Managerial Economics
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Lecture - 59
Monopolistic

We will start our discussion today with Bilateral Monopoly. So, if you remember in the previous session, we talk about a market form which is known as Monopsony, and it is in the other side, it is not on the basis of the seller; it is on the basis of the single buyers, and this form of market is known as monopsony, because there is only one buyer and there are number of sellers into that.

Now, we will take a situation, where there is only single buyer and single seller, how generally, the price and output determination is done, or may be how this equilibrium price is obtained; because there is a single seller and single buyer, who influences the price more; who decides the output more; that we will discuss in case of a bilateral monopoly.
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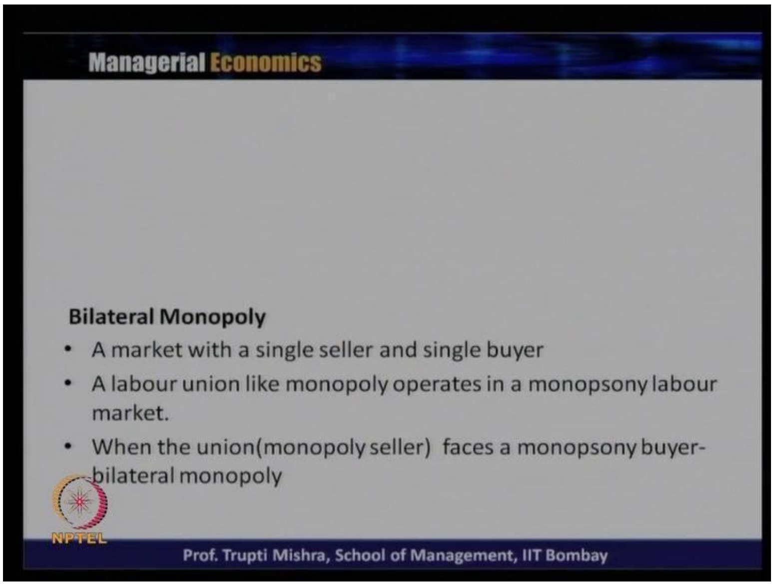

So, bilateral monopoly is one, where there is a single seller and single buyer. We can call it a labour union like monopoly operates in a monopsony labour market. That is the typical example of a bilateral monopoly. When the union act as a monopoly seller faces a monopsony buyer, that is the one single plant, who generally employs all the labourers from this union, they become the buyer of this.

So, seller is the labour union that is single seller, and the buyer is the single plant or single industry who generally gives employment to the labour from the labour union. So, bilateral monopoly is a market with single seller and single buyer. Take a typical example like a labour union like monopoly operates in a monopsony labour market, and when the union that is monopolist faces the monopsonist, that is single large industry or single large plant, who employs them; it is generally the case of a bilateral monopoly.

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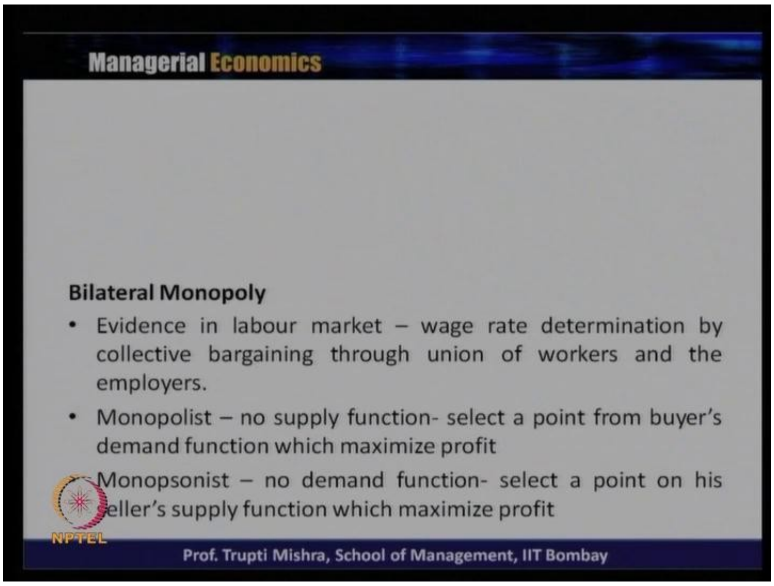
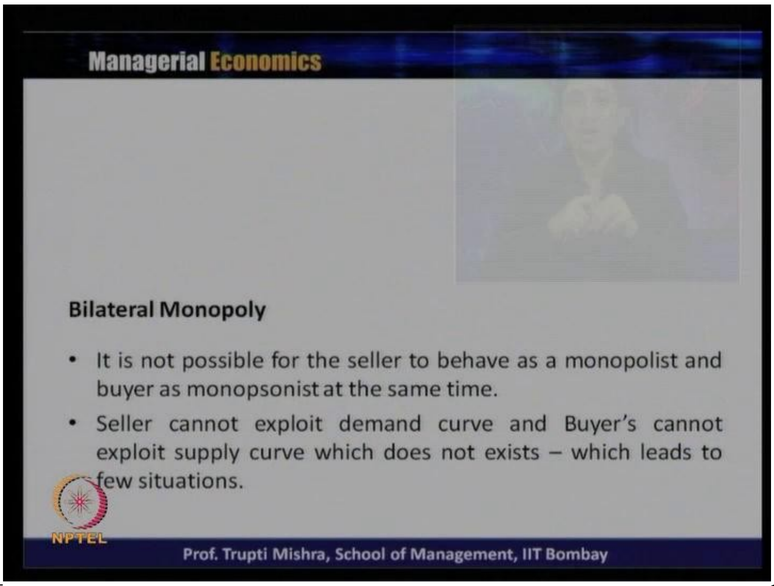


