Supply

Definition: Supply refers to the quantity of a good or service that a producer or group of producers is willing and able to offer for sale at a given price in a specific period of time.

Profit: Profit is the difference between the revenue a business earns from selling its goods or services and the costs it incurs in producing and selling them. Supply refers to the quantity of a good or service that a producer or group of producers is willing and able to offer for sale at a given price in a specific period of time.

Symbol of Profit is π

This is the formula we use to calculate it

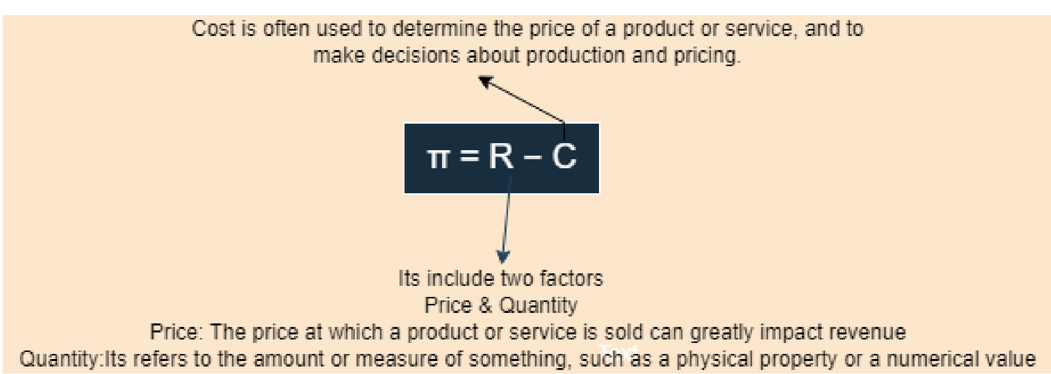
$$\pi = R - C$$

In this formula, the variable π represents the profit, R represents the total revenue, and C represents the total costs.

The revenue is consist of two factors

1.Price

2.Quantity



How Producers will earn more Profit?

If the product price increase in market. The Producers will increase its supply to earn more. Producers can also earn more profit by increasing revenue or decreasing costs. Some ways that producers can increase revenue include:

1. Increasing the price of their product or service
2. Selling more units of their product or service
3. Expanding into new markets
4. Introducing new products or services

Some ways that producers can decrease costs include:

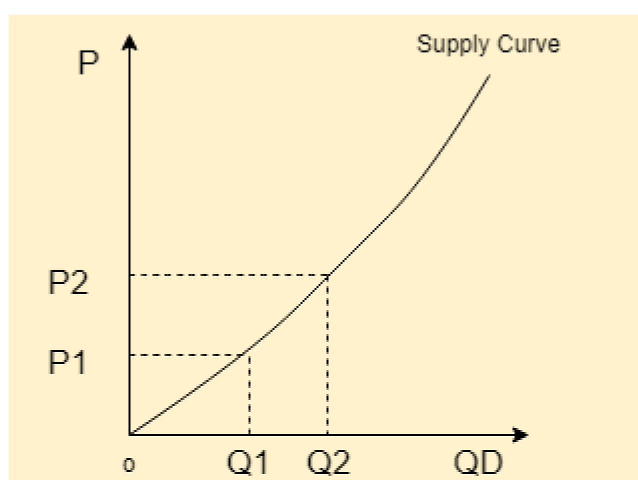
1. Reducing the cost of raw materials or inputs
2. Improving production efficiency
3. Outsourcing certain aspects of production
4. Automating certain processes
5. Reducing overhead costs such as rent or utilities.

It's also important to keep in mind that increasing revenue or decreasing costs alone is not enough for increased profits, it's the balance of both revenue and costs that determines the profit.

