

Robert W. Hahn

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EDUCATION

- 1977-81 California Institute of Technology, Pasadena, California
M.S., 1979, Ph.D., Social Science, 1981
- 1976-77 Stanford Graduate School of Business, Stanford, California
- 1971-75 Brown University, Providence, Rhode Island
B.A., Mathematical Economics, 1975
M.A., Economics, 1975
Languages: Spanish
Honors: Phi Beta Kappa

EMPLOYMENT

- 2008- Senior Visiting Fellow, Smith School, University of Oxford
- 2009- Senior Fellow, Center for Business and Public Policy, Georgetown University, Washington, D.C.
- 2003-08 Executive Director, AEI-Brookings Joint Center for Regulatory Studies, Washington, D.C.
- 1998-02 Co-founder and Director, AEI-Brookings Joint Center for Regulatory Studies, Washington, D.C.
- 1999-08 Non-resident Senior Fellow, Brookings Institution, Washington, D.C.
- 1989-07 Resident Scholar, American Enterprise Institute, Washington, D.C.
- 1997-02 Research Associate, Harvard University, Cambridge, Massachusetts
- 1990-01 Adjunct Professor of Economics, Carnegie Mellon, Pittsburgh, Pennsylvania
- 1991-94 Adjunct Research Faculty, Harvard University, Cambridge, Massachusetts

- 1987-89 Senior Staff Economist, Council of Economic Advisers, Washington, D.C.
- 1985-90 Associate Professor of Economics, Carnegie Mellon, Pittsburgh, Pennsylvania
- 1982-85 Assistant Professor of Economics, Carnegie Mellon, Pittsburgh, Pennsylvania
- 1981-82 Research Fellow, California Institute of Technology, Pasadena, California
- 1981 Instructor, Pitzer College, Claremont, California
- 1978 Economist, Council on Environmental Quality, Washington, D.C. (summer)
- 1976 Economist, World Bank, Washington, D.C. (summer)
- 1975-76 Division Staff, MITRE Corporation, McLean, Virginia
- 1973-75 Math Teacher, Transitional High School, Providence, Rhode Island

PUBLIC SERVICE AND ACADEMIC ACTIVITIES

- 1983- Co-founder of the Community Preparatory School, Providence, Rhode Island
- 2009- Editorial Board - *Journal of Benefit-Cost Analysis*
- 2009- Editorial Board - *Journal of Prediction Markets*
- 2008- Editorial Board - *Policy and Internet*
- 2006- Editorial Board - *Review of Environmental Economics and Policy*
- 2005- Columnist - *Economists' Voice*
- 2000- Editorial Board - *Milken Review*
- 2000- Research Advisory Board - Committee for Economic Development
- 2001- Editorial Advisory Board - *Regulation*
- 1994-99 Board of Directors, Annapolis Center
- 1989-93 Editorial Council - *Journal of Environmental Economics and Management*

1990-92 Cochairman of the U.S. Alternative Fuels Council

PROFESSIONAL AFFILIATIONS

American Economic Association

Association for Public Policy Analysis and Management

Association of Environmental and Resource Economists

AWARDS

American Association for the Advancement of Science Fellowship

Barr Award for Outstanding Research in Applied Public Economics

Brookings Fellowship

Caltech McDonnell Award for best graduating student in Social Science

Premier's Fellowship, New South Wales, Australia

SELECTED RESEARCH PROJECTS AND FOUNDATION SUPPORT

Agency for International Development, “Government Regulation of the Marketing and Processing of Crops in Uganda”

Electric Power Research Institute, “Organizational Aspects of Power Pooling”

Electric Power Research Institute, “Markets in Transferable Property Rights”

Environmental Protection Agency, “An Examination of EPA's Controlled Trading Options”

Environmental Protection Agency, “An Evaluation of Mechanisms for Complying with the Ozone Standard”

Environmental Protection Agency, “Designing Markets in Tradable Allowances for Reducing Acid Deposition”

Environmental Protection Agency, “Promoting Conservation Through Price Rationalization”

Environmental Protection Agency, “Evaluation of Economic Incentives for Hazardous Waste Management”

