

Industrial Organization I: Reading List

I. Imperfect Competition: Background

Bresnahan, Tim “Empirical Studies with Market Power,” *Handbook of Industrial Organization*, vol. II, chap. 17.

Einav, Liran and Jonathan Levin. “Empirical Industrial Organization: A Progress Report,” *Journal of Economic Perspectives*, 24(2), 145-162 (2010).

Tirole, Jean. *The Theory of Industrial Organization*, Cambridge, MA: MIT Press, 1988.

A. Test of Market Power

Ashenfelter, O., and D. Sullivan, “Nonparametric Tests of Market Structure: An Application to the Cigarette Industry,” *Journal of Industrial Economics* 35, 483-498, (1989).

Baker, J., and T. Bresnahan, “Estimating the residual demand curve facing a single firm,” *International Journal of Industrial Organization* 6(3), 283-300, (1988).

Corts, K., “Conduct Parameters and the Measurement of Market Power,” *Journal of Econometrics* 88, 227-225, (1999).

Genesove, D. and W. Mullin, “Testing Static Oligopoly Models: Conduct and Cost in the Sugar Industry, 1890-1914,” *Rand Journal of Economics* 29(2), 355-377, (1989).

Stigler, G. “A Theory of Oligopoly,” *The Journal of Political Economy*, 72(1), 44-61, (1964)

Sumner, D., “Measurement of Monopoly Behavior: An Application to the Cigarette Industry,” *Journal of Political Economy* 89, 1010-1019, (1981).

Wolfram, C., “Measuring Duopoly Power in the British Electricity Spot Market,” *American Economic Review* 89(\$), 805-826, (1999).

B. Differentiated Products

Anderson, S. P., A. de Palma, and J. F. Thisse, *Discrete Choice Theory of Product Differentiation*, Chapters 1-5, Cambridge: MIT Press, (1992).

Caplin, A., and B. Nalebuff, “Aggregation and Imperfect Competition: On the Existence of Equilibrium,” *Econometrica* 59: 25-60, (1991).

Chaudhuri, Shubham, Pinelopi K. Goldberg, and Panle Jia, "Estimating the Effects of Global Patent Protection in Pharmaceuticals: A Case Study of Quinolones in India." *American Economic Review*, 96 (5): 1477-1514, (2006).

Deaton, A., and J. Muellbauer, *Economics and Consumer Behavior*, New York: Cambridge University Press, (1980).

Deaton, A., and J. Muellbauer, "An Almost Ideal Demand System," *American Economic Review* 70: 312-326, (1980).

McFadden, D., "Econometric Analysis of Qualitative Response Models," in Griliches and Intilligator (Eds.), *Handbook of Econometrics*, Volume III, Amsterdam: North Holland. (1984).

C. Demand and Supply Estimation

Benkard, C. L., and Pat Bajari, "Demand Estimation with Heterogeneous Consumers and Unobserved Product Characteristics: A Hedonic Approach," *Journal of Political Economy* 113(6): 1239-1276, (2006).

Berry, Steven, "Estimating Discrete Choice Models of Product Differentiation," *Rand Journal of Economics* 25: 242-262, (1994).

Berry, Steven, M. Carnall, and P. T. Spiller, "Airline Hubs: Costs, Markups and The Implications of Customer Heterogeneity," in *Advances in Airline Economics*, Vol. 1: Competition Policy and Anti-Trust, D. Lee, ed. Elsevier Press, 183–214 (2006).

Berry, Steven and Philip Haile, "Identification in Differentiated Products Markets Using Market Level Data," *Econometrica* 82: 1749–1798 (2014).

Berry, Steven, and Philip Haile, "Nonparametric Identification of Differentiated Products Demand Using Micro Data," *Econometrica* 92: 1135–1162 (2024).

Berry, Steven, James Levinsohn, and Ariel Pakes, "Automobile Price in Market Equilibrium," *Econometrica* vol. 63: 841-890, (1995).

Berry, Steven, James Levinsohn, and Ariel Pakes, "Differentiated Product Demand Systems from a Combination of Micro and Macro Data: The New Car Market," *Journal of Political Economy* 112: 68-105, (2004).

Berry, Steven, and A. Pakes, "The Pure Characteristics Discrete Choice Model of Differentiated Products Demand," *International Economic Review* 48(4) 1192-1225, (2007).

Borenstein, Severin, "Hubs and High Fares: Dominance and Market Power in the U.S. Airline Industry," *Rand Journal of Economics* vol. 2: 344-365, (1989).

Bresnahan, Tim, "Competition and Collusion in the American Automobile Oligopoly: The 1955 Price War," *Journal of Industrial Economics* vol. 35: 457-482, (1987).

Einav, Liran, "Seasonality in the U.S. Motion Picture Industry," *Rand Journal of Economics* 37(1), (2007).

Goldberg, Pinelopi, "Product Differentiation and Oligopoly in International Markets: The Case of the U.S. Automobile Industry," *Econometrica* vol. 63: 891-952, (1995).

Hausman, Jerry, Gregory Leonard, and J. Douglas Zona, "Competitive Analysis with Differentiated Products," *Annales d'Economie et de Statistique* vol. 34: 159-180, (1994).

Hendel, Igal, "Estimating Multiple Discrete Choice Models: An Application to Computerization Returns," *Review of Economic Studies* vol. 66: 423-446, (1999).

Nevo, Aviv, "Measuring Market Power in the Ready-to-Eat Cereal Industry," *Econometrica* vol. 69: 307-342, (2001).

Nevo, Aviv, "A Practitioner's Guide to Estimation of Random Coefficients Logit Models of Demand," *Journal of Economics and Management Strategy* vol. 9: 513-548, (2000).

Whinston, Michael, and Scott Collins, "Entry and Competitive Structure in Deregulated Airline Markets: An Event Study Analysis of People Express," *Rand Journal of Economics* vol. 23: 445-462, (1992).

D. Welfare Analysis of New Goods

Gentzkow, Matthew, "Valuing New Goods in a Model with Complementarities: Online Newspapers," *American Economic Review* 97(3), (2007).

Hausman, Jerry, "Valuation of New Goods Under Perfect and Imperfect Competition," in Bresnahan and Gordon (eds.), *The Economics of New Goods*, NBER Studies in Income and Wealth vol. 58: 209-237 (see also a comment by Bresnahan in the same volume) (1997).

Petrin, Amil, "Quantifying the Benefits of New Products: The Case of The Minivan," *Journal of Political Economy* vol. 110: 705-729, (2002).

Trajtenberg, Manuel, "The Welfare Analysis of Product Innovation, with an Application to CT Scanners," *Journal of Political Economy* vol. 97: 444-479, (1989).

II. Imperfect Competition: Policy

A. Mergers

Ashenfelter, Orley and Daniel Hosken, "The Effect of Mergers on Consumer Prices: Evidence from Five Selected Case Studies," *Journal of Law and Economics* 53: 417-466 (2010).

Ashenfelter, Orley, Daniel Hosken, and Matthew Weinberg, "The Price Effects of a Large Merger of Manufacturers: A Case Study of Maytag-Whirlpool" *American Economic Journal: Economic Policy*, 5(1): 239-261, (2013).

