

## CURRICULUM VITAE

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### Date of Birth

January 4, 1953

### Citizenship

U.S.A.

### Marital Status

Married, 2 Children

### Education

Haverford College, B.A. 1975 (Economics, German)  
Princeton University M.A. 1978, Ph.D., 1980 (Economics)

### Employment

2004-2008 Chair, Department of Economics, Stanford  
2002-present Landau Professor in Technology and the Economy  
1991-present Professor of Economics, Stanford  
2000-2002 Gordon and Betty Moore Senior Fellow, SIEPR  
1999-2000 Deputy Assistant Attorney General and Chief  
Economist, Antitrust Division, USDOJ  
1997-present Senior Fellow, SIEPR.  
1994-1998 Stanford Computer Industry Project: (Associate  
Director, Co-Director, Director), Information  
Technology in Use Module (Co-Director, Director)  
1989-present Technology and Economic Growth Program,  
Employment and Growth Center (Associate  
Director, Co-Director, Director)  
1993-1994 Visiting Professor, Instituto de Analisis Economico  
1986-1991 Associate Professor of Economics, Stanford  
1989-1990 Visiting Scholar, Hoover Institution  
1988-1989 Associate Chair, Department of Economics  
Stanford  
1986-1987 Marvin Bower Fellow and Visiting Associate  
Professor, Graduate School of Business  
Administration, Harvard  
1979-1986 Assistant Professor of Economics, Stanford

Publications

1. “General Purpose Technologies” in Handbook of the Economics of Innovation, North Holland Elsevier, Bronwyn Hall and Nathan Rosenberg, editors.
2. “Monopolization and the Fading Dominant Firm,” in Competition Law and Economics: Advances in Competition Policy in US and Europe, Abel Mateus and Teresa Moreira, editors, Edward Elgar, 2008.
3. (with Roger Noll, et al.), Brief Amici Curiae of Economists, Business and Law in Support of Petitioner: American Needle, Inc. v. National Football League, et al., No. 08-661 in the Supreme Court of the United States, 2009.
4. (with Einer Elhauge, et al.), Amicus Brief Antitrust Law and Economics Professors in Support of the Settlement: The Authors Guild et al. v. Google inc., US District Court for the Southern District of New York.
5. (with Jonathan Baker) “Economic Evidence in Antitrust: Defining Markets and Measuring Market Power,” in The Economics of Antitrust Law, MIT Press 2008, Paolo Buccirossi, editor.
6. (with Mark Lemley, Joseph Farrell, Carl Shapiro, et al.), Brief Amici Curiae of 41 Professors of Economics, Business and Law in Support of Granting the Petition: In Re: Tamoxifen Citrate Antitrust Litigation, No. 06-830 in the Supreme Court of the United States, 2007.
7. (with 22 other economists) “Brief of Amici Curiae Economists in Support of Petitioner Leegin Creative Leather Products before the US Supreme Court,” 2007.
8. (with Pai-Ling Yin) “Standard Setting in Markets: The Browser War,” in Standards and Public Policy, Cambridge University Press 2007, Shane Greenstein and Victor Stango, editors.
9. “Creative Destruction in the PC Industry,” Chapter 4 in Perspectives on Innovation, Cambridge University Press 2007, Stefano Brusoni and Franco Malerba, editors.
10. (with Pai-Ling Yin) “Economic and Technical Drivers of Technology Choice: Browsers” Annales d'Economie et de Statistique, November, 2006, Special Issue from the Zvi Griliches Memorial Conference, Jacques Mairesse and Manuel Trajtenberg, editors.
11. “The Valuation of Organizational Capital, Comment” in Measuring Capital in the New Economy 2005, Carol Corrado, John Haltiwanger, and Daniel Sichel, editors.
12. "The Contribution of Information Technology to Economic Growth" in Institutions, Innovation and Growth: Selected Economic Papers, Jean-Philippe Touffut, editor,

Edward Elgar 2003.

