CLASS - XI

ECONOMICS

CHAPTER–5

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Market Structure and Pricing

PREPARED BY
V.ARIVAZHAGAN.,M.A.,B.ED.,M.PHIL.,M.C.A.,
P.G.ASST.IN ECONOMICS.,
ADITYA'S VIVEKANANDA MATRIC HR.SEC.SCHOOL,
VILUPPURAM – 605602.

CHAPTER - SYNOPSIS

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

CHAPTER - SYNOPSIS

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Quote :

"Marketing is not the art of finding clever ways to dispose of what you make. It is the art of creating genuine customer value".

– Philip Kotler

Learning Objectives :

1. To understand the characteristics of markets and how the price and output are determined under the several types of markets; and,
2. To study the nature of the profit obtained by a firm under different types of markets

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,


MARKET

Introduction :

- Every commodity or service that is exchanged has two sides : the supply side and the demand side.
- The supply side contains information on the number of sellers, the nature and the quantum of the product produced and brought to the market for sale.
- The demand side contains information on the number of buyers entering the market for buying the product.
- Hence the study of market and market structure forms an important feature of micro economics.

Meaning of Market

- In the ordinary sense, the word 'market' refers to a physical place, where commodities and services are bought and sold.
- In Economics, the term 'market' refers to a system of exchange between the buyers and the sellers of a commodity.
- Besides direct exchanges, there are exchanges that are carried out through correspondence, telephones, online, email etc.
- A market has the following characteristic features:

    1. ***Buyers and sellers of a commodity or a service***
    2. ***A commodity to be bought and sold***
    3. ***Price agreeable to buyer and seller***
    4. ***Direct or indirect exchange.***

Classification of Markets

Market is of various kinds.

They are classified:

- ***5.3.1 On the basis of Area:***
- ***5.3.2 On the basis of Time:***
- ***5.3.3 On the Basis of Quantity of the Commodity***
- ***5.3.4 On the Basis of Competition***

5.3.1 On the basis of Area:

The market is classified not only on its geographical spread, but also on the nature of the goods exchanged.

i. ***Local market arises when products or services are sold and bought in the place of their production. In such markets, the products exchanged are mostly perishable and semi-durable in nature: For example, Vegetable, fruits etc.***
ii. ***Provincial market arises when products or services are sold and bought in a restricted circle. For example, provincial newspaper.***
iii. ***National market arises when products and services are sold and bought throughout a country. For example, Nation-wide market for tea, coffee, cement, electrical goods, some printed books etc.***
iv. ***International market arises when products and services are sold and bought at the world level. For example, petrol, gold etc.***

5.3.2 On the basis of Time :

- Alfred Marshall classifies market on the basis of time.
- The 'time' here refers to the nature of the factors, such as fixed factors and variable factors, used in the production process, and how the supply of the products meets with varying demand situations in the determination of price of the products.

*i. **Very short period market or Market Period***
*ii. **Short period market***
*iii. **Long period market***
*iv. **Very long period market (or a Secular Period Market)***

Continue…

- i. ***Very short period market or Market Period***
  - It occurs when with the available time, the quantum supplied of a product cannot be increased (or decreased). Here, the supply curve is vertical; it is inelastic. In this market, the demand force is more active than the supply force in the determination of the price. For example, given an inelastic supply for food, an increase in its demand, as for example, during a flood situation, raises the price of food.
- ii. ***Short period market***
  - It occurs when the quantum supplied of a product can be increased (or decreased) to some extent. Here, the supply curve is a little more elastic. In this period, some factors continue to be fixed and they work a little more intensively to meet an increased demand.
- iii. ***Long period market***
  - It occurs when the quantum supplied of a product can be increased (or decreased) to a larger extent. Here the supply curve is very much elastic. Thus, to meet an increase in demand, the quantum of *all the factors becomes variable. There are no fixed factors here. Therefore, there is a possibility for larger changes in supply. The price of the product cannot be as high as in the case of short run.*
- ***iv. Very long period market (or a Secular Period Market)***
  - It occurs when the entire economy undergoes a drastic change. Newer technologies are introduced and most modern products are produced. Several newer methods of production are adopted in the production process, with improvements taking place in technology. For example, the entry of pen-drive has driven out compact disc (CD); as CD has replaced floppies which once replaced tape cassettes.

5.3.3 On the Basis of Quantity of the Commodity

i. Whole-sale market is for bulk selling and buying of goods (Clothing, Grocery etc.). The price is likely to be low compared to retail market.

ii. Retail market is for selling or buying of commodities in small quantities (Clothing, Vegetable etc).

5.3.4 *On the Basis of Competition*

i. Perfect competition market

ii. Imperfect competition market which comprises monopoly market, monopolistic competition market, duopoly market, oligopoly market etc.

Firm and Industry

1. *FIRM :* A firm refers to a single production unit in an industry, producing a large or a small quantum of a commodity or service, and selling it at a price in the market. Its main objective is to earn a profit. There may be other objectives as described by managerial and behavioral theories of the firm.
2. *INDUSTRY :* An industry refers to a group of firms producing the same product or service in an economy. For example, a group of firms producing cement is called a cement industry.

5.4 Equilibrium Conditions for a Firm

- Equilibrium of the firm means that the firm reaches the maximum profit.
- Now, there are two approaches (TC = TR) for calculating the maximum profits.
  - **5.4.1 Total curve approach**
  - **5.4.2 Marginal curve Approach**

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.4.1 Total curve approach (TC = TR)

- In the TC-TR Approach, profit is obtained by a firm, through the difference between the TC and the TR.
- Equilibrium is obtained at the point where maximum difference between the TC and TR occurs.
- This TC-TR method is not generally adopted in the calculation of maximum profit.
- Hence to calculate profit / loss, economists resort to the MC=MR approach.
- Shaded area denotes profit.
- Profit is maximum when Q = 5.

