International Trade Policy
Midterm Exam Answers
October 29, 2012

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. The exam has a total of 30 points.

1. (5 points) In the space below explain the Most Favored Nation principle. Include in your answer:
   a. What the MFN principle says and what it requires members of the WTO to do;
   b. What exceptions from MFN are permitted by the WTO;
   c. Why it is important for international trade relations and what is the reason for granting some exceptions.

Ans:
   a. Within the WTO, the MFN principle says that a country should treat each other country within the group (other WTO members) as well (i.e., apply on their exports the lowest tariff) as they treat any other members of the group, and therefore should apply the same tariff rate, on a particular imported good, on exports from all other WTO members.

   b. Exceptions:
      ✓ Zero tariffs on essentially all imports from a partner country in a free trade area if the free trade agreement is notified to the WTO.
      ✓ Higher than MFN tariff on a product that has been exported unfairly, either dumped or subsidized.
      ✓ Retaliatory tariffs levied in response to a WTO dispute settlement case when the offending country does not remove its violation of WTO rules. (Safeguards tariffs are generally not allowed to be discriminatory)
      ✓ Special favorable treatment for less developed countries (Generalized System of Preferences).

   c. The principle allows to avoid discrimination in trade policy among WTO members and it helps even countries with low bargaining power (e.g. small and poor countries) to get more favorable market access. The exceptions are granted to allow some flexibility in the system, to accommodate special situations. The exceptions must be allowed for by the WTO.

2. (8 points) Imagine there are two almost identical small open economies, Country Alpha and Country Beta, whose markets for a good are shown below. Each faces the same initial world price
for the good, $P_0^w$, and each is using a trade policy that causes the domestic price initially to be $P_0^D$, with quantities supplied and demanded, $S_0$ and $D_0$. The one difference is that Country Alpha is using a specific tariff, while Country Beta is using a quota, with the import rights of the quota being licensed by the government through an auction, and going to the highest bidder.

### a. How, if at all, do levels of initial welfare in these two countries (of suppliers, demanders, and government) differ, and why?

**Ans:** Initial welfare in the two countries is the same. Suppliers are equally well off in the two countries, as are demanders, since they all face the same prices. Also the welfare of the two governments – that is, their revenues, is the same, areas $c$ and $m$, respectively. Government in Alpha is getting tariff revenue, and government in Beta is getting an equivalent revenue for auctioning quota licenses (the maximum price that will be paid for a license is in fact the difference between $P_0^w$ and $P_0^D$, which is equal to the tariff.

### b. Now suppose that, for both countries, the world price of the good falls from $P_0^w$ to $P_1^w$, and that each country keeps its particular trade policy in place at the same size as before. Show in the two figures above the values after the world price change of domestic price, $P_1^D$, supply, $S_1$, and demand, $D_1$.

**Ans:** See fig. The domestic price in Country Alpha decreases to $P_1^D$, and imports increase, while nothing happens to the domestic price in Country Beta and to the level of its imports, fixed by the quota.
c. Say in words and indicate also in the figures above, as appropriate, how the welfare of each of the constituencies (suppliers, demanders, and government) are affected by this fall in world price.

Ans: In Country Beta, the fixed quota prevents imports from rising at all and so domestic price stays unchanged. Therefore neither suppliers nor demanders are affected at all in terms of quantity produced or consumed (but note that compared with free trade, the welfare cost of the quota in terms of lost surplus has increased). The government was earning revenue $m$ from the quota, and now its gain expands to $m+n$, as it benefits from the lower world price.

In Country Alpha, it is very different. Since the domestic price falls from $P_0^D$ to $P_1^D$, suppliers now lose $-(a+e)$ while demanders gain $(a+b+c+d+e+f+g+h)$. At the same time, the government’s revenue from the tariff changes from $+c$ to $+(i+j+k)$. Since it is a specific tariff, the height of rectangles $c$ and $j$ are the same, as are their widths. So the government gains $(i+k)$. The country as a whole gains $(b+c+d+f+g+h+i+k)$.

d. How would your answers to part (a) have been different if Alpha and Beta had been large countries?

The answers to part (a) would not have been any different. If both countries are large, the welfare effects would still not differ for the two. The two policies, since by assumption they give rise to the same domestic price, would improve their terms of trade to the same extent.
3. (6 points) Georgia is a small country, and its potential trade partners are the EU and Russia. The government of Georgia must decide whether to sign a free trade agreement (FTA) with the EU.

a. Using a partial equilibrium approach showing a representative import market for Georgia, illustrate under which conditions the FTA between Georgia and the EU will be welfare-improving for Georgia, carefully explaining welfare effects in your diagram.

