VITA

Mark A. Satterthwaite

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Education

B.S.: California Institute of Technology, 1967.M.S.: University of Wisconsin-Madison, 1969.

Ph.D.: University of Wisconsin-Madison, 1973, Economics. Dissertation Title: "The Existence of Strategy Proof Voting Procedures."

Academic Appointments

Assistant Professor of Managerial Economics, Kellogg School of Management, Northwestern University, September 1972 through August 1978.

Professor of Managerial Economics, September 1978-August 1983.

IBM Research Professor of Managerial Economics, September 1979-August 1981.

Herman Smith Research Professor of Hospital and Health Services Management, September 1981-August 1983.

Earl Dean Howard Professor of Managerial Economics, September 1983-August 2003.

Professor of Economics (courtesy), College of Arts and Sciences, September 1983 to present.

Professor of Strategic Management, , December 1985 to present.

Visiting Professor of Economics, California Institute of Technology, Winter 1989.

A. C. Buehler Professor in Hospital and Health Service Management, September 2003 to present.

Recognitions and Honors

Fellow, Econometric Society, December 1986.

Associate Editor, Journal of Economic Theory, 1987-2007.

Founding Member, The Game Theory Society, Winter 2000.

Tenth Annual Research Award, National Institute for Health Care Management Foundation for "Is More Information Better: The Effects of 'Report Cards' on Health Care Providers" (with David Dranove, Daniel Kessler, and Mark McClellan), November 2003.

Fellow, American Academy of Arts and Sciences, April 2004

Stanley Reiter Best Paper Award for "Is More Information Better: The Effects of 'Report Cards' on Health Care Providers" (with David Dranove, Daniel Kessler, and Mark McClellan). Awarded for the article judged to be best from among those published by Kellogg faculty in the preceding four calendar years. June 2005.

Associate Editor, Theoretical Economics, 2005-2010.

Council Member, Game Theory Society, 2005-2011.

Economic Theory Fellow (Society for the Advancement of Economic Theory), 2012

Robert F. Lanzillotti Best Paper Award in Antitrust Economics for "Internal versus External Growth in Industries with Scale Economies: A Computational Model of Optimal Merger Policy" (with Mermelstein, Ben, Volker Nocke, Mark A. Satterthwaite, and Michael D. Whinston) at the International Industrial Organization Conference of The Industrial Organization Society, 2014.

Administrative Appointments

Chairperson, Department of Managerial Economics and Decision Sciences, September 1979-August 1983.

Director, General Motors Research Center for Strategy in Management, September 1987-present.

Chairperson, Department of Management and Strategy, August 1990-August 1992.

Associate Dean for Academic Affairs, Kellogg Graduate School of Management, Sept. 1992-August 1996.

Chairperson, Department of Management and Strategy, September 2000-August 2002 and September 2008-2010.

Selected Committee Chairmanships

Chairman, University Policy Advisory Committee, May 1982-September 1983.

Chairman, University Athletics and Recreation Committee, October 1986-September 1987.

Chairman, University Budget Resources Advisory Committee, September 1987-August 1988.

Research Interests

Efficiency of trading mechanisms as markets become large Price and quality determination in health care Dynamics of imperfect competition Matching of buyers and sellers under asymmetric information

Papers

- "Strategy-proofness and Arrow's Conditions: Existence and Correspondence Theorems for Voting Procedures and Social Welfare Functions" *Journal of Economic Theory* 10 (April 1975), 187-217. Reprinted in *Social Choice Theory*, ed. C. Rowley. Cheltenham, Glos., UK: Edward Elgar Publishing, 1992. To be reprinted in *The Economics of Politics*, ed. D. Mueller, Cheltenham, Glos., UK: Edward Elgar Publishing, circa 2002.
- 2 "Strategy-proofness and Single-peakedness" (with J. Blin), *Public Choice* 26 (Summer 1976), 51-58.
- 3 "On Preferences, Beliefs, and Manipulation" (with J. Blin), *Econometrica* 45 (May 1977), 881-88.
- 4. "The Equivalence of Strong Positive Association and Strategy-Proofness" (with E. Muller), *Journal of Economic Theory* 14 (April 1977), 412-18.
- 5. "Individual Decisions and Group Decisions: The Fundamental Differences" (with J. Blin), *Journal of Public Economics* 10 (1978), 246-67.
- 6. "Social Welfare Functions when Preferences are Convex, Strictly Monotonic, and Continuous" (with E. Kalai and E. Muller), *Public Choice* 34 (1979), 87-97.
- 7. "Consumer Information, Equilibrium Industry Price, and the Number of Sellers," *Bell Journal of Economics* 10 (Autumn 1979), 483-502.
- 8 "On the Scope of Stockholder Unanimity Theorems," *International Economic Review* 22 (February 1981), 119-33.
- 9. "The Pricing of Primary Care Physician's Services: A Test of the Role of Consumer Information" (with Mark. V. Pauly), *Bell Journal of Economics* 12 (Autumn 1981), 488-506.
- 10. "Strategy-proof Allocation Mechanisms at Differentiable Points" (with Hugo Sonnenschein), *Review of Economic Studies* 48 (1981), 587-97.
- 11. "Efficient Mechanisms for Bilateral Trading" (with R. Myerson), *Journal of Economic Theory* 29 (April 1983), 265-81.

