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EXHIBIT A

May 1999

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EDUCATION

- 1968-1973 Columbia University, New York, New York
Graduate Department of Economics and European Institute of the School of International Affairs
Doctoral Dissertation: Three Essays on Economic Theory, May 1973. Ph.D. 1973.
- 1967-1968 McGill University, Montreal, Canada
Departments of Economics and Political Science
- 1963-1966 Warsaw University, Warsaw, Poland
Department of Political Economy. B.A. (equiv.), 1966.

HONORS

- 1973 Columbia University: Highest distinction for the doctoral dissertation
- 1971-1972 Columbia University: Honorary President's Fellow
- 1969-1971 Columbia University: President's Fellow
- 1967-1968 McGill University: Honors Student
- 1964, 1965 Warsaw University: Award for Academic Achievement, Department of Political Economy
- Who's Who in the World
Who's Who in America
Who's Who in the East

PROFESSIONAL EXPERIENCE

- June 1982 - present *Professor of Economics*
Department of Economics, New York University, New York, New York
- Sept. 1996 - present *Director of Masters in Economics Program*
Department of Economics, New York University, New York, New York
- Summer 1996- present *Lecturer*
International Program on Privatization and Reform
Institute for International Development, Harvard University, Cambridge, Massachusetts
- Aug. 1991 - Oct. 1992 *Deputy Assistant Attorney General for Economics*
Antitrust Division
United States Department of Justice, Washington, D.C.
- Sept. 1989 - July 1990 *Visiting Professor of Economics*
School of Management and Organization, Yale University, New Haven, Connecticut
- Lecturer in Law*
Yale Law School
- Mar. 1984 - June 1988 *Visiting Professor of Economics*
Universita Commerciale "Luigi Bocconi", Milan, Italy.
- June 1982 - Feb. 1985 *Director of Graduate Studies*
Department of Economics, New York University
- Sept. 1982 - June 1986 *Adjunct Professor of Law (part-time)*
Columbia University Law School, New York, New York
- Feb. 1982 - June 1982 *Acting Director of Graduate Studies*
Department of Economics, New York University
- June 1978 - June 1982 *Associate Professor of Economics*
Department of Economics, New York University
- Sept. 1979 - May 1990 *Lecturer in Economics and Antitrust*
New York University Law School
- Sept. 1977 - June 1978 *Member, Technical Staff*
Bell Laboratories, Holmdel, New Jersey
- Associate Professor of Economics*

Columbia University

Visiting Research Scholar

Center for Law and Economics, University of Miami, Miami, Florida

Sept. 1973 - Assistant Professor of Economics
Aug. 1977 New York University

Summer 1976 Fellow, Legal Institute for Economists,
Center for Law and Economics, University of Miami

Summer 1976 Visiting Researcher Bell Laboratories, Holmdel, New Jersey

OTHER PROFESSIONAL ACTIVITIES

1997 – 1998 Consultant, Inter-American Development Bank, Washington, D.C.

1997 – present Board of Editors, Antitrust Report

1995 - present Consultant, The World Bank, Washington, D.C.

1995 - present Senior Affiliate
Cornerstone Research, Inc., Palo Alto, California

Fall 1995 Testimony, Hearings of the Federal Trade Commission
"Anticipating the 21st Century: Competition Policy in the New High-Tech, Global Marketplace,"
Washington, D.C.

1994 - 1996 Senior Affiliate
Law and Economics Consulting Group, Emoryville, California

1994 - present Senior Affiliate
Consultants in Industry Economics, LLC, Princeton, New Jersey

1993 - 1994 Director
Consultants in Industry Economics, Inc., Princeton, New Jersey

1992 - 1993 Vice-Chair (*pro tempore*)
Economics Committee, American Bar Association, Chicago, Illinois

1992 - 1995 Senior Consultant
1990 - 1991 Organization for Economic Cooperation and Development, Paris, France

1991 Member
Ad hoc Working Group on Bulgaria's Draft Antitrust Law

The Central and East European Law Initiative
American Bar Association

1990 - 1991 Advisor
Polish Ministry of Finance and Anti-Monopoly Office
Warsaw, Poland

1990 - 1991 Member
Special Committee on Antitrust
Section of Antitrust Law, American Bar Association

1990 - 1991 Director and Senior Advisor
Putnam, Hayes & Bartlett, Inc., Washington, D.C.

1990 - 1996 Member
Predatory Pricing Monograph Task Force
Section of Antitrust Law, American Bar Association

1989 Hearings on Competitive Issues in the Cable TV Industry
Subcommittee on Monopolies and Business Rights of the Senate Judiciary Committee
Washington, D.C.

