

1. Introduction

- x The Research Framework of Industrial Organization Theory

2. Monopoly Pricing

- x Monopoly pricing: an overview
- x Price discrimination
- x Multiproduct pricing
- x Dynamic pricing (learning consumer demand, durable-good pricing, ...)
- x Selling formats: listing prices vs. bargaining vs. auctions; marketing channels

References

- x Maskin, E., and J. Riley, "Monopoly with Incomplete Information", RAND (1984), 171-196.
- x Varian, H., "Price Discrimination and Social Welfare", AER (1985), 870-875.
- x Fudenberg and Tirole, "Upgrades, Trade-ins, and Buybacks " RAND (1998).
- x Armstrong, Mark, "Recent Developments in the Economics of Price Discrimination", 2006.
- x Bagwell and Riordan, "High and declining prices signal product quality", AER, 1991.
- x McAfee, McMillan, and Whinston, "Multiproduct Monopoly, Commodity Bundling, and Correlation of Values", QJE (1989), 371-384.
- x Armstrong, Mark, "Price discrimination by a multiproduct firm", RES, 1999. 151-168.
- x Segal, I., "Optimal Pricing Mechanisms with Unknown Demand," AER 2003, pp. 509-529.
- x Johnson, J.P. and D.P. Myatt. "On the Simple Economics of Advertising, Marketing, and Product Design." AER, 2006, 96(3), pp. 756-784.
- x Iñaki Aguirre, Simon Cowan and John Vickers, "Monopoly Price Discrimination and Demand Curvature", AER, 2010.
- x Oz Shy and Zhu Wang, "Why Do Payment Card Networks Charge Proportional Fees?" AER, 2010.

3. Static Models of Oligopoly with Homogeneous Products

- x The Cournot Model
- x Bertrand Competition

4. Product Differentiation and Price Competition

A Historical Overview

Discrete Choice Models

- x Formulation
- x The Independent Case without Outside Good (Perloff and Salop, 1985)
- x The Copula approach to product variety (Chen and Riordan, 2008)
- x Price and Performance in Differentiated Industries with General Distributions of Consumer Preferences (Chen and Riordan, 2010)

References

- x Anderson, S.P., de Palma, A. and Thisse, J-F. (1992). *Discrete Choice Theory of Product Differentiation*, Cambridge: The MIT Press.
- x Armstrong, Mark and John Vickers (2010), "Competitive Nonlinear Pricing and Bundling", *Review of Economic Studies*, 77: 30-60.
- x Bulow, Jeremy, John Geanakoplos, and Paul Klemperer (1985), "Multimarket Oligopoly: Strategic Substitutes and Complements," *Journal of Political Economy*, 488-511.
- x Caplin, A. and B. Nalebuff (1991), "Aggregation and Imperfect Competition: On the Existence of Equilibrium", *Econometrica*, 25-59.
- x Chen, Y. and M. Riordan (2007), "Price and Variety in the Spokes Model", *Economic Journal*, 897-921.
- x Chen, Y. and M. Riordan (2008), "Price-Increasing Competition", RAND.
- x Chen, Y. and M. Riordan (2010), "Preferences, Prices, and Performance in Multiproduct Industries," working paper.
- x Deneckere, R. and C. Davidson (1985), "Incentives to form coalitions with Bertrand competition," *RAND Journal of Economics*, 473-486.
- x Dixit, A. and Stiglitz, J.E. (1977). "Monopolistic competition and optimum product diversity", *American Economic Review*, 297-308.
- x Fudenberg, D. and J. Tirole (2001), "Customer Poaching and Brand Switching", *RAND Journal of Economics*, 634-657.
- x Eaton, B.C. and Lipsey, R.G. (1989). "Product differentiation", In (R. Schmalensee and R.D. Willig eds.), *Handbook of Industrial Organization*, Vol. I, pp. 723-763, Amsterdam: North-Holland.
- x Hart, O.D. (1985). "Monopolistic competition in the spirit of Chamberlin: a general model", *Review of Economic Studies*, 529-546.
- x Hotelling, H. (1929). "Stability in Competition", *Economic Journal*, vol. 39, pp. 41-57.
- x Perloff, J.M. and Salop, S.C. (1985). "Equilibrium with product differentiation", *Review of Economic Studies*, vol. 52, pp. 107-120.
- x Salop, S.C. (1979). "Monopolistic competition with outside goods", *Bell Journal of Economics*, vol. 10, pp. 141-156.
- x Shaked and Sutton (1982), "Relaxing Price Competition through Product Differentiation", *Review of Economic Studies*, 3-13.
- x Stole, Lars, "Price Discrimination in imperfectly competitive markets." HIO 3.