- 12. "Competition and Equilibrium as a Driving Force in the Health Services Sector," in *Managing the Service Economy: Prospects and Problems*, ed. R. Inman, pp. 239-67. New York: Cambridge University Press, 1985.
- 13. "Strategy-proofness: The Existence of Dominant Strategy Mechanisms" (with E. Muller), in *Social Goals and Social Organization*, ed. L. Hurwicz, D. Schmeidler, and H. Sonnenschein, pp. 131-72. Cambridge: Cambridge University Press, 1985.
- 14. "Monopolistic Competition, Aggregation of Competitive Information, and the Amount of Product Differentiation" (with K. Ravi Kumar), *Journal of Economic Theory* 37 (October 1985), 32-54.
- 15. "Preferred Provider Organization: Injecting Price Competition into the Hospital Market" (with David Dranove and Jody Sindelar), *Inquiry* 23 (Winter 1986), 419-31.
- 16 "Introduction: Symposium on noncooperative bargaining" (with Peter Linhart and Roy Radner), *Journal of Economic Theory* 48 (June 1989): 1-17.
- 17. "The Rate at which a Simple Market Becomes Efficient as the Number of Traders Increases: An Asymptotic Result for Optimal Trading Mechanisms" (with Thomas A. Gresik), *Journal of Economic Theory* 48 (June 1989): 304-32.
- 18. "Bilateral Trade with the Sealed Bid Double Auction: Existence and Efficiency" (with Steven R. Williams), *Journal of Economic Theory* 48 (June 1989): 107-33.
- 19. "The Rate of Convergence to Efficiency in the Buyers' Bid Double Auction as the Market Becomes Large" (with Steven R. Williams), *Review of Economic Studies* 56 (October 1989): 477-98.
- 20. "The Implications of Resource-Based Relative Value scales for Physicians' Fees, Incomes, and Specialty Choices" (with David Dranove), in *Regulating the Doctor's Fee: Costs, Competition, and Controls under Medicare*, ed. H. E. Frech, III, pp. 52-70. Washington, D.C.: The AEI Press, 1991.
- 21. "High-Growth Industries and Uneven Metropolitan Growth," in *Sources of Metropolitan Growth*, ed. E. Mills and J. McDonald, pp. 39-50. New Brunswick: Rutgers University Press, 1992.
- 22 "Sectoral Growth Patterns at the Metropolitan Scale", (with Breandan O'hUallachain), *Journal of Urban Economics* 31 (1992): 25-58.
- 23. "The Bayesian Theory of the k-Double Auction" (with Steven R. Williams), in *The_Double Auction Market: Institutions, Theories, and Evidence*, Santa Fe Institute Studies in the Sciences of Complexity, Proceedings Volume XIV, ed. D. Friedman and J. Rust, pp. 99-124. Reading, Mass.: Addison-Wesley, 1992.
- 24. "Monopolistic Competition when Price and Quality are not Perfectly Observable" (with David Dranove), *Rand Journal of Economics* 23 (1992): 518-34.
- 25. "The Kinked Demand Curve, Facilitating Practices, and Oligopolistic Competition" (with E. Kalai), in *Imperfections and Behavior in Economic Organizations*, ed. R. Gilles and P. Ruys, pp. 15-38. Boston: Kluwer Academic Publishers, 1993.
- 26. "Convergence to Efficiency in a Simple Market with Incomplete Information" (with Aldo Rustichini and Steven Williams), *Econometrica* 62 (1994): 1041-63.
- 27. "The Industrial Organization of Health Care Markets" (with David Dranove), in *The Handbook of Health Economics*, ed. by A. Culyer and J. Newhouse, pp. 1093-1139. Amsterdam, Elsevier Science, 2000.
- 28. "Strategy-proofness and Markets," Social Choice and Welfare 18 (2001): 37-58.
- 29. "The Optimality of a Simple Market Mechanism" (with Steven R. Williams), *Econometrica* 70 (2002): 1841-63.
- 30. Antitrust Policy and hospital mergers: Recommendations for a new approach" (with Cory Capps, David Dranove, and Shane Greenstein), *Antitrust Bulletin* (Winter 2002): 677-714.

