

Prof. Tybout

INTERNATIONAL TRADE (ECONOMICS 507A)
Midterm Exam

February 21, 2002

Please write your student ID number at the top of each page you turn in and number all pages (For example, if you use 6 pages, label them 1 of 6, 2 of 6., and so on.) Do not write your name anywhere on the exam.

You must answer all three questions on this exam. Each will receive equal weight. However, please note that you may choose any 3 of the 4 parts in questions in 2 and 3. Gook luck!

1. **(25 minutes)** The world consists of two trading regions: Europe and the rest of the world. Both regions are able to produce and consume two goods, beef and clothes, using two factors, land and labor. Compared to the rest of the world, Europe is relatively well endowed with labor. Production of beef is relatively intensive in the use of land, compared to production of clothes. All markets are perfectly competitive and there are no distortions. Trade between the countries is free and frictionless. All consumers demand strictly positive amounts of both goods at all finite prices. Answer the following questions:
- What can you say for sure about the pattern of trade and the pattern of production, based on this information alone? That is, who produces, exports, and imports what?
 - Explain, using the integrated world economy, how you would determine whether or not factor price equalization (FPE) occurs in this equilibrium.
 - Suppose that European consumers suddenly become afraid to eat beef. Explain why this will reduce the relative price of beef in Europe and elsewhere if there initially was FPE. If there initially was *not* FPE, could the effects on relative prices be any different?
2. **(25 minutes)** Suppose that a country discovers a costless way to make all of its people 10 percent more productive than they were before. (Perhaps it involves a new vitamin or mass hypnosis.) That is, in any production relationship, any given output can be produced with 10 percent less labor than was needed before. **For any three of the four models described below**, describe the implications of this change for the country's:
- production,
 - trade, and
 - real factor prices

Note: For this question, you need not take the time to provide detailed defenses for your answers. Grades will be based on the changes that you predict.

- A Ricardian 2-good model of a small open economy, completely specialized under free and frictionless trade.
- The Dornbusch-Fischer-Samuelson continuum of goods model with free trade.
- The Heckscher-Ohlin 2-good model of a small open economy that produces both goods but exports the labor-intensive good, under free and frictionless trade.
- The Specific Factors model with labor mobile between sectors and other factors *permanently* dedicated to their current sectors.

3. (25 minutes) For *any three of the following four statements*, indicate whether it is true, false, or uncertain and defend your answer. Grades will be based mainly on your defenses.
- a) To demonstrate the gains from trade, it is necessary to assume that (1) there are no tariffs or transport costs, (2) no trade subsidies, and (3) all consumers supply factor inputs in the same proportions.
 - b) In Ricardian models (e.g., Dornbusch/Fischer/Samuelson and Eaton/Kortum), a country's welfare depends positively upon productivity levels in every other country, but most heavily upon its own productivity.
 - c) Relative to autarky, the gains from trade are commonly estimated to amount to 50 percent of GDP or more.
 - d) If everyone has identical tastes, the extent to which an individual gains from trade liberalization depends only upon the factor mix that the individual supplies.