Environmental Protection Agency, “Economic and Environmental Analysis of Alternative Fuels”

Matsushita Foundation, “Educational Development”

Mott Foundation, “AEI-Brookings Joint Center for Regulatory Studies”

National Science Foundation, Decision, Risk and Management Science, “The Emergence of Markets for Controlling Risks”

National Science Foundation, Regulation and Policy Analysis, “Spot Markets for Electricity”

National Science Foundation, Decision, Risk and Management Science, “Markets for Controlling Environmental Risks”

New South Wales Government, Australia, “Economic Approaches for Protecting Environmental and Natural Resources: From Theory to Practice”

Office of Technology Assessment, “Designing Economic Incentives for the Clean Air Act”

Rhode Island Foundation, “Options for Alternative Education”

Smith Richardson Foundation, “AEI-Brookings Joint Center for Regulatory Studies”

World Bank, “The Benefits and Costs of Regulation in Developing Countries”

World Bank, “Application of Economic Incentives to Environmental Problems in Developing Countries”

SELECTED PUBLICATIONS¹

Recent Working Papers

“The Effects of Allowance Allocations on Cap-and-Trade Systems: A Tribute to Ronald Coase,” with Robert N. Stavins, *Journal of Legal Studies*, in preparation.

¹ Most of my recent scholarly publications can be found at www.ssrn.com.

“Clearing The Way for an Important New Business Management Tool,” with Robert Litan and Cass Sunstein, in preparation.

“Optimal Liquidity Provision for Decision Makers,” with Paul C. Tetlock, Working Paper, AEI-Brookings Joint Center.

“The Economics of Allowing More U.S. Oil Drilling,” with Peter Passell.

“Designing Smarter Regulation with Improved Benefit-Cost Analysis.”

“Why the iPhone Won’t Last Forever and What the Government Should Do to Promote its Successor,” with Hal Singer, *Milken Institute Review*, forthcoming.

“Factoring Economic Inefficiency into Policy Design: An Application to Climate Change,” with David Anthoff, in preparation.

“Government Failure and Market Failure: On the Inefficiency of Environmental and Energy Policy,” with David Anthoff, 2009, *Oxford Review of Economic Policy*, revise and resubmit.

“Regulating Dynamic Markets: Lessons from Telecommunications,” with Lewis Evans, in preparation.

“Rethinking Energy Policy,” with Daniel Ahn, in preparation.

“An Economic Perspective on a U.S. National Broadband Strategy,” with Scott Wallsten, *Policy and Internet*, forthcoming.

Academic Journals

“Climate Policy: Separating Fact from Fantasy,” *Harvard Environmental Law Review* (2009) 33, 557-591.

“Greenhouse Gas Auctions and Taxes: Some Practical Considerations,” *Review of Environmental Economics and Policy*, 2009, 1-22.

“A Statement on the Appropriate Role for Research and Development in Climate Policy,” with Kenneth J. Arrow, Linda Cohen, Paul A. David, Charles Kolstad, Lee Lane, W. David Montgomery, Richard R. Nelson, Roger Noll and Anne E. Smith, *Economists’ Voice* (February 2009): 1-4.

“Climate Policy and the Art of the Possible,” *Milken Institute Review*, Second Quarter (2009): 36-47.

