

Chapter 17: Oligopoly

Discussion section 4

December 2023

Oligopolies

- Another example of a mix of monopolies and perfect competition
- Now we return to perfectly substitutable products, but. . .
- There are only a *small number* of sellers
- Thus, oligopolistic firms will have pricing power

Suppose McDonalds and Burger King are the only hamburger sellers (and their burgers are now identical)

- How will they make their production decision?
- What would the best outcome be?
- Will they achieve this?

Duopoly

McDonalds and Burger King may try and cooperate to mimic a monopoly, and each take half of the profits.

This is *collusion* and makes them a *cartel*.

It would also be *inefficient*. (What do I mean by this?)

But...

Collusion will be difficult to maintain.

Why?

Collusion

Why will collusion be difficult to maintain?

Intuition: each side has an incentive to cheat *a little bit*.

If one firm increases production, what happens?

Collusion

If one firm increases production, what happens?

- Price effect: higher market $Q \rightarrow$ lower market P (price effect)
- But, for that individual firm, higher $Q \rightarrow$ more revenue (output effect)
- So the oligopoly will not be able to maintain the monopoly outcome
 - Also will not produce at the competitive market outcome, though: $P > MC$ but less than the free market price
 - The more firms in the oligopoly, the closer the outcome gets to the free market

Nash equilibrium

- This is a *Nash equilibrium*: both firms are making the best decision for themselves, given the decision of the other firm
- Arises in a strategic setting or game, where the behavior of others influences my own behavior
- Form of a prisoner's dilemma

Demand curve

		Bonnie's Decision	
		Confess	Remain Silent
Clyde's Decision	Confess	Bonnie gets 8 years Clyde gets 8 years	Bonnie gets 20 years Clyde goes free
	Remain Silent	Bonnie goes free Clyde gets 20 years	Bonnie gets 1 year Clyde gets 1 year

Prisoners' Dilemma

- Is this good or bad?
- In the case of two firms, maybe good for consumers!
- In the case of two super-powers, maybe bad for the world
- What can we do?

Prisoners' Dilemma

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- What can we do?
 - Threats
 - Commitment devices
 - Regulation

Other anti-competitive prices

- Tying: two goods are sold as a bundle
- Resale price maintenance: force your customers to resell at a certain level
- Predatory pricing: undercut the competition

As usual, Mankiw's view will be that none of these are necessarily bad.