1989 Member
EEC Merger Control Task Force, American Bar Association

1988 - present Associate Member
American Bar Association

1987 - 1989 Adjunct Member
Antitrust and Trade Regulation Committee, The Association of the Bar of the City of New York

1984 Speaker, "Industrial and Intellectual Property: The Antitrust Interface"
National Institutes, American Bar Association, Philadelphia, Pennsylvania

1983 - 1990 Director
Consultants in Industry Economics, Inc

1982 Member
Organizing Committee
Tenth Annual Telecommunications Policy Research Conference, Annapolis, Maryland

1981 Member
Section 7 Clayton Act Committee, Project on Revising Merger Guidelines
American Bar Association

1980 Organizer

Invited Session on Law and Economics
American Economic Association Meetings, Denver, Colorado

1978 - 1979 Member
Department of Commerce Technical Advisory Board
Scientific and Technical Information Economics and Pricing Subgroup

1978 – present Referee for numerous scholarly journals, publishers, and the National Science Foundation

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Economic Association
American Bar Association

PUBLICATIONS

1. A. Journal Articles

"Parity Pricing and its Critics: Necessary Condition for Efficiency in Provision of Bottleneck Services to Competitors," with W. J. Baumol and R. D. Willig, *Yale Journal on Regulation*, vol. 14, Winter 1997, 146-63.

"Competition and Trade Law and the Case for a Modest Linkage," with E. Fox, *World Competition, Law and Economics Review*, vol. 19, December 1995, 5-34.

"On the Perils of Vertical Control by a Partial Owner of Downstream Enterprise," with W.J. Baumol, *Revue D'économie industrielle*, No. 69, 3^e trimestre 1994, 7-20.

"Competition Policy for Natural Monopolies in Developing Market Economy," with R.W. Pittman and P. Clyde, *Economics of Transition*, vol. 2, no. 3, September 1994, 317-343. Reprinted in B. Clay (ed), *De-monopolization and Competition Policy in Post-Communist Economies*, Westview Press 1996, 159-193.

"The 1992 Agency Horizontal Merger Guidelines and the Department of Justice's Approach to Bank Merger Analysis," with M. Guerin-Calvert, *Antitrust Bulletin*, vol. 37, no. 3, 667-688. Reprinted in *Proceedings of the 1992 Conference on Bank Structure and Competition: Credit Markets in Transition*, Federal Reserve Bank of Chicago, 1992, 541-560.

"Entry Analysis Under the 1992 Horizontal Merger Guidelines," with Jonathan B. Baker, *Antitrust Law Journal*, vol. 61, no. 1, Summer 1992, 139-146.

"Economics and the 1992 Merger Guidelines: A Brief Survey," with Robert D. Willig, *Review of Industrial Organization*, vol. 8, 139-150, 1993. Reprinted in E. Fox and J. Halverson (eds.), *Collaborations Among Competitors: Antitrust Policy and Economics*, American Bar Association, 1992, 639-652.

"Equilibrium Vertical Foreclosure: A Reply," with G. Saloner and S.C. Salop, *American Economic Review*, vol. 82, no. 3, 1992, 698-703.

"A Patent System for Both Diffusion and Exclusion," *Journal of Economic Perspectives*, vol. 5, Winter 1991, 43-60.

"R&D Cooperation and Competition," with M. Katz, *Brookings Papers on Economic Activity: Microeconomics*, 1990, 137-203.

"Equilibrium Vertical Foreclosure," with G. Saloner and S. Salop, *American Economic Review*, vol. 80, March 1990, 127-142.

"Antitrust Policy for High-Technology Industries," with W.J. Baumol, *Oxford Review of Economic Policy*, vol. 4, Winter 1988, 13-34. Reprinted in E. Fox and J. Halverson (eds.), *Collaborations Among Competitors: Antitrust Policy and Economics*, American Bar Association, 1991, 949-984.

"Conflicts of Jurisdiction: Antitrust and Industrial Policy," *Law and Contemporary Problems*, vol. 50, Summer 1987, 165-178.

"Market Structure and Optimal Management Organization," with C. Bull, *Rand Journal of Economics*, vol. 18, no. 4, Winter 1987, 480-491.

"A Sequential Concession Game with Asymmetric Information," with A. Rubinstein, *Quarterly Journal of Economics*, vol. 101, no.4, November 1986, 879-888.

"The G.M.-Toyota Joint Venture: An Economic Assessment," with C. Shapiro, *Wayne Law Journal*, vol. 31, no. 4, 1985, 1167-1194.

