

**[Academic Script]**

**Monopolistic Competition**

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<b>Unit No. &amp; Title:</b>	Unit – 1 Markets with Imperfect Competition
<b>Lecture No. &amp; Title:</b>	Lecture – 2 Monopolistic Competition

## **Academic Script**

### **1. Introduction**

There are basically four main market structures theoretically or practically from which we have received many other market structure. Those are 1) Perfect competition. 2) Monopoly. 3) Oligopoly. 4) Monopolistic competition.

It is too hard to find out perfect competition in the real market or we can say it is not possible because of its own impossible characteristics such as "N" number of sellers and absence of transportation cost, keeping prices same irrespective of the region. Which is not possible?

Monopoly market structure is rather more common than perfect competition. Many countries have seen monopoly in their various times including India in various sectors, weather it is of government monopoly or private monopoly. But still monopoly is seldom phenomenon in today's competitive world. There was dire need to reformulate the theory markets and price so that it should be nearer to the real market situations. Professor E H Chamberlin and Joan Robinson worked independently and they came out with a solution simultaneously. "The theory of Monopolistic competition" and "The economics of imperfect competition" respectively.

Monopolistic market is a hybrid kind of market structure where it possesses features of perfect competition and also of monopoly; moreover this market is rather more common than any other market in reality. Monopolistic market is a market which brings the solution from these two most extreme market structures.

Monopolistic market is also difference from pure competition in one aspect that is importance of marginal revenue in monopolistic competition. In perfect competition marginal

revenue (MR) is equal to the AR (average revenue or price), while in monopolistic competition firm's marginal revenue is falling rightward and remain under average revenue. The reason behind this behavior of marginal revenue (MR) is elasticity. In perfect competition elasticity is infinite while in monopolistic competition elasticity is less than infinite so there is difference between price and Marginal revenue.

Monopolistic market structure is a market with many firms which can produce identical or differentiated goods with very less effect of revelry firms.

This market structure possess the characteristics of both the perfect competition and the monopoly market because in this competition firms are many and may produce identical goods while it has some features of monopoly as a firm can have its own price policy and product policy unlike the perfect competition.

### **Features of monopolistic market**

It is important to look at the characteristics of Monopolistic market to understand it fully so let see the some features of this market.

**Large numbers of sellers:** - in this market large numbers of sellers are selling their close substitutable or no substitutable goods to the consumers. Moreover no seller has power to affect market significantly or the rival firms and this gives significant freedom to each seller to frame its own policies regarding selling and pricing.

**Product differentiation:** - Monopolistic market consist many sellers with different goods. This difference can be real difference or the imaginary but until this kind of difference is significant for

the consumer it will be regarded as product differentiation. In this sense we can say that each and every firm has its own monopoly in his respective goods whether its substitutes are available in the market or not. It also implies that goods bought by a consumer from one seller gives different marginal utility if that consumer would have bought good from other seller.

Product differentiation can be of different types as: -

A) **By changing the quality of the product:** - This is the easiest way of having differentiated goods from the other producers and sellers by using different quality materials, production system, workmanship, durability, attraction, service assurance are the main things which give unique name and features to the particular seller which makes different from one to another.

B) **By advertisement:** - by doing advertisement and sales promotion techniques also makes big difference whether that can be real or imaginary which gives psychological edge to that particular seller over others. That can be selling techniques like new delivery systems, unique styles of keeping goods and many more depends on the goods.

C) **By Patents, Rights and Trademarks and IPRs:** - patents and rights are given to the inventors of the new goods for exclusive production which makes them differ from other sellers or producers and also promotes more sales and differentiation. This is same with the rights and the trademarks which makes easy for consumer to choose goods of their own choice. Intellectual property rights (IPRs) are creating the somewhat monopoly power for any firm who possess this rights specially if a company has invented any important technology used widely,

and also generate huge revenue by producing goods at large scale and charging fairly higher price than cost.