Generally, we find the evidence of bilateral monopoly in case of a labour market, because that only we can organize into the monopolist buyer and the monopolist seller. So, wage rate determination is generally in this case, how the wage rate is decided. The wage rate determination is by collective bargaining through the union of worker and the employer. It is now strictly on the basis of the demand and supply, because there is a single seller and single buyer. So, the evidence in the wage rate is decided by collective bargaining through the union of worker and the employer. This shows that, if someone is having a more bargaining strength, they generally influence price or the wage rate more as compared to the other.

But ideally, if you look at the monopolist depend on monopsonist, to generally maximize the profit, and monopsonist depends on monopolist to maximizing their profit. As you know, that monopolist has no supply curve; there is an absence of supply curve in the monopoly. So, there is no supply function and generally the monopsonist selects a point from the buyers demand curve, which maximizes the profit. There is no supply curve for monopolist, and to maximize the profit generally, they select a point from the buyers demand curve. And similarly, from monopsonist point of view also, there is no demand curve, there is an absent of demand curve in the monopsony market and they select a point on his seller"s supply function which maximize the profit.

So, one is, in case of monopolist there is no supply function, to maximize the profit they select a point from the buyers demand function. And in case of monopsony, there is no demand function, and in order to maximize the profit they select a point from the seller supply function and maximize the profit.

So, if you look at, there is an interdependence when it comes to maximizing the profit only monopolist, and only monopsonist influencing the price and output decision, they cannot maximize the profit and it is not possible also to independently influence the price and output. (Refer Slide Time: 04:36)



So, it is not possible for the sellers to behave as a monopolist in this kind of market and not possible also for the buyers to monopsonist at the same time. Seller cannot exploit the demand curve and buyers cannot exploit the supply curve, which does not exist and which leads to a few situations.

So, for the seller there is no demand curve as it is a case of a monopsonist market and that is the reason they cannot exploit the demand curve. Buyers since there is an absence of supply curve for the monopolist they cannot also exploit the supply curve. So, there is an absence of a situation where seller is exploiting the demand curve, when buyer is exploiting the supply curve, and that leads to few kind of situations which we can summarize.

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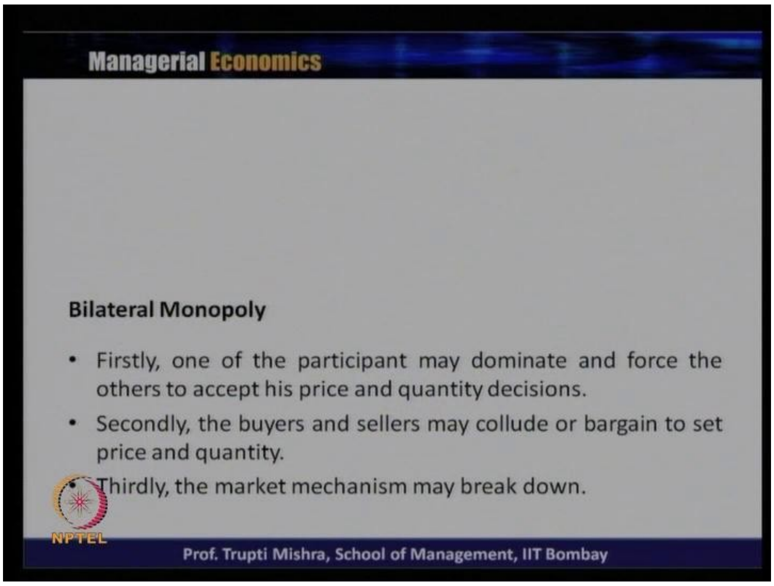