"Economic Foundations and Considerations in Protecting Industrial and Intellectual Property: An Introduction," *ABA Antitrust Law Journal*, vol. 53, no. 3, 1985. 503-518, Comments, 523-532.

"Antitrust for High-Technology Industries: Assessing Research Joint Ventures and Mergers," with R.D. Willig, *Journal of Law and Economics*, vol. 28, May 1985, 311-334.

"Use of Antitrust to Subvert Competition," with W.J. Baumol, *Journal of Law and Economics*, vol. 28, May 1985, 247-266. Reprinted in *Journal of Reprints for Antitrust Law and Economics*, vol. 16, no. 2.

"Advances in Supervision Technology and Economic Welfare: A General Equilibrium Analysis," with C. Shapiro, *Journal of Public Economics*, vol. 25/3, 1985, 371-390.

"Predatory Systems Rivalry: A Reply," with A. O. Sykes and R. D. Willig, 83 *Columbia Law Review*, June 1983, 1150-1166. Reprinted in *Corporate Counsel*, Matthew Bender & Company, 1984, 433-450.

"The 1982 Department of Justice Merger Guidelines: An Economic Assessment," with R. D. Willig, 71 *California Law Review*, March 1983, 535-574. Reprinted in *Antitrust Policy in Transition: The Convergence of Law and Economics*, E. Fox and J. Halverson (eds.), American Bar Association Press, 1984, 267-304.

"Unfair International Trade Practices," with A. O. Sykes and R. D. Willig, 15 *Journal of International Law and Politics*, Winter 1983, 323-338.

"On Non-linear Pricing of Inputs," with J. Panzar, *International Economic Review*, October 1982, 659-675.

"Herfindahl Concentration, Rivalry and Mergers," with A. O. Sykes and R. D. Willig, *Harvard Law Review*, vol. 95, June 1982, 1857-1875.

"A Reply to 'Journals as Shared Goods: Comment,'" with R. D. Willig, *American Economic Review*, June 1982, 603-607.

"Proposed Revisions to the Justice Department's Merger Guidelines," with S. Edwards, *et al.*, *Columbia Law Review*, vol. 81, December 1981, 1543-1591.

"An Economic Definition of Predation: Pricing and Product Innovation," with R.D. Willig, *Yale Law Journal*, vol. 91, November 1981, 8-53.

"On the Consequences of Costly Litigation in the Model of Single Activity Accidents: Some New Results," *Journal of Legal Studies*, June 1981, 269-291.

"On the Political Sustainability of Taxes," with A. Schotter, *American Economic Review Papers and Proceedings*, May 1981, 278-282.

"Information and the Law: Evaluating Legal Restrictions on Competitive Contracts," with A. Weiss, *American Economic Review Papers and Proceedings*, May 1981, 399-404.

"Redistributing Incomes: *Ex Ante* or *Ex Post*," *Economic Inquiry*, April 1981, 333-349.

"On the Nonexistence of *Pareto Superior* Outlay Schedules," with J. Panzar, *The Bell Journal of Economics*, Spring 1980, 351-354.

"The Role of Information in the Design of Public Policy Towards Externalities," with R. D. Willig, *Journal of Public Economics*, December 1979, 271-299.

"On the Concept of Optimal Taxation in the Overlapping-Generations Model of Efficient Growth," with E.S. Phelps, *Journal of Public Economics*, August 1979, 1-27.

"Products Liability in Markets With Heterogeneous Consumers," *Journal of Legal Studies*, June 1979, 505-525.

"Costly Litigation and the Tort Law: Single Activity Accidents," *Journal of Legal Studies*, June 1978, 243-261.

"On the Optimal Provision of Journals Qua Excludable Public Goods," with R. D. Willig, *American Economic Review*, June 1978, 324-338.

"Distortionary Wage Differentials in a Two-Sector Growth Model: Some Theorems on Factor Earnings," *International Economic Review*, June 1978, 321-333.

"On the Optimality of Public-Goods Pricing with Exclusion Devices," with W.J. Baumol, *Kyklos*, Fasc. 1, 1977, 5-21.

"Public Good Properties in Reality: The Case of Scientific Journals," with W.J. Baumol, *Proceedings of the ASIS Meetings*, San Francisco, October 1976.

"Merger Illusions and Externalities: A Note," with A. Schotter, *Eastern Economic Review*, November 1976, 19-21.

"Distributive Justice and Optimal Taxation of Wages and Interest in a Growing Economy," *Journal of Public Economics*, January 1976, 139-160.

"Linear Taxation of Wealth and Wages for Intragenerational Lifetime Justice: Some Steady-State Cases," with E.S. Phelps, *American Economic Review*, September 1975, 660-673.

