1 Ricardian model

1.1

Home $Oc_{w,c}$ $\frac{5}{5} \to 1$

Foreign $Oc_{w,c}$ $\frac{5}{2} \to 2,5$

Opportunity cost is defined as $\frac{\alpha LW}{\alpha LC}$

Since Foreign opportunity cost of producing wine is bigger than home, home will have comparative advantage in producing wine.

1.2

$$1000 \geq 5\alpha_{LW} + 5\alpha_{LC}$$

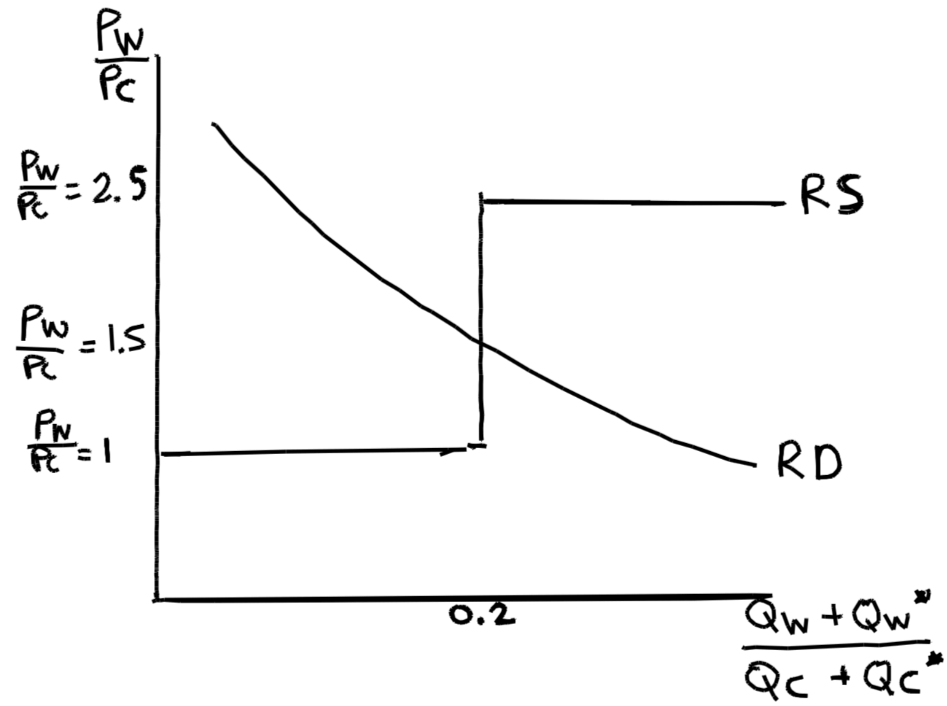
Therefor PPF will have the following expression $Q_W = 200 - Q_C$

1.3 The absolute value of the slope (in this example -1) is the relative prices of wine in terms of cloth. Meaning that these goods are traded/produced one for one.

In Autarky equilibrium, the opportunity cost will equal relative prices so the country will produce both good for themselves.

$$\frac{\alpha_{LW}}{\alpha_{LC}} = \frac{P_W}{P_C}$$

1.4



Home will be fully specialized in the production of wine and foreign in the production of cloth since;

$$\frac{\alpha_{LW}}{\alpha_{LC}} < \frac{P_W}{P_C} < \frac{\alpha_{LW}^*}{\alpha_{LC}^*}$$

2 Hechsher-Ohlin model

2.1 B
2.2 C
2.3 A
2.4 A

3 Trade policy instruments

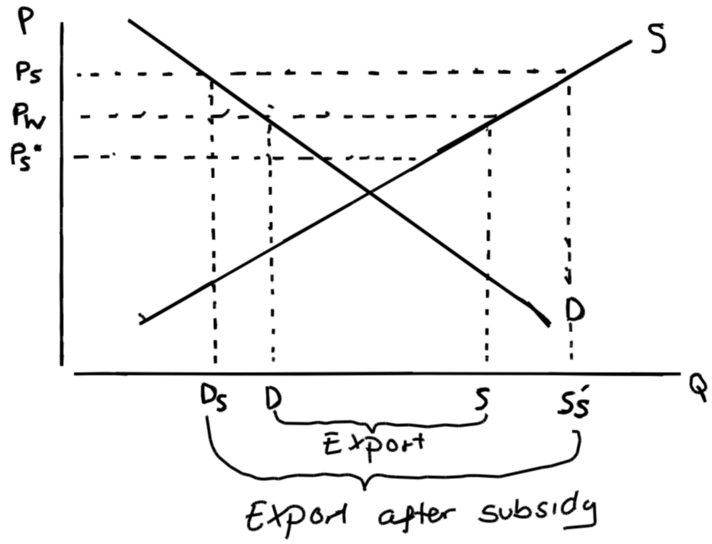
3.1

Domestic: The price of tulips increased after the government introduced the subsidy to producers exporting tulips. See the following expression.

