



Keith Waehrer, Ph.D.

Managing Director

Current Position

Dr. Waehrer is a Managing Director with Secretariat Economists.

Professional Experience

Keith Waehrer has testified at deposition and trial on mergers, monopolization claims, and calculations of reasonable royalties. He has worked on some of the highest profile antitrust litigations in recent years—*State of New York et al. v. T-Mobile-Sprint*, *FTC v. Qualcomm*, *United States v. AT&T-Time Warner*, and *United States of America et al. v. American Express Co. et al.*—and on significant mergers—E.I. DuPont de Nemours & Co. and Dow Chemical Company, United Technologies Corp. and Rockwell Collins, and Comcast and Time Warner Cable (abandoned). Having authored highly regarded papers on the subject, Dr. Waehrer is an expert in the analysis of competitive effects in auction markets and the impact of overlapping minority shareholdings on competition.

As a visiting partner at ESMT Competition Analysis (now known as E.CA Economics) in Berlin, Germany, Dr. Waehrer worked on a number of significant matters before the European Commission and national competition authorities in Europe. Dr. Waehrer's international experience also includes work on a significant merger matter before the South African competition authorities. He has worked on matters involving a wide range of industries, including consumer products, telecommunications, aerospace, music licensing, Internet services, pharmaceuticals, financial services, e-commerce, agricultural inputs, industrial parts, and chemicals. Dr. Waehrer has been named to Global Competition Review's list of *International Who's Who of Competition Economists* in 2012, 2018, 2019, and 2020.

Contact Details

Direct: +1 202.833.5206

Email: kwaehrer@secretariat-intl.com

Professional History

- Secretariat Economists
- Bates White LLC
- Johns Hopkins University
- US Department of Justice
- Georgetown University
- University of Maryland
- US Bureau of Labor Statistics
- Brigham Young University
- Rutgers University

Education

- Ph.D., Economics, Rutgers University
- M.A., Economics, Rutgers University
- B.A., Economics, Trinity College

Representative Engagements

Mergers

- Aon/Willis Towers Watson: On behalf of Willis Towers Watson, provided counsel with input and on analyses presented to the DOJ involving unilateral effects simulations and employee movements.
- UTC/Raytheon merger: On behalf of United Technologies, provided advice to counsel on potential vertical and horizontal issues in various product areas, and provided significant assistance to United Technologies responding to requests from the DOJ and other regulators.
- State of New York et al. v. Deutsche Telekom et al.: On behalf of a group of State Attorneys General litigating to block the merger of Sprint and T-Mobile, led the team supporting the testimonies of Professors Carl Shapiro and Fiona Scott Morton.
- UTC/Rockwell Collins merger: On behalf of United Technologies, assisted counsel seeking antitrust regulatory approval for the acquisition of Rockwell Collins. Provided significant assistance to United Technologies responding to requests from the DOJ and other regulators. Submitted a white paper to Chinese regulators.
- United States v. AT&T/Time Warner: Led the team supporting Professor Carl Shapiro's testimony on behalf of DOJ in its litigation over the proposed merger of AT&T and Time Warner.
- Dow/DuPont merger: On behalf of DuPont, analyzed likely competitive effects of its proposed merger with Dow Chemical in a wide range of markets, including seeds and transgenic traits, agricultural chemicals, and specialty polymers.
- Nelnet/Great Lakes merger: Contributed analyses and advice to counsel for Nelnet in connection with its acquisition of Great Lakes' student loan business. Submitted a white paper and participated in meetings with the DOJ staff and front office. DOJ approved the merger without remedies.
- International Paper/Weyerhaeuser merger: Assisted counsel for International Paper Company by performing merger analyses, including a merger simulation, of International Paper's proposed acquisition of Weyerhaeuser's pulp business. DOJ approved the merger without remedies.
- Iron Mountain/Recall merger: Assisted the Competition Bureau of Canada in its review of the Iron Mountain/Recall merger. Iron Mountain and Recall are suppliers of records management services in Canada and a number of other countries. The merger was not challenged by the Competition Bureau after the merging parties agreed to divest assets in six Canadian cities.
- Stamps.com/Endicia merger: Prepared as testifying expert for the Department of Justice's potential challenge of the Stamps.com/Endicia merger. Both companies provide computer-based systems for buying printable United States electronic postage. The Department of Justice did not seek to challenge the merger.

