DENNIS WILLIAM CARLTON

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EDUCATION

Ph.D., MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Massachusetts: Economics, 1975.

M.S., MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Massachusetts: Operations Research, 1974.

A.B., HARVARD UNIVERSITY (Summa cum laude): Applied Math and Economics, 1972.

ACADEMIC EMPLOYMENT

UNIVERSITY OF CHICAGO, Booth School of Business, David McDaniel Keller Professor of Economics (2011 – present); Katherine Dusak Miller Professor of Economics (2008 – 2011); Professor of Economics (1984 – 2008)

UNIVERSITY OF CHICAGO, Law School (1980 - 1984): Professor of Economics.

UNIVERSITY OF CHICAGO, Department of Economics: Assistant Professor (1976 – 1979); Associate Professor (1979).

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Massachusetts, Department of Economics (1975 - 1976): Instructor in Economics.

OTHER ACADEMIC EXPERIENCE

HARVARD UNIVERSITY, Public Policy Summer Course in Economics (1977): Professor.

BELL TELEPHONE LABORATORIES (Summers 1976, 1977).

JOINT CENTER FOR URBAN STUDIES OF M.I.T. AND HARVARD UNIVERSITY, Cambridge, Massachusetts (1974 - 1975).

FIELDS OF SPECIALIZATION

Theoretical and Applied Microeconomics

Industrial Organization

ACADEMIC HONORS AND FELLOWSHIPS

Best Academic Economics Article in Antitrust - 2016 Antitrust Writing Awards, given by Concurrences and George Washington University Law School for the article "Rethinking Antitrust in the Presence of Transaction Costs: Coasian Implications" (with B. Keating) in *Review of Industrial Organization*.

Keynote Address, Federal Trade Commission, Auto Distribution: Current Issues and Future Trends, January 19, 2016

Award for Antitrust Litigation Consultants of the Year 2015, awarded by Corporate Vision

Keynote Address, International Industrial Organization Conference, 2014

The 2014 Distinguished Fellow, Industrial Organization Society

Award for Best Antitrust Economist, Global Competition Review, 2014

Keynote Address, Sixth Annual Federal Trade Commission Microeconomics Conference, 2013 Heath Memorial Lecture, University of Florida, 2013

Award (w. Mark Israel) for Best Antitrust Analysis in Litigated Cases, Global Competition Review, 2013

Keynote Address, 21st Annual Workshop of the Competition Law & Policy Institute of New Zealand, 2010

Keynote Address, Japanese Symposium on Competition, sponsored by Japan Fair Trade Commission. 2009

Recipient of Inaugural Robert F. Lanzilotti Prize, awarded by the Industrial Organization Society for Best Paper in Antitrust Economics, 2008

Keynote Address to Israel Antitrust Conference, 2008

Lewis Bernstein Memorial Antitrust Lecture, Washington, D.C., 2006

Distinguished Visitor, University of Melbourne, April 2005

Milton Handler Lecture, New York, 2004

Keynote Address to the International Competition Network, Mexico, 2004

Alexander Brody Distinguished Lecture, Yeshiva University, 2000

Ph.D. Thesis chosen to appear in the Garland Series of Outstanding Dissertations in Economics Recipient of the 1977 P.W.S. Andrews Memorial Prize Essay, best essay in the field of Industrial Organization by a scholar under the age of thirty

National Science Foundation Grant, 1977 - 1985

Recipient of Post-doctoral Grant from the Lincoln Foundation, 1975

National Science Foundation Fellowship, 1972 - 1975

Phi Beta Kappa, 1971

John Harvard Award, 1970

Detur Book Prize, 1969

Edwards Whitacker Award, 1969

M.I.T., National Scholar Award, 1968

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Compass Lexecon, 2008 - present; (formerly) Lexecon Inc., 1977 - 2006; President 1997 - 2001

Appointed Member of the ABA Presidential Transition Task Force, Antitrust Law, 2016

Appointed Member of the ABA Presidential Transition Task Force, Antitrust Law, 2012

