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

# Lecture - 41
# Public Policy in Oligopoly

Hello and welcome back to the last module of this entire course and last module of our discussion on oligopoly. So we have so far discussed about situations where the oligopolistic firm does not go by its economic rationale of equating marginal revenue to marginal cost and ends up charging a price depending on what the other rivals are charging in the market.

We have looked at the kinked demand curve. We have looked at price leadership, price signaling etc. So we have seen that the oligopolistic market is somewhat different from the other kinds of markets where decision making process is solely dependent on economic rationale of equating marginal revenue to marginal cost if it is profit maximizing objective of the firm.

So in case of oligopoly, lot of subjectivity is involved in deciding what price to charge and what output to produce and we are going to see that in a oligopolistic market it is possible for the government to intervene. We have looked at government intervention in all kinds of market.

In perfect competition it is not required because that is the most efficient output that any market should strive to attend and in rest of all the markets in monopoly we have seen that there is requirement for government intervention so that the government can force the monopolist to produce a higher amount of output at a lower price.

In case of monopolistic competition we have seen that since the firms although the firms are charging a price which is higher than marginal cost and but still the firms are charging a price which is equal to the their average cost and their economic profit is equal to zero in the long run hence the government can cannot do anything much.

But in case of oligopoly we have seen that if there are few firms in the market there is a possibility of the firms colluding with each other and charging a monopoly price and producing a monopoly level of output. So government intervention is possible in case of a oligopolistic market so let us look at how the government intervenes.

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## Government intervention

- In oligopolies, it is possible for output and price to be close to monopoly situation
- Hence government intervention required to
  - Promote competition
  - Prevent cooperation

So in oligopolies it is possible for output and price to be close to the monopoly situation hence government intervention is required to promote competition and to prevent cooperation. So when we say to promote competition what we basically mean is in any oligopolistic firm we have said that oligopolistic market is defined with high entry barriers and the reason that the firms are behaving this way is because there are few firms in the industry and each firm can keep a track of the other firms and that is the reason that their decision making gets complicated and the resultant the market outcome is not exactly competitive outcome and competitive outcome or higher output with lower prices can only happen when a oligopolistic market moves more and more towards having more and more number of firms in the market.

And that is possible only if the barriers to entry are low and sometimes barrier to entry could be created by the firms themselves in the market. Barriers to entry can come from a lot of other things say information mismatch, lack of infrastructure; lot of things can happen and here is where the government can intervene to see to it that there are no artificial barriers to entry that have been created in the market by the existing firm so that other firms cannot enter the market.

So that if the existing firms say for example if the existing firms decide to go for predatory pricing that is they charge a price which is so low that it keeps all rivals out of the market. So that is a it is creating a artificial barrier to entry by charging a price which is so low that the other entrance will be deterred by this price to enter in the market.

So this is where the government can step in and prevent the firm from doing so and as a result remove this barrier to entry so that more firms can enter the market and raise the amount of output in the market and so this is a promoting competition and another is prevent cooperation.

That is if the firms cooperate amongst each other that is although that is good for the consumers it is not good, it is, if the sorry, if they cooperate, the firms cooperate with each other it is good for the firms because they end up getting monopoly profit but it is not good for the consumers because they have to charge a they have to pay a higher price and they get lesser choices, lesser amount of output in the market.

So preventing cooperation is another thing which the government tries to do through competition laws like the government is going to say stop firms from entering into mergers where there is a possibility that the firm will end up being the only sole player in the market. So these are preventing cooperation preventing Cartel formation, preventing price fixing; these are the things that the government likes would like to do so that the existing firms do not charge high prices and produce monopoly output.

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## Laws around the globe

- Sherman Antitrust Act (1890): Forbids collusion between competitors
- Clayton Antitrust Act (1914): Strengthened rights of individuals damaged by anticompetitive arrangements between firms
- In India, Competition Law (2002)
- NDRC in China

So which are the laws around the globe which uphold competition and forbid collusion like the earliest is probably the Sherman Antitrust Act of 1890 which forbids collusion between competitors. We have Clayton Antitrust Act again from US in 1914. These are the acts the competition laws of US under these acts and the Clayton Antitrust Act strengthened the rights of individuals damaged by anticompetitive arrangements between firms.