Dafny, Leemore, "Estimation and Identification of Merger Effects: An Application to Hospital Mergers" *Journal of Law and Economics*, 52(3): 523-550, (2009).

Farrell, Joseph and Carl Shapiro, "Antitrust evaluation of horizontal mergers: An economic alternative to market definition" *The BE Journal of Theoretical Economics* 10(1): 1-41, (2010).

Farrell, Joseph and Carl Shapiro, "*Horizontal Mergers: An Equilibrium Analysis.*" *American Economic Review*, Vol. 80: 107-26, (1990).

Hosken, Daniel and Orley Ashenfelter, "The Effect of Mergers on Consumer Prices: Evidence from Five Mergers on the Enforcement Margin" *Journal of Law and Economics*, 53(3): 417-466, (2010).

Houde, Jean-François, "Spatial Differentiation and Vertical Mergers in Retail Markets for Gasoline" *The American Economic Review*, 102(5): 2147-2182, (2012).

Nevo, Aviv, "Mergers with Differentiated Products: The Case of the Ready-to-Eat Cereal Industry" *RAND Journal of Economics* 31(3): 395-421, (2000).

Pesendorfer, Martin "Horizontal Mergers in the Paper Industry" *The RAND Journal of Economics* 34(3): 495-515, (2003).

Sweeting, Andrew, "The Effects of Mergers on Product Positioning: Evidence from the Music Radio Industry" *The RAND Journal of Economics* 41(2): 372-397, (2010).

Whinston, Michael and Volker Nocke, "Merger Policy with Merger Choice" *The American Economic Review* 103(2): 1006-1033, (2013).

B. Collusion

Albæk S., P. Møllgaard, and P. Overgaard, "Government-Assisted Oligopoly Coordination? A Concrete Case," *The Journal of Industrial Economics* 45(4), 429-443, (1997).

Asker, John, "A Study of the Internal Organization of a Bidding Cartel". *The American Economic Review*, 100(3): 723-62, (2010).

Athey, Susan, Kyle Bagwell, and C. Sanchirico, "Collusion and Price Rigidity," *Review of Economic Studies*, (2005).

Bagwell, Kyle and R. Staiger, "Collusion over the Business Cycle," *Rand Journal of Economics* 28(1), 82-106, (1997).

Bernheim, B. Douglas and Erik Madsen, "Price Cutting and Business Stealing in Imperfect Cartels," *American Economic Review* 107: 387-424 (2017).

Borenstein, S. and A. Shepard, "Dynamic Pricing in Retail Gasoline Markets," *Rand Journal of Economics* 27(3), 429-451, (1996).

Carlton, Dennis, Gustavo Bamberger, and R. Epstein, "Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?" *RAND Journal of Economics*, 131-147 (1995).

Clark, Robert and Jean-François Houde, "Collusion with asymmetric retailers: Evidence from a gasoline price-fixing case" *American Economic Journal: Microeconomics* 5(3): 97-123(2013).

Chen, Z. and P. Rey, "On the Design of Leniency Programs" *Journal of Law and Economics*, 56(4): 917-957, (2013).

Ellison, Glenn, "Theories of Cartel Stability and the Joint Executive Committee," *Rand Journal of Economics* 25(1), 37-57, (1994).

Erutku, Can and Vincent A. Hildebrand, "Conspiracy at the Pump," *Journal of Law and Economics* 53(1), 223-237, (2010).

Genesove, D. and W. Mullin, "Rules, Communication, and Collusion: Narrative Evidence from the Sugar Institute Case," *American Economic Review* 91(3), 379-398, (2001).

Genesove, David; Mullin, Wallace P. "Testing Static Oligopoly Models: Conduct and Cost in the Sugar Industry, 1890-1914" *RAND Journal of Economics* 29(2): 355-77, (1998).

Green, E. and R. Porter, "Noncooperative Collusion under Imperfect Price Information," *Econometrica* 52(1), 87-100, (1984).

Harrington, Joe and Andy Skrzypacz, "Private Monitoring and Communication in Cartels: Explaining Recent Collusive Practices," *American Economic Review*, 101(6): 2425-49 (2011).

Kaplow, Louis, *Competition Policy and Price Fixing*, Princeton University Press (2012).

Levenstein, M., "Price Wars and the Stability of Collusion: A Study of the Pre World War I Bromine Industry," *The Journal of Industrial Economic*, 45(2): 117-138, (1997).

Levenstein, Margaret and Valerie Suslow "What Determines Cartel Success?" *Journal of Economic Literature*, 44(1): 43-95, (2006).

- Marshall, Robert and Leslie Marx, *The Economics of Collusion*, MIT Press, (2012).
- Miller, Amalia R., “Did the Airline Tariff Publishing Case Reduce Collusion?” *Journal of Law and Economics* 53(3): 569-586, (2010).
- Noel, M., “Edgeworth Price Cycles: Evidence from the Toronto Retail Gasoline Market”, *Journal of Industrial Economics* 55(1): 69-92, (2007).
- Porter, R., “A Study of Cartel Stability: The Joint Economic Committee, 1880-1886,” *Bell Journal of Economics* Vol. 14, 301-314, (1983).
- Porter, Robert H. and J. Douglas Zona, “Ohio School Milk Markets: An Analysis of Bidding,” *The RAND Journal of Economics* 30(2): 263-288, (1999).
- Rotenberg, J. and G. Saloner, “A Supergame-Theoretic Model of Prices Wars During Booms,” *American Economic Review* 76(3): 390-407, (1986).

III. Imperfect Competition: Applications and Extensions

A. Two-Sided Markets, Platforms, and Network Effects

- Armstrong, Mark. "Competition in Two-Sided Markets." *RAND Journal of Economics* 37, no. 3 (2006): 668–91.
- Chandra, Ambarish, and Allan Collard-Wexler. "Mergers in Two-Sided Markets: An Application to the Canadian Newspaper Industry." *Journal of Economics & Management Strategy* 18, no. 4 (2009): 1045–70.
- Cullen Z, Farronato F. 2015. Outsourcing tasks online: matching demand and supply on peer-to-peer Internet platforms. Work. Pap., Stanford Univ.
- Einav, Liran, Chiara Farronato and Jonathan Levin, “Peer-to-Peer Markets,” *Annual Review of Economics*, 8:1, 615-635, (2016).
- Ellison, Glenn, Drew Fudenberg, et al. "Competing Auctions." (PDF) *Journal of the European Economic Association* 2, no. 1 (2004): 30–66.
- Ellison, Glenn, and Drew Fudenberg. "The Neo-Luddite's Lament: Excessive Upgrades in the Software Industry." (PDF) *RAND Journal of Economics* 31, no. 2 (2000): 253–72.
- Farrell, Joseph, and Garth Saloner. "Standardization, Compatibility, and Innovation." *RAND Journal of Economics* 16, no. 1 (1985): 70–83.
- Fradkin A. 2015. Search frictions and the design of online marketplaces. Working Paper, MIT
- Fudenberg, Drew, and Jean Tirole. "Pricing Under the Threat of Entry by Sole Supplier of a Network Good." *Journal of Industrial Economics* 48, no. 4 (2000): 373–90.
- Katz, Michael L., and Carl Shapiro. "Technology Adoption in the Presence of Network Externalities." *Journal of Political Economy* 94, no. 4 (1986): 822–41.
- Jeziorski, Przemyslaw. "Effects of Mergers in Two-Sided Markets: Examination of U.S. Radio Industry." University of California, Berkeley - Haas School of Business, 2012.
- Lee, Robin S. "Vertical Integration and Exclusivity in Platform and Two-Sided Markets." *American Economic Review* 103, no. 7 (2013): 2960–3000.
- Lerner, Josh, and Jean Tirole. "A Model of Forum Shopping." *American Economic Review* 96, no. 4 (2006): 1091–113.

