Curriculum Vitae

Name: Robert D. Willig

Address: 220 Ridgeview Road, Princeton, New Jersey 08540

Birth: 1/16/47; Brooklyn, New York

Married, four children

Education: Ph.D. Economics, Stanford University, 1973

Dissertation: Welfare Analysis of Policies
Affecting Prices and Products.

Advisor: James Rosse

M.S. Operations Research, Stanford University, 1968.

A.B. Mathematics, Harvard University, 1967.

Professional Positions:

Lecturer with the rank of Professor, Woodrow Wilson School of Public and International Affairs, 2/2017–6/2020.

Professor of Economics and Public Affairs, Emeritus, Princeton University, 7/2016–

Professor of Economics and Public Affairs, Princeton University, 7/1978–6/2016.

Principal External Advisor, Infrastructure Program, Inter-American Development Bank, 6/97–8/98.

Deputy Assistant Attorney General, U.S. Department of Justice, 1989–1991.

Supervisor, Economics Research Department, Bell Laboratories, 1977–1978.

Visiting Lecturer (with rank of Associate Professor), Department of Economics and Woodrow Wilson School, Princeton University, 1977–1978 (part time). Economics Research Department, Bell Laboratories, 1973–1977.

Lecturer, Economics Department, Stanford University, 1971–1973.

Other Professional Activities

ABA Section of Antitrust Law Economics Task Force, 2010–2012.

Advisory Committee, Compass Lexecon 2010–

OECD Advisory Council for Mexican Economic Reform, 2008–2009.

Senior Consultant, Compass Lexecon, 2008–

Director, Competition Policy Associates, Inc., 2003–2005.

Advisory Bd., Electronic Journal of I.O. and Regulation Abstracts, 1996–2008.

Advisory Board, Journal of Network Industries, 2004–2010.

Visiting Faculty Member (occasional), International Program on Privatization and Regulatory Reform, Harvard Institute for International Development, 1996–2000.

Member, National Research Council Highway Cost Allocation Study Review Committee, 1995–1998.

Member, Defense Science Board Task Force on the Antitrust Aspects of Defense Industry Consolidation, 1993–1994.

Editorial Board, Utilities Policy, 1990–2001.

Leif Johanson Lecturer, University of Oslo, November 1988.

Member, New Jersey Governor's Task Force on Market-Based Pricing of Electricity, 1987–1989.

Co-editor, Handbook of Industrial Organization, 1984–1989.

Associate Editor, <u>Journal of Industrial Economics</u>, 1984–1989.

Director, Consultants in Industry Economics, Inc., 1983–1989, 1991–1994.

Fellow, Econometric Society, 1981–

Organizing Committee, Carnegie-Mellon-N.S.F. Conference on Regulation, 1985.

Board of Editors, American Economic Review, 1980-1983.

Nominating Committee, American Economic Association, 1980–1981.

Research Advisory Committee, American Enterprise Institute, 1980–1986.

Editorial Board, M.I.T. Press Series on Government Regulation of Economic Activity, 1979–1993.

Program Committee, 1980 World Congress of the Econometric Society.

Program Committee, Econometric Society, 1979, 1981, 1985.

Organizer, American Economic Association Meetings: 1980, 1982.

American Bar Association Section 7 Clayton Act Committee, 1981.

Principal Investigator, NSF grant SOC79-0327, 1979-80; NSF grant 285-6041, 1980–1982; NSF grant SES-8038866, 1983–1984, 1985–1986.

Aspen Task Force on the Future of the Postal Service, 1978–1980.

Organizing Committee of Sixth Annual Telecommunications Policy Research Conference, 1977–1978.

Visiting Fellow, University of Warwick, July 1977.

Institute for Mathematical Studies in the Social Sciences, Stanford University, 1975.

Published Articles and Book Chapters:

"Intertemporal Failures of the Invisible Hand: Theory and Implications for International Market Dominance," (with W.J. Baumol), reprinted in <u>Indian Economic Review 65 Years of Selected Papers</u>, Volume 54 – Supplement 1, December 2019, s45–s56.

"Economic Foundations for 21st Century Freight Rail Rate Regulation," (with John W. Mayo), in <u>U.S. Freight Rail Economics and Policy: Are We on the Right Track?</u>, Macher, J.T. and J.W. Mayo (eds.), Routledge, 2019.

"Is Professor Salop Right That Judge Leon Bungled United States v. AT&T?" (with Janusz Ordover and J. Gregory Sidak), <u>The Criterion Journal on Innovation</u>, v. 3, 249–263, 2018.

"The Role of the Circle Principle in Market Definition," (with Bryan Keating and Jonathan Orszag), The Antitrust Source, April 2018, 1–6.

"Economy-wide and Sectoral Impacts on Workers of Brazil's Internet Rollout" (with Mark A. Dutz, Lucas Ferreira Mation, and Stephen D. O'Connell), <u>Forum for Social Economics</u>, 46:2, 160–177, 2017.

- "Two-Sided Market Definition and Competitive Effects for Credit Cards After United States v. American Express" (with J. Gregory Sidak), The Criterion Journal on Innovation, v. 1, 1301, 2016.
- "Unilateral Competitive Effects" (with Bryan Keating), in <u>The Oxford Handbook on International Antitrust Economics</u>, (Roger D. Blair and D. Daniel Sokol, eds.), Oxford University Press, 2014.
- "Activating Actavis: A More Complete Story" (with Barry C. Harris, Kevin M. Murphy, and Matthew B. Wright), <u>Antitrust, vol. 28, No. 2 (Spring), 2014.</u>
- "'Reverse Payments' in Settlements of Patent Litigation: Split Opinions on Schering-Plough's K-Dur (2005 and 2012)" (with John P. Bigelow), in <u>The Antitrust Revolution</u> (Sixth Edition), (J. Kwoka and Laurence White, eds.), Oxford University Press, 2013.
- "The Delta-Northwest Merger: Consumer Benefits from Airline Network Effects (2008)" (with Mark Israel, Bryan Keating and Daniel Rubinfeld), in <u>The Antitrust Revolution</u> (Sixth Edition), (J. Kwoka and Laurence White, eds.), Oxford University Press, 2013.
- "Airline Network Effects and Consumer Welfare" (with Bryan Keating, Mark Israel and Daniel Rubinfeld), Review of Network Economics, published online November 2013.
- "The Liftoff of Consumer Benefits from the Broadband Revolution" (with Mark Dutz and Jon Orszag), Review of Network Economics (2012) vol. 11, issue 4, article 2.
- "Competition and innovation-driven inclusive growth" (with Mark Dutz, Ioannis Kessides and Stephen O'Connell), in <u>Promoting Inclusive Growth: Challenges and Policies</u>, Luiz de Mello and Mark Dutz (eds.), OECD, 2011.
- "Unilateral Competitive Effects of Mergers: Upward Pricing Pressure, Product Quality, and Other Extensions," Review of Industrial Organization (2011) 39:19–38.
- "Antitrust and Patent Settlements: The Pharmaceutical Cases," (with John Bigelow) in <u>The Antitrust Revolution</u> (Fifth Edition), John Kwoka and Lawrence White (eds.), 2009.
- "The 1982 Department of Justice Merger Guidelines: An Economic Assessment," (with J. Ordover) reprinted in <u>Economics of Antitrust Law</u>, Benjamin Klein (ed.), Edward Elgar, 2008.
- "On the Antitrust Treatment of Production Joint Ventures," (with Carl Shapiro) reprinted in Economics of Antitrust Law, Benjamin Klein (ed.), Edward Elgar, 2008.
- "Consumer's Surplus Without Apology," reprinted in <u>Applied Welfare Economics</u>, Richard Just, Darrel Hueth and Andrew Schmitz (eds.), Edward Elgar, 2008; reprinted in <u>Readings in Social Welfare: Theory and Policy</u>, Robert E. Kuenne (ed.), Blackwell, 2000, pp. 86–97; reprinted in Readings in Microeconomic Theory, M. M. La Manna (ed.), Dryden Press, 1997, pp. 201–212.