3) **Freedom of entry and exit of firms:** - Monopolistic market allows free entry and exit from the market. Each firm produces identical products and it is easy to leave the market but the reality is because of product differentiation firms are entering and leaving market continuously as their new inventive idea gets obsolete. Survivability of the company depends on the how keeping edge by doing dome new, and perhaps with new more firms are entering in the market which is forcing old firms either change a way of doing their business by doing something new or leave the market.

4) **Selling Cost:** - selling cost is essential when any form wants to sell more goods or wants to take majority of share of the market. Selling cost basically done to show what different quality that particular firm is giving to consumers.

## **2. Product Differentiation and Monopolistic Competition**

There is some feature of monopoly and some feature of perfect competition in the monopolistic market. Product differentiation is the distinguish feature which makes monopolistic market different from the perfect competition. In monopolistic market every producer has some kind of differentiation in his good while in perfect competition all the goods are assumed to be homogenous. Product differentiation doesn't mean that products are altogether different but they are also closely related with each other, so where there is differentiation in the products the elements of monopoly enters and the greater the amount of differentiation the greater the degree of monopoly.

The element of competition is also prevailing in the monopolistic market despite there is product differentiation, products are closely related with each other so no doubt every seller has monopoly in their own goods but they have to face tough competition from the other sellers also because they also have done some differentiation. So we can see monopolistic competition is a hybrid child of monopoly and the perfect competition.

Product differentiation can be seen by the preference given by the consumers while they are making choices, it can be said general product differentiation when a consumer is choosing goods of one seller over other seller.

These preferences have two bases or we can say product differentiation can be happen on two bases

1) Differentiation may be based on the certain feature of the product patents, brands, trade mark, packaging style or quality, design, color. It can be real qualitative differentiation like quality of raw material used, human working quality of any industry. Sometimes imaginary qualitative or other differentiation can be created by advertisements.

2) Second kind of product differentiation can be seen when the extra services provided by the seller while selling same goods as other sellers are selling. Sometimes consumers are giving preference to the particular seller for particular goods because the way of doing business, the communication skills or some kind of other services differ from other sellers which also make one type of product differentiation.

If we keep this above two things in mind and if we observe the real world market we will find each and every product in the real world is different and though they are different there is a stiff competition among the various sellers selling differentiated goods. We can see competition and monopoly elements at micro level also where some consumer prefer single seller for purchasing same goods as other sellers are selling, reason can be some services rendered by preferred seller, location factor, way of dealing with the consumer, reputation of selling qualitative goods.

The theory of monopolistic competition differs from perfect competition and monopoly when this theory studies the problem of an individual (ordinary theory of monopoly) but also the group of firms (differs from perfect competition of industry).

This gives birth to the Chamberlin's group equilibrium. Chamberlin uses group instead of industry because industry comprises firms producing homogenous goods while in monopolistic market every firm is producing differentiated goods so industry lost its significance and group of firms introduced because by group Chamberlin means "a number of producers whose goods are fairly close substitutes".

Individual firm is independent while taking some decisions in the group but it doesn't mean that individual firm is totally isolated from his rival firms because there are other close substitutes in the market, otherwise it will bring the original monopoly situation.

In the present world the word "Competition" is used in many sense but one thing should be clear that competition in real world belongs to monopolistic competition, it does not represent pure competition. Actually competition word succeeded its meaning in

monopolistic market rather than in pure competition because in pure competition sellers surrender against the market and accepts pieces decided by the market forces while in the monopolistic competition it is not so.

### **3. Price Output Equilibrium under Monopolistic Market**

Monopolistic market is more complicated than its birth ideologies like perfect competition and monopoly, because in monopoly a single firm has to face more variables than those two competitions. Such as in perfect competition a firm can sell any amount of goods in the market at a prevailing rate while in the monopolistic competition it is not true. Monopolistic market has to face three main variables as

1) Fluctuating prices.

2) Nature of the goods.

3) Advertisement outlay.

1) **Price:** - in the monopolistic competition firm has to form its pricing policy. That what price firm is going to charge for particular good? Because in monopolistic competition people have different perceptions and reservations about some goods and brands so if any firm is increasing the price there is a possibility that demand will fall down but it will not become zero and if the firm is decreasing the price there is possibility that many consumers will start using goods of the firm but not all the consumer. So firms will have to adopt the suitable price policy which brings more profit for them.