(a) B. Books and Monographs

Proceedings of the Tenth Annual Telecommunications Policy Research Conference, editor with O. Gandy and P. Espinosa, ABLEX Publishers, 1983.

Obstacles to Trade and Competition, with L. Goldberg, OECD, Paris, 1993.

Predatory Pricing, with William Green, *et al.*, American Bar Association, Section of Antitrust Law, Monograph 22, 1996.

(b)

(c) C. Book Chapters

"Sustainable Privatization of Latin American Infrastructure: The Role of Law and Regulatory Institutions," with Evamaria Uribe, Chap. 1 in F. Basanes, E. Uribe, R. D. Willig (eds.), *Can Privatization Deliver? Infrastructure for Latin America*, The Johns Hopkins U. P. for IADB, 1999, 9-32.

"Access and Bundling in High-Technology Markets," with R. D. Willig, Chap. 6, in J. A. Eisenach and T. M. Leonard, (eds.), *Competition, Innovation, and the Microsoft Monopoly: The Role of Antitrust in the Digital Marketplace*, Kluwer Academic Press, 1999, 103-29.

"The Harmonization of Competition and Trade Law," with E. Fox, Chap. 15 in L. Waverman, *et al.* (eds.), *Competition Policy in the Global Economy*, Routledge, 1997, 407-439.

"Transition to a Market Economy: Some Industrial Organization Issues," with M. Iwanek, Chap. 7 in H. Kierzkowski, et al. (eds.), *Stabilization and Structural Adjustment in Poland*, Routledge, 1993, 133-170.

"Competition Policies for Natural Monopolies in a Developing Market Economy," with Russell Pittman, *Butterworth's Trade and Finance in Central and Eastern Europe*, Butterworth Law Publishers Ltd., 1993, 78-88, Reprinted in *Journal for Shareholders* (published by the Russian Union of Shareholder), Moscow, January 1993, 33-36; *Versenyfelügyeleti Ertesito* (Bulletin of Competition Supervision), Budapest, vol. 3, no. 1-2, January 1993, 30-41; *Narodni Hospodarstvi* (National Economy), Prague; *ICE: Revista de Economia*, No. 736 (December 1994) (in Spanish), 69-90; *USA: Politics, Economics, Ideology*, forthcoming.

"Antitrust: Source of Dynamic and Static Inefficiencies?" with W.J. Baumol, in T. Jorde and D. Teece (eds.), *Antitrust, Innovation, and Competitiveness*, Oxford University Press, 1992, 82-97. Reprinted in "The Journal of Reprints for Antitrust Law and Economics," vol. 26, no. 1 (1996).

"Economic Foundations of Competition Policy: A Review of Recent Contributions," in W. Comanor, et al., *Competition Policy in Europe and North America: Economic Issues and Institutions, Fundamentals of Pure and Applied Economics* (Vol. 43), Harwood Academic Publishers, 1990, 7-42.

"The Department of Justice 1988 Guidelines for International Operations: An Economic Assessment," with A.O. Sykes, in B. Hawk (ed.), *European/American Antitrust and Trade Laws*, Matthew Bender, 1989, 4.1-4.18.

"Predation, Monopolization, and Antitrust," with G. Saloner, in R. Schmalensee and R.D. Willig (eds.), *Handbook of Industrial Organization*, vol. 1, North Holland, 1989, 538-596.

"Supervision Technology, Firm Structure, and Employees' Welfare," in *Prices, Competition and Equilibrium*, M. Peston and R.E. Quandt (eds.), Philip Allan Publishers, Ltd., 1986, 142-163.

"Perspectives on Mergers and World Competition," with R.D. Willig, in *Antitrust and Regulation*, R. Grieson (ed.), Lexington Books, 1986, 201-218.

"Transnational Antitrust and Economics," in *Antitrust and Trade Policies in International Trade*, B. Hawk (ed.), Matthew Bender, 1985, 233-248.

"Pricing of Interexchange Access: Some Thoughts on the Third Report and Order in FCC Docket No. 78-72," in *Proceedings of the Eleventh Annual Telecommunications Policy Research Conference*, Vincent Mosco (ed.), ABLIX Publishers, 1984, 145-161.

"Non-Price Anticompetitive Behavior by Dominant Firms Toward the Producers of Complementary Products," with A.O. Sykes and R.D. Willig, in *Antitrust and Regulation: Essays in Memory of John McGowan*, F. Fisher (ed.), MIT Press, 1985, 315-330.

