

5/28/2015

# **Roy Radner**

## Curriculum Vitae

### **1. BIOGRAPHY**

#### **1.1 Personal Data**

- Born June 29, 1927, Chicago, Illinois
- m. Charlotte V. Kuh
- Children: Hilary A., Erica H. (dec.), Amy E., Ephraim L.
- U. S. Army, 1945-48

#### **1.2 Education**

- Ph.B. with Honors, University of Chicago, 1945
- B.S., Mathematics, University of Chicago, 1950
- M.S., Mathematics, University of Chicago, 1951
- Ph.D., Mathematical Statistics, University of Chicago, 1956

#### **1.3 Research and Academic Appointments**

- Research Assistant, Cowles Commission for Research in Economics, U. of Chicago, 1951
- Research Associate, Cowles Commission, University of Chicago, 1951-54
- Assistant Professor, Cowles Commission, University of Chicago, 1954-55
- Assistant Professor, Department of Economics (and staff of Cowles Foundation for Research in Economics), Yale University, 1955-57
- Associate Professor of Economics and Statistics, University of California, Berkeley, 1957-61
- Professor of Economics and Statistics, University of California, Berkeley, 1961-79
- Chairman, Department of Economics, University of California, Berkeley, 1966-69
- Taussig Professor of Economics, Harvard University, 1977-78
- Visiting Professor, Kennedy School of Government, Harvard University, 1978-79
- Member of Technical Staff, AT&T, Bell Laboratories, 1979-1985
- Distinguished Member of Technical Staff, AT&T Bell Laboratories, 1985-95
- Research Professor of Economics, New York University, 1983-95
- Professor of Economics and Information Systems, New York University Stern School of Business, 1995-; Leonard N. Stern School Professor of Business, 1996-; Professor of Environmental Studies, 2007-

#### **1.4 Fellowships, Honors, etc.**

- William Cook Scholarship, University of Chicago, 1944-45
- Phi Beta Kappa, University of Chicago, 1950
- Fellow, Center for Advanced Study in the Behavioral Sciences, 1955-56
- Guggenheim Foundation Fellow, for study of mathematical theory of organization, 1961-62
- Fellow, Econometric Society, elected 1962
- Guggenheim Foundation Fellow, for research on resource allocation planning and decentralization, 1965-66

- Overseas Fellow, Churchill College, Cambridge, 1969-70, 1990
- Fellow, American Academy of Arts & Sciences, elected, 1970
- Elected to National Academy of Sciences, 1975
- AT&T Bell Laboratories Distinguished Technical Staff Award, 1985
- Distinguished Fellow, American Economic Association, elected 1988
- Fellow, American Association for the Advancement of Science, elected 1989
- Woytinsky Award, U. of Michigan, Ann Arbor, 1998
- Laffont Memorial Lecturer, Econometric Society and European Economic Association, Vienna, 2006
- Fellow, Society for the Advancement of Economic Theory, elected 2011
- Conference on Rational Expectations in Honor of Roy Radner, Inst. for Advanced Study, Vienna, June, 2014

### **1.5 Memberships in Scholarly and Professional Organizations**

- American Academy of Arts and Science
- American Association for the Advancement of Science
- American Economic Association
- Econometric Society (Vice-President 1971-72, President, 1972-73)
- National Academy of Sciences
- Schumpeter Society
- Society For Economic Design
- H.A. Simon Society

### **1.6 Professional Appointments**

- Consultant, Boeing Airplane Company, 1956-57
- Consultant, Kaiser Foundation Psychology Research, 1957-58
- Consultant, Maritime Cargo Transportation Conference, National Academy of Sciences, 1958-60
- Consultant, The RAND Corporation, 1959-70
- Associate Editor, *Management Science*, 1959-70
- Associate Editor, *Econometrica*, 1961-68
- Consultant, Societe d'Economie et de Mathematique, Appliquees (Society for Economics and Applied Mathematics), 1961-1962
- Consultant, System Development Corporation, 1962-1965
- The Institute of Management Sciences, Vice President - Member Activities, 1962-65
- Consultant, Committee on Utilization of Scientific and Engineering Manpower, National Academy of Sciences, 1962-63
- Economics Advisory Panel, National Science Foundation, 1963-65
- Policy Committee, Contra Costa County Project for Economics Education Curriculum Dev. & In-Service Training of Teachers, 1964-65
- Consultant, Mathematica, 1956-66
- Technical Advisory Committee, Carnegie Commission on the Future of Higher Education, 1967-73
- Consultant on econometric models of higher education, Carnegie Commission on the Future of Higher Education, 1967-73

