SES'S L.S.RAHEJA COLLEGE OF ARTS AND COMMERCE

Course: Economics II Unit: II Prepared by: Rahul Dandekar

Important Concepts

1) **Money and Real Cost**

When cost of production is expressed in monetary terms, it is called as money cost. It is nothing but the aggregate expenditure (in terms of Money) incurred by a producer for producing final product. The concept of Money cost is extensively used in the theory of production. The Money cost is sum of explicit and implicit cost.

According to Marshall, "Real costs are the exertion of all the different kinds of labour that are directly or indirectly involved in making it together with the abstinence rather than the waiting required for saving the capital used in making it, all these efforts and sacrifices together will be called the real cost of production of the commodity."

Therefore real cost refers to the trouble and sacrifice of factors of production in the process of production.

2) **Private cost and Social cost**

Costs which are directly incurred by the individual or firm producing good or service is called **private cost**. This cost gives private benefit to an individual or firm engaged in relevant activity. Some of the examples of private cost are firms expenditure on purchase of raw material, payment of rent, wages and salaries, interest, insurance, depreciation etc. similarly companies expenditure of its labour, advertising cost for the promotion of goods, transportation cost to carry goods from company to the market are also considered as private cost.

Social cost on the other hand is bared by the society as a result of production of commodity. Even though social cost occurs due to production of a commodity it is not bared by the producer. It consists of external cost. E.g.: If a factory is located in a residential area causes air pollution. Due to pollution as the health of the people living in that area affects, they have to spend money on medical facilities. Even though this cost occurs due to the factory, it is passed on to the society. Externalities are included in the social cost.

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3) Historical cost and Replacement cost

The original money value spent at the time of purchasing of the asset is called **historical cost.** Most of the assets in the balance sheet are at the historical cost. One of the advantage of historical cost is that records maintained on the basis of historical cost are considered to be reliable, consistent, comparable and verifiable. Historical cost does not reflect current market valuation.

The amount which has to be spent at the time of replacing of the existing asset is called the **replacement cost**. This cost reflects the current market prices.

If we consider an increase in prices over the years, replacement cost will be greater than historical cost. If we consider fall in prices over the years, replacement cost will be less than historical cost and if we consider prices to be constant over the years, replacement cost and historical costs are the same.

4) Fixed cost and Variable cost

Fixed cost refers to the firm's expenditure on fixed factors of production. Even if no output is produced, fixed cost needs to be paid. Even if output increases in the short run, fixed cost remain constant. Eg: If a businessman borrows money from a bank to start his business. Initially even if his output is zero, he has to pay the interest on borrowed capital. Rent on land, insurance premium, tax payment are some of the examples of fixed cost. Addition of all fixed cost gives Total Fixed Cost.

Variable cost on the other hand refers to the firm's expenditure on variable factors of production. When no output is produced, variable cost is zero. As output increases, variable cost also increases. Payment for raw material, wages and salaries of the workers are some of the examples of variable cost. Addition of all variable costs gives the Total Variable Cost.

5) Sunk Cost and Incremental Cost

In order to enter in to the market certain costs are incurred by the firm. These costs are known as **Sunk cost**. It includes the cost by the firm for setting up the business, advertisement etc. These costs cannot be recovered by the firm if they decide to exit the market.

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Incremental cost refers to a change in total coat as a result of policy change or a change in managerial decision. The concept of incremental cost is broader as compared to marginal cost.

Marginal cost considers a change in total cost due to a unit change in output whereas incremental cost considers a change in total cost due to an introduction of new product , change in advertising strategy, additional batch of output etc. The concept of incremental cost is more relevant as compared to marginal cost because the firm increases its output in batches and not by unit only.

6) Implicit Cost and Explicit Cost

Implicit cost refers to the cost of all own factors which the entrepreneur employs in the business. It includes salary and wages for the service of entrepreneur, interest on capital invested by the entrepreneur etc. Implicit costs are also called indirect cost because direct cash payment is not made to own factors of production.

If entrepreneur sold these services to others, he would have earned money. Therefore implicit cost is also the opportunity cost of factors owned by him.