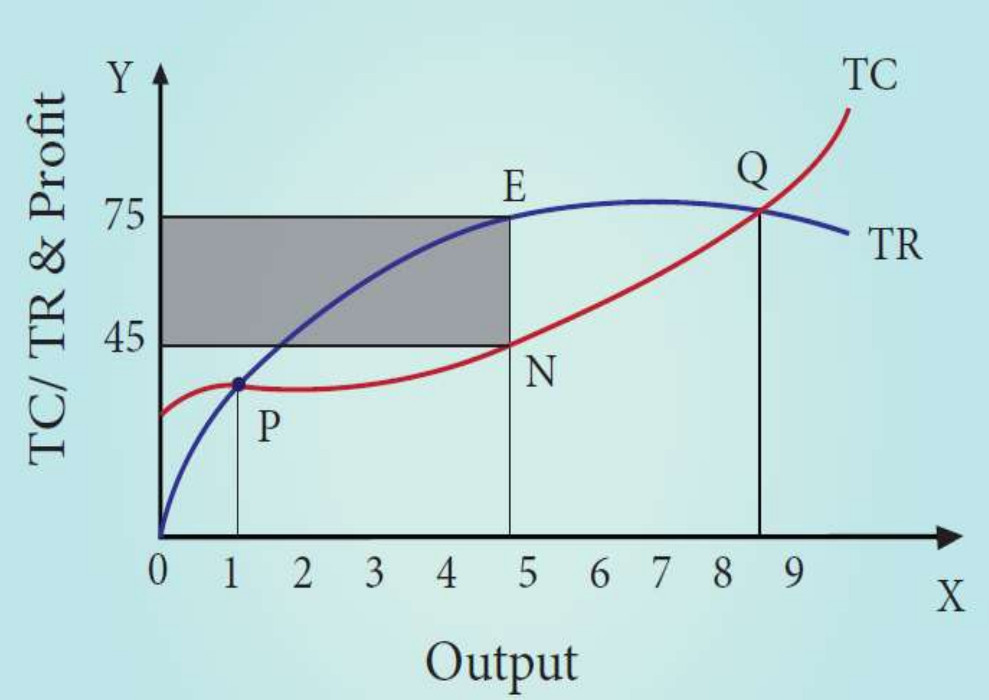


Diagram 5.1

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.4.2 Marginal curve Approach (MC = MR)

- In this approach, the following two conditions are to be verified to obtain equilibrium of a firm.

1. MC = MR

- Look at the following hypothetical situation. A rational seller will not be in equilibrium at output level 1, though MC=MR at that point, since continuing production, his profit increases.
- When he produces an output beyond 1 unit till he reaches 5 units, his MC < MR. It is advantageous for the producer to continue his production.
- Again, he will not be in equilibrium beyond 5 units of Q, when his MC > MR, implying that the seller incurs loss.
- Therefore, he is said to be in equilibrium, i.e., at the point of maximum profit when his MC is equal to MR.
- Hence, MC = MR is the first condition for the equilibrium.
- (Note: This is *a necessary condition but not a sufficient condition).*

2. MC cuts MR curve from below (Sufficient conditions)

- A firm under perfect competition faces a horizontal price line.
- (It is also the AR curve and the MR curve).
- A firm under imperfect competition focuses declining price line.
- The MC is U-shaped and it cuts MR at two points, both *from above (i.e., at point A) and also from below (i.e., at point B), as shown in the diagram.*
- Only at point B, the equilibrium condition is fulfilled.
- Thus for equilibrium under all market situations the two conditions viz., MC = MR; and MC cuts MR from below.

Diagram & Market Structure

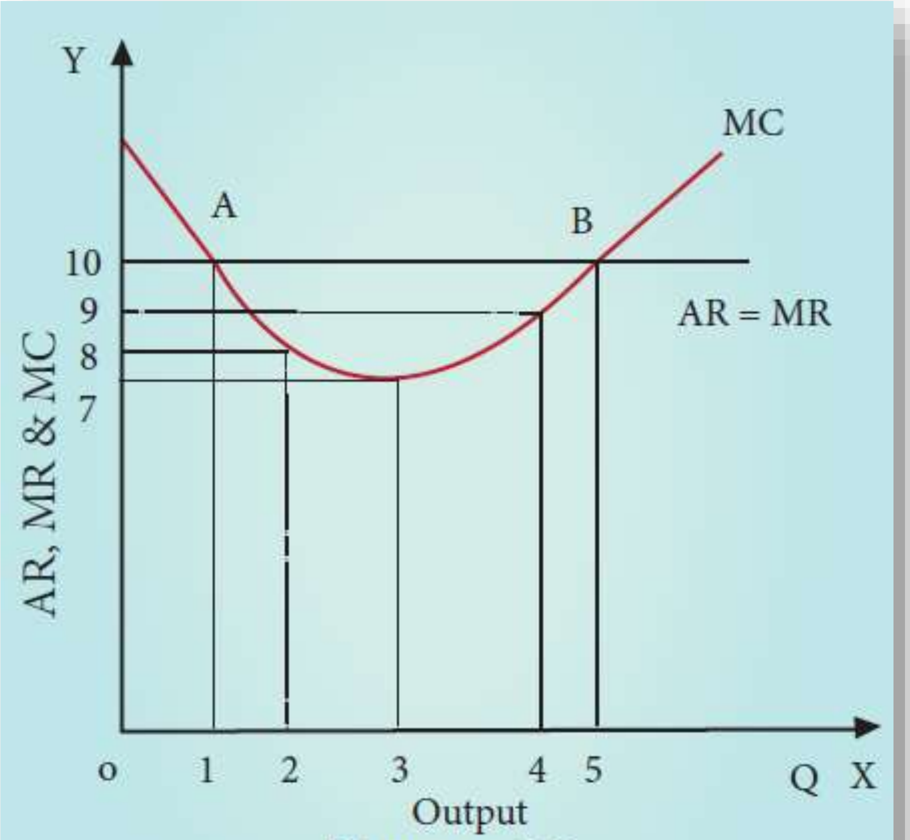
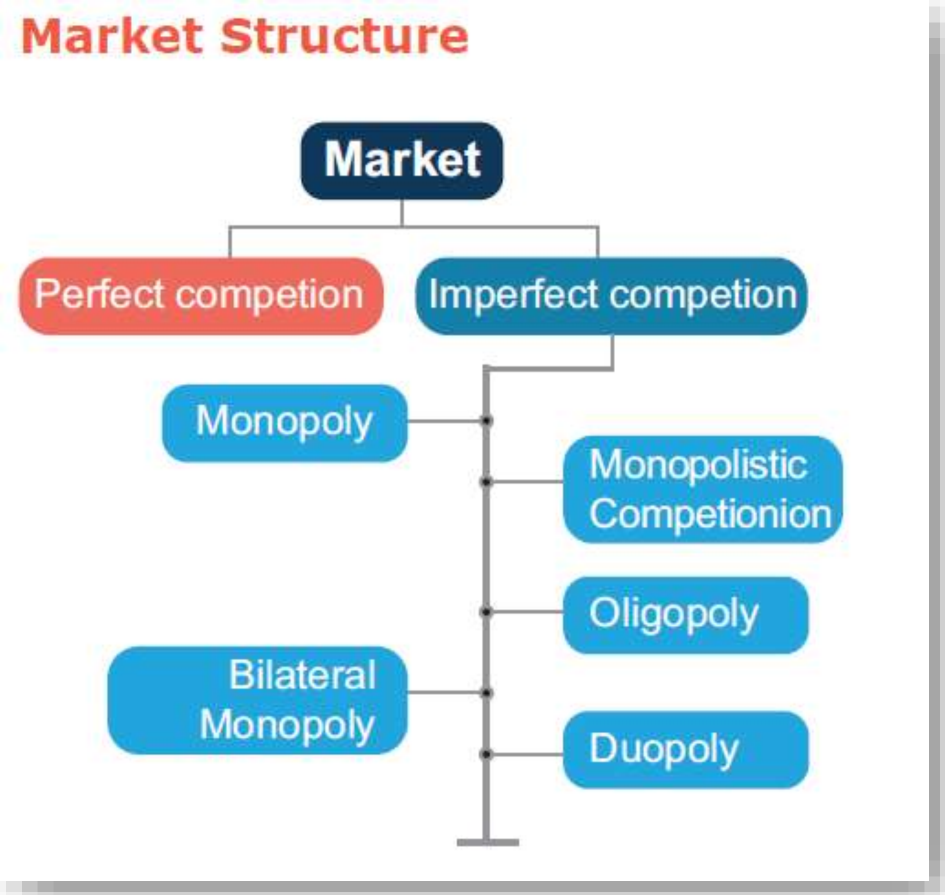


