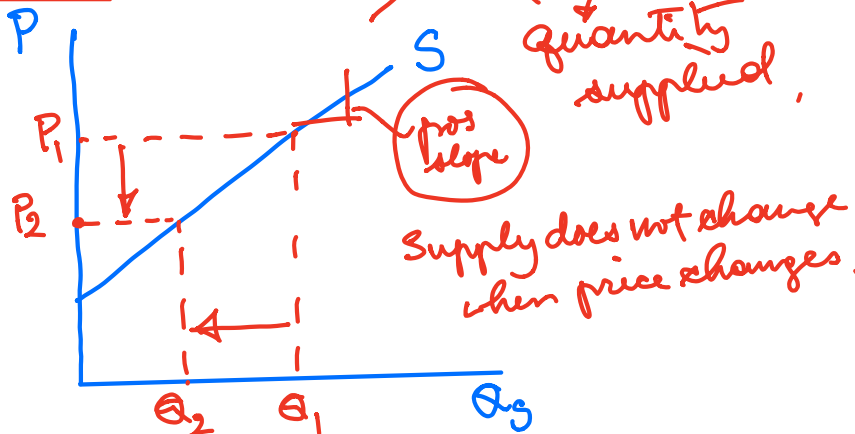


Chapter 5 Supply

Supply is relationship between the price and the quantity the seller(s) is (are) willing and able to sell.

- At a given price, the quantity sold is called the quantity supplied.
- Statement: When ~~price decreases~~, the supply decreases.



Change in Supply and Change in Quantity Supplied

- *Supply increases*: At a given price, the quantity supplied increases.
- *Quantity Supplied increases*: When price decreases the quantity supplied decreases—when the supply is actually unchanged.

Law of Supply: Given all factors being equal, if the price decreases (increases) the quantity supplied decreases (increases)

- ⇔ Price and quantity supplied have direct relationship
- ⇔ Supply curve has positive slope

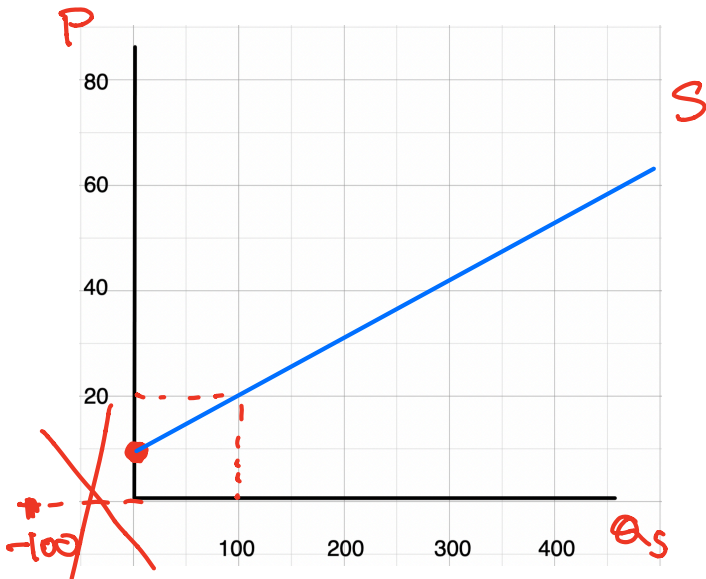
Example: A supply curve is given by a function,

Supply: $P = 10 + \frac{1}{10}Q_s$

$Q_s = 0, P = 10$

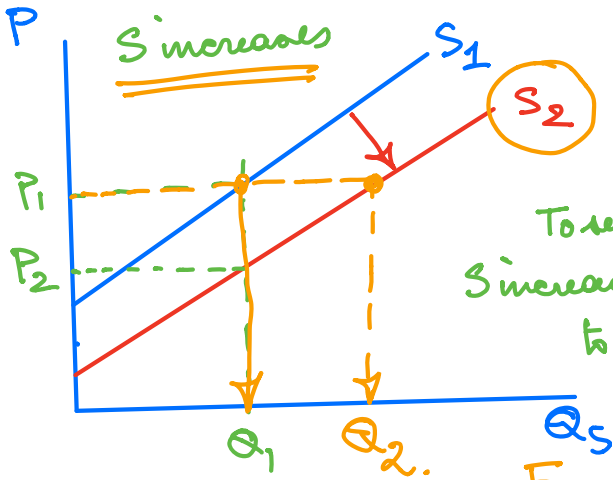
$P = 0, Q_s = -100$

• Plot of Supply Curve:



Factors that can change the Supply

1. Technology



To sell Q_1 , S_1 asks for P_1
 S increases to S_2 ,
to sell Q_1 , now asks for
 P_2 lower price.