13. “Pro-Innovation Competition Policy: Microsoft and Beyond” in the Proceedings of the Competition Policy Research Center, Fair Trade Commission of Japan Inaugural Symposium, 2003.
14. “La contribution des technologies de l’information à la croissance économique,” in Institutions et Innovation, Jean-Philippe Touffut, editor, Albin Michel Press, Paris. 2002.
15. “Why the Microsoft Settlement Won’t Work,” IEEE Spectrum, September 2002.
16. (with Franco Malerba) “The value of competitive innovation” in Technology and the New Economy edited by Chong-En Bai and Chi-Wa Yuen MIT Press, 2002.
17. (with 36 other economists) “Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets” Comment in the Federal Communications Commission’s Secondary Markets Rule Making, 2001.
18. Comments on “Reforming European Merger Review: Targeting Problem Areas in Policy Outcomes” in the Journal of Industry, Competition and Trade, 2002.
19. (with Alfonso Gambardella,) Building High Tech Clusters: Silicon Valley and Beyond (with contributions by Ralph Landau, Kevin Davis, Catherine de Fontenay, Erran Carmel, Ashish Arora, Salvatore Torrisi, Suma Athreye, John Richards, AnnaLee Saxenian, Scott Wallsten, Michael Horvath, and Gordon Moore ) Cambridge University Press, 2005.
20. “Prospects for an Information Technology-Led Productivity Surge,” in Innovation Policy and the Economy, Edited by Adam Jaffe, Scott Stern, and Joshua Lerner. The MIT Press, 2002 (Volume 2).
21. “Innovation will lift economy – be patient: New Economy Myths Aside, Tech Industry Hasn’t Lost Its Vital Role” in San Jose Mercury News, Perspective.
22. “A Remedy that Falls Short of Restoring Competition” Antitrust, v 6. n.1, December 2001.
23. (with Alfonso Gambardella and AnnaLee Saxenian, “Old Economy Inputs for “New Economy Outputs: Cluster Formation in the New Silicon Valleys,” Industrial and Corporate Change, Vol.10 (4), pp.835-860 (2001).
  - a. Reprinted in The Growth of Cities, edited by Zoltan J. Acs, Edward Elgar Publishing Ltd.
  - b. Reprinted in Clusters, Networks, and Innovation, edited by Stefano Breschi and

Franco Malerba, Oxford University Press, 2005.

24. (with George Hay, Richard Gilbert, Daniel Rubinfeld, Lawrence White, and Bruce Owen (all former chief economists of the antitrust division)) “Brief of Economists Amicus Curiae in *US v Microsoft*.”
25. (with George A. Akerlof, Kenneth J. Arrow, James M. Buchanan, Ronald H. Coase, Linda R. Cohen, Milton Friedman, Jerry R. Green, Robert W. Hahn, Thomas W. Hazlett, C. Scott Hemphill, Robert E. Litan, Roger G. Noll, Richard Schmalensee, Steven Shavell, H R. Varian, and Richard J. Zeckhauser “Brief of Economists Amici Curiae In Support Of Petitioners Eric Eldred et al” (U.S. Supreme Court Considers Bono Copyright Extension Act.) 2002
26. “Competition Cooperation, and Predation in Innovative Industries” in Fighting Cartel Why and How? The 3<sup>RD</sup> Nordic Competition Policy Conference in Stockholm. Konkurrensverket, Swedish Competition Authority, September 2000.
27. (with Eric Brynjolfsson and Lorin Hitt) “Information Technology, Workplace Organization, and the Demand for Skilled Labor: Firm-level Evidence” Quarterly Journal of Economics, 2002.
  - a. Reprinted in Reformas Y Equidad Social, 2004, edited by Carlos Velez and Paz Castillo-Ruiz, Inter-American Development Bank.
  - b. Reprinted in “Institutions et innovation” 2002.
28. (with Shane Greenstein) “The Economic Contribution of Information Technology: Towards Comparative and User Studies” forthcoming in Journal of Evolutionary Economics.
29. (with S. Greenstein) “Technological Competition and the Structure of the Computer Industry” in Journal of Industrial Economics, March 1999, v. 47n. 1, pp. 1.
  - a. Reprinted in Computing, Shane M. Greenstein editor, Edward Elgar, 2006.
30. “Computers and Growth” in The Puzzling Relations Between the Computer and the Economy, Greenan, L’Horthy, and Mairesse, eds., MIT Press.
31. (with J. Richards) “Local and Global Competition in Information Technology” in Journal of the Japanese and International Economies, December 1999, v. 13 n. 4, pp. 336-71.
32. (with E. Brynjolfsson and L. M. Hitt) “Technology, Organization, and the Demand for Skilled Labor”, The New Relationship: Human Capital in the American Corporation, M.M. Blair and T.A. Kochan, eds. Brookings Institution Press, 2000.