Advisory panel to the Department of Justice and the FTC on the merger guidelines, 2010

Co-editor, Journal of Law and Economics, 1980 - present

Visiting Committee, MIT, Department of Economics, 1995 - 2011

Member, Advisory Board, Economics Research Network, 1996 - present

Member, Advisory Board of Antitrust and Regulation Abstracts, Social Science Research Network, 1998 - present

Advisory Board, Massachusetts Institute of Technology, Department of Economics, 1999 - present

Editorial Board, Competition Policy International (CPI), 2010 – present, Co-Editor, Competition Policy International (CPI), 2004 – 2009

Member, Economic Task Force – Antitrust Division, American Bar Association, 2010 – present Advisory Board, Journal of Competition Law and Economics, 2004 – present

Adjunct Scholar, American Enterprise Institute for Public Policy Research, 2007 – present

Deputy Assistant Attorney General for Economic Analysis, Antitrust Division, U.S. Department of Justice, 2006 – 2008

Presidential Appointment to the Antitrust Modernization Commission, 2004 - 2007

Invited Panelist at Public Hearing on the Retail Banking Sector Inquiry: Payment Cards, before the European Commission in Brussels, Belgium, July 17, 2006.

Consultant on Merger Guidelines to the FTC, 2003

Professor, George Mason Institute for Judges, October 2001

Chairman, FTC Round Table on Empirical Industrial Organization (September 11, 2001)

Participant in the Round Table on the Economics of Mergers between Large ILECS before the Federal Communications Commission, February 5, 1999

Member, Steering Committee, Social Science Research Council, Program in Applied Economics, 1997 - 1999

Participant in roundtable discussions on "The Role of Classical Market Power in Joint Venture Analysis," before the Federal Trade Commission, November 19, 1997 and March 17, 1998.

Participant in meetings with Committee of the Federal Reserve on Payment Systems, June 5, 1997 Associate Editor, Regional Science and Urban Economics, 1987 - 1997

Resident Scholar, Board of Governors of the Federal Reserve System, Summer, 1995

Accreditation Committee, Graduate School of Business, Stanford University, 1995

Associate Editor, The International Journal of Industrial Organization, 1991 - 1995

Editorial Board, Intellectual Property Fraud Reporter, 1990 - 1995

Consultant on Merger Guidelines to the U.S. Department of Justice, 1991 - 1992

Member, Advisory Committee to the Bureau of the Census, 1987 - 1990

National Bureau of Economic Research, Research Associate

Member, American Economics Association, Econometrics Society

BOOKS

Market Behavior Under Uncertainty, Ph.D. Thesis, Massachusetts Institute of Technology (September 1975); Garland Publishing (1984).

Modern Industrial Organization, Scott, Foresman & Co., co-authored with Jeffrey Perloff, first edition (1990), (Chapter 17 of first edition reprinted as "The Economics of Information" for the University of Connecticut, Food Marketing Policy Center (1989)), second edition (1994), translated into Chinese, French, Hungarian and Italian; Addison Wesley Longman, third edition (2000), fourth edition (2005), translated into Chinese (2009).

RESEARCH PAPERS

"The Equilibrium Analysis of Alternative Housing Allowance Payments," (with Joseph Ferreira) Chapter 6 of <u>Analysis of a Direct Housing Allowance Program</u>, The Joint Center for Urban Studies of M.I.T. and Harvard University, (July 1975).

"Theories of Vertical Integration," presented at Fourth Annual Telecommunications Conference.

Appears in a volume of <u>Proceedings of the Fourth Annual Telecommunications Conference</u>,

Office of Telecommunications Policy, (April 1976).

