Questions for PubPol/Econ 541
September 11-13

Tariffs and Quotas

KOM, Ch. 9, pp. 215-226:

- What is the difference between a specific tariff and an ad valorem tariff, both in terms of their definitions and their implications for trade? **<a: Specific is units of currency per unit of the good, while ad valorem is a percent of price. At a given time, they are equivalent, but as prices change, the amount collected by a specific tariff will not change, while that collected by an ad valorem tariff will change, and therefore the changes in trade will be different as well.>**
- An import demand curve is sometimes called a "derived demand curve." Why? **<a: For a homogeneous product, it is derived from domestic demand minus domestic supply.>**
- What is an "effective rate of protection"? How and why does it differ from the nominal rate of protection? **<a: ERP is the protection of value added, and takes account of the protective (or really anti-protective) effect of any tariffs on input. Nominal protection is just the tariff on output.>**
- Can you explain in words the meaning of Consumer Surplus? Or the Change in Consumer Surplus? **<a:>**
- If the price of a good falls, why is the benefit to demanders not equal to the fall in the amount that they pay for it? Is it larger than this or smaller? **<a: It is larger than the fall in the amount that they pay for the initial quantity, and that is because they are now able to buy for the lower price units that they previously did not, but which are worth more to them than the new lower price.>**
- If the price of a good rises, why is the benefit to suppliers not equal to the rise in the amount they are paid for it? Is it larger than this or smaller? **<a: Again, it is larger than the extra revenue that they get for the initial quantity, because they now can sell additional units on which they make a profit as well.>**
- How is the area to the left of an import demand curve between two prices related to the changes in consumer and producer surplus in the domestic market? Same question for an export supply curve? **<a: For the import demand curve, it is the change in consumer surplus minus the change in producer surplus. Just the reverse for the export supply curve.>**
- In what sense does a small country gain by eliminating a tariff? Does anybody in the country lose? If so, then how can we say that the country gains? **<a: It gains because demanders benefits more than suppliers lose, and therefore gain enough to be able to compensate the losers.>**
- Explain the sources of the "production distortion loss" and the "consumption distortion loss." Why does each occur, and who is it that loses in each case? **<a: Production distortion loss is due to producing units of a good that cost more than they are worth, in the sense that the same could have been bought for less from the world market. Consumption distortion loss is due to consuming units of a good that are worth less to consumers than the price they could**

have been purchases for as imports. Both losses are borne by consumers, however, as part of the larger loss of consumer surplus. These are the portions of that loss that are not offset by gains to producers or government.>

- In what sense might a large country gain by using a tariff? Who in the country benefits from that gain? **<a: It gains to the extent that it pushes down the world price, so that the country improves its terms of trade. That gain shows up as a portions of the government's tariff revenue that is not itself offset by loss of consumers.>**

Deardorff, "Nontariff Barriers and Domestic Regulation," 1999, pp. 1-12.

- What reasons are there, if any, for a large country not to levy a tariff? **<a: It harms other countries, and that might hurt the country's diplomatic relations with them. In addition, they may retaliate with tariffs of their own on the large country's exports.>**
- In what ways might import quotas be administered, and what happens to the quota rents in each case? **<a: The imports can be licensed, with the licenses either sold (perhaps at auction to the highest bidder) or given away to favored firms or people. If sold, the rents accrue to the government. If given away, they accrue to the recipient.>**
- In what ways is an import quota equivalent to a tariff? In what ways is it not equivalent? **<a: It is equivalent, if markets are perfectly competitive, in that it raises domestic price and reduces quantity of imports, having therefore all the same welfare effects on suppliers and demanders. It is not equivalent, however, unless the licenses are sold, in that the government gets no revenue and somebody else gets rents. Another difference is in the effects of changes that shift supply and/or demand, which will leave quantity unchanged with a quota and change its tariff equivalent.>**
- The figure on p. 2 shows the tariff causing the world price to fall, which should only be true if the tariff-levying country is large. What in the figure tells you that the country is large? **<a: That it faces an upward sloping supply curve for its imports. If it were small, that curve would be horizontal.>**
- If a country is large, will it gain from applying a tariff that reduces imports to zero (a "prohibitive tariff")? Why, or why not? **<a: No, it will not. A large country gains from a tariff only by being able to buy cheaper imports. If it does not buy any, then there is no gain.>**
- If you were a domestic supplier competing with imports and had been promised a certain level of tariff, say 10%, would you rather learn that your country is small or that it is large? **<a: Better for the supplier if the country is small, since then the domestic price rises by the full amount of the tariff.>**
- In the presence of a fixed and binding import quota, how will the domestic price and the tariff-equivalent of the quota change if the demand curve for imports shifts to the right? How will these change if the supply curve for imports shifts to the right? What if the supply curve on the domestic market shifts right? **<a: If the demand curve for imports shifts right, domestic price and the tariff equivalent will both rise. If the supply curve for imports shifts right,**

domestic price won't change and the tariff equivalent rises. If the domestic supply shifts right, that causes the import demand curve to shift left, so price and tariff equivalent fall.>

Lahart, Justin, "The Imperfect Science of How Much Tariffs Will Hurt," *Wall Street Journal*, July 6, 2018.

- What do models say that Trump's tariffs so far will do to US GDP? **<a: Reduce it by 0.1%.>**
- How do the estimates change if Trump's threatened tariffs are included? And if foreign retaliation is included? **<a: Rase the loss from 0.1% to 0.5%. And with retaliation, rise further to 1.3%.>**
- Are these changes big? **<a: They may not look big, but the article says that the 1.3% number "is a big bite out of the 2.4% growth economists expect next year.">**
- Why is this an underestimate? **<a: Because there are so many things that the models don't include. Examples are stock prices, investor and consumer confidence, and supply chains.>**

Martin, Eric, "US Importers Bore Cost of Trump's China Goods Tariffs, ITC Says", *Supply Lines*, Bloomberg, March 16, 2023.

- By how much did prices of items subject to tariffs rise? **<a: Almost one-to-one with the tariffs.>**
- How much did this mean for individual items? **<a: As much as 25%.>**
- How much did imports decline from China? **<a: 13%.>**
- How has USTR under Biden responded? **<a: They began a review and called for public input, which produced "hundreds of requests for the tariffs to continue," so they've kept the tariffs in place during the review.>**

Optional to Read:

Deardorff, "Analysis of Tariffs and Quotas," 2020.

- What seem to be the most important assumptions made for this analysis? **<a: Perfect competition, homogeneous product, markets in equilibrium.>**
- Is it possible, in this analysis under these assumptions, for a tariff to raise the welfare of a small country? Would that be possible for a large country? **<a: No, and yes.>**
- Can a tariff ever be beneficial to domestic demanders, or harmful to domestic suppliers? **<a: That's the same as asking whether a tariff can ever cause the domestic price of the good to fall. In the small country case, the answer is no. In the two-country case, it might seem possible for that to happen, if the world price is driven down by more than the tariff. But from equation (118) the answer is no. The reason is that if the domestic price were to fall, then the country would supply less and demand more, increasing its demand for imports, and that could not be met by foreign supply of exports, since the world price would fall. Note however that this assumes the normal shapes**

for supply (upward sloping) and demand (downward sloping) curves, both at home and abroad.>

- Can an import quota ever <u>not</u> be harmful to the importing country? **<a: Yes, if it is set at a quantity of imports greater than would come in under free trade. Then, under perfect competition, it has no effect.>**