An Introduction to Microeconomics
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Lecture – 141
Market Environment: Comparison Table

Ok to complete this topic I am going to present you a table which compares different market environments that we have studied. And also, I am going to talk about 2 empirical measures to identify the market structure.

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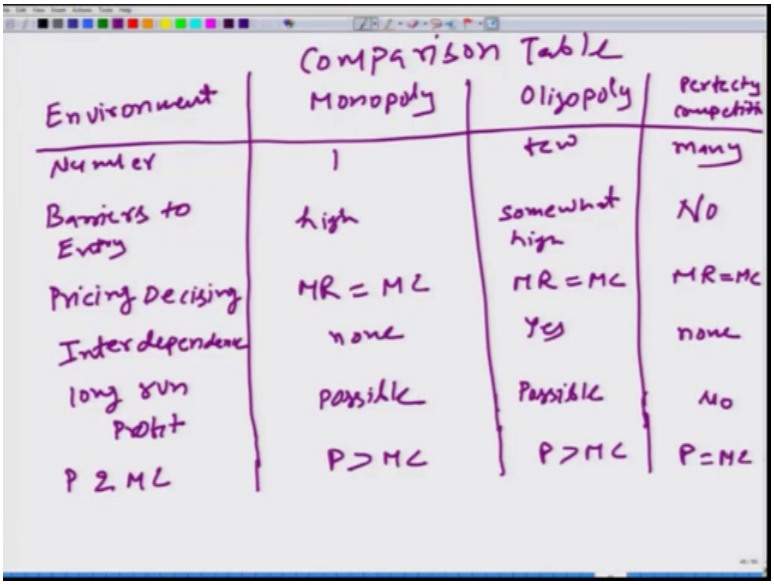

So, the table here it is comparison table what we have is here we are going to talk about environment. And here we have Monopoly here we have Oligopoly although we did studied only duopoly, but the results would hold oligopoly. And perfectly competitive market perfectly competitive.

So, let us first look at the number of seller's number 1. Here we have few 2 3 4 and here we have many. Then let us talk about barriers to entry. Here we have very high barriers to entry in case of monopoly we studied monopoly we the monopoly exists because other firms cannot enter in the market.

Here also we have somewhat high, but not of course, as high as the monopoly and then the last that we have in perfectly competitive market no there is absolutely no barriers to entry firms can enter or exit at their bill.

Pricing decision here it is common to all the setting MR has to be equal to MC in all these 3 setting because if MR is not equal to MC firm can increase it is profit by increasing the production if MR happens to be greater than MC and if MR is less than MC that firm would be better off by decreasing the production, no matter which setting that this firm is operating in this would be true.

Here we will talk about interdependence. We can say no there is no interdependence because there is no other firm here yes, we have interdependence in the case of oligopoly. And then in case of perfectly competitive market again we do not have any interaction.

How about long run profit? In perfectly competitive market there cannot be any long run profit. So, no for oligopoly it is possible and here also it is possible. Now let us look at the relationship between price and marginal cost. In case of monopoly price will be greater than marginal cost in oligopoly also price would be greater than marginal cost, but case of perfectly competitive market P has to be equal to the marginal cost because in perfectly competitive market P is equal to MR.

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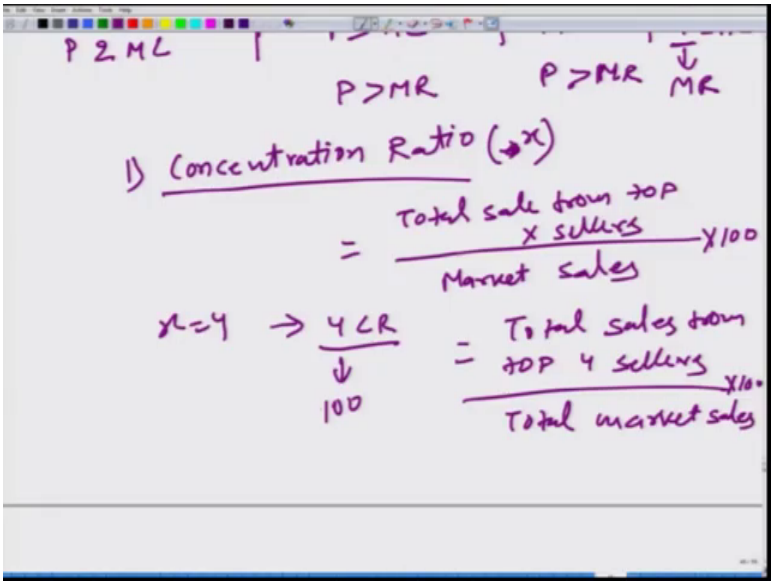

So, it is also clear that in all other cases P is greater than marginal revenue. So, this is the comparison table.

