

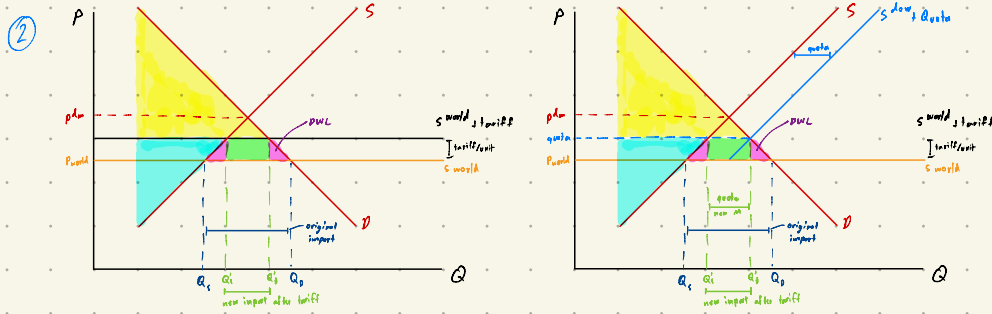
Exercise 1

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	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	200	0	100	20	100

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 a) 4 unit because of at 4 unit, $MC = MB$ which mean that marginal cost equal to marginal benefit that consumer still satisfy.
- b) It's under allocation since the $MB = MC$ at 4 unit but he decide to order only two, which mean that deadweight loss will be 2 hamburger.
- c) It's over allocation since $MB = MC$ at 4 unit but he decide to order for 5 unit, which mean that deadweight loss will be 1 hamburger.



Different between Quota and Tariff is that Tariff is not limit the import quantity, but Quota limit it.

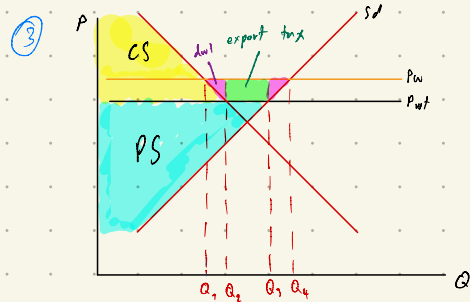
Moreover, The Quota have an equilibrium point, but the Tariff not have it.

Both Quota and Tariff producer get better off, but consumer worse off.

Quota, Producer buy at p^{world} and sell at p^{quota} to get profit. Government would also better off, since people buy more domestic product and get money from quota license.

Tariff, since it make S^w shift upward, that allow domestic producer can compete with foreign producer. Producer get more profit and government get tariff revenue.

Consumer need to pay more, so they are worse off.



Consumer gain benefit since CS is larger the export tax making the price lower due to lower exporting, Government got to the export tax but the producer worst off due to they have to pay for a tax P reduce Q reduce PS is smaller.

④ a) Small country is mean that it P domestic cannot effect P_w because it have small impact, so it will not effect the price

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. The country currently import 60 unit of Q.

c) ① $CS = \frac{1}{2} \times 70 \times 70 = 2450$
 $PS = \frac{1}{2} \times 50 \times 30 = 450$

② Tariff rev = $10 \times 100 = 1000$

③ DWL = $10 \times 10 = 100$