Rochet, Jean-Charles, and Jean Tirole. "Platform Competition in Two-Sided Markets." *Journal of the European Economic Association* 1, no. 4 (2003): 990–1029.

Rysman, Mark. "Competition Between Networks: A Study of the Market for Yellow Pages." *Review of Economic Studies* 71, no. 2 (2004): 483–512.

Weyl, E. Glenn. "A Price Theory of Multi-Sided Platforms." *American Economic Review*, September 2010, 100, 4, 1642-1672.

B. Consumer Search and Imperfect Information

Bakos, Yannis, and Eric Brynjolfsson, "Bundling Information Goods: Pricing, Profits, and Efficiency" *Management Science* 45(12): 1613-1630, (1999).

Bakos, Yannis, and Eric Brynjolfsson, "Bundling and Competition on the Internet: Aggregation Strategies for Information Goods," *Marketing Science* 19(1): 63-82, (2000).

Baye, Michael and John Morgan, "Information Gatekeepers on the Internet and the Competitiveness of Homogeneous Product Markets," *American Economic Review*, 91(3): 454-474, (2003).

Baye, Michael and John Morgan, "Price Dispersion in the Lab and on the Internet: Theory and Evidence" *The RAND Journal of Economics* 35(3): 449-466, (2004).

Brown, Jeffrey and Austan Goolsbee, "Does the Internet Make Markets More Competitive? Evidence from the Life Insurance Industry," *Journal of Political Economy* 110(3): 481-507, (2002).

Brynjolfsson, Erik and Michael Smith, "Consumer Decision-making at an Internet Shopbot: Brand Still Matters," *Journal of Industrial Economics*, 49(4): 541-558, (2001).

Clay, Karen, Ramayya Krishnan, and Eric Wolff, "Price and Price Dispersion on the Web: Evidence from the Online Book Industry," *The Journal of Industrial Economics* 49(4): 521-539, (2001).

Coey, D., Larsen, B., and B. C. Platt (2020). "Discounts and Deadlines in Consumer Search," *American Economic Review*, 110(12), 3748-3785.

De Los Santos, Babur, Ali Hortacsu, et al. "Testing Models of Consumer Search Using Data on Web Browsing and Purchasing Behavior." *American Economic Review* 102, no. 6 (2012): 2955–80.

Dinerstein, Michael, Liran Einav, et al. "Consumer Price Search and Platform Design in Internet Commerce." (PDF) 2013.

Ellison, Glenn, "A Model of Add-on Pricing," *Quarterly Journal of Economics*, 120(2): 585-637, (2005).

Ellison, Glenn and Sara Ellison, "Search, Obfuscation, and Price Elasticities on the Internet," *Econometrica*, 77(2): 427-452, (2009).

Ellison, Glenn, and Sara Fisher Ellison. "Match Quality, Search, and the Internet Market for Used Books." (PDF) 2013.

Genesove, David, "Search at Wholesale Auto Auctions," *Quarterly Journal of Economics* 110 (1): 23-49, (1995).

- Gerardi, Kristopher and Adam Hale Shapiro, "Does Competition Reduce Price Dispersion? New Evidence from the Airline Industry," *Journal of Political Economy* 117(1): 1-37, (2009).
- Hortacsu, Ali and Chad Syverson, "Product Differentiation, Search Costs, and the Welfare Effects of Entry: A Case Study of the S&P 500," *Quarterly Journal of Economics*, 119(2): 403-456, (2004).
- Klemperer, Paul, "Competition When Consumers Have Switching Costs: An Overview with Applications to Industrial Organization, Macroeconomics, and International Trade," *Review of Economic Studies* 62 (4): 515-39, (1995).
- Morton, Scott, Fiona Zettelmeyer, and Jorge Silva-Risso, "Internet Car Retailing," *Journal of Industrial Economics*, 49(4): 501-519, (2001).
- Sorenson, Alan, "Equilibrium Price Dispersion in Retail Markets for Prescription Drugs," *Journal of Political Economy*, 108(4), (2000).
- Stahl, Dale, "Oligopolistic Pricing with Heterogeneous Consumer Search," *International Journal of Industrial Organization*, vol. 14: 243-268, (1996).
- Varian, Hal, "A Model of Sales," *American Economic Review* 70(4): 651-659, (1980).
- Diamond, Peter A. "A Model of Price Adjustment." *Journal of Economic Theory* 3, no. 2 (1971): 156-68.
- Varian, Hal R. "A Model of Sales." *American Economic Review* 70, no. 4 (1980): 651-9.
- Anderson, Simon P., and Régis Renault. "Pricing, Product Diversity, and Search Costs: A Bertrand-Chamberlin-Diamond Model." *RAND Journal of Economics* 30, no. 4 (1999): 719-35.
- McAfee, R. Preston. "Multiproduct Equilibrium Price Dispersion." *Journal of Economic Theory* 67, no. 1 (1995): 83-105.
- Baye, Michael R., and John Morgan. "Information Gatekeepers on the Internet and the Competitiveness of Homogeneous Product Markets." *American Economic Review* 91, no. 3 (2001): 454-74.
- Genesove, David. "Search at Wholesale Auto Auctions." *Quarterly Journal of Economics* 110, no. 1 (1995): 23-49.
- Hong, Han, and Matthew Shum. "Using Price Distributions to Estimate Search Costs." *RAND Journal of Economics* 37, no. 2 (2006): 257-75.
- Ellison, Glenn, and Alexander Wolitzky. "A Search Cost Model of Obfuscation." *RAND Journal of Economics* 43, no. 3 (2012): 417-41.
- Wilson, Chris M. "Ordered Search and Equilibrium Obfuscation." *International Journal of Industrial Organization* 28, no. 5 (2010): 496-506.

C. Spatial Search Frictions

- Brancaccio, G., Kalouptsi, M. and Papageorgiou, T. (2020), "Geography, Transportation, and Endogenous Trade Costs." *Econometrica*, 88: 657-691.
- Brancaccio, G., Kalouptsi, M., Papageorgiou, T. and Rosaia, N. (2022) "Search Frictions and Efficiency in Decentralized Transport Markets," *Quarterly Journal of Economic*, forthcoming.
- Buchholz, N. Spatial Equilibrium, Search Frictions and Dynamic Efficiency in the Taxi Industry. *Review of Economic Studies*, forthcoming.
- Fréchette, Guillaume, Alessandro Lizzeri, and Tobias Salz, "Frictions in a Competitive, Regulated Market: Evidence from Taxis," *American Economic Review*, 109 (8): 2954-92, (2019).