$$P_S = P_S^* + S$$

World: The price of tulips decreased with the subsidy (the subsidy allowing additional producers to compete on the world market pushing prices down)

3.2



3.3

$$\text{Terms of trade} : \frac{\text{Price of exported good}}{\text{Price of imported good}}$$

Since we know that the price of the exported decreased with the subsidy and **assuming the price of the imported good is constant** our terms of trade was improved by the subsidy.

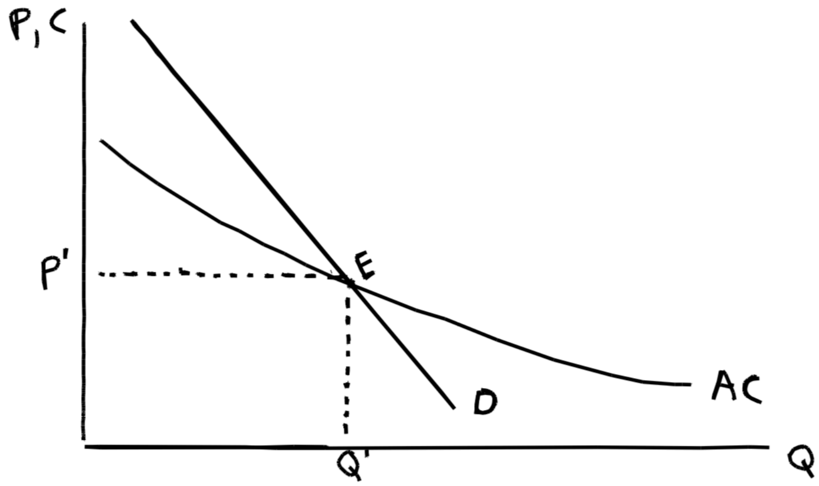
3.4 The government is now paying producers to export. The domestic price went up and consumer surplus decreased (the area under the demand curve until you reach the price). However producer surplus increased (the area above supply curve until you reach the price). The overall net effect will be negative of introducing the subsidy.

4 External economies of scale

4.1: external economies of scale means that the average cost depends on the size of the industry (number of firms). Which in turn means that the economy will be experiencing increasing returns to scale. When the industry expands the AC cost will decrease. This happens due to labor market pooling, specialized suppliers and knowledge spillovers making all firms more productive.

Q

4.2

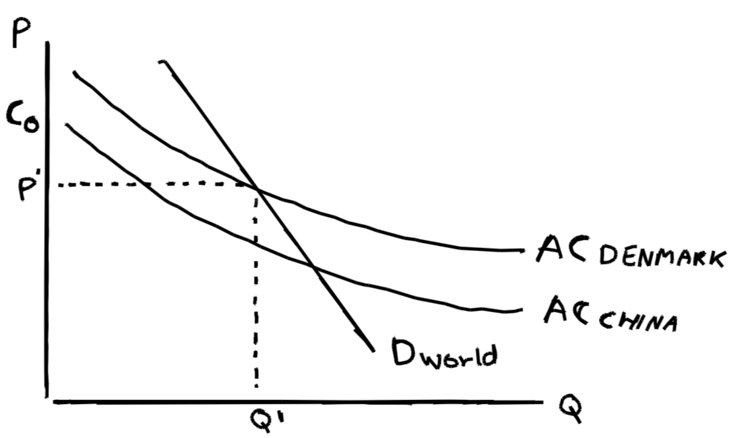


The y axe shows both price and costs. Point E for equilibrium.

4.3 When an industry is experiencing external economies of scale then equilibrium is defined by P=AC. When AC falls due to an increased industry (number of firms) it will be attractive for firms to move into that industry because costs will be lower hence pushing the price down until it reaches AC

and it is no longer profitable for firms to enter that industry. There for industries with external economies of scale have perfect competition hence profit=0.

4.4



Denmark originally started producing a good and since the industry grew average cost decreased. Now China wants to start producing that good and they could even do it cheaper BUT since Denmark is already producing Q1 at a price of P1 China can never start producing that good because C0>P1. (C0 would be the start cost of producing that given product). So China will simply not be able to compete with the lower price offered by Denmark and hence never start production.