33. "Computing" in U.S. Industry in 2000: Studies in Competitive Performance, David C. Mowery, ed. National Academy Press, 1999.
34. (with F. Malerba) "Industrial Dynamics and the Evolution of Firms=and Nations= Competitive Capabilities in the World Computer Industry", Sources of Industrial Leadership, D. Mowery and R. Nelson, eds. Cambridge University Press, 1999.
35. "The Changing Structure of Innovation in the Computer Industry", in D. Mowery et al., (eds.) America's Industrial Resurgence.
36. "New Modes of Competition and the Future Structure of the Computer Industry", in Competition, Innovation, and the Microsoft Monopoly: Antitrust in the Digital Marketplace, The Progress and Freedom Foundation, Kluwer Press, 1999.
37. (with Alfonso Gambardella) "The Division of Inventive Labor and the Extent of the Market" in General Purpose Technologies and Economic Growth, Elhanan Helpman, ed. 1998.
38. (with Scott Stern and Manuel Trajtenberg) "Market Segmentation, Transitory Market Power, and Rents from Innovation: Personal Computers in the late 1980's", RAND Journal of Economics, 1997.
  - a. Reprinted in Computing, Shane M. Greenstein editor, Edward Elgar, 2006.
39. (with Shane Greenstein) "Technical Progress in Computing and in the Uses of Computers" Brookings Papers on Economic Activity, Micro, 1997.
  - a. Reprinted in Computing, Shane M. Greenstein editor, Edward Elgar, 2006.
40. "Testing and Measurement in Competition Models" in Advances in Economics and Econometrics, Econometric Society Seventh World Congress, David Kreps and Ken Wallis, editors.
41. (with Robert E. Porter) "Papers in honor of Richard E. Quandt; An Introduction", RAND Journal of Economics, 1997.
42. (with Robert J. Gordon) "The Economics of New Goods: An Introduction" Bresnahan and Gordon, eds., The Economics of New Goods, 1997.
43. (edited with Robert J. Gordon) The Economics of New Goods, proceedings of a meeting of the Conference on Research in Income and Wealth, University of Chicago Press, 1997.
44. (with Amy Bertin and Daniel Raff) "Aggregation, Localized Competition, and Plant Level Increasing Returns: Blast Furnace Operations 1929-1935," Journal of Political Economy, April 1996, v. 104 n. z, pp. 241-66

45. "Testing and Measurement in Competition Models", La Lettre de l'AFSE, Conférence aux Journées AFSE, Juillet 1996, n 31.
46. (with Garth Saloner) "Large Firms' Demand for Computer Products and Services: Competing Market Models, Inertia, and Enabling Strategic Change," in Colliding Worlds: The Merging of Computers, Telecommunications, and Consumer Electronics, David B. Yoffie (ed.), Harvard University Press, 1996.
47. (with Shane Greenstein) "The Competitive Crash in Large-Scale Commercial Computing," in Growth & Development; the Economics of the 21st Century, edited by Ralph Landau, Nathan Rosenberg, and Timothy Taylor, Stanford University Press, 1995.
48. (with Manuel Trajtenberg) "General Purpose Technologies: 'Engines of Growth'?" Journal of Econometrics, Special Issue, January 1995, v 65, n 1, pp. 83-108.
49. (with Peter C. Reiss) "Measuring the Importance of Sunk Costs," Annales D'Économie et de Statistique, No. 31, pp. 183-217, 1994.
50. (with Valerie Ramey) "Segment Shifts and Capacity Utilization in the U.S. Automobile Industry," AER Papers & Proceedings, vol. 83(2), May 1993.
51. (with Jonathan Baker) "Empirical Methods of Identifying and Measuring Market Power," Antitrust Law Journal, Summer 1992.
52. (with Daniel Raff) "Intra-Industry Heterogeneity and the Great Depression: The American Motor Vehicle Industry, 1929-1935," Journal of Economic History, June, 1991.
53. Output Measurement in the Service Sectors edited with Zvi Griliches, Ernst Berndt and Marilyn Manser, (Chicago: University of Chicago Press), 1992.
54. (with Valerie Ramey) "Output Fluctuations at the Plant Level," Quarterly Journal of Economics, August 1994, v 109, n 3, pp. 593-624.
55. (with Paul Milgrom and Jonathan Paul) "The Real Output of the Stock Exchange," in Output Measurement in the Service Sectors edited with Zvi Griliches, Ernst Berndt and Marilyn Manser, (Chicago: University of Chicago Press), 1992.
56. (with Peter Reiss) "Entry and Competition in Concentrated Markets," Journal of Political Economy, vol. 95 (5), (October), pp. 977-1009, 1991.
  - a. Reprinted in Empirical Industrial Organization, (Joskow and Waterson, Editors) Edward Elgar, 2004.
57. (with Peter Reiss) "Econometric Models of Discrete Games," Journal of Econometrics,