- Committee on the Status of Teaching Assistants, American Association of University Professors, 1968-70
- Associate Editor, *Journal of Economic Theory*, 1968-2005
- Cartter Panel on Student Financial Need Analysis, 1969-71
- Advisory Committee on the Economics of Education, Nat. Acad. of Education, 1972-3
- Mathematical Social Science Board, Social Science Research Council, 1970-74
- Advisory Board of the Office of Mathematical Sciences, National Research Council, National Academy of Sciences, 1972-76
- National Bureau of Economic Research, Committee on Econometrics and Mathematical Economics, 1971-
- Advisory Board, *Journal of Mathematical Economics*, 1973-
- Nominating Committee, American Economic Association, 1972-74
- Commission on Human Resources, National Research Council, National Academy of Sciences, 1976-79
- Committee on Fundamental Research Relevant to Education, National Research Council, National Academy of Sciences, 1976-77
- Associate Editor, *American Economic Review*, 1979-82
- Assembly of the Behavioral and Social Sciences, National Research Council, 1979-82
- Committee on Risk and Decision Making, National Research Council, 1980-81
- Oversight Committee for Economics Program, National Science Foundation, 1983
- Committee on Basic Research in the Behavioral and Social Sciences, Working Group on Markets and Organizations, National Research Council, 1985
- Committee on the Contribution of Behavioral and Social Science to the Prevention of Nuclear War, National Research Council, 1985-90
- Editorial Board, "*Games and Economic Behavior*," 1989-2005
- Editorial Board, "*Economic Theory*," 1991-2003
- Panel on Contingent Valuation Methodology, National Oceanic and Atmospheric Administration, U.S. Dept. of Commerce, 1992-93.
- Editorial Board, "*Economic Design*," 1993-2003
- Editorial Board, "*Review of Accounting Studies*," 1993-2004
- Member, Steering Committee, Project on "Enjeux et Procedures de Decentralization," Commisariat du Plan, Paris, 1992-5
- Chair, Economics Section, National Academy of Sciences, 1994-7.
- Member, Comm. on the High-Technology/Information-Technology Workforce, Computer Science and Technology Board, Nat. Res. Council, 1999-2000.
- Editorial Board, *Information Systems Frontiers*, 2000-
- Member, Standing Comm. on Geophysical and Environmental Data, Nat. Res. Council, 2001-2004
- Member, Study Comm. on Public-Private Partnerships in Weather and Climate Services, Nat. Res. Council, 2001-2.
- AEA Delegate, Consortium of Social Science Associations, 2003 –
- Secretary, Class 5, Behavioral and Social Sciences, Nat. Acad. of Sci., 2004-2007
- Associate Editor, *Theoretical Economics*, 2005-2011.

- Chair, Class 5, Behavioral and Social Sciences, Nat. Acad. of Sci., 2007- 9.
- Editorial Board, Economic Sciences, *Proc. National Acad. of Sciences, U.S.A.*, 2009-
- Executive Board, Herbert A. Simon Society, 2009-
- Member, National Research Council, Comm. on Emerging Workforce Trends in the U.S. Energy and Mining Industries, 2011-12.

