Foundation Course in Managerial Economics
Prof. Barnali Nag
Vinod Gupta School of Management
Indian Institute of Technology-Kharagpur

Lecture - 30
Monopolistic Competition

Hello and welcome back to the foundation course in Managerial Economics. We had we have been discussing about different kinds of market structures and we have completed 2 extreme kinds of market structure with very opposite almost opposite kinds of assumptions. One is the perfect competition we discussed in the last to last week and last week we discussed about monopoly.

So in case of perfect competition we saw that there are whole lot of buyers and sellers in the market who really do not have much control over price. So basically the producer decides how much to produce. He does and just generally accept accepts the price that is given in the market. So he is basically a price taker.

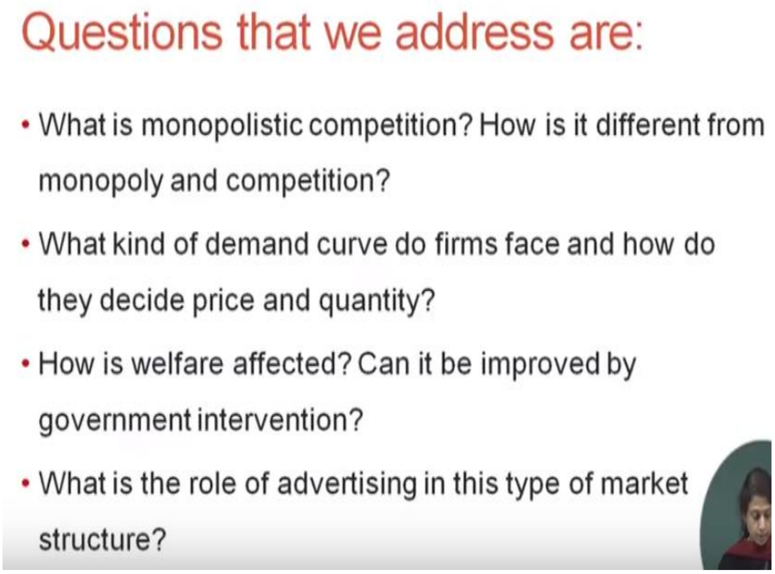
And on the other extreme when we discussed about monopoly we saw that in case of monopoly there is only one single seller in the market and he is the single seller so he has a lot of control over the market. He faces the negatively sloping demand curve and he has a lot of choices to make what amount of output to produce what price to charge. So everything he decides and depending on the demand curve he decides the price to be charged in the market and he earns a it is possible for him to earn a greater than zero economy profit.

So this is what we saw and the very central difference between perfect competition and monopoly basically comes from the nature of the product that is sold in this market because we saw that in case of perfect competition the products are highly substitutable or they are homogenous. So the buyer basically does not differentiate between the different sellers.

It is fine for him to buy from whoever is there to sell the product. On the other hand in case of monopoly the product is unique. It is not available. If it is if this single monopoly seller does not sell the product then there is no other seller available in the market to sell this product. So basically it is a unique product and its substitute is not available in the market and this is the kind of market that we studied when we talked about monopoly.

So today we are going to discuss about monopolistic competition. So as the name suggests the this kind of market structure has some qualities of a perfectly competitive market but on the other hand it has some qualities of a monopoly market. So let us see what monopolistic competition looks like.

(Refer Slide Time: 03:20)



So the questions that we are going to address in this week are what is monopolistic competition and how is it different from monopoly and competition? What kind of demand curve do firms face and how do they decide price and quantity? How is welfare affected? So we have seen in most of the in all the market structures that we have discussed so far we have always tried to not only see what the market output is, what is the market clearing price, what is the market clearing quantity but we have also studied what are the welfare implications of this market outcome. The same thing we are going to do in this in the case of monopolistic competition as well.

So we are going to study how is welfare affected and can it be improved by government intervention. What is the role of advertising in this type of market structure?

(Refer Slide Time: 04:27)

So coming to monopolistic competition. Now monopolistic competition, in monopolistic market structure lies somewhere, monopolistic competition market structure lies somewhere between the 2 extremes of perfect competition and monopoly. There is a mistake in the first point in this slide; it should be monopolistic competition market structure. So I am going to correct it when the slides are shared with the students.