- "Uncertainty, Production Lags, and Pricing," American Economic Review, (February 1977).
- "Selecting Subsidy Strategies for Housing Allowance Programs," (with Joseph Ferreira) <u>Journal of Urban Economics</u>, (July 1977).
- "Peak Load Pricing With Stochastic Demand," <u>American Economic Review</u>, (December 1977). (Reprinted in <u>Economic Regulation</u> edited by P.L. Joskow, Edward Elgar Publishing Limited, 1998 and Reprinted in <u>The Economics of Public Utilities</u> edited by Ray Rees, Edward Elgar Publishing, Limited (2006).
- "The Distribution of Permanent Income," <u>Income Distribution and Economic Inequality</u>, edited by Zvi Griliches, et al. (Halsted Press, 1978).
- "Vertical Integration--An Overview," in <u>Congressional Record Hearings on the Communications Act of 1978</u>. Bill H.R. 13105, (August 3, 1978).
- "Market Behavior with Demand Uncertainty and Price Inflexibility," <u>American Economic Review</u>, (September 1978).
- "Vertical Integration in Competitive Markets Under Uncertainty," <u>Journal of Industrial Economics</u>, (March 1979). Awarded the P.W.S. Memorial Prize for the best essay in the field of Industrial Organization by a scholar under the age of thirty.
- "Valuing Market Benefits and Costs in Related Output and Input Markets," <u>American Economic Review</u>, (September 1979).
- "Contracts, Price Rigidity and Market Equilibrium," Journal of Political Economy, (October 1979).
- "Why New Firms Locate Where They Do: An Econometric Model," in <u>Studies in Regional Economics</u>, edited by W. Wheaton, (Urban Institute, 1980).
- "Benefits and Costs of Airline Mergers: A Case Study," (with W. Landes and R. Posner) <u>Bell Journal of Economics</u>, (Spring 1980). (Reprinted in "Air Transport" in <u>Classics In Transport Analysis</u> series, edited by Kenneth Button and Peter Nijkamp, 2001.)
- "The Limitations of Pigouvian Taxes as a Long Run Remedy for Externalities," (with G. Loury)

 <u>Quarterly Journal of Economics</u>, (November 1980).
- "The Law and Economics of Rights in Valuable Information: A Comment," <u>Journal of Legal Studies</u>, (December 1980).
- "Price Discrimination: Vertical Integration and Divestiture in Natural Resources Markets," (with J. Perloff) Resources and Energy, (March 1981).
- "The Spatial Effects of a Tax on Housing and Land," <u>Regional Science and Urban Economics</u>, (November 1981).
- "Comments on Weicher," Journal of Law and Economics, (December 1981).
- Comment, in Sherwin Rosen ed. Studies in Labor Markets, University of Chicago Press, (1981).
- "Planning and Market Structure," in <u>The Economics of Information and Uncertainty</u>, edited by J.J. McCall, University of Chicago Press, (1982).

- "The Disruptive Effect of Inflation on the Organization of Markets," in Robert Hall, ed. <u>The Economics of Inflation</u>, University of Chicago Press, (1982).
- "The Need for Coordination Among Firms With Special Reference to Network Industries," (with J. M. Klamer) <u>University of Chicago Law Review</u>, (Spring 1983).
- "A Reexamination of Delivered Pricing," <u>Journal of Law and Economics</u>, (April 1983).
- "Futures Trading, Market Interrelationships, and Industry Structure," <u>American Journal of Agricultural Economics</u>, (May 1983).
- "The Regulation of Insider Trading," (with D. Fischel), Stanford Law Review, (May 1983), reprinted in J. Macey ed., Classics in Corporate Law and Economics, Edward Elgar Publishing (2008), reprinted in part in Roberto Romano, Foundations of Corporate Law, Oxford University Press (1993), Foundation Press (2010 forthcoming), and Corporate Law Series Insider Trading, Edward Elgar Publishing (2011 forthcoming).
- "The Location and Employment Choices of New Firms: An Econometric Model with Discrete and Continuous Endogenous Variables," <u>The Review of Economics and Statistics</u>, (August 1983).
- "Economic Goals and Remedies of the AT&T Modified Final Judgment," (with W. Lavey), <u>Georgetown Law Review</u>, (August 1983).
- "Equilibrium Fluctuations When Price and Delivery Lags Clear the Market," <u>Bell Journal of Economics</u>, (Autumn 1983).
- "Energy and Location," <u>Energy Costs, Urban Development, and Housing</u>, Brookings Institution, (1984).
- "Futures Markets: Their Purpose, Their History, Their Growth, Their Successes and Failures,"