For S_2 , Q_s increases
from Q_1 to Q_2 .

2. Number of sellers

more sellers in market
 \Rightarrow Market Supply increases.

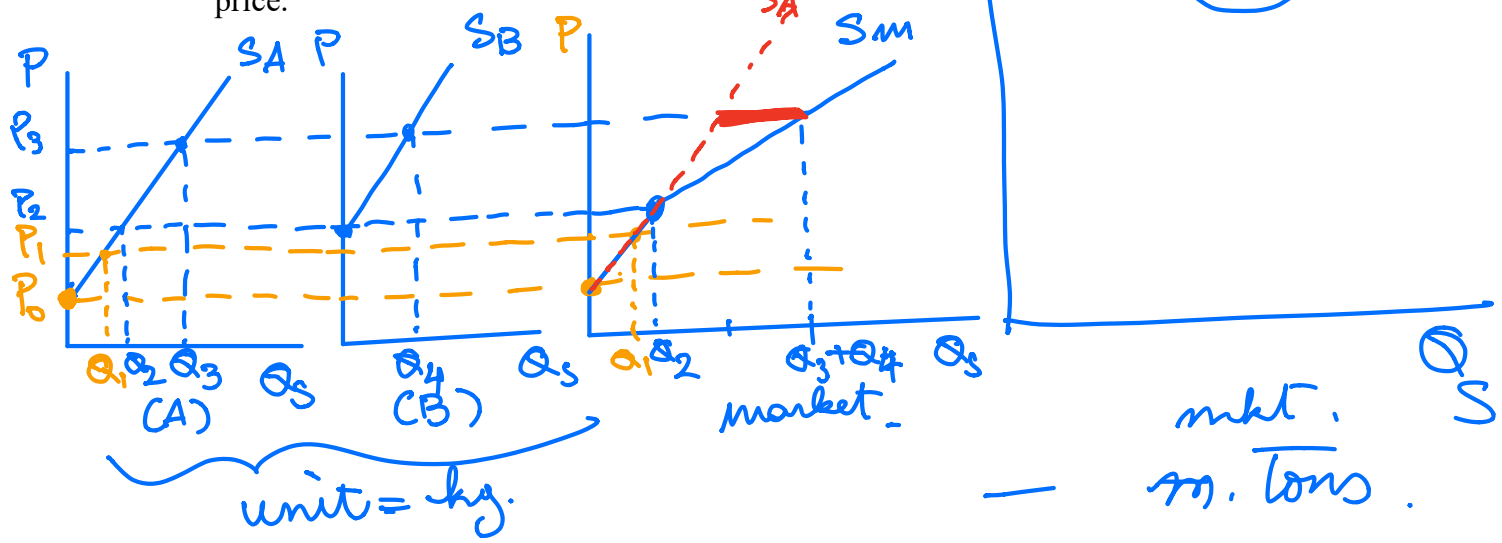
3. Expectation

4. Price and quality of inputs

If price of gasoline is lower,
supply increases.
better quality of labor.
 $\Rightarrow S$ increases.