"Local Telephone Pricing in a Competitive Environment," with R.D. Willig, in *Regulating New Telecommunication Networks*, E. Noam (ed.), Harcourt Brace Jovanovich, 1983, 267-289.

"An Economic Definition of Predatory Product Innovation," with R.D. Willig, in *Strategy, Predation and Antitrust Analysis*, S. Salop (ed.), Federal Trade Commission, 1981, 301-396.

"Marginal Cost," in *Encyclopedia of Economics*, D. Greenwald (ed.), McGraw-Hill, 2nd ed. 1994, 627-630.

"Understanding Economic Justice: Some Recent Development in Pure and Applied Welfare Economics," in *Economic Perspectives*, M. Ballabon (ed.) Harwood Academic Publishers, vol. 1, 1979, 51-72.

"Problems of Political Equilibrium in the Soviet Proposals for a European Security Conference," in *Columbia Essays in International Affairs*, Andrew W. Cordier (ed.) Columbia University Press, New York, 1971, 1951-197

(2) D. Other Publications

"Predatory Pricing," in Peter Newman (ed.), *The New Palgrave Dictionary of Economics and the Law*, Grove Dictionaries, New York, 1999.

Book review of L. Philips, *Competition Policy: A Game Theoretic Perspective*, reviewed in *Journal of Economic Literature*, vol. 35, No.3, September 1997, 1408-9.

"The Role of Efficiencies in Merger Assessment: The 1997 Guidelines," *Antitrust Report*, September 1997, 10-17.

"Bingaman's Antitrust Era," *Regulation*, vol. 20, No. 2, Spring 1997, 21-26.

"Competition Policy for High-Technology Industries," *International Business Lawyer*, vol. 24, No. 10, November 1996, 479-82.

"Internationalizing Competition Law to Limit Parochial State and Private Action: Moving Towards the Vision of World Welfare," with E.M. Fox, *International Business Lawyer*, vol. 24, No. 10, November 1996, 458-62.

"Economists' View: The Department of Justice Draft for the Licensing and Acquisition of Intellectual Property," *Antitrust*, vol. 9, No. 2, Spring 1995, 29-36.

"Competition Policy During Transformation to a Centrally Planned Economy: A Comment," with R.W. Pittman, in B. Hawk (ed.), *1992 Fordham Corporate Law Institute*, 533-38.

"Poland: The First 1,000 Days and Beyond," *Economic Times*, vol. 3, no. 9, October 1992, 6-7.

"Interview: Janusz A. Ordover: A Merger of Standards? The 1992 Merger Guidelines," *Antitrust*, vol. 6, no. 3, Summer 1992, 12-16.

"Interview: U.S. Justice Department's New Chief Economist: Janusz A. Ordover," *International Merger Law*, no. 14, October 1991.

"Poland: Economy in Transition," *Business Economics*, vol. 26, no. 1, January 1991, 25-30.

"Economic Analysis of Section 337: Protectionism versus Protection of Intellectual Property," with R.D. Willig, in *Technology, Trade and World Competition*, JEIDA Conference Proceedings, Washington, D.C., 1990, 199-232.

"Eastern Europe Needs Antitrust Now," with E. Fox, *New York Law Journal*, November 23, 1990, 1-4.

"Understanding Econometric Methods of Market Definition," with D. Wall, *Antitrust*, vol. 3, no. 3, Summer 1989, 20-25.

"Proving Entry Barriers: A Practical Guide to Economics of Entry," with D. Wall, *Antitrust*, vol. 2, no. 2, Winter 1988, 12-17.

"Proving Predation After Monfort and Matsushita: What the New 'New Learning' has to Offer," with D. Wall, *Antitrust*, vol. 1, no. 3, Summer 1987, 5-11.

"The Costs of the Tort System," with A. Schotter, Economic Policy Paper No. PP-42, New York University, March 1986. Reprinted in *Congressional Record*, U.S. Government Printing Office, Washington, D.C., 1987.

"An Economic Definition of Predation: Pricing and Product Innovation," with R.D. Willig, Report for the Federal Trade Commission, October 1982, 131 pp.

"Market Power and Market Definition," with R.D. Willig, Memorandum for ABA Section 7 Clayton Act Committee, Project on Revising the Merger Guidelines, May 1981.

"Herfindahl Concentration Index," with R.D. Willig, Memorandum for ABA Section 7 Clayton Act Committee, Project on Revising the Merger Guidelines, March 1981.

"Public Interest Pricing of Scientific and Technical Information," Report for the Department of Commerce Technical Advisory Board, September 1979.