 <u>Journal of Futures Markets</u>, (September 1984). (Reprinted in <u>Futures Markets</u> edited by A.G. Malliaris and W.F. Mullady, Edward Elgar Publishing Limited, 1995; and in <u>Classic Futures</u>:

 <u>Lessons from the Past for the Electronics Age</u>, edited by Lester Telser, Risk Books, 2000.)
- "The Economics of Gray-Market Imports," (with C. DeMuth), written for the Coalition to Preserve the Integrity of American Trademarks (COPIAT), (May 1985).
- "The Limitation of Pigouvian Taxes As A Long Run Remedy for Externalities: Extension of Results," (with G. Loury) Quarterly Journal of Economics, (August 1986).
- "The Rigidity of Prices," American Economic Review, (September 1986).
- "The Theory and The Facts of How Markets Clear: Is Industrial Organization Valuable for Understanding Macroeconomics?" in <u>Handbook of Industrial Organization</u>, eds. Schmalensee and Willig, (1989).
- "Market Power and Mergers in Durable Good Industries," (with R. Gertner), <u>Journal of Law and Economics</u>, (October 1989).
- "Comments on Vertical Integration and Market Foreclosure," <u>Brookings Papers on Economic Activity:</u> <u>Microeconomics</u>, (1990).
- Book Review of Tirole's "The Theory of Industrial Organization", <u>Journal of Political Economy</u>, (June 1990).

- "The Genesis of Inflation and the Costs of Disinflation: Comment," <u>Journal of Money, Credit & Banking</u>, (August 1991, Part 2).
- "The Theory of Allocation and its Implications for Marketing and Industrial Structure: Why Rationing is Efficient," <u>Journal of Law and Economics</u>, (October 1991).
- "The Economics of Cooperation and Competition in Electronic Services Network Industries," in Economics of Electronic Service Networks, Wildman Steven ed., Praeger Press, (1992).
- "Merger Policy and Market Definition Under the EC Merger Regulation," (with W. D. Bishop).

 <u>Conference on Antitrust in a Global Economy</u>, Fordham Corporate Law Institute, (1994).
- "The Antitrust Economics of Credit Card Networks," (with A. Frankel) <u>Antitrust Law Journal</u>, (Winter 1995).
- "Economic Organization and Conflict," <u>Journal of Institutional and Theoretical Economics</u>, (March 1995).
- "Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?" (with G. Bamberger and R. Epstein) The Rand Journal of Economics, (Vol. 26, No. 1, Spring 1995, pp. 131-147).
- "The Competitive Effects of Line-of-business Restrictions in Telecommunications," (with K. Arrow and H. Sider), Managerial and Decision Economics, (Vol. 16, pp. 301-321, 1995). (Reprinted in Deregulating Telecommunications The Baby Bells Case for Competition, edited by Richard S. Higgins and Paul H. Rubin, John Wiley & Sons Ltd., 1995.)
- "The Antitrust Economics of Credit Card Networks: Reply to Evans and Schmalensee," (with A. Frankel), Antitrust Law Journal, (Spring 1995).
- "Antitrust and Payment Technologies," (with A. Frankel), <u>Review</u>, Federal Reserve Bank of St. Louis (November/December 1995).
- "Antitrust Policy Toward Mergers When Firms Innovate: Should Antitrust Recognize the Doctrine of Innovation Markets?" Testimony before the Federal Trade Commission Hearings on Global and Innovation-based Competition (October, 1995).
- "You Keep on Knocking But You Can't Come In: Evaluating Restrictions on Access to Input Joint Ventures," (with S. Salop), <u>Harvard Journal of Law & Technology</u>, (Volume 9, Summer, 1996). (Reprinted in <u>e-Commerce Antitrust & Trade Practices</u>, Practicing Law Institute, 2001.)
- "Comments on Causes and Consequences of Airline Fare Wars," <u>Brookings Papers on Economic Activity: Microeconomics</u>, (1996).
- "A Critical Assessment of the Role of Imperfect Competition in Macroeconomics," in <u>Market Behavior and Macro Economic Modeling</u>, Brakman, Van Ees, & Kuipers (eds.), MacMillan Press (1997).
- "Price Rigidity," <u>Business Cycles and Depressions</u>, David Glasner ed., Garland Publishing, Inc., (1997).
- "Communication Among Competitors: Game Theory and Antitrust," (with R. Gertner and A. Rosenfield), <u>George Mason Law Review</u>, (1997). (Reprinted in <u>e-Commerce Antitrust & Trade</u> Practices, Practicing Law Institute, 2001.)

