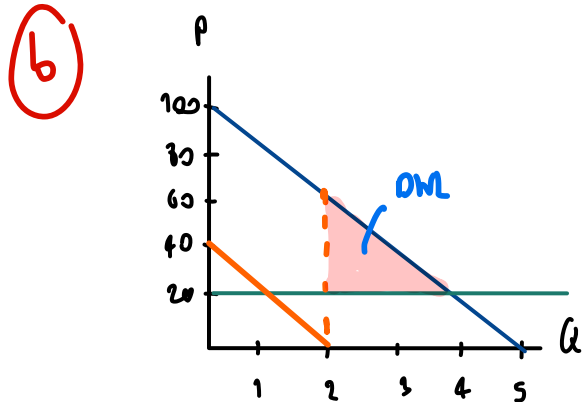


1. You are considering the number of hamburgers that you plan to order. Based on the following table, complete the table and answer the following questions.

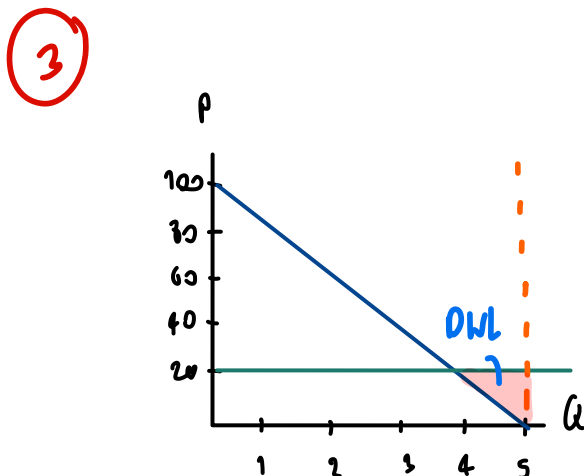
- How many units of hamburgers should you order? Why?
- Suppose you decide to order 2 hamburgers. Is this underallocation or overallocation? Explain.
How much is your deadweight loss?
- Suppose you decide to order 5 hamburgers. Is this underallocation or overallocation? Explain.
How much is your deadweight loss?

Quantity	Total Benefit	Marginal Benefit	Total Cost	Marginal Cost	Total Net Benefit
1 st	90	80	20	20	60
2 nd	140	60	40	20	100
3 rd	170	40	60	20	110
4 th	190	20	80	20	110
5 th	190	0	100	20	90

2 I should order 4 units of hamburgers because I can receive the maximum benefit. The total net benefit of the 5th unit of hamburger is decreased.



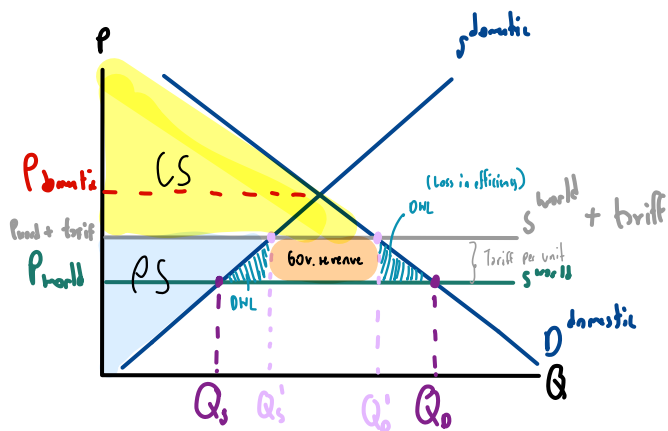
⇒ It is underallocation because the line of ordering 2 unit of burgers doesn't go beyond the maximum utility.
Deadweight loss is equal to the area of pink triangle which is $= \frac{1}{2} \times 40 \times 2 = 40$ #



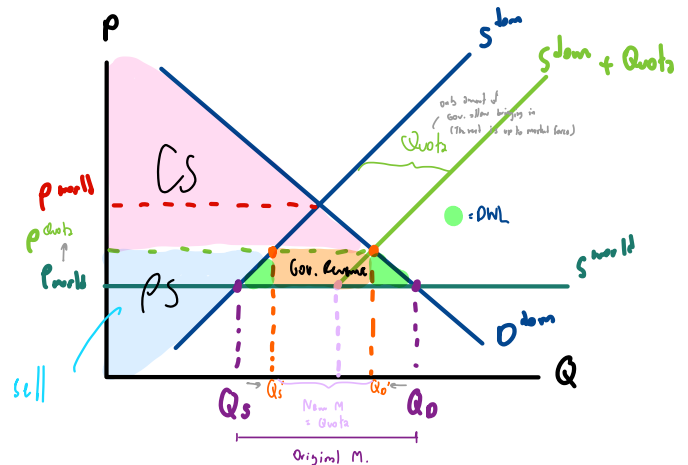
⇒ It is overallocation because the deadweight loss goes beyond the maximum utility. The pink triangle of deadweight loss is equal to $\frac{1}{2} \times 1 \times 20 = 10$ #

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?