## 2. PUBLICATIONS

### 2.1 Books and Monographs

1. *Notes on the Theory of Economic Planning*, Athens, Greece: Center for Economic Research, 1963.
2. *Optimal Replacement Policy* (with D. W. Jorgenson and J. J. McCall), North-Holland Press and Rand-McNally, 1967 (also released as RAND Corporation Report R-437-PR, April 1966).
3. *Decision and Organization* (with C. B. McGuire, eds.), North Holland Press, Amsterdam, 1972; second ed., Univ. of Minnesota Press, Minneapolis, 1986.
4. *Economic Theory of Teams* (with J. Marschak), Cowles Foundation and Yale University Press, New Haven, 1972.
5. *Demand and Supply in U.S. Higher Education* (with L. S. Miller), Carnegie Commission on Higher Education and McGraw-Hill, New York, 1975.
6. *Education as an Industry* (with J. T. Froomkin and D. T. Jamison, eds.), National Bureau of Economic Research, Univ. -NBER Series, No. 28, Ballinger, Cambridge, Mass., 1976.
7. *Mathematicians in Academia* (with C. V. Kuh), Conference Board of the Mathematical Sciences, Washington, D.C., 1980.
8. *Information, Incentives and Economic Mechanisms* (with T. Groves and S. Reiter, eds.), Univ. of Minnesota Press, Minneapolis, 1987.
9. *Perspectives on Deterrence* (with P. C. Stern, R. Axelrod, and R. Jervis, eds.), Oxford University Press, New York, 1989.
10. *Bargaining with Incomplete Information* (with P. B. Linhart and M. A. Satterthwaite, eds.), Academic Press, San Diego, 1992.

### 2.2 Articles

1. "[Notes on Some Proposed Decision Criteria](#)" (with J. Marschak), in Thrall, Coombs, and Davis (eds.) *Decision Processes*. New York: John Wiley and Sons, 1954, Ch. 5.
2. "[The Linear Team: An Example of Linear Programming under Uncertainty](#)," in *Proceedings of the Second Symposium on Linear Programming*. Washington, D.C.: National Bureau of Standards, 1955, pp. 381-96.
3. "[Limit Distributions of Failure Time for Series-Parallel Systems](#)," in *Proceedings of the New York University Industry Conference on Reliability Theory*. New York: New York University, June 1958, pp. 163-86.
4. "[Minimax Estimation in Linear Regression](#)," *Annals of Mathematical Statistics*, Vol. 5, No. 2, January 1959, pp. 1244-50.
5. "[The Application of Linear Programming to Team Decision Problems](#)," *Management Science*, Vol. 5, No. 2, January 1959, pp. 143-50.

6. "[The Use of Bayesian Techniques for Predicting Spare-Parts Demand](#)" (with W. H. McGlothlin), RAND Research Memorandum RM-2536, The RAND Corporation, March 1, 1960.
7. "[The Evaluation of Information in Organizations](#)," in *Proceedings of the Fourth Berkeley Symposium on Probability and Statistics*. Berkeley, California: University of California Press, 1961, Vol. 1, pp. 491-530.
8. "[Paths of Economic Growth that are Optimal with Regard Only to Final States: A Turnpike Theorem](#)," *Review of Economic Studies*, Vol. 28, 1961, pp. 98-104.
9. "[Team Decision Problems](#)," *Annals of Mathematical Statistics*, Vol. 33, 1962, pp. 857-81.
10. "[Politiques Optimales d'Entretien et de Remplacement dans les Systemes a Plusieurs Elements](#)" (Optimal Policies of Maintenance and Replacement for Systems with Several Parts), Bulletin de l'Association Francaise pour le Controle Industriel de Qualite (Bulletin of the French Association for Industrial Quality Control), No. 11, October 1962, pp. 29-42.
11. "[Opportunistic Replacement of a Single Part in the Presence of Several Monitored Parts](#)" (with Dale Jorgenson), *Management Science*, Vol. 10, No. 1, October 1963, pp. 70-84.
12. "[Optimal Replacement and Inspection of Stochastically Failing Equipment](#)" (with Dale Jorgenson), in Arrow, Karlin, and Scarf (eds.) *Studies in Applied Probability and Management Science*. Stanford, California: Stanford University Press, 1963, pp. 184-206.
13. "[Mathematical Specification of Goals for Decision Problems](#)," in *Symposium on the Use of Judgement in Optimal Decisions*, Shelly and Bryan (eds.), New York, Wiley, 1964.
14. "[Decision Rules Based on Failure-Restoration Processes](#)," System Development Corporation, SP-15301000100, January 1964.
15. "[Optimal Growth in a Linear-Logarithmic Economy](#)," *International Economic Review*, Vol. 7, 1966, pp. 1-33.
16. "[Efficiency Prices for Infinite Horizon Production Programs](#)," *Review of Economic Studies*, Vol. 34, 1967, pp. 51-66.
17. "[Equilibre des marches a terme et au comptant en cas d'incertitude](#)," *Cahiers d'Econometrie* No. 9, 1967, pp. 30-47.
18. "[Dynamic Programming of Economic Growth](#)," in M. Bacharach and E. Malinvaud (eds.), *Activity Analysis in the Theory of Growth and Planning*, Macmillan, London. 1967.
19. "[On Maximal Points in Convex Sets](#)," *Proceedings of the Fifth Symposium on Probability and Statistics*, Vol. 1, University of California Press, Berkeley, 1967, pp. 351-54.
20. "[Competitive Equilibrium under Uncertainty](#)," *Econometrica*, Vol. 36, No. 1, January 1968, pp. 31-58.
21. [Review of V. S. Nemchinov](#), (ed.), *The Use of Mathematics in Economics*, English edition, edited and with an introduction by A. Nove. Review was published in *American Economic Review*, Vol. 58, No. 1, March 1968, pp. 232-35.

