

CH.4

SUPPLY

Concept of Supply

The producers produce a commodity and move to sell it in the market. If they are offered more price of their commodity, they try to sell more quantity of it and hold its quantity in their stock at lower price, and then they want for increase in its price. In this way, the quantity of a commodity which is offered for sale in the market is called supply.

Definition

"The quantity of a commodity which is offered for sale at a specific price per unit of time is called supply.

"In brief, by supply is meant by amount that comes into the market for sale over a range of prices. The higher the price prevailing in the market the greater the quantity of a commodity will be supplied for sale."

Types of Supply regarding Time period

Following are the types of supply regarding time period.

(1) Fixed Supply

Fixed supply is also called daily market supply. There is no time to increase or decrease in supply due to increase or decrease in price. For example vegetables, milk, fruits etc. whose fresh supply is brought in the market.

(2) Short Period Supply

Short period supply is meant by that quantity supplied, which is brought from stocks or godowns to market due to increase in price of a commodity and supply is increased by over shifting in productive units. In this period, the new productive units cannot be installed or productive capacity cannot be increased.

(3) Long-run Supply

Long-period supply is meant by that quantity supplied which can be increased to meet the increased market demand due to increase in price of commodity. New productive units can be installed or productive capacity can be increased to meet the increased demand of the market.

DIFFERENCE BETWEEN SUPPLY AND STOCK

The difference between supply and stock can be cleared by the following points.

- (i) Supply is that quantity of a commodity which is actually brought into the market for sale at a specified price per unit of time while stock is that quantity of a commodity which exists in the ware-house of the seller and has not yet been brought in the market for sale but can be offered at a specified price at a short notice.
- (ii) Stock is constant quantity while quantity supplied is a flow.
- (iii) Stock is a total quantity while quantity supplied is a part of total quantity.
- (iv) Commonly for perishable goods (for example, vegetables & fruits etc.) the quantity supplied takes the same shape of quantity of stock.
- (v) If a seller feels that prevailing price is less than the cost of production, he takes the quantity supplied into stock.
- (vi) If a seller gets his desired price, he converts a major portion of stock or the whole stock into quantity supplied.
- (vii) A stock book is kept in which amount of stock and the amounts of goods sold are recorded.

LAW OF SUPPLY

It is observed in markets that when more price of commodities are offered to sellers. They increase the quantity supplied of these commodities and when the level of prices decreases, the sellers decrease the quantity supplied. This behaviour of seller is called law of supply.

Definition,

"Other things remaining same, if the price of a commodity increases its quantity supplied increases and if the price of a commodity decreases, quantity supplied also decreases".

There exists a direct and positive relationship between price and quantity supplied of a commodity. The functional relationship between quantity supplied and the price of a commodity can be expressed as: $Q_s = f(P)$

Where Q_s = quantity supplied P = price of commodity

ASSUMPTIONS

The assumptions of law of supply are as under:

1. No Change in Cost of Production

It is assumed that there is no change in cost of production because of the profit decreases with the increase in cost of production and it causes the decrease in supply. If price of a commodity decreases and

cost of production also decreases, at the same time, the quantity supplied does not decrease and profit remains constant.

2. No Change in Technology

It is also assumed that technique of production does not change. If better methods of production are invented, profit increases at the previous price. The sellers increase supply and law of supply does not operate.

3. No Change in climate

It is assumed that there is no change in climatic situation. For example, at any place flood or earth quake occurred. The supply of goods decreases at that place at previously prevailing prices.

4. No Change in Prices of Substitutes

If the prices of substitutes of a commodity fall then the tendency of consumers diverts to substitutes. Therefore, the supply of a commodity falls without any change in price.

5. No Change in Natural Resources

If the quantity of natural resources (minerals, gas, coal, oil etc) increases, the cost of production decreases. It causes to increase in quantity supplied.

6. No Change in prices of Capital goods

The capital goods are raw material, machinery, tools etc. The cost of production increases due to increase in the prices of capital goods. It can lead to decrease in quantity supplied.

7. No Change in political situation

The amount of investment is affected by the change in political situation of a country. The production of goods decreases due to decrease in investment.

8. No Change in Tax Policy

It is also assumed that the taxation policy of the government does not change. The increase in taxes effects the investment and production and supply of goods decreases.