- 48 (1991) 57-81.
58. (with Peter Reiss) "Entry into Monopoly Markets," Review of Economic Studies, vol. 57 (no. 4, October), pp. 531-553, 1990.
59. (with Amit Chopra) "The Development of the Local Area Network Market as Determined by User Needs," Economics of Innovation and New Technology, vol. 1 (nos. 1-2), pp. 97-110, 1990.
60. (with W. Bruce Chew, Kim B. Clark) "Measurement, Coordination, and Learning in a Multiplant Network," in Measures for Manufacturing Excellence, Robert Kaplan, ed., (Boston: Harvard Business School Press), 1990.
61. (with Valerie Suslow) "Short-Run Supply with Capacity Constraints," Journal of Law and Economics, University of Chicago, vol. XXXII (October), pp. S11-S42, 1989.
62. (with Valerie Suslow) "Short-Run Pricing with Capacity Constraints," Annales d'Economie et de Statistique, vol. 15/16 (Juillet-Décembre), pp. 267-290, 1989.
63. "Empirical Methods for Industries with Market Power," chapter 17 in Handbook of Industrial Organization, Volume II, Richard Schmalensee and Robert Willig, eds., (Amsterdam: Elsevier Science Publishers B.V.), 1989.
64. (with Jonathan Baker 1988) "Estimating the Residual Demand Curve Facing a Single Firm," International Journal of Industrial Organization, vol. 6, pp. 283-300, 1988.
- a. Reprinted in Antitrust and Competition Policy, edited by Andrew Kleit, Edward Elgar, Ltd., June 2005.
65. (with Peter Reiss) "Do Entry Conditions Vary across Markets?" Brookings Papers on Economic Activity: Special Issue on Microeconomics, no. 3, Martin Baily and Clifford Winston, eds., pp. 833-871, 1987.
66. The Empirical Renaissance in Industrial Economics, Edited with Richard Schmalensee, New York: Basil Blackwell, 1987.
67. (with Richard Schmalensee) "The Empirical Renaissance in Industrial Economics: An Overview," Journal of Industrial Economics, vol. XXXV (no. 4, June--special issue), pp. 371B378, 1987. Reprinted in The Empirical Renaissance in Industrial Economics, 1987.
68. "Competition and Collusion in the American Automobile Market: The 1955 Price War," Journal of Industrial Economics, vol. XXXV (no. 4, June--special issue) pp. 457-482, 1987.
- a. Reprinted in The Empirical Renaissance in Industrial Economics, (Bresnahan &

Schmalensee, editors) 1987.

- b. Reprinted in Empirical Industrial Organization, (Joskow and Waterson, Editors) Edward Elgar, 2004.
69. "Measuring the Spillovers from Technical Advance: Mainframe Computers in Financial Services," American Economic Review, vol. 76 (no. 4, September), pp. 742-755, 1986,
  - a. Reprinted in Computing, Shane M. Greenstein editor, Edward Elgar, 2006.
70. (with Pablo Spiller) "Futures Market Backwardation under Risk Neutrality," Economic Inquiry, vol. XXIV (July), pp. 429-441, 1986.
71. (with Steven Salop) "Quantifying the Competitive Effects of Production Joint Ventures," International Journal of Industrial Organization, vol. 4, pp. 155-175, 1986.
72. "The Demand for Advertising by Medium: Implications for Economies of Scale in Advertising," in Paula Ippolito, ed., Empirical Approaches to Consumer Protection Issues, (Washington, DC: Federal Trade Commission), 1986.
73. The Transition to Competition in the Plain Paper Copier Industry, (Washington, DC: Federal Trade Commission), 1986.
74. (with Dennis Yao) "The Nonpecuniary Costs of Automobile Emissions Controls," Rand Journal of Economics vol. 16 (no. 4, Winter), pp. 437-455, 1985.
75. (with Peter Reiss) "Dealer and Manufacturer Margins," Rand Journal of Economics, vol. 16 (no. 2, Summer), 253-268, 1985.
  - a. Reprinted in Empirical Industrial Organization, (Joskow and Waterson, Editors) Edward Elgar, 2004.
76. (with Jonathan Baker) "The Gains from Merger or Collusion in Product Differentiated Industries," Journal of Industrial Economics, vol. XXXIII (no. 4, June), pp. 427-444, 1985.
77. (with Valerie Suslow) "Inventories as an Asset: The Volatility of Copper Prices," International Economic Review, vol. 26 (no. 2, June), pp. 409-424, 1985.
78. "Post-Entry Competition in the Plain Paper Copier Market," American Economic Review, vol. 75 (no. 2, May), pp. 15-19, 1985.
79. "Existence of Consistent Conjectures: Reply," American Economic Review, vol. 73 (no.3, June), pp. 457-458, 1983.