- "The Risk of Contagion from Multi-Market Contact," (with Charles Thomas), <u>The International</u> Journal of Industrial Organization, Vol. 24, Issue 6 (Nov. 2006), pp. 1157–1184.
- "Pareto-Superior Nonlinear Outlay Schedules," reprinted in <u>The Economics of Public Utilities</u>, Ray Rees (ed.), Edward Elgar, 2006; reprinted in <u>The Economics of Price Discrimination</u>, G. Norman, (ed.), Edward Elgar, 1999.
- "Economic Effects of Antidumping Policy," reprinted in <u>The WTO and Anti-Dumping</u>, Douglas Nelson (ed.), Edward Elgar, 2005.
- "Merger Analysis, Industrial Organization Theory and the Merger Guidelines," reprinted in Antitrust and Competition Policy, Andrew Kleit (ed.) Edward Elgar, 2005.
- "Antitrust Policy Towards Agreements That Settle Patent Litigation," (with John Bigelow), Antitrust Bulletin, Fall 2004, pp. 655–698.
- "Economies of Scope," (with John Panzar), reprinted in <u>The Economics of Business Strategy</u>, John Kay (ed.), Edward Elgar, 2003.
- "Panel on Substantive Standards for Mergers and the Role of Efficiencies," in <u>International Antitrust Law & Policy</u>, Barry E. Hawk (ed.), Juris Publishing, 2003.
- "Practical Rules for Pricing Access in Telecommunications," (with J. Ordover) in <u>Second Generation Reforms in Infrastructure Services</u>, F. Basanes and R. Willig (eds.), Johns Hopkins Press, 2002.
- "Comments on Antitrust Policy in the Clinton Administration," in <u>American Economic Policy in the 1990s</u>, J. Frankel and P. Orszag (eds.), MIT Press, 2002.
- "Entrepreneurship, Access Policy and Economic Development: Lessons from Industrial Organization," (with M. Dutz and J. Ordover), <u>European Economic Review</u>, (44)4–6 (2000), pp. 739–747.
- "Public Versus Regulated Private Enterprise," reprinted in <u>Privatization in Developing Countries</u>, P. Cook and C. Kirkpatrick (eds.), Edward Elgar, 2000.
- "Deregulation v. the Legal Culture: Panel Discussion," in <u>Is the Telecommunications Act of 1996 Broken?</u>, G. Sidak (ed.), AEI Press, 1999.
- "Economic Principles to Guide Post-Privatization Governance," in <u>Can Privatization Deliver?</u> <u>Infrastructure for Latin America</u>, R. Willig co-editor, Johns Hopkins Press, 1999.
- "Access and Bundling in High-Technology Markets," (with J. A. Ordover), in <u>Competition</u>, <u>Innovation and the Microsoft Monopoly: Antitrust in the Digital Marketplace</u>, J. A. Eisenach and T. Lenard (eds.), Kluwer, 1999.

- "Competitive Rail Regulation Rules: Should Price Ceilings Constrain Final Products or Inputs?," (With W. J. Baumol), Journal of Transport Economics and Policy, Vol. 33, Part 1, pp. 1–11.
- "Economic Effects of Antidumping Policy," <u>Brookings Trade Forum: 1998</u>, pp. 19–41.
- "Interview With Economist Robert D. Willig," Antitrust, Vol. 11, No. 2, Spring 1997, pp. 11–15.
- "Parity Pricing and its Critics: A Necessary Condition for Efficiency in Provision of Bottleneck Services to Competitors," (with W. J. Baumol and J. A. Ordover), <u>Yale Journal on Regulation</u>, Vol. 14, No. 1, Winter 1997, pp. 145–164.
- "Restructuring Regulation of the Rail Industry," (with Ioannis Kessides), in <u>Private Sector</u>, Quarterly No. 4, September 1995, pp. 5 8. Reprinted in <u>Viewpoint</u>, October, 1995, The World Bank. Reprinted in <u>Private Sector</u>, *special edition*: Infrastructure, June 1996.
- "Competition and Regulation in the Railroad Industry," (with Ioannis Kessides), in <u>Regulatory</u> Policies and Reform: A Comparative Perspective, C. Frischtak (ed.), World Bank, 1996.
- "Economic Rationales for the Scope of Privatization," (with Carl Shapiro), reprinted in <u>The Political Economy of Privatization and Deregulation</u>, E. E. Bailey and J. R. Pack (eds.), The International Library of Critical Writings in Economics, Edward Elgar Publishing Co., 1995, pp. 95–130.
- "Weak Invisible Hand Theorems on the Sustainability of Multi-product Natural Monopoly," (with W. Baumol and E. Bailey), reprinted in <u>The Political Economy of Privatization and Deregulation</u>, E. E. Bailey and J. R. Pack (eds.), The International Library of Critical Writings in Economics, Edward Elgar Publishing Co., 1995, pp. 245–260.
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- "Economics and the 1992 Merger Guidelines: A Brief Survey," (with J. Ordover), <u>Review of Industrial Organization</u>, V. 8, No. 2, (1993), pp. 139–150.
- "The Role of Sunk Costs in the 1992 Guidelines' Entry Analysis," <u>Antitrust</u>, V. 6, No. 3 (summer 1992).
- "Antitrust Lessons from the Airlines Industry: The DOJ Experience," <u>Antitrust Law Journal</u>, V. 60, No. 2 (1992).
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- "Anti-Monopoly Policies and Institutions," in <u>The Emergence of Market Economies in Eastern</u> Europe, Christopher Clague and Gordon Rausser (eds.), Basil Blackwell, 1992.
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- "Merger Analysis, Industrial Organization Theory, and Merger Guidelines," <u>Brookings Papers on Economic Activity Microeconomics 1991</u>, pp. 281–332.
- "On the Antitrust Treatment of Production Joint Ventures," (with C. Shapiro), <u>Journal of Economic Perspectives</u>, Vol. 4, No. 3, Summer 1990, pp. 113–130.
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- "Railroad Deregulation: Using Competition as a Guide," (with W. Baumol), <u>Regulation</u>, January/February 1987, Vol. 11, No. 1, pp. 28–36.
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- "On the Theory of Perfectly Contestable Markets," (with J. Panzar and W. Baumol), in <u>New Developments in The Analysis of Market Structure</u>, J. Stiglitz and F. Mathewson (eds.), MIT Press, 1986.
- "InterLATA Capacity Growth and Market Competition," (with C. Shapiro), in Telecommunications and Equity: Policy Research Issues, J. Miller (ed.), North Holland, 1986.
- "Corporate Governance and Market Structure," in <u>Economic Policy in Theory and Practice</u>, A. Razin and E. Sadka (eds.), Macmillan Press, 1986.
- "Antitrust for High-Technology Industries: Assessing Research Joint Ventures and Mergers," (with J. Ordover), <u>Journal of Law and Economics</u>, Vol 28(2), May 1985, pp. 311–334.
- "Non-Price Anticompetitive Behavior by Dominant Firms Toward the Producers of Complementary Products," (with J. Ordover and A. Sykes), in <u>Antitrust and Regulation</u>, F.M. Fisher (ed.), MIT Press, 1985.
- "Telephones and Computers: The Costs of Artificial Separation," (with W. Baumol), <u>Regulation</u>, March/April 1985.
- "Transfer Principles in Income Redistribution," (with P. Fishburn), <u>Journal of Public Economics</u>, 25 (1984), pp. 1–6.
- "Market Structure and Government Intervention in Access Markets," in <u>Telecommunications Access and Public Policy</u>, A. Baughcam and G. Faulhaber (eds.), 1984.
- "Pricing Issues in the Deregulation of Railroad Rates," (with W. Baumol), in <u>Economic Analysis of Regulated Markets: European and U. S. Perspectives</u>, J. Finsinger (ed.), 1983.
- "Local Telephone Pricing in a Competitive Environment," (with J. Ordover), in <u>Telecommunications Regulation Today and Tomorrow</u>, E. Noam (ed.), Harcourt Brace Jovanovich, 1983.
- "Economics and Postal Pricing Policy," (with B. Owen), in <u>The Future of the Postal Service</u>, J. Fleishman (ed.), Praeger, 1983.

