

Econ 355 - International Trade

2014-15

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Problem Set 5

Due Mon, Mar 30, 2015

by 1pm either on Connect or in class

1 Tariffs and subsidies

In a small country the market for cheese is described by the following demand and supply equations:

$$Q^D = 210 - 2p$$

$$Q^S = p$$

1. What is the autarky price for cheese, p^A , in this country?
2. Imagine the price of cheese on the international market is $p^W = 30$. At this price how much would the country produce, how much would it demand and how much would it import?
3. Imagine the country imposes a tariff $t = 5$. What is the change in consumer surplus, producer surplus and tariff revenues associated with this tariff? Represent all changes in a graph.
4. Imagine the country instead offers a production subsidy to producers of cheese. The subsidy is $s = 5$ per cheese unit. What is the change in consumer surplus, producer surplus and government expenditure associated with the subsidy? Represent all changes in a graph.
5. What can you conclude about the efficiency of the two alternative instruments? Explain.

2 Import tariffs in a large country

Consider a world composed of two large countries: Home and Foreign. Imagine the demand and supply of cars in Home are, respectively:

$$D = 40 - p \text{ and } Q = p - 1$$

In the Foreign country demand and supply are (the star denotes Foreign):

$$D^* = 20 - p \text{ and } Q^* = p - 1$$

1. What is the free trade price of cars in this world, p_{FT} ? How many cars does Home import?
2. Now imagine that Home imposes a tariff $t = 2$ on imports from Foreign. What is the impact on the world price of cars (call it p_T)? What is the price paid by Home customers for a car? (If you cannot calculate the new world price, explain whether it is higher or lower than the free trade price). How many cars does Home import?
3. In a graph with Home demand and Home supply show the net change in welfare associated with the tariff.
4. Calculate numerically the total change in welfare for Home compared to free trade (notice that I am not asking you to calculate total welfare before and after, I just ask for the change). Is Home better off or worse off? Explain why.
5. EXTRA CREDIT: Is the tariff $t = 2$ the optimal tariff? In other words could Home achieve higher welfare by charging a different tariff?

3 Short question: anti-dumping in Canada

How many anti-dumping duties are currently active in Canada? What is the most protected category of goods? What is the most common “target” country for Canadian anti-dumping provisions?

4 True/False/Uncertain

Indicate whether the following statement is true/false/uncertain and BRIEFLY explain why (use max two sentences)

1. According to the Most Favorite Nation article alone, NAFTA should not be allowed.

2. According to the Heckscher-Ohlin model, trade between China and the US could explain why the skill premium has been rising in both countries.
3. The increase in the skill premium started well before the recent rise in trade with developing countries.
4. Since exporting firms are more skill intensive, the Melitz model can partially explain why trade may increase the skill premium.