

COST

- **An amount that has to be paid or given up in order to get something**
- **Costs of a firm is incurred to establish the production unit and to purchase different factors of production**
- **There are 2 types of costs in economic theory**
 - short run costs
 - long run costs

Short run costs are costs over a period during which some factors of production are fixed

Long run costs are the costs over a period long enough to permit the change of all factors of production. In the long run all factors become variable.

COST FUNCTION

- Both in the short run and long run total cost is a multivariable function, that is, total cost is determined by many factors.

Long run cost function is

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

Short run cost function is

$$C = f(X, T, P_f, K)$$

where $C = tc$

$X =$ output

$T =$ technology

$P_f =$ prices of factors

$K =$ fixed factors



- Graphically cost are shown on two-dimensional diagrams. such curves imply that cost is a function of output, $C = f(X)$. (all other factors which determine costs are constant)
- If these factors do change, their effect on costs is shown graphically by a shift of the cost curve. This is the reason why determinants of costs other than output are called shift factors.



CONCEPTS OF COST

○ EXPLICIT COST

Explicit costs refer to those which fall under actual or business costs entered in the books of accounts. The payments for wages and salaries, materials, license fee, insurance premium, depreciation charges are the examples of explicit costs. These costs involve cash payments and are recorded in normal accounting practices.

○ IMPLICIT COST

there are certain other costs which do not take the form of cash outlays, nor do they appear in the accounting system. Such costs are known as implicit or imputed costs. Implicit costs may be defined as the earning expected from the second best alternative use of resources.



○ ACCOUNTING COSTS

Monetary value of economic resources used in performing an activity. These are contractual cash payments which the firm makes to other factor owners for purchasing and hiring the various factors .it is also known as explicit costs

○ ECONOMIC COSTS

The sacrifice involved in performing an activity. It may be expressed as the total of opportunity cost (cost of employing resources in one activity than the other) and accounting costs (the cash outlays).economist takes into account the accounting cost and also he takes into account the amount of money entrepreneur could have earned if he had invested his money and sold his own services and other factors in the next best alternative uses

ECONOMIC COST=ACCOUNTING COSTS+IMPLICIT COSTS



OPPORTUNITY COST

- The opportunity cost of anything is the next best alternative that could be produced instead by the same factors or by a equivalent group of factors, costing the same amount of money



PRIVATE COSTS AND SOCIAL COSTS

- The sum of implicit and explicit costs incurred by a firm to produce a product.
- The social costs are the sum of the private costs and net of negative externalities over positive externalities. if there is no negative externalities social costs will be greater than the private costs



- **FIXED COSTS** : Fixed costs are those which are incurred in hiring the fixed factors of production whose amount cannot be altered in short run
- **VARIABLE COSTS** : variable costs are those costs which are incurred on the employment of variable factors of production whose amount can be altered in the short run
- **TOTAL COST** : it is the sum of fixed and variable costs
- **SUNK COST** : Sunk costs are those expenditures incurred by a firm that cannot be recovered



- **AVERAGE FIXED COSTS** : It is the total fixed costs divided by the number of units of output produced

$$\text{TFC}/\text{Q}$$

- **AVERAGE VARIABLE COSTS** : It is the total variable costs divided by the number of units of output produced

$$\text{TVC}/\text{Q}$$

- **AVERAGE TOTAL COSTS** : It is the total cost divided by the number of units of output produced. It is simply called as average cost.

$$\text{TC}/\text{Q}$$

- **MARGINAL COST** : it is addition to the total cost caused by producing one more units of output.

$$\text{MC}_n = \text{TC}_n - \text{TC}_{n-1}$$