- “The Benefits and Costs of Ethanol: An Evaluation of the Government’s Analysis,” with Caroline Cecot, *Journal of Regulatory Economics*, (2009) 35, no. 3, 275-295.
- “Has Economic Analysis Improved Regulatory Decisions?,” with Paul C. Tetlock, *Journal of Economic Perspectives* 22, no. 1 (Winter 2008): 67-84.
- “The Promise of Prediction Markets,” with Kenneth J. Arrow, Robert Forsythe, Michael Gorham, Robin Hanson, John O. Ledyard, Saul Levmore, Robert Litan, Paul Milgrom, Forrest D. Nelson, George R. Neumann, Marco Ottaviani, Thomas C. Schelling, Robert J. Shiller, Vernon L. Smith, Erik Snowberg, Cass R. Sunstein, Paul C. Tetlock, Philip E. Tetlock, Hal R. Varian, Justin Wolfers, and Eric Zitzewitz, *Science* 320, no. 5878 (May 2008): 877-878.
- “Is Trillion the New Billion?,” with Peter Passell, *Economists’ Voice* 6, no. 7, Article 2 (2009).
- “Legislating Life’s Value,” with Peter Passell, *Regulation* 31, no. 4 (2008).
- “An evaluation of the quality of impact assessment in the European Union with lessons for the US and the EU,” with Caroline Cecot, Andrea Renda, and Lorna Schrefler, *Regulation and Governance* (2008) 2, 405-424.
- “Ethanol: Law, Economics and Politics,” *Stanford Law and Policy Review* 19, no. 2 (2008).
- “The Need for Greater Price Transparency in the Medical Device Industry: An Economic Analysis,” with Hal Singer and Keith Klovers, *Health Affairs* 27, no. 6 (November 2008): 1554-1559.
- “Regulating Our Way to Freedom?,” *The American* 2, no. 6 (2008): 108-109.
- “The FCC’s \$19 Billion Baby,” with Allen Ingraham, *Regulation* 31, no. 3 (2008).
- “Regulation after Bush,” with Peter Passell, *The Economists’ Voice* 5, no. 4, Article 5 (2008).
- “The Rush to Re-Regulate” with Peter Passell, *The Economists’ Voice* 5, no. 3, Article 5 (2008).
- “Time to Change U.S. Climate Policy,” with Peter Passell, *The Economists’ Voice* 4, no. 5, Article 2 (2007).
- “Better that the Fed Regulates Subprime Mortgages” with Peter Passell, *The Economists’ Voice* 5, no. 1, Article 4 (2008).

- “Microsoft: Predator or Prey” with Peter Passell, *The Economists’ Voice* 5, no. 2, Article 4 (2008).
- “How Well Does the U.S. Government Do Cost-Benefit Analysis?” with Patrick M. Dudley, *Review of Environmental Economics and Policy* 1, 2 (Summer 2007): 192-211.
- “Are Drivers Who Use Cell Phones Inherently Less Safe?,” with James E. Prieger, *Applied Economics Quarterly* 53, 4 (2007): 327-352.
- “Assessing Bias in Patent Infringement Cases: A Review of International Trade Commission Decisions,” with Hal Singer, *Harvard Journal of Law and Technology* 21, 2 (Spring 2008): 457-508.
- “The Myth of Net Neutrality and the Threat to Internet Innovation,” with Robert Litan, *Milken Institute Review*, First Quarter (2007): 28-35; revised and updated as “The Myth of Network Neutrality and What We Should Do About It,” for the *International Journal of Communication* 1 (2007): 595-606.
- “The Economics of Wireless Net Neutrality,” with Robert Litan and Hal Singer, *Journal of Competition Law and Economics* 3, 3 (2007): 399-451.
- “The Economic Significance of ‘Insignificant’ Rules,” with Caroline Cecot, *Regulation and Governance* 1, no. 2 (June 2007): 172-182.
- “Further Thoughts on the Cashless Society: A Reply to Dr. Shampine,” with Daniel Garcia Swartz and Anne Layne-Farrar, *Review of Network Economics* 6, 4 (December 2007): 509-524.
- “The President’s New Executive Order on Regulation,” with Robert Litan, *The Economists’ Voice* 4, no. 2, Article 1 (2007).
- “Regulating the Raters: The Law and Economics of Ratings Firms” with Harold Furchtgott-Roth and Anne Layne-Farrar, *Journal of Competition Law and Economics* 3, no. 1 (2007): 49-96.
- “The Law and Economics of Software Security,” with Anne Layne-Farrar, *Harvard Journal of Law and Public Policy* 30, no. 1 (Fall 2006): 284-353.
- “The Impact of Driver Cell Phone Use on Accidents,” with James E. Prieger, *Advances in Economics & Policy* 6, no. 1, Article 9 (2006): 1-37.
- “A New Approach for Regulating Information Markets,” with Paul C. Tetlock, *Journal of Regulatory Economics* 29, (2006): 265-281.

