suggest in terms of the relative explanatory power of either line of trade theory?
- c) In 2000, the U.S. imported 17,149 million USD worth of electrical machinery and apparatus. At the same time, the U.S. exported 14,170 million USD worth of this product category. Define a measure of intra-industry trade, explain the measure, and calculate it for this product category.

Question 4: The gains from trade.

- a) Graphically depict a free trade situation involving two countries and show how both countries gain from trade.
- b) Using the Mussa diagram, derive the Stolper-Samuelson result and the price magnification effect. Explain how this result qualifies your finding in a).
- c) Suppose two countries form a PTA and a third country stays out. Explain the two welfare effects stemming from the formation of this PTA. What do they imply about the total effect of the PTA?