Firstly, it may happen that one of the participants either monopolist or monopsonist may dominate and force the others to accept his price and quantity decisions. So, it may happen that either monopolist will force the monopsonist to accept his price or quantity decision or monopsonist will force the monopolist to accept his price and quantity decision. Secondly, the buyers and sellers may collude or bargain to set the price and quantity. They can come to collusion and they bargain to set the price and quantity. So, they will form collusion and depend upon their bargaining strength they bargain to set the price and quantity according to their own choice.

And thirdly, if no one is able to dominate or the collusion is not taking place, the market mechanism breakdown and it may not exist as a bilateral monopoly. So, case one; one may dominate other has to follow, second both of them come to a collusion and they set their price and quantity on the basis of the bargaining, and third one, when the market mechanism will break down if none of this above two are possible.

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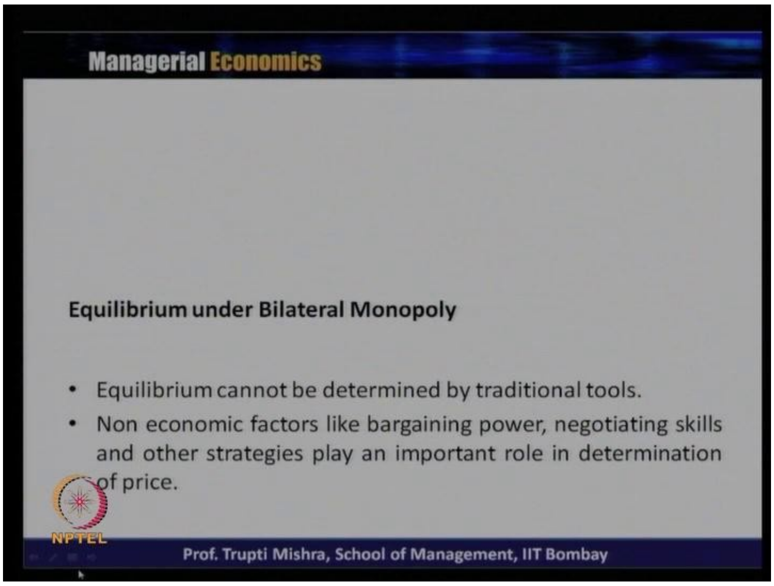

Now, how the equilibrium takes place in case of a bilateral monopoly. Equilibrium cannot be determined by the traditional tools, because there is absence of the demand curve in case of a monopsonist, and there is an absence of a supply curve in case of a monopolist. So, since demand curve and supply curve is absent for the buyers and seller, equilibrium cannot be determined by the traditional tool, that is the typical demand supply or profit maximization cannot take place through the marginal revenue and marginal cost on the basis of the price determined by the demand and supply.

So, here the economic factors like bargaining power, negotiating skill or other strategy like how to influence the, or how to force the other party play an important role in the determination of price. So, we need to do with the non economic factors like bargaining power and negotiating skills when it comes to price and output. So, if it is more bargaining strength or more negotiating strength the price and quantity go in their favor.

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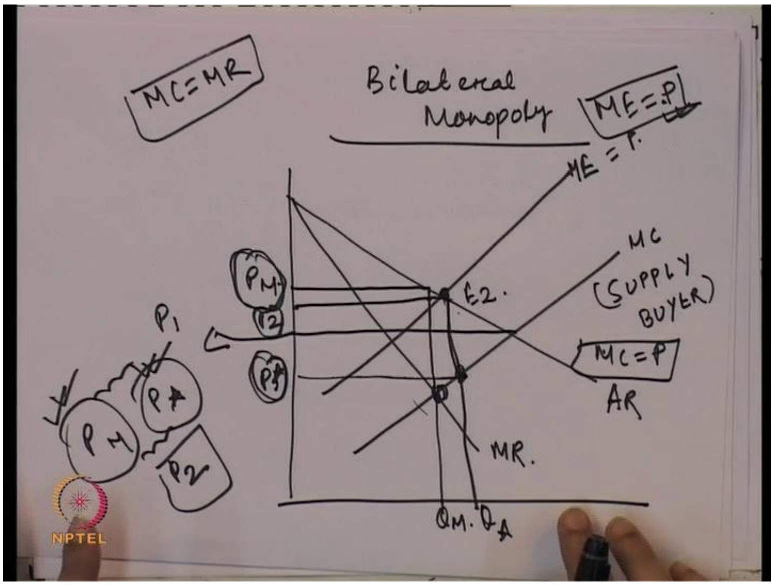