- “The Move toward a Cashless Society: A Closer Look at Payment Instrument Economics” with Daniel Garcia Swartz and Anne Layne-Farrar, *Review of Network Economics* 5, no. 2 (June 2006): 175-198.
- “The Move toward a Cashless Society: Calculating the Costs and Benefits” with Daniel Garcia Swartz and Anne Layne-Farrar, *Review of Network Economics* 5, no. 2 (June 2006): 199-228.
- “The Economics of Network Neutrality,” with Scott Wallsten, *The Economists’ Voice* 3, no. 6, Article 8 (2006).
- “What Affects the Quality of Economic Analysis for Life-Saving Investments?” with Katrina Kosec, Peter Neumann, and Scott Wallsten, *Risk Analysis* 26, no. 3 (2006): 641-655.
- “Designing Environmental Policy: Lessons from the Regulation of Mercury Emissions” with Ted Gayer, *Journal of Regulatory Economics* 30, no. 3 (November 2006): 291-315.
- “Costs and Benefits of Regulating Mercury,” with Ted Gayer, *Science* 310, (November 4, 2005): 777-778.
- “Using Information Markets to Improve Public Decision Making,” with Paul C. Tetlock, *Harvard Journal of Law and Public Policy* 29, no. 1 (Fall 2005): 213-289.
- “The Economics of Rebuilding Cities: Reflections after Katrina,” *The Economists’ Voice* 2, no. 4, Article 1 (2005): 1-4.
- “Regulating Mercury: What’s At Stake?,” with Ted Gayer, *Science* 309, no. 5732 (July 8, 2005): 244-245.
- “The Precautionary Principle,” with Cass R. Sunstein, *The Economists’ Voice* 2, no. 2, Article 8 (2005): 1-9.
- “Sold, but what’s the brokerage fee?,” with Robert E. Litan and Jesse Gurman, *Milken Institute Review*, Fourth Quarter (2005): 46-55; revised and updated as “Bringing More Competition to Real Estate Brokerage,” *Real Estate Law Journal* 35, no. 1 (Summer 2006): 86-118.
- “Making Development Work,” with Paul C. Tetlock, *Policy Review*, no. 112 (August and September 2005): 27-38.
- “Big Ideas: The Market’s Last Frontier,” with Paul C. Tetlock, *Milken Institute Review*, First Quarter (2005): 83-89.

- “Counting Regulatory Benefits and Costs: Lessons for the U.S. and Europe,” with Robert E. Litan, *Journal of International Economic Law* 8, no. 2 (June 2005): 473-508; reprinted in *Economics of Administrative Law*, Susan Rose-Ackerman, editor, Edward Elgar Publishing, Northampton, MA, (2008): 359-394.
- “The Political Economy of Mercury Regulation,” with Ted Gayer, *Regulation* 28, no. 2 (Summer 2005): 26-33.
- “The Impact of Economics on Environmental Policy,” *Journal of Environmental Economics and Management* 39 (2000): 375-399; reprinted in *The Political Economy of Environmental Regulation*, Robert Stavins, editor, Edward Elgar Publishing, Northampton, MA, 2004; reprinted in Chinese in the *Journal of Comparative Studies* 20 (2005): 23-55.
- “The Economic Analysis of Regulation: A Response to the Critics,” *The University of Chicago Law Review* 71, no. 3 (Summer 2004): 1021-1054.
- “Bandwidth for the People,” with Robert W. Crandall, Robert E. Litan, and Scott Wallsten, *Policy Review* 127 (October/November 2004): 67-75.
- “The Case for Federal Preemption in Antitrust Enforcement,” with Anne Layne-Farrar, *Antitrust*, vol. 18, no. 2 (Spring 2004): 79-81.
- “Is Regulation Good for You?,” with Rohit Malik, *Harvard Journal of Law and Public Policy* 27, no. 3 (October 2004): 893-916.
- “Internet Telephones: Hanging up on Regulation?” with Robert W. Crandall, Robert E. Litan, and Scott Wallsten, *Milken Institute Review* 6, no. 3 (2004): 30-34.
- “Environmental Regulation During the 1990s: A Retrospective Analysis,” with Sheila M. Olmstead and Robert N. Stavins, *Harvard Environmental Law Review* 27, no. 2 (July 2003): 377-415; reprinted in *The Political Economy of Environmental Regulation*, Robert Stavins, editor, Edward Elgar Publishing, Northampton, MA, 2004.
- “Tracking the Value of Regulation,” with Erin M. Layburn, *Regulation* 26, no. 3 (Fall 2003): 16-21.
- “Federalism and Regulation: An Overview,” with Anne Layne-Farrar and Peter Passell, *Regulation* 26, no. 4 (Winter 2003-2004): 46-50.
- “The Grand Experiment in Regulatory Reporting,” with Mary Beth Muething, *Administrative Law Review* 55, no. 3 (Summer 2003): 607-642.
- “Cybersecurity: Who’s Watching the Store?,” with Bruce Berkowitz, *Issues in Science and Technology* XIX (Spring 2003): 55-62.