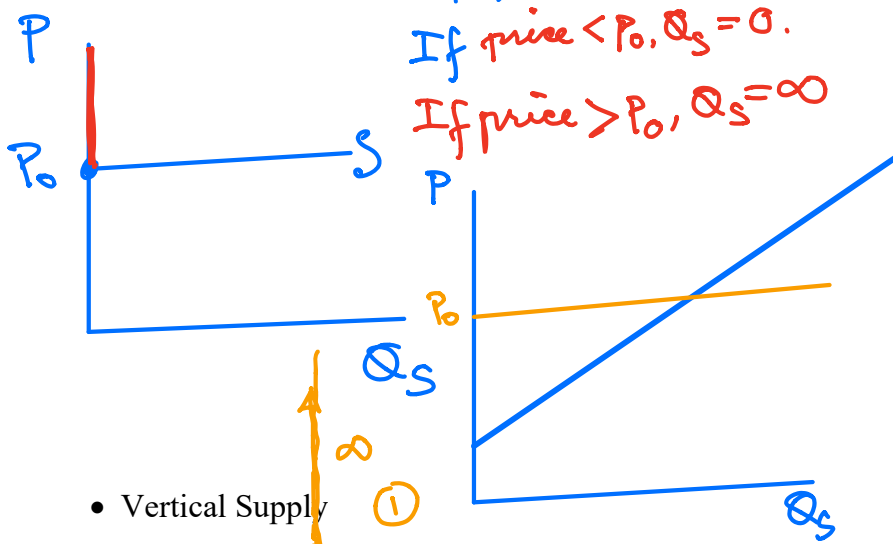
Individual and Market Supplies

- Market supply is the summation of individual supplies of all sellers in the market.
- At each price, the quantity supplied of the market is sum of all quantities supplied of all sellers at that price.

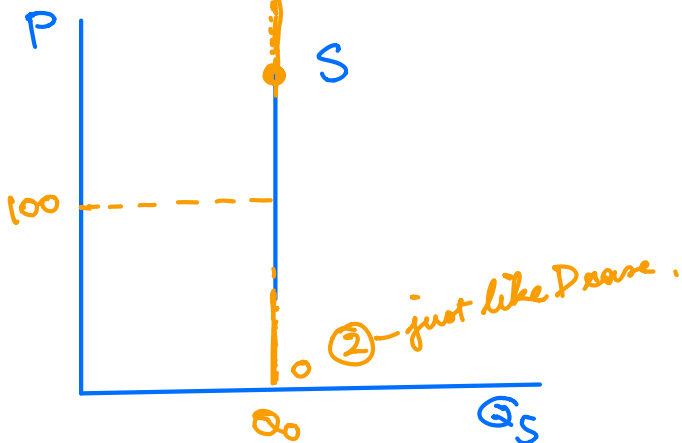


Extreme Cases of Supply Curve

- Horizontal Supply At P_0 , Q_s supplied is ∞

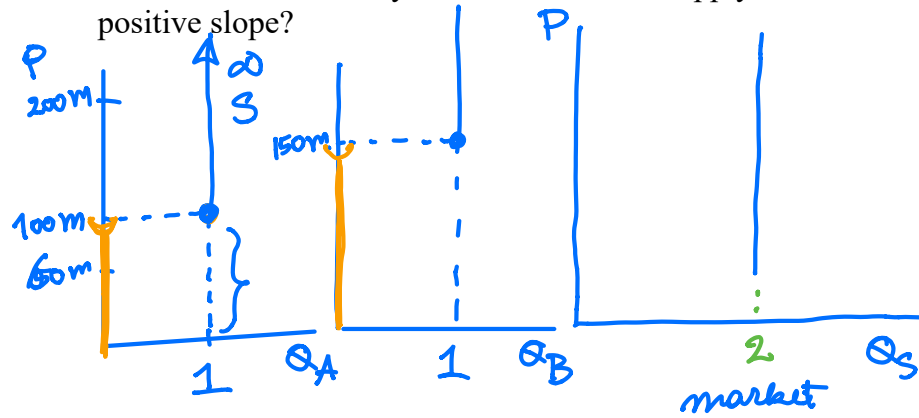


- Vertical Supply



HW How the supply increases in each of these extreme cases?

H.W. Example. Suppose that it is legal to sell one's kidney. What is the individual supply of kidney of a person who wants to sell his kidney? Does the market supply has a positive slope?



Mkt Supply will have positive relationship with price.

Question: If individual supplies of sellers are all horizontal at different prices, what will be the market supply?