We will understand this equilibrium in a graphical format that how the equilibrium take place in case of a bilateral monopoly. In this kind of market like typical monopoly market we will get our average revenue, marginal revenue, the marginal cost, the marginal expenditure.

So, monopolist equilibrium if you look at, it is a point where marginal cost is equal to the marginal revenue and we get the corresponding monopoly price, we can call it a monopoly price. Producer cannot be the price maker as there is a single ware. So, P_M even if it is a monopolist price and how we got this monopolist price, through the MC equal to MR rule, and through that we got the price to be P_M and quantity is Q_M. But producer cannot be the price maker as there is a single buyer. So, there we introduce the supply curve of buyer that is M C, and it is the supply for the buyers. This is the supply curve of the buyer and marginal E is equal to the P and the consumer, the buyer will purchase additional Q to maximize the profit till the time this marginal expenditure is equal to P.

So, the buyer will go on producing the additional or Q to maximize the profit till the time M_E is equal to P. So, monopsonist equilibrium will be at the point E_2 and E_2 is the point where M_E is equal to P. So, E_2 is the point where corresponding to that, we get the price which is equal to P_2.

Now, we have E_2, corresponding to this, this is the monopolist point, this is the monopsonist equilibrium point, and corresponding to E_2, we get price E_2, and how we get this price E_2, whether this has to be the price or may be corresponding to this, we get a point where in the

MC curve, because if you look at MC, it is the again deciding point, here we get one more price level or we can call it as $P*¿$.

So, now what is the ideal level here? Ideal level may be this is the monopsonist price because this is the point corresponding to this where we get is equal to the MC. this is the monopolist price, and always through bargaining, neither they will accept this P_M nor they will accept this $P*¿$. Because this is the level of price, what they will propose now is between this P_M and $P*¿$. This is the monopsonist price, this is the monopolist price and they will devise a price between $P_M$and $P*¿$, whether its P_2 or any other price. Because, that will be decided through the market, or this will be decided through the bargaining strength of both the buyers and seller that they has to charge a price which is between the monopoly price and the monopsonist price.

Now, how we get all this three price points? Point one with respect to the monopoly price that is P_M, that is through MC equal to MR rule, and how we get this $P*¿$. We get through this by the supply curve of the buyer and if you remember in case of monopsonist, always the P has to be equal to the marginal cost, or they have to pay the price with respect to the supply of the input.

So, in the first case, we just identified the point where till which time the quantity level has to be produced, and that is $Q*¿$, and how we get this quantity level? We guess the quantity level where M_E is equal to P, and after identifying the quantity level E_2, we will then find out what is the price, and to find the price we need to pick a point corresponding to this output level where this is equal to the MC and that is the reason we get the $P*¿$as the monopsonist price.

Now, what is the level of output now? If this is P_2 there is one more suggestion may also come where the competitive price is P_2 that is MC is equal to P, this is the competitive price. So, maybe there can also zero down on a price P_1 which is between $P*¿$and P_M, and that decides on the basis of the bargaining strength of the monopolist and the bargaining strength of the monopsonist.

So, between P_M and $P*¿$, they can pick up a price P_1, P_2 or the number of other options over here, decided on their bargaining strength which brings some amount of the profit to both the buyers and seller.

So, typically in the bilateral monopoly since single seller and single buyer, no one will influence the price and quantity. Either one has to dominate which is not appearing when we are deciding it in graphically. Because the monopolist price is not accepted to the monopsonist, and the monopsonist price is not accepted to the monopolist. So, in this case they will try to come to a price between the price P_M and $P*$¿which will give some amount of profit through their bargaining and through their collusion.