- "Selected Aspects of the Welfare Economics of Postal Pricing," in <u>Telecommunications Policy Annual</u>, Praeger, 1987.
- "The Case for Freeing AT&T" (with M. Katz), Regulation, July-Aug. 1983, pp. 43–52.
- "Predatory Systems Rivalry: A Reply" (with J. Ordover and A. Sykes), <u>Columbia Law Review</u>, Vol. 83, June 1983, pp. 1150–1166. Reprinted in Corporate Counsel's Handbook 1984.
- "Sector Differentiated Capital Taxation with Imperfect Competition and Interindustry Flows," <u>Journal of Public Economics</u>, Vol. 21, 1983.
- "Contestable Markets: An Uprising in the Theory of Industry Structure: Reply," (with W.J. Baumol and J.C. Panzar), American Economic Review, Vol. 73, No. 3, June 1983, pp. 491–496.
- "The 1982 Department of Justice Merger Guidelines: An Economic Assessment," (with J. Ordover), <u>California Law Review</u>, Vol. 71, No. 2, March 1983, pp. 535–574. Reprinted in <u>Antitrust Policy in Transition: The Convergence of Law and Economics</u>, E.M. Fox and J.T. Halverson (eds.), 1984.
- "Intertemporal Failures of the Invisible Hand: Theory and Implications for International Market Dominance," (with W.J. Baumol), <u>Indian Economic Review</u>, Vol. XVI, Nos. 1 and 2, January-June 1981, pp. 1–12.
- "Unfair International Trade Practices," (with J. Ordover and A. Sykes), <u>Journal of International</u> Law and Politics, Vol. 15, No. 2, winter 1983, pp. 323–337.
- "Journals as Shared Goods: Reply," (with J. Ordover), <u>American Economic Review</u>, V. 72, No. 3, June 1982, pp. 603–607.
- "Herfindahl Concentration, Rivalry, and Mergers," (with J. Ordover and A. Sykes), <u>Harvard Law Review</u>, V. 95, No. 8, June 1982, pp. 1857–1875.
- "An Economic Definition of Predation: Pricing and Product Innovation," (with J. Ordover), <u>Yale</u> Law Journal, Vol. 90: 473, December 1981, pp. 1–44.
- "Fixed Costs, Sunk Costs, Entry Barriers, and the Sustainability of Monopoly," (with W. Baumol), Quarterly Journal of Economics, Vol. 96, No. 3, August 1981, pp. 405–432.
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- "Economies of Scope," (with J. Panzar), <u>American Economic Review</u>, Vol. 72, No. 2, May 1981, pp. 268–272.
- "Income-Distribution Concerns in Regulatory Policymaking," (with E.E. Bailey) in <u>Studies in</u> Public Regulation (G. Fromm, ed.), MIT Press, Cambridge, 1981, pp. 79–118.

- "An Economic Definition of Predatory Product Innovation," (with J. Ordover), in <u>Strategic Predation and Antitrust Analysis</u>, S. Salop (ed.), 1981.
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- "Pricing Decisions and the Regulatory Process," in <u>Proceedings of the 1979 Rate Symposium on Problems of Regulated Industries</u>, University of Missouri-Columbia Extension Publications, 1980, pp. 379–388.
- "The Theory of Network Access Pricing," in <u>Issues in Public Utility Regulation</u>, H.M. Trebing (ed.), MSU Public Utilities Papers, 1979.
- "Customer Equity and Local Measured Service," in <u>Perspectives on Local Measured Service</u>, J. Baude, et al. (ed.), 1979, pp. 71–80.
- "The Role of Information in Designing Social Policy Towards Externalities," (with J. Ordover), <u>Journal of Public Economics</u>, V. 12, 1979, pp. 271–299.
- "Economies of Scale and the Profitability of Marginal-Cost Pricing: Reply," (with J. Panzar), Quarterly Journal of Economics, Vol. 93, No. 4, November 1979, pp. 743–744.
- "Theoretical Determinants of the Industrial Demand for Electricity by Time of Day," (with J. Panzar) Journal of Econometrics, V. 9, 1979, pp. 193–207.
- "Industry Performance Gradient Indexes," (with R. Dansby), <u>American Economic Review</u>, V. 69, No. 3, June 1979, pp. 249–260.
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- "Multiproduct Technology and Market Structure," American Economic Review, Vol. 69, No. 2, May 1979, pp. 346–351.
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- "Decisions with Estimation Uncertainty," (with R. Klein, D. Sibley, and L. Rafsky), <u>Econometrica</u>, V. 46, No. 6, November 1978, pp. 1363–1388.
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- "On the Comparative Statics of a Competitive Industry With Infra-marginal Firms," (with J. Panzar), American Economic Review, V. 68, No. 3, June 1978, pp. 474–478.
- "Pareto Superior Nonlinear Outlay Schedules," <u>Bell Journal of Economics</u>, Vol. 9, No. 1, Spring 1978, pp. 56–69.
- "Predatoriness and Discriminatory Pricing," in <u>The Economics of Anti-Trust: Course of Study</u> Materials, American Law Institute-American Bar Association, 1978.
- "Economies of Scale in Multi-Output Production," (with J. Panzar), <u>Quarterly Journal of Economics</u>, V. 91, No. 3, August 1977, pp. 481–494.
- "Weak Invisible Hand Theorems on the Sustainability of Multi-product Natural Monopoly," (with W. Baumol and E. Bailey), <u>American Economic Review</u>, V. 67, No. 3, June 1977, pp. 350–365.
- "Free Entry and the Sustainability of Natural Monopoly," (with J. Panzar), <u>Bell Journal of</u> Economics, Spring 1977, pp. 1–22.
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- "Ramsey-Optimal Pricing of Long Distance Telephone Services," (with E. Bailey), in <u>Pricing in Regulated Industries</u>, Theory and Application, J. Wenders (ed.), Mountain State Telephone and Telegraph Co., 1977, pp. 68–97.
- "Network Externalities and Optimal Telecommunications Pricing: A Preliminary Sketch," (with R. Klein), in <u>Proceedings of Fifth Annual Telecommunications Policy Research Conference</u>, Volume II, NTIS, 1977, pp. 475–505.
- "Otsenka ekonomicheskoi effektivnosti proizvodstvennoi informatsii" ["The Evaluation of the Economic Benefits of Productive Information"] in <u>Doklady Sovetskikh i Amerikanskikh Spetsialistov Predstavlennye na Pervyi Sovetsko-Amerikanskii Simpozium po Ekonomicheskoi Effektivnosti Informat sionnogo Obsluzhivaniia [Papers of Soviet and American Specialists Presented at the First Soviet-American Symposium on Costs and Benefits of Information Services], All Soviet Scientific Technical Information Center, Moscow, 1976.</u>
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Books

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Unpublished Papers and Reports:

"Joint Submission Of Antitrust Economists, Legal Scholars, And Practitioners To The House Judiciary Committee On The State Of Antitrust Law And Implications For Protecting Competition In Digital Markets," 5/15/2020.