- “Federalism in Antitrust,” with Anne Layne-Farrar, *Harvard Journal of Law and Public Policy* 26, no.3 (Summer 2003): 878-921.
- “The Disconnect Between Law and Policy Analysis: A Case Study of Drivers and Cell Phones,” with Patrick M. Dudley, *Administrative Law Review* 55 no. 1 (Winter 2003): 127-185.
- “A New Executive Order for Improving Federal Regulation: Deeper and Wider Cost Benefit Analysis,” with Cass R. Sunstein, *University of Pennsylvania Law Review* 150 (May 2002): 1489-1552.
- “The False Promise of Full Disclosure,” *Policy Review* 115 (October/November 2002): 39-50.
- “The Benefits of MS-Settlement,” *Regulation* 25, no. 1 (Spring 2002): 11-13.
- “The Benefits and Costs of Online Privacy Legislation,” with Anne Layne-Farrar, *Administrative Law Review* 54, no. 1 (Winter 2002): 85-171.
- “A Costly Benefit: Economic Analysis Does Not Support EPA’s New Arsenic Rule,” with Jason K. Burnett, *Regulation* 24, no. 3 (Fall 2001): 44-49.
- “Competition Policy and the New Economy,” *Milken Institute Review* 3, no. 1 (2001): 33-41.
- “Using the Federal Register to Improve Regulatory Accountability,” *Administrative Law Review* 52, no. 3 (Summer 2000): 927-962.
- “Assessing Regulatory Impact Analyses: The Failure of Agencies to Comply With Executive Order 12,866,” with Jason K. Burnett, Yee-Ho I. Chan, Elizabeth A. Mader, and Petrea R. Moyle, *Harvard Journal of Law and Public Policy* 23, no. 3 (Summer 2000): 859-885.
- “State and Federal Regulatory Reform: A Comparative Analysis,” *Journal of Legal Studies* XXIX, no. 2 (June 2000): 873-912; reprinted in *Cost Benefit Analysis: Legal, Economic, and Philosophical Perspectives*, Matthew Adler and Eric Posner, editors, University of Chicago Press, Chicago, 2001: 37-77.
- “Should You Be Allowed to Use Your Cellular Phone While Driving?,” with Paul C. Tetlock and Jason K. Burnett, *Regulation* 23, no.3 (2000): 46-55; revised and updated from “The Economics of Regulating Cellular Phones in Vehicles,” with Paul C. Tetlock, Working Paper 99-9, AEI-Brookings Joint Center, October 1999.
- “Changing the *Federal Register* to Improve Regulatory Accountability,” *Regulation* 22, no. 4 (1999): 16-19.