80. "Duopoly Models with Consistent Conjectures: Reply," American Economic Review, vol. 73 (no. 1, March), pp. 240-241, 1983.1.3.
81. "The Oligopoly Solution Concept is Identified," Economics Letters, vol. 10, pp. 87-92, 1982.
82. "Duopoly Models with Consistent Conjectures," American Economic Review, vol. 71 (no. 5, December), pp. 934-945, 1981.
83. (with Holland Hunter and Everett J. Rutan, III) "Modeling Structural Change Using Early Soviet Data," Journal of Development Economics, vol. 9, pp. 65-87, 1981.
84. "Prices, Quantities and Qualities in the American Auto Market," Proceedings of the American Statistical Association, Section on Statistical Education, pp. 18-23, 1981.
85. "Departures from Marginal-Cost Pricing in the American Automobile Industry: Estimates for 1977-1978," Journal of Econometrics vol. 17, pp. 201-227, 1981.
86. Three Essays on the American Automobile Oligopoly, Ph.D. Dissertation, Princeton University, 1980.

#### Book and Related Reviews

1. Comments on "Reforming European Meyer Review: Targeting Problem Areas in Policy Outcomes," in Journal of Industry Competition and Trade: Special Merger Issue Hingham, December 2002. Vol. 2, Iss. 4, pp 379.
2. Comments on "Valuation of New Goods Under Perfect and Imperfect Competition" by Jerry Hausman, his chapter in The Economics of New Goods. Available at <http://www.stanford.edu/~tbres/>
3. Comments on "The Information-Integrated Channel: A Study of the U.S. Apparel Industry in Transition" by Abernathy, Dunlop, Hammond & Weil, Brookings Papers on Economic Activity, v 0, n 0, 0007-2303, pp. 232-36, 1995.
4. Comments on "Competition, Regulation, and Efficiency in Service Industries" by Martin N. Baily, in Brookings Papers on Economic Activity, no. 2, pp. 71-159, 1993.
5. Comments on "Productivity Dynamics in Manufacturing Plants," by Martin N. Baily et al., in Brookings Papers on Economic Activity, pp. 187-267, 1992.
6. Review Essay on Sunk Costs and Market Structure, by John Sutton, Summer 1992, RAND Journal of Economics.

7. Review of "The Measurement of Durable Goods Prices," by Robert J. Gordon, in Business History Review, (3) pp.355-357, 1991.
8. Discussion of "Organizing Industrial Organization: Reflections on the Handbook of Industrial Organization," by Franklin M. Fisher, Brookings Papers on Economic Activity, pp. 201-225, 1991.
9. Review of The Dynamics of Company Profits: An International Comparison, Dennis C. Mueller, ed., in Journal of Economic Literature, vol. XXIX (December 1991).
10. Review of Regulating the Automobile, Robert Crandall et al., in Rand Journal of Economics, vol. 17 (no. 4, Winter), 1986.
11. Review of Breaking up Bell: Essays on Industrial Organization and Regulation, David S. Evans, ed., in Information Economics and Policy, vol. 2, pp. 87-89, 1986.
12. Review of The Future of the Automobile: The Report of MIT's International Automobile Program, Alan Altschuler, et al., in Journal of Economic Literature, vol. XXIV (no. 1, March), pp. 128-129, 1986.
13. "Conjoint Analysis of Price Premiums for Hotel Amenities=: Comment," Journal of Business, vol. 57 (no. 1, pt. 2, January), pp. S133-S138, 1984.
14. Review of Competition in the Open Economy: a Model Applied to Canada, R. E. Caves, et al., in Journal of Economic Literature, vol. XIX (no. 3, September), pp. 1116-1117, 1981.