- "Comments on Born and Viscusi," Brookings Papers on Economic Activity: Microeconomics, (1998).
- "Antitrust and Higher Education: MIT Financial Aid (1993)," (with G. Bamberger), <u>The Antitrust Revolution</u>, in eds. J. Kwoka and L. White, (Oxford University Press, 3rd edition 1999).
- "Market Power and Vertical Restraints in Retailing: An Analysis of FTC v. Toys 'R' Us," (with H. Sider), <u>The Role of the Academic Economist in Litigation Support</u>, edited by Daniel Slottje, North Holland, (1999).
- "The Economics of Religion, Jewish Survival and Jewish Attitudes Toward Competition on Torah Education," (with A. Weiss), <u>Journal of Legal Studies</u>, (2001). (Reprinted in <u>Essential Readings on Jewish Identities</u>, <u>Lifestyles and Beliefs</u>, edited by Stanford M. Lyman, Gordian Knot Books, 2003).
- "A General Analysis of Exclusionary Conduct and Refusal to Deal -- Why Aspen and Kodak are Misguided," <u>Antitrust Law Journal</u>, (2001). (Reprinted in <u>e-Commerce Antitrust & Trade Practices</u>, Practicing Law Institute, 2001.)
- "The Lessons from Microsoft," Business Economics, (January 2001).
- "Lessons from Halacha About Competition and Teaching," (with A. Weiss), <u>Center for Business Ethics Social Responsibility</u>, http://besr.org/library/competition.html, (March 2001).
- "The Choice of Organizational Form in Gasoline Retailing and The Costs of Laws Limiting that Choice," (with A. Blass), <u>Journal of Law and Economics</u>, (October 2001). (Reprinted in <u>Franchise Contracting and Organization</u>, edited by Francine Lafontaine, Elgar Publishing, (2005).
- "Should The Merger Guidelines Be Scrapped? Introduction to a Debate," in <u>Symposium On The Antitrust Analysis Of Mergers: Merger Guidelines vs. Five Forces</u>, 33 U. WEST L.A. L. REV. (2001).
- "Free Riding and Sales Strategies for the Internet," (with J. Chevalier), The Journal of Industrial Economics, (December 2001).
- "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries," (with M. Waldman), The Rand Journal (Vol. 33, No. 2, Summer 2002). (Reprinted in B. Klein and A. Lerner eds. Economics of Antitrust Law, Edward Elgar Publishing Ltd, 2008, and Recent Developments in Monopoly and Competition Policy, The International Library of Critical Writings in Economics, edited by George Norman, Edward Elgar Publishing Ltd, 2008.)
- "The Competitive Effects of Fannie Mae," (with D. Gross and R. Stillman) in <u>Housing Matters: Issues</u> in American Housing Policy, Fannie Mae (January 2002, reprinted 2004).
- "Intellectual Property, Antitrust and Strategic Behavior," (with R. Gertner), in eds. Adam Jaffee and Joshua Lerner, <u>Innovation Policy and the Economy</u>, Volume 3, MIT Press (2003).
- "Airline Networks and Fares," (with G. Bamberger), <u>Handbook of Airline Economics</u>, 2nd ed., Darryl Jenkins, ed., McGraw Hill (2003).
- "Contracts that Lessen Competition -- What is Section 27 for, and How Has it Been Used?" (with David Goddard), in Mark N. Berry and Lewis T. Evans eds., <u>Competition Law at the Turn of the Century: A New Zealand Perspective</u>, Victoria University Press (2003).

