

Fig. 7.2

UNIT-3

LAW OF SUPPLY

The law of supply states that, other things remaining same, as the price of a commodity rises, its supply also rises and as the price falls, supply contracts. Thus supply and price of a commodity have direct/positive relationship, i.e., higher the price, larger will be the supply and vice versa. According to Marshall, “As the prices rise, other things remaining same, the supply rises and as the price falls the supply decreases”. The law of supply can be explained through a supply schedule as shown under:

Price of apples (in Rs.)	Quantity supplied (in units)
1	5
2	10
3	15
4	20
5	25
6	30

It is seen in the table above that, as price of apples rise from Re. 1 to Rs. 6, sellers increase supply of apples from 5 units to 30 units. Thus price and supply varies directly. Higher the price, more is the supply and vice versa, other factors remaining constant. These factors are money income of sellers and buyers, technology, costs of all factors of production, taxes and subsidies, prices of related goods etc. The Fig. 7.3 below shows the supply curve, which is derived from the schedule above.

SS is the supply curve sloping upwards to the right indicating direct relationship between price and supply of a product.

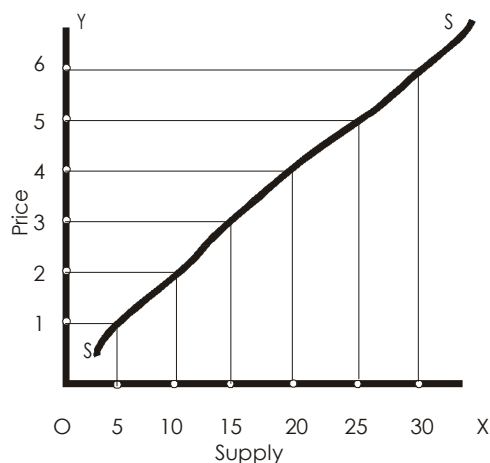


Fig. 7.3

DETERMINANTS OF SUPPLY

Supply of a commodity depends upon a number of factors. The important determinants of supply can be grouped together in a supply function as follows:

$$S_X = f(P_X, P_Y, F, T, G)$$

Supply function describes the functional relationship between supply of a commodity (say X) and other determinants of supply, i.e., price of the commodity (P_X), prices of related commodities (P_Y), price of the factors of production (F), technology (T) and goals (G) or general objectives of the producer.

Let us discuss the factors that determine supply of a product as under:

1. *Price of the product:* As already stated, price determines the supply of a product. When price is high, supply is more and vice versa. Producers are encouraged to produce more when price is high because of high profit margin.
2. *Technology:* The change in technology also affects supply of a product. It may reduce the cost of production and as a result supply will be more. Automatic and digital photocopier machines have increased the speed of photocopy per unit and hence large production.
3. *Price of factors:* Changes in prices of factors also cause a change in cost of production and thereby bring changes in the supply of the product. When costs of factors come down, it reduces the overall cost of production and as a result producers are induced to produce and supply more.
4. *Prices of other products:* Prices of substitutes and complements also affect the supply of a product. For example, if prices of tea rise, it will result in the reduction in the production and supply of coffee as the producers will withdraw resources from the production of coffee and devote these to the production of tea.
5. *Future price expectation:* If sellers expect the prices to rise in future, they would reduce supply of a product in the market and hoard the commodity to sell in the future.

This is specially done for earning high profits. For example, when traders expect that price of kerosene oil will rise further, they create artificial scarcity and stock so as to sell and reap high profits in future.

MOVEMENT ALONG AND SHIFTS IN SUPPLY CURVE

A movement along the same curve simply indicates changes in quantities offered as a result of a change in the price. When supply changes not due to changes in the price of the product but due to other factors, such as change in technology, changes in the prices of related commodities, changes in price of inputs etc, it is said to be shifts in supply curve.

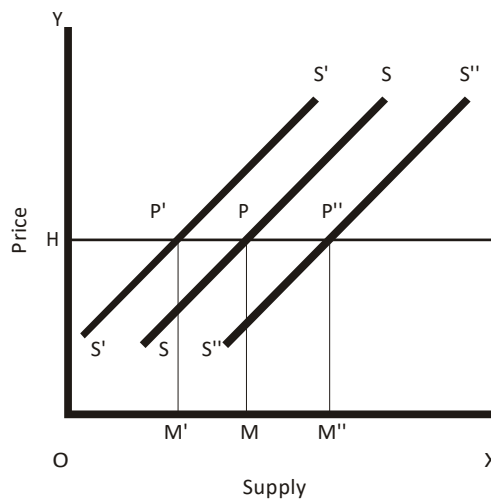


Fig. 7.4

Supply is said to increase (supply curve shifts to the right) when, price remaining same, more is offered for sale and decrease (supply curve shifts to the left) when, at the same price, less is offered for sale in the market. This is illustrated in the Fig. 7.4 above.

SS is the supply curve before the change. S'S' shows a decrease in supply because at the same price $OM' (OM' < OM)$ is offered for sale. S''S'' shows an increase in supply because at the same price OH, more is supplied ($OM'' > OM$).

