



Exploring Possible Futures

Video Transcript

From one to many

After leaving our rosy first best world and entering the realms of the second best world, we have made first contact with monopolies, single firms dominating their market. While there are markets out there with a dominant monopoly, many markets have more than one company, but too few to really get us back into our perfect competitive first best setting. We already know that in a perfect competitive setting, we obtain our welfare optimal result. Companies have no possibility to influence market prices and take those as given. In the end, we have the allocative efficient solution. And prices are equal to marginal costs. On the other side of the spectrum, we have the monopoly.

Being able to influence the prices, the monopoly will exercise market power to push those up until it maximises its own profit. Compared with the perfect competitive world, we end up the less satisfied demand at a higher market price. In between those two extremes, we have what economists term an oligopoly, a market with a few larger firms, a pretty common real world market setting. Just think about cars, supermarkets, or telecommunication. Also, many energy markets have oligopolistic structures. And the industry sectors, subject to environmental policies, may be structured as oligopolies as well. So how should we deal with oligopolies and economic modelling? First, they are also part of the second best world.

We still try to get the best outcome that is possible within those conditions. Second, there are different types of oligopolies and different concepts how to model them, like Cournot, or Bertrand competition, or Stackelberg's leader / follower setting. It will take a separate course to discuss them all. The basic concept of oligopoly models is that the firm, i , knows that it has an influence on the price and so do the competing firms indicated by the minus i . Given this information, the firm still tries to do what every company is doing, maximising profits. Consequently, many oligopoly model approaches fall into the realm of equilibrium modelling to capture the interaction between firms.

Being placed between the benchmark of perfect and monopolistic competition, the oligopolistic market results also fall between those two extremes. The closer you get to one side of the axis, the closer the market results typically converge to their respective benchmark. If you have a duopoly, your results normally will tend closer to the monopoly results than if you have 5 or 10 firms, which then usually tend closer to the competitive benchmark results. Oligopoly models are some of the most interesting settings to study, but they often have challenging mathematical properties. So expect to rely on simplifications when designing your own ones.

Often, it is helpful to derive to two benchmarks first before venturing into the world of oligopolies, not only to get to reference points, which you may compare your oligopoly to, but also to get a basic understanding of your model before adding the complexity of oligopolistic competition.