Next is like competition there are many sellers and buyers and entry and exit are easy. However products are differentiated but substitutable to some extent and like monopoly firms have some amount of market power over its buyers, though not absolute.

So let me explain a little bit. So in case of monopolistic competition market structure as I already said that it lies somewhere between perfect competition and monopoly. Like in competition in monopolistic competition there are whole lot of buyers and sellers in the market. Since we are focusing on sellers primarily so since there are large number of sellers in the market no single seller can actually influence the price too much.

So no one can influence the price or rather the market too much and the entry and exit is easy as is already indicated by the fact that there are so many buyers and so many sellers in the market. That basically means that entry and exit are possible. They are easy. It is not difficult to enter this market and it is not difficult to exit this market.

So this point is very similar to perfectly competitive market structure. So there are whole lot of buyers and sellers in the market. So any single seller cannot influence the market too much. Yet the products are slightly differentiated. What does that mean? That means that products are such that there it is they are not perfectly substitutable like in the case of say perfect competition where products are like to give example the products are like say agricultural products say rice, wheat, or say milk, eggs which are fundamentally they are all exactly same products.

So a perfect competitive market perfectly competitive market one can imagine to sell such kinds of products which are not at all differentiated. They are basically fundamentally the same products. On the other hand and since we are taking example so let me also complete it by giving examples of monopoly and in case of monopoly the products are very unique say patented drugs, lifesaving drug, or say the railways the water supply.

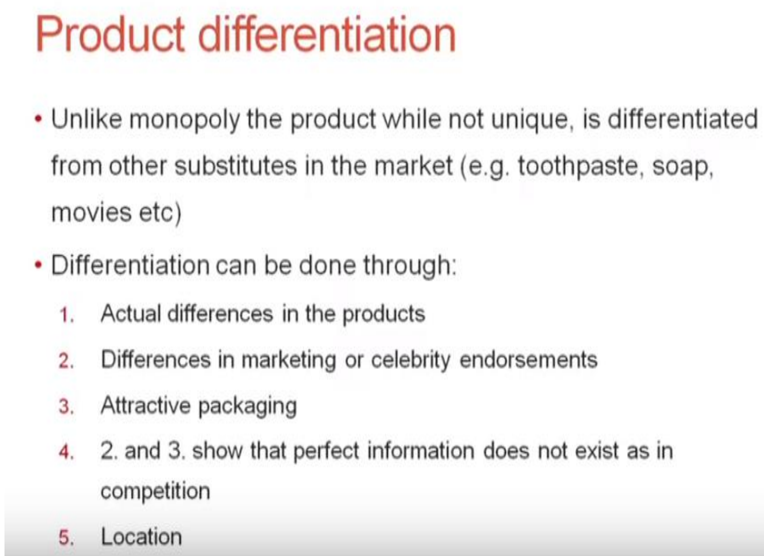
So there is one single producer or supplier of these products in the market and monopolistic competition lies somewhere in between and examples of monopolistic competition are actually far and wide. Most of the products that you are going to see around you are belong to monopolistic competition market structure. Say for example the fast moving consumer goods they are monopolistic, they belong to monopolistic competition. Say movies, novels.

So all these are monopolistic competition, products which are sold in monopolistic competition market structure. So what is how are these products different from the examples that we took for perfect competition or say for monopoly. Now the products are different in the sense that say fast moving consumer goods. So there can be whole lot of examples where different kinds of the firms are selling goods like say toothpaste.

Now toothpaste can be of various types and categories and one could have some inclination towards repeatedly using a particular brand of toothpaste and so they are slightly differentiated. The products are differentiated. So basically the consumer has some amount of loyalty towards consuming a particular type of product although fundamentally the products are all same. At the end of the day they are all toothpaste.

So similarly so it is said that the products are differentiated but substitutable to some extend and since the products are differentiated and since the products have their own consumers every kind of variety of products has its own group of consumers who would not like to shift from this variety of the product to any other variety so some amount of market power is possible over these consumers. So let us move on the next slide and as we discuss the difference will be even more clearer.

(Refer Slide Time: 10:03)



So what do we mean by product differentiation? What does it what does it mean product difference when I say product differentiation and they are substitutable but they are differentiated what does that mean? Now unlike monopoly the product while not unique is differentiated from other substitutes in the market. For example toothpaste, soap, movies, etc.

