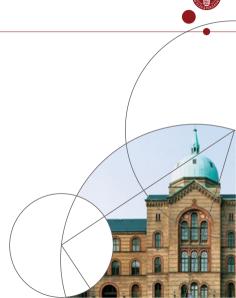


Johannes Wohlfart



#### Plan for the lecture

• Very brief discussion of the causes of monopoly (mostly a recap of the ØP)



### Monopoly status by law

- One reason monopolies may arise is that a legislature grants partial monopoly status by law
- Examples are requirements for certifications (e g doctors) or a limited number of licenses (e g taxis)
- Can be tied to a desire to keep track of a special good / service being delivered properly ...
- ... but may also be due to skilled political lobbying



## High fixed costs (natural monopoly)

- Monopolies can also occur if there are very high fixed costs of producing a particular good
- Remember (from last lecture / Micro I) that in the long run, a business will close if the price it can sell at is less than its average cost
- At high fixed costs, the average cost will be extremely high when the company's production is low

$$ATC(x) = \frac{FC + VC(x)}{x} = \frac{FC}{x} + \frac{VC(x)}{x}$$

 Hence, companies can only be profitable if they have a large production, i.e. large market share: there may not be enough demand for two companies to be in the market and be profitable at the same time



# High fixed costs, policy

- Also, note that with high fixed costs, it may be optimal for social welfare that there are not too many companies (each of which has to pay the costs)
- Optimal regulation may then be to ensure that the monopolist can operate in the market, but try to reduce the deadweight loss from the monopoly:
  - Gas, electricity and water etc.: Supply networks are expensive to establish, a historical tradition of public production
  - Telephony: Telephone networks are expensive to establish.
  - Drugs (and other inventions): Development work is expensive, patents provide incentive to develop, but expire at some point



#### What have we learned?

• Causes of monopolies and a little about the implications of regulating them

