International Trade Problem Set #6
Commercial Policy

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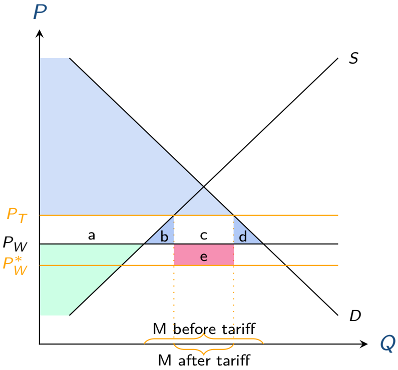
Exercise 1

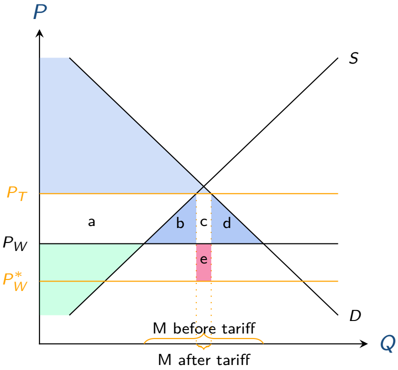
If a large open economy can improve its terms of trade by levying a tariff, why is it not always better to keep levying higher and higher tariffs to obtain ever better terms of trade?



- The tariff will increase the price for solar panels in the home country. There will be less demand and more supply.
- The world demand has significantly decreased which lowers the world price for solar panels.
- The consumer surplus decreases by **a,b,c** and **d**
- The producer surplus increases by **a**
- Total tariff that the government receives is equal to **c** and **e**
- In this case **e**>**b+d**

Exercise 1

Suppose we would further increase the tariff...



- The extra tariff will increase the effect on demand and supply.
- The world demand has decreased even more which further lowers the world price for solar panels.
- The consumer surplus decreases by **a,b,c** and **d**
- The producer surplus increases by **a**
- Total tariff that the government receives is equal to **c** and **e**
- In this case **e**$<$**b**+**d**

Exercise 2

Suppose a country is an exporter of solar panels. The government wants to increase solar panel exports and pays a subsidy on solar panel exports. That is, if firms export solar panels they receive an additional subsidy from the government, so that the price they receive for the exports is higher than the world price of solar panels.

a) Show the effect of an export subsidy on consumer surplus, producer surplus, government revenue, and total welfare (assuming the country introducing the subsidy is a small player in the world market for solar panels).

Exercise 2

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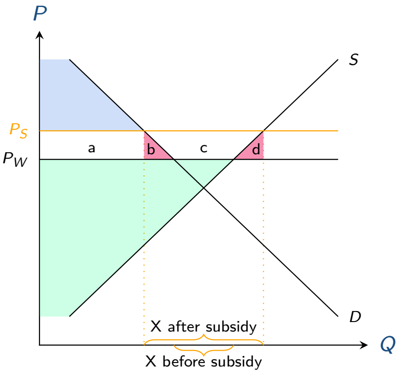
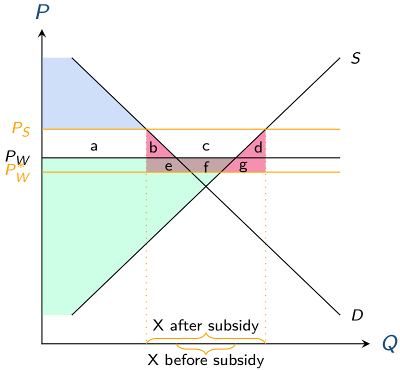


- The subsidy will increase the price for solar panels in the home country. Therefore less will be demanded, and more will be supplied, which the firms sell on the foreign market.
- The consumer surplus decreases by **a** and **b**
- The producer surplus increases by **a,b** and **c**
- Total subsidy that is paid amounts to **b,c** and **d**
- Total welfare loss equals **b** and **d**

Exercise 2

b) Do the same analysis as in a), but now suppose the country introducing the subsidy is a large player in the market for solar panels. Compare the welfare losses or gains to your answer in a).



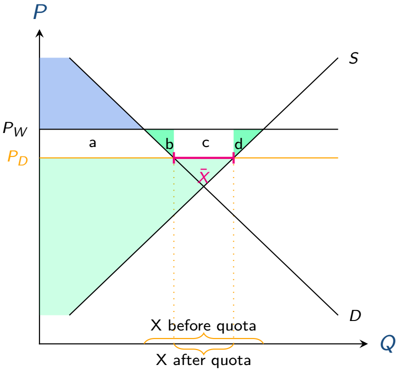
- The subsidy will increase the price for solar panels in the home country. As in a) there is more supply and less demand.
- The world supply has significantly increased which lowers the world price for solar panels.
- The consumer surplus decreases by **a** and **b**
- The producer surplus increases by **a,b** and **c**
- Total subsidy that is paid amounts to **b,c,d,e,f** and **g**
- Total welfare loss equals **b,d,e,f** and **g**

Exercise 3

Suppose a country is an exporter of wheat. The government wants to keep the domestic price for wheat below the world price. Show that this can be achieved with an export quota, i.e. a system in which the government limits the total amounts of exports of wheat. Suppose that the firms who are allowed to export can keep all the export revenue. Show the effects of such an export quota on producer surplus, consumer surplus and on total welfare.

Exercise 3

The effect of an export quota on consumer surplus, producer surplus and total welfare.



- Government introduces a cap on the maximum quantity of exports.
- Firms lower the price to sell more in the domestic market.
- The consumer surplus increases by **a**.
- The producer surplus decreases by **a,b** and **d**
- Producers generate surplus with exports equal to **c**.
- Total welfare loss equals **b** and **d**