22. "[Demand and Supply in U.S. Higher Education: A Progress Report](#)" (with L. S. Miller), *American Economic Review*, Vol. 60, No. 2, May 1970, pp. 326-34.
23. "[Problems in the Theory of Markets Under Uncertainty](#)," *American Economic Review*, Vol. 60, No. 2, May 1970, pp. 454-60.
24. "[Balanced Stochastic Growth at the Maximum Rate](#)," in G. Bruckman and W. Weber (eds.), *Contributions to the von Neumann Growth Model* (Zeitschrift für Nationalökonomie, Suppl. 1), Springer-Verlag, Vienna, 1971, pp. 39-62.
25. "[Existence of Equilibrium of Plans, Prices, and Price Expectations in a Sequence of Markets](#)," *Econometrica*, Vol. 40, 1972, pp. 289-304.
26. "[Allocation of Resources in a Team](#)" (with T. F. Groves), *Journal of Economic Theory*, Vol. 4, 1972, pp. 415-441.
27. "[Shadow Prices for Infinite Growth Programs: The Functional Analysis Approach](#)" (with M. K. Majumdar), in *Techniques of Optimization*, A. V. Balakrishnan, (ed.), Academic Press, New York and London, 1972.
28. "[Optimal Steady State Behavior of an Economy with Stochastic Production and Resources](#)," in *Mathematical Topics in Economic Theory and Computation*, R. A. Day, (ed.), SIAM Publications, Philadelphia, 1972.
29. "[Optimal Stationary Consumption with Stochastic Production and Resources](#)," *Journal of Economic Theory*, Vol. 6, 1973, pp. 68-90.
30. "[Market Equilibrium under Uncertainty: Concepts and Problems](#)," in *Frontiers of Quantitative Economics*, Vol. II, M. Intriligator and D. A. Kendrick, (eds.), North-Holland, Amsterdam, 1974.
31. "[A Note on Unanimity of Stockholders' Preferences among Alternative Production Plans](#)," *Bell Journal of Economics and Management Science*, Vol. 5, No. 1, 1974, pp. 181-86.
32. "A Stochastic Decentralized Resource Allocation Process, [Parts I](#) and [II](#)" (with L. Hurwicz and S. Reiter), *Econometrica*, Vol. 43, No. 2, 1975, pp 187-221, and Vol. 43, No. 3, 1975, pp. 363-93.
33. "[A Behavioral Model of Cost Reduction](#)," *Bell Journal of Economics and Management Science*, Vol. 6, No. 1, Spring 1975.
34. "[Satisficing](#)," *Journal of Mathematical Economics*, Vol. 2, 1975, pp. 253-62.
35. "[On the Allocation of Effort](#)" (with M. Rothschild), *Journal of Economic Theory*, Vol. 10, 1975, pp. 358-76.
36. "[Planning Under Uncertainty: Recent Theoretical Developments](#)," in *Economic Planning, East and West*, M. Bornstein, (ed.) University of Michigan Press, Ann Arbor, 1975.
37. "[Faculty-Student Ratios in U.S. Higher Education](#)," in J. T. Froomkin, D. T. Jamison, and R. Radner, eds., *Education as an Industry*, Ballinger, Cambridge, Mass., 1976, pp. 415-444.
38. "[Allocation of Resources in Large Teams](#)" (with K. J. Arrow), *Econometrica*, Vol. 47, 1979, pp. 361-386.
39. "[Rational Expectations Equilibrium: Generic Existence and the Information Revealed by Prices](#)," *Econometrica*, Vol. 47, 1979, pp. 655-678.