- Comcast/TimeWarnerCable merger: Led the Bates White team providing support for Dr. Joseph Farrell, who provided expert analysis to the FCC on behalf of Cogent Communications regarding the proposed merger of Comcast and TimeWarnerCable. The submission included an analysis of the declarations submitted by the merging parties' economic experts and an assessment of the competitive effects of the merger on the provision of Internet access for both the consumer and Internet content provider sides of the market.
- Caraustar/Newark merger: Prepared as testifying expert for the Department of Justice's potential challenge of the Caraustar/Newark merger. Caraustar and Newark both manufacture uncoated recycled boxboard along with a number of downstream products. The Department of Justice did not seek to challenge the merger.
- Flakeboard/Sierra Pine merger: Prepared as testifying expert for the Department of Justice's challenge of the merger of Flakeboard and Sierra Pine. Flakeboard and Sierra Pine both manufacture medium density fiberboard and particleboard. The parties abandoned the merger after the Department of Justice indicated their intention to file in court to enjoin the merger.
- ViroPharma/Shire merger: Provided expert support to an interested party regarding the merger of ViroPharma and Shire. Participated in and helped prepare corporate executives for meeting with the FTC.
- Express Scripts/Medco merger: On behalf of Express Scripts in connection with its \$29 billion acquisition of Medco Health Solutions, conducted both an upward pricing pressure analysis and a merger simulation to predict the competitive effect of the merger in order to demonstrate that the proposed transaction would not have an anticompetitive effect. Assisted with the presentation of these analyses to the FTC.
- Pioneer Hi-Bred/Pannar Seed merger: As an expert for the merging parties, testified before the South African Competition Tribunal on the unilateral and coordinated effects of Pioneer Hi-Bred's proposed acquisition of Pannar Seed, along with the results of a simulation to quantify the effects of efficiencies on post-merger pricing. (Trial Testimony: September 27–28, 2011; Supplementary Report: August 11, 2011; Expert Report: June 24, 2011.)
- Oracle/Sun merger: Worked on behalf of SAP to provide input to the EC on its review of Oracle's acquisition of Sun Microsystems. Reviewed evidence of database switching.
- Comcast/NBCU merger: Supported Bloomberg's expert in the drafting of comments on the Comcast/NBC transaction before the FCC. The analysis included an assessment of foreclosure strategies available to Comcast to competitively weaken independent cable content suppliers.
- Monsanto/Delta Pine Land merger: Led the team that presented before DOJ in connection with its investigation of the acquisition of Delta and Pine Land by Monsanto. The proposed transaction raised both horizontal and vertical concerns.

- Reed Elsevier/ChoicePoint merger: On behalf of Reed Elsevier, identified potential areas of competitive concern associated with its acquisition of ChoicePoint Asset Company. Conducted an analysis to assess the likelihood of entry in the event of an attempted post-merger price increase.
- Lubrizol/Dow acquisition: On behalf of Lubrizol, evaluated the competitive effects of its acquisition of Dow's thermoplastic elastomers business, and prepared materials for presentation to the FTC. Responsibilities included analyzing win-loss data and market shares and developing an initial assessment of market definition.
- CME/CBOT merger: Provided expert support in connection with DOJ's investigation of the CME/CBOT merger, including empirical analyses of candidate competitive effects theories.
- Financial services merger: Identified antitrust risks and analyzed competitive overlaps in connection with a major acquisition in the consumer and business financial services industry.
- Online music streaming joint ventures: Assisted in civil investigations of joint ventures and anticompetitive practices of e-commerce platforms and online music streaming services.
- Financial services mergers and joint ventures: Provided economic analysis for DOJ of the competitive practices in financial markets in connection with mergers and civil (non-merger) investigations.
 - Analyzed likely competitive effects of the NYSE/Archipelago and NASDAQ/Instinet mergers.
 - Supported the testifying expert in the ICAP/BrokerTec merger.
 - Participated in civil investigations of the conduct in the foreign exchange, treasury, and futures markets.
- United States v. Northwest Airlines: Helped develop the competitive effects analysis and supported the testifying expert.

