

Natural Monopoly

- Public ownership
- Price regulation
 - limits the price that a monopolist is allowed to charge

Before 1987, British

Airways was state-owned

Passenger rail service

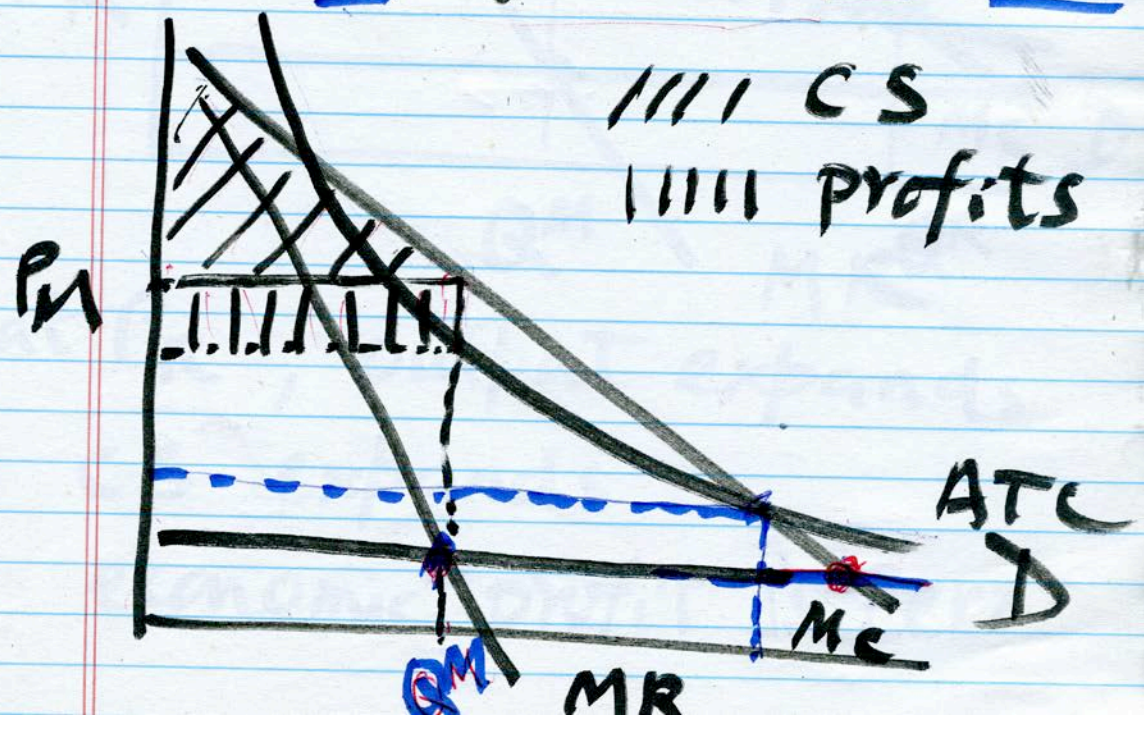
in the U.S. - Amtrak

U.S. Postal Service

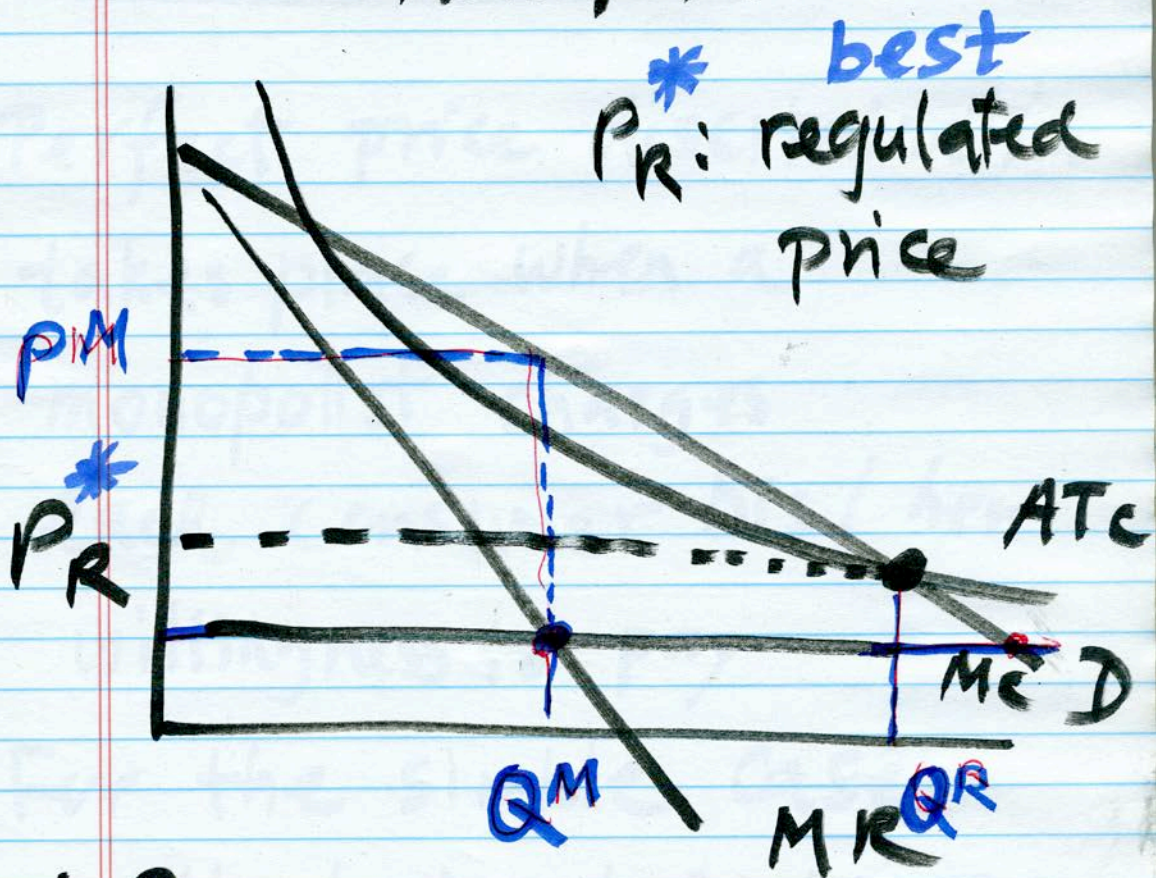
Public ownership - less
eager to keep costs
down; serve political
interest