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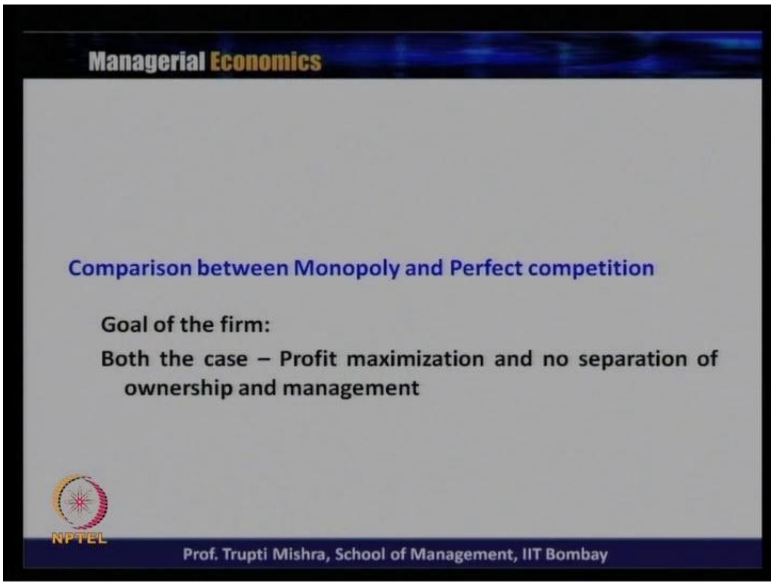

Now talk about the second situation, where ideally the price is decided on the basis of the bargaining strength of both the buyers and sellers. We have discussed so many types of monopoly, and different aspects of monopoly and previously we have also discussed about the perfect competitive market structure, we will come to a comparative studies between the perfect competition and the monopoly; how this two markets different from each other.

So, when it comes to the goal of the firm, in both these cases, the goal of the firm is the profit maximization. Whether it in case of perfect competition, or in case of a monopolist; both the cases the goal of the firm is to maximize the profit and there is no separation of ownership and the management. So, there is no difference between the ownership and management and profit maximization of the goal of the firm, which is uniform as a characteristic or feature to both the types of market, that is, perfect competition and the monopoly.

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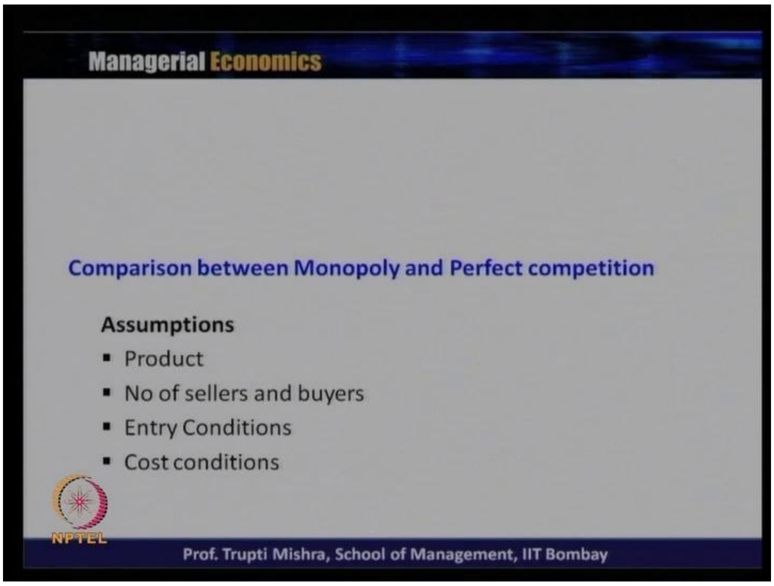

When it comes to assumption, if you look at, there is a different in the assumption that is taken by the perfect competitive market structure and the monopoly market structure. When it comes to product, since there is a single product in case of monopoly, it has to be uniform, there is no close substitute, where as in case of a perfect competition, it is a homogenous product with similar product and all the products are closely substitute to each other.

Similarly, the number of sellers and buyer in case of monopoly, the number of seller is one there are large numbers of buyers. But in case of perfect competitive market structure, there are large number of sellers and buyers. Entry condition; in case of perfect competition, there is free entry and free exit. Whereas, in case of monopoly, there is entry barrier, but the exit is easy if we are incurring a loss over there.