Diagram 5.2



V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.5 Perfect Competition

- It is an ideal but imaginary market. 100% perfect competition cannot be seen.
- Perfect Competition market is that type of market in which the number of buyers and sellers is very large, all are engaged in buying and selling a homogenous product at uniform price without any artificial restrictions and possessing perfect knowledge of the market at a time.
- According to Joan Robinson, *"Perfect competition prevails when the demand for the output of each producer is perfectly elastic".*

- **5.5.1 Features of the Perfect Competition:**
- **5.5.2 Perfect Competition: Firm's Equilibrium in the Short Run**
- **5.5.3 Perfect Competition: Firm's Equilibrium in the Long Run (Normal Profit)**

5.5.1 Features of the Perfect Competition:

a) *Large Number of Buyers and Sellers*

b) *Homogeneous Product and Uniform Price*

c) *Free Entry and Exit*

d) *Absence of Transport Cost*

e) *Perfect Mobility of Factors of Production*

f) *Perfect Knowledge of the Market*

g) *No Government Intervention*

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.5.1 Features of the Perfect Competition:

a. Large Number of Buyers and Sellers

- 'A large number of buyers' implies that each individual buyer buys a very, very small quantum of a product as compared to that found in the market.
- This means that he (he includes she also) has no power to fix the price of the product.
- He is *only a price-taker and not a price-maker.*
- The term, 'large number of sellers' implies that share of each individual seller is a very, very small quantum of a product.
- This means that he has no power to fix the price of the product. Like the buyer, the seller also only a *price-taker and not a price-maker.*

b. Homogeneous Product and Uniform Price

- The product sold and bought is homogeneous in nature, in the sense that the units of the product are perfectly substitutable.
- All the units of the product are identical (ie) of the same size, shape, colour, quality etc.
- Therefore, a *uniform price prevails in the market.*

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Continue…

c. Free Entry and Exit

- In the short run, it is possible for the very efficient producer, producing the product at a very low cost, to earn *super normal profits.*
- *Attracted by such a profit, new firms enter into the industry.*
- *When large number of firms enter, the supply (in comparison to demand) would increase, resulting in lower price.*
- An inefficient producer, who is unable to bring down the cost incurs loss.
- Disturbed by the loss, the existing loss-incurring firms quit the market.
- If it happens, supply will then decrease, price will go up.
- Existing firms could earn more profit.

d. Absence of Transport Cost

- The prevalence of the uniform price is also due to the absence of the transport cost.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Continue…

e. Perfect Mobility of Factors of Production

- The prevalence of the uniform price is also due to the perfect mobility of the factors of production. As they enjoy perfect freedom to move from one place to another and
- from one occupation to another, the price gets adjusted.

f. Perfect Knowledge of the Market

- All buyers and sellers have a thorough knowledge of the quality of the product, prevailing price etc.

g. No Government Intervention

- There is no government regulation on supply of raw materials, and in the determination of price etc.

5.5.2 Perfect Competition:

Firm's Equilibrium in the Short Run

- In the short run, at least a few factors of production are fixed.
- The firms under Perfect Competition take the price (10) from the industry and start adjusting their quantities produced.
- For example Qd= 100 – 5P and Qs=5P. At equilibrium Qd=Qs.
- Therefore 100-5P=5P.
- 100 = 10P; 100/10 = P Qd = demand
- P = 10 P = Price
- Qd = 100-5(10) Qs = Supply
- 100-50 = 50
- Qs = 5(10)=50
- Therefore 50 = 50

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

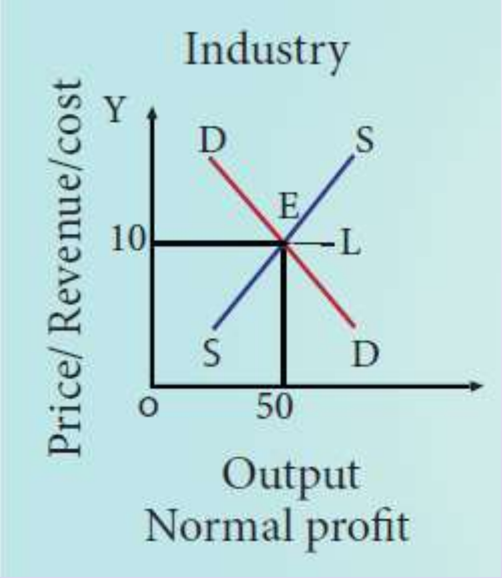
Continue...

- This diagram consists of three panels.
- The equilibrium of an industry is explained in the first panel.
- The demand and supply forces of all the firms interact and the price is fixed as ₹10.
- The equilibrium of an industry is obtained at 50 units of output.
- In the second part of the diagram, AC curve is lower than the price line.
- The equilibrium condition is achieved where MC=MR.
- Its equilibrium quantity sold is 50.
- With the prevailing price, ₹10 it experiences super normal profit.
- AC = ₹8, AR = ₹10.
- Its total revenue is 50X10=500.
- Its total cost is 50X8=400.
- Therefore, its total profit is 500-400=100.
- In the third part of the diagram, firm's cost curve is above the price line.
- The equilibrium condition is achieved at point where MR=MC. Its quantity sold is 50.
- With the prevailing price, it experiences loss. (AC>AR)
- Its total revenue is 50X10=500. Its total cost is 50X12=600.
- Therefore, its total loss is 600-500=100.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Continue...