#### Working Papers and Work in Progress

1. "The Apple-Cinnamon Cheerios War: Valuing New Goods, Identifying Market Power, and Economic Measurement" Available at <http://www.stanford.edu/~tbres/>
2. (with Thomas N. Hubbard) "The Commercialization of Information Technologies".
3. (with Paul David) "The Diffusion of Automatic Teller Machines Across U.S. Banks," in The Diffusion of New Technologies, Paul David and Giovanni Dosi, eds., (New York: Oxford University Press), forthcoming.
4. (with Daniel Raff) "Technological Heterogeneity, Adjustment Costs and the Dynamics of Plant-Shut-Down Behavior: The American Motor Vehicle in the Time of the Great Depression".

5. (with Shane Greenstein) "Technological Competition and the Structure of the Computer Industry," Center for Economic Policy Research Publication No. 315, September 1992. New version available as <http://www.stanford.edu/~tbres/>
6. (with Pai-Ling Yin) "Reallocating Innovative Resources Around Growth Bottlenecks"
7. (with Shane Greenstein and Rebecca Henderson) "Schumpeterian competition and diseconomies of scope; illustrations from leading historical firms in computing," for the NBER 50<sup>th</sup> Anniversary Volume of the Rate and Direction of Technical Change
8. "Generality, Recombination and Re-Use" for the NBER 50th Anniversary Volume of the Rate and Direction of Technical Change

EditorialCo-Editor, Associate Editor

RAND Journal of Economics (1984-1998)  
Annual Review of Economics (2009-)

Associate Editor

Journal of Industrial Economics (1992-1997)  
Quarterly Journal of Economics (1986-1990)  
Rand Journal of Economics (1985-1988)  
American Economic Review (1984-1994)  
Annual Review of Economics (founding)

Editor

(with Richard Schmalensee) Journal of Industrial Economics, Special Issue, June 1987.  
(with John Vickers) original editors, Handbook of Industrial Organization, Volume III.  
(with Robert E. Porter) RAND Journal of Economics, Special Issue in Honor of Richard E. Quandt.  
(with Kenneth J. Arrow) Annual Review of Economics

Other Professional Activities

Graduate Service Award, Stanford 2002.  
Sloan Foundation Fellowship Board, 2005-2010  
Stanford University Humanities and Sciences PPAC, 2005—2009  
Stanford University Humanities and Sciences Chairs' Council Steering Committee, 2005-2009  
Stanford University Committee on Research; 2001-2003  
Stanford C-ACIS and SAC 2002-2004  
Deans' Subcommittee on Indirect Cost Policy, 1988-1989  
AEA Honors and Awards Committee, 1996, 1997, 1998, 2000.  
Program Committee, AEA Annual Meeting, 1996, 1997.  
Marsh O'Neil Award Committee, 1995.  
Fellow, American Academy of Arts and Sciences.  
Fellow, Econometric Society, 1990 to present.  
Program Committee, Econometric Society World Congress, 1995.  
Ph.D. Placement Director, 1994 to 1995.  
Member, Appointments and Promotions Committee, School of Humanities and Sciences, 1994 to 1996  
Member, Faculty Senate, many years, Steering Committee, 2003-2004  
Steering Committee, Industrial Organization Program, National Bureau of Economic Research, 1990 to present.  
Research Associate, National Bureau of Economic Research, 1985 to present.  
Member, American Economics Association Advisory Committee to the Bureau of the Census, 1985 to 1990; Chair, 1988 to 1989.

Member, Federal Economics Statistics Advisory Committee, 2000-2004.  
Project Leader, Project on Firm and Industry Dynamics, National Bureau of Economic Research, 1988 to 1990.  
Member, National Science Foundation, Economics Panel, December 1987 to December 1989.  
Member, Program Committee, Econometric Society Summer Meetings, 1987.  
Member, Program Committee, Econometric Society World Congress, 1985.  
Member, Program Committee, Econometric Society Winter Meetings, 1985.  
Economic Advisory Committee, ICPSR.  
Frisch Medal Committee, Econometric Society.  
Dean's Award for Excellence in Teaching, Stanford University, 1992.  
American Economic Association Program Committee, 1995.

### Dissertation Supervision

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On Reading Committee:

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