Monopolization/Monopoly Maintenance

- FTC v. Qualcomm: On behalf of the Federal Trade Commission (FTC), led the team supporting Professor Carl Shapiro's reports and testimony in litigation against Qualcomm, the world's dominant supplier of baseband modem chips, which enable cellular communication for mobile devices. The FTC alleged that Qualcomm used its dominant position as a supplier of these modem chips to impose anticompetitive supply and licensing terms on cell phone manufacturers and to weaken competitors.
- United States v. American Express: Provided support for expert testimony on behalf of American Express in its litigation with DOJ.
- Songkick v. Ticketmaster: Provided support for Dr. Joseph Farrell with expert reports and deposition testimony on behalf of Songkick in connection with *Complete Entertainment Resources LLC d/b/a/ Songkick v. Live Nation Entertainment, Inc., Ticketmaster LLC*.

- Generic drug industry: On behalf of a generic drug manufacturer, analyzed the effects of joint purchasing arrangements on the supply of generic drugs including the frequency and severity of shortages. The results of the analysis were presented to the FTC.
- Monsanto v. DuPont: Led the Bates White team providing support in the matter *Monsanto v. DuPont*. Provided liability and damages analysis for DuPont in its litigation against Monsanto regarding alleged antitrust and intellectual property violations. Monsanto originally sued DuPont and its Pioneer subsidiary for infringing Monsanto's Roundup Ready soybean patent. DuPont countersued, accusing Monsanto of antitrust violations and of fraudulently obtaining the patent.
- Allflex v. Avid: Served as testifying expert on behalf of Allflex in its litigation with *Avid Identification Systems*. Allegations in the case involved patent infringement and antitrust claims in the market for radio frequency identification microchips used for the identification of pets. Submitted a declaration and expert report on monopoly power, market definition, and antitrust harm. (Declaration: December 20, 2010; Expert Report: June 15, 2011.)
- AA v. Sabre: Provided support for expert testimony on damages on behalf of American Airlines in a suit filed in Texas state court. The suit alleged anticompetitive conduct by Sabre in markets for airline ticket booking services.
- Crystal Imports v. Avid: Served as testifying expert in *Crystal Import Corporation v. Avid Identification Systems* in an exclusionary conduct matter regarding radio frequency identification microchips. Performed economic analysis to define markets, assess market power, and evaluate the impact of the conduct at issue. (Expert Report: June 2, 2008; Deposition: August 12, 2008.)
- Commercial aircraft matter: Advised a client on possible monopolization claims related to aftermarket conduct in the commercial aircraft industry in both Europe and the United States. Reviewed evidence to analyze potential anticompetitive conduct and assess the validity of efficiency arguments.
- Credit card payment systems matter: Advised Heartland Payment Systems on liability issues such as market definition, market power, and competitive effects related to the tying of the processing of credit card authorizations.
- ZF Meritor v. Eaton: Advised attorneys on case strategy related to an antitrust lawsuit on behalf of ZF Meritor. Advised on the legal complaint and supported attorneys in mediation. Work included economic analyses of market definition, bundling, and exclusive dealing.

Intellectual Property

- Copyright Royalty Board—Webcasters V proceeding: Prepared testimony to the Copyright Royalty Board on behalf of a webcaster relating to its royalties for the digital performance rights in sound recordings and ephemeral recordings.