- As *profit prevails in the market, new firms will enter the industry, thus increasing the supply of the product.*
- *This means a decline in the price of the product and increase the cost of production.*
- *Thus, the abnormal profit will be wiped out; loss will be incurred.*
- When *loss prevails in the market, the existing loss making firms will exit the industry, thus decreasing the supply of the product.*
- *This means a rise in the price of the product and reduction in the cost of production.*
- *So the loss will vanish; Profit will emerge.*
- *Consequent upon the entry and exit of new firms into the industry, firms always earn 'normal profit' in the long run as shown in diagram.*



SS – market supply

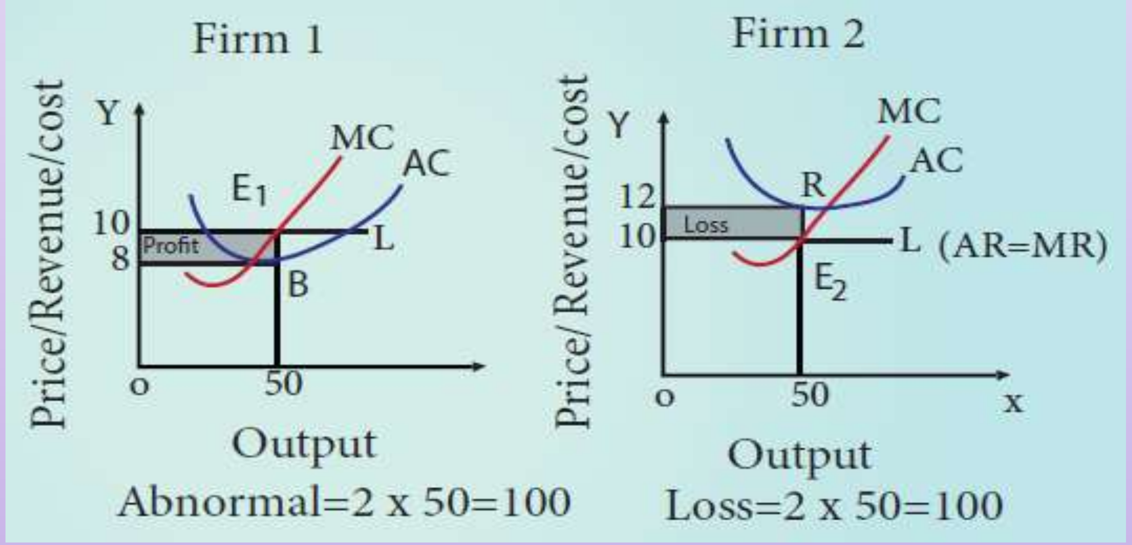
DD – market demand

AR – Average Revenue

AC – Average Cost

MR – Marginal Revenue

MC – Marginal Cost



5.5.3 Perfect Competition:

Firm's Equilibrium in the Long Run (Normal Profit)

- In the long run, all the factors are variable.
- The LAC curve is an envelope curve as it contains a few average cost curves.
- It is a flatter U shaped one.
- It is also known as planning curve.
- First, the firms will earn *only normal profit*.
- Secondly, all the firms in the market are in equilibrium.
- This means that there should neither be a tendency for the new firms to enter into the industry nor for any of the existing firms to exit from the industry.
- Long run supply curve is explained to determine the long run price after an increase in demand.
- The effect of the increase in demand in the short run is explained by the movement from point 'a' to point 'b'.
- The price increases from ₹8 to ₹13, and the quantity increases from 600 to 800 units.
- Economic profit of a firm is positive.
- Therefore, new firms enter the market. In the long run new firms entry will continue until the price drops to ₹11 and the quantity is 1,200 units.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Continue…

- The new long run equilibrium is shown by point 'c', where the new demand curve intersects supply curve.
- At this price level (₹11) and quantity (1,200 units).
- Due to diminishing returns, it is very difficult to increase output in the short tun, as a result the price will increase to cover these higher cost of production.
- New firms will enter into the market.
- The price gradually drops to the point (₹11) at which each firm makes zero economic profit.
- A firm under perfect competition even in the long run is a price – taker, not a price – maker.
- It takes the price of the product from the industry. And it superimposes its cost curves on the revenue curves.
- Long run equilibrium of the firm is illustrated in the diagram.

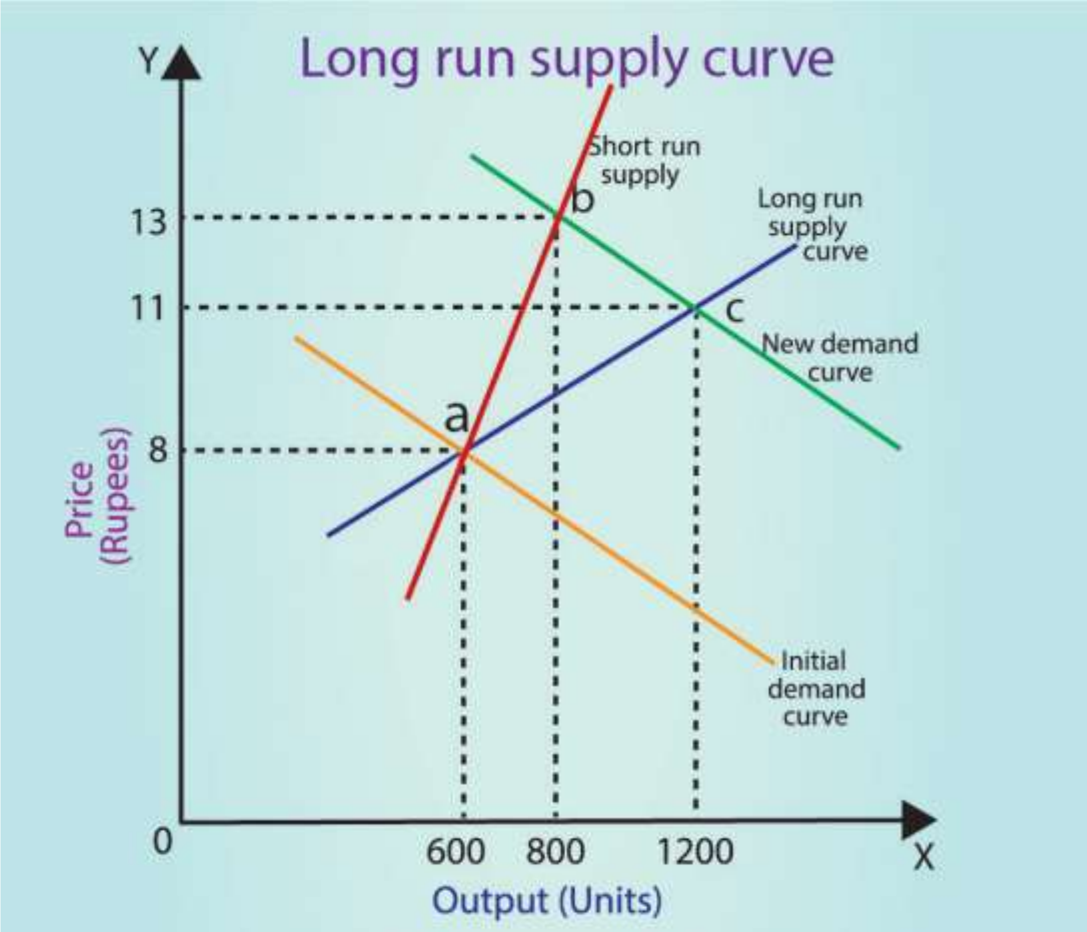


Diagram 5.5

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Continue…

- Under perfect competition, long run equilibrium is only at minimum point of LAC.
- At point E, LMC = MR = AR = LAC.
- In the above diagram (5.4), average cost is equal to average revenue.
- The equilibrium of the firm finally rests at point E where price is 8 and output is 500. (Numbers are hypothetical)
- At this point, the profit of the firm is only normal. Thus condition for long run equilibrium of the firm is :
- **Price = AR=MR = Minimum AC**
- At the equilibrium point, the SAC>LAC.
- Hence, long run equilibrium price is lower than short run equilibrium price; long run equilibrium quantity is larger than short run equilibrium quantity.