40. "[Market Adjustment in Disequilibrium with Random Disturbances](#)" (with W. Hildenbrand), in J. Green (ed.), *General Equilibrium, Growth, and Trade*, Academic Press, N.Y., 1979, pp. 139-149.
41. "Market Conditions and Tenure in Higher Education" (with C. V. Kuh), Technical Report No. 2, Carnegie Council on Policy Studies in Higher Education, Berkeley, July, 1977.
42. "[Preserving a Lost Generation: Policies to Assure a Steady Flow of Young Scholars until the Year 2000](#)" (with C. V. Kuh), Carnegie Council on Policy Studies in Higher Education, Berkeley, October, 1978.
43. "[Behavioral Models of Stochastic Control](#)," in S. Reiter (ed.), *Mathematical Models in Economics*, American Mathematical Society, Washington, 1986, pp. 351-404.
44. "[Collusive Behavior in Noncooperative Epsilon-Equilibria of Oligopolies With Long but Finite Lives](#)," *J. of Econ. Theory*, Vol. 22, 1980, pp. 136-154.
45. "[Monitoring Cooperative Agreements in a Repeated Principal-Agent Relationship](#)," *Econometrica*, Vol. 49, 1981, pp. 1127-1148.
46. "[Equilibrium Under Uncertainty](#)", in K. J. Arrow and M. Intriligator, eds., *Handbook of Mathematical Economics*, North-Holland, Amsterdam, 1981, Ch. 20, pp. 923-1006.
47. "[Private Information and Pure-Strategy Equilibria](#)" (with R. W. Rosenthal), *Mathematics of Operations Research*, Vol. 7, 1982, pp. 401-409.
48. "[Rational Expectations in Microeconomic Models: An Overview](#)" (with J. S. Jordan), *J. of Econ. Theory*, Vol. 26, 1982, pp. 201-223.
49. "[The Role of Private Information in Markets and Other Organizations](#)," in W. Hildenbrand, ed., *Advances in Economic Theory*, Cambridge University Press, Cambridge, 1982, pp. 95-120.
50. "[A Nonconcavity in the Value of Information](#)" (with J. E. Stiglitz), in M. Boyer and R. E. Kihlstrom, eds., *Bayesian Models in Economic Theory*, North-Holland, Amsterdam, 1983, pp. 33-52.
51. "[Approximate Purification of Mixed Strategies](#)" (with R. J. Aumann, et al), *Mathematics of Operations Research*, vol. 8, 1983, pp. 327-341.
52. "[Stationary Optimal Policies with Discounting in a Stochastic Activity Analysis Model](#)" (with M. K. Majumdar), *Econometrica*, Vol. 51 (1983), 1821-1835.
53. "[A Sequential Principal-Agent Approach to Regulation](#)" (with P. B. Linhart and F. W. Sinden), in O. H. Gandy, Jr., P. Espinosa, and J. A. Ordover, eds., *Proc. 10th Annual Telecommunications Policy Research Conference*, ABLEX Publ. Co., Norwood, N.J., 1983, pp. 213-226.
54. "[Jacob Marschak and the Theory of Decision and Organization](#)," in H. W. Spiegel and W. J. Samuels, eds., *Contemporary Economists in Perspective*, JAI Press, Greenwich, Connecticut, 1984.
55. "[Deregulation of Long-Distance Telecommunications](#)" (with P. B. Linhart), in V. Mosco, ed., *Policy Research in Telecommunications*, ABLEX Publ. Co., Norwood, N.J., 1984.
56. "[Repeated Principal-Agent Games with Discounting](#)," *Econometrica*, Vol. 53, 1985, pp. 1173-1198.
57. "[Repeated Partnership Games with Imperfect Monitoring and No Discounting](#)," *Review of Economic Studies*, Vol. 53 (1986), 43-57.