- “A Solution to the Controversy Over Public Access to Scientific Data,” with Linda R. Cohen, *Science* 285 (July 23, 1999): 535-36.
- “The Costs and Benefits of Regulation: Implications for Developing Countries,” with J. Luis Guasch, *World Bank Research Observer* 14, no.1 (February 1999): 137-58.
- “Government Analysis of the Benefits and Costs of Regulation,” *Journal of Economic Perspectives* 12, no. 4 (Fall 1998): 201-210.
- “The Costs of Regulating Microsoft,” *Regulation* 21, no. 3 (1998): 62-68.
- “The Cost of Airport Security Measures,” *Consumers' Research* 80, no. 7 (July 1997): 15-19.
- “Achieving Real Regulatory Reform,” *University of Chicago Legal Forum* (1997): 143-158.
- “The Economics of Airline Safety and Security,” *Harvard Journal of Law and Public Policy* 20, no. 3 (Summer 1997): 791-827.
- Reply to letter on “Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation?,” Arrow, Kenneth J., *et al.*, *Science* 272, no.5268 (June 14, 1996): 1569-1573.
- “The Cost of Antiterrorist Rhetoric,” *Regulation* 4 (1996): 51-57.
- “Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation?,” Arrow, Kenneth J., *et al.*, *Science* 272, no. 5259 (April 12, 1996): 221-222.
- “Why Energy Transitions Matter: A Case Study of Methanol,” with Matthew Borick, *Journal of Regulatory Economics* 9, no. 2 (March 1996): 133-155.
- “An Economic Analysis of Scrappage,” *Rand Journal of Economics* 26 (Summer 1995): 222-242.
- “Designing More Efficient Markets: Lessons from Los Angeles Smog Control,” with Vivien Foster, *Journal of Law and Economics* XXXVIII (April 1995): 19-48; reprinted in *Price Theory and Its Applications*, Bernard Saffran and F.M. Scherer, editors, International Library of Critical Writings In Economics, Edward Elgar Publishing Limited, Northampton, Massachusetts, 1998: 135-165.
- “Government Markets and the Theory of the *N*th Best,” *Journal of Public Economics* 57 (1995): 219-234.

- “Choosing Among Fuels and Technologies for Cleaning Up the Air,” *Journal of Policy Analysis and Management* 14 (Fall 1995): 532-554.
- “Reevaluating the Relationship Between Transferable Property Rights and Command-and-Control Regulation,” with Robert Axtell, *Journal of Regulatory Economics* 8 (1995): 125-148.
- “U.S. Environmental Policy: Past, Present and Future,” *Natural Resources Journal* 34, (Spring 1994): 305-348.
- “The Behavior of the Allowance Market: Theory and Evidence,” with Carol A. May, *Electricity Journal* 7 (March 1994): 28-37.
- “Getting More Environmental Protection for Less Money: A Practitioner's Guide,” *Oxford Review of Economic Policy* 9 (Winter 1993): 112-123.
- “How Reliably Can Climate Change and Mitigation Policy Impacts on Electric Utilities Be Assessed?,” with Hadi Dowlatabadi, Raymond J. Kopp, Karen Palmer and Diane DeWitt, *Utilities Policy* (July 1993): 261-268.
- “Toward a New Environmental Paradigm,” Review Essay, *Yale Law Journal* 102 (May 1993): 1719-1761.
- “Comparing Environmental Markets with Standards,” *Canadian Journal of Economics*, XXVI (May 1993): 347-354.
- “Strumenti Economici Per La Politica Ambientale: Il Caso Degli Stati Uniti,” with Robert N. Stavins, *Innovazione e Materie Prime* 3 (1992): 66-79.
- “Go for the Market: Warts and All,” *Regulation*, 5-6, Winter 1992.
- “Economic Incentives for Environmental Protection: Integrating Theory and Practice,” with Robert N. Stavins, *American Economic Review* 82 (May 1992): 464-468.
- “Market Incentives for Alternative Fuels,” *Issues in Science and Technology* VII (Spring 1991): 13-14.
- Reply to Review of “The Costs and Benefits of Regulation: Review and Synthesis,” with John Hird, *Regulation* 4 (Fall 1991).
- “The Costs and Benefits of Regulation: Review and Synthesis,” with John Hird, *Yale Journal on Regulation* 8 (Winter 1991): 233-278.
- “Incentive-Based Environmental Regulation: A New Era from an Old Idea?,” with Robert N. Stavins, *Ecology Law Quarterly* 18 (1991): 1-42.