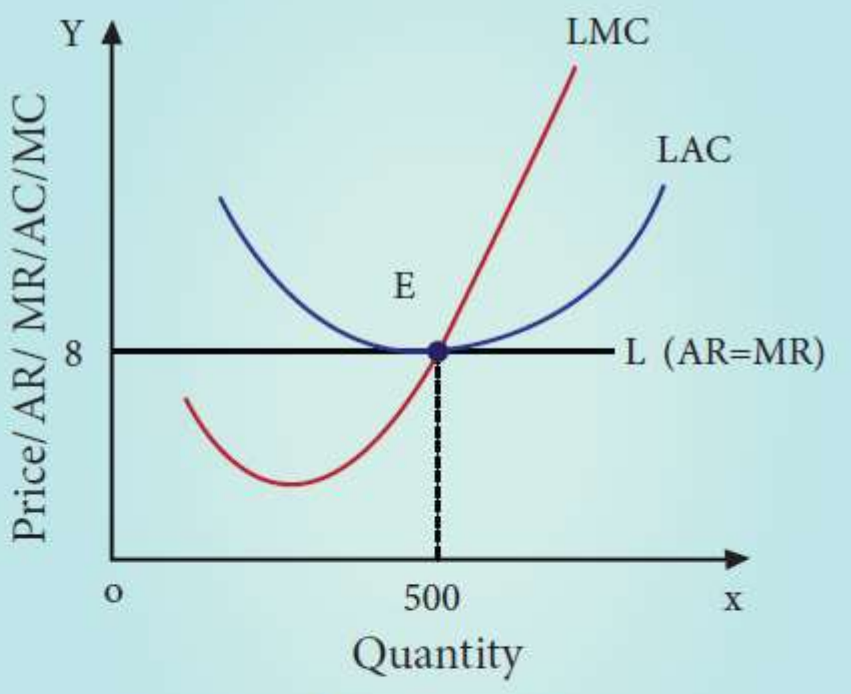
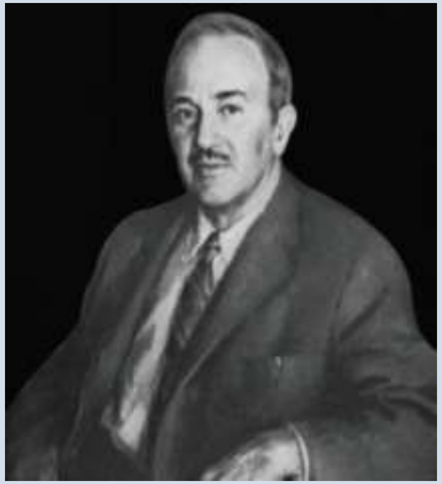


Diagram 5.4

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.6 Imperfect Competition

- The concept of imperfect competition was propounded in 1933 in England by Joan Robinson and in America by E.H. Chamberlin.
- It is an important market category where the individual firms exercise their control over the price.
- **Definition:** *"Imperfect competition is a competitive market situation where there are many sellers, but they are selling heterogeneous (dissimilar) goods as opposed to the perfect competitive market scenario."*
- *As the name suggests, competitive markets are imperfect in nature.*
- **Description:** ***"Imperfect competition is the real world competition.***
- ***Today some of the industries and sellers follow it to earn surplus profits.***
- ***In this market scenario, the seller enjoys the luxury of influencing the price in order to earn more profits.***
- ***If a seller is selling a non-identical good in the market, then he can raise the prices and earn profits.***
- ***High profits attract other sellers to enter the market and sellers, who are incurring losses, can very easily exit the market."***



Joan Robinson 1903-1983 Edward Chamberlin1899 -1967

5.7 Monopoly

- 5.7.1 Features of Monopoly
- 5.7.2 Sources of Monopoly Power
- 5.7.3 Price & Output Determination Under Monopoly
- 5.7.4 Price Discrimination under monopoly
- 5.7.5 Degrees of Price Discrimination
- 5.7.6 Dumping

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Monopoly…

Meaning :

- The word monopoly has been derived from the combination of two Greek words i.e., 'Mono' and 'Poly'.
- Mono refers to a single and "poly" to seller.
- In this way, monopoly refers to a market situation in which there is only one seller of a commodity.
- Hence, there is no scope for competition.
- (Still some economists observe that there will always be potential threat to the monopolists).

Definition :

- Monopoly is a market structure characterized by a single seller, selling the unique product with the restriction for a new firm to enter the market.
- Monopoly is a form of market where there is a single seller selling a particular commodity for which there are no close substitutes.

5.7.1 Features of Monopoly

- 1. There is a single producer / seller of a product;
- 2. The product of a monopolist is unique and has no close substitute;
- 3. There is strict barrier for entry of any new firm;
- 4. The monopolist is a price-maker;
- 5. The monopolist earns maximum profit/ abnormal profit.

5.7.2 Sources of Monopoly Power

1. Natural Monopoly:

- Ownership of the natural raw materials [Eg.Gold mines (Africa), Coal mines, Nickel (Canada) etc.]

2. State Monopoly:

- Single supplier of some special services (Eg.Railways in India)

3. Legal Monopoly:

- A monopoly firm can get its monopoly power by getting patent rights, trade mark from the government.