58. "[An Example of a Repeated Partnership Game with Discounting and with Uniformly Inefficient Equilibria](#)" (with E. Maskin and M. Satterthwaite), *Review of Economic Studies*, Vol. 53 (1986), 59-69.
59. "[Repeated Moral Hazard with Low Discount Rates](#)," in W. P. Heller, R. M. Starr, and D. Starrett, eds., *Uncertainty, Information, and Communication, Essays in Honor of Kenneth J. Arrow*, Vol. III, Cambridge U. Press, Cambridge, 1986, pp. 25-64.
60. "[The Internal Economy of Large Firms](#)," *The Economic Journal*, Vol. 96, Supplement, 1986, 1-22.
61. "[Can Bounded Rationality Resolve the Prisoners' Dilemma?](#)", in A. Mas-Colell and W. Hildenbrand, eds., *Contributions to Mathematical Economics*, North-Holland, Amsterdam, 1986, pp. 387-399.
62. "[Decentralization and Incentives](#)," in T. Groves, R. Radner, and S. Reiter, eds. *Information, Incentives, and Economic Mechanisms*, U. of Minn. Press, Minneapolis, 1987.
63. "[Alternative Market Arrangements for Technology Transfer](#)" (with P. B. Linhart), *Annales des Telecommunications* 42, (1987), 720-730.
64. "Price Caps: Theory and Implementation" (with P. B. Linhart), in E. E. Zajac (ed.), *Proceedings of the 15th Annual Telecommunications Policy Research Conference*, 1988.
65. "[A Model of Defense-Protected Build-Down](#)," in A. M. Weinberg and J. N. Barkenbus (eds.), *Strategic Defenses and Arms Control*, " The Washington Institute, Washington, 1987.
66. "[Uncertainty and General Equilibrium](#)," "Teams", and "Jacob Marschak," J. Eatwell, M. Milgate, and P. Newman (eds.), *The New Palgrave: A Dictionary of Economics*, Macmillan, London, 1987.
67. "[Effects of Increased Subscriber-Line Charge on Total Surplus and GNP](#)" (with P. B. Linhart), *AT&T Technical Journal*, 66 (5), Sept./Oct. 1987, 86-91.
68. "[Introduction: Symposium on Noncooperative Bargaining](#)" (with P. B. Linhart and M. Satterthwaite), *J. Econ. Theory.*, vol. 48 (June 1989), 1-17.
69. "[Equilibria of the Sealed-Bid Mechanism for Bargaining with Incomplete Information](#)" (with W. Leininger and P. B. Linhart), *J. Econ. Theory.*, vol. 48 (June 1989), 47-62.
70. "[The Sealed-Bid Mechanism: An Experimental Study](#)" (with A. Schotter), *J. Econ. Theory.*, vol. 48 (June 1989), 179-220.
71. "[Minimax-Regret Strategies for Bargaining over Several Variables](#)" (with P. B. Linhart), *J. of Econ. Theory*, vol. 48 (June 1989), 152-178.
72. "[Linear Models of Economic Survival Under Production Uncertainty](#)" (with M. K. Majumdar), *Economic Theory*, vol. 1, no. 1 (1991), 13-30.
73. "[A Sequential Mechanism for Direct Price Regulation](#)" (with P. B. Linhart and F. W. Sinden), Ch. 7 of Michael A. Einhorn (ed.), *Price Caps and Incentive Regulation in Telecommunications*, Kluwer Academic Publishers, Norwell, MA, 1991, pp. 127-153.
74. "[On the Market for Data Networking Products](#)" (with P. B. Linhart and R. Tewari), Ch. 11 in Christiano Antonelli (ed.), *The Economics of Information Networks*, International Telecommunications Society, 1991.