2) **Product variations:** - this is again a differentiation from the pure competition and in some sense from monopoly also. In

perfect competition seller is not facing this problem while in monopolistic competition sellers has to take care of this factor because profit depends on how a seller is making difference from other seller while selling close substitute goods. There is possibility that for product differentiation a seller has to change the technical specifications of the products, designs of the products or the materials of the product or may be some geographical changes. So the possibilities of profit maximization largely depend on how a monopolistic seller is employing skills.

3) **Selling outlays:** - Selling outlay is also very important for the seller in the monopolistic competition. Changes in the price and variations in the products are reasons of doing selling outlay so that seller can attract as buyers for gaining maximum profit. There is again a keen competition among the rivals in this market because everyone is trying to sell own goods and wants to make impact on buyers as a more creative and better. This is again a point where we can differentiate perfect competition from monopolistic competition as in perfect competition there is no need of doing advertisement expenditure because prices are same for every same nature of goods.

#### **4. Individual firm under monopolistic competition**

In the monopolistic competition the demand curve of a firm is sloping downward because of availability of substitute goods. So we can say that the position and the elasticity of any demand curve depends on the availability of substitute goods and their prices, but for making study simple we are keeping the prices of other goods as a constant. In monopolistic market we have seen

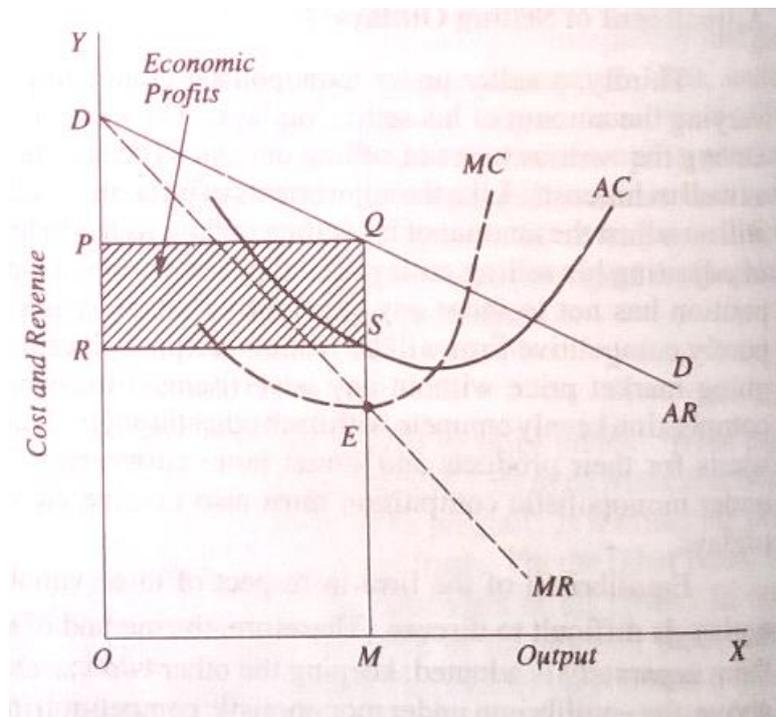
that every seller has a power of monopoly that means because of product differentiations seller can decide prices of goods by own. We should keep in mind that in monopolistic market the elasticity can be fairly elastic, which means if seller is increasing prices enormously buyers will shift towards other sellers. So we are assuming here that:

Prices of substitute goods and varieties are constant.

Demand curve of the monopolistic firm is given.

We will only study equilibrium with respect of price changes.

With these assumptions we will see the individual firm's equilibrium under monopolistic market in figure 1.



