

Pricing

R. Preston McAfee

Monday (75 minutes): Introduction to price discrimination

- Examples
- Basic theory
 - Reading: handout #1.
- Varian theorems
 - Suggested reading Varian, Hal, "Price discrimination and social welfare." American Economic Review, 75(4):870-875, 1985.
- Brief review of Ramsey pricing
 - Further reading Tirole, 66-72.
- Contrast of price discrimination theory to Ramsey pricing
- Effect of arbitrage
 - By intermediaries/fixed costs

Wednesday morning (90 minutes): Quantity discounts and self-selection

- Two types of consumers
 - Suggested reading: Tirole, Industrial Organization, 1985, 153-158.
 - Reading: Handout #2.
- Brief overview of incentive constraints & revelation principle
- Formulation of the seller's problem
- Solution and characterization
- Interpretation as quality premia
- Continuum solution (not covered in detail)
- Wilson's elasticity interpretation
- Brief discussion: tie-ins as price discrimination
 - Further reading: McAfee, R. Preston, John McMillan and Michael Whinston, "Commodity Bundling by a Monopolist," Quarterly Journal of Economics, May 1989, 371-83.

Wednesday afternoon (105 minutes): Peak-load pricing and price dispersion

- Examples
- Basic theory
 - Reading: Handout #3
 - Suggested reading: Williamson, Oliver, "Peak Load Pricing and Optimal Capacity under Indivisibility Constraints," American Economic Review, 56, September 1966, 810-827.
 - If you read French: Boiteaux, Marcel, "La Tarification des Demandes en point: application de la theorie de la vent au cout marginal," Revue Generale de l'Electricite 58, August, 1949, 321-340. (English translation available in J Business 33, April 1960.)
- Brief introduction to priority pricing
 - Further reading: Wilson, Robert, "Efficient and Competitive Rationing," Econometrica 57, January 1989.
 - Further reading: Oren, Shmuel, Stephen Smith and Robert Wilson, "Capacity Pricing," Econometrica 53, May 1985, 545-566.
- Price Dispersion: motivation
 - Reading: Handout #4
- Simplest model
 - Suggested reading: Stigler, George, "The Economics of Information," Journal of Political Economy 69, June 1961, 213-25.
 - Further reading: H. Varian, "A Model of Sales," American Economic Review, 70, 651-659 (1980).
 - Suggested reading: G. Butters, "Equilibrium Distributions of Sales and Advertising Prices," Review of Economic Studies 44, 465-91 (1980).

Wednesday afternoon, continued

- Intensity choice, asymmetric equilibria
 - Suggested reading: McAfee, R.P. "Endogenous Availability, Cartels and Merger in an Equilibrium Price Dispersion," *Journal of Economic Theory* 62, no. 1, February 1994, 24-47.
- Applications for the IO toolkit, contrast to Cournot

Thursday (105 minutes): Durable good pricing & the Coase conjecture

- Motivation
 - Reading: Handout #5
 - Suggested reading: Coase, Ronald, "Durability and Monopoly" *Journal of Law and Economics* 15: 143-149, 1972.
- Linear demand model, backward inducted
- Coase confirmed
 - Further reading: Gul, Faruk, Hugo Sonnenschein & Robert Wilson, "Foundations of Dynamic Monopoly and the Coase Conjecture," *Journal of Economic Theory* 39, 1986, 155-190.
- Nonstationary supergame equilibria
 - Further reading: Ausubel, Larry and Raymond Deneckere, "Reputation in Bargaining and Durable Goods Monopoly," *Econometrica* 57, 1989, 511-32.
 - Other reading: Kahn, Charles, "The Durable Goods Monopoly and Consistency with Increasing Costs," *Econometrica* 54, March 1986, 275-294.
 - Other reading, Pesendorfer, Wolfgang, "Fashion Cycles," *American Economic Review*, 1995.
- Capacity constraints (time permitting ... unlikely)

Friday (90 minutes): Auction theory and experiments

- Handout #6: Simple version of Milgrom-Weber theory
- Suggested reading: Milgrom, Paul and Robert Weber, "A General Theory of Auctions and Bidding," *Econometrica*, November 1982.
- Suggested reading: Milgrom, Paul, 1989, "Auctions and Bidding: A Primer," *Journal of Economic Perspectives* 3: 3-22.
- Suggested reading: McAfee, R. Preston and John McMillan, "Auctions and Bidding," *Journal of Economic Literature*, Summer, 1987.
- **ALL EXPERIMENTS PLAYED FOR REAL MONEY!!!**
- Four bidding experiments
 - First price, Vickrey, Dutch, English
- Discussion of auctions
- Winner's curse
- Winner's curse correction
- Transponder auction
 - Suggested reading: McAfee, R. Preston and Daniel Vincent, "The Price Decline Anomaly," *Journal of Economic Theory* 60, June, 1993, 191-212.
- Olympic broadcast rights auctions
- Linkage
- Wilson auction experiment
- Collusion in bidding
 - Suggested reading: McAfee, R. Preston and John McMillan, "Bidding Rings," *American Economic Review* 82, no.3, June 1992, 579-99.
- Copies of auction slides provided after presentation.

Suggested Packet Materials

- 6 mathematical handouts I will provide.
- Varian, Hal, "Price discrimination and social welfare." *American Economic Review*, 75(4):870-875, 1985.
- Tirole, Jean *Industrial Organization*, 1985, 66-72, 153-158.
- Suggested reading: Williamson, Oliver, "Peak Load Pricing and Optimal Capacity under Indivisibility Constraints," *American Economic Review*, 56, September 1966, 810-827.
- Stigler, George, "The Economics of Information," *Journal of Political Economy* 69, June 1961, 213-25.
- G. Butters, "Equilibrium Distributions of Sales and Advertising Prices," *Review of Economic Studies* 44, 465-91 (1980).
- Coase, Ronald, "Durability and Monopoly" *Journal of Law and Economics*, 15:143-149, 1972.
- Milgrom, Paul, 1989, "Auctions and Bidding: A Primer," *Journal of Economic Perspectives* 3: 3-22.