When there is a change in price (rise/fall), supply also changes (increases/decreases) and the phenomena is called extension and contraction in supply. In this case, equilibrium point moves along the same supply curve-either to left or right. In Fig. 7.5, SS is the supply curve and the equilibrium point is E at OP price. When price falls to OP'' , supply gets reduced by $N''N$ and supply increases to ON' when price rises to OP' . The equilibrium point E moves to E' when price falls and moves to E' , when price rises.

UNIT-3

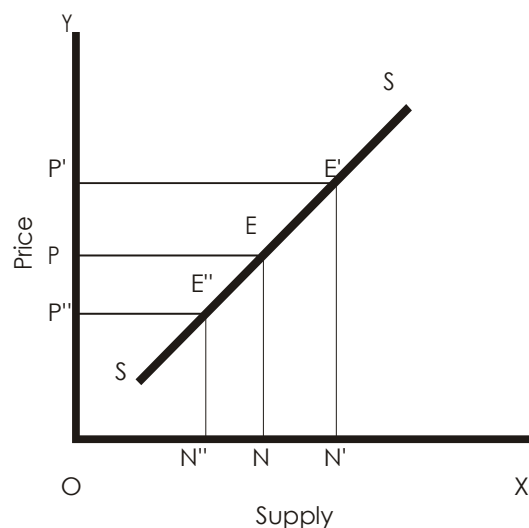


Fig. 7.5

Questions for Review

1. What is meant by shift of the supply curve?
2. What is the law of supply?
3. Explain briefly any three factors on which supply of a commodity depends.
4. What factors determine the supply of a commodity? Briefly explain.
5. What is meant by supply schedule?
6. Write short notes on :
 - (a) Market supply of a commodity
 - (b) Movement along and movement of the supply curve.
7. State the law of supply and illustrate it in the form of a curve with the following data:

<i>Price (in Rs.)</i>	<i>Quantity supplied (per period)</i>
0	0
1	1000
2	2000
3	3000
4	4000
5	5000
6	6000

8. Distinguish between contraction/expansion in supply, and decrease/increase in supply. Illustrate with diagrams.
9. What are the factors on which the supply of a commodity depends? Discuss them briefly.
10. The supply schedule of a commodity as follows:

<i>Price per unit (Rs.)</i>	<i>Quantity supplied initially</i>	<i>Quantity supplied after change</i>
1	20	0
2	40	20
3	60	40
4	80	60
5	100	80

- (i) Calculate elasticity of supply when price rises from Rs.2 to Rs.3, both in case of A and B.
- (ii) Why does supply elasticity differ in the two cases even though absolute change in quantity supplied is 20 units in both cases?
- (iii) The coefficient of elasticity of supply of a commodity X is 2. How much quantity of the commodity will a seller supply at the price of Rs.5 per unit if he supplies 80 units of it at Rs.4 per unit?
11. The supply function of a commodity x is $QS_x = 20P_x$. The value of P_x (in Rs) is given as 6, 5, 4, 3, 2, 1, and 0. Find out the producer's supply schedule.
 12. The market supply and demand schedules of a certain commodity at prices of Rs.6, 5, 4, 3, 2, 1, and 0 are given by the equation
 - (a) $Qd_x = (12 - 2P_x) 10000$
 - (b) $Qs_x = (20 P_x) 1000$
 13. Find out the equilibrium quantity and the equilibrium price.
 14. Suppose that a freely determined price of kerosene oil is Rs 4.00 per litre. The government fixes its controlled price at Rs 3.00 per litre. At this price there is a shortfall of 20 lakh litres between the quantity and demand and supplied. What will be the consequence of this? Show with the help of a diagram.
 15. What is meant by change in supply?
 16. What effect does a cost saving technical progress have on the supply curve?
 17. What effect does an increase in input price have on the supply curve?
 18. What effect does an increase in excise tax rate have on the supply curve of the product?
 19. Name three factors that can shift a supply curve.



CONCEPTS OF COST

The concept of cost is of great significance in the micro economic theory. It is the cost of production which determines the production decision of an entrepreneur whose main aim is to maximize profit. Lower the cost of production, greater is the profit margin.

COST OF PRODUCTION

The expenses incurred on all inputs of production—both factor inputs and non-factor inputs are known as the cost of production. Land, labour, capital and organization are the factors of production called factor inputs. Raw materials, fuel, equipments, tools etc are non factor inputs. Thus, cost is a function of various factors. Symbolically, cost function can be expressed as under,

$$C = f(Q, T, P_f)$$

Where C is the total cost of production, Q is output; T is technology, and P_f is the prices of factors of production.

Some important concepts of costs of production are explained as under.

Real Cost and Nominal Cost

Real costs refer to those payments, which are made to factors of production for the toil and efforts in rendering their services. Real cost is estimated in terms of the pain and sacrifices of labour. It is also the cost of waiting.

Nominal cost is the money cost (expenses) of production incurred on various inputs of production.

Explicit and Implicit Costs

Explicit costs are the paid out costs. These are the payments made for productive resources purchased or hired by the firm. These include wages paid to the labourers, rent paid for the premises, payments made for the raw materials, payments into depreciation accounts, premium paid towards insurance against fire, theft, etc. According to Leftwitch, “*Explicit costs are those cash payments which firms make to outsiders for their services and goods.*” These costs appear in the accounting records of the firm.