"Brief Amici Curiae of 37 Economists, Antitrust Scholars, and Former Government Antitrust Officials In Support of Appellees and Supporting Affirmance," In the United States Court of Appeals for the District of Columbia Circuit; USCA Case #18-5214; United States of America, Plaintiff-Appellant, v. AT&T, Inc.; DirecTV Group Holdings, LLC; and TimeWarner Inc., Defendants-Appellees; On appeal from a final judgment of the U.S. District Court for the District of Columbia, Hon. Richard J. Leon, No. 1:17-cv-2511; 9/26/2018.

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"Brief of Leading Economists as Amici Curiae in Support of Respondents," In the Supreme Court of the United States; Douglas R. M. Nazarian, et al., v. PPL Energyplus, LLC, et al. and CPV Maryland, LLC, v. PPL Energyplus, LLC, et al.; On Writ of Certiorari to the US Court of Appeals for the Fourth Circuit; Nos. 14-614, 14–623; January 19, 2016.

"Technological change and labor market segmentation in the developing world: Evidence from Brazil," (with Dutz, Mark, Lucas Ferreira-Mation, and Stephen O'Connell), 2015 Background Paper for the 2016 World Bank's World Development Report.

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Supreme Court Amicus Brief Regarding Morgan Stanley Capital Group Inc. v. Public Utility District No. 1 of Snohomish County, Washington, (co-authored), AEI-Brookings Joint Center Brief No. 07-02, 12/2/07

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"Assessment of U.S. Merger Enforcement Policy," statement before the Antitrust Modernization Commission, 11/17/05.

"Investment is Appropriately Stimulated by TELRIC," in Pricing Based on Economic Cost, 12/2003.

"Brief of Amici Curiae Economics Professors, re Verizon v. Trinko, In the Supreme Court of the U.S.," (with W.J. Baumol, J.O. Ordover and F.R. Warren-Boulton), 7/25/2003.

"Stimulating Investment and the Telecommunications Act of 1996," (with J. Bigelow, W. Lehr and S. Levinson), 2002.

"An Economic Analysis of Spectrum Allocation and Advanced Wireless Services," (with Martin N. Baily, Peter R. Orszag, and Jonathan M. Orszag), 2002.

"Effective Deregulation of Residential Electric Service," 2001.

"Anticompetitive Forced Rail Access" (with W. J. Baumol), 2000.

- "The Scope of Competition in Telecommunications" (with B. Douglas Bernheim), 1998.
- "Why Do Christie and Schultz Infer Collusion From Their Data? (with Alan Kleidon), 1995.
- "Demonopolization," (with Sally Van Siclen), OECD Vienna Seminar Paper, 1993.
- "Economic Analysis of Section 337: The Balance Between Intellectual Property Protection and Protectionism," (with J. Ordover) 1990.
- "The Effects of Capped NTS Charges on Long Distance Competition," (with M. Katz).
- "Discussion of Regulatory Mechanism Design in the Presence of Research Innovation, and Spillover Effects," 1987.
- "Industry Economic Analysis in the Legal Arena," 1987.
- "Deregulation of Long Distance Telephone Services: A Public Interest Assessment," (with M. Katz).
- "Competition-Related Trade Issues," report prepared for OECD.
- "Herfindahl Concentration Index," (with J. Ordover), Memorandum for ABA Section 7 Clayton Act Committee, Project on Revising the Merger Guidelines, March 1981.
- "Market Power and Market Definition," (with J. Ordover), Memorandum for ABA Section 7 Clayton Act Committee, Project on Revising the Merger Guidelines, May 1981.
- "The Continuing Need for and National Benefits Derived from the REA Telephone Loan Programs An Economic Assessment," 1981.
- "The Economics of Equipment Leasing: Costing and Pricing," 1980.
- "Rail Deregulation and the Financial Problems of the U.S. Railroad Industry," (with W.J. Baumol), report prepared under contract to Conrail, 1979.
- "Price Indexes and Intertemporal Welfare," Bell Laboratories Economics Discussion Paper, 1974.
- "Consumer's Surplus: A Rigorous Cookbook," Technical Report #98, Economics Series, I.M.S.S.S., Stanford University, 1973.
- "An Economic-Demographic Model of the Housing Sector," (with B. Hickman and M. Hinz), Center for Research in Economic Growth, Stanford University, 1973.

Invited Conference Presentations:

Israel Competition Authority "Antitrust Analyses of Vertical Combinations"	2019
Griswold Center Symposium "Has the US Economy Become Less Competitive" — moderator	2019
NYU Stern and Concurrence Global Antitrust Economics Conference "Pharmaceutical Industry Antitrust" — moderator	2019
FTC Competition and Consumer Protection Hearings "The State of US Antitrust Law"	2018
Portuguese Competition Authority Public Seminar Series "Ups and Downs of Horizontal and Vertical Mergers"	2017
World Bank Workshop on Digital Technology Adoption, Skills, Productivity and Jobs in Latin America "Discussion of Models of Firm Heterogeneity"	2016
George Mason Law Review Annual Antitrust Symposium: Antitrust in an Interconnected World "GUPPI and the Safe Harbor"	2016
Competition Law & Policy Institute of New Zealand Annual Workshop "Merger Analysis Keynote"	2015
Economic Studies at Brookings: Railroads, Policy and the Economy "The Industry Perspective"	2015
Georgetown University McDonough School of Business Railroad Economics Symposium "The Role of Economic Theory in the 'Deregulated' Rail Industry"	2015
Brazilian School of Economics and Finance (FGV EPGE) Seminario "Public Interest Regulation: Lessons from Railroads"	2015
NYU School of Law Conference on the Fiftieth Anniversary of United States v. Philadelph National Bank: The Past, Present and Future of Merger Law "Discussion with Agency Economists"	ia 2013
Brookings Institution Conference on The Economics of the Airline Industry "Airline Network Effects and Consumer Welfare"	2012

AGEP Public Policy Conference on Pharmaceutical Industry Economics, Regulation and Legal Issues; Law and Economics Center, George Mason University School of Law	
"Pharmaceutical Brand-Generic Disputes"	2012
U.SEU Alliance Study Peer Review Conferences "Review of Cooperative Agreements in Transatlantic Airline Markets" "The Research Agenda Ahead"	2012 2012
Antitrust in the High Tech Sector Conference "Developments in Merger Enforcement"	2012
Georgetown Center for Business and Public Policy, Conference on the Evolution of Regula "Reflections on Regulation"	ntion 2011
Antitrust Forum, New York State Bar Association "Upward Price Pressure, Market Definition and Supply Mobility"	2011
American Bar Association, Antitrust Section, Annual Convention "The New Merger Guidelines' Analytic Highlights"	2011
OECD and World Bank Conference on Challenges and Policies for Promoting Inclusive Growth	
"Inclusive Growth From Competition and Innovation"	2011
Villanova School of Business Executive MBA Conference "Airline Network Effects, Competition and Consumer Welfare"	2011
NYU School of Law Conference on Critical Directions in Antitrust "Unilateral Competitive Effects"	2010
Conference on the State of European Competition Law and Enforcement in a Transatlantic Context "Recent Developments in Merger Control"	2010
Recent Developments in Weiger Control	2010
Center on Regulation and Competition, Universidad de Chile Law School "Economic Regulation and the Limits of Antitrust Law"	2010
Center on Regulation and Competition, Universidad de Chile Law School "Merger Policy and Guidelines Revision"	2010
Faculty of Economics, Universidad de Chile "Network Effects in Airlines Markets"	2010
Georgetown Law Global Antitrust Enforcement Symposium "New US Merger Guidelines"	2010