- Interview, Economists' Roundtable, Antitrust Magazine, (Spring 2003).
- "The Relevance for Antitrust Policy of Theoretical and Empirical Advances in Industrial Organization," (Fall 2003), George Mason Law Review.
- "The Control of Externalities in Sports Leagues: An Analysis of Restrictions in the National Hockey League," (with A. Frankel and E. Landes), <u>Journal of Political Economy</u>, (February 2004), reprinted in <u>Recent Developments in the Economics of Sport</u>, edited by W. Andreff (forthcoming).
- "An Empirical Investigation of the Competitive Effects of Domestic Airline Alliances," (with G. Bamberger and L. Neumann), <u>Journal of Law and Economics</u>, Vol. 47, No. 1, (April 2004, pp. 195-222).
- "Why Barriers to Entry are Barriers to Understanding," American Economic Review, (May 2004).
- "Using Economics to Improve Antitrust Policy," Milton Handler Lecture, <u>Columbia Business Law Review</u>, (June 2004).
- "The Proper Role for Antitrust in an International Setting," (Keynote address: Second Annual Conference of the International Competition Network (ICN), Merida City, Mexico (June 25, 2003), appears as Appendix to "Using Economics to Improve Antitrust Policy", Columbia Business Law Review (June 2004).
- "Econometric Analysis of Telephone Mergers," (with H. Sider) pp. 373-395 in American Bar Association, Econometrics: Legal, Practical, and Technical Issues, (2005).
- "How Economics Can Improve Antitrust Doctrine Towards Tie-in Sales," (with M. Waldman), Competition Policy International, (Spring 2005).
- Preface to: "Law and Economics of the Mexican Competition Laws," by Francisco Gonzalez de Cossio (2005).
- "Transaction Costs, Externalities and "Two-Sided" Payment Markets," (with A. Frankel), <u>Columbia Business Law Review</u>, No. 3, Vol. (2005).
- "Predation and the Entry and Exit of Low-Fare Carriers," (with G. Bamberger), in <u>Advances in Airline Economics: Competition Policy and Antitrust</u>, Darin Lee, ed., (2006).
- "Why Tie An Essential Good," (with Michael Waldman), in Hahn R. ed., <u>Antitrust Policy and Vertical</u> Restraints, AEI-Brookings, (July 2006).
- "Market Definition: Use and Abuse," <u>Competition Policy International</u> (Spring 2007)
- Interview with Deputy Assistant Attorney General, <u>The Antitrust Source</u> (February 2007)
- Separate Statement of Dennis W. Carlton, in <u>The Report of the Antitrust Modernization Commission</u>, (April 2007)
- "Does Antitrust Need to be Modernized?," Journal of Economic Perspectives (Summer 2007)
- "The Year in Review: Economics at the Antitrust Division 2006-2007" (with K. Heyer), Review of Industrial Organization, (2007).

- "Economic Analysis of Competition Practices in the EU and the U.S.: A View from Chief Economists," (with M. Salinger), Competition Policy International (Autumn 2007).
- "Merger Analysis," Palgrave Dictionary, (with J. M. Perloff), (2008).
- "Tying," (with M. Waldman), in W. Collins ed. <u>Issues in Competition Law and Policy</u>, American Bar Association, (2008).
- "Barriers to Entry," in W. Collins ed. <u>Issues in Competition Law and Policy</u>, American Bar Association, (2008).
- "Product Variety and Demand Uncertainty: Why Mark-ups Vary with Quality," (with James D. Dana Jr.), <u>Journal of Industrial Economics</u> (2008)
- "Regulation, Antitrust, and Trinko," (With H. Sider), in eds. J. Kwoka and L. White, <u>The Antitrust Revolution</u>, (2008).
- "A Solution to Airport Delays," (with W. Whalen, K. Heyer and O. Richard), Regulation (2008).
- "Should 'Price Squeeze' Be A Recognized Form of Anticompetitive Conduct?," <u>Journal of Competition Law & Economics</u> (2008).
- "Safe Harbors for Quantity Discounts and Bundling," (with M. Waldman), George Mason Law Review (2008).
- "Appropriate Antitrust Policy Towards Single-Firm Conduct: Extraction vs. Extension" (with K. Heyer),"

