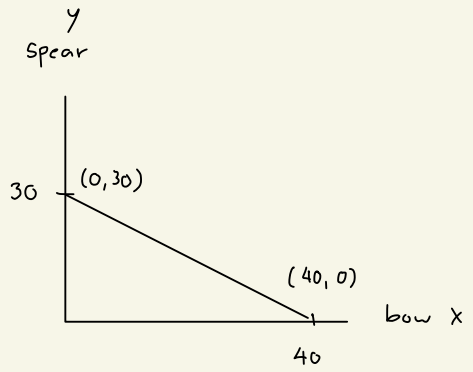
1a



slope -0.75

to produce 1 spear

we need to use 4 units of wood

At maximum we can produce 30

to produce 1 bow

we need to use 3 units of wood

At maximum we can produce 40

y - amount of spear can produce

x - amount of bow can produce

1b

opp cost for a spear is $\frac{40-0}{0-30} = -\frac{4}{3} \rightarrow 1.33$

(in term of bow)

to find opp cost of y

use $\frac{1}{\text{slope}}$

Rujiwat Fiamsirihulmit

6304641324

1 C

It's possible to produce 20 spears and 12 bows

Cause the civilization will have enough resource to produce

as well as including resource for produce 12 bows

when we produce 1 spear, we have less chance to produce 1.33 of bow

So it will be $20 \times 1.33 = 26.6$ then decrease from the total unit at maximum

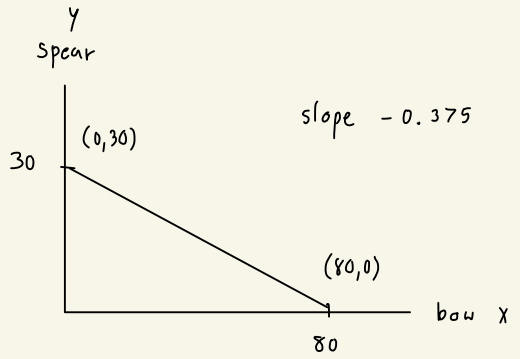
which is $40 - 26.6 = 13.4$

↓

So 12 bows is including in 13.4

We can produce 20 spears and 12 bows *

1d



According to the new method, now we use only 1.5 units of wood producing each bow

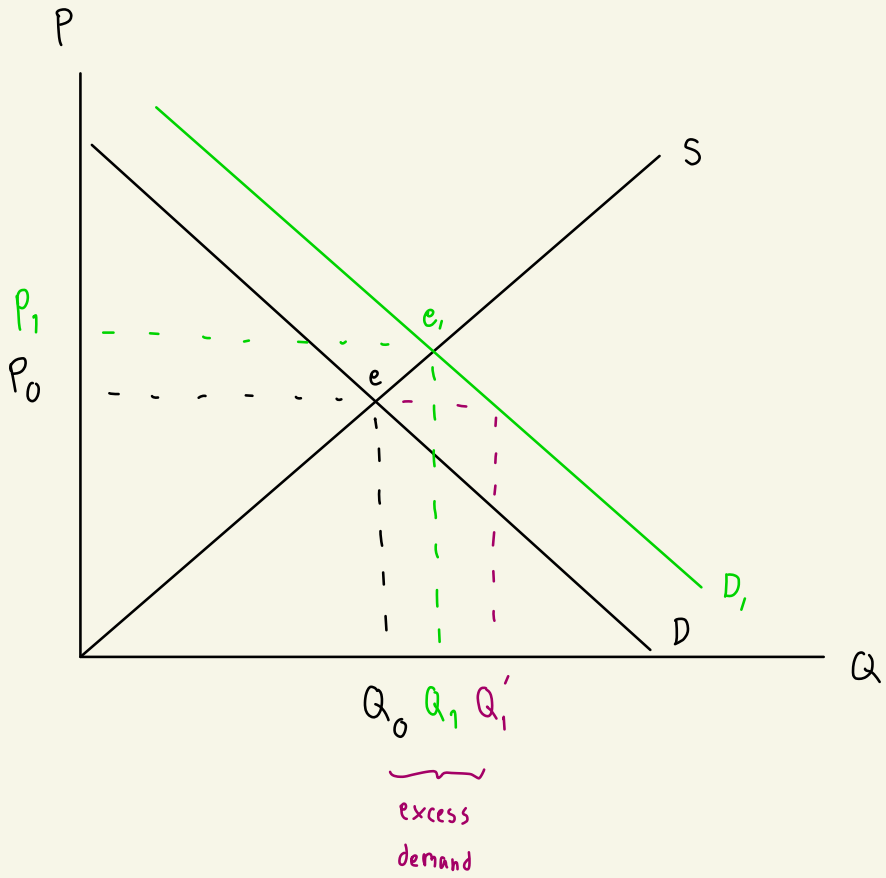
So we can produce 80 bows for maximum which is double from the old method

As you can see from the graph, It's such a good way to produce bow because at this moment we can produce double amount as well as less opp cost which is when we produce 1 bow we don't have to lose resource from making spear as much as we produce from the past

opp cost of y will increase from 1.33 to 2.66 $\longleftarrow$ $\frac{1}{0.375}$ ~ slope

which means to produce each spear we have less 2.66 of bow

2



2a

Due to more WFH, the demand will shift up because people need to use more computer for WFH especially for some workers who don't have or want to have better device for working as well as student for online learning