5 Internal economies of scale

5.1

$$CC = \frac{N \cdot F}{S} + c$$

$$CC = \frac{750{,}000{,}000 \times N}{900{,}000} + 5000$$

5.2 The CC curves describes the relationship between n (number of firms) and the average costs. When the number of firms increase, the market share the individual firm can obtain decreases. This lower output per firm means that the fixed costs would have to be divided out on a smaller number of units and AC will therefor increase as the number of firms increase. CC is upward-sloping.

5.3

To find number of firms we do the following

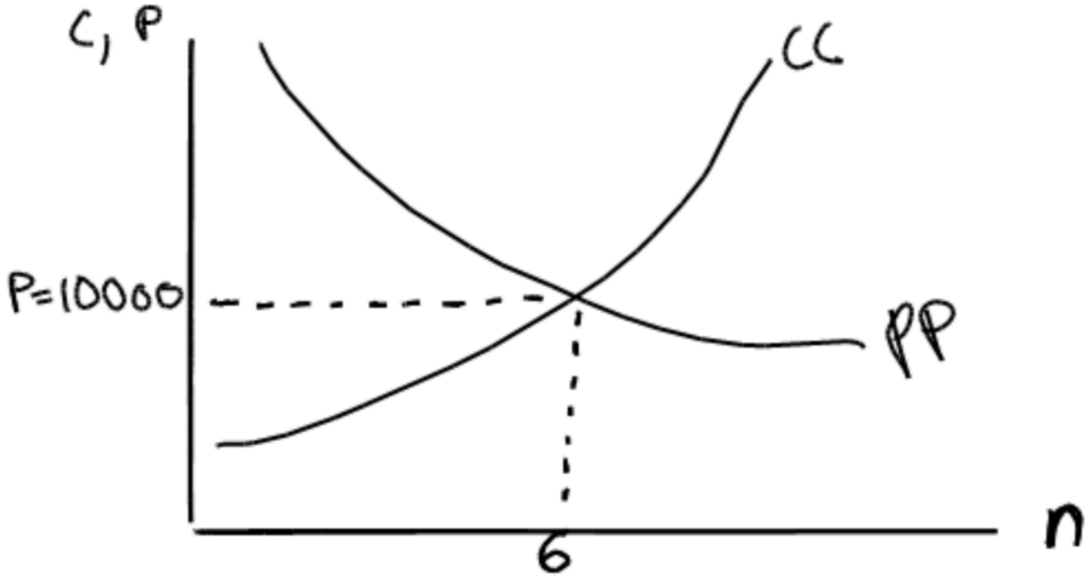
I assume $b = \frac{1}{30{,}000}$ from PP curve.

$$N = \sqrt{\frac{S}{bF}}$$

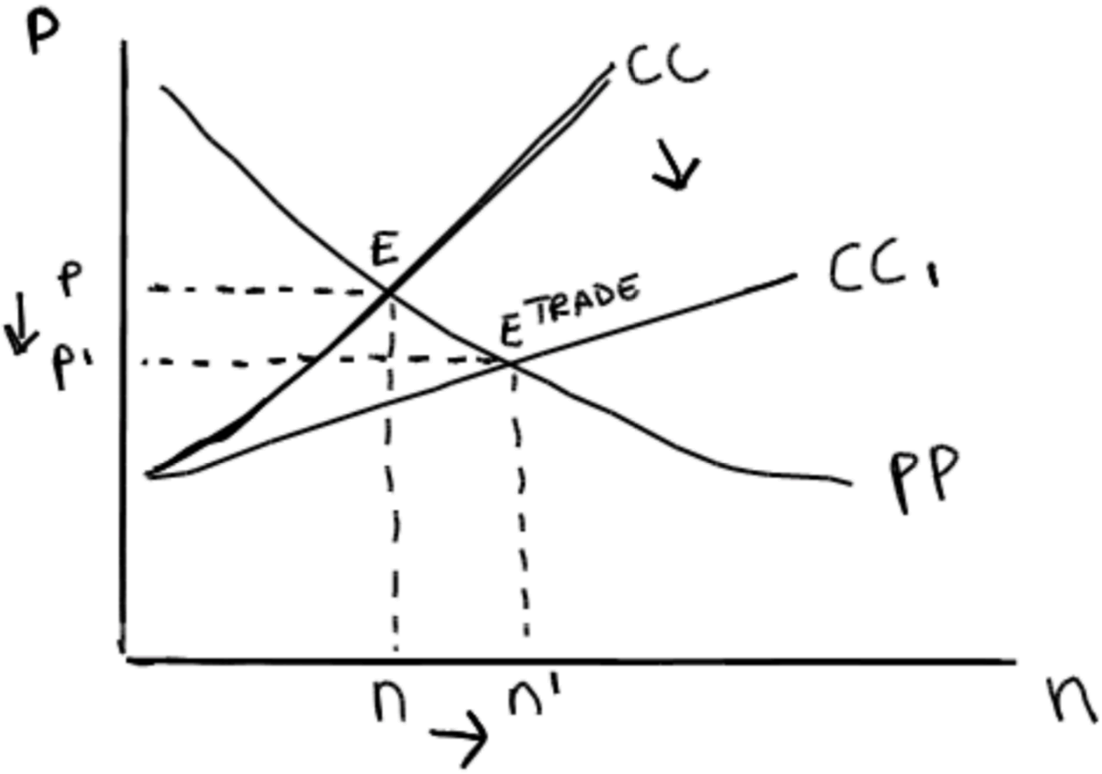
$$N = \sqrt{\frac{900{,}000}{\frac{1}{30{,}000} \times 750{,}000{,}000}} = \underline{\underline{6}}$$