75. "[Intertemporal General Equilibrium](#)," Ch. 15 of L. W. McKenzie and S. Zamagni (eds.), *Value and Capital Fifty Years Later*, Macmillan, London, 1991.
76. "[Dynamic Games in Organization Theory](#)," *J. of Econ. Behavior and Organization*, 16 (1991), 217-260.
77. "[Transfer Payments and the Core of a Profit-Center Game](#)," in P. Dasgupta, et al, eds., *Economic Analysis of Markets and Games*, MIT Press, Cambridge, MA, 1992, pp. 316-339.
78. "[Information Processing in Firms and Returns to Scale](#)" (with T. Van Zandt), *Annales d'Economie et de Statistique*, June, 1992, No. 25/26, 265-298.
79. "[Joint Exploitation of a Productive Asset](#)" (with J. Benhabib), *Economic Theory*, 2 (1992), 155-190.
80. "[Hierarchy: The Economics of Managing](#)," *J. of Economic Literature*, vol. 30 (Sept. 1992), 1382-1415.
81. "[Survival under Production Uncertainty](#)" (with M. K. Majumdar), in M. K. Majumdar, ed., *Equilibrium and Dynamics*, Macmillan, London, 1992, pp. 179-200.
82. "[Price Caps](#)" (with P. B. Linhart), *Annals of Operations Research*, 36 (1992), 17-32.
83. "[The Organization of Decentralized Information Processing](#)," *Econometrica*, 61 (1993), 1109-1146.
84. "[A Note on the Theory of Cost-Benefit Analysis in the Small](#)," Chapter 6 in K. Basu, M. K. Majumdar, and T. Mitra, eds., *Capital, Investment, and Development*, Basil Blackwell, Oxford, 1993, pp. 129-141.
85. "[Report of the NOAA Panel On Natural Resource Damage Assessments Under the Oil Pollution Act of 1990](#)" (with K.J. Arrow, K., R. Solow, P.R. Portney, E.E. Lerner, and H. Schuman, *Federal Register*, 58 (1993), pp. 4601-14, reprinted in Richard T. Carson, ed., *The Stated Preference Approach to Environmental Valuation, Volume III Applications: Benefit-Cost Analysis and Natural Resource Damage Assessment*, Ashgate Publ., Aldershot, UK 2007.
86. "[Optimal Principal-Agent Contracts for a Class of Incentive Schemes](#)" (with P. K. Dutta), *Economic Theory*, Vol. 2, (1994), 483-504.
87. "[Efficiency in Partnership when the Joint Output is Uncertain](#)" (with S. R. Williams), in J. Ledyard, ed., *The Economics of Informational Decentralization*, Kluwer, Boston, 1995, pp. 79-99.
88. "[Moral Hazard](#)" (with P. K Dutta), in R. Aumann and S. Hart, eds., *Handbook of Game Theory*, Vol. 2, North-Holland, Amsterdam, 1995, pp. 869-903.
89. "[The Allocation of Value for Jointly Provided Services](#)" (with P. B. Linhart, K. G. Ramakrishnan, and R. Steinberg, *Telecommunications Systems*, 41 (1995), 151-175.
90. "[The Design and Performance of Sharing Rules for a Partnership in Continuous Time](#)" (with A. Rustichini), *Games and Economic Behavior*, 12 (Feb. 1996), 245-265.
91. "[Risk vs. Profit Potential: A Model for Corporate Strategy](#)" (with L. A. Shepp), *J. of Econ. Dynamics and Control*, 20(1996), pp.1373-1393.
92. "[Bounded Rationality, Indeterminacy, and the Managerial Theory of the Firm](#)," in Z. Shapira, ed., *Organizational Decision Making*, Cambridge U. Press, Cambridge, 1997, pp. 324-352. [A shorter version published as "Bounded Rationality, Indeterminacy, and the Theory of the Firm," *Economic J.*, 106, no. 438 (Sept. 1996), 1360-1373.]