TARIFF



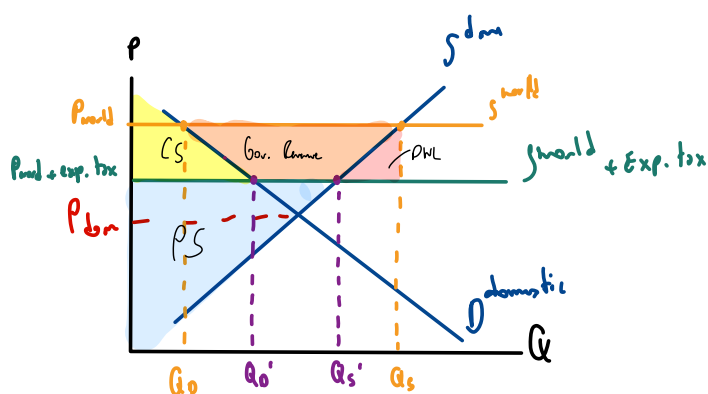
QUOTA



⇒ The tariff increases import price shifting supply curve of the world upward, so consumers have to pay more and buy less because of the higher price is set by producers that they can produce more. For the quota, government sets a limit of import and issues import license. This causes domestic supply curve shift to the right, so we import less.

The impact on domestic stakeholder of the Tariff is allowing more domestic producers to compete against foreign producers. According to the higher price of import because of tariff, consumers buy more domestic goods. For the impact of Quota, the producer is better off because when the quota hits in, producers are able to buy at cheap price abroad and sell it at higher price implying that they make money.

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).



⇒ The producers loss benefits because they have to pay higher tax of export, so they can sell less. This cause consumer to gain benefits and the government also receive the revenue.

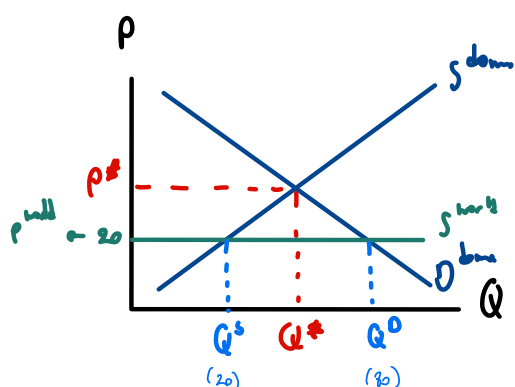
4. A "small", open economy is engaging in international trade. Its domestic demand curve is given by $P = 100 - Q$ and its domestic supply curve is given by $P = Q$. The world price of the good is 20\$.

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?

The establishing of small country does not matter to the world's economy. Not likely to the big countries, they can be affected from the world's crisis.

- 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?

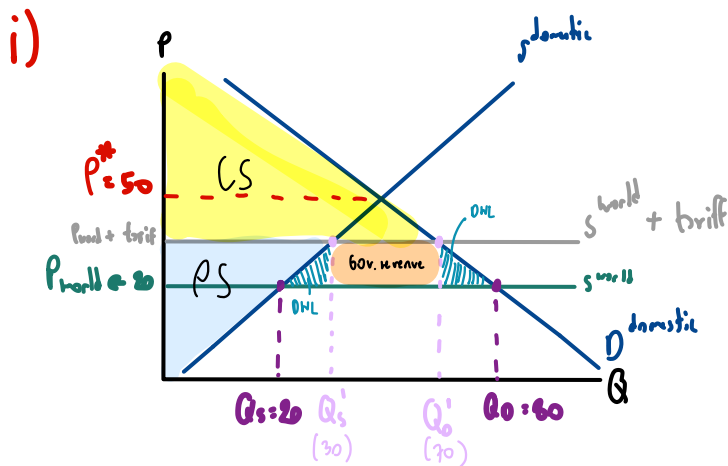


$$\begin{aligned} P_{D^{\text{domestic}}} &= 100 - Q \\ P_{S^{\text{domestic}}} &= Q \\ P_{D^{\text{domestic}}} &= P_{S^{\text{domestic}}} \\ 100 - Q &= Q \\ 100 &= 2Q \\ Q &= 50 \end{aligned}$$

$$\begin{aligned} P^{\text{world}} &= 20 \\ Q^S = P^S &= 20 \\ Q^D &= 100 - 20 \\ &= 80 \end{aligned}$$

⇒ This is importing country because price word for selling this good is lower than the price in the market that producers are willing to sell. There are 60 units of goods that this country currently importing.

- 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
- Domestic consumer and producer surplus after the intervention
 - Either subsidy cost or tariff revenue
 - Deadweight loss from the intervention.



$$\text{Consumer surplus} = \frac{1}{2} \times (20 + 10) \times 70$$

$$= 1,050$$

$$\text{Producer surplus} = \frac{1}{2} \times 30 \times (20 + 10)$$

$$= 450$$

ii) Tariff revenue = $(70 - 30) \times 10$

$$= 400$$

iii) Dead weight loss = $\left[\frac{1}{2} \times (30 - 20) \times 10 \right] + \left[\frac{1}{2} \times (70 - 30) \times 10 \right]$

$$= 50 + 50$$

$$= 100$$