

How shifts in demand and supply affect equilibrium

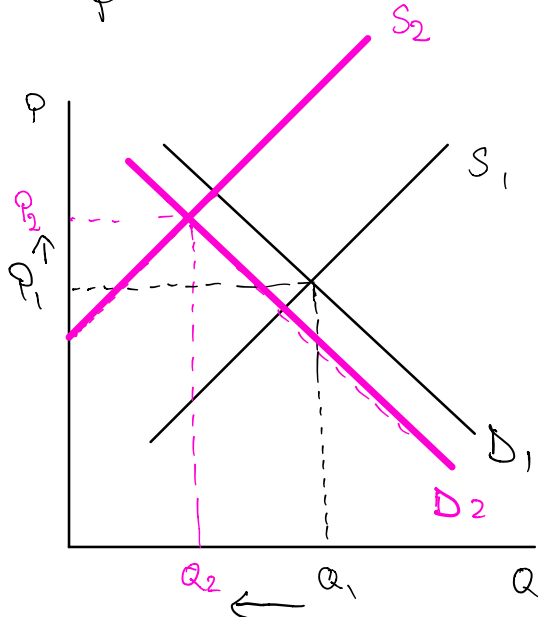
	Supply shift Right	Supply shift left
Demand shift right	Q increases P increases, decreases or unchanged	Q increases, decreases or unchanged P increases
Demand shift left	Q decreases, increases or unchanged P decreases	Q decreases P increases, decreases or unchanged

①

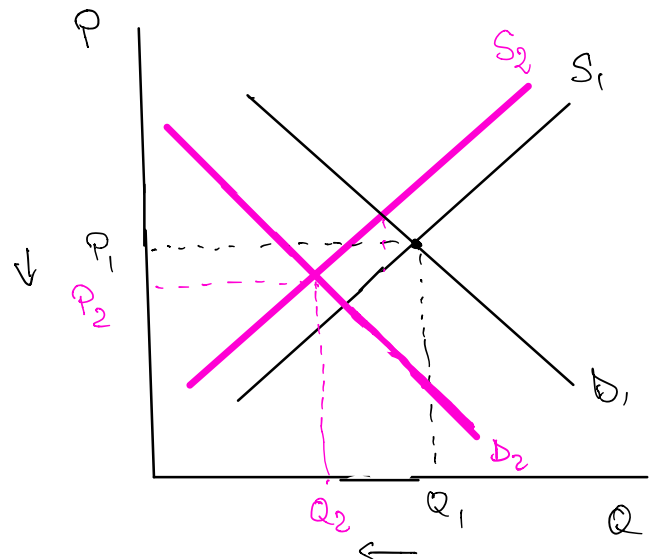
eg: Demand shift left and supply shift left

Shift in supply larger than shift in demand.

Shift in supply smaller than shift in demand



P increases
 Q decreases



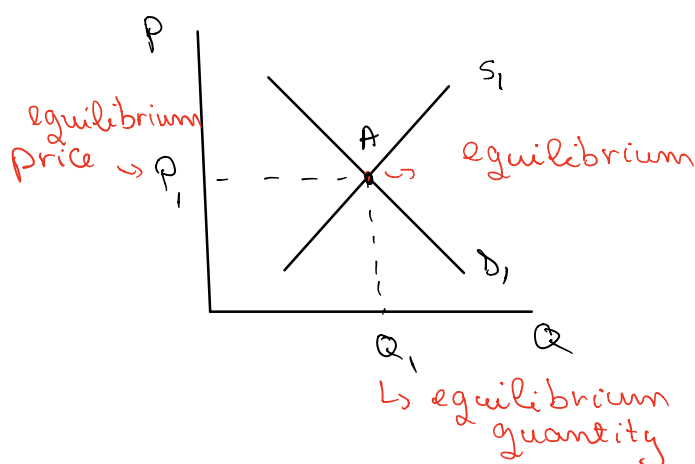
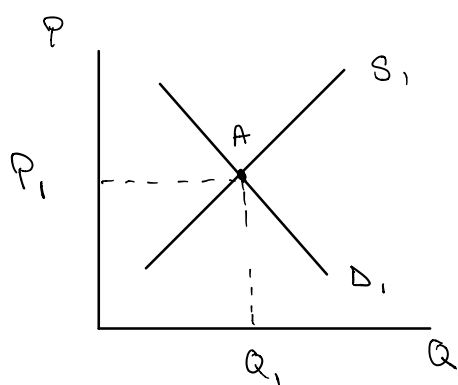
P decreases
 Q decreases

So when we have a demand shift to the left and a supply shift to the left: prices are undetermined (can increase, decrease, unchanged) and quantity decreases. (Purple case)

② let's take another example. Demand shifts left and supply shifts right.

Step 1: Draw the supply and demand and identify the equilibrium price and quantity.

Note: P_1 can take any value, we use the subscript 1 because it is the initial price. Thus, P_2 would represent the second price.

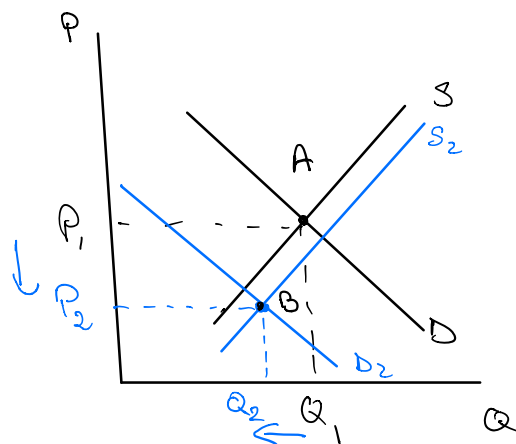
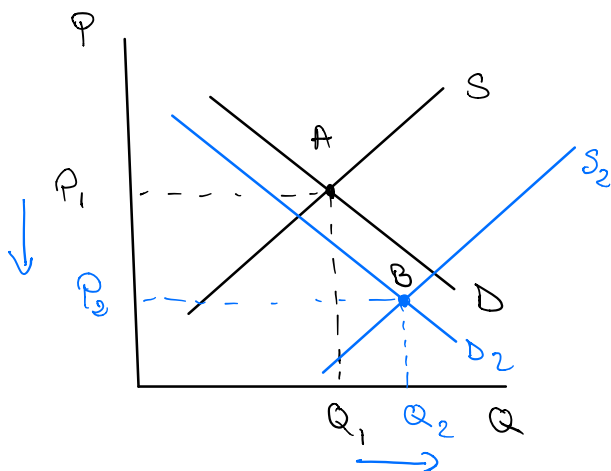


Note: Market equilibrium is where quantity demanded is equal to quantity supplied (the intersection of demand and supply)

Step 2 • Identify the shift in demand and supply. In our case, demand shifts left and supply shifts right.

• on the LEFT graph, we will shift the supply more than demand

• on the RIGHT graph, we will shift the supply less than demand.



The new market equilibrium is at point B (intersection of the new demand and supply). The new equilibrium price is P_2 and the new equilibrium quantity is Q_2 .

Step 3 Compare the new equilibrium price and quantity (P_2, Q_2) with the old equilibrium price and quantity (P_1, Q_1)

Left graph
 ~ \rightarrow greater

Right graph
 ~

$$P_1 > P_2$$

$$Q_1 < Q_2$$

Price decreases

Quantity increases

$$P_1 < P_2$$

$$Q_2 > Q_1$$

Price decreases

Quantity decreases

Step 4 Final answer: When demand shifts to the left and supply shifts to the right, equilibrium price decreases and equilibrium quantity is undetermined (can increase, decrease or stay the same)