- “A Recipe for Sustained Environmental Growth,” *Regulation* (Spring 1991): 17-19.
- Reply to Comment on “The Politics and Religion of Clean Air,” *Regulation* 4 (Summer 1990).
- Reply to Comment on “Can Regulatory Institutions Cope with Cross Media Pollution?,” with Eric Males, *Journal of the Air and Waste Management Association*, 1990.
- “Lost in Space: International Satellite Communications Policy,” *Via Satellite VI* (February 1991): 57-64; earlier version published as “Lost in Space: U.S. International Satellite Communications Policy,” with Randy Kroszner, *Regulation* (Summer 1990): 57-66
- “Regulatory Constraints on Environmental Markets,” *Journal of Public Economics* 42 (1990): 149-175.
- “An Experimental Examination of Spot Markets for Electricity,” with Mark Van Boening, *Economic Journal* 100 (1990): 1073-1094.
- “Instrument Choice, Political Reform and Economic Welfare,” *Public Choice* 67 (1990): 243-256.
- “Environmental Markets in the Year 2000,” with Roger Noll, *Journal of Risk and Uncertainty* 3 (1990): 351-367.
- “The Politics and Religion of Clean Air,” *Regulation*, Winter 1990 21-30.
- “Can Regulatory Institutions Cope with Cross Media Pollution?,” with Eric Males, *Journal of the Air and Waste Management Association* 40 (January 1990): 24-31.
- “Regulation: Past, Present and Future,” *Harvard Journal of Law and Public Policy* 13 (Winter 1990): 167-229.
- “The Political Economy of Environmental Regulation: Towards a Unifying Framework,” *Public Choice* 65 (1990): 21-45.
- “The Mismanagement of Air Transport: A Supply-Side Analysis,” with Randy Kroszner, *Public Interest* 95 (Spring 1989): 100-111.
- “Economic Prescriptions for Environmental Problems: How the Patient Followed the Doctor's Orders,” *Journal of Economic Perspectives* 3 (spring 1989): 95-114; reprinted in *The Economics of the Environment*, Wallace Oates, editor, Edward Elgar Publishing Company, 1992: 279-298; revised and updated in *Markets, the State and the Environment: Towards Integration*, Robyn Eckersley, editor, “Economic Prescriptions for Environmental Problems: Lessons from the United States and Continental Europe,” Macmillan, Melbourne, Australia, 1995: 129-

156. Original version reprinted in *The Political Economy of Environmental Regulation*, Robert Stavins, editor, Edward Elgar Publishing, Northampton, MA, 2004: 164-168.
- “The Political Economy of Instrument Choice: An Examination of the U.S. Role in Implementing the Montreal Protocol,” with Al McGartland, *Northwestern University Law Review* 83 (Spring 1989): 592-611.
- “The Internationalization of Environmental Regulation,” with Ken Richards, *Harvard International Law Journal* 30 (spring 1989): 421-446; reprinted in *Environmental Law*, Michael Blumm, editor, Aldershot, 1992: 441-465.
- “A New Approach to the Design of Regulation in the Presence of Multiple Objectives,” *Journal of Environmental Economics and Management* 17 (1989): 95-211.
- “Marketable Permits: Lessons for Theory and Practice,” with Gordon Hester, *Ecology Law Quarterly* 16 (1989): 361-406.
- “Where Did All the Markets Go?: An Analysis of EPA's Emission Trading Program,” with Gordon Hester, *Yale Journal on Regulation* 6 (1989): 109-153.
- “Promoting Efficiency and Equity Through Institutional Design,” *Policy Sciences* 21 (1988): 41-66.
- “Coping with Complexity in the Design of Environmental Policy,” with Gregory McRae and Jana Milford, *Journal of Environmental Management* 27 (1988): 109-125.
- “Innovative Approaches for Revising the Clean Air Act,” *Natural Resources Journal* 28 (1988): 171-188.
- Reply to Comments on “EPA's Market for Bads,” with Gordon Hester, *Regulation* 2 (1988): 64.
- “An Evaluation of Options for Reducing Hazardous Waste,” *Harvard Environmental Law Review* 12 (1988): 201-230; summarized in, “Beyond Waste Minimization: Evaluating the Alternatives,” in *Reports: 1986 Environmental Science and Engineering Fellows*, AAAS Publication No. 87-14, 17-26.
- “Jobs and Environmental Quality: Some Implications for Instrument Choice,” *Policy Sciences* 20 (1987): 289-306.
- “The Market for Bads: EPA's Experience with Emissions Trading,” with Gordon Hester, *Regulation* 3, no. 4 (1987): 48-53.
- “Assessing the Influence of Power Pools on Emission Constrained Economic Dispatch,” with Steve Brodsky, *IEEE Transactions on Power Systems* 1 (1986): 57-62.