5.7.3 Price & Output Determination Under Monopoly

- A monopoly is a one firm-industry.
- Therefore, a firm under monopoly faces a downward sloping demand curve (or AR curve).
- Since, under monopoly AR falls, as more units of output are sold, the MR lies below the AR curve (MR<AR).
- The monopolist will continue to sell his product as long as his MR>MC.
- He attains equilibrium at the level of output when its MC is equal to MR.
- Beyond this point, the producer will experience loss and hence will stop selling.
- From this diagram, till he sells 3 units output, MR is equal to MC.
- The monopoly firm will be in equilibrium at the level of output where MR is equal to MC. The price is 23.
- To checkup how much profit the monopolist is making at the equilibrium output, the average revenue curves and the average cost curves are used.
- At equilibrium level of output, (3) is the average revenue is 23 and the average cost is 12.67, therefore (23-12.67 = 10.33) is the profit per unit.
- Total profit = (Average Revenue – Average Cost) X Total output
  - = (23 – 12.67) × 3
  - = 10.33 × 3 = 30.99

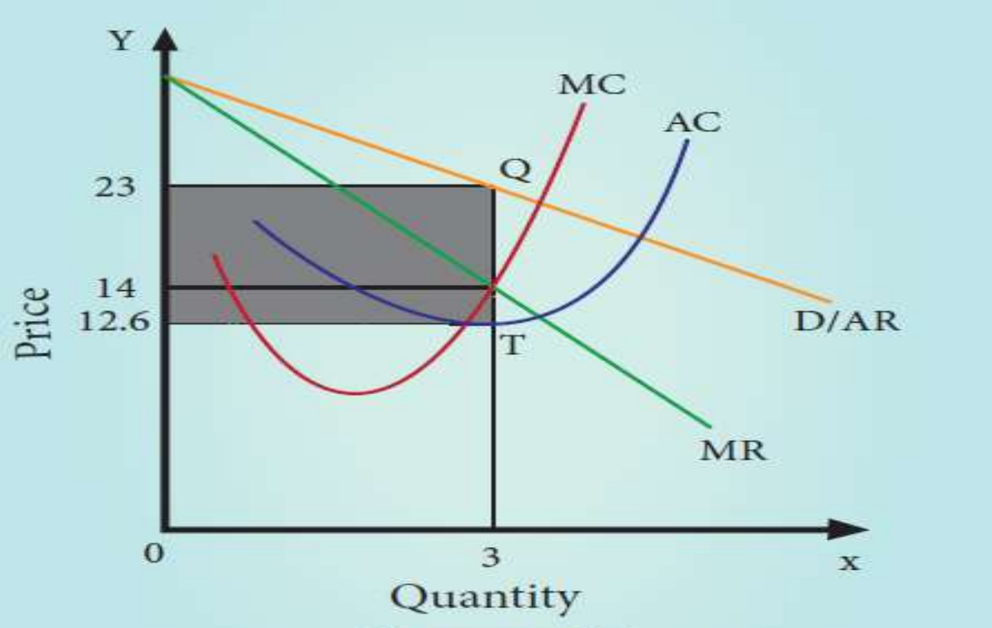


Diagram 5.6

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.7.4 Price Discrimination under monopoly

- A discriminating monopoly is a single entity that charges different prices for different consumers.
- Higher price will be charged for price inelastic consumers and vice versa
- **Types of Price Discrimination**
- There are three types of price discrimination :
  - (i) ***Personal***
  - (ii) ***Geographical***
  - **(iii) On the basis of Use**

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Types of Price Discrimination

There are three types of price discrimination.

- **(i) *Personal*** – *Different prices are charged for different individuals (for example, the railways give tickets at concessional rate to the 'senior citizens' for the same journey).*
- **(ii) *Geographical*** – *Different prices are charged at different places for the same product (for example, a book sold within India at a price is sold in a foreign country at lower price). On their basis, China drops its goods in Indian market. As a result, watch and toys industries closed down their business.*
- **(iii) On the basis of Use** – Different prices are charged according to the use of a product (for example, lower rates are charged by Tamil Nadu Electricity Board for domestic uses of electricity and higher rates are charged for commercial and industrial uses).

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.7.5 Degrees of Price Discrimination

- Price discrimination has become widespread in almost all monopoly markets.
- According to A.C.Pigou, there are three degrees of price discrimination.
  - **(i) First degree price discrimination**
  - **(ii) Second degree price discrimination**
  - **(iii) Third degree price discrimination**

three degrees of price discrimination…

(i) First degree price discrimination

- A monopolist charges the maximum price that a buyer is willing to pay.
- This is called as perfect price discrimination.
- This price wipes out the entire consumer's surplus.
- This is maximum exploitation of consumers.
- Joan Robinson named it as "Perfect Discriminating Monopoly".

(ii) Second degree price discrimination

- Under this degree, buyers are charged prices in such a way that a part of their consumer's surplus is taken away by the sellers.
- This is called as imperfect price discrimination.
- Joan Robinson named it as "Imperfect Discriminating Monopoly".
- Under this degree, buyers are divided into different groups and a different price is charged for each group.
- For example, in cinema theatres, prices are charged for same film show from viewers of different classes.
- In a theatre the difference between the first row of first class and the last row in the second class is smaller as compared to the differences in charges.

(iii) Third degree price discrimination

- The monopolist splits the entire market into a few sub-market and charges different price in each sub-market.
- The groups are divided on the basis of age, sex and location.
- For example, railways charge lower fares from senior citizens.
- Students get discounts in museums, and exhibitions.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.7.6 Dumping

- Dumping refers to practice of the monopolist charging higher price for his product in the local market and lower price in the foreign market.
- Through dumping, a country expands its command over other countries for its product.
- This is also called as ‘International Price Discrimination”.
- For example, India’s electronic market is flooded with the China’s products.

5.8 Monopolistic Competition

- Monopolistic competition refers to a market situation where there are many firms selling a differentiated product.
- There is competition which is keen, though not perfect, among many firms making very similar products.
- No firm can have any perceptible influence on the price-output policies of the other sellers nor can it be influenced much by their actions.
- Thus monopolistic competition refers to competition among a large number of sellers producing close but not perfect substitutes for each other.
  - ***5.8.1 Features of monopolistic competition***
  - ***5.8.2 Price and Output Determination under Monopolistic Competition***
    - **Short-run equilibrium:**
    - **Long-Run Equilibrium of the Firm and the Group Equilibrium**
  - ***5.8.3 Wastes of Monopolistic Competition***
    - **Idle Capacity**
    - **Unemployment**
    - **Advertisement**
    - **Too Many Varieties of Goods:**
    - **Inefficient Firms**

5.8.1 Features of monopolistic competition

The important features of monopolistic competition are :

1. There are large number of buyers and many sellers.
2. Firms under monopolistic competition are price makers. They set their own prices.
3. Firms produce differentiated products. It is the key element of monopolistic competition.
4. There is a free entry and exit of firms.
5. Firms compete with each other by incurring selling cost or expenditure on sales promotion of their products.
6. Non – price competition is an essential part of monopolistic competition.
7. A firm can follow an independent price policy.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Examples of Monopolistic Competition

- Clothing shops
- Gas stations
- Grocery stores
- Athletic wear
- Fast food restaurants
- Business supply stores
- Home Supply Stores
- Pet foods