"Economics of Property Rights as Applied to Computer Software and Databases," with Y.M. Braunstein, D.M. Fischer, W.J. Baumol, prepared for the National Commission on New Technological Uses of Copyrighted Works, June 1977, 140 pp. Reprinted in part in *Technology and Copyright*, R.H. Dreyfuss (ed.), Lemond Publications, 1978.

Book review of O. Morgenstern and G.L. Thompson, *Economic Theory of Expanding and Contracting Economies*, reviewed in *Southern Economic Journal*, September 1978.

"Manual of Pricing and Cost Determination for Organizations Engaged in Dissemination of Knowledge," with W.J. Baumol, Y.M. Braunstein, D.M. Fischer, prepared for the Division of Science Information, NSF April 1977, 150 pp.

(3) UNPUBLISHED PAPERS

"Economics, Antitrust and the Motion Picture Industry," C.V. Starr Center Policy Paper, July 1983.

"On Bargaining, Settling, and Litigating: A Problem in Multiperiod Games With Imperfect Information," with A. Rubinstein, C.V. Starr Working Paper, December 1982.

"Supervision and Social Welfare: An Expository Example," C.V. Starr Center Working Paper, January 1982.

"Should We Take Rights Seriously: Economic Analysis of the Family Education Rights Act," with M. Manove, November 1977.

"An Echo or a Choice: Product Variety Under Monopolistic Competition," with A. Weiss; presented at the Bell Laboratories Conference on Market Structures, February 1977.

(4) GRANTS RECEIVED

Regulation and Policy Analysis Program, National Science Foundation, Collaborative Research on Antitrust Policy, Principal Investigator, July 15, 1985 - December 31, 1986.

Regulation of Economic Activity Program, National Science Foundation, Microeconomic Analysis of Antitrust Policy, Principal Investigator, April 1, 1983 - March 31, 1984.

Economics Division of the National Science Foundation, "Political Economy of Taxation," Principal Investigator, Summer 1982.

Sloan Workshop in Applied Microeconomics (coordinator), with W.J. Baumol (Principal Coordinator), September 1977 - August 1982.

Economics Division of the National Science Foundation, "Collaborative Research on the Theory of Optimal Taxation and Tax Reform," July 1979 to September 1980, with E.S. Phelps.

Division of Science Information of the National Science Foundation for Research on "Scale Economies and Public Goods Properties of Information," W.J. Baumol, Y.M. Braunstein, M.I. Nadiri, Fall 1974 to Fall 1977.

National Science Foundation Institutional Grant to New York University for Research on Taxation and Distribution of Income, Summer 1974.



December 1998

Curriculum Vitae

Name: Robert D. Willig

Address: 220 Ridgeview Road, Princeton, New Jersey 08540

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

Marital Status: 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:

Professor of Economics and Public Affairs, Princeton University, 1978-.

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, 1977-78 (part time).

Economics Research Department, Bell Laboratories, 1973-77.

Lecturer, Economics Department, Stanford University, 1971-73.

Other Professional Activities:

Advisory Board, Electronic Journal of Industrial Organization and Regulation Abstracts, 1996-.

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

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

Member, Defense Science Board Task Force on the Antitrust Aspects of Defense Industry Consolidation, 1993-94.

Editorial Board, Utilities Policy, 1990-

Leif Johanson Lecturer, University of Oslo, November 1988.

Member, New Jersey Governor's Task Force on Market-Based Pricing of Electricity, 1987-89.

Co-editor, Handbook of Industrial Organization, 1984-89.

Associate Editor, Journal of Industrial Economics, 1984-89.

Director, Consultants in Industry Economics, Inc., 1983-89, 1991-94.

Fellow, Econometric Society, 1981-.

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

Board of Editors, American Economic Review, 1980-83.

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, 1979-93.

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, 1980-82; NSF grant SES-8038866, 1983-84, 1985-86.

Aspen Task Force on the Future of the Postal Service, 1978-80.

Organizing Committee of Sixth Annual Telecommunications Policy Research Conference, 1977-78.

Visiting Fellow, University of Warwick, July 1977.