Then in case of cost condition, we have analyze the perfect competitive market structure, typically incase of supply curve of the perfect curve market structure in three different cost that is, constant cost, increasing cost and decreasing cost, that we have not analyzed through monopoly. But in general, if you look at, the monopolist is not conscious about the cost condition because, they can influence the price, and if the cost goes on a higher side they can always justifies and they can charge a higher price. They are the price maker.

But in case of perfect competitive market, since the price is decided by the market forces, they will always try to reduce the cost of production, so, that the profit can be more. Whenever there is an increasing cost of production, they are not charging a higher price, because price is decided by the market power.

Nevertheless it is not that the monopolist never tries to reduce the cost, but at least when they have, they are the price taker. In any case there is increase in the cost function at least they can increase the price, or supplement the increase in the cost of the production, or that they can get it from the buyers, or at the increase in the cost taken pass to the buyer in the form of increase in the cost of production or increase in the price.

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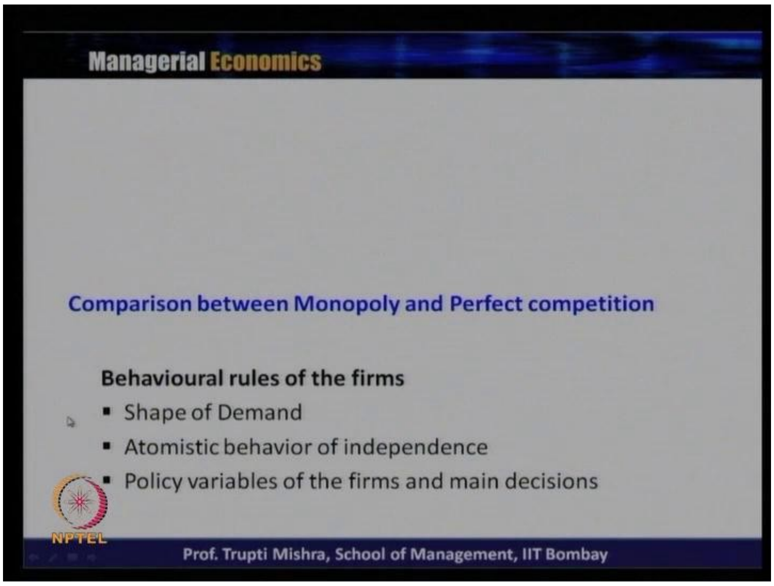

Then when it comes to behavioral rules of the firm, the shape of the demand curve in case of the monopolistic firm is downward sloping the regular demand curve, but in case of a perfect competitive market, if you look at, it is horizontal, because there is no change in the price at the same price, whatever the buyer is willing to buy they can buy and how much the seller is willing to sell they can sell. But in case of monopolist the shape of demand curve is downward sloping, and whenever he has to increase the quantity demanded he has to reduce the price.

The shape of the demand depends upon the price and quantity relationship in case of a perfect competitive market structure and the monopoly market structure. Then, the atomistic behavior of the independence that is present in case of a monopolist firm is absent in case of a perfect competitive market structure. Then, we have some policy variables in the firm and that is the main decision. If you look at this regulation, typically the regulatory, and that comes more to the monopoly. But in case of perfect competitive market it is always a free market, in which the price quantity decided by the market force and supply forces. So, more it is into a free market economy where the invisible and principle works whenever there is an imbalance that is taken care by the demand and supply.

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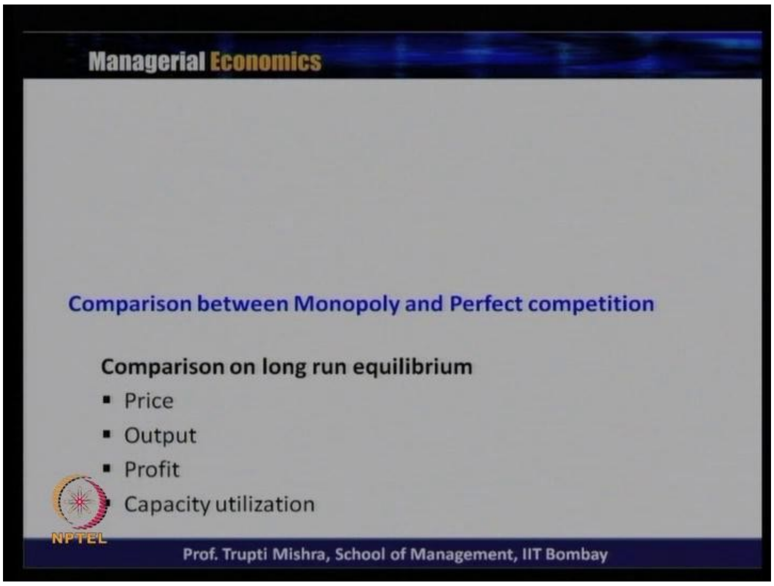