- 31. "Is More Information Better? The Effects of Health Care Quality Report Cards" (with David Dranove, Daniel Kessler, and Mark McClellan), *Journal of Political Economy* 111 (2003): 555-88. Winner of Tenth Annual Research Award, National Institute for Health Care Management Foundation, 2003 and the Stanley Reiter Best Paper Award, Kellogg School of Management, 2005.
- 32. "Competition and Market Power in Option Demand Markets" (with Cory Capps and David Dranove). *RAND Journal of Economics* 34 (2003): 737-63.
- 33. "Dynamic Matching, Two-sided Incomplete Information, and Participation Costs: Existence and Convergence to Perfect Competition" (with Artyom Shneyerov), *Econometrica* 75 (2007): 155-200.
- 34. "Convergence to Perfect Competition of a Dynamic Matching and Bargaining Market with Two-sided Incomplete Information and Exogenous Exit Rate" (with Artyom Shneyerov). *Games and Economic Behavior* 63 (2008): 435-67.
- 35. "Learning-by-Doing, Organizational Forgetting, and Industry Dynamics" (with David Besanko, Ulrich Doraszelski,, and Yaroslav Kryukov), *Econometrica* 78 (March 2010): 453-508.
- 36. "Computable Markov-Perfect Industry Dynamics" (with Ulrich Doraszelski), *RAND Journal of Economics* 41 (Summer 2010): 215-43.
- 37. "Lumpy Capacity Investment and Disinvestment Dynamics" (with David Besanko, Ulrich Doraszelski, and Lauren Lu), *Operations Research*.58 (July-August, 2010, Part 2): 1178-93.
- 38. "On the Role of Demand and Strategic Uncertainty in Capacity Investment and Disinvestment Dynamics" (with David Besanko, Ulrich Doraszelski, and Lauren Lu), <u>International Journal of Industrial Organization</u> **28** (July, 2010): 383-89
- 39. "Optimality versus Practicality in Market Design: A comparison of Two Double Auctions" (with Steven Williams and Konstantinos Zachariadis) *Games and Economic Behavior*, forthcoming.

Edited Book

Bargaining with Incomplete Information (edited with P. Linhart and R. Radner). San Diego: Academic Press, 1992.

Other Publications

- 1. "The Effect of the Provider Supply on Price" (with M. Pauly), in The Target Income Hypothesis and Related Issues in Health Manpower Policy, Department of HEW, Public Division of Manpower Analysis and Division of Dentistry, DHEW Publication No. 80-27, January 1980, 36-36.
- 2. "Strategy-proof Allocation Mechanisms," in *The New Palgrave*, ed. J. Eatwell, M. Milgate, and P. Newman, Vol. 4, pp. 518-20. London: Macmillan Press, 1987.
- 3. "Location Patterns of High-Growth Firms", Commentary (Spring 1988): 7-11.
- 4. "Book Review: *Numerical Methods in Economics*, K. L. Judd; MIT Press, Cambridge, MA, 1998. *Journal of Economic Dynamics and Control* 25 (2001): 1263-71.
- 5. "Strategy-proof Allocation Mechanisms," in *The New Palgrave Dictionary of Economics*, 2nd edition, edited by L. Blume and S. Durlauf. London: Macmillan Publishers, 2008.. This entry is almost completely revised from the 1987 entry.

Working Papers

- 1. "Price Discovery" (with Steven Williams, and Konstantinos Zachariadis), 2014.
- 2. "Internal versus External Growth in Industries with Scale Economies: A Computational Model of Optimal Merger Policy" (with Ben Mermelstein, Volker Nocke, and Michael Whinston), 2014.

Research Grants

- Senior Investigator, "Program in Health Care Policy and Financing," grant awarded to the Center for Health Services and Policy Research from the Health Care Financing Administration, September 1978-August 1983.
- Principal Investigator (with E. Kalai and D. J. Roberts), "Alternative Models of Incentives in Economics," grant awarded by the National Science Foundation, June 1979-May 1981.
- Principal Investigator, "Private Information, Inefficiency, the Number of Traders, and the Rate of Convergence to a Competitive Allocation," grant awarded by the National Science Foundation, February 1986-March 1988.
- Principal Investigator, "The Effect of Market Size on the Efficiency of Markets with Private Information," grant awarded by the National Science Foundation, April 1988-March 1990.
- Principal Investigator, "Strategic Behavior in Small Markets," grant awarded by the National Science Foundation, July 1990-June 1992.
- Principal Investigator (with Rakesh Vohra, Tuomas Sandholm, Ming Kao, and Subhash Suri), "ITR/PE+SY: Collaborative Research: Foundations of Electronic Marketplaces: Game Theory, Algorithms and Systems," grant awarded by the National Science Foundation, September 2001 through August 2007.
- Principal Investigator (with David Dranove), "Hospital Bailouts and Economic Efficiency," grant awarded by the Searle Foundation, Sept. 1, 2002 through August 31, 2004.
- Investigator (with David Dranove), "The Effect of Hospital Mergers on Prices Paid by Managed Care Organizations," grant awarded by the Blue Cross Blue Shield Association, July 2002-August 2004.
- Principal Investigator (with David Dranove), "New Approaches to Identifying Market Power in Health Care," grant awarded by the Robert Wood Johnson Foundation, May 2004-April 2006.

Other Experience

Planning Associate, Wisconsin Regional Medical Program, Madison, Wisconsin, 1969-1971. Interim Program Director, Cream City Neighborhood Health Center, Milwaukee, Wisconsin, July 1970-December 1970.

Outside Activities

None reportable within the past three years.