Let's take a look at Supply curve

we can say that

$R \propto Q$

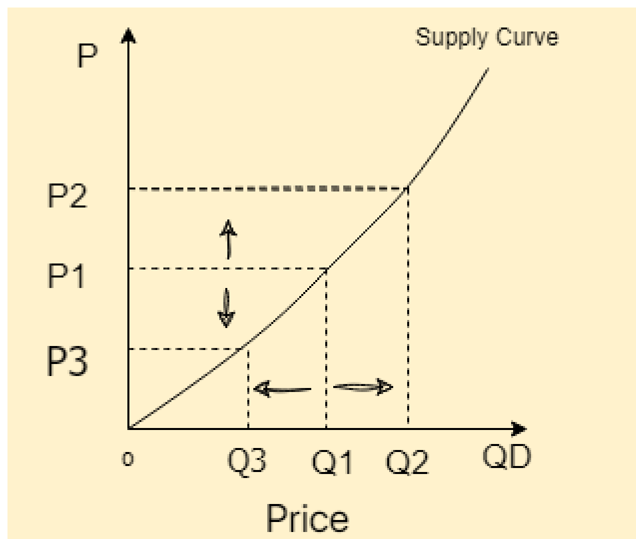


Determinants of Supply
& their effect on Supply Curve

The determinants of supply are the factors that influence the quantity of a good or service that a producer is willing and able to offer for sale at a given price. The main determinants of supply are:

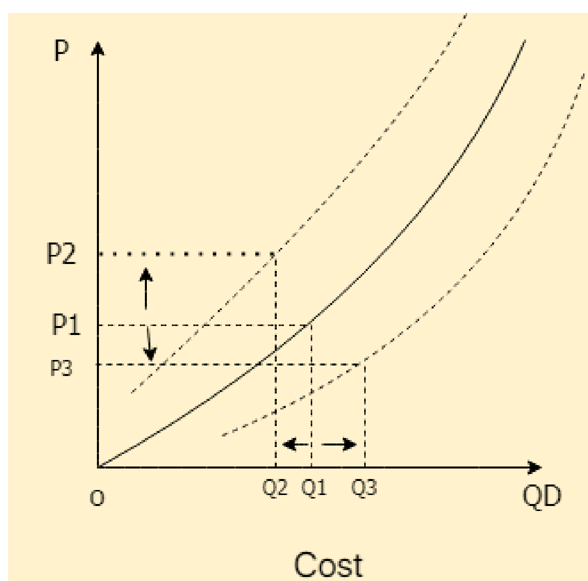
1.Price: As the price of a good or service increases, the quantity supplied will generally increase as well, this relationship is direct. When prices increase, producers are more incentivized to produce and offer more of the good, as they can earn more profit per unit.

- High Price {P1-P2, Q1-Q2}
- Low Price {P1-P3, Q1-Q3}



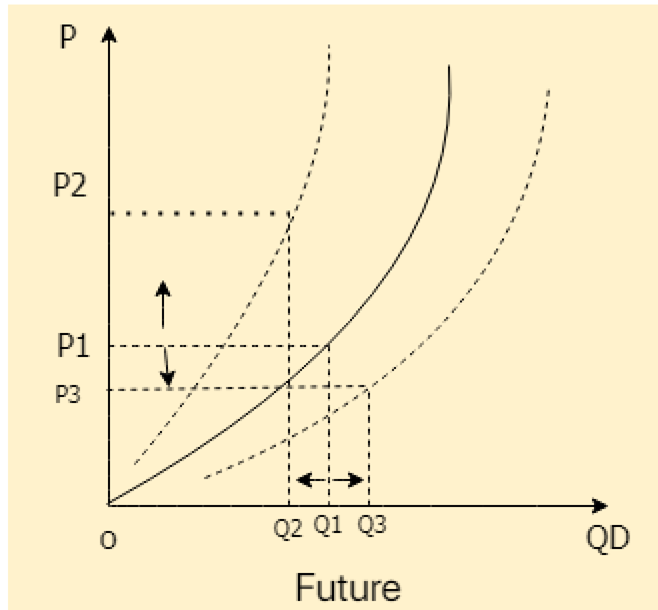
2.Cost: As the cost of producing a good or service increases, the quantity supplied will generally decrease.

- High Cost {P1-P2, Q1-Q2}
- Low Cost {P1-P3, Q1-Q3}



3.Future Expectation: Producers will adjust their supply based on their expectations of future prices and events. If producers expect prices to increase in the future, they may hold back on production in the present in order to sell at a higher price later.