Now differentiation can be done through a lot of ways. Now the seller has a has, the seller will come up with whole lot of ways to differentiate his product from the other products in the market; so one is the actual difference in the product. Say for example again coming back to the example of toothpaste you will get whole lot of varieties of toothpaste in the market. Some will be having will be claiming to have clove, some will claim to have mint, some will claim to have salt, some are white, some are red, some are striped. So the products are different from each other. Although they are all toothpaste but still they are different from each other and one can imagine that different consumers will have different preferences. Some may like to stick to a toothpaste which has mint. Some may like to stick to like the colour red for his toothpaste. So these are ways in which the seller creates differences in the products and this is how a seller makes his product different from the other products in the market.

Second is differences in marketing or celebrity endorsements. So apart from having the product exactly, products different actually, the making the products different, one can imagine that the seller will try to create notions in the minds of consumers that the products are different. Say for example we took the example of milk, eggs when we discussed about perfect competition.

Now one can imagine different companies they are selling milk in tetra packs and they might create difference through marketing saying that our packaging is good or we the milk is fresh, it contains these vitamins which it is not easy for the consumer to check or even find out when he consumes the milk what is the difference between 2 different cartons but it is basically the marketing or the endorsement say in the case of other product say soap, shampoo, etc. it is being endorsed by a physician or doctor.

So these are the perceptions that are created in the minds of the consumers that the product is better than any other product in the market. So one carton of milk is better than another brand of milk that is available in the supermarket. So this is differentiation of perception that is created in the market.

Another possibility is attractive packaging. So one might like a soap because it is it has a better shape or it has a better packaging so attractive packaging. So 2 and 3 show that perfect information does not exist as in competition. So the points 2 and 3 that one or the seller is able to create differences in opinion about the product through just market advertising or attractive packaging in the minds of the consumers that shows that perfect information does not exist.

So it is possible to sell exactly the same product through different packaging and charging different prices for them. So that shows that perfect information does not exist in this kind of market structure and perfect information is something which we had assumed in the case of perfect competition. So in this kind of market structure actual difference in product does not matter as long as there is difference in the mind of the consumer that the products are different.

Another interesting differentiation that can happen is through location. Now when I say location say for example there is say for example there are 2 petrol pumps on 2 sides of a road and during rush hour during office hour when there is very high traffic on the road you are driving on the left side of the road and there is a petrol pump both on the left and the right and on the right side petrol pump you know that they charge a price which is 50 paisa less per litre of petrol than the petrol pump on the left.

So during rush hour you may not like to so if you are planning to buy 10 litres of petrol that means only 10 Rs that you are going to or 5 Rs that you are going to save by making a U turn and buying the petrol from the right side of the highway or right side of the road. So you may not like to do that during the rush hour because you know the traffic is too heavy and it will be it will take you a lot of time to actually turn the car and fill up your tank and then again come back into this road.

So you are going to prefer paying a little extra and filling up your tank from the left side of the road. So basically that means that although on the left side of the road the petrol pump is charging 50 paisa more than the one charging than the petrol pump which is on the right so that shows that because of location there is a locational advantage which the petrol pump on the left has and it is basically leveraging that advantage and charging a little extra from its consumers.

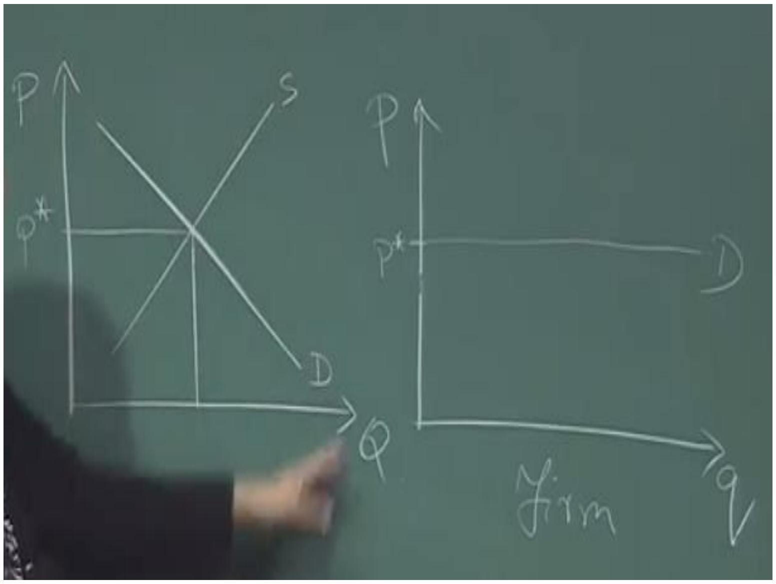
So it is possible to do that if you have a preferable location and we see that happening all the time. Say for example in a very in a residential complex in a residential area there is only one stationery shop. So probably they are going to sell you stationeries say pencils, notebooks etc. at a at MRP or a high price than shops which are there in the office area where there are whole lot of stationery shops and who are probably going to give you a discount on the maximum retail price that is printed on the products.