93. [Economic Survival](#), Nancy Schwartz Memorial Lecture, Northwestern University, 1996; reprinted in D. P. Jacobs, et al, *Frontiers of Research in Economic Theory*, Cambridge University Press, Cambridge, 1998, pp. 183-209.
94. "[Profit Maximization with Bankruptcy and Variable Scale](#)," *J. of Econ. Dynamics and Control.*, v. 22, no. 6 (June, 1998), 849-867.
95. "[On the Optimal Schedule for Introducing a New Technology](#)" (with P. B. Linhart), in G. Chichilnisky, ed., *Markets, Information, and Social Choices*, Cambridge U. Press, 1999, pp. 165-190.
96. "[Profit-Maximization and the Market Selection Hypothesis](#)" (with P. K. Dutta), *Review of Economic Studies*, 66(1999), 769-798..
97. "[A Profit-Center Game with Incomplete Information](#)" (with T. Ichiishi), *Review of Economic Design*, 4 (1999), 307-343.
98. "[Real-Time Decentralized Information Processing and Returns to Scale](#)" (with Timothy Van Zandt), *Economic Theory*, 17 (no. 3, May 1999), 545-575.
99. "[Costly and Bounded Rationality in Individual and Team Decision-Making](#)," *Industrial and Corporate Change*, v.9, no. 4 (2000), 623-658.
100. "[On the Core of a Cartel](#)," in G. Debreu, W. Neuefeind, and W. Trockel, eds., *Economics Essays*, Springer, Berlin, 2001, pp. 315-331.
101. "[Bounded and Costly Rationality](#)," in N. J. Smelser and P. B. Baltes, eds., *International Encyclopedia of the Social and Behavioral Sciences*, Pergamon, Oxford, 2001, pp. 1298-1303.
102. "[Viscous Demand](#)," *J. of Economic Theory*, 112 (2003), 189-231.
103. "[Robert W. Rosenthal](#)" (with Debraj Ray), *J. of Economic Theory*, 112 (2003), 365-8.
104. "[Monopolists and Viscous Demand](#)" (with T. J. Richardson), *Games and Economic Behavior*, 45, No.2 (2003), 442-464.
105. "[Self-Enforcing Climate-Change Treaties](#)" (with P. K. Dutta), *Proc. Nat. Acad. Sci. U.S.*, 101 (2004), 4746-4751.
106. "[The Best is the Enemy of the Good](#)," in Mie Augier and James G. March, eds., *Models of a Man: Essays in Memory of Herbert A. Simon*, MIT Press, Cambridge, MA, 2004.
107. "[A Game-Theoretic Approach to Global Warming](#)" (with P. K. Dutta), S. Kusuoka and A. Yamazaki, eds., *Advances in Mathematical Economics*, Springer-Verlag, Tokyo, 2006.
108. "[Population Growth and Technological Change in a Global Warming Model](#)" (with P. K. Dutta), *Economic Theory*, 29 (2006), 251-270.
109. "[Strategic Analysis of Petty Corruption: Entrepreneurs and Bureaucrats](#)" (with A. Lambert-Mogiliansky and M. K. Majumdar), *J. of Development Economics*, 83 (2007), 351-367.
110. "[Petty Corruption: A Game-Theoretic Approach](#)" (with A. Lambert-Mogiliansky and M. K. Majumdar), *International J. of Economic Theory*, 4 (2008), 273-297
111. "[Strategic Analysis of Petty Corruption with an Intermediary](#)" (with A. Lambert-Mogiliansky and M. K. Majumdar), *Review of Economic Design*, 13 (2009), 45-57.
112. "[Strategic Analysis of Global Warming: Theory and Some Numbers](#)" (with P. K. Dutta), *J. of Economic Behavior and Organization*, vol. 71, (2009), 187-209.

113. [“Capital Growth in a Global Warming Model: Will China and India Sign a Climate Treaty”](#) (with P. K. Dutta), *Economic Theory*, 49 (2012), 411-443.
114. [“Dynamic Pricing of Network Goods with Boundedly Rational Consumers”](#) (with A. Radunskaya and A. Sundararajan), *Proceedings of the National Academy of Sciences*, 111 (2014), pp. 99-104; Supplementary Information, 12 pp.

### **3. PAPERS IN PROCESS**

1. “Climate-Change Mitigation with Foreign Aid” (with P. K. Dutta), 2015
2. “Bounded Rationality: In Search of a Definition,” 2013.
3. “Bayesian Analysis and Model Revision for  $k$ 'th Order Markov Chains with Unknown  $k$ ,” 2014.
4. “Nonconvex Production Technology and Price Discrimination” (with Bing Jing), 2004.
5. “Designing a Discrete Product Line in a Monopoly” (with Bing Jing), January 2006.

### **4. CURRENT RESEARCH**

- Self-Enforcing Climate-Change Treaties: Fixing Kyoto
- Bounded rationality
- Pricing of information goods
- Statistical theory of data mining