

Exercise 1

1. You are considering the number of hamburgers that you plan to order. Based on the following table, complete the table and answer the following questions.
 - a. How many units of hamburgers should you order? Why?
 - b. Suppose you decide to order 2 hamburgers. Is this underallocation or overallocation? Explain.
How much is your deadweight loss?
 - c. Suppose you decide to order 5 hamburgers. Is this underallocation or overallocation? Explain.
How much is your deadweight loss?

Quantity	Total Benefit	Marginal Benefit	Total Cost	Marginal Cost	Total Net Benefit
1 st		80		20	
2 nd		60		20	
3 rd		40		20	
4 th		20		20	
5 th		0		20	

2. With diagrams, explain the differences between tariff and quota. Also, explain the impact on domestic stakeholders (consumers, producers, and government), i.e., who is better off and who is worse off? Why?
3. Consider an exporting country. Analyze welfare effect on all stakeholders when its government impose “Export Tax”, i.e., per-unit tax imposed on the exported good. Draw a diagram(s) and provide complete analysis on who gain(s) and who lose(s).
4. A “small”, open economy is engaging in international trade. Its domestic demand curve is given by $P = 100 - Q$ and its domestic supply curve is given by $P = Q$. The world price of the good is 20\$. Answer the following questions.
 - a. What does it mean for a country to be “small”? What implication of being “small” has on the world supply curve?
 - b. Is this economy either an exporting or important country? Why? How many units of the goods is the country is currently importing or exporting?
 - c. Now suppose the government decides to intervene. If the country is importing, the government will impose import tariff of 10\$ per unit. If the country is exporting, the government will impose export subsidy of 10\$ per unit. Calculate
 - i. Domestic consumer and producer surplus after the intervention
 - ii. Either subsidy cost or tariff revenue
 - iii. Deadweight loss from the intervention.

Exercise 1

78-7c

1. You are considering the number of hamburgers that you plan to order. Based on the following table, complete the table and answer the following questions.

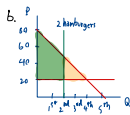
Quantity	Total Benefit	Marginal Benefit	Total Cost	Marginal Cost	Total Net Benefit
1 st	90	80	20	20	40
2 nd	140	60	40	20	100
3 rd	180	40	60	20	120
4 th	200	20	80	20	120
5 th	210	0	100	20	110

a. How many units of hamburgers should you order? Why?

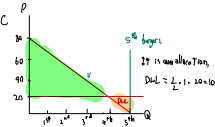
b. Suppose you decide to order 2 hamburgers. Is this underallocation or overallocation? Explain. How much is your deadweight loss?

c. Suppose you decide to order 5 hamburgers. Is this underallocation or overallocation? Explain. How much is your deadweight loss?

d. 4 units because marginal benefit should be greater than or equal to marginal cost.

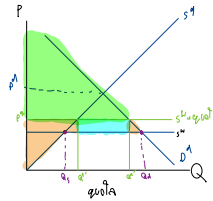
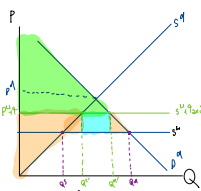
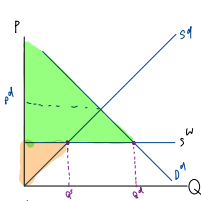


IT is underallocation, and $DWL = \frac{1}{2} \times (80-40) \times 2$
 $DWL = 40$



IT is overallocation, and $DWL = \frac{1}{2} \times (20-0) \times 1$
 $DWL = 10$

2. With diagrams, explain the differences between tariff and quota. Also, explain the impact on domestic stakeholders (consumers, producers, and government), i.e., who is better off and who is worse off? Why?

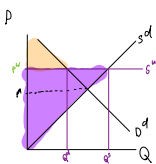


When we add tariff in to mkt, it'll shift S^u upward because world producers produce more, while we add quota in to mkt, it will shift domestic price down to quota price.

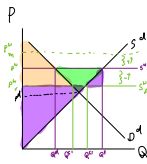
but still higher than world price, then shift domestic supply to S^d quota. Both of these things are increase in producer surplus and decrease consumer surplus. Moreover, these create

DWL, but there revenue is similar to each other. Tariff earned by govt and quota earned by license holders. On the other hand the group of people who is worse off is someone who faces higher cost.

3. Consider an exporting country. Analyze welfare effect on all stakeholders when its government impose "Export Tax", i.e., per-unit tax imposed on the exported good. Draw a diagram(s) and provide complete analysis on who gain(s) and who lose(s).



"Export Tax": exporting country

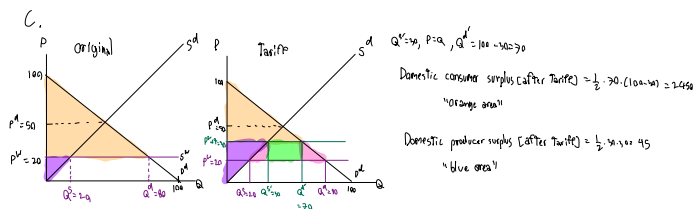
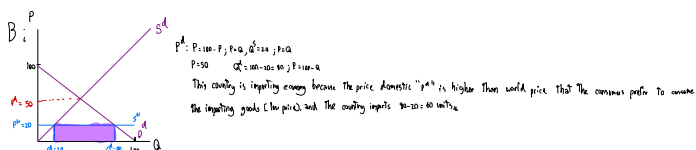


Firstly, when the government impose tax on exporting goods, it'll raise price. In part secondly, the foreign demand will decrease [shift left] according to the higher price. Thirdly, it's a loss in export. So, therefore, a lot of goods in domestic that the producers will be low the price. That means the govt will gain the benefit from tax revenue [export tax] and the consumer will gain the benefit from consuming in cheap price "P^W". While the producers will suffer being lower.

- complete analysis of the gains and the losses.
4. A "small", open economy is engaging in international trade. Its domestic demand curve is given by $P = 100 - Q$ and its domestic supply curve is given by $P = Q$. The world price of the good is 20\$. Answer the following questions.

- What does it mean for a country to be "small"? What implication of being "small" has on the world supply curve?
- Is this economy either an exporting or important country? Why? How many units of the goods is the country is currently importing or exporting?
- Now suppose the government decides to intervene. If the country is importing, the government will impose import tariff of 10\$ per unit. If the country is exporting, the government will impose export subsidy of 10\$ per unit. Calculate
 - Domestic consumer and producer surplus after the intervention
 - Either subsidy cost or tariff revenue
 - Deadweight loss from the intervention.

A: small open economy is a country which participates in the international trade have no effect on world economy (price and income). It's defined by the size of the working population which is less than the global median, and it shows gap between the large-small open economy.



ii) Tariff revenue (green area) $= (30 - 20) \cdot (80 - 20) = 10 \cdot 60 = 600$

iii) DWL (purple) $= \frac{1}{2} \cdot (30 - 20) \cdot (20 - 0) + \frac{1}{2} \cdot (20 - 10) \cdot (80 - 20) = 20 \cdot \frac{1}{2} \cdot 20 + 10 \cdot \frac{1}{2} \cdot 60 = 100$