2b

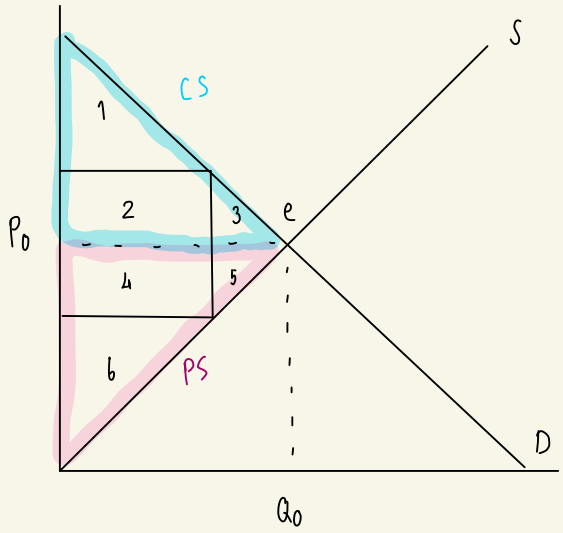
After people was urged to WFH due to the pandemic

Demand curve will increase from D to D_1 → we have new intersection of D_1 and s that is the new equilibrium at e_1. But at the point P_0 there will have exress demand ($Q_1' > Q_0$)

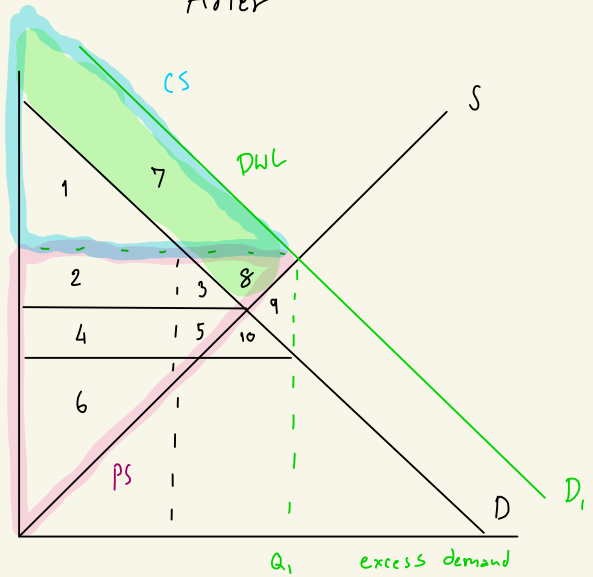
So after the adjustment process supply in the market will satisfy the new quantity demand at e_1

2C

Before

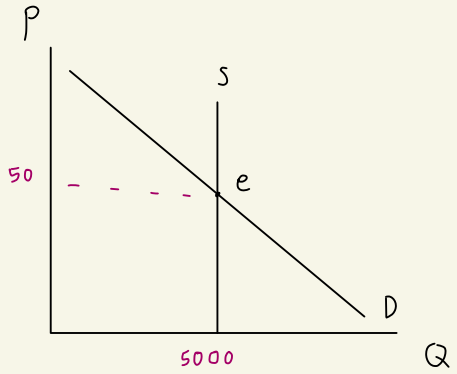


After



Surplus	Before	After	Diff
CS	123	17	7-2-3
PS	456	234568	238
total	123456	12345678	78 DWL

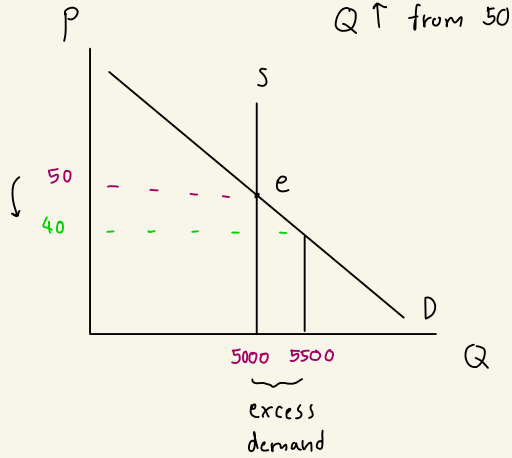
3a.



3b.

P ↓ from 50 to 40

Q ↑ from 5000 to 5500



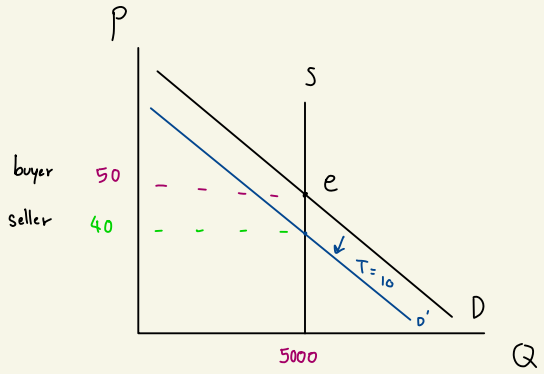
$$\varepsilon_p = \frac{Q_2 - Q_1}{P_2 - P_1} \times \frac{P_1}{Q_1} = \frac{5500 - 5000}{40 - 50} \times \frac{50}{5000}$$

$$= \frac{500}{-10} \times 0.01$$

Demand: $\varepsilon_p = -0.5$

supply is perfectly inelastic

3C



- Buyers have to pay higher price. ($P\uparrow$: 40 → 50), Buyers pay 10 on tax
- Sellers don't have to pay any tax cause of the buyers paid the tax already
- Gov rev. tax = 5000 x 10 → 50000
- Don't have DWL because if D or S is perfectly inelastic it will not have DWL