

PRICE DETERMINATION IN DIFFERENT MARKETS

UNIT 1: MEANING & TYPES OF MARKETS

MARKET

MEANING

It is a platform where the buyers and sellers interact with each other in order to buy the commodities and sell the commodities.

ELEMENTS OF A MARKET

(a) Buyers and sellers; (b) A product or service; (c) Bargaining for a price; (d) Knowledge about market conditions; (e) One price for a product or service at a given time.

CLASSIFICATION OF MARKETS

ON THE BASIS OF GEOGRAPHICAL AREA

- Local markets (goods produced and sold in the same locality- hairdressers and retailers).
- Regional markets (the goods are sold in a particular state -traditional Assamese saree).
- National markets (the goods are sold in many parts of the country- Hindi books may have national markets in India)
- International markets (the goods are even sold to foreign countries-gold and silver).

ON THE BASIS OF TIME

- Very Short Period Market (perfectly inelastic supply-fish, eggs, fruits, milk, etc. which are perishable).
- Short-Period Market (supply of output may be increased by increasing the employment of variable factors).
- Long-period Market (all factors become variable).
- Very long-period or secular period (secular movements are observed in size of the population, capital supply, supply of raw materials etc.).

ON THE BASIS OF TRANSACTIONS

- Spot or cash market (grains sold in the *mandi* at the current prices).
- Forward or future market (purchase of foreign currency contract at a future rate from the bank).

ON THE BASIS OF REGULATION

- Regulated market (Rules are there -stock exchange).
- Unregulated market (No proper rules - weekly markets).

ON THE BASIS OF VOLUME OF BUSINESS

- Wholesale market (goods traded in large quantities- Business to Business, *i.e.*, B2B).
- Retail market (goods traded in smaller quantities- Business to Consumer, *i.e.*, B2C).

ON THE BASIS OF COMPETITION

- Perfect Competition (characterized by many sellers selling identical products to many buyers).
- Monopolistic Competition (many sellers offering differentiated products to many buyers, *for example*, Shampoo manufacturers).
- Monopoly (single seller producing for many buyers, *for example*, Indian Railways)
- Oligopoly (few sellers selling competing products to many buyers, *example*, Telecom Industry).

TOTAL REVENUE, AVERAGE REVENUE & MARGINAL REVENUE

TOTAL REVENUE OR TOTAL EXPENDITURE (TR)

It incurred by the purchasers of the firm's product refers to the amount of money, a firm received by selling units of the commodity.

$$TR = P \times Q$$

... where [P = Price & Q = Quantity

➤ **AVERAGE REVENUE (AR)**

It is the revenue earned per unit of output. It can be represented as: $AR = \frac{TR}{Q}$.

➤ **MARGINAL REVENUE (MR)**

It is the change in Total Revenue resulting from the sale of an additional unit of the commodity.

It is calculated as: $MR = \frac{\Delta TR}{\Delta Q}$.

For one-unit change in output, $MR_n = TR_n - TR_{n-1}$ (TR_{n-1} is the Total Revenue when sales are at the rate of $(n - 1)$ units per period).

➤ **RELATIONSHIP BETWEEN AR, MR, TR AND PRICE ELASTICITY OF DEMAND**

$$MR = AR \left[\frac{(E-1)}{E} \right] \quad \dots \text{ where } \left\{ \begin{array}{l} E = \text{Price elasticity of demand} \\ \text{If } E > 1; \text{ MR will be positive.} \\ \text{If } E < 1; \text{ MR will be negative.} \\ \text{If } E = 1; \text{ MR} = 0 \end{array} \right.$$

✂ **BEHAVIOURAL PRINCIPLES**

➤ **PRINCIPLE 1:** A firm should not produce if its Total Variable Costs are not met.

➤ **PRINCIPLE 2:** The firm will be making maximum profits by expanding output to the level where Marginal Revenue is equal to Marginal Cost.

If a firm produces a level of output such as $MR > MC$, then the **firm should increase output**.

UNIT 2: DETERMINATION OF PRICES

✂ **EQUILIBRIUM PRICE & QUANTITY**

The **Equilibrium** occurs at a point where the demand is *equal* to the supply of the product. The price and quantity at which the demand is equal to the supply of the product is called the **Equilibrium Price & Quantity** respectively. Changes in equilibrium price and quantity occurs whenever there are changes in the demand and supply.

✂ **SIMULTANEOUS CHANGES IN DEMAND & SUPPLY**

- If **both, an increase or decrease in demand and supply are equal**, there will be **no change** in the equilibrium price, but equilibrium output would change in the direction in which supply and demand change.
- If the **increase in demand is more than the increase in supply**, the equilibrium price will increase and output will increase.
- If the **increase in supply is more than the increase in demand**, equilibrium price will fall, and output will increase.
- When **both demand and supply decreases**, the equilibrium quantity decreases but the change in equilibrium price is uncertain.
- When **demand increases and supply decreases**, the equilibrium price rises but nothing certain can be said about the change in equilibrium quantity.
- When **demand decreases and supply increases**, the equilibrium price falls but nothing certain can be said about the change in equilibrium quantity.

UNIT 3: PRICE OUTPUT DETERMINATION UNDER DIFFERENT MARKETS FORMS

✓ PERFECT COMPETITION

➤ FEATURES OF PERFECT COMPETITION

(a) Large number of buyers and sellers; (b) Product homogeneity; (c) Perfect knowledge of the market conditions; (d) Firm is free to enter the market or to go out of it; (e) Very low transaction costs; (f) Price takers.