So these are locational advantages that these kinds of sellers leverage and this is how they have differentiated their product from the rest of the products available in the market. So now that we have understood what is the difference what does the product in case of monopolistic competition look like and what is the fundamental difference between monopolistic competition and perfect competition, let us look at what the demand curve looks like.

Now a quick recap in case of perfect competition you may remember that the demand curve facing each of the buyers, there are whole lot of buyers in the perfect competition. Similarly, in case of monopolistic competition also there are numerous buyers. It is very easy to enter or exit the market so there are lot of buyers in this market.

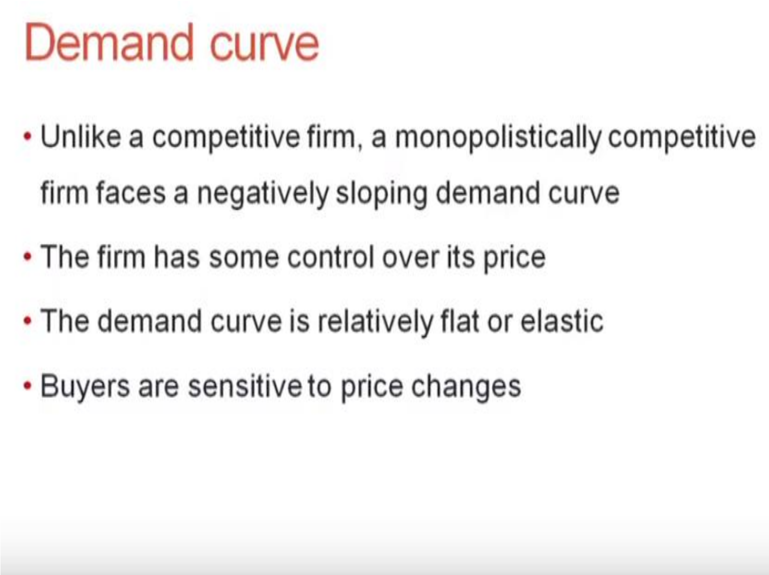
Similarly, in case of competition also there were whole lot of buyers in the market and if you may remember in case of competition each of the buyers was facing a horizontal demand curve. That means each of our each of the firms I am sorry not each of the buyers each of the sellers. So each of the firms was facing a horizontal demand curve and they were all price takers and that price was determined from the market demand and market supply curves.

(Refer Slide Time: 19:12)



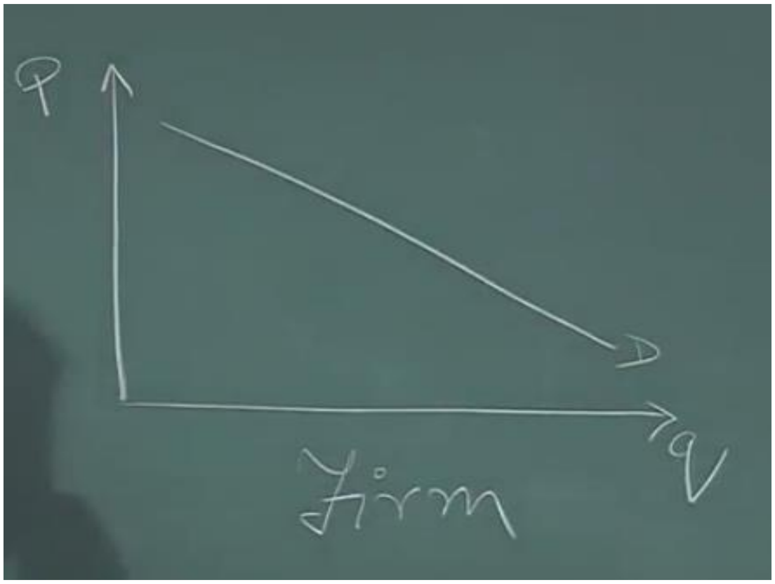
So basically so this was the P star was determined in the market and for every firm any firm where small q was the output that each firm produced and P was the price that it charged so this was for the firm. So firm basically took this price as given. So the firm knew that at this price this is the demand curve that is he knows that that the buyers will buy as much of the product as possible at his price. So this is the demand curve that the firm was facing in case of a perfectly competitive market. But what happens in the case of the monopolistic competition, let us see.