FTI London Financial Services Conference "Competition and Regulatory Reform"	2010
NY State Bar Association Annual Antitrust Conference "New Media Competition Policy"	2009
Antitrust Law Spring Meeting of the ABA "Antitrust and the Failing Economy Defense"	2009
Georgetown Law Global Antitrust Enforcement Symposium "Mergers: New Enforcement Attitudes in a Time of Economic Challenge"	2009
Phoenix Center US Telecoms Symposium "Assessment of Competition in the Wireless Industry"	2009
FTC and DOJ Horizontal Merger Guidelines Workshop "Direct Evidence is No Magic Bullet"	2009
Northwestern Law Research Symposium: Antitrust Economics and Competition Policy "Discussion of Antitrust Evaluation of Horizontal Mergers"	2008
Inside Counsel Super-Conference "Navigating Mixed Signals under Section 2 of the Sherman Act"	2008
Federal Trade Commission Workshop on Unilateral Effects in Mergers "Best Evidence and Market Definition"	2008
European Policy Forum, Rules for Growth: Telecommunications Regulatory Reform "What Kind of Regulation For Business Services?"	2007
Japanese Competition Policy Research Center, Symposium on M&A and Competition Police "Merger Policy Going Forward With Economics and the Economy"	y 2007
Federal Trade Commission and Department of Justice Section 2 Hearings "Section 2 Policy and Economic Analytic Methodologies"	2007
Pennsylvania Bar Institute, Antitrust Law Committee CLE "The Economics of Resale Price Maintenance and Class Certification"	2007
Pennsylvania Bar Institute, Antitrust Law Committee CLE "Antitrust Class Certification – An Economist's Perspective"	2007
Fordham Competition Law Institute, International Competition Economics Training Semina "Monopolization and Abuse of Dominance"	ar 2007

Canadian Bar Association Annual Fall Conference on Competition Law "Economic Tools for the Competition Lawyer"	2007
Conference on Managing Litigation and Business Risk in Multi-jurisdiction Antitrust Matte "Economic Analysis in Multi-jurisdictional Merger Control"	ers 2007
World Bank Conference on Structuring Regulatory Frameworks for Dynamic and Competi South Eastern European Markets "The Roles of Government Regulation in a Dynamic Economy"	tive 2006
Department of Justice/Federal Trade Commission Section 2 Hearings "(Allegedly) Monopolizing Tying Via Product Innovation"	2006
Fordham Competition Law Institute, Competition Law Seminar "Monopolization and Abuse of Dominance"	2006
Practicing Law Institute on Intellectual Property Antitrust "Relevant Markets for Intellectual Property Antitrust"	2006
PLI Annual Antitrust Law Institute "Cutting Edge Issues in Economics"	2006
World Bank's Knowledge Economy Forum V "Innovation, Growth and Competition"	2006
Charles University Seminar Series "The Dangers of Over-Ambitious Antitrust Regulation"	2006
NY State Bar Association Antitrust Law Section Annual Meeting "Efficient Integration or Illegal Monopolization?"	2006
World Bank Seminar "The Dangers of Over-Ambitious Regulation"	2005
ABA Section of Antitrust Law 2005 Fall Forum "Is There a Gap Between the Guidelines and Agency Practice?"	2005
Hearing of Antitrust Modernization Commission "Assessment of U.S. Merger Enforcement Policy"	2005
LEAR Conference on Advances in the Economics of Competition Law "Exclusionary Pricing Practices"	2005
Annual Antitrust Law Institute "Cutting Edge Issues in Economics"	2005

PRIOR Symposium on States and Stem Cells "Assessing the Economics of State Stem Cell Programs"	2005
ABA Section of Antitrust Law – AALS Scholars Showcase "Distinguishing Anticompetitive Conduct"	2005
Allied Social Science Associations National Convention "Antitrust in the New Economy"	2005
ABA Section of Antitrust Law 2004 Fall Forum "Advances in Economic Analysis of Antitrust"	2004
Phoenix Center State Regulator Retreat "Regulatory Policy for the Telecommunications Revolution"	2004
OECD Competition Committee "Use of Economic Evidence in Merger Control"	2004
Justice Department/Federal Trade Commission Joint Workshop "Merger Enforcement"	2004
Phoenix Center Annual U.S. Telecoms Symposium "Incumbent Market Power"	2003
Center for Economic Policy Studies Symposium on Troubled Industries "What Role for Government in Telecommunications?"	2003
Princeton Workshop on Price Risk and the Future of the Electric Markets "The Structure of the Electricity Markets"	2003
2003 Antitrust Conference "International Competition Policy and Trade Policy"	2003
International Industrial Organization Conference "Intellectual Property System Reform"	2003
ABA Section of Antitrust Law 2002 Fall Forum "Competition, Regulation and Pharmaceuticals"	2002

Villa Mondragone International Economic Seminar "Competition Policy for Network and Internet Markets"	2000
HIID International Workshop on Infrastructure Policy "Infrastructure Privatization and Regulation"	2000
FTC Public Workshop on Competition Policy for E-Commerce "Necessary Conditions for Cooperation to be Problematic"	2001
2001 Antitrust Conference "Collusion Cases: Cutting Edge or Over the Edge?" "Dys-regulation of California Electricity"	2001 2001
Tel-Aviv Workshop on Industrial Organization and Anti-Trust "The Risk of Contagion from Multimarket Contact"	2001
Harvard University Conference on American Economic Policy in the 1990s "Comments on Antitrust Policy in the Clinton Administration"	2001
ABA Antitrust Law Section Task Force Conference "Time, Change, and Materiality for Monopolization Analyses"	2001
IPEA International Seminar on Regulation and Competition "Electricity Markets: Deregulation of Residential Service" "Lessons for Brazil from Abroad"	2001 2001
Federal Energy Regulatory Commission Workshop "Effective Deregulation of Residential Electric Service"	2001
The Conference Board: Antitrust Issues in Today's Economy "The 1982 Merger Guidelines at 20"	2002
Center for Economic Policy Studies Symposium on Energy Policy "The Future of Power Supply"	2002
Law and Public Affairs Conference on the Future of Internet Regulation "Open Access and Competition Policy Principles"	2002
Department of Commerce Conference on the State of the Telecom Sector "Stimulating Investment and the Telecommunications Act of 1996"	2002
Department of Justice Telecom Workshop "Stimulating Investment and the Telecommunications Act of 1996"	2002
Fordham Conference on International Antitrust Law and Policy "Substantive Standards for Mergers and the Role of Efficiencies"	2002

New Developments in Railroad Economics: Infrastructure Investment and Access Policies "Railroad Access, Regulation, and Market Structure"	2000
The Multilateral Trading System at the Millennium "Efficiency Gains From Further Liberalization"	2000
Singapore – World Bank Symposium on Competition Law and Policy "Policy Towards Cartels and Collusion"	2000
CEPS: Is It a New World?: Economic Surprises of the Last Decade "The Internet and E-Commerce"	2000
Cutting Edge Antitrust: Issues and Enforcement Policies "The Direction of Antitrust Entering the New Millennium"	2000
The Conference Board: Antitrust Issues in Today's Economy "Antitrust Analysis of Industries With Network Effects"	1999
CEPS: New Directions in Antitrust "Antitrust in a High-Tech World"	1999
World Bank Meeting on Competition and Regulatory Policies for Development "Economic Principles to Guide Post-Privatization Governance"	1999
1999 Antitrust Conference "Antitrust and the Pace of Technological Development" "Restructuring the Electric Utility Industry"	1999 1999
HIID International Workshop on Privatization, Regulatory Reform and Corporate Governance	
"Privatization and Post-Privatization Regulation of Natural Monopolies"	1999
The Federalist Society: Telecommunications Deregulation: Promises Made, Potential Lost? "Grading the Regulators"	1999
Inter-American Development Bank: Second Generation Issues In the Reform Of Public Services	
"Post-Privatization Governance" "Issues Surrounding Access Arrangements"	1999 1999
Economic Development Institute of the World Bank — Program on Competition Policy "Policy Towards Horizontal Mergers"	1998