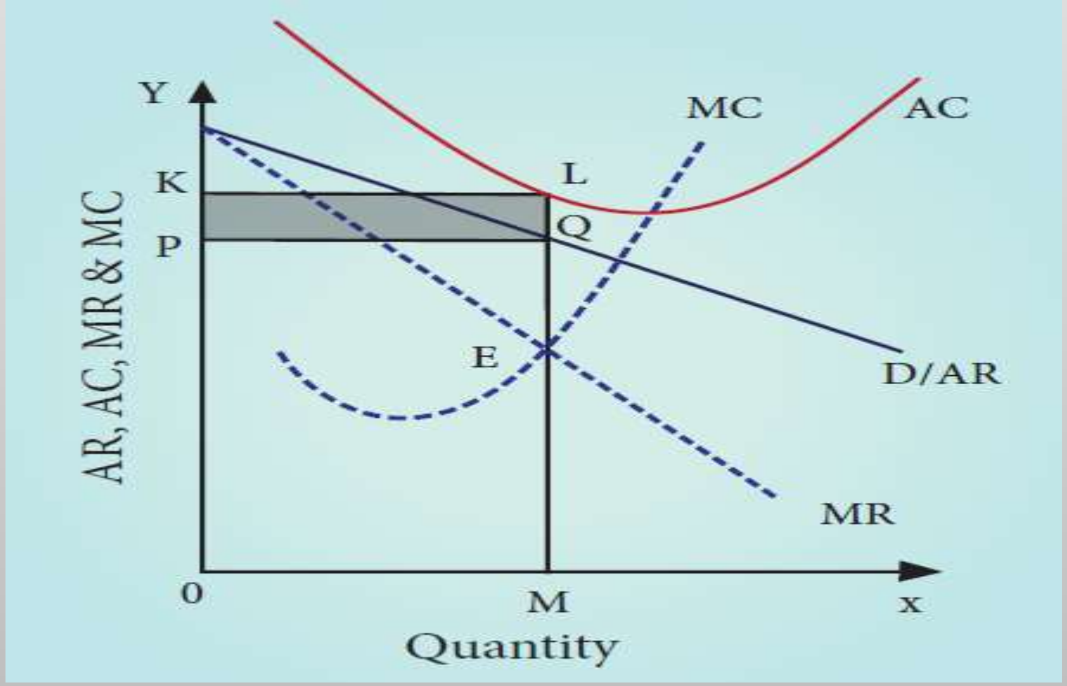
5.8.2 Price and Output Determination under Monopolistic Competition

- The firm under monopolistic competition achieves its equilibrium when it's MC = MR, and when its MC curve cuts its MR curve from below.
- If MC is less than MR, the sellers will find it profitable to expand their output.
- Under monopolistic competition
  - **(1) The demand curve is downwards sloping.**
  - **(2) There are close substitutes.**
  - **(3) The demand curve (the average revenue curve) is fairly elastic.**
- Under monopolistic competition, different firms produce different varieties of the product and sell them at different prices.
- Each firm under monopolistic competition seeks to achieve equilibrium as regards
  - 1. Price and output,
  - 2. Product adjustment and
  - 3. selling cost adjustment.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Short-run equilibrium

- How does a monopolistically competitive firm achieve price-output level equilibrium?
- The profit maximisation is achieved when MC=MR.
- ‘OM’ is the equilibrium output.
- ‘OP’ is the equilibrium price.
- The total revenue is ‘OMQP’.
- And the total cost is ‘OMRS’.
- Therefore, total profit is ‘PQRS’.
- This is super normal profit under short-run.
- But under differing revenue and cost conditions, the monopolistically competitive firms may incur loss.
- As shown in the diagram, the AR and MR curves are fairly elastic.
- The equilibrium situation occurs at point ‘E’, where MC = MR and MC cuts MR from below.
- The equilibrium output is OM and the equilibrium price is OP.
- The total revenue of the firm is ‘OMQP’ and the total cost of the firm is ‘OMLK’ and thus the total loss is ‘PQLK’.
- This firm incurs loss in the short run.



Long-Run Equilibrium of the Firm and the Group Equilibrium

- In the short run a firm under monopolistic competition may earn super normal profit or incur loss.
- But in the long run, the entry of the new firms in the industry will wipe out the super normal profit earned by the existing firms.
- The entry of new firms and exit of loss making firms will result in normal profit for the firms in the industry.
- In the long run AR curve is more elastic or flatter, because plenty of substitutes are available.
- Hence, the firms will earn only normal profit.
- In the diagram equilibrium is achieved at point 'E'.
- The equilibrium output is 'OM' and the equilibrium price is 'OP'.
- The average revenue at the equilibrium output is 'MQ' and the average cost is also 'MQ'.
- Thus, in the long run under monopolistic competition, there is equilibrium when AR=AC and MC=MR.
- It means that a firm earns normal profit.
- AR is tangent to the Long Run Average Cost (LAC) curve at point 'Q'.

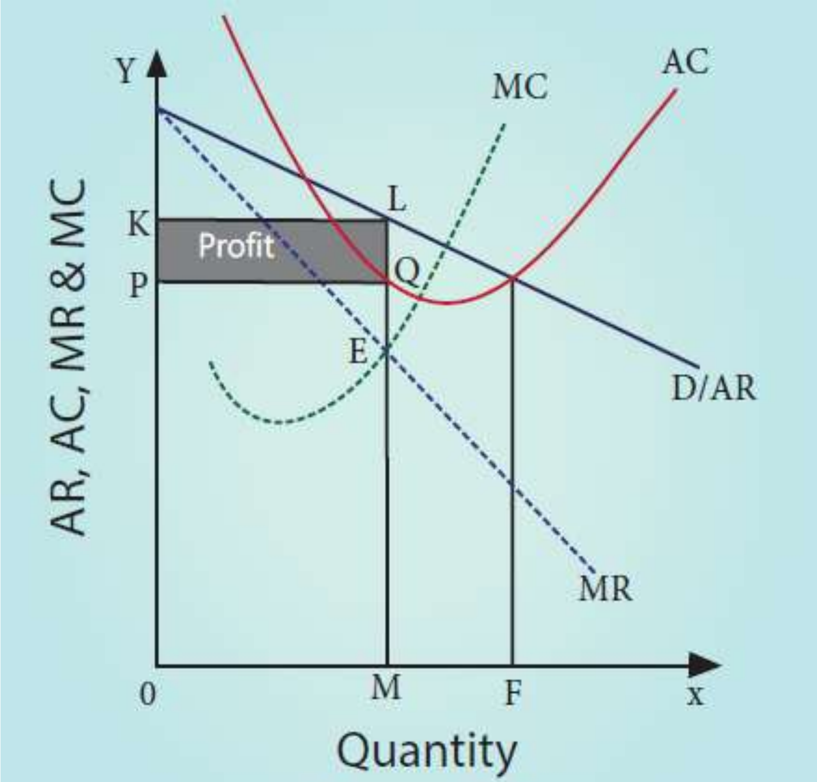


Diagram 5.9

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

- The only one condition for equilibrium in the short run : MC = MR.
- The two conditions for equilibrium in the long run : MC = MR and AC = AR.