D. Price Discrimination

- Adams, William and Janet Yellen, "Commodity Bundling and the Burden of Monopoly," *Quarterly Journal of Economics*, 90(3): 475-498, (1976).
- Borenstein, Severin and Nancy Rose, "Competition and Price Dispersion in the U.S. Airline Industry," *Journal of Political Economy*, 102(4): 653-683, (1994).
- Busse, Meghan and Marc Rysman, "Competition and Price Discrimination in Yellow Pages Advertising," *Rand Journal of Economics* 36(2): 378-390, (2005).
- Crawford, Gregory, "The Discriminatory Incentives to Bundle in the Cable Television Industry," *Quantitative Marketing and Economics* 6(1): 41-78, (2007).
- DellaVigna, Stefano and Ulrike Malmendier, "Paying Not to Go to the Gym," *American Economic Review*, 96(3): 694-719, (2006).
- Ivaldi, Marc and David Martimort, "Competition under Nonlinear Pricing," *Annales d'Economie et de Statistique* vol. 34: 71-114, (1994).
- Kehoe, Patrick, Bradley Larsen, and Elena Pastorino, "Dynamic Competition in the Era of Big Data" (2018). Working paper, Stanford University.
- Leslie, Philip, "Price Discrimination in Broadway Theatre," *Rand Journal of Economics*, 35(3): 520-540, (2004).
- Luo, Yao, Isabelle Perrigne, and Quang Vuong, "Structural Analysis of Nonlinear Pricing," *Journal of Political Economy* 126, 2523-2568 (2018).
- McAfee, Preston and Raymond Deneckere, "Damaged Goods," *Journal of Economics and Management Strategy*, 5(2): 149-74, (1996).
- McAfee, Preston, John McMillan, and Michael Whinston, "Multiproduct Monopoly, Commodity Bundling, and Correlation of Values," *Quarterly Journal of Economics*, vol. 104: 371-83, (1989).
- McManus, Brian, "Nonlinear Pricing in an Oligopoly Market: the Case of Specialty Coffee," *Rand Journal of Economics*, vol. 38: 512-532, (2007).
- Miravete, Eugenio, "Choosing the Wrong Calling Plan? Ignorance, Learning, and Risk Aversion," *American Economic Review*, 93(1): 297-310, (2002).
- Miravete, Eugenio and Lars-Hendrik Roeller, "Competitive Nonlinear Pricing in Duopoly Equilibrium: The Early US Cellular Telephone Industry," *Journal of European Economic Association*, 2(2): 526-535, (2004).

- Miravete, Eugenio and Lars-Hendrik Roeller, "Estimating Markups under Nonlinear Pricing Competition," *Journal of the European Economic Association*, 2(2): 526-535 (2004).
- Morton, Fiona Scott, Florian Zettlmeyer, and Jorge Silva-Risso, "Consumer Information and Discrimination: Does the Internet Affect the Pricing of New Cars to Women and Minorities," *Quantitative Marketing and Economics*, 1(1): 65-92, (2003).
- Oster, Sharon, and Fiona Scott Morton, "Behavioral Biases Meet the Market: The Case of Magazine Subscription Prices," *The B.E. Journals in Advances in Economic Analysis and Policy*, 5(1), (2005).
- Ratchford, Brian, Myung-Soo Lee, and Debabrata Talukdar, "The Impact of the Internet on Information Search for Automobiles," *Journal of Marketing Research* 40(2): 193-209, (2003).
- Rochet, Jean-Charles and Lars Stole, "Nonlinear Pricing with Random Participation Constraints," *Review of Economic Studies*, 69(1): 277-311, (2002).
- Rutherford, Brian, Debabrata Talukdar, and Myung-Soo Lee, "The Impact of the Internet on Consumers' Use of Information Sources for Automobiles," *Journal of Consumer Research* 34(1): 111-119, (2007).
- Shepard, Andrea, "Price Discrimination and Retail Configuration," *Journal of Political Economy*, 99(1): 30-53, (1991).
- Sibley, David and Padmanabhan Srinagesh, "Multiproduct Nonlinear Pricing with Multiple Taste Characteristics," *RAND Journal of Economics*, 28(4): 684-707, (1997).
- Stole, Lars, "Nonlinear Pricing and Oligopoly," *Journal of Economics and Management Strategy*, 4(4): 529-562 (2005).
- Varian, Hal, "Price Discrimination and Social Welfare," *American Economic Review*, 75(4): 870-5, (1985).

E. Product Quality

- Armstrong, Mark, John Vickers, and Jidong Zhou, "Prominence and Consumer Search," *The RAND Journal of Economics* 40(2): 209-233, (2009).
- Bond, Eric, "A Direct Test of the 'Lemons' Model: The Market for Used Pickup Trucks," *The American Economic Review* 72(4): 836-840, (1982).
- Bronnenberg, Bart, Sanjay Dhar, and Jean-Pierre Dubé, "Brand History, Geography, and the Persistence of Brand Shares," *Journal of Political Economy* 117(1): 87-115, (2009).
- Cabral, Luis and Ali Hortacsu, "Dynamics of Seller Reputation: Evidence from eBay," *Journal of Industrial Economics* 58(1): 54-78, (2010).
- Chiappori, Pierre-Andre and Bernard Salanie, "Testing Contract Theory: A Survey of Some Recent Work," in *Advances in Economics and Econometrics: Theory and Applications*, 8th Ed. Vol.1. Edited by Mathias Dewatripont, Lars Peter Hansen, Stephen J. Turnovsky. Cambridge: Cambridge University Press. (2001).
- Cohen, Alma and Liran Einav, "Estimating Risk Preferences from Deductible Choice," *The American Economic Review* 97(3): 745-788, (2007).
- Dafny, Leemore and David Dranove, "Do Report Cards Tell Consumers Anything They Don't Already Know? The Case of Medicare HMOs," *The RAND Journal of Economics* 39(3): 790-821, (2008).