Planning for Term Paper

5. Dynamic Models of Oligopoly

- x Strategic Behavior: Ideas and Applications
- x Dynamic Price Competition
- x Dynamic Pricing Based on Consumer Purchase Histories
 - f* A Model of Ex-post Differentiation due to Consumer Switching Costs (Chen, 1997)
 - ¾ Motivation
 - ¾ The Model
 - ¾ Second-Period Demand
 - ¾ Second-Period Equilibrium: The Irrelevance Result; the Role of Switching Cost; The Ratio of markups; The Role of Market Shares
 - ¾ First-Period Equilibrium
 - ¾ Comparing with Uniform Pricing
 - ¾ Welfare Implications
 - f* A Model of Ex ante Differentiation due to Heterogeneous Consumer Preferences (Fudenberg and Tirole, 2000)
 - ¾ Motivation
 - ¾ The Model
 - ¾ Second-Period Demand
 - ¾ Second-Period Equilibrium: The Ratio of markups; The Role of Market Shares
 - ¾ First-Period Equilibrium
 - ¾ Comparing with Uniform Pricing
 - ¾ Welfare Implications

References

- x Klemperer, Paul, “Competition when Consumers Have Switching Costs: An Overview”, RESTf

References

- x Deneckere, R., H. Marvel, and J. Peck, "Demand Uncertainty, Inventories, and Resale Price Maintenance," *QJE* (1996), pp. 885-913.
- x Perry, M. and R. Porter, "Can Resale Price Maintenance and Franchise Fees Correct Sub-optimal Levels of Retail Service?" *IJIO* (1990), pp. 115-141.
- x Aghion, P. and P. Bolton, "Contracts as a Barrier to Entry," *AER*, Vol. 77 (1987), pp. 388-401
- x Bernheim, B.D. and M.D. Whinston, "Exclusive Dealing," *JPE*, Vol. 106 (1998), pp. 64-103
- x Besanko, D and M. Perry, "Equilibrium Incentives for Exclusive Dealing in a Differentiated Products Oligopoly," *RAND*, Vol. 24 (1993), pp. 646-667.
- x Chen, Y., "Oligopoly Price Discrimination and Resale Price Maintenance", *RAND*, 1999, 441-455.
- x Chen, Y and D. Sappington, "Exclusive Contracts, Innovation, and Welfare", working paper, 2008.
- x Marvel, H.P., "Exclusive Dealing," *Journal of Law and Economics*, Vol. 25 (1982), pp. 1-25.
- x Rasmusen, E.B., Ramseyer, J.M., and Wiley, Jr. J.S., "Naked Exclusion," *AER*, Vol. 81 (1991), pp. 1137-1145.
- x Segal, I.R. and M.D. Whinston, "Exclusive Contracts and Protection of Investments," *RAND*, Vol. 31 (2000), pp. 603-633.
- x Fumagalli, Chiara, and Massimo Motta. 2006. "Exclusive Dealing and Entry when Buyers Compete." *AER*, 96(3): 785-795.
- x Wright, Julian, "Exclusive Dealing and Entry, When Buyers Compete: Comment," *AER*, 2009, p. 1070-81.
- x Simpson, John, and Abraham Wickelgren. "Naked Exclusion, Efficient Breach, and Downstream Competition." *AER*, 97(2007), p. 1305-1320.
- x Spier, K. and M.D. Whinston, "On the Efficiency of Privately Stipulated Damages for Breach of Contract: Entry Barriers, Reliance, and Renegotiation," *RAND*, Vol. 26 (1995), pp. 180-202.
- x Williamson, O.E., *The Economic Institutions of Capitalism*, 1985, New York: Free Press.

Proposal for Term Paper

7. Vertical Mergers and Vertical Organization of Industries

References

- x Chen, Y. "On Vertical Mergers and Their Competitive Effects," RAND, 2001.
- x Chen, Y. "Vertical Disintegration," JEMS, 2005.
- x Chen and Riordan, "Vertical integration, exclusive dealing, and ex post cartelization", RAND, 2007
- x Choi, J.P. and S-S. Yi, "Vertical Foreclosure with the Choice of Input Specification," RAND, Vol. 31 (2000), pp. 717-743.
- x Hart and Tirole, "Vertical integration and market foreclosure". Brookings Papers on Economic Activity, 1990.
- x Ordoover, J.A., G. Saloner, and S. Salop, "Equilibrium Vertical Foreclosure," AER, Vol. 80 (1990), pp. 127-142.
- x Ray and Tirole, "A primer on foreclosure." HIO 3.
- x Riordan, M.H., "Anticompetitive Vertical Integration by A Dominant Firm," AER, 1998, 88, 1232-1248.
- x Riordan, M.H. and S.C. Salop, "Evaluating Vertical Mergers: A Post-Chicago Approach," Antitrust Law Journal, 1995, 63, 513-568.
- x Salinger, M.A., "Vertical Mergers and Market Foreclosure", QJE, 1988, 103, 345-56.
- x Nocke, Volker, and Lucy White, "Do Vertical Mergers Facilitate Upstream Collusion," AER, 2007.

Exam

8. Innovation and Intellectual Property Rights

1. Market Structure and Innovation Incentive

- x Arrow's Analysis (1962): Process Innovation
- x Preempting Monopoly: Gilbert and Newbery (1982)
- x Product Innovation: Can Arrow's Ranking Be Reversed?

2. A Model of Vertical Organization and Innovation Incentive

- x Formulation
- x Upstream Innovation Under Downstream Cournot Competition
- x Upstream Innovation Under Downstream Bertrand Competition
- x Vertical Integration and Innovation Incentive

3. Intellectual Property Rights (IPRs) and Innovation

- x The Basic Trade-off
- x Common Forms of IPRs
- x Intellectual Property Rights (IPRs) and Innovation in Developing Countries: Theory and Evidence

References

- x Arrow, K. (1962). "Economic Welfare and the Allocation of Resources for Innovations," R. Nelson ed. *The Rate and Direction of Inventive Activity*, Princeton University Press.
- x Gilbert, R. and Newbery, D. (1982). "Preemptive Patenting and the Persistence of