- Copyright Royalty Board—SDARS III proceeding: Provided support for Dr. Joseph Farrell with testimony before the Copyright Royalty Board in the SDARS III proceeding on behalf of Sirius XM.
- ASCAP and BMI consent decree review: On behalf of Pandora, provided analysis regarding DOJ's review of the consent decrees issued in *United States v. BMI and United States v. ASCAP*.
- BMI v. Pandora: Provided expert testimony on behalf of Pandora in its litigation with Broadcast Music, Inc. (BMI) regarding the royalty rate for Pandora's use of music licensed by BMI (*Broad. Music, Inc. v. Pandora Media, Inc.*, No. 13-cv-4037 (S.D.N.Y. filed 2013)). Opined on what range of rates would be reasonable for Pandora's blanket license to perform works in the BMI repertory; assessed an appropriate advertising sales cost deduction for a Pandora–BMI license; and proposed a method to adjust the royalties that Pandora would pay to BMI when compositions are either directly licensed or withdrawn from BMI. (Trial Testimony: March 10–11, 2015; Affidavit: January 26, 2015; Deposition testimony: October 30, 2014; Rebuttal Report: October 3, 2014; Expert Report: August 22, 2014.)
- Copyright Royalty Board—Webcasters IV proceeding: Submitted testimony to the Copyright Royalty Board on behalf of National Public Radio, Inc. and the Corporation for Public Broadcasting as part of the Webcasters IV proceeding (Docket No. 2014-CRB-0001-WR) to determine webcaster royalties for the digital performance rights in sound recordings and ephemeral recordings. (Written Testimony: October 7, 2014.)
- Pandora v. ASCAP: In the matter *In re Petition of Pandora Media, Inc.*, led the Bates White team providing support for the expert analyses, reports, and testimony of Dr. Leslie Marx on behalf of Pandora in its litigation with the American Society of Composers, Authors, and Publishers (ASCAP) over royalty rates for musical compositions. Assisted the trial team with the cross-examination of ASCAP's expert and other witnesses.

Public Policy

- FCC rulemaking—Business data services: Provided support for Dr. Joseph Farrell, who submitted two declarations on behalf of Comcast in an FCC proceeding on business data services. The FCC is seeking comment on a new regulatory framework for the provision of business data services.
- FCC spectrum auction: On behalf of Verizon Wireless, assisted with an analysis of possible bid-rigging during Auction 97. The analysis involved an examination of bidding data to look for patterns that would not be likely to arise in the absence of collusion. This analysis was presented to key FCC staff.
- FCC incentive auction: Served as the Bates White lead to support the expert work of Dr. Leslie Marx who filed a report with the Federal Communications Commission (FCC). The report, written on behalf of Verizon, provides evidence that the FCC could not impose significant bidding restrictions without materially reducing auction revenues and risking outright auction failure in the FCC incentive auction meant to encourage the transfer of spectrum between uses.

- Timber leasing: Wrote a report assessing the timber leasing policies and possible improvements in those policies on behalf of a foreign government leasing authority.
- SEC regulations: Drafted position letters to the SEC in response to requests for comments and on CFTC changes in regulations.

Price-Fixing and Bid Rigging

- Bid rigging overcharge matter: Assessed potential overcharges associated with the alleged rigging of bids over sports broadcast rights.
- Cartel overcharge matter: Provided detailed analysis of the Bundeskartellamt's overcharge calculation used to assess the fine on participants of an alleged cartel in a market related to the design and construction of large-scale engineering projects.
- Parcel tanker cartel: Assessed potential damages as part of the DOJ team investigating the parcel tanker cartel.
- Bid rigging in agricultural market: Assessed liability issues as part of the DOJ team investigating bid rigging in an agricultural market.