**Figure 1 (short run equilibrium of a firm)**

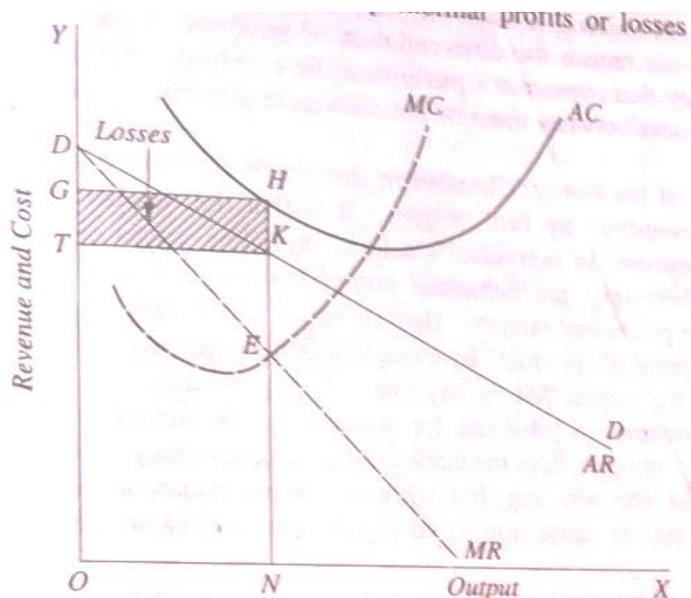
Firm will adjust its price and output by such a way so it can maximise profit as theory of value under monopolistic market is based on profit maximisation as in the perfect competition.

The point where firm can maximise profit is the point where marginal cost meets with marginal revenue.

In this figure firm is producing OM quantity of goods at OP prices. DD is the demand curve of this firm which is also an average revenue curve. We can see in the figure 1 the MR curve is intersecting MC curve at point E. the average cost curve of the firm passes through S point which is below the point Q from where average revenue curve is passing. So we can say this distance between average revenue and average cost is showing the area of profit of the firm which is PQSR. This also shows that firm is earning more than normal profit because if firm had to earn normal profit it could earn at point S where average cost is passing.

In this diagram firm is shown by making abnormal profit in the short run but there is also a possibility of making loss in the short run if the cost adjustment is not done well.

Now we will see diagrammatically how loss can be possible in the short run.



**Figure 2 (loss of a firm in short run)**

In the figure 2 we can see firm is making loss in the short run also. On the Y axis we have shown revenue and cost and on X axis output. Firm is producing ON amount of output where

marginal revenue curve is intersecting marginal cost curve at E point.

The demand curve or the average revenue curve (AR) is passing from K point and here is the answer why this firm is making losses in the short run. The average revenue (AR) curve is below the average cost (AC) curve it means the average cost is more than the average revenue equal to HK. So the area comprising TKHG is showing the loss of the firm in the short run in monopolistic market.

### **5. Group equilibrium in the monopolistic market or Long run firm's equilibrium**

In the earlier explanation we have seen the short run equilibrium of a single firm and how firm is adjusting the price and cost. Now we have to see the group equilibrium of a monopolistic market where there are number of firms with identical goods. As we know that each firm has some kind of monopoly power due to differentiation in the goods but still among those producers keen competition is prevailing because their goods are differentiated though close substitutable by consumers.

To explain group equilibrium is little bit difficult because of different situations and conditions prevailing in the group because of diversity in the firms.

Various firms have their own different demand curves because every firm has different level of elasticity. The quality difference among the goods leads to large variations between the cost and revenue conditions for different firms, to simplify this Chamberlin says "we therefore proceed under the heroic assumption that both demand and cost curves for all the products are uniform through the group."

Further to simplify monopolistic market Chamberlin assumed one more thing that is called 'Symmetry assumption' by prof. Stigler. Symmetry assumption says that because there are many sellers in the monopolistic market so the change in the price and output by one firm has negligible effects on other competitors so they will not think about retaliation.