Then we have a comparison between the monopoly and perfect competition on the basis of the long run equilibrium. So, in the long run again the price is decided by the demand and supply that is following the MC and MR rule. The output if you look at again its increase at a increasing cost, decreasing of cost, or the constant cost, In case of long run in the monopoly market, all the firms they get the normal profit even if not the super normal profit, because if they are getting supper normal profit that attracts new firms to enter into the market and increase the competition. And when it comes to capacity utilization, the capacity utilization is full incase of perfect competitive market structure, because maximize the optimal quantity in case of a perfect competitive market structure it is decided by the maximum output at the minimum cost of production, and the maximum output. Generally if you look at it produces at the bottom of the minimum point of the average cost. Whereas in case of monopoly, the capacity is not fully existed and always the output is produced at the decreasing portion of the average cost and that leads to some excess capacity in case of a monopoly market structure.

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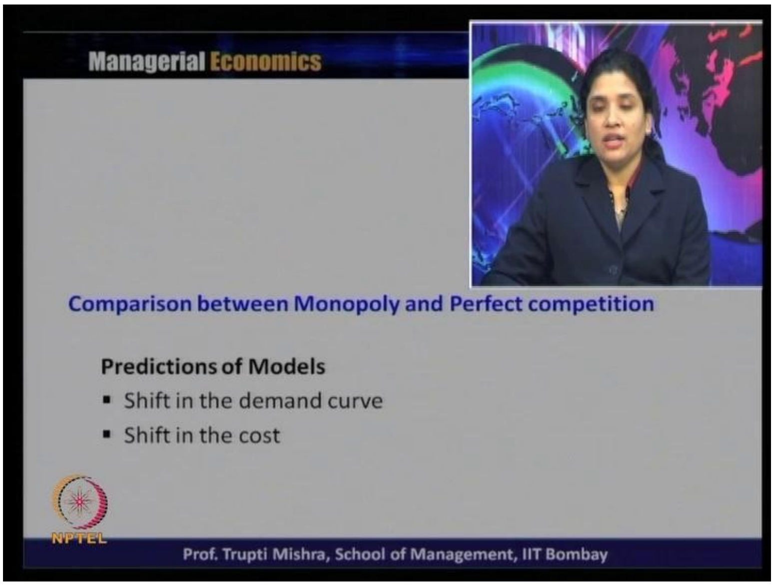

Then when it comes to prediction of module there is a shift in the demand curve or shift in the cost. If it is a fixed cost in nature, in both the cases perfect competitive monopoly market structure it will not disturb the equilibrium situation, but whenever there is an increase or decrease in the variable cost they disturb the equilibrium position.

Similarly, the change in the demand whether it is elastic or inelastic accordingly, the equilibrium position will change and also the corresponding profit maximizing output price, whether the firm is getting super normal profit or normal profit or economic loss.

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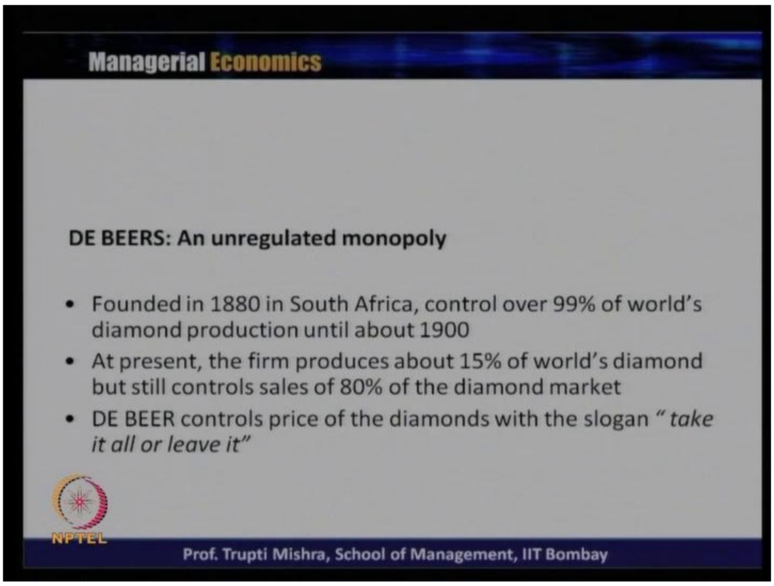

Let us take a case, take small example to understand how this unregulated monopoly or the monopoly works in case of a real world situation. As you know, De Beers, if you look at, they are the monopoly in diamond market. We will take a case of how De Beers become an unregulated monopoly and how the different act of monopolization is done by it in order to become a monopoly leader in the market.