If Georgia is already trading with EU because EU has the lowest price (i.e. it is an efficient supplier), before the agreement the domestic price will be $P_{EU}$ and when signing the trade agreement the domestic price will be reduced to $P_{EU}$. In this case consumers’ surplus will increase, producers’ surplus will decline and the government will have no more tariff revenue, but the net positive benefit for the country will be given by areas $a+c+d+f$ in the figure below. In general, for the country to gain it is necessary that the trade creation effect ($a+c+d+f$) is larger than the trade diversion effect, given by the increase in the price of the imported good at the border after the FTA times the amount of imports. In the graph below, the trade diversion effect is zero, as the price of the imported good at the border remains equal to $P_{EU}$.

![Diagram showing Georgia import market](image)

b. Using the same type of diagram, show under which conditions instead the Georgian government should NOT sign the agreement with the EU, carefully explaining your diagram.
Using exactly the same diagram but inverting the price levels of Russia and EU, it is possible to see that if Georgia signs a FTA with the EU, now there will be trade diversion. In this case, when the same tariff is applied to both countries, Georgia imports from Russia at the price $P_R$ setting the domestic price at $P_t^R$. If it signs an agreement with the EU, it will start to import at the price $P_{EU}$ (higher than the previous border price), with a negative trade diversion effect given by the area $e$ in the figure, and with trade creation given by areas $a+c$. In this case, the negative effect of trade diversion is much larger than the positive effect of trade creation, and therefore the FTA is welfare reducing.

c. (2 points extra credit) Considering now Georgia’s exporting industries, will there be an unambiguous gain in those sectors because of the FTA?

Yes, because Georgia will be able to export more and at a higher price. If Georgia is a small country, its export price without tariff will now be the same as other exporters’ price with the tariff, so producers’ surplus of exporters in Georgia will expand (and in export markets it will expand more than the reduction in Georgian consumers’ surplus).
4. (5 points) “We generally expect to observe higher tariffs in final consumption goods’ sectors and lower tariffs on inputs and intermediate goods sectors”. Discuss this statement using the arguments of political economy of protectionism, explaining which groups will gain and loose because of the tariffs in the different types of sectors, and the possible differences in their lobbying power.

The statement is correct: in most countries we observe lower tariff rates applied to raw materials and intermediate inputs, and higher tariffs applied to final goods. When a tariff is applied to a final good, while the domestic producers of the good will gain, the loss impacts on final consumers. These are numerous, but collectively unorganized, and therefore generally have a weak lobbying power. Furthermore, as for each individual consumer the gain obtained by removing or reducing the tariff is generally small (even if for all consumers together it can be very large), the individual incentive to lobby against tariffs is small. Instead, when a tariff is applied to intermediate goods (e.g. steel), the loss occurs for other downstream industries (e.g. car manufacturers), who will face higher production costs. The individual losses for each company can be high, especially if the downstream industry is concentrated. These industries might find that it is worthwhile to spend money and effort to complain about these losses and will generally use their lobbying power to avoid or limit them, asking and obtaining a reduction or removal of the tariff on intermediate goods.
5. (6 points) State whether the following three statements are True or False and provide a short analysis to justify your answer (no motivation for the answer, no points).

   a. A tariff cannot make a country better off.

   Ans: False. If a country is large enough to matter for the world price of the good on which it levies the tariff, then the world price will fall and the country may gain thanks to an improvement in its terms of trade (using the market for a country’s imports, its large size means that it faces an upward sloping supply of imports from abroad, allowing to see that the tariff will give rise to a reduction in the world price).

   ![Diagram of supply and demand with imports](image)

   b. A prohibitive tariff (a tariff that stops imports completely) cannot make a country better off.

   Ans.: True. While it is true that a prohibitive tariff if levied by a large country will change world prices in what would have been its favor if it traded – thus by definition an improvement in it terms of trade – since it does not buy or sell anything at these improved prices, it does not gain from it at all. There will be only a deadweight loss. In the diagram above, the price will increase above the vertical intersection of the demand curve, and there will be no exchange in the imports market, and no price paid to foreigners.

   c. A production subsidy can be used more efficiently in place of a tariff to increase production in an industry of a small open economy.

   Ans.: True, because in this case it is possible to increase production without lowering consumption, so reducing the deadweight loss.