In India we have the competition law which is relatively newer than in the developed countries' laws. These laws were existing long back in the developed countries of US most European countries but in India the competition law came into being in 2002 after abolishing the monopolies and monopolistic and restrictive trade practices act the MRTP Act was abolished and we had the competition law in price in India.

And in China it is the NDRC. Even in China many countries, many developing countries are gradually recognizing the importance of creating a competitive business environment in the economy and hence having these laws in place which are which have the objective of creating a competitive environment, creating a level playing field for all the firms in the economy.

Now one important thing in case of competition law why was the Monopolies and Restrictive Trade Practices Act abolished and in place we have the competition law because in case of MRTP monopoly itself was considered as illegal and monopoly itself only the public sector firm could be a monopoly and no other firm could be a monopoly because monopoly per se was considered to be bad but as we have seen during the our discussion of natural monopoly in this course that sometimes it is beneficial for the consumers to have one single firm catering to the needs of all the consumers because the firm is able to reap the benefits of economies of scale and pass it on to the consumers.

So monopoly per se is not bad. What is bad what is considered bad by the competition law is if a dominant player, if a monopoly player is abusing its position of dominance and charging or charging a higher price to the consumers or charging or producing lesser output in the market or in any other way abusing its position as a dominant player in the market.

So one example is the competition law where the real estate giant of DLF was tried under this law where one of their apartment building's Resident Flat Owners' Association, the Belaire Owners' Association they filed a law suit against DLF for abuse of dominance and they actually won the case and Supreme Court also upheld the decision of the competition commission of India and DLF was charged as was found guilty of abuse of dominance.

Now here what kind of abuse was done here basically DLF being a dominant player in this market they had gone ahead not honoring the agreements that was signed between the flat owners and DLF and eventually the flat owners had to face a lot of loses. They got the flat's, the timely delivery of the flats was not done and whole range of similar reasons were given against

DLF and DLF could, it was thought that DLF could afford to do so because it was a dominant player in the market.

And but one thing which is of importance or which is of relevance here for this course is when we say that a firm is a dominant player or when we say that like in the previous module we said there is a dominant firm which is the price leader or say in the example of the 2 petrol pumps that we talked about on the highway there are only 2 petrol pumps and they are almost behaving like monopoly because there are only 2 firms instead of one and for a very huge area there is no other petrol pump.

So that does not mean that petrol pump itself is a monopolistic or oligopolistic market. So basically this kind of puts things in perspective in the sense that throughout the entire course we have kept talking about market and we have kept talking about product. Now the questions is when we look at competition when we looked at look at pricing's decision for different firms the question is how are we to define if it is a monopoly market, if it is competitive market, if it is a monopolistic competition, if it is a oligopoly.

So basically it means that all of this distinction depends on what is the exact nature of the market that the firms are operating in and what is the relevant product that the firms are selling. So in that context we can only say if a firm is operating as a monopolist or operating as a oligopolist. Say for example had these petrol pumps been in a very crowded middle of the city. Then probably it is a monopolistic competition. They are all very similar, lot of petrol pumps around and the buyers have can choose between the petrol pumps. So say if one petrol pump it provides a free car wash, it is basically product differentiating and most of the drivers would probably like to take their cars there. So it is a monopolistic competition.

But the same petrol pump if it is in the middle of nowhere, it is a huge area, completely remote area where there is no petrol pump inside for long distances and cars are, long distance cars are travelling on the highway, there the petrol pump can afford to behave like a monopoly and charge a very high price.

So all of this is in the context of what the market looks like and what is the product that it is selling. So coming back to the example of DLF that I gave when the case was tried in court the first thing that the court needed to decide was so it had to be so if the Belaire Association or the flat owners' association was accusing DLF of abusing its dominant position, first it had to be

proved if DLF at all had a dominant position and if dominant position then in what market, in which product?

