HSS 201: Economics for Engineers

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Supply

The supply curve shows the quantity of a good that producers are willing to sell at a given price, holding constant any other factors that might affect the quantity supplied.

$$Q_s = f(P)$$

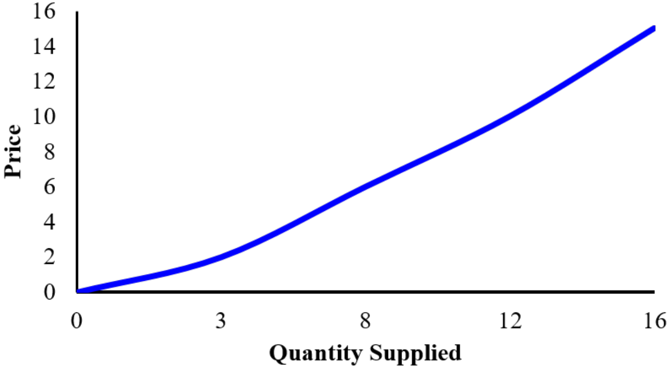
The quantity supplied of any good is the amount of the good that sellers are *willing* and *able* to produce and sell at any given point of time.

Law of Supply: *Ceteris paribus* (other thing reaming the same), when the price of a good falls, the quantity supplied of the good falls and when the price of a good rises, the quantity of the good rises.

Supply Schedule

Price of Cold Drinks	Quantity Supplied of Cold Drinks
0	0
2	3
6	8
10	12
15	16

The Supply Curve



The upward-sloping line relating price and quantity demanded is called the supply curve.

Assumptions to the Law of Supply

1. No change in the cost of factors of production such as wages, interest charges, cost of raw materials, among others
2. No change in technology
3. No change in the expected price of good supplied: If the seller expects that price of good x will increase in the future it will put some of its current production into storage and supply less to the market today
4. No change in the number of sellers in the market
5. No change in the price of related goods: For example, if the price of jackets increase instead of sweaters, producers would tend to produce more of jackets than sweaters. In other words, producers would shift their resources from sweaters to production of jackets
6. No change in the goal of the firm

Why does the Supply Curve Slope Upward?

1. Law of Diminishing Marginal Productivity: Marginal retunrs (additional output) falls with a every additional labor employed, *beyond a certain level*.

2. If price rises, sellers would sell more from their old stock. As a result of it supply increases, as well as, profit also improves.

Exceptions to the Law of Supply

1. Perishable Goods: For instance, Litches is a highly perishable good. So, to clear of stock, the fruit seller vendor is ready to sell of litches once it starts to perish at any given price
2. Future expectations about change in price
3. Agricultural Products: As agricultural production is heavily dependent upon climatic conditions, therefore supply of such commodites may not be responsive to price. For example, due to unforeseen changes in weather, the production of agricultural products is low, then their supply cannot be increased even at higher prices
4. Goods sold through auction

Changes in Supply

1. Movement along the supply curve
   - Other things remaining the same, if price of commodity *falls* its supply *falls*. It is called *contraction of supply*
   - Other things remaining the same, if price of commodity *rises* its supply *rises*. It is called *extension of supply*
2. Shift of the supply curve
   - Keeping price to be constant, if supply for any commodity *increase* we have a *rightward shift of the supply curve*.
     E.g., Supply curve forgood x will shift to right if the cost of production falls.
   - Keeping price to be constant, if supply for any commodity *decrease* we have a *leftward shift of the supply curve*.
     E.g.,Supply curve forgood x will shift to left if the cost of production rises.