5.8.3 Wastes of Monopolistic Competition

1. **Idle Capacity**
2. **Unemployment**
3. **Advertisement**
4. **Too Many Varieties of Goods**
5. **Inefficient Firms**

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.8.3 Wastes of Monopolistic Competition

Generally there are five kinds of wastages under monopolistic competition.

1. Idle Capacity :

- Unutilized capacity is the difference between the optimum output that can be produced and the actual output produced by the firm.
- In the long run, a monopolistic firm produces delibrately output which is less than the optimum output that is the output corresponding to the minimum average cost.
- This is done so mainly to create artificial scarcity and raise price.
- This leads to excess capacity which is actually a waste in monopolistic competition.
- In diagram 5.9, MF quantity of output refers to unused capacity.
- If OF is produced, the society will get larger quantity with lower price.

2. Unemployment:

- Under monopolistic competition, the firms produce less than optimum output.
- As a result, the productive capacity is not used to the fullest extent.
- This will lead to unemployment of human resources also.

3. Advertisement:

- There is a lot of wastes in competitive advertisements under monopolistic competition.
- The wasteful and competitive advertisements lead to high cost to consumers.
- It is also claimed that advertisements cheat the consumers by giving false, information about the product.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Continue…

4. Too Many Varieties of Goods:

- Introducing too many varieties of a good is another waste of monopolistic competition.
- The goods differ in size, shape, style and colour.
- A reasonable number of varieties would be sufficient.
- Cost per unit can also be reduced, if only a few varieties are produced in larger quantity instead of larger varieties with small quantity.

5. Inefficient Firms:

- Under monopolistic competition, inefficient firms charge prices higher than their marginal cost.
- Such type of inefficient firms should be kept out of the industry.
- But, the buyers' preference for such products mostly due to emotions, enables the inefficient firms to continue to exist.
- Efficient firms cannot drive out the inefficient firms because sometimes the Efficient firms may not be able to spend money on attractive advertisement to lure the buyers.
- In reality, the consumers are mostly emotional rather than rational, as stated by Richard Theiler, the Nobel prize winner for the year 2017.
- Rational decisions are made by mind; emotional decisions are made by heart.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

5.9 Duopoly

- Duopoly is a special case of the theory of oligopoly in which there are only two sellers.
- Both the sellers are completely independent and no agreement exists between them.
- Even though they are independent, a change in the price and output of one will affect the other, and may set a chain of reactions.
- A seller may, however, assume that his rival is unaffected by what he does, in that case he takes only his own direct influence on the price.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Monopsony

- *Monopsony is a market structure in which there is only one buyer of a good or service.*
- *If there is only one customer for a certain good, that customer has monopsony power in the market for that good.*
- *Monopsony is analogous to monopoly, but monopsony has market power on the demand side rather than on the supply side.*

Bilateral Monopoly:

- *Bilateral monopoly refers to a market situation in which a single producer (monopolist) of a product faces a single buyer (monopsonist) of that product.*

5.9.1 Characteristics of Duopoly

1. Each seller is fully aware of his rival's motive and actions.
2. Both sellers may collude (they agree on all matters regarding the sale of the commodity).
3. They may enter into cut-throat competition.
4. There is no product differentiation.
5. They fix the price for their product with a view to maximising their profit.

5.10 Oligopoly

- Oligopoly is a market situation in which there are a few firms selling homogeneous or differentiated products.
- Examples are oil and gas.
- It is difficult to pinpoint the number of firms in 'competition among the few.'
- With only a few firms in the market, the action of one firm is likely to affect the others.

5.10.1 Features of Oligopoly

1. ***Few large firms***
   - Very few big firms own the major control of the whole market by producing major portion of the market demand.
2. ***Interdependence among firms***
   - The price and quality decisions of a particular firm are dependent on the price and quality decisions of the rival firms.
3. ***Group behaviuor***
   - The firms under oligopoly realise the importance of mutual co-operation.
4. ***Advertisement cost***
   - The oligopolist could raise sales either by advertising or improving the quality of the product.
5. ***Nature of product***
   - Perfect oligopoly means homogeneous products and imperfect oligopoly deals with heterogeneous products.
6. ***Price rigidity***
   - It implies that prices are difficult to be changed. The oligopolistic firms do not change their prices due to the fear of rivals' reaction.

5.11 Comparison among the Features of Various Markets

Sl. No	Features	Perfect Competition	Monopoly	Monopolistic Competition
1.	Number of Producers/Sellers	Innumerable	Only One	Large
2.	Nature of the Product	Homogeneous Perfect Substitute	Unique (No close substitute)	Differentiated Product (close substitutes)
3.	Control over Price	Price-Taker	Price-Maker	Some control depending on branded loyalty
4.	Entry / Exit	Free	Barriers to entry	Free
5.	Profit	Abnormal profit / loss in short-run, Normal profit in long-run	Monopoly Profit	Abnormal profit in short-run, Normal profit in long run
6.	Market Knowledge	Complete	Complete	Partial
7.	AR Curves	Parallel to X axis Perfectly elastic	Fairly Flat More elastic	Steep (highly inelastic)
8.	Quantity	Very large	Less compared to perfect competition	Substantial
9.	Price	Uniform and low	High	Moderate and varied
10.	Market power	Nil	Absolute	Limited

5.12 Conclusion

- Different forms and characteristics of different markets have been studied in this chapter Market, in general is divided into perfect market and imperfect market.
- Imperfect market consists of Monopoly, Monopolistic Competition, Duopoly, Monopsony etc.
- In the long-run, firms earn normal profit.
- Under imperfect market, the sellers would manage to reap larger profits depending upon the degree of monopoly power.

Glossary

- **Equilibrium :**
  - A situation or a state at which a firm seeks to rest.
- **Equilibrium Price :**
  - The price at which the quantity demanded of a good equals quantity supplied.
- **Firm :**
  - A single organization which employs factors of production to produce goods and sells.
- **Long run :**
  - The period of time during which all factors of production are variable.
- **Marginal cost :**
  - Addition made to total costs already incurred by producing one more unit of the commodity.
- **Marginal revenue :**
  - Addition made to total revenue already incurred by selling one more unit of the commodity.
- **Monopolist :**
  - A single-seller who controls entire or major part of output, which has no close substitutes.
- **Price-maker :**
  - The power in the firm to set the price for goods in the market.
- **Price-taker :**
  - The feature of a firm to accept the price fixed in the industry.

V. ARIVAZHAGAN.,M.A.,B.Ed.,M.Phil.,M.C.A.,

Prepared by,

V. ARIVAZHAGAN.,M.A,B.Ed.,M.Phil.,M.C.A.,
P.G.Asst. in Economics,
Aditya's Vivekananda Matric Hr. Sec. School,
Viluppuram - 605602

THANK YOU