

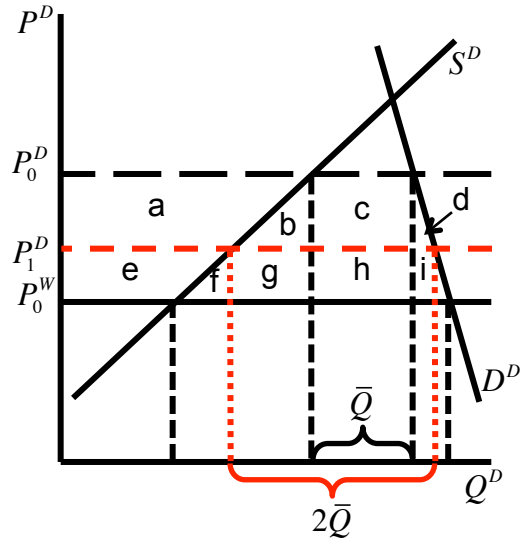
Midterm Exam - *Answers*
November 9, 2015

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 7) 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. (10 pts.) Define any five (5) of the following seven terms. (If you answer more than 5, I will grade only the first 5, so be sure to cross out any answers you don't want me to grade.)
 - a. Bicycle theory: *That the system of international trade law depends upon negotiations moving successfully ahead, or otherwise the system fails and falls to the ground.*
 - b. Balance on Current Account: *Exports minus imports of goods and services plus net inflows of interest, dividends, and other income and net inflows of transfer payments.*
 - c. Voluntary export restraint: *A restriction of a country's exports in a sector that is requested by the importing country and implemented by the exporting country.*
 - d. Ad valorem tariff: *A tax on imports specified as a fraction of its currency value.*
 - e. Tariff equivalent of a quota: *The ad valorem tariff that would have the same effects on price and quantity of imports as the quota.*
 - f. Most favored nation treatment: *Trade policy treatment of imports from one nation as favorably – usually meaning by as low a tariff – as the treatment of imports from all other countries that qualify for MFN (members of the WTO).*
 - g. Column 2 tariffs: *These are the tariff rates that are applied by the United States to imports from countries that do not qualify for MFN treatment, also called normal trading relations. They are the high tariffs left over from the last time that tariffs were increased at the beginning of the Great Depression. Today they are applied only to Cuba and North Korea.*

2. (16 pts) The figure at the right shows the domestic market for a good in a small country, facing a world price of P_0^W and using a quota of size \bar{Q} . Suppose now that the government doubles the size of the quota to $2\bar{Q}$. Add your own lines and labels to the figure as needed to indicate the following:



a. The domestic price in the presence of the initial quota \bar{Q} .

: P_0^D

b. The domestic price in the presence of the new quota $2\bar{Q}$.

: P_1^D

c. The change in producer surplus of domestic suppliers (due to doubling the quota):

: $-a$

d. The change in consumer surplus of domestic demanders (due to doubling the quota):

: $+(a+b+c+d)$

e. The change in quota rents (due to doubling the quota):

: $+(g+i-c)$

f. The change in welfare of the country as whole, due to doubling the quota, if quota rents, before and after, are retained within the country:

: $+(b+d+g+i)$

g. The change in welfare of the country as whole, due to doubling the quota, if quota rents, before and after, go to the foreign country:

: $+(b+c+d)$

3. (4 pts) Of the European Commission, the European Council, and the European Parliament, which do the following:

a. Make trade policy (e.g., set tariffs)?

Ans: Council and Parliament.

b. Authorize negotiation of trade agreements?

Ans: Council.

c. Negotiate trade agreements?

Ans: Commission.

d. Approve trade agreements?

Ans: Council and Parliament.

4. (6 pts) Suppose that foreign producers of imports to our country become more efficient, so that their costs fall. How will

a. the domestic price of the good and

b. the quantity of imports

respond to this fall in foreign costs under each of the policies for restricting imports listed in the table below? Fill in the table with one of the following for each cell:

+ for an increase,

– for a decrease,

0 for no change, or

? for a change that could be either positive or negative.

(Feel free to draw figures to help you find the answers, but you will be graded only on what you insert in the table.)