 <u>Antitrust</u>, (condensed version of subsequent paper), (Summer 2008).
- "Extraction vs. Extension: the Basis for Formulating Antitrust Policy Towards Single-Firm Conduct" (with K. Heyer), Competition Policy International, (Autumn, 2008).
- "Assessing the Anticompetitive Effects of Multiproduct Pricing," (with P. Greenlee and M. Waldman), Antitrust Bulletin, (Fall, 2008).
- "The Need to Measure the Effect of Merger Policy and How to Do It," <u>Antitrust</u>, (condensed version of subsequent paper), (Summer 2008).
- "How to Measure The Effectiveness of US Merger Policy," http://voxeu.org/index.php?q=node/3344, (2009), and a slightly revised version appears as "Measuring the Effectiveness of US Merger Policy" in The Economists' Voice: Vol. 6: Iss. 7, Article 2, (2009). These are condensed versions of the subsequent paper.
- "Why We Need to Measure the Effect of Merger Policy and How to Do It," <u>Competition Policy</u> International (Spring 2009).
- "Competition, Monopoly, and Aftermarkets," (with M. Waldman), <u>Journal of Law, Economics and Organization</u>, (April 2009).
- "Competition Policy: Beware of Using It to Harm Competition," Fair Trade, Japan, (Spring, 2009).
- "Should Competition Policy Prohibit Price Discrimination?" (with M. Israel), Global Competition Review, (2009).
- "Merger Guidelines Revisited?" an interview, Antitrust, American Bar Association, (Fall 2009).

- "How Should Economic Evidence Be Presented and Evaluated," in <u>European Competition Law Annual</u>: 2009, <u>The Evaluation of Evidence and its Judicial Review in Competition Cases</u>, edited by Claus-Dieter Ehlermann and Mel Marquis, Hart publishing (2011).
- "Externalities in Payment Card Networks: Theory and Evidence: A Commentary," <u>The Changing Retail Payments Landscape: What Role for Central Banks?</u>, Federal Reserve Bank of Kansas City (2010).
- "Why Tie a Product Consumers Do Not Use?," (with J. Gans and M. Waldman), Recipient of Inaugural Robert F. Lanzilotti Prize, awarded by the International Industrial Organization Society for Best Paper in Antitrust Economics, (2008), American Economic Journal: Microeconomics (2010).
- "Mergers in Regulated Industries: Electricity," in <u>Competition Law and Economics: Advances in Competition Policy Enforcement in the EU and North America</u>, A. Mateus and T. Moreira editors, (2010).
- "Financial Issues (Comments on Bankruptcy and Clearing Houses)," Chapter X in Competition as Public Policy, American Bar Association, (2010).
- "Revising the Horizontal Merger Guidelines," <u>Journal of Competition Law & Economics</u> (2010), also appears in Journal of Competition Law CADE (Brazil) Vol. 1, No. 23 (2011), also appears in Revista de Direito da Concorrencia, Conselho Administrativo de Defesa Economica, (Brazilian Government Publication), translated into Portuguese by T. Aranovich, p. 83-114 (2011).
- "Net Neutrality and Consumer Welfare," (with G. Becker and H. Sider), <u>Journal of Competition Law & Economics</u>, (2010).
- "Will The New Guidelines Clarify or Obscure Antitrust Policy?," (with M. Israel), <u>The Antitrust Source</u>, (2010).
- "Introduction to Stigler's Theory of Oligopoly," (with S. Peltzman), <u>Competition Policy International</u>, (2010).
- "Response to Gopal Das Varma's Market Definition, Upward Pricing Pressure, and the Role of Courts: A Response to Carlton and Israel" (with M. Israel), <u>The Antitrust Source</u>, (2010).
- "Use and Misuse of Empirical Methods in the Economics of Antitrust," 3(1) Competition Policy International Antitrust Chronicle, (2011).
- "The Economics of Patent Ambush," Concurrences, New Frontiers of Antitrust, (2011).
- "Proper Treatment of Buyer Power in Merger Review," (with M. Israel), <u>Review of Industrial</u> Organization, (2011).
- "Upgrades, Switching Costs, and the Leverage Theory of Tying," (with M. Waldman), <u>Economic Journal</u>, (2012).
- "Brantley Versus NBC Universal: Where's the Beef?," (with M. Waldman), <u>Competition Policy International</u>, (2012).
- "The Economics of Cartel Cases and the Use of Experts," (with G. Bamberger and M. Israel), <u>ABA</u> Handbook of Cartel Enforcement, ed. S. Cherry (forthcoming).