(Refer Slide Time: 20:31)



So unlike a competitive firm a monopolistically competitive firm faces a negatively sloping demand curve. The firm has some control over its price. The demand curve is relatively flat or elastic. Buyers are sensitive to price changes. So let us see what the demand curve looks like to the monopolistically competitive firm. So there are whole lot of firms in a monopolistic competition market structure also but in case of a monopolistic competition market structure there is no single price. The firm there is no single price determined in this way and to the firm they the demand curve does not look like this. So let us see what the demand curve looks like.

(Refer Slide Time: 21:42)



So again see we have used the small q here because we are showing it for one typical firm in a monopolistic competition market setup. So this is a firm we are talking about. So this is a firm, this is the price on the y axis. Now this firm sells a product which is nothing unique but the product is slightly differentiated from the other products in the market. So there are other products in the market of similar nature but not exactly same.

So this firm, say for example this is a firm which sells minty toothpaste. So he has a whole lot of he knows that there are whole lot of consumers in the market who are fond of minty toothpaste. So they are loyal to the products of this firm; so this firm faces a negatively sloping demand curve similar to a monopolist. So for this firm his product is unique in certain way and he knows that there are some people who would really not who would really like to stick to this particular type of product, say minty toothpaste.

So he has a negatively sloping, so he has some amount of market power over these people who are fond of minty toothpaste and so he has a negatively sloping demand curve but the demand curve is flat. The demand curve is it is not exactly flat but the demand curve has a flat slope or it is a highly elastic demand curve. Why is that so?

So we are saying that it has a demand curve which looks like this. It is very flat. Why is that so? Now flat demand curve means that the consumers are highly price sensitive, why? They are price sensitive because if there is some amount of price change here since this firm has some amount of market power over these consumers who like minty toothpaste so this firm might like to change the price a little bit.

The firm might decide that I am going to increase the price a little bit. Now these people who buy this type of toothpaste they may not mind to pay a little bit of extra to continue to consume the same amount of same variety of product. But if the firm decides I am going to increase the price a little higher, it decides that I am going to make a substantial increase in price, then he is going to lose his consumers**.**

Then he is going to lose his consumers because the consumers will then shift to other products in the market because other products are available in the market. They are not perfect substitutes yet they are substitutes in the market. So the firm, the buyers are going to shift to another seller in the market and shift probably shift their preferences from minty toothpaste to some other variety of toothpaste.

Hence the demand curve is flat or it is highly elastic which means that in monopolistic competition the firms have the buyers are highly price sensitive and they respond to any reduction in price. There will be a whole lot of increase in demand and little increase in price lot of people are going to shift away from the consumption of the product. So buyers are sensitive to price changes hence demand curve is relatively flat or elastic.

So this was our preliminary discussion about how the monopolistic competition market structure looks like and we have seen that there are many sellers in the market as in perfect competition but yet unlike perfect competition where we have a horizontal demand curve in case of monopolistic competition the firm faces a negatively sloping demand curve which implies that the firm has some amount of market power like in case of monopoly yet the demand curve is quite flat or it is highly elastic because the buyers although they have preferences for this differentiated product yet they know that substitutes are available in the market although they may not be exact substitutes.

So if the price changes too much, if the price increases too much, people are going to reduce their consumption. So basically the monopolistic competition competitive firm faces a negatively sloping demand curve like in case of monopoly and yet the products yet it is very easy for other firms to enter or exit the market. In the following section we are going to see how the market outcome is arrived at by a monopolistic competitive firm. Thank you.