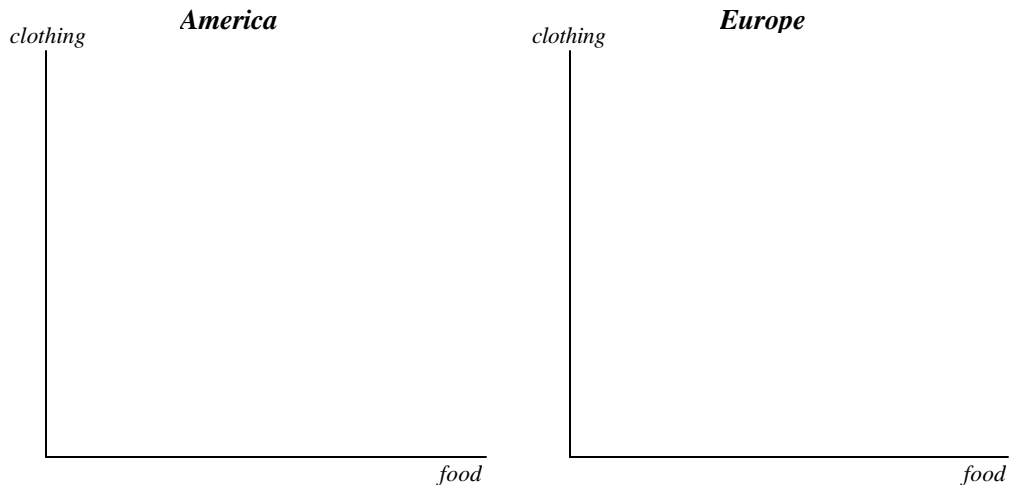


Final Exam
December 21, 2000

Answer all questions on these exam sheets. The three questions are of approximately equal weight. Look ahead and budget your time accordingly.

1. Use the two-country, two-good, Heckscher Ohlin model to find the effects on one country of a change in preferences abroad that shifts away from its exported good. Specifically, assume that there are two countries, American and Europe, both producing food and clothing from land and labor. America is relatively abundantly endowed with land, compared to Europe, and land is used more intensively in production of food than in production of clothing. The change in preferences will be introduced in part (b).
 - a. On the axes below, draw production possibility curves for America and Europe, and then use them to illustrate a free trade equilibrium pattern of production, consumption, and trade for the two countries. In the space below the figures, state briefly which country exports which good, and why.



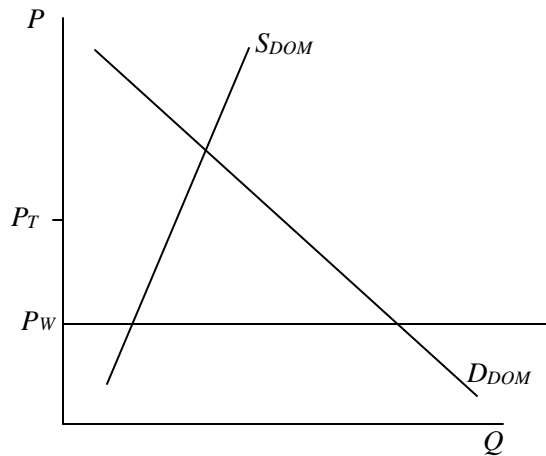
- b. Suppose now that that preferences in Europe shift away from food and toward clothing (so that at any given prices and income, Europe's consumers buy less food and more clothing). You can think of this, if you like, as motivated by concerns about genetically modified food or mad-cow disease, although that is not actually part of the model, and the shift here is away from food regardless of where it has been produced. In the space below, illustrate the determination of world equilibrium prices and how they would be affected by this change in preferences.

- c. How will this change in world prices affect America? Specifically, determine the effects on
- i. Output of food
 - ii. Output of clothing
 - iii. The real wage of labor
 - iv. The real rental price of land
 - v. Overall national welfare

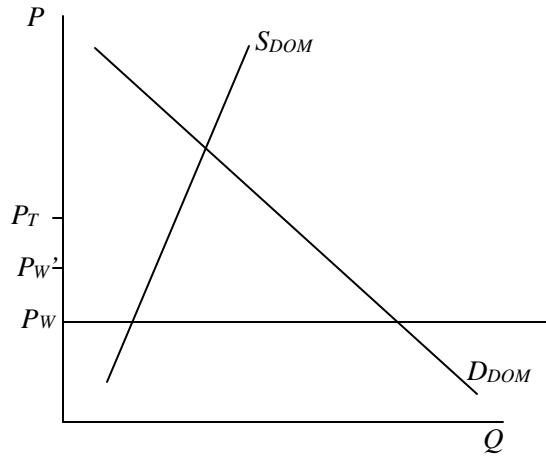
2. The graph below shows domestic supply and demand for a good in a small country that faces a world price for the good of P_W . Also shown is a “target price” of P_T that the country’s government has promised to maintain for its domestic suppliers.

a. Show the effects of using an import tariff to provide this target price to the suppliers. Indicate clearly the size of the tariff needed to do this. Then add any necessary lines and labels to the figure, and use them to state the direction and sizes of effects of this tariff on

- Domestic production
- Domestic consumption
- Quantity of imports
- Tariff revenue
- Producer surplus
- Consumer surplus
- National welfare



- b. Now suppose that the world price, P_w , rises on the world market to P_w' , about half way to P_T as shown below. Starting with the tariff that you had in part (a), assume that the size of the tariff is now changed automatically so as to keep the domestic price at P_T , as it would be under a “variable levy.” What will this increase in world price, accompanied by this automatic change in the tariff, do to the same variables that you examined in part (a)?



- c. Suppose that you now learn that the good you've been analyzing is cigarettes, and that they cause a negative externality whenever they are consumed, lowering the welfare of other consumers nearby. Let the size of that externality, just for convenience, happen to be equal to the difference between the target and initial world prices: $E = P_W - P_T$. How will knowledge of this externality alter your conclusions in part (a)? (For this part, you should ignore the world price increase in part (b)).

3. Write an essay describing the various circumstances under which the rules of the World Trade Organization permit a member to restrict imports. For each of these circumstances, discuss briefly what economic theory says about the desirability and/or optimality of these rules.

(Use this space to continue your answer to question 3.)

(Use this space to continue your answer to question 3.)