- Dewan, Sanjeev and Vernon Hsu, "Adverse Selection in Electronic Markets: Evidence from Online Stamp Auctions," *The Journal of Industrial Economics* 52(4): 497-516, (2004).
- Einav, Liran, Amy Finkelstein, and Mark Cullen, "Estimating Welfare in Insurance Markets using Variation in Prices," *Quarterly Journal of Economics* 125(3): 877-921(2010).
- Einav, Liran, Amy Finkelstein and Jonathan Levin, "Beyond Testing: Empirical Models of Insurance Markets" *Annual Review of Economics*, vol. 2: 311-336, (2010).
- Ellison, Glenn and Sara Ellison, "Search, Obfuscation, and Price Elasticities on the Internet" *Econometrica*, 77(2): 427-452, (2009).
- Genesove, David, "Adverse Selection in the Wholesale Used Car Market," *Journal of Political Economy* 101(4): 644-665, (1993).
- Gilligan, Thomas, "Lemons and Leases in the Used Business Aircraft Market" *Journal of Political Economy* 112(5): 1157-1180. (2004).
- Hendel, Igal and Alessandro Lizzeri, "Adverse Selection in Durable Goods Markets," *American Economic Review*, 89(5): 1097-1115, (1999).
- Hendricks, Kenneth, and Robert Porter, "An Empirical Study of an Auction with Asymmetric Information," *The American Economic Review*, 78(5): 865-883, (1988).
- Hendricks, Kenneth and Alan Sorensen, "Information and the Skewness of Music Sales," *Journal of Political Economy*, 117(2): 324-369, (2009).
- Hubbard, Thomas, "How Do Consumers Motivate Experts? Reputational Incentives in an Auto Repair Market," *Journal of Law and Economics*, 45(2): 437-468, (2002).
- Jin, Ginger Zhe, "Competition and Disclosure Incentives: An Empirical Study of HMOs," *The RAND Journal of Economics*, 36(1): 93-112, (2005).
- Jin, Ginger Zhe and Andrew Kato, "Price, Quality, and Reputation: Evidence from an Online Field Experiment" *The RAND Journal of Economics*, 37(4): 983-1004(2006).
- Jin, Ginger Zhe and Andrew Kato, "Dividing Online and Offline: A Case Study," *The Review of Economic Studies*, 74(3): 981-1004, (2007).
- Jin, Ginger Zhe and Phillip Leslie, "The Effect of Information on Product Quality: Evidence from Restaurant Hygiene Grade Cards" *The Quarterly Journal of Economics*, 118(2): 409-451, (2003).
- Jin, Ginger Zhe and Phillip Leslie, "Reputational Incentives for Restaurant Hygiene," *American Economic Journal: Microeconomics*, 1(1): 237-267, (2009).
- Johnson, Justin and Michael Waldman, "Leasing, Lemons, and Moral Hazard," *Journal of Law and Economics*, 53(2): 307-328, (2010).
- Lewis, Gregory, "Asymmetric Information, Adverse Selection and Online Disclosure: The Case of eBay Motors," *American Economic Review*, 101(4): 1535-1546, (2011).
- McDevitt, Ryan, "Names and Reputations: An Empirical Analysis" *American Economic Journal: Macroeconomics*, 3(3): 193-209, (2011).
- Mocan, Naci, "Can Consumers Detect Lemons? An Empirical Analysis of Information Asymmetry in the Market for Child Care," *Journal of Population Economics*, 20(4): 743-780, (2007).

IV. Organization of Production

A. Theory of the Firm and Vertical Integration

- Acemoglu, Daron, Simon Johnson and Todd Mitton, “Determinants of Vertical Integration: Financial Development and Contracting Costs,” *Journal of Finance* 64: 1251-1290 (2009).
- Anderson, Eric and David Schmittlein, “Integration of the Sales Force: An Empirical Examination,” *Rand Journal of Economics*, 15(3): 385-395, (1984).
- Anton, James and Dennis Yao, “Start-Ups, Spin-Offs and Internal Projects,” *Journal of Law, Economics, and Organization* 11(2): 362–378, (1995).
- Antras, Pol and Esteban Rossi-Hansberg, “Organizations and Trade,” *Annual Review of Economics*, 1: 43–64, (2009).
- Arora, Ashish, Andrea Fosfuri, and Alfonso Gambardella. 2001. *Markets for Technology: The Economics of Innovation and Corporate Strategy*. Cambridge, MA: MIT Press.
- Asker, John and Alexander Ljungqvist, “Competition and the Structure of Vertical Relationships in Capital Markets,” *Journal of Political Economy*, 118(3): 599-647, (2010).
- Atalay, Enghin, Ali Hortaçsu, and Chad Syverson, “Vertical Integration and Input Flows,” *American Economic Review*, 104(4): 1120-48, (2014)
- Azoulay, Pierre, “Capturing Knowledge within and across Firm Boundaries: Evidence from Clinical Development.” *American Economic Review*, 94(5): 1591–1612, (2004).
- Baker, George and Thomas Hubbard, “Make versus Buy in Trucking: Asset Ownership, Job Design and Information.” *American Economic Review*, 93(3): 551–572, (2003).
- Baker, George and Thomas Hubbard, “Contractibility and Asset Ownership: On-Board Computers and Governance in U.S. Trucking.” *Quarterly Journal of Economics* 119(4): 1443–1479, (2004).
- Bloom, Nicholas and John van Reenen, “Measuring and Explaining Management Practices across Firms and Countries.” *Quarterly Journal of Economics*, 122(4): 1351–1408, (2007).
- Bresnahan, Timothy and Jonathan Levin, “Vertical Integration and Market Structure,” in *Handbook of Organizational Economics*, Robert Gibbons and John Roberts eds., Princeton University Press, Ch. 21, (2012).
- Chipty, Tasneem, “Vertical Integration, Market Foreclosure, and Consumer Welfare in the Cable Television Industry,” *American Economic Review*, 91(3): 428-453, (June 2001).
- Ciliberto, Federico, “Does Organizational Form Affect Investment Decisions?” *The Journal of Industrial Economics*, 54(1): 63-93, (2006).
- Cuellar, Alison Evans, and Paul Gertler, “Strategic Integration of Hospitals and Physicians.” *Journal of Health Economics*, 25(1): 1–28, (2006).
- Forbes, Silke and Mara Lederman, “Control Rights, Network Structure and Vertical Integration: Evidence from Regional Airlines,” UCSD Working Paper, (2006).
- Forbes, Silke and Mara Lederman, “Adaptation and Vertical Integration in the Airline Industry.” *American Economic Review* 99(5): 1831–1849, (2009).
- Forbes, Silke and Mara Lederman, “Does Vertical Integration Affect Firm Performance? Evidence from the Airline Industry.” *Rand Journal of Economics*, 41(4): 765-90, (2010).

Hastings, Justine, “Vertical Relationships and Competition in Retail Gasoline Markets: Empirical Evidence from Contract Changes in Southern California,” *American Economic Review*, 94(1): 317-328, (January 2004).

Hortacsu, Ali and Chad Syverson, “Cementing Relationships: Vertical Integration, Foreclosure, Productivity and Prices,” *Journal of Political Economy*, 115(2): 250-301, (2007).

Hubbard, Thomas, “Information, Decisions, and Productivity: On-Board Computers and Capacity Utilization in Trucking.” *American Economic Review*, 93(4): 1328-53, (2003).

Joskow, Paul, “Contract Duration and Relationship-Specific Investments: Empirical Evidence from Coal Markets,” *American Economic Review*, 77(1): 168-185, (1987).

Joskow, Paul, “Vertical Integration and Long-Term Contracts: The Case of Coal-Burning Electric Generating Plants.” *Journal of Law, Economics, and Organization*, 1(1): 33–80, (1985).

Joskow, Paul, “Price Adjustment in Long Term Contracts: The Case of Coal.” *Journal of Law and Economics*, 31(1): 47–83, (1988).

Joskow, Paul, “Vertical Integration,” *Handbook of New Institutional Economics*, Kluwer, (2005).

Lee, Robin S. “Vertical Integration and Exclusivity in Platform and Two-Sided Markets.” *American Economic Review*, 103(7): 2960-3000, (2013)

Masten, Scott, “The Organization of Production: Evidence from the Aerospace Industry,” *Journal of Law and Economics*, 27(2): 403-417, (1984).

Monteverde, Kirk and David Teece, “Supplier Switching Costs and Vertical Integration in the Automobile Industry,” *Bell Journal of Economics*, 13(1): 206-213, (1982).