“Trade-offs in Designing Markets with Multiple Objectives,” *Journal of Environmental Economics and Management* 13 (1986): 1-12.

“Market Power and Transferable Property Rights,” *Quarterly Journal of Economics* 99 (1984): 753-765.

“On Reconciling Conflicting Goals: Applications of Multiobjective Programming,” *Operations Research* 32 (1984): 221-228.

“Barriers to Implementing Tradable Air Pollution Permits: Problems of Regulatory Interaction,” with Roger Noll, *Yale Journal on Regulation* 1 (1983): 63-91.

“Marketable Permits: What's all the Fuss About?,” *Journal of Public Policy* 2 (1982): 395-411.

“On the Applicability of Market Solutions to Environmental Problems,” *Journal of Environmental Management* 14 (1982): 161-171.

“Applications of Market Mechanisms to Pollution,” with Gregory McRae, *Policy Studies Review* 1 (1982): 470-476.

“An Assessment of the Determination of Energy Needs: The Case of Nuclear Power,” *Policy Sciences* 13 (1981): 9-24.

Books, Edited Books and Monographs

Information Markets: A New Way of Making Decisions, co-editor with Paul C. Tetlock, AEI-Brookings Joint Center, Washington, D.C., 2006.

Antitrust Policy and Vertical Restraints, editor, AEI-Brookings Joint Center, Washington, D.C., 2006.

In Defense of the Economic Analysis of Regulation, AEI-Brookings Joint Center, Washington, D.C., 2005.

Intellectual Property Rights in Frontier Industries: Software and Biotechnology, editor, AEI-Brookings Joint Center, Washington, D.C., 2005.

High-Stakes Antitrust: The Last Hurrah?, editor, AEI-Brookings Joint Center, Washington, D.C., 2003.

Government Policy toward Open Source Software, editor, AEI-Brookings Joint Center, Washington, D.C., 2003.

- Reviving Regulatory Reform: A Global Perspective*, AEI-Brookings Joint Center, Washington, D.C., 2000.
- Do Federal Regulations Reduce Mortality?*, with Randall W. Lutter and W. Kip Viscusi, AEI-Brookings Joint Center, Washington, D.C., 2000.
- What Has the Kyoto Protocol Wrought? The Real Architecture of International Tradable Permit Markets*, with Robert N. Stavins, AEI Press, Washington, D.C., 1999.
- The Economics and Politics of Climate Change*, AEI Press, Washington, D.C., 1998.
- An Agenda for Federal Regulatory Reform*, with Robert W. Crandall, Christopher DeMuth, Robert E. Litan, Pietro S. Nivola, and Paul R. Portney, American Enterprise Institute and The Brookings Institution, Washington, D.C., 1997.
- Improving Regulatory Accountability*, with Robert E. Litan, American Enterprise Institute and The Brookings Institution, Washington, D.C., 1997.
- Risks, Costs, and Lives Saved: Getting Better Results from Regulation*, editor, Oxford University Press and AEI Press, Washington, D.C., 1996.
- Benefit-Cost Analysis in Environmental, Health, and Safety Regulation: A Statement of Principles*, with Kenneth J. Arrow, Maureen L. Cropper, George C. Eads, Lester B. Lave, Roger G. Noll, Paul R. Portney, Milton Russell, Richard L. Schmalensee, V. Kerry Smith, and Robert N. Stavins, AEI Press and Resources for the Future, Washington, D.C., 1996.
- A Primer on Environmental Policy Design*, Harwood Academic Publishers, London, 1989.

Book Chapters

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