

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.

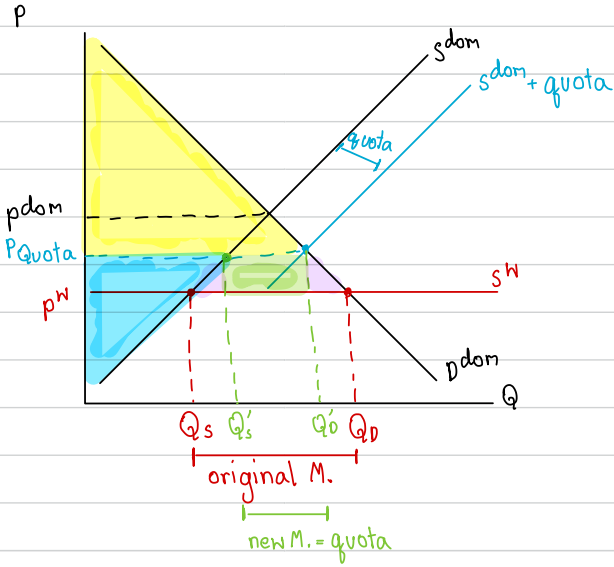
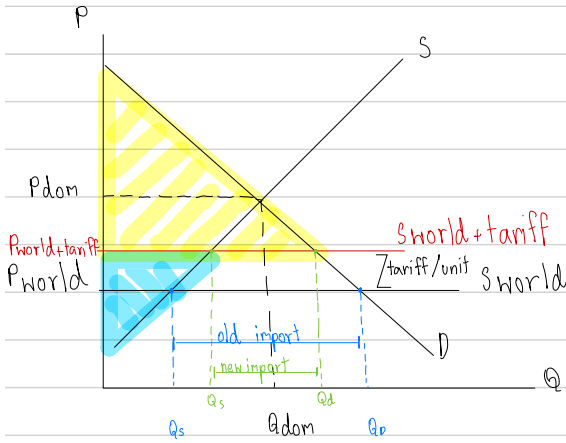
1. You are considering the number of hamburgers that you plan to order. Based on the following table, complete the table and answer the following questions.

- How many units of hamburgers should you order? Why?
- Suppose you decide to order 2 hamburgers. Is this underallocation or overallocation? Explain. How much is your deadweight loss?
- 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	80	20	20	60
2 nd	140	60	40	20	100
3 rd	180	40	60	20	120
4 th	200	20	80	20	120
5 th	0	0	100	20	100

- 4th unit because in the fourth unit the marginal benefit is equal to marginal cost. 4th unit is maximize benefit
- Is a underallocation because in 2nd unit the $MB < MC$, so the deadweight loss will be 2 hamburger
- Is overallocation because the 5th unit MB is less than MC, so the deadweight loss will be 1 hamburger

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?



The different between tariff and quota first is limit, tariff does not have limit while Import but quota has limit to import. Second, tariff don't have equilibrium but quota have equilibrium.

Tariff

Quota

The impact on consumer

consumer will pay more than before

The impact on producer

it help producer to compete to foreign producer

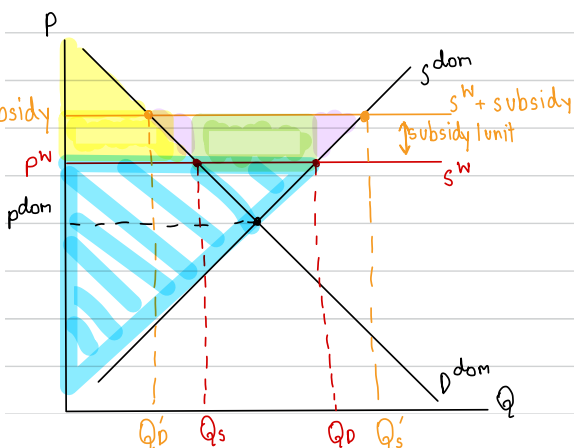
The producer can buy at P_world and sell P_quota

The impact on government

after gov.t make tariff increase import price and make S_world upward

Govt make a import license to control a import product.

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).



Consumer gain more benefit since CS is larger

the tax is making price lower due to lower exporting

government got the tax. Producer are worst off

because they have to pay tax. price and quantity

are reduce, so PS smaller

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.

4. a) small country means that P in that country cannot effect the P_{world}

b) It is an import country, because P_{world} is less than $P_{domestic}$ so that if the country import the product and sell for $P_{domestic}$ there will be profit. Import by 60 unit of Q

$$c) \text{ CS} = \frac{1}{2} \times 70 \times 70 = 2450$$

$$P.S. = \frac{1}{2} \times 50 \times 30 = 750$$

$$ii \text{ Tariff revenue} = 10 \times 100 = 1000$$

$$iii \text{ DWL} = 10 \times 10 = 100$$