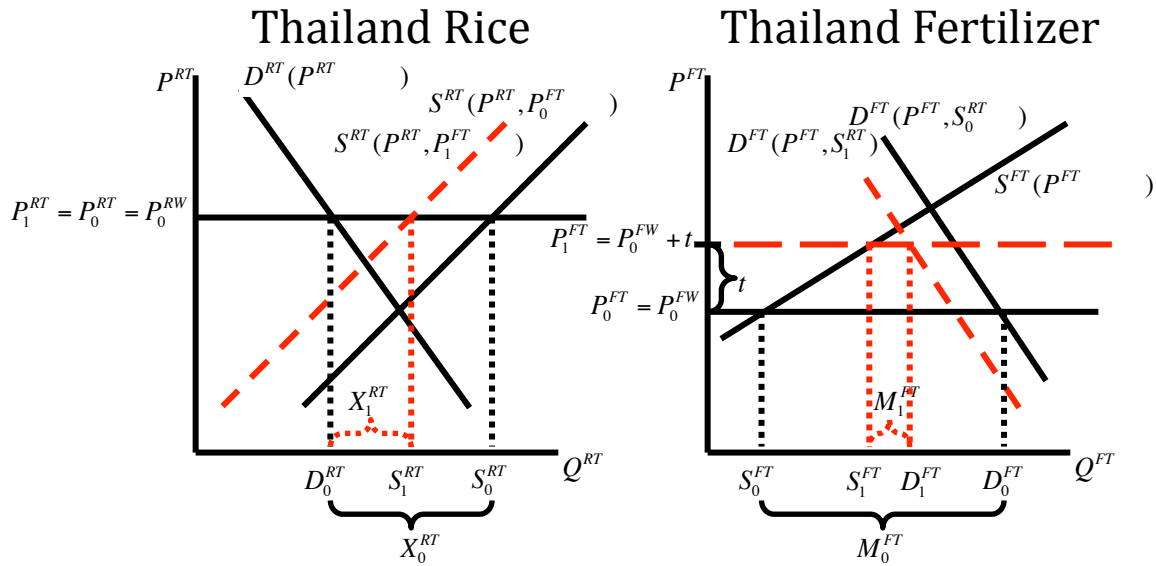
	a. Price	b. Quantity
Tariff	–	+
Quota	0	0
Variable levy	0	0

5. (10 pts) Write a short essay explaining several (at least 5) sources of gain from trade.

Ans: The following are several of the sources of gain from trade that you could mention:

- *Comparative advantage: Countries specialize in the products for which they have relatively low cost of production.*
- *Economies of scale: If average costs fall with output, countries will achieve lower costs by specializing in export sectors where they can expand output.*
- *Competition: Monopoly pricing by imperfectly competitive firms hurts consumers more than it benefits producers. By forcing small numbers of producers to compete with imports, that market power is reduced and the country gains.*
- *Variety: Trade makes a greater variety of goods available to consumers, thereby allowing them to find a better match between the goods that they buy and their particular needs.*
- *Innovation: By expanding markets, trade provides a greater incentive for innovators to develop new products and improved processes.*
- *Technology spillover: By importing from countries with superior technologies, domestic firms can learn those technologies and apply them.*
- *Reduced rent seeking: Trade barriers cause resources to be wasted in unproductive activities intended only to secure a portion of rents created by those barriers. Eliminating the barriers frees up those resources for more productive use.*
- *Sorting of firms: If firms are heterogeneous in their productivities, the opportunity to export will allow the most productive firms to expand, and competition with imports will cause the least productive firms to contract or disappear. Together these changes increase the average level of productivity.*

6. (14 pts) Thailand produces a lot of rice, which it exports, but production of rice requires fertilizer, and Thailand's domestic fertilizer industry initially produces less of it than is needed by the rice industry. Thailand is a small economy, initially with free trade in both products. The initial equilibrium is shown in the graphs below, including the initial quantities of rice demanded D_0^{RT} and supplied S_0^{RT} domestically and the initial quantities of fertilizer supplied S_0^{FT} and demanded D_0^{FT} domestically.



- Supply and demand curves are labeled in the figure, but their arguments have been omitted. Fill those in. That is, on what do each of these supplies and demands depend?
- Show in the figure the effects of a tariff, t , of the size shown on prices of both fertilizer P_1^{FT} and rice P_1^{RT} and on quantities supplied, demanded, and traded of each good, S_1^{FT} , D_1^{FT} , M_1^{FT} , S_1^{RT} , D_1^{RT} , X_1^{RT} .
- Who gains and who loses (no need to say by how much) from the tariff?

Ans: The Thai producers of fertilizer clearly gain, as their price goes up. And even though the demand for fertilizer shifts to the left with the fall in rice output, they still sell more at a higher price than before (even if imports fall to zero). The Thai producers of rice clearly lose, as their costs are higher and the price they get for their output is fixed on the world market. Demanders of rice are unaffected, as they too face the fixed world price. Demanders of fertilizer include the rice producers, who are hurt as stated above, as are any other demanders of fertilizer. The government (or taxpayer), on the other hand, gains from the tariff revenue.

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