Twenty-fifth Anniversary Seminar for the Economic Analysis Group of the Department of	
Justice "Market Definition in Antitrust Analysis"	1998
HIID International Workshop on Privatization, Regulatory Reform and Corporate Governar "Infrastructure Architecture and Regulation: Railroads"	nce 1998
EU Committee Competition Conference – Market Power "US/EC Perspective on Market Definition"	1998
Federal Trade Commission Roundtable "Antitrust Policy for Joint Ventures"	1998
1998 Antitrust Conference "Communications Mergers"	1998
The Progress and Freedom Foundation Conference on Competition, Convergence, and the Microsoft Monopoly "Access and Bundling in High-Technology Markets"	1998
FTC Program on The Effective Integration of Economic Analysis into Antitrust Litigation "The Role of Economic Evidence and Testimony"	1997
FTC Hearings on Classical Market Power in Joint Ventures "Microeconomic Analysis and Guideline"	1997
World Bank Economists — Week IV Keynote "Making Markets More Effective With Competition Policy"	1997
Brookings Trade Policy Forum "Competition Policy and Antidumping: The Economic Effects"	1997
University of Malaya and Harvard University Conference on The Impact of Globalisation and Privatisation on Malaysia and Asia in the Year 2020 "Microeconomics, Privatization, and Vertical Integration"	1997
ABA Section of Antitrust Law Conference on The Telecommunications Industry "Current Economic Issues in Telecommunications"	1997
Antitrust 1998: The Annual Briefing "The Re-Emergence of Distribution Issues"	1997
Inter-American Development Bank Conference on Private Investment, Infrastructure Reform and Governance in Latin America & the Caribbean "Economic Principles to Guide Post-Privatization Governance"	1997

Harvard Forum on Regulatory Reform and Privatization of Telecommunications in the Middle East	
"Privatization: Methods and Pricing Issues"	1997
American Enterprise Institute for Public Policy Research Conference "Discussion of Local Competition and Legal Culture"	1997
Harvard Program on Global Reform and Privatization of Public Enterprises "Infrastructure Privatization and Regulation: Freight"	1997
World Bank Competition Policy Workshop "Competition Policy for Entrepreneurship and Growth"	1997
Eastern Economics Association Paul Samuelson Lecture "Bottleneck Access in Regulation and Competition Policy"	1997
ABA Annual Meeting, Section of Antitrust Law "Antitrust in the 21st Century: The Efficiencies Guidelines"	1997
Peruvian Ministry of Energy and Mines Conference on Regulation of Public Utilities "Regulation: Theoretical Context and Advantages vs. Disadvantages"	1997
The FCC: New Priorities and Future Directions "Competition in the Telecommunications Industry"	1997
American Enterprise Institute Studies in Telecommunications Deregulation "The Scope of Competition in Telecommunications"	1996
George Mason Law Review Symposium on Antitrust in the Information Revolution "Introduction to the Economic Theory of Antitrust and Information"	1996
Korean Telecommunications Public Lecture "Market Opening and Fair Competition"	1996
Korea Telecommunications Forum "Desirable Interconnection Policy in a Competitive Market"	1996
European Association for Research in Industrial Economics Annual Conference "Bottleneck Access: Regulation and Competition Policy"	1996
Harvard Program on Global Reform and Privatization of Public Enterprises "Railroad and Other Infrastructure Privatization"	1996

FCC Forum on Antitrust and Economic Issues Involved with InterLATA Entry "The Scope of Telecommunications Competition"	1996
Citizens for a Sound Economy Policy Watch on Telecommunications Interconnection "The Economics of Interconnection"	1996
World Bank Seminar on Experiences with Corporatization "Strategic Directions of Privatization"	1996
FCC Economic Forum on the Economics of Interconnection "Lessons from Other Industries"	1996
ABA Annual Meeting, Section of Antitrust Law "The Integration, Disintegration, and Reintegration of the Entertainment Industry"	1996
Conference Board: 1996 Antitrust Conference "How Economics Influences Antitrust and Vice Versa"	1996
Antitrust 1996: A Special Briefing "Joint Ventures and Strategic Alliances"	1996
New York State Bar Association Section of Antitrust Law Winter Meeting "Commentary on Horizontal Effects Issues"	1996
FTC Hearings on the Changing Nature of Competition in a Global and Innovation-Driven A "Vertical Issues for Networks and Standards"	Age 1995
Wharton Seminar on Applied Microeconomics "Access Policies with Imperfect Regulation"	1995
Antitrust 1996, Washington D.C. "Assessing Joint Ventures for Diminution of Competition"	1995
ABA Annual Meeting, Section of Antitrust Law "Refusals to Deal — Economic Tests for Competitive Harm"	1995
FTC Seminar on Antitrust Enforcement Analysis "Diagnosing Collusion Possibilities"	1995
Philadelphia Bar Education Center: Antitrust Fundamentals "Antitrust — The Underlying Economics"	1995

Vanderbilt University Conference on Financial Markets "Why Do Christie and Schultz Infer Collusion From Their Data?"	1995
ABA Section of Antitrust Law Chairs Showcase Program "Discussion of Telecommunications Competition Policy"	1995
Conference Board: 1995 Antitrust Conference "Analysis of Mergers and Joint Ventures"	1995
ABA Conference on The New Antitrust: Policy of the '90s "Antitrust on the Super Highways/Super Airways"	1994
ITC Hearings on The Economic Effects of Outstanding Title VII Orders "The Economic Impacts of Antidumping Policies"	1994
OECD Working Conference on Trade and Competition Policy "Empirical Evidence on The Nature of Anti-dumping Actions"	1994
Antitrust 1995, Washington D.C. "Rigorous Antitrust Standards for Distribution Arrangements"	1994
ABA — Georgetown Law Center: Post Chicago-Economics: New Theories - New Cases? "Economic Foundations for Vertical Merger Guidelines"	1994
Conference Board: Antitrust Issues in Today's Economy "New Democrats, Old Agencies: Competition Law and Policy"	1994
Federal Reserve Board Distinguished Economist Series "Regulated Private Enterprise Versus Public Enterprise"	1994
Institut d'Etudes Politiques de Paris "Lectures on Competition Policy and Privatization"	1993
Canadian Bureau of Competition Policy Academic Seminar Series, Toronto. "Public Versus Regulated Private Enterprise"	1993
CEPS Symposium on The Clinton Administration: A Preliminary Report Card "Policy Towards Business"	1993
Columbia Institute for Tele-Information Conference on Competition in Network Industries, New York, NY "Discussion of Deregulation of Networks: What Has Worked and What Hasn't"	1993
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World Bank Annual Conference on Development Economics "Public Versus Regulated Private Enterprise"	1993
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Columbia University Seminar on Applied Economic Theory, New York, NY "Economic Rationales for the Scope of Privatization"	1992
Howrey & Simon Conference on Antitrust Developments, Washington, DC "Competitive Effects of Concern in the Merger Guidelines"	1992
Arnold & Porter Colloquium on Merger Enforcement, Washington, DC "The Economic Foundations of the Merger Guidelines"	1992
American Bar Association, Section on Antitrust Law Leadership Council Conference, Monterey, CA "Applying the 1992 Merger Guidelines"	1992
OECD Competition Policy Meeting, Paris, France "The Economic Impacts of Antidumping Policy"	1992
Center for Public Choice Lecture Series, George Mason University Arlington, VA "The Economic Impacts of Antidumping Policy"	1992
Brookings Institution Microeconomics Panel, Washington, DC, "Discussion of the Evolution of Industry Structure"	1992
AT&T Conference on Antitrust Essentials "Antitrust Standards for Mergers and Joint Ventures"	1991
ABA Institute on The Cutting Edge of Antitrust: Market Power "Assessing and Proving Market Power: Barriers to Entry"	1991
	1991 1991
Special Seminar of the New Zealand Treasury "Strategic Behavior Antitrust and The Regulation of Natural Monopoly"	1991