To find P we simply plug in N=6 into PP

$$P = 5000 \frac{30000}{6} = \underline{\underline{10{,}000}}$$



5.4



When opening up for trade the market “s” is now bigger → and allow for more firms to try their luck in the beer industry → we see on the graph n increased → when n increased competition also increased pushing prices down which we also an se from the graph.

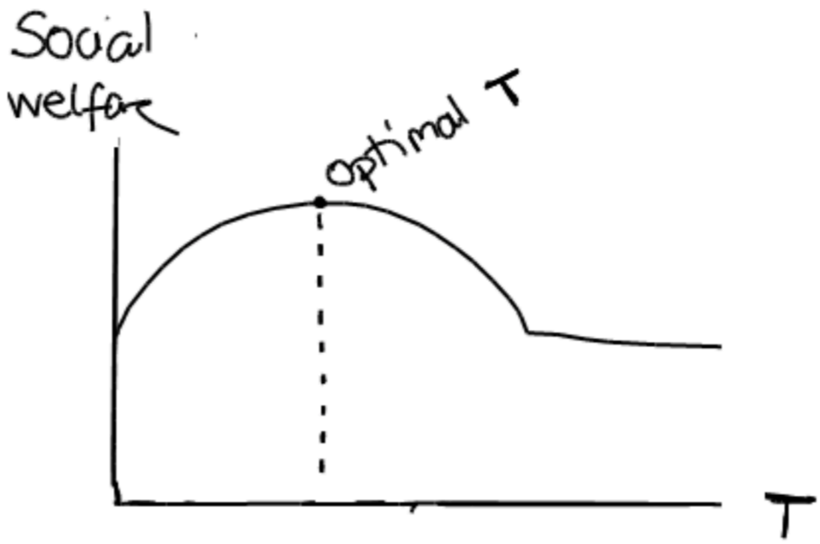
The price would decrease and the number of firms would increase but now that make size is bigger

6 Political economy of trade policy

6.1 – Since Canada is a small country in the sugar market the effect of tariff would be that the world price would not change and the price of sugar in Canada would increase by the whole tariff. So consumers in Canada would be faced with higher prices, demand for sugar would decrease.

Government earns a revenue from the tariff. Consumer surplus would decrease and producer surplus would increase. Nonetheless the social welfare would decrease.

6.2 - If Canada where a large country in the sugar market the tariff could affect world prices and hence the tariff would only increase domestic price by some of T it is possible that the team of economists could find the optimal T (See graph below) and increase welfare.



6.3 If Canada were to introduce a quota instead of a tariff, the government were to lose the revenue from the tariff and instead other countries would be rent-seeking to get the quota. Therefor the economy is at least as bad of when introducing a quota instead of a tariff. Since the government lost the revenue social welfare would decline (assuming the government does something at advantage for the broader public with the revenue from the tariff).

6.4 When the Canadian government imposes a protective policy for the sugar market the effect on the individual consumer is so little that no individual would “put up the fight” to stop the policy. So what hurts many combined but only influence my purchases by a little I will not do anything about. (This is the theory of collective action). However, the producers facing increased international competition and high costs (I assume, Canada is not the most productive place to grow sugar) are often organized and through lobbying they try to influence the politicians (by giving them money to their campaigns) in return they “expect” protective policies helping them compete in their industry.