It is founded in 1880 in South Africa and control about 99 percent of the world"s diamond production until 1900. Now, at present the firm produces 15 percent of world diamond, but still controls sales of 80 percent of the diamond market. They just produce 15 percent, but still they control sales of 80 percent in the diamond market. De Beer controls the price of diamond with a slogan "take it all or live it". They are following price rigidity, they are not going to reduce the price in order to increase the quantity demanded. Their philosophy is "take it all or live it". It is up to the buyer whether they are ready to buy at that typical price or not.

If you summarize this, the fact is that, even if they were controlling the market with their production, controlling the production then, when they are not controlling the production, they are now controlling the market through the sale of eighty percent of the total share of the diamond market. So, they just produce fifteen percent, but when it comes to sale they sell more than eighty percent and that way they emerge as a monopoly market.

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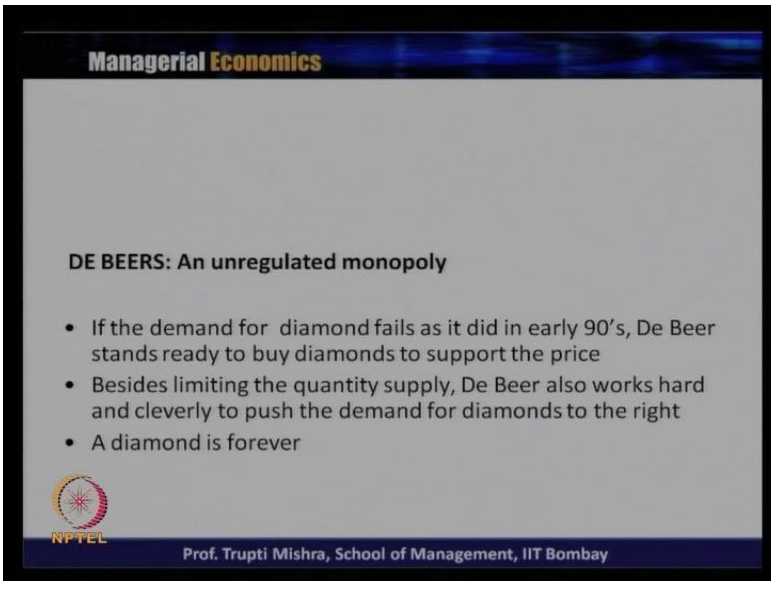

They follow the price rigidity. They never reduces the price in order to increase the price, if buyers really needed, they have to buy it in that typical price. if the demand for the diamond falls as it did in early 90s, De Beers stands ready to buy diamond to support the price. So, here it comes to the act of monopolization.

The demand for diamond decreases in 1990 and what De Beer did is, they did not want the demand to decrease, if so it will reduce the price. At that time, De Beer buys the diamond. They acted as a buyer to support the price at the same level, because if they are not buying generally the demand is decreasing that leads to decrease in the price. So, De Beer stands ready to buy diamond to support the price and this is the activity through which they still want to maintain the monopoly because they are not allowing the demands to reduce.

So, in one way they are limiting the quantity supplied and also by doing this activity they cleverly push the demand for the diamond. When there is a decreasing trend of demand for diamond in 1990 they catch a slogan that „diamond is forever". They talk about the quality and durability of the product and it is a diamond when you're buying it for life time. So, you should not think about the price, and this is how they maintain the price rigidity, quality and durability of the product.

So, if you look at De Beers, it is not a regulated monopoly through their activity, control over the supply and demand. They have become the monopoly in the diamond market.

Similarly, we have many more examples like, if you can take an example of a Microsoft, whether it is a monopoly or it is a act of monopolization, or similarly you can take Indian railway, it is a kind of regulated monopoly because there is no other player in the market and if you look at, there is also no close substitute. So, there are many other examples, what you can find there is a close resemblance of the market in the form of monopoly market.