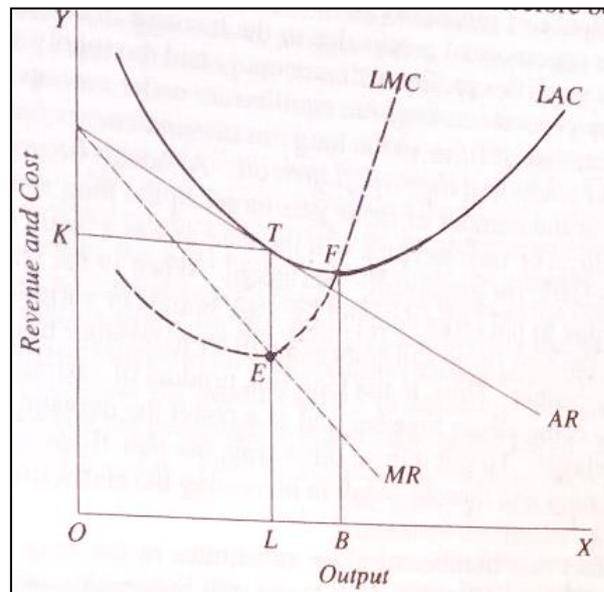
With this assumption we will see how group equilibrium can be achieved when they produce close substitutable goods.

First of all we will have to see the situation of short run which is shown in the diagram 1 above. Where firms are earning supernormal profit in a short run because their average revenue is more than average cost.

This supernormal profit will attract new firm in the market. In monopolistic competition we can't say that entry of the firm is fully free because for free entry firm should produce exactly same goods as other firm are producing in the market but in monopolistic competition firms are not producing exactly same goods but they are producing goods which are nearly substitutable. So entry is neither totally free nor restricted in monopolistic market.

As new firms enter in the market attracted by supernormal profit the supply of the product will increase in the market and the demand curve of the each firm will shift downward to the left side. This process will continue until the average revenue curve intersects the average cost curve. Which is shown in figure 3 where average revenue curve intersecting average cost curve at point T and at point E marginal cost (LMC) and marginal revenue (MR) are intersecting, which shows that firm in long run

Therefore in the long run profit will be totally wiped out as a firm is producing OL quantity of goods at OK prices. Because the average cost is equal to average revenue so the firm will normal profits only.



**Figure 3. Group equilibrium.**

### **Comparison of monopolistic competition with perfect competition**

There are some important differences between perfect competition and monopolistic market.

- 1) We can see in the long run equilibrium in monopolistic market firm is making only normal profit same as in perfect competition but the point of difference is that even in long run also the output of a single firm of monopolistic competition is smaller than perfect competition firm and the price set by a monopolist firm is higher than perfect competition firm. This point shows that how monopolistic market has similarities as well as dissimilarities with perfect competition and monopoly competition.
- 2) Secondly in perfect competition the optimum point at which firm stops its output is always where there is lowest average

cost curve point which says that until the average cost becomes lowest firm should continue to produce further goods while in monopolistic market firm stops its production before reaching its lowest average cost curve point. This we can see from the figure 3 where firm is producing OL output at OK price and the average cost curve is intersecting average revenue curve at point T, but the point T is not the lowest average cost curve point. The lowest average cost curve point is F in figure 3, but in monopolistic market firm can't reach at this point because if firm will produce at that point the average cost will be higher than the average revenue will turn firm into loss rather than normal profit.

- 3) Third point of difference is while in monopolistic market firm is charging higher prices but does not enjoys abnormal profit while in perfect competition firm is charging prices given by market and lower than the monopolistic firm and takes normal profit. So we can say that in monopolistic market in long run firm charges monopoly prices but does not enjoys monopoly profits.
- 4) We can say that as the new firm enters in the monopolistic market the demand curve of firms becomes more and more elastic while in case of perfect competition there is no question of change in elasticity in long run.
- 5) The element of competition itself makes difference between these both markets. As more and more firm will enter in the monopolistic market to take advantage of abnormal profit each brand will become more competitive to each other, which will increase the level of competition which is not possible in the perfect competition.

## **6. Summary**

Monopolistic market is a real situation prevailing in the market rather than perfect competition which is basically a conceptual idea never prevails in reality. Monopolistic competition has some kind of similarities with monopoly market in sense of monopoly power while selling goods. Monopolistic market has some unique characteristics as it has monopoly power but the choices of goods are large because there is large number of sellers selling different goods which is not the characteristic of monopoly market. We can say that monopolistic market gives the realistic situation.