Explicit cost on the other hand is the direct cash payment made by the firm for purchasing or hiring of various factors of production. E.g. rent paid for hiring of land, money spent for purchasing for raw material, wages and salaries paid to the employees, expenditure on transport, power, advertising etc.

7) Accounting and Economic Cost

Accounting cost includes only explicit cost i.e. the firm's expenditure on purchasing of various factors of production. For financial purpose and tax purpose, accounting cost is important.

Economic cost on the other hand includes both explicit and implicit cost. This cost is important for managerial decision making therefore an economist who wants to take any decision consider both explicit and implicit cost.

8) Total cost (TC)

Firm's total expenditure on all fixed and variable factors for producing a commodity is called the Total cost of production.

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Therefore TC= TFC+TVC

For zero level of output there is some total cost. It increases with an increases in the level of output.

9) Average Cost (AC) or Average Total Cost (ATC) –

It refers to per unit cost of producing a commodity. It is calculated by the following formula

AC = TC/Q

Where AC = Average cost   TC = Total cost   Q = Number of units produced

Average cost can also be calculated by using following formula-

AC or ATC = AFC+AVC

Where

AC = Average Cost

AFC = Average Fixed Cost

AVC = Average Variable Cost

10) Average Fixed Cost (AFC) –

It is the per unit fixed cost of production. It can be calculated by the following formula

AFC= TFC/Q

Where TFC= Total Fixed Cost   Q = Number of units produced

11) Average Variable Cost (AVC) –

It is the per unit variable cost of production. It can be calculated by the following formula

AVC= TVC/Q

Where TVC= Total Variable Cost   Q= Number of units produced

12) Marginal Cost (MC) –

It is the addition made to the total cost. Or cost of producing an additional unit of output is called the marginal cost. It can be calculated by using following formula

MC = Change in total cost/ change in output

OR

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$MC = TC_n - TC_{n-1}$

13) Cost Function

Production function gives the functional relationship between the level of output and the various factor inputs (land, labour, capital and entrepreneur). The cost of production depends on the level of output produced, nature of technology used and prices of factors of production. Thus the cost function is derived from the production function. The cost function is given as-

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

Where C = total cost   Q = Level of output produced   T = Technology

Pf = Prices of factors   f = Functional relationship

If we assume that technology, prices of factors are constant, total cost increases with an increase in the level of output i.e. C = f(Q).

14) Envelop curve / Long run Average Cost Curve

The Long run Average Cost curve includes the family of short run average cost curves, it is called an Envelop curve. In the long run firm can also plan to increase its scale of production and therefore LAC curve is also called the Planning Curve.

Important Questions

1) If TFC = 1000 then calculate TC, AVC, AFC, ATC, MC.

Quantity In Units	0	1	2	3	4	5	6	7	8	9	10
TVC In Lakhs	0	125	140	150	170	200	245	305	385	485	615

2) If TFC = 500 then calculate TC, AVC, AFC, ATC, MC.

Quantity In Units	0	1	2	3	4	5	6	7	8	9	10
TVC In Lakhs	0	25	40	50	70	100	145	205	285	385	515

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3) Define TR, AR and MR. Also calculate TR, AR and MR for the following data.

Quantity In Units	1	2	3	4	5	6	7	8
Price In Lakhs	100	90	80	70	60	50	40	30

4) Define TR, AR and MR. Also calculate TR, AR and MR for the following data.

Quantity In Units	1	2	3	4	5	6	7	8
Price In Lakhs	50	50	50	50	50	50	50	50

5) Discuss relationship between Average, Marginal and Total Cost with the help of schedule and diagram.

6) Discuss relationship between Average, Marginal and Total Revenue with the help of schedule and diagram.

7) Explain concept of Envelop curve in detail.

8) Write short notes following

    a) Money Cost

    b) Real Cost

    c) Social Cost

    d) Private Cost

    e) Explicit Cost

    f) Implicit Cost

    g) Opportunity Cost

    h) Short run average cost curve

    i) Long run average cost curve

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