So then that had to be decided by the court of law first. So the court basically said it is selling this high-end apartments to a particular category of customers who can afford to buy such expensive, luxurious apartments. So that is the product that they have defined first. Second is which is more important in this case is it has to be defined or decided if DLF is the dominant player in the market.

So what do we mean by dominant player and if you may remember we had discussed about concentration ratio. We said that what percentage of the output is produced by the 4 major players in the market. So it seemed very easy then but now the question is what product are they selling and so it is is it the market for only apartments? Is it the market for both commercial and residential apartments? Is it the market for only high high-end, luxurious residential apartments?

So that has to be narrowed down first. Secondly as in the case of the petrol pump, geographic location also matters in case of the market. Now in case of DLF, DLF probably argued that we have we are in real estate business all over the country. So that is the market we are operating in and so the amount the percentage share in the market that we hold is much less than what it is nowhere close to being the dominant player because there are so many big real estate giants all over India.

But here the question is DLF is selling these apartments in Gurgaon which has a specific characteristic of its own, it is close to Delhi and it is a very major upcoming official corporate hub and it has its own clientele or own requirement of residential apartments and so the market in Gurgaon cannot be compared to market in any other place.

For example a person, a consumer or a customer who is deciding to purchase a apartment in Gurgaon is not going to, is unlikely to consider an apartment anywhere else say in Bangalore or Calcutta or Mumbai as a substitute. Probably he is considering apartments only in Gurgaon. So in for this case DLF is the dominant player only in Gurgaon or the market that is to be considered for this case for Gurgaon for DLF is Gurgaon and no other place.

So this is what is the reason that I went into the details of this case is basically it is not to talk about the case but to bring to your understanding that definition of the market and definition of the market as we narrow down the product, as we narrow down the market the real existence of

the firm as a monopoly or a oligopoly or a monopolistic competition that becomes more and more clear.

So the firm, the individual firms know this. So even a single firm which maybe producing multiple types of products yet it could be a monopolist in producing one product and it could be oligopolist in producing some other product and it could be into monopolistic competition in producing yet other products. So this is something I wanted to highlight.

Second is, so we have all these laws in place but at the same time there have been lot of dispute all around the globe about implementation of these laws because often it becomes very difficult to differentiate between what is legal and what is economically or what is rational as a economic entity to do.

So every firm exists as a rational economic agent which makes his choices depending on some very legitimate objective of say profit maximization and it takes certain decision depending on that and it could be probably shown through the theoretical models that it was the obvious choice for the firm to do but in the eyes of the law it could be interpreted as anti-competitive.

So this is a conflict that exists all the time and hence each of the cases the cases none of the cases if you go through the different kinds of cases that have been tried all over the world, none of the cases are exactly similar to each other.

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Why implementing the law could be difficult?

- While price fixing agreements are anti competitive, it is difficult to determine if there is a genuine reason to raise prices for everyone
- Business practices could be having economic rationale behind legitimate objectives and competition law could end up stifling them
- Three cases could be considered
  - Resale price maintenance
  - Predatory pricing
  - Tying

So why implementing the law could be difficult while price fixing agreements are anti-competitive, it is difficult to determine if there is a genuine reason to raise prices for everyone.

So we have seen that there is a kinked demand curve and there is a range in which firms are reluctant to raise prices. They are afraid of raising prices because they do not want to lose customers.

On the other hand it is possible for the firms to collude and raise the prices to a monopolistic level. So if the if a firm is a oligopolist and it is in that range where it is scared of increasing the prices yet its costs have gone up and it increases the price and similarly the same situation happens all over the market and all the firms increase their price, is that price fixing; is it possible that the firms have all colluded and they have decided we are going to increase the price.

So these are certain very delicate situations where it is not easy to determine whether something anti-competitive or whether something illegal has happened or is it just a natural consequence of the economic circumstances. So second is business practices could be having economic rationale behind legitimate objectives and competition law could end up stifling them.