- "An Economic Interpretation of FRAND," (with A. Shampine), <u>Journal of Competition Law & Economics</u>, (2013).
- "Economists' Roundtable on Hot Patent-Related Antitrust Issues," <u>Antitrust Magazine</u>, Vol. 27, No. 3, (Summer 2013).
- "Identifying Benchmarks for Applying Non-Discrimination in FRAND," (with A. Shampine), <u>Competition Policy International</u>, CPI Antitrust Chronicle, (August 2014).
- "Patent Litigation, Standard Setting Organizations, Antitrust and FRAND," (with A. Shampine), <u>University of Texas Intellectual Property Law Journal</u>, (2014).
- "Antitrust and Regulation," (with R. Picker) in N. Rose ed., Economics of Deregulation, NBER, (2014).
- "Competition Policy and Regulation in Credit Card Markets: Insights from Single-sided Market Analysis," (with R. Winter), <u>Competition Policy International</u>, (2014).
- "Robert Bork's Contributions to Antitrust Perspectives on Tying Behavior," (with M. Waldman), <u>Journal of Law & Economics</u>, (2014).
- "Buyer Power in Merger Review," (with M. Coleman and M. Israel), Oxford Handbook of International Antitrust Economics, eds. R. Blair and D. Sokol (2015).
- "Antitrust, Transaction Costs and Merger Simulation with Non-linear Pricing," (with B. Keating), Journal of Law and Economics, (2015).
- "Rethinking antitrust in the presence of transaction costs: Coasian Implications," (with B. Keating), Review of Industrial Organization, (2015).
- "Does The FTC's Theory of Product-Hopping Promote Competition?" (with F. Flyer and Y. Shefi), <u>Journal of Competition Law and Economics</u>, (2016).
- Eugene Fama and Industrial Organization, <u>The Fama Portfolio</u>, edited by John Cochrane and Tobias Moskowitz, University of Chicago Press, (forthcoming).

UNPUBLISHED PAPERS

- "Modeling the Housing Allowance Program," M.A. Thesis, Massachusetts Institute of Technology (September 1974).
- "The Cost of Eliminating a Futures Market and The Effect of Inflation on Market Interrelationships," (1984).
- "The Empirical Importance of Delivery Lags as an Explanation of Demand," (1984).
- "Statistical Supplement to The Antitrust Economics of Credit Card Networks: Reply to Evans and Schmalensee Comment, 63 Antitrust Law Journal 903 (1995)," (with Alan Frankel), (May 1997).
- "Antitrust and Not for Profits; The Case of Hospitals," (with C. Capps, and G. David), mimeo (2010).
- "A Critical Evaluation of the FTC's Theory of Product Hopping as a Way to Promote Competition," (with F. Flyer and Y. Shefi), NBER, (July 2016).

WORK IN PROGRESS

Theoretical analysis of firm size, information, price rigidity, and product variety.

Empirical analysis of business cycle effects on firm size distributions.

Analysis of growth of futures markets and the effect of this growth on the industrial organization of related industries.