Let us talk about some empirical measure of market structure, how can we figure out that which market environment that we are in. So, we are going to talk about 2 different major the first one is concentration ratio. And concentration ratio basically what it does that; it measures the sales I can we can say that concentration ratio let us me put here x because x is the number of firm that we would take to calculate the concentration ratio that it is, the total sale from top x sellers divided by total market sales.

This is the concentration ratio one example of concentration ratio would be that x is equal to 4 this is called 4 CR what we do that here that total sale from top 4 sellers divided by total market sale. So, let us say what would be the value of 4 CR if we have monopoly there is a firm which is the only firm supplying in the market. So, the 100 you know we will get and of course, here if we multiply it we will get in terms of percentage if we do not multiply it we will get it in terms of fraction.

So, in case of monopoly the 4 CR is going to be 100 percent and in case of perfectly competitive market all firms are tiny in comparison to the whole market. So, the value is going to be much lower. So, this is one major of the one way of figuring out which the market environment that we are in.

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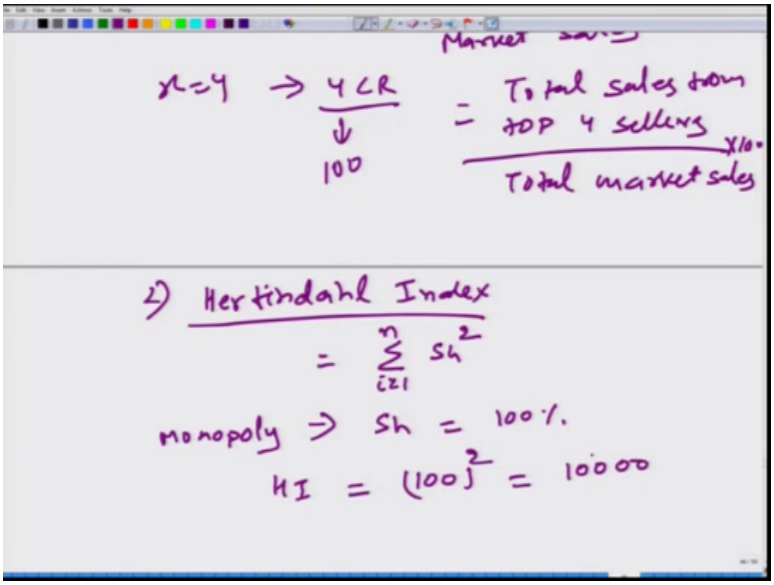

And the second is called Her findahl index, Her findahl index, what it does that here we calculate the square of market share of all the firm. So, let us say that if we have only one firm in the market, in case of the monopoly what we have here the market share that this firm will have 100 percent. So, in that case the HI index is going to be 100 to the power 2 which will come out to be 10000 and this is the maximum value that that this index can take. So, if we have 10 firms each having the 10 percent of the market.

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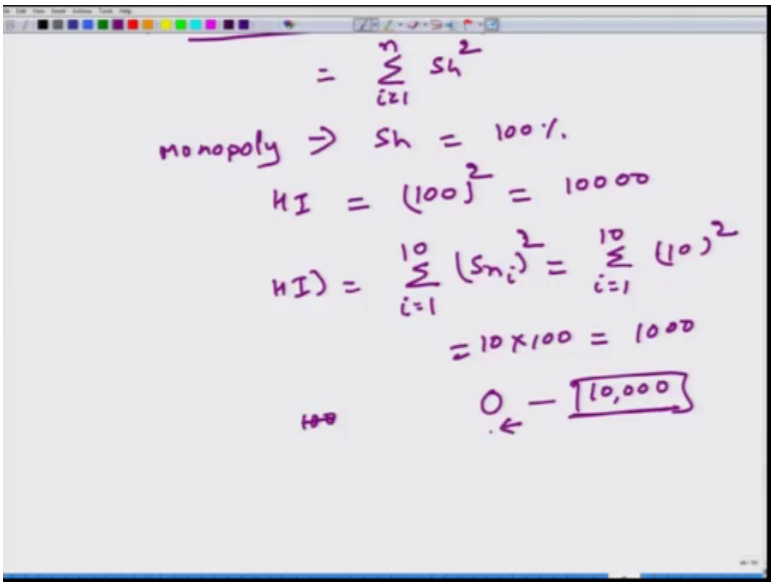

In that case the HI index is going to be from i 1 to 10 market share for all the firm we have to square it. So, we are going to get 10 point or 10 square. So, 10 multiplied by 100 it is going to be 1000.

And let us say we have 100 firm again, what would be the value? The value of HI index is going to be 100. So, the HI index varies between 0 to 10000, 10000 indicates that very high market power that only one firm is operating it is monopoly and the value nearer to 0 indicates that we have perfectly competitive market environment. So, these are the some basic empirical major to figure out the market environment.

Thank you.