SPP/Econ 541 Alan Deardorff
Fall Term 2019 Final Exam
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| Name | | |
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Final Exam December 19, 2019

Answer on these sheets. Note that the last page of the exam (page 10) 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, especially for the types of questions asked on most of this exam.

The exam has a total of 85 points.

1. (12 points) The WTO includes many rules. Some rules say what member countries *must* do, some what they *must not* do, and some rules say things that they *may* (but need not) do, so long as they do them in specified ways. For each of the rules listed below, indicate by circling the correct response which category each belongs to.

| Rule | | | | |
|--|------|-------------|-----|-------------------|
| Reduce tariffs on imports | Must | Must Not | May | Not a WTO rule |
| Raise tariffs on imports | Must | Must Not | May | Not a WTO rule |
| Levy anti-dumping duties against dumped imports | Must | Must Not | May | Not a WTO rule |
| Subsidize exports | Must | Must Not | May | Not a WTO rule |
| Treat imported goods, once inside the country, the same as domestically produced goods | Must | Must Not | May | Not a WTO rule |
| Set tariffs above "bound" levels | Must | Must Not | May | Not a WTO rule |
| Abide by decision of Dispute Settlement Mechanism or suffer retaliation | Must | Must Not | May | Not a WTO rule |
| If levying safeguards a tariff, apply it to imports from all countries | Must | Must Not | May | Not a WTO rule |
| If levying countervailing duty, apply it to imports from all countries | Must | Must Not | May | Not a WTO rule |
| Enact and enforce intellectual property rights | Must | Must Not | May | Not a WTO rule |
| Enact and enforce adequate labor standards | Must | Must Not | May | Not a WTO rule |
| If levying an anti-dumping duty, set it equal to the minimum of the dumping margin and the injury margin | Must | Must Not | May | Not a WTO rule |

- 2. (8 points) Which of the following units of the European Union,
 - A. the European Commission,
 - B. the European Council, and/or
 - C. the European Parliament,

Function

do the following? Answer by inserting one (or more, if two units participate) of the letters "A", "B", and "C" in the blanks to the right of each function:

| Set tariffs on imports | |
|---|--|
| Authorize negotiation of trade agreements | |
| Negotiate trade agreements | |
| Approve trade agreements | |

- 3. (9 points) Use the graph below of domestic supply and demand for a good in a small open economy to calculate the following:
 - a) If the world price is \$3 and the import tariff is 100%,

The domestic price

The quantity of imports

The tariff revenue

b) If the world price is \$8 and the import tariff is \$4.00 per unit

The domestic price

The quantity of the good demanded domestically

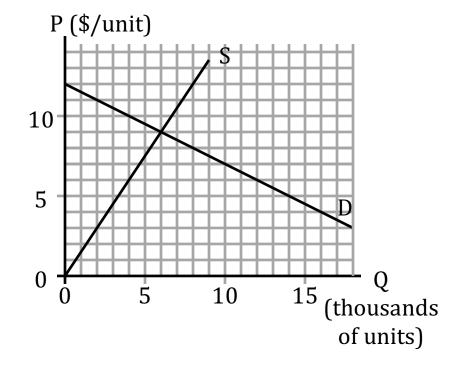
The tariff revenue

c) If the world price is \$12 and the import tariff is \$1.00 per unit

The domestic price

The quantity of the good supplied domestically

The tariff revenue



4. (11 points) The graph below shows domestic supply and demand for a good in a large country. Initially it has free trade and faces a world price of \$4/unit. It then places a 100% tariff on imports of the good, and as a result the world price falls to \$3/unit. Draw into the graph the two equilibria: first with free trade and then with the tariff. Then use the labeled amounts in the graph to calculate the following:

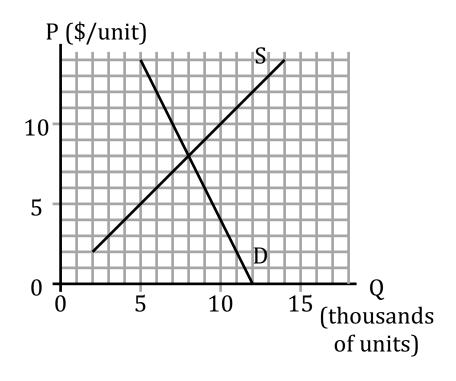
The free trade quantity of imports

The quantity of imports with the tariff

The tariff revenue

The gain (+) or loss (-) to demanders due to the tariff

The gain (+) or loss (-) to the importing country as a whole due to the tariff

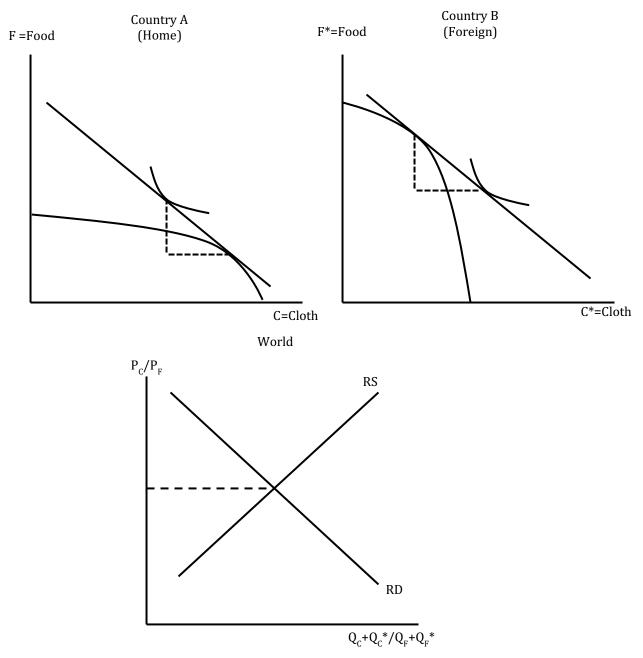


5. (10 points) The table below shows a variation of the payoffs (profits) to US-based Boeing and EU-based Airbus when they produce (P) and do not produce (N) in the export-duopoly game between them that we saw in class but with different numbers:

| | | Airbus | | | |
|--------|---|------------|---|--|--|
| | | P | N | | |
| Boeing | P | -20 -10 | 0 | | |
| | N | 80 | 0 | | |

- a) If initially Boeing is already producing, will Airbus then choose to produce or to not produce?
- b) If the EU now provides Airbus an export subsidy of 15, and if Boeing is still producing, will Airbus then choose to produce or to not produce?
- c) If the EU provides Airbus an export subsidy of 25, and a new equilibrium is reached, what will be the profit or loss of Airbus?
- d) If the EU's export subsidy to Airbus of 25 is now increased to 30, what does this do to the welfare of the EU as a whole, compared to the equilibrium in part (c)?
- e) Why?

6. (9 points) Does a country benefit or lose from growth in the economy of the country with which it trades? To answer this question in the particular case of the Standard Model shown below, draw into the figures what will happen to both countries if the foreign country's ability to produce food becomes larger by some fixed percentage for all possible levels of its output of cloth. Then show what this will do to world relative supply and demand, the equilibrium world relative price, and the welfare of the home country.



In very few words, has the home country been made better or worse off by this change, and why?

7. (9 points) A few years ago, Canada concluded a free trade agreement with the European Union. Assume that this FTA has gone fully into effect; that there is no trade agreement between the EU and the US; and that the only relevant current FTA is NAFTA, which was in existence for many years before the Canada-EU FTA.

Consider the following changes in trade that may have occurred due to the Canada-EU FTA. Each is an example of a phenomenon that we studied. State what that phenomenon is, and say which <u>countries</u> gained and which lost (if any) from them if they occurred? (There's no need to say who gains and loses *within* countries.)

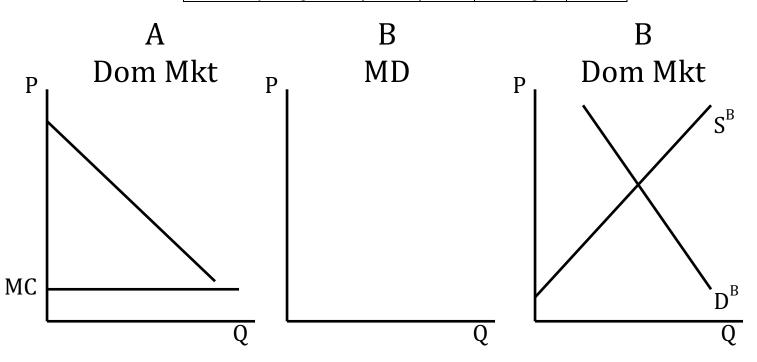
a) Canada imported from the EU products that it previously produced in Canada

b) Canada imported from the EU products that it previously imported from the US

c) Canada imports from the EU products that it currently imports from Japan

- 8. (8 points) The left panel in the diagram below shows domestic demand, D^A , for a good in Country A, where only a single firm produces the good and has the constant marginal cost shown as MC. The only other country in the world is Country B, which has competitive suppliers of the good with supply curve S^B and demand curve D^B . Assume that Country A has a prohibitive tariff on imports of this good, so that its firm can, if it chooses, charge a higher price in Country A than it charges for exports to Country B.
 - a) Construct, in the center panel below, Country B's demand curve for imports from Country A, and label it MD^B .
 - b) Derive in the figures and label as \hat{Q}^A and \hat{Q}^B the profit maximizing quantities for Country A's firm to sell in Country A (in the left panel) and to export to Country B (in the center panel).
 - c) In your answer to part (b), is Country A's firm engaged in dumping? Why or why not?
 - d) Without putting anything further into the figures, indicate by circling the correct answer, using what you learned in class about this model, what will happen to the following if, in response to fear of an anti-dumping duty by Country B, the firm in Country A now changes its behavior so as not to dump.

| i) Price in Country A | Rise | Fall | Unchanged | Unsure |
|----------------------------|------|------|-----------|--------|
| ii) Price in Country B | Rise | Fall | Unchanged | Unsure |
| iii) Country A firm profit | Rise | Fall | Unchanged | Unsure |
| iv) Country B imports | Rise | Fall | Unchanged | Unsure |



9. (9 Points) Using what you know about the trade policy actions of the United States and other countries over the last two years, together with your understanding from this course of the economics of trade policies, write a short essay on who you think have been the winners and losers, in the US and elsewhere, from these trade policies.

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