So this is one argument that the economist or this is one thing that the economist keep on reminding that too much implementation of the law or too much legal restrictions on the firms could make them lose the breathing space that they have to behave or to flourish as or to thrive as businesses and that could be harmful for the entire economy as a whole.

Now three cases could be considered. One is resale price maintenance. So we are taking three examples where this kind of situation can arise which probably in eyes of law it could be termed as anti-competitive yet it could be explained to have its own economic rationale behind it. Now three cases to be considered; one is called the resale price maintenance.

Now often it happens that it can be seen that the manufacturer sets a lower limit to prices for the retailers. That is the retailers cannot charge a or cannot provide a discount below a certain level to its customers. Now this could be considered as anti-competitive among the retailers because firstly manufacturers do not have manufacturers are not going to gain by imposing a lower price restriction on the retailers.

All that it is probably doing is restricting competition amongst retailers and preventing the consumers from actually gaining from competition between retailers and finally getting the product at a lower price. But yet manufacturers could be doing that and the one reason behind this is probably the manufacturer is trying to prevent the discount retailers from free riding on services of the full service retailers.

So let me give an example. Quite a few years back I mean it has been more than probably a decade or so or even more that, the Bosch speakers were introduced in India. The Bosch speakers came to India and we had retailers selling the Bosch speakers.

Now at that time when the speakers were launched in India there were exclusive showrooms which had very the entire the these showrooms used to have special rooms to display the sound, effectiveness of sound of Bosch speakers because that is how the audio facilities inside the or the infrastructure within the showrooms were such that they would highlight the special features of the Bosch sound systems.

So obviously these retailers were had spent a lot of money to display this product to the customers who are new to this product. Now Bosch had now these showrooms the Bosch would be honoring the warranties of these products sold in these showrooms only and not by the discount retailers.

Now what is the reason behind it? The reason being that it is possible that say for example me as a customer I might have gone to one of the full service showrooms got a full test of the sound system the sounds the speakers and identified what I exactly wanted and then gone to a discount retailer and said that okay I would like to purchase this and give me at a lower price.

So in that case why would the full service retailer spent so much effort and money on selling the Bosch speakers in a specialized showroom like his. So these are the reasons that resale price maintenance could be controlled by the manufacturers. Another example is predatory pricing. Predatory pricing as I already said that it is possible for certain firms to cut the prices so low that other firms do not enter the, so the other firms cannot enter the market.

Now predatory pricing is also argued against by economist who say that it really does not make sense for a firm to take so much of risk because if one is going for predatory pricing this firm is probably cutting its price below its cost and incurring a loss to drive out the rivals or stop the entry of other rivals in the firm.

Why would the firm take such a risk because it is it cannot continue to stay at this low price. It has to increase its price eventually and in that case whenever it increases its price the other firms other rivals who have probably been waiting for this firm to drive out the competitors they will jump right back into the market and take the advantage of this predatory pricing of the first firm. So this predatory pricing is also something which the economists do not think is actually possible.

Third is tying. Tying is something where a firm or a company may actually tie a weak product with a strong product and sell it in the market. This is also is considered anti-competitive but again say for example when Microsoft would add a browser to its operating system. So this is something which is considered as anti-competitive because a firm could be it is possible for a firm to tie a weak product with its strong product but here again the argument which the economists put forth is the consumers would not be willing to pay a price which is higher than the total price that they would be paying individually for the 2 products. So there is and tying is something where the different firms actually price discriminate. Tying is a is a form of price discrimination and it is and price discrimination is not illegal. So tying is again something which is argued against by economists.

So coming back so that basically ends our discussion on oligopoly and we have seen that an oligopoly is probably the most realistic of the market situations and we have seen that different firms it is the all the in spite of all the theoretical models that we have gone into, which clears our understanding about how what is the economic rationale behind or what is the logic behind firms to charge a certain price when they do so; but at the same time the firms also need to take into account the decision of all the other firms or the other players in the market to decide on their price and output. Thank you.