Mortimer, Julie, “Vertical Contracts in the Video Rental Industry” *Review of Economic Studies* 75(1): 165-199, (2008).

Shepard, Andrea, “Contractual Form, Retail Price, and Asset Characteristics in Gasoline Retailing.” *RAND Journal of Economics*, 24(1): 58–77, (1993).

Tadelis, Steven, “Complexity, Flexibility, and the Make-or-Buy Decision” *The American Economic Review*, 92(2): 433-437, (2002).

Whinston, Michael, “On the Transaction Cost Determinants of Vertical Integration,” *Journal of Law, Economics and Organization*, 19(1): 1-23, (2003).

B. Vertical Contracts and Relationships

Bernheim, Doug and Michael Whinston, “Exclusive Dealing,” *Journal of Political Economy*, 106(1): 64-103, (1998).

Bolton, Patrick and Michael Whinston, “Incomplete Contracts, Vertical Integration, and Supply Assurance,” *Review of Economic Studies*, 60(1): 121-148, (1993).

Coase, R.H., “The Nature of the Firm,” *Economica*, 16(4): 386-405, (1937).

Grossman, Sanford and Oliver Hart, “The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration,” *Journal of Political Economy*, 94(4): 691-719, (1986).

Hart, Oliver and John Moore, "Property Rights and the Nature of the Firm," *Journal of Political Economy*, 98(6): 1119-1158, (1990).

Hart, Oliver and Jean Tirole, “Vertical Integration and Market Foreclosure,” *Brookings Papers on Economic Activity: Microeconomics*, 205-276 (1990).

Holmstrom, Bengt and Paul Milgrom, "The Firm as an Incentive System," *American Economic Review*, 84(4): pp. 972-991, (1994).

Lee, Robin S., "Vertical Integration and Exclusivity in Platform and Two-Sided Markets," *American Economic Review*, 103(7): 2960-3000.

Williamson, Oliver, "The Vertical Integration of Production: Market Failure Considerations," *American Economic Review*, 61(2): 112-123, (1971).

Williamson, O. *Markets and Hierarchies*, Free Press, 1975.

C. Procurement, Auctions and other Mechanisms

Athey, Susan and Phil Haile, "Nonparametric Approaches to Auctions," *Handbook of Econometrics*, 6(A): 3847-3965, (2007).

Athey, Susan and Phil Haile, "Identification of Standard Auction Models," *Econometrica*, 70(6): 2107-2140 (2002).

Milgrom, P. and R. Weber, "A Theory of Auctions and Competitive Bidding," *Econometrica*, 50(5): 1089-1122, (1982).

Laffont, Jean-Jacques, Hervé Ossard and Quang Vuong, "Econometrics of First-Price Auctions," *Econometrica*, 63(4): 953-980, (1995).

Guerre, Emmanuel, Isabelle Perrigne and Quang Vuong, "Optimal Nonparametric Estimation of First-Price Auctions," *Econometrica*, 68(3): 525-574, (2000).

Campo, Sandra, Isabelle M. Perrigne, and Quang H. Vuong, "Asymmetry in First-Price Auctions With Affiliated Private Values," *Journal of Applied Econometrics*, 18(2): 179-207, (2003).

Li, Tong, Isabelle Perrigne, and Quang Vuong, "Structural Estimation of the Affiliated Private Value Auction Model," *The RAND Journal of Economics*, 33(2): 171-193, (2002).

Krasnokutskaya, E., "Identification and Estimation in Procurement Auctions under Unobserved Auction Heterogeneity," *Review of Economic Studies*, 78(1): 293-327, (2011).

Roberts, James W., "Unobserved Heterogeneity and Reserve Prices in Auctions," *RAND Journal of Economics*, 44(4): 712-732, (2013).

Porter, Robert H. and J. Douglas Zona, "Detection of Bid Rigging in Procurement Auctions," *Journal of Political Economy*, 101(3): 518-538, (1993).

Athey, Susan, Jonathan Levin, and Enrique Seira, "Comparing open and Sealed Bid Auctions: Evidence from Timber Auctions," *The Quarterly Journal of Economics*, 126(1): 207-257, (2011).

Kastl, Jakob, "Discrete Bids and Empirical Inference in Divisible Good Auctions," *Review of Economic Studies*, 78(3): 974-1014, (2011).

Cassola, Nuno, J. Kastl, and Ali Hortacsu, "The 2007 Subprime Market Crisis Through the Lens of European Central Bank Auctions for Short-Term Funds," *Econometrica*, 81(4): 1309-1345, (2013).

Jofre-Bonet, M. and M. Pesendorfer, "Estimation of a Dynamic Auction Game," *Econometrica*, 71(5): 1443-1489, (2003).

Somainsi, Paulo "Identification in Auction Models with Interdependent Costs", *Journal of Political Economy*, 128 (10), 3820–3871 (2020)

Agarwal, N. “An Empirical Model of the Medical Match”, *American Economic Review*, July 2015, 105(7), 1939-1978

Agarwal, N. and P. Somaini, “Demand Analysis using Strategic Reports: An application to a school choice mechanism,” *Econometrica*, March 2018, 86 (2), 391-444

V. Productivity

A. Measuring Productivity

Ackerberg, Daniel, Kevin Caves, Garth Frazer, “Structural Identification of Production Function Estimators,” *Econometrica* 83(6): 2411–2451, (Nov 2015).

Aw, Bee Yan, Mark J. Roberts, and Daniel Yi Xu, “R&D Investments, Exporting, and the Evolution of Firm Productivity,” *American Economic Review*, 98(2): 451-56, (2008).

Bartel, Ann, Casey Ichniowski, and Kathryn Shaw, “How Does Information Technology Affect Productivity? Plant-Level Comparisons of Product Innovation, Process Improvement, and Worker Skills,” *Quarterly Journal of Economics*, 122(4): 1721-58, (2007).

Bloom, Nicholas, and John Van Reenen, “Measuring and Explaining Management Practices across Firms and Countries,” *Quarterly Journal of Economics*, 122(4): 1351-1408, (2007).

Bloom, Nicholas, Raffaella Sadun, and John Van Reenen, “Americans Do I.T. Better: US Multinationals and the Productivity Miracle,” *American Economic Review*. 102(1): 167-201, (2012).

De Loecker, “Product differentiation, multiproduct firms, and estimating the impact of trade liberalization on productivity,” *Econometrica* 79(5): 1407–1451, (Jan 2011).

Doraszelski, Ulrich and Jordi Jaumandreu, 2013, “R&D and Productivity: Estimating Endogenous Productivity.” *Review of Economic Studies* 80 (4):1338-1383

Dunne, Timothy, Mark J. Roberts, and Larry Samuelson, “The Growth and Failure of U. S. Manufacturing Plants,” *The Quarterly Journal of Economics* 104(4): 671–698, (1989).

Foster, L., J. Haltiwanger, and C. Syverson, “Reallocation, Firm Turnover, and Efficiency: Selection on Productivity or Profitability?” *American Economic Review*, 98(1): 394-425 (2008).

Gandhi, Amit, Salvador Navarro, and David Rivers “On the Identification of Gross Output Production Functions”, *Journal of Political Economy*, 128 (08), 2973–3016 (2020)

Griliches, Zvi and Jacques Mairesse, “Production Functions: The Search for Identification,” *In: Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium*, 31. Cambridge University Press, p. 169, (1998).