Explanation

Regarding the assumptions, the standard equation of supply function is written as $Q_s = -c + dP$

Where c and d are parameters while P and Q_s are independent and dependent variables, respectively. The positive sign of slope ' d ' represents direct relationship between P and Q_s .

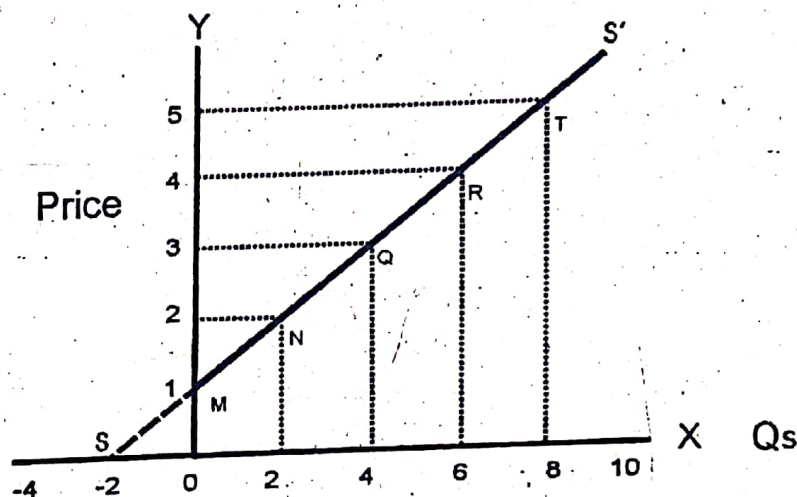
The supply function is expressed with the help of following example:

$$Q_s = -2 + 2P$$

By assuming different values of P , we can calculate the different values of Q_s as shown in the table.

Price (P)	Quantity supplied. (Q_s)
0	-2
1	0
2	2
3	4
4	6
5	8

As we assume the different values of ' P ' from zero to 5, then the calculated values of Q_s increase from -2 to 8. The law of supply is further explained with the help of following diagram.



The quantity supplied is expressed on X-axis while price is measured on Y-axis. By plotting the various combinations of price and quantity supplied, we get different points S, M, N, Q, R and T. By joining these points, we get our desired supply curve SS' , having positive slope as shown in the figure.

EXCEPTIONS OR LIMITATIONS OF LAW OF SUPPLY

Following are the exceptions or limitations of the law of supply.

(1) **Need of Liquid Money**

The seller increases quantity supplied at low price due to need of liquid money and law of supply does not operate.

(2) **Migration**

People sell their goods at low price at the time of immediate migration and law of supply does not prove to be correct.

(3) **Obstacles in means of Transportation**

The natural calamities (floods, earth quake etc.) are obstacles in means of transport. The quantity supplied of goods cannot be

increased in various areas due to this reason.

(4) Political Un-stability

If a country is facing unstable political circumstances, then the sellers increase the quantity supplied at low rate to dispose off the stock and law of supply does not prove to be true.

(5) Behaviour of Labourers

If there is a common practice of close down and strikes due to unsuitable behaviour of labourers, the quantity supplied decreases and law of supply does not operate in proper sense.))

CAUSES OF POSITIVE SLOPE OF SUPPLY CURVE

Following are the causes of positive slope of supply curve.

(1) Profit

When the price of a commodity increases, the seller increases the quantity supplied. The profit of seller increases and the aim of seller is profit maximization.

(2) Cost of Production

The cost of production increases due to increase in quantity supplied. It is necessary to increase price to maintain or increase the level of profit. Therefore, there is a direct relationship between price and quantity supplied.

(3) Future Expectations

If there is a tendency of increasing prices at present period, the sellers increase quantity supplied for the lust of profit. It may be expected in future to decrease prices. Now they want to maximize their profit due to good present circumstances.

CHANGES IN SUPPLY

There are two types of changes in supply. The one is movement of supply or extension and contraction of supply and the other is shift in supply.

A) Movement of supply or Extension and Contraction of Supply

Price is an important factor of changing the quantity supplied by a seller. When the price of a commodity increases its quantity supplied also increases it is called the extension of supply.

In opposite process, when the price of commodity decreases, the quantity supplied of it also decreases it is called the contraction of supply. It leads to the law of supply.

In other words, all the changes in the quantity supplied resulting from the change in price factor, is called the movement of supply. In this