Public Seminar of the Australian Trade Practices Commission "Antitrust Issues of the 1990's"	1991
National Association of Attorneys General Antitrust Seminar "Antitrust Economics"	1991
District of Columbia Bar's 1991 Annual Convention "Administrative and Judicial Trends in Federal Antitrust Enforcement"	1991
ABA Spring Meeting "Antitrust Lessons From the Airline Industry"	1991
Conference on The Transition to a Market Economy - Institutional Aspects "Anti-Monopoly Policies and Institutions"	1991
Conference Board's Thirtieth Antitrust Conference "Antitrust Issues in Today's Economy"	1991
American Association for the Advancement of Science Annual Meeting "Methodologies for Economic Analysis of Mergers"	1991
General Seminar, Johns Hopkins University "Economic Rationales for the Scope of Privatization"	1991
Capitol Economics Speakers Series "Economics of Merger Guidelines"	1991
CRA Conference on Antitrust Issues in Regulated Industries "Enforcement Priorities and Economic Principles"	1990
Pepper Hamilton & Scheetz Anniversary Colloquium "New Developments in Antitrust Economics"	1990
PLI Program on Federal Antitrust Enforcement in the 90's "The Antitrust Agenda of the 90's"	1990
FTC Distinguished Speakers Seminar "The Evolving Merger Guidelines"	1990
The World Bank Speakers Series "The Role of Antitrust Policy in an Open Economy"	1990
Seminar of the Secretary of Commerce and Industrial Development of Mexico "Transitions to a Market Economy"	1990

Southern Economics Association "Entry in Antitrust Analysis of Mergers" "Discussion of Strategic Investment and Timing of Entry"	1990 1990
American Enterprise Institute Conference on Policy Approaches to the Deregulation of Network Industries "Discussion of Network Problems and Solutions"	1990
American Enterprise Institute Conference on Innovation, Intellectual Property, and World Competition "Law and Economics Framework for Analysis"	1990
Banco Nacional de Desenvolvimento Economico Social Lecture "Competition Policy: Harnessing Private Interests for the Public Interest"	1990
Western Economics Association Annual Meetings "New Directions in Antitrust from a New Administration" "New Directions in Merger Enforcement: The View from Washington"	1990 1990
Woodrow Wilson School Alumni Colloquium "Microeconomic Policy Analysis and Antitrust — Washington 1990"	1990
Arnold & Porter Lecture Series "Advocating Competition" "Antitrust Enforcement"	1991 1990
ABA Antitrust Section Convention "Recent Developments in Market Definition and Merger Analysis"	1990
Federal Bar Association "Joint Production Legislation: Competitive Necessity or Cartel Shield?"	1990
Pew Charitable Trusts Conference "Economics and National Security"	1990
ABA Antitrust Section Midwinter Council Meeting "Fine-tuning the Merger Guidelines "The State of the Antitrust Division"	1990 1991
International Telecommunications Society Conference "Discussion of the Impact of Telecommunications in the UK"	1989
The Economists of New Jersey Conference "Recent Perspectives on Regulation"	1989

Conference on Current Issues Challenging the Regulatory Process "Innovative Pricing and Regulatory Reform" "Competitive Wheeling"	1989 1989
Conference Board: Antitrust Issues in Today's Economy "Foreign Trade Issues and Antitrust"	1989
McKinsey & Co. Mini-MBA Conference "Economic Analysis of Pricing, Costing, and Strategic Business Behavior"	1989
Olin Conference on Regulatory Mechanism Design "Revolutions in Regulatory Theory and Practice: Exploring The Gap"	1989
University of Dundee Conference on Industrial Organization and Strategic Behavior "Mergers in Differentiated Product Industries"	1988
Leif Johanson Lectures at the University of Oslo "Normative Issues in Industrial Organization"	1988
Mergers and Competitiveness: Spain Facing the EEC "Merger Policy" "R&D Joint Ventures"	1988 1988
New Dimensions in Pricing Electricity "Competitive Pricing and Regulatory Reform"	1988
Program for Integrating Economics and National Security: Second Annual Colloquium "Arming Decisions Under Asymmetric Information"	1988
European Association for Research in Industrial Economics "U.S. Railroad Deregulation and the Public Interest" "Economic Rationales for the Scope of Privatization" "Discussion of Licensing of Innovations"	1987 1989 1990
Annenberg Conference on Rate of Return Regulation in the Presence of Rapid Technical Cl "Discussion of Regulatory Mechanism Design in the Presence of Research, Innovation, and Spillover Effects"	hange 1987
Special Brookings Papers Meeting "Discussion of Empirical Approaches to Strategic Behavior" "New Merger Guidelines"	1987 1990
Deregulation or Regulation for Telecommunications in the 1990's "How Effective are State and Federal Regulations?"	1987

Conference Board Roundtable on Antitrust "Research and Production Joint Venture" "Intellectual Property and Antitrust"	1990 1987
Current Issues in Telephone Regulation "Economic Approaches to Market Dominance: Applicability of Contestable Markets"	1987
Harvard Business School Forum on Telecommunications "Regulation of Information Services"	1987
The Fowler Challenge: Deregulation and Competition in The Local Telecommunications Market "Why Reinvent the Wheel?"	1986
World Bank Seminar on Frontiers of Economics "What Every Economist Should Know About Contestable Markets"	1986
Bell Communications Research Conference on Regulation and Information "Fuzzy Regulatory Rules"	1986
Karl Eller Center Forum on Telecommunications "The Changing Economic Environment in Telecommunications: Technological Change and Deregulation"	1986
Railroad Accounting Principles Board Colloquium "Contestable Market Theory and ICC Regulation	1986
Canadian Embassy Conference on Current Issues in Canadian — U.S. Trade and Investment "Regulatory Revolution in the Infrastructure Industries"	t 1985
Eagleton Institute Conference on Telecommunications in Transition "Industry in Transition: Economic and Public Policy Overview"	1985
Brown University Citicorp Lecture "Logic of Regulation and Deregulation"	1985
Columbia University Communications Research Forum "Long Distance Competition Policy"	1985
American Enterprise Institute Public Policy Week "The Political Economy of Regulatory Reform"	1984
MIT Communications Forum "Deregulation of AT&T Communications"	1984