Hall, Bronwyn and Nathan Rosenberg, *Handbook of the Economics of Innovation*, Vol 1, Vol 2.

Melitz, Marc J. “The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity,” *Econometrica*, 71(6): 1695–1725, (2003).

Syverson, Chad, “Market Structure and Productivity: A Concrete Example,” *Journal of Political Economy*, 112(6): 1181–1222, (2004).

Syverson, Chad, “What Determines Productivity?” *Journal of Economic Literature*, 49(2): 326-365, (2011).

VI. Entry and Market Structure

A. Market Structure and Strategic Entry

- Anderson, Simon, Andre de Palma, and Yurii Nesterov, "Oligopolistic Competition and the Optimal Provision of Products," *Econometrica*, 63(6): 1281-1302, (1995).
- Berry, Steve, "Estimation of a Model of Entry in the Airline Industry," *Econometrica*, 60(4): 889-918, (1992).
- Berry, Steve and Elie Tamer, "Identification in Models of Oligopoly Entry," in *Advances in Economics and Econometrics: Theory and Applications*, Ninth World Congress, Volume II, edited by Richard Blundell, Whitney K. Newey, and Torsten Persson, Cambridge University Press, Chapter 2, (November 2006).
- Berry, Steve and Joel Waldfogel, "Free Entry and Social Inefficiency in Radio Broadcasting," *Rand Journal of Economics*, 30(3): 397-420, (1999).
- Baumol, W.K., J.C. Panzar, and R.D. Willig, "On the Theory of Perfectly Contestable Markets," in J.E. Stiglitz and G.F. Mathewson (Eds.), *New Developments in the Analysis of Market Structure*, MIT Press, (1986).
- Bresnahan, Timothy, "Sutton's Sunk Costs and Market Structure: Price Competition, Advertising, and the Evolution of Concentration: Review Article," *Rand Journal of Economics*, 23(1): 137-52, (1992).
- Bresnahan, Timothy and P. Reiss, "Entry in Monopoly Markets," *Review of Economic Studies*, vol. 57: 531-53, (1990).
- Bresnahan, Timothy and P. Reiss, "Entry and Competition in Concentrated Markets," *Journal of Political Economy*, 99(5): 977-1009, (1991).
- Ciliberto, Frederico and Elie Tamer, "Market Structure and Multiple Equilibria in Airline Markets," *Econometrica*, 77(6): 1791-1828, (2009).
- Comments on Bresnahan and Reiss, *Brookings Papers on Economic Activity: Special Issue on Microeconomics* 3: 872-882, (1987).
- Einav, Liran, "Not All Rivals Look Alike: Estimating an Equilibrium Model of The Release Date Timing Game", *Economic Inquiry*, 48(2): 369-390, (2010).
- Ellickson, Paul, "Does Sutton Apply to Supermarkets?" *Rand Journal of Economics*, 37(1): 43-59, (2007).
- Mankiw, Gregory, and Michael Whinston, "Free Entry and Social Inefficiency," *Rand Journal of Economics*, 17(1): 48-58, (1986).
- Mazzeo, Michael, "Product Choice and Oligopoly Market Structure," *Rand Journal of Economics*, 33(2): 221-42, (2002).
- Seim, Katja, "An Empirical Model of Firm Entry with Endogenous Product-Type Choices," *Rand Journal of Economics*, 36(3): 619-640, (2006).
- Sutton, J. *Sunk Costs and Market Structure*, MIT Press, 1991, Chapters 1-2.
- Toivanen, Otto and Michael Waterson, "Market Structure and Entry: Where's the Beef?" *Rand Journal of Economics*, 36(3): 680-699, (2005).

B. Product Design and Positioning

Blonigen, Bruce, Christopher Knittel and Anson Soderbery, "Keeping it fresh: Strategic product redesigns and welfare," *International Journal of Industrial Organization*, 53, 170-214, (2017).

Fan, Ying, "Ownership Consolidation and Product Characteristics: A Study of the US Daily Newspaper Market," *American Economic Review*, 103(5), 1598-1628, (2013).

Eizenberg, Alon, "Upstream Innovation and Product Variety in the U.S. Home PC Market," *The Review of Economic Studies*, 81(3), 1003–1045, (2014).

Sweeting, Andrew, "Dynamic Product Positioning in Differentiated Product Markets: The Effect of Fees for Musical Performance Rights on the Commercial Radio Industry," *Econometrica*, 81 (5): 1763–1803, (2013).

Wollmann, Thomas, "Trucks without Bailouts: Equilibrium Product Characteristics for Commercial Vehicles," *American Economic Review*, 108(6): 1364–1406, (2018).

C. Strategic Entry Deterrence and Predation

Aghion, Philippe and Patrick Bolton, "Contracts as Barriers to Entry," *American Economic Review*, 77(3): 388-401, (1987).

Bulow, Jeremy, John Geanakoplos, and Paul Klemperer, "Multimarket Oligopoly: Strategic Substitutes and Complements," *Journal of Political Economy*, 93(3): 488-511, (1985).

Chevalier, Judith, "Capital Structure and Product Market Competition: Empirical Evidence from the Supermarket Industry," *American Economic Review*, 85(3): 415-435, (1995).

Ciliberto, Federico and Jonathan Williams, "Limited Access to Airport Facilities and Market Power in the Airline Industry" *Journal of Law and Economics*, 53(3): 467-495, (2010).

Dafny, Leemore, "Games Hospitals Play: Entry Deterrence in Hospital Procedure Markets," *Journal of Economics and Management Strategy*, 14(3): 513-542, (2005).

Ellison, Glenn and Sara Ellison, "Strategic Entry Deterrence and the Behavior of Pharmaceutical Incumbents Prior to Patent Expiration," *American Economic Journal: Microeconomics*, 3(1): 1-36, (2011).

Fudenberg, Drew and Jean Tirole, "The Fat Cat Effect, the Puppy Dog Ploy and the Lean and Hungry Look," *American Economic Review*, 74(2): 361-366, (1984).

Ghemawat, Pankaj, "Capacity Expansion in the Titanium Dioxide Industry," *Journal of Industrial Economics*, 33(2): 145-63, (1984).

Gilbert, Richard and Marvin Lieberman, "Investment and Coordination in Oligopolistic Industries," *Rand Journal of Economics*, 18(1): 17-3, (1987).

Goolsbee, Austan and Chad Syverson, "How do Incumbents Respond to the Threat of Entry?: Evidence from Major Airlines," *Quarterly Journal of Economics*, 123(4): 1611-1633, (2008).

Klepper, Steven and Kenneth Simons, "Dominance by Birthright: Entry of Prior Radio Producers and Competitive Ramifications in the U.S. Television Receiver Industry," *Strategic Management Journal*, 21(10/11): 997-1016, (2000).

Lieberman, Marvin, "Post Entry Investment and Market Structure in the Chemical Processing Industry," *Rand Journal of Economics*, 18(4): 533-549, (1987).

Nalebuff, Barry, "Bundling as an Entry Barrier," *Quarterly Journal of Economics*, 119(1): 159-187, (2004).