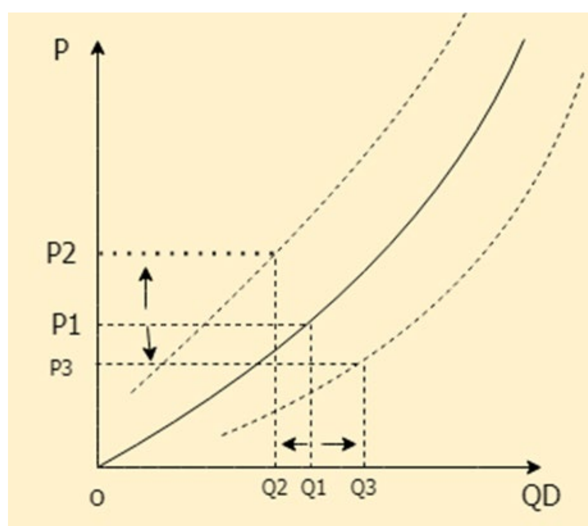
- Future High Demand-Present Low Production {P1-P2, Q1-Q2}
- Future Low Demand-Present High Production {P1-P2, Q1-Q2}



4.Policies: Government policies like Taxes, subsidies, regulations, and laws can affect the production and supply of goods and services. Taxes can increase the cost of production, subsidies can decrease the cost, regulations can limit production and laws can affect the market conditions.

Taking Taxes in this Example;

- High Taxes will increase cost of production in result Low Quantity Demand {P1-P2, Q1-Q2}
- Low Taxes will decrease cost of production in result High Quantity Demand {P1-P3, Q1-Q3}



- And there are many others Determinants like Technology,Substitutes ,Weather ,Population & etc.

Price Equilibrium: Price equilibrium is a state in which the quantity of a good or service supplied by producers is equal to the quantity demanded by consumers, and the price of the good or service is stable.

- Surplus: When the quantity supplied is greater than the quantity demanded, there is a Surplus of the good or service, and the price will tend to fall.
- Shortage: When the quantity supplied is less than the quantity demanded, there is a shortage of the good or service, and the price will tend to rise.

- Low Price(Shortage):

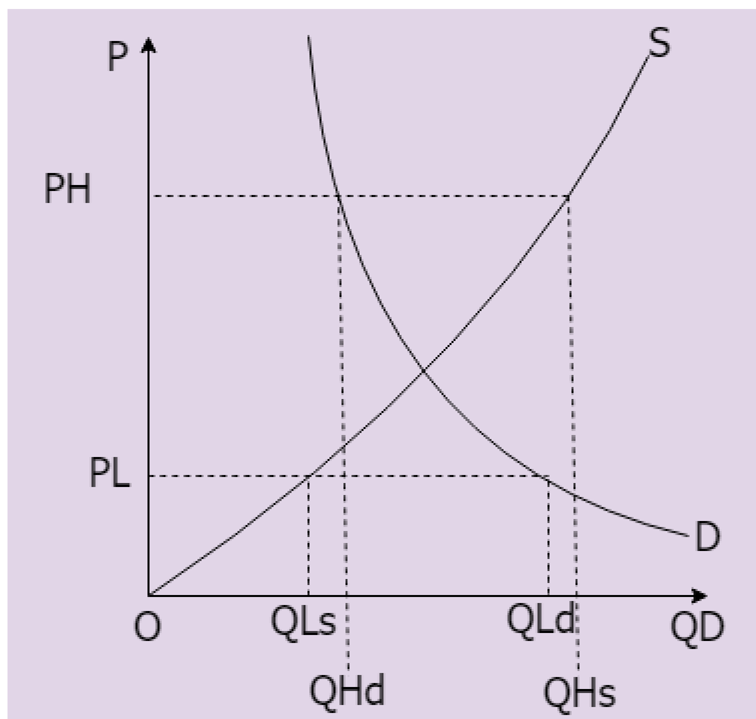
  QLs ≠ QLd

  QLd > QLs

- High Price():

  QHs≠QHd

  QHd<QHs



The price equilibrium is usually represented by the point at which the supply and demand curves intersect.

Price Equilibrium

Qd=Qs