Information about the course
Industrial Organization

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What is industrial economics (or industrial organization, IO)?

A definition suggested by Richard Schmalensee (2016):

- "The field of economics concerned with markets that cannot easily be analyzed using the standard textbook competitive model."
- So, IO is the study of markets with imperfect competition.
  - Firms have market power.

This raises questions such as:

- How do firms use market power?
- How do firms acquire (more) market power?

To understand those questions, IO economists study:

- Oligopoly competition (Cournot, Bertrand etc), price discrimination, entry deterrence, predatory/limit pricing, collusion, mergers, advertising, product differentiation.

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Three ways of approaching these questions:

- Theoretically.
- Empirically.
- (Competition/antitrust) policy, looking at case studies.

Where is the emphasis in our course?

- The emphasis is clearly on theory.
- But this year we had one lecture on empirical IO.
- Our textbook discusses many case studies and we very often phrase our theoretical investigations as normative questions.
  - When should we block mergers?
  - Should we try to prevent firms from colluding? If so, how?
  - Should we prevent firms from setting "too low" prices (predatory pricing)?

Prerequisites for the course

- Game theory and microeconomics.
- Enjoying formal mathematical modeling (but we put great emphasis on the intuition and logic behind theoretical results).

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Outline of the Course (this year)

- L1: Introduction.
- L2: Firms, consumers and the market [Ch 2 B&P].
- L3: Price discrimination I [Ch 1 Tirole, Ch 10 B&P]
- L4: Static oligopoly with homogeneous goods [Ch 3 B&P].
- L5: Vertically related markets [Ch 17 B&P].
- L6: Cartels and tacit collusion [Ch 14 B&P].
- L7: Product differentiation [Ch 6 B&P].
- L8: Price discrimination II [Ch 3 Tirole, Ch 8 B&P].
- L9: Reputation and limit pricing [Ch 9 Tirole].
- L10: Markets with network goods [Ch 20 B&P].
- L11: Empirical tests of oligopoly [Church & Ware].
- L12: Advertising [Ch 6 B&P].

Examples of specific problems that we study

- Predatory pricing:
  - A big firm sets a very low price to get rid of a small rival.
  - Once the rival has left the market, the big firm raises its price.
  - Can this at all happen? If yes, is it good or bad for consumers?
  - We will study these questions using a signaling model.
- Behavioral-based price discrimination:
  - A monopoly firm sells to consumers over two periods.
  - Valuations unknown, but a consumer's buying decision observed.
  - Price discrimination in period 2: higher price for period 1 buyers.
  - In period 1, consumers anticipate implications of buying early.
  - Is this kind of price discrimination good for consumers?
- Welfare effects of third-degree price discrimination:
  - We derive upper and lower bounds on the change in total surplus, due to third-degree price discrimination.

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References

References

Schmalensee, Richard (2016) *Industrial Organization*, pp. 1–9, London: Palgrave Macmillan UK.