Regulation

Unregulated P^M , Q^M



Regulated Natural Monopolist



at P_R , output expands
CS expands
economic profit is zero

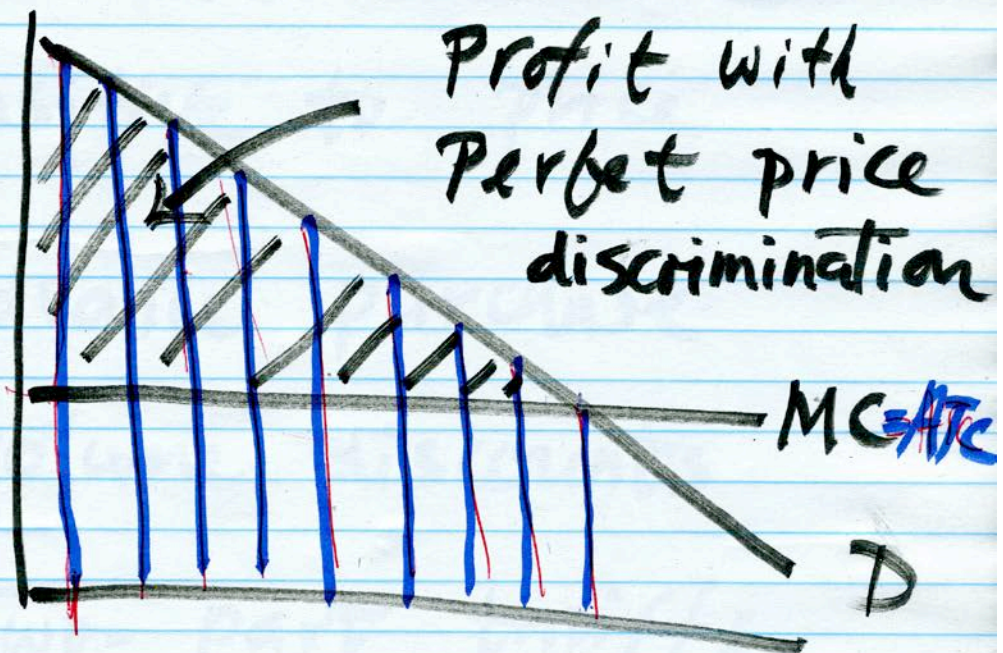
Price Discrimination

Perfect price discrimination takes place when a monopolist charges each consumer his/her willingness to pay

For the simple case with horizontal MC,
no fixed cost

$$MC = ATC$$

Perfect Price discrimination



Want to separate
consumers who are more
sensitive to price

- advance purchase
- volume discounts
- Two-part tariffs
(annual fee + cost
of items)
 - like volume discount

Airline travel

- one way vs roundtrip
- staying Saturday overnight vs. weekdays
- advance booking

ch 15. Oligopoly

oligopoly: an industry
with only a small #
of producers

Herfindahl-Hirschman Index

HHI: sum of square of
each firm's share of
market sales

e.g. 3 firms: 60%, 25%, 15%

$$\begin{aligned} \text{HHI} &= 60^2 + 25^2 + 15^2 \\ &= 4,450 \end{aligned}$$

Justice Department:

HHI $<$ 1,000 Strongly
Competitive

HHI between
1,000 & 1,800 Somewhat
Competitive

HHI over 1,800 Oligopoly

For HHI $>$ 1,000

proposed merger that
results in a significant
increase of HHI
likely not allowed

Duopoly: an oligopoly consisting of 2 firms

Collusion: Sellers cooperate to raise their joint profits

Cartel: an agreement among several producers to obey output restrictions to raise joint profits

Interdependence :

when a firm's decision significantly affects the profits of other firms

Game theory : study of behavior in situations of interdependence

Payoff : reward received by a player

The Prisoners' Dilemma Game

		Louise	
		No Confess	Confess
Thelma	No Conf	L: 5 yrs T: 5 yrs	L: 2 yrs T: 20 yrs
	Conf	L: 20 yrs T: 2 yrs	L: 15 yrs T: 15 yrs

Dominant strategy: Confess