# Chapter 17: Oligopoly

Discussion section 4

December 2023

Discussion section 4 Chapter 17: Oligopoly December 2023 1/12

## 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

Discussion section 4 Chapter 17: Oligopoly December 2023 2 / 12

## Duopoly

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?

Discussion section 4 Chapter 17: Oligopoly December 2023 3 / 12

### 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...

Discussion section 4 Chapter 17: Oligopoly December 2023 4 / 12

# Duopoly

Collusion will be difficult to maintain.

Why?

Discussion section 4 Chapter 17: Oligopoly December 2023 5/12

#### 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?

Discussion section 4 Chapter 17: Oligopoly December 2023 6 / 12

#### Collusion

If one firm increases production, what happens?

- Price effect: higher market Q −¿ lower market P (price effect)
- But, for that individual firm, higher Q −¿ 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

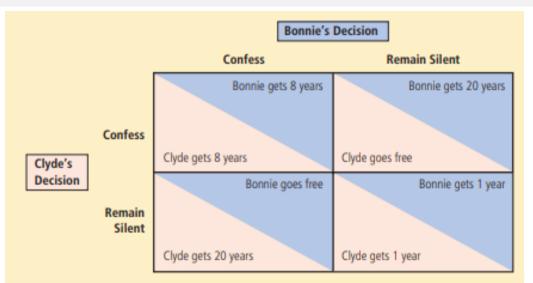
Discussion section 4 Chapter 17: Oligopoly December 2023 7 / 12

### 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

Discussion section 4 Chapter 17: Oligopoly December 2023 8 / 12

#### Demand curve



Discussion section 4 Chapter 17: Oligopoly December 2023

#### 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?

Discussion section 4 Chapter 17: Oligopoly December 2023 10 / 12

#### 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?
  - Threats
  - Commitment devices
  - Regulation

Discussion section 4 Chapter 17: Oligopoly December 2023 11/12

### 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.

Discussion section 4 Chapter 17: Oligopoly December 2023 12 / 12