Schmalensee, Richard, "Entry Deterrence in the Ready-to-Eat Breakfast Cereal Industry," *Bell Journal of Economics*, 9(2): 305-327, (1978).

Schmalensee, Richard, "Economies of Scale and Barriers to Entry," *Journal of Political Economy*, 89(6): 1228-1238, (1981).

Smiley, Robert, "Empirical Evidence on Strategic Entry Deterrence," *International Journal of Industrial Organization*, 6(2): 167-180, (1988).

Weiman, David and Richard Levin, "Preying for Monopoly: The Case of the Southern Bell Telephone Company, 1894-1912," *Journal of Political Economy*, 102(1): 103-126, (1994).

Zanarone, Giorgio, "Vertical Restraints and the Law: Evidence from Automobile Franchising," *Journal of Law and Economics*, 52(4): 691-700, (2009).

IX. Dynamic Models

A. Industry Dynamics: Theory and Evidence

Aw, Bee, Xiaomen Chen, and Mark Roberts, "Firm-Level Evidence on Productivity Differentials and Turnover in Taiwanese Manufacturing," *Journal of Development Economics*, 66(1): 51-86, (2001).

Dunne, Timothy, Mark Roberts, and Larry Samuelson, "Patterns of Firm Entry and Exit in U.S. Manufacturing," *Rand Journal of Economics*, 19(4): 495-515, (1988).

Hopenhayn, Hugo, "Entry, Exit and Firm Dynamics in Long-run Equilibrium," *Econometrica*, 60(5): 1127-1150, (1992).

Jovanovic, Boyan, "Selection and the Evolution of Industry," *Econometrica*, 50(3): 649-670, (1982).

Melitz, Marc, "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71(6): 1695-1725, (2003).

Olley, Steven, and Ariel Pakes, "The Dynamics of Productivity in the Telecommunications Equipment Industry," *Econometrica*, 64(6): 1263-1297, (1996).

Sutton, John, "Gibrat's Legacy," *Journal of Economic Literature*, 35(1): 40-59, (1997).

Sutton, John, *Technology and Market Structure*, MIT Press, (1998).

B. Single Agent Dynamic Models

Ackerberg, Daniel, "Advertising, Learning, and Consumer Choice in Experience Good Markets: A Structural Empirical Examination," *International Economic Review*, 44: 1007-1040, (2003).

Aghion, Philippe, Patrick Bolton, Christopher Harris, and Bruno Jullien, "Optimal Learning by Experimentation," *Review of Economic Studies* 58: 621-54, (1991).

Aguirregabiria, Victor, "The Dynamics of Markups and Inventories in Retailing Firms," *Review of Economic Studies* 66(2): 275-308, (1999).

Benkard, C. Lanier, "Learning and Forgetting: The Dynamics of Aircraft Production," *American Economic Review*, 90(4): 1034-1054, (2000).

Dixit, Avinash, "Entry and Exit Decisions Under Uncertainty," *Journal of Political Economy*, 97(3): 620-638, (1989).

Hitsch, Gunter, "An Empirical Model of Optimal Dynamic Product Launch and Exit Under Demand Uncertainty," *Marketing Science*, 25(1): 25-50, (2006).

Holmes, Thomas, "The Diffusion of Wal-Mart and Economies of Density," *Econometrica*, 79(1): 253-301, (2011).

Hotz, Joseph and Robert Miller, "Conditional Choice Probabilities and the Estimation of Dynamic Models," *Review of Economic Studies* 60(3): 497-530, (1993).

Hotz, Joseph, Robert Miller, Seth Sanders and Jeffrey Smith "A Simulation Estimator for Dynamic Models of Discrete Choice," *Review of Economic Studies*, 61: 256-289, (1994).

Pakes, Ariel, "Patents as Options: Some Estimates of the Value of Holding European Patent Stocks," *Econometrica*, 54(4): 755-784, (1986).

Rust, John, "Optimal Replacement of GMC Bus Engines: An Empirical Model of Harold Zurcher," *Econometrica*, 55(5): 999-1033, (1987).

Stokey, N., R. E. Lucas, and E. C. Prescott, *Recursive Methods in Economic Dynamics*, chapter 5, Cambridge, MA: Harvard University Press, 1989.

C. *Dynamic Models of Imperfect Competition (in Winter Quarter)*

Akerberg, Daniel, Steven Berry, Lanier Benkard, and Ariel Pakes, "Econometric Tools for Analyzing Market Outcomes," in *Handbook of Econometrics*. J.J. Heckman and E.E. Leamer (ed.), Elsevier. Edition 1, volume 6, (2007).

Bajari, Patrick, Lanier Benkard, and Jonathan Levin, "Estimating Dynamic Models of Imperfect Competition," *Econometrica*, 75(5): 1331-1370, (2007).

Benkard, Lanier, "Dynamic Analysis of the Market for Wide-Bodied Commercial Aircraft," *Review of Economic Studies*, 71(3): 581-611, (2004).

Caruana, Guillermo and Liran Einav, "Production Targets," *Rand Journal of Economics*, 38(4): 990-1017, (2008).

Collard-Wexler, Allan, "Demand Fluctuations in the Ready-Mix concrete Industry," *Econometrica* 81: 1003–1037 (2013).

Ericson, Richard and Ariel Pakes, "Markov-Perfect Industry Dynamics: A Framework for Empirical Work," *Review of Economic Studies*, 62(1): 53-82, (1995).

Gowrisankaran, Guatam and Robert Town, "Dynamic Equilibrium in The Hospital Industry," *Journal of Economics and Management Strategy*, 6(1): 45-74, (1997).

Markovich, Sarit, "Snowball: The Evolution of Dynamic Oligopolies with Network Externalities," *Journal of Economic Dynamics and Control*, 33(3): 909-938, (2007).

Maskin, Eric and Jean Tirole, "A Theory of Dynamic Oligopoly, I," and "A Theory of Dynamic Oligopoly, II," *Econometrica*, 56(3): 549-570 and 571-599, (1988).

Maskin, Eric and Jean Tirole, "A Theory of Dynamic Oligopoly, III: Cournot Competition," *European Economic Review* 31(4): 947-968, (1987).

Pakes, Ariel and Paul McGuire, "Computing Markov-Perfect Nash Equilibria: Numerical Implications of a Dynamic Differentiated Product Model," *Rand Journal of Economic*, 25(4): 555-589, (1994).

Pakes, Ariel and Richard Ericson, "Empirical Implications of Alternative Models of Firm Dynamics," *Journal of Economic Theory*, 79(1): 1-45, (1998).

Pakes, Ariel, Michael Ostrovsky, and Steven Berry, "Simple Estimators for the Parameters of Dynamic Discrete Games (with Entry/Exit Examples)," *Rand Journal of Economics*, 38(2): 373-399, (2007).

Pakes Ariel and U. Doraszelski, "A Framework for Applied Dynamic Analysis in IO". In: Armstrong M, Porter R, *The Handbook of Industrial Organization*. Vol. 3. New York: Elsevier; pp. Chapter 33 2183-2162 (2007).

Ryan, Stephen, "The Costs of Environmental Regulation in a Concentrated Industry," *Econometrica*, 80(3): 1019-1061, (2012).