➤ PRICE DETERMINATION IN PERFECTLY COMPETITIVE MARKET

Industry is the price maker and firm is the price taker. Industry sets the equilibrium price of the product and firms of this industry has to accept the price decided by the industry.

➤ THREE IMPORTANT CONDITIONS OF PURE COMPETITION

(a) Many buyers and sellers (b) Homogeneous products (c) Free entry and exit

✓ COMPETITIVE FIRM AND PROFITS

- When the Average Revenue of a firm is just equal to its Average Total Cost, a firm earns **normal profits** or **zero economic profits**.
- When a firm earns **super-normal profits**, its Average Revenue is more than Average Total Cost.

✓ SHORT-RUN EQUILIBRIUM

➤ Two conditions for equilibrium in all market conditions are:

(a) $MC = MR$ (b) MC curve should cut the MR curve from below.

- With a given supply curve, a decrease in demand causes an overall decrease in price and a decrease in equilibrium quantity.
- For a price-taking firm (as in perfect competition), Marginal Revenue is *equal* to the Price (P).

✓ LONG-RUN EQUILIBRIUM

- The firm's condition for the firm's long-run equilibrium is that the Marginal Cost should be equal to the price and the Long-run Average Cost, *i.e.*, $LMC = LAC = P$.
- **In the long run**, $LAR = LMR = P = LMC = LAC$ and there will be optimum allocation of resources. (The perfectly competitive market system is a myth. This is because the assumptions on which this system is based are never found in the real world market conditions).
- **In perfect competition**, consumers pay the minimum possible price which covers the Marginal Cost, *i.e.*, $MC = AR$, plants are used at full capacity in the long-run so that there is no wastage of resources, *i.e.*, $MC = AC$.
- **MC curve of the firm in perfect competition** is the firm's supply curve. In a perfect competition firm, the MC curve above AVC is considered as the firm's supply curve because when $P < AVC$, the firm will not supply any output.

✓ MONOPOLY

➤ FEATURES OF MONOPOLY MARKET:

(a) Single seller of the product; (b) Barriers to entry; (c) No close-substitutes; (d) Market power (Price > Marginal Cost)

➤ ECONOMIC EFFECTS OF MONOPOLY

(a) Often criticized; (b) Charge substantially higher prices and produce lower levels of output; (c) Earn economic profits; (d) Prices *exceed* Marginal Costs; (e) Restricts consumer sovereignty; (f) Substantial financial resources; (g) Do not have the necessary incentive; (h) Use their monopoly power to pay lower prices to their suppliers.

➤ REASONS BEHIND CREATION OF MONOPOLY

Strategic control over scarce resources, Unique product, Exclusive rights by government, patents and copyrights, cartels, huge investment, high level of goodwill, stringent legal rules discouraging entry of new firms in the industry, various anti-competitive measures.

➤ AT EQUILIBRIUM LEVEL

- In perfect competition: Price = MC = AR.
- In monopoly / monopolistic competition: Price > MC and Price = AR

➤ RELATIONSHIP BETWEEN AR & MR OF A MONOPOLY FIRM

- AR & MR are both negatively-sloped (downward sloping) curves.
- The slope of the MR curve is twice that of the AR curve.
- AR cannot be zero, but MR can be zero or even negative.
 - The firm earns a **maximum profit at the equilibrium level** (when MC = MR, MC curve cuts MR curve from below).
 - All firm's least cost output is at that point where the AC curve is lowest.
 - AR = Demand curve.

≠ DISCRIMINATING MONOPOLY

➤ MEANING

Discriminating Monopoly (Price Discrimination) implies that the monopolist charges different prices for his commodity from different consumers at different places for different uses.

➤ EXAMPLES OF PRICE DISCRIMINATION

Railways separate high-value or relatively small-bulk commodities that can bear higher freight charges from other categories of goods. In addition, some countries dump goods at low prices in foreign markets to capture them, etc.

➤ CONDITIONS FOR PRICE DISCRIMINATION

- The seller should have some control over the supply of his product.
- The seller should be able to divide his market into two or more sub-markets.
- The price elasticity of the product should be different in different sub-markets.
- There must be no market arbitrage.

➤ OBJECTIVES OF PRICE DISCRIMINATION

(a) Maximum profit; (b) Dispose-off surplus stock; (c) Enjoy economies of scale; (d) Capture foreign markets; (e) Secure equity through pricing.

➤ THREE DEGREES OF PRICE DISCRIMINATION

- *First degree* (prices are charged according to the financial capacity of the consumers).
- *Second degree* (Prices are charged as per the quantity of the goods purchased by the consumer).
- *Third degree* (different prices are charged in different sub-markets based on the price elasticity of product).

➤ EQUILIBRIUM OF THE PRICE-DISCRIMINATING MONOPOLIST

Marginal Cost *equals* to the Marginal Revenue of all the sub-markets.

≠ FEATURES OF MONOPOLISTIC COMPETITION

- (a) Large number of sellers
- (c) Freedom of entry and exit

- (b) Product differentiation
- (d) Non-price competition.

≠ OLIGOPOLY

➤ MEANING

It is often described as competition among the few sellers. **Prof. Stigler** defines oligopoly as that "situation in which a firm bases its market policy, in part, on the expected behaviour of a few close rivals."

➤ TYPES OF OLIGOPOLY

- Pure oligopoly or perfect oligopoly (the product is homogeneous in nature. *For example*, Aluminium industry.
- Open (new firms can enter the market) and closed oligopoly (entry is restricted).