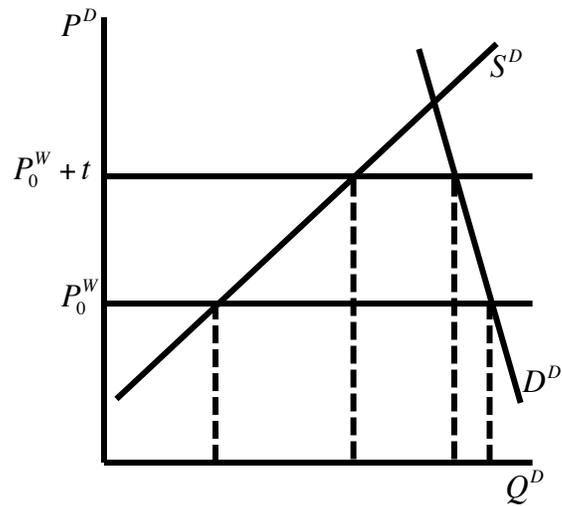


Midterm Exam
October 31, 2013

Answer on these sheets. Use the indicated point values as a guide to how extensively you should answer each question, and budget your time accordingly. Note that the last page of the exam (page 9) is intentionally left blank for you to use if you run out of space to answer any of the questions, although I do not intend that you should need it.

The exam has a total of 60 points.

1. (15 pts.) The graph at the right shows the domestic market in a small country for a good that is imported subject to a specific tariff, t , from a world market where the price is P_0^W .



a. (5 pts.) Add labels to the figure as needed to identify:

i. Quantity of domestic production

ii. Quantity of domestic consumption

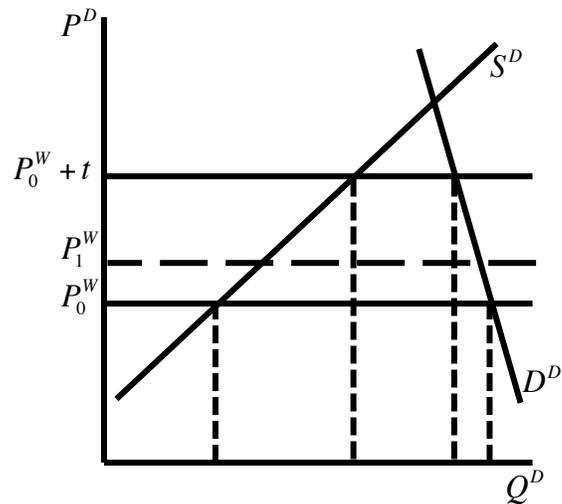
iii. Quantity of imports

iv. Tariff revenue

v. Dead weight loss due to the tariff

b. (2 pts.) Suppose that the tariff in part (a) were doubled in size, to $2t$. State in words what would happen to domestic price, production, consumption, and trade. (Look carefully at the figure before you answer.)

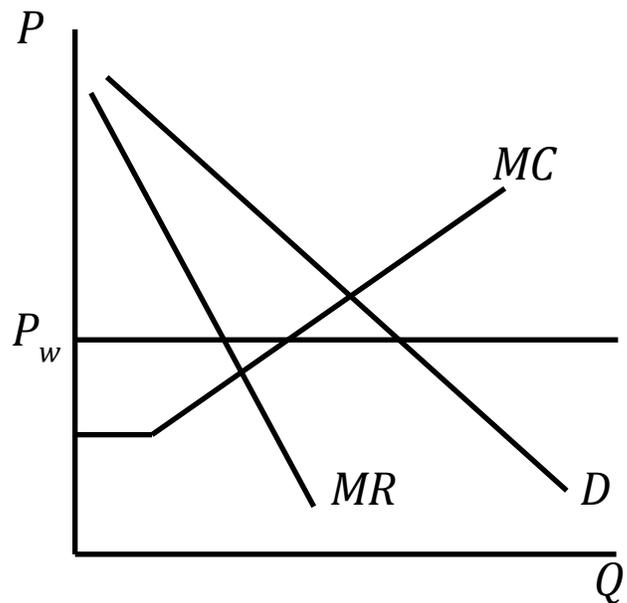
c. (6 pts.) Suppose now, with the tariff back at its level in part (a), that the world price were to rise to P_1^W shown in the figure here. Add any labels that you need to this figure to identify the following changes due to this increase in the world price:



- i. Change in quantity supplied
- ii. Change in quantity demanded
- iii. Change in tariff revenue
- iv. Change in producer surplus
- v. Change in consumer surplus
- vi. Change in dead weight loss due to the tariff

d. (2 pts.) Finally, suppose that we had an import quota instead of a tariff, but that the quota was set at the level of imports that we started with in part (c). And suppose that the quota was allocated to domestic residents. Who now gains, who loses, and who is unaffected by the increase in world price?

6. (8 points) Suppose that a small domestic economy has only a single firm producing a good that can be imported, under free trade, for the fixed price P_w shown. The firm's marginal cost is the upward sloping line shown here. Domestic demand is the downward sloping line, D , and the firm could earn the marginal revenue MR shown if there were no trade at all. Add lines and labels to the figure, as needed, to identify the following:



a. Suppose first that there is free trade. What will be the domestic price of the good, and what will be the quantities of the good produced by the firm, demanded by the domestic market, and imported?

b. Now suppose that the country imposes an import quota, set equal to the quantity of imports that would have come in under free trade. Determine what will be the quantities produced, demanded, and imported, and at what price?

7. (10 points) In the early 2000's, the US levied a safeguards tariff on imports of steel. As it turned out, the tariff was ruled illegal by the WTO, but suppose it had not.
- a. Which of the following would you have expected to be in favor of the tariff, and which opposed, and why? (No need for any formal analysis here; just say in words why these different groups might have the interests for or against a tariff on steel.)
 - i. US producers of coke (an input to producing steel)
 - ii. US producers of cars (for which steel is an input)
 - iii. US producers of aluminum (which is a substitute for steel in some uses)
 - iv. The US labor union of steelworkers
 - v. Foreign steel producers
 - vi. Foreign producers of cars abroad
 - b. By what mechanism might these interests express themselves in efforts to influence US trade policies.

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