Bureau of Census Longitudinal Establishment Data File and Diversification Study Confer "Potential Uses of The File"	ence 1984
Federal Bar Association Symposium on Joint Ventures "The Economics of Joint Venture Assessment"	1984
Hoover Institute Conference on Antitrust "Antitrust for High-Technology Industries"	1984
NSF Workshop on Predation and Industrial Targeting "Current Economic Analysis of Predatory Practices"	1983
The Institute for Study of Regulation Symposium: Pricing Electric, Gas and Telecommunications Services Today and for the Future "Contestability As A Guide for Regulation and Deregulation"	1984
University of Pennsylvania Economics Day Symposium "Contestability and Competition: Guides for Regulation and Deregulation"	1984
Pinhas Sapir Conference on Economic Policy in Theory and Practice "Corporate Governance and Market Structure"	1984
Centre of Planning and Economic Research of Greece "Issues About Industrial Deregulation" "Contestability: New Research Agenda"	1984 1984
Hebrew and Tel Aviv Universities Conference on Public Economics "Social Welfare Dominance Extended and Applied to Excise Taxation"	1983
NBER Conference on Industrial Organization and International Trade "Perspectives on Horizontal Mergers in World Markets"	1983
Workshop on Local Access: Strategies for Public Policy "Market Structure and Government Intervention in Access Markets"	1982
NBER Conference on Strategic Behavior and International Trade "Industrial Strategy with Committed Firms: Discussion"	1982
Columbia University Graduate School of Business, Conference on Regulation and New Telecommunication Networks "Local Pricing in a Competitive Environment"	1982

International Economic Association Roundtable Conference on New Developments in Theory of Market Structure "Theory of Contestability" "Product Dev., Investment, and the Evolution of Market Structures"	the 1982 1982
N.Y.U. Conference on Competition and World Markets: Law and Economics "Competition and Trade Policy — International Predation"	1982
CNRS-ISPE-NBER Conference on the Taxation of Capital "Welfare Effects of Investment Under Imperfect Competition"	1982
Internationales Institut fur Management und Verwalturg Regulation Conference "Welfare, Regulatory Boundaries, and the Sustainability of Oligopolies"	1981
NBER-Kellogg Graduate School of Management Conference on the Econometrics of Market	et
Models with Imperfect Competition "Discussion of Measurement of Monopoly Behavior: An Application to the Cigarette Industry"	1981
The Peterkin Lecture at Rice University "Deregulation: Ideology or Logic?"	1981
FTC Seminar on Antitrust Analysis "Viewpoints on Horizontal Merger" "Predation as a Tactical Inducement for Exit"	1982 1980
NBER Conference on Industrial Organization and Public Policy "An Economic Definition of Predation"	1980
The Center for Advanced Studies in Managerial Economics Conference on The Economics	of
Telecommunication "Pricing Local Service as an Input"	1980
Aspen Institute Conference on the Future of the Postal Service "Welfare Economics of Postal Pricing"	1979
Department of Justice Antitrust Seminar "The Industry Performance Gradient Index"	1979
Eastern Economic Association Convention "The Social Performance of Deregulated Markets for Telecom Services"	1979
Industry Workshop Association Convention "Customer Equity and Local Measured Service"	1979

Symposium on Ratemaking Problems of Regulated Industries "Pricing Decisions and the Regulatory Process"	1979
Woodrow Wilson School Alumni Conference "The Push for Deregulation"	1979
NBER Conference on Industrial Organization "Intertemporal Sustainability"	1979
World Congress of the Econometric Society "Theoretical Industrial Organization"	1980
Institute of Public Utilities Conference on Current Issues in Public Utilities Regulation "Network Access Pricing"	1978
ALI-ABA Conference on the Economics of Antitrust "Predatoriness and Discriminatory Pricing"	1978
AEI Conference on Postal Service Issues "What Can Markets Control?"	1978
University of Virginia Conference on the Economics of Regulation "Public Interest Pricing"	1978
DRI Utility Conference "Marginal Cost Pricing in the Utility Industry: Impact and Analysis"	1978
International Meeting of the Institute of Management Sciences "The Envelope Theorem"	1977
University of Warwick Workshop on Oligopoly "Industry Performance Gradient Indexes"	1977
North American Econometric Society Convention "Intertemporal Sustainability" "Social Welfare Dominance" "Economics of Socre. DAIC, and Markets with Joint Production"	1979 1978 1977
"Economies of Scope, DAIC, and Markets with Joint Production" Telecommunications Policy Research Conference	1977
"Transition to Competitive Markets"	1986
"InterLATA Capacity Growth, Capped NTS Charges and Long Distance Competition"	1985
"Market Power in The Telecommunications Industry"	1985
"FCC Policy on Local Access Pricing"	1983
"Do We Need a Regulatory Safety Net in Telecommunications?"	1982
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"Anticompetitive Vertical Conduct"	1981
"Electronic Mail and Postal Pricing"	1980
"Monopoly, Competition and Efficiency": Chairman	1979
"A Common Carrier Research Agenda"	1978
"Empirical Views of Ramsey Optimal Telephone Pricing"	1977
"Recent Research on Regulated Market Structure"	1976
"Some General Equilibrium Views of Optimal Pricing"	1975
National Bureau of Economic Research Conference on Theoretical Industrial Organization	1076
"Compensating Variation as a Measure of Welfare Change"	1976
Conference on Pricing in Regulated Industries: Theory & Application	
"Ramsey Optimal Pricing of Long Distance Telephone Services"	1977
NBER Conference on Public Regulation	
"Income Distributional Concerns in Regulatory Policy-Making"	1977
Allied Social Science Associations National Convention	
"Merger Guidelines and Economic Theory"	1990
Discussion of "Competitive Rules for Joint Ventures"	1989
"New Schools in Industrial Organization"	1988
"Industry Economic Analysis in the Legal Arena"	1987
"Transportation Deregulation"	1984
Discussion of "Pricing and Costing of Telecommunications Services"	1983
Discussion of "An Exact Welfare Measure"	1982
"Optimal Deregulation of Telephone Services"	1982
"Sector Differentiated Capital Taxes"	1981
"Economies of Scope"	1980
"Social Welfare Dominance"	1980
"The Economic Definition of Predation"	1979
Discussion of "Lifeline Rates, Succor or Snare?"	1979
"Multiproduct Technology and Market Structure"	1978
"The Economic Gradient Method"	1978
"Methods for Public Interest Pricing"	1977
Discussion of "The Welfare Implications of New Financial Instruments"	1976
"Welfare Theory of Concentration Indices"	1976
Discussion of "Developments in Monopolistic Competition Theory"	1976
"Hedonic Price Adjustments"	1975
"Public Good Attributes of Information and its Optimal Pricing"	1975
"Risk Invariance and Ordinally Additive Utility Functions"	1974
"Consumer's Surplus: A Rigorous Cookbook"	1974
University of Chicago Symposium on the Economics of Regulated Public Utilities	
"Optimal Prices for Public Purposes"	1976

American Society for Information Science

"The Social Value of Information: An Economist's View"

Institute for Mathematical Studies in the Social Sciences Summer Seminar

"The Sustainability of Natural Monopoly"

1975

U.S.-U.S.S.R. Symposium on Estimating Costs and Benefits of Information Services

"The Evaluation of the Economic Benefits of Productive Information"

1975

NYU-Columbia Symposium on Regulated Industries

"Ramsey Optimal Public Utility Pricing"

1975

Research Seminars:

Bell Communications Research (2)

Bell Laboratories (numerous)

Carleton University Carnegie-Mellon University

Columbia University (4) Cornell University (2)

Department of Justice (3) Electric Power Research Institute

Federal Reserve Board Federal Trade Commission (4)

Georgetown University Harvard University (2)

Hebrew University Johns Hopkins University (2)

M. I. T. (4) Mathematica

New York University (4) Northwestern University (2)

Norwegian School of Economics and Business

Administration

Princeton University (many)

Rand Rice University

S.U.N.Y. Albany Stanford University (5)

University of California, San Diego

University of Chicago University of Delaware

University of Florida University of Illinois

University of Iowa (2) University of Maryland

University of Michigan University of Minnesota

University of Oslo University of Pennsylvania (3)

University of Toronto University of Virginia

University of Wisconsin University of Wyoming

Vanderbilt University World Bank (4)

Yale University (2)