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

Consulting: Bell Laboratories, 1978-79; AT&T, 1978-89, 1991-; Conrail 1978-87, 1991-97; Federal Trade Commission, 1979-82, 1994-96; Pennsylvania Bell, 1980; Simpson Thatcher Bartlett, 1980, 1993-98; American Association of Railroads, 1981, 1985; Math-tech, 1981; Union Pacific Railroad, 1981, 1995-; Family Lines Rail System, 1982; Pepper, Hamilton, and Scheetz, 1981-87, 1991-98; Siemens Corp., 1982; Board of Governors of U. S. Postal Service, 1981; OECD, 1983-85, 1991-95; Sidley & Austin, 1983-89, 1991-98; U.S. Postal Service, 1983-84; Echlin Inc., 1982-83; United Airlines, 1983, 1991-98; Consultants in Industry Economics, 1983-89, 1991-; Wiley, Malehorn & Sirota, 1983-89; City of Newark, 1984; Arnold & Porter, 1986-89, 1991-; Howrey & Simon, 1985-88, 1993-; Kodak, 1987-89; Crowell & Moring, 1988; Viacom 1989, 1991-98; Bell Atlantic, 1991-94; Intel, 1991-93; AOPL, 1993; IBM, 1993-96; Merck, 1993-1995; Harkins Cunningham, 1993-96; Boeing, 1993-98; Niagra Mohawk, 1994; PSE&G, 1994-1996; Microsoft, 1994; Coca-Cola Co., 1994-; Digital Equipment Corp. 1997-98; World Bank 1994-; Inter-American Development Bank, 1997-; Air Transport Association of America, 1998.

Published Articles and Book Chapters:

“Economic Principles to Guide Post-Privatization Governance,” forthcoming in Can Privatization Deliver? Infrastructure for Latin America, R. Willig co-editor, Johns Hopkins Press, 1999.

“Access and Bundling in High-Technology Markets,” (with J. A. Ordover), forthcoming in Competition, Convergence and the Microsoft Monopoly, T. Lenard editor.

“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,” Brookings Trade Forum: 1998, 19-41.

"Consumer's Surplus Without Apology," reprinted in Readings in Microeconomic Theory, M. M. La Manna (ed.), Dryden Press, 1997, pp. 201-212.

"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), Yale Journal on Regulation, Vol. 14, No. 1, Winter 1997, pp. 145-164.

"Restructuring Regulation of the Rail Industry," (with Ioannis Kessides), in Private Sector, Quarterly No. 4, September 1995, pp. 5 - 8. Reprinted in Viewpoint, October, 1995, The World Bank. Reprinted in Private Sector, special edition: Infrastructure, June 1996.

"Competition and Regulation in the Railroad Industry," (with Ioannis Kessides), in Regulatory Policies and Reform: A Comparative Perspective, C. Frischtak (ed.), World Bank, 1996.

"Economic Rationales for the Scope of Privatization," (with Carl Shapiro), reprinted in The Political Economy of Privatization and Deregulation, E. E. Bailey and J. R. Pack (eds.), The International Library of Critical Writings in Economics, Edward Elgar Publishing Co., 1995, pp. 95-130.

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Books

Can Privatization Deliver? Infrastructure for Latin America, R. Willig co-editor, Johns Hopkins Press, forthcoming 1999.

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Contestable Markets and the Theory of Industry Structure, (with W.J. Baumol and J.C. Panzar), Harcourt Brace Jovanovich, 1982. Second Edition, 1989.

Welfare Analysis of Policies Affecting Prices and Products, Garland Press, 1980.

Unpublished Reports:

“The Scope of Competition in Telecommunications” (with B. Douglas Bernheim)

“Why Do Christie and Schultz Infer Collusion From Their Data?,” (with Alan Kleidon), 1995.

“Economic Foundations for Vertical Merger Guidelines,” (with B. Douglas Bernheim), 1994.

“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. Ordovery) 1990.

“Privatization to Limit Public Sector Discretion,” (with Carl Shapiro) 1989.

“Arming Decisions Under Asymmetric Information,” 1989.

“Regulation of Information Services,” 1987.

“The Effects of Capped NTS Charges on Long Distance Competition,” (with M. Katz).

“The Revolution in Telephone Communications Policy.”

“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.

EXHIBIT B

“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.

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“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:

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| 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 Governance “Infrastructure Architecture and Regulation: Railroads” | 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 | |

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| “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 Guidelines” | 1997 |
| World Bank Economists' Week IV | |
| “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 | |

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| “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 | |

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| “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 Age “Vertical Issues for Networks and Standards” | 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 Chair’s 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 |

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| 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 |
| World Bank Annual Conference on Development Economics "Public Versus Regulated Private Enterprise" | 1993 |
| Center for Public Utilities Conference on Current Issues Challenging the Regulatory Process, Santa Fe, NM "The Economics of Current Issues in Telecommunications Regulation" | 1992 |
| | "The Role of Markets in Presently Regulated Industries" 1992 |
| The Conference Board's Conference on Antitrust Issues in Today's Economy, New York, NY "Antitrust in the Global Economy" | 1992 |
| | "Monopoly Issues for the '90s" 1993 |
| 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 |

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| 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 |
| Second Annual Workshop of the Competition Law and Policy Institute of New Zealand | |
| “Merger Analysis, Industrial Organization Theory, and Merger Guidelines” | 1991 |
| “Exclusive Dealing and the <u>Fisher & Paykel</u> Case” | 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 |

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| General Seminar, Johns Hopkins University “ <i>Economic Rationales for the Scope of Privatization</i> ” | 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” | 1990 |
| “Discussion of Strategic Investment and Timing of Entry” | 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” | 1990 |
| “New Directions in Merger Enforcement: The View from Washington” | 1990 |

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| Woodrow Wilson School Alumni Colloquium “Microeconomic Policy Analysis and Antitrust--Washington 1990” | 1990 |
| Arnold & Porter Lecture Series “Advocating Competition” | 1991 |
| “Antitrust Enforcement” | 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” | 1990 |
| “The State of the Antitrust Division” | 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” | 1989 |
| “Competitive Wheeling” | 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 1994 |
| 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 |

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| Mergers and Competitiveness: Spain Facing the EEC | |
| “Merger Policy” | 1988 |
| “ <i>R&D Joint Ventures</i> ” | 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” | 1987 |
| “Economic Rationales for the Scope of Privatization” | 1989 |
| “Discussion of Licensing of Innovations” | 1990 |
| Annenberg Conference on Rate of Return Regulation in the Presence of Rapid Technical Change | |
| “Discussion of Regulatory Mechanism Design in the Presence of Research, Innovation, and Spillover Effects” | 1987 |
| Special Brookings Papers Meeting | |
| “Discussion of Empirical Approaches to Strategic Behavior” | 1987 |
| “New Merger Guidelines” | 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 Ventures” | 1990 |
| “Intellectual Property and Antitrust” | 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, | |
| “ <i>What Every Economist Should Know About Contestable Markets</i> ” | 1986 |
| Bell Communications Research Conference on Regulation and Information | |
| “Fuzzy Regulatory Rules” | 1986 |

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| Karl Eller Center Forum on Telecommunications “The Changing Economic Environment in Telecommunications: <i>Technological Change and Deregulation</i> ” | 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” | 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 Conference “Potential Uses of The File” | 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 |

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| Centre of Planning and Economic Research of Greece | |
| “Issues About Industrial Deregulation” | 1984 |
| “Contestability: New Research Agenda” | 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 the Theory of Market Structure | |
| “Theory of Contestability” | 1982 |
| “Product Development, Investment, and the Evolution of Market Structures” | 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 für Management und Verwaltung Regulation Conference | |
| “Welfare, Regulatory Boundaries, and the Sustainability of Oligopolies” | 1981 |
| NBER-Kellogg Graduate School of Management Conference on the Econometrics of Market 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 Mergers” | 1982 |

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| “Predation as a Tactical Inducement for Exit” | 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 Telecommunications 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 |

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| 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” | 1979 |
| “Social Welfare Dominance” | 1978 |
| “Economies of Scope, DAIC, and Markets with Joint Production” | 1977 |
| Telecommunications Policy Research Conference | |
| “Transition to Competitive Markets” | 1986 |
| “InterLATA Capacity Growth, Capped NTS Charges and Long Distance Competition” | 1985 |
| “Market Power in The Telecommunications Industry” | 1984 |
| “FCC Policy on Local Access Pricing” | 1983 |
| “Do We Need a Regulatory Safety Net in Telecommunications?” | 1982 |
| “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 | |
| Discussion of “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 |

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| 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" | 1975 |
| 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:

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| Bell Communications Research (2) | University of California, San Diego |
| Bell Laboratories (numerous) | University of Chicago |
| Department of Justice (3) | University of Delaware |
| Electric Power Research Institute | University of Florida |
| Federal Reserve Board | University of Illinois |
| Federal Trade Commission (4) | University of Iowa (2) |

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| Mathematica | Université Laval |
| Rand | University of Maryland |
| World Bank (3) | University of Michigan |
| Carleton University | University of Minnesota |
| Carnegie-Mellon University | University of Oslo |
| Columbia University (4) | University of Pennsylvania (3) |
| Cornell University (2) | University of Toronto |
| Georgetown University | University of Virginia |
| Harvard University (2) | University of Wisconsin |
| Hebrew University | University of Wyoming |
| Johns Hopkins University (2) | Vanderbilt University |
| M. I. T. (4) | Yale University (2) |
| New York University (4) | Princeton University (many) |
| Northwestern University (2) | Rice University |
| Norwegian School of Economics and Business Administration | Stanford University (5) |
| | S.U.N.Y. Albany |