Other Professional Experience

Dr. Waehrer joined Bates White in June 2006. Previously, he was a Research Economist with the Antitrust Division of DOJ, where he provided economic analysis in connection with numerous merger investigations and civil and criminal antitrust matters. Dr. Waehrer took a 12 month leave of absence from Bates White in 2009–2010 to work on competition issues in Europe with Bates White's partner ESMT Competition Analysis (now known as E.CA Economics). Dr. Waehrer served as an economist with the Bureau of Labor Statistics, focusing on measurement of living standards and the construction and interpretation of various price indexes. He also worked for Economist Insight, where he developed models to analyze the West Coast oil and electric power markets; and for Bonneville Power Administration, where his analyses supported long-term contract negotiations and a major rate case. His academic career includes teaching posts at the University of Maryland, Georgetown University, Johns Hopkins University, Brigham Young University, and Rutgers University.

Publications

- Dua, Nitin, and Keith Waehrer. "Three Things You Might Not Have Known About the *SPRINT/T-MOBILE* Merger Litigation." *Antitrust Chronical*, vol. 1(2) (2021): 24–31.
- Hill, Nicholas, and Keith Waehrer. "Is 5-to-4 the New 4-to-3? A View from the United States." *Competition Law and Policy Debate* 5, no. 2 (2019): 50–54.

- Marx, Leslie M., and Keith Waehrer. “A Tussle over Royalties: *Pandora v. ASCAP, Pandora v. BMI*, and the DOJ’s Consent Decree Review, 7th ed. (2016).” In *The Antitrust Revolution*, eds. John E. Kwoka, Jr., and Lawrence J. White. New York: Oxford University Press, 2018.
- O’Brien, Daniel P., and Keith Waehrer. “The Competitive Effects of Common Ownership: We Know Less Than We Think.” *Antitrust Law Journal* 81, no. 3 (2017).
- Waehrer, Keith. “A Primer on Competitive Effects of Mergers in Auction and Bidding Markets.” *ABA Antitrust Section Economics Committee Newsletter*, Spring 2007.
- Waehrer, Keith. “Mechanisms for Dividing Labor and Sharing Revenue in Joint Ventures.” *Review of Economic Design* 8, no. 4 (2004): 465–77.
- Waehrer, Keith, and Martin K. Perry. “The Effects of Mergers in Open Auction Markets.” *Rand Journal of Economics* 34, no. 2 (2003): 287–304.
- Waehrer, Keith. “Hazardous Facility Siting when Cost Information is Private: An Application of Multidimensional Mechanism Design.” *Journal of Public Economic Theory* 5, no. 4 (2003): 605–22.
- Waehrer, Keith. “The Ratchet Effect and Bargaining Power in a Two-Stage Model of Competitive Bidding.” *Economic Theory* 13 (1999): 171–81.
- Waehrer, Keith. “Asymmetric Auctions with Application to Joint Bidding and Mergers.” *International Journal of Industrial Organization* 17 (1999): 437–52.
- Waehrer, Keith, Ronald M. Harstad, and Michael H. Rothkopf. “Auction Form Preferences of Risk-Averse Bidtakers.” *Rand Journal of Economics* 29 (1998): 179–92.
- Harstad, Ronald M., Michael H. Rothkopf, and Keith Waehrer. “Efficiency in Auctions When Bidders Have Private Information about Competitors.” In *Advances in Applied Microeconomics*, vol. 6, ed. Michael R. Baye, 1–13. Greenwich: Jai Press, 1996.
- Crystal, Stephen, and Keith Waehrer. “Later Life Economic Inequality in Longitudinal Perspective.” *Journal of Gerontology: Social Sciences* 51B (1996): S307–18.
- Waehrer, Keith. “A Model of Auction Contracts with Liquidated Damages.” *Journal of Economic Theory* 67 (1995): 531–55.
- Waehrer, Keith, and Stephen Crystal. “The Impact of Coresidence on the Economic Well-Being of Elderly Widows.” *Journal of Gerontology: Social Sciences* 50B (1995): S250–58.

Unpublished Papers, Papers in Progress, and Other Papers

- Waehrer, Keith. “Modeling the effects of mergers in procurement: Comment.” 2020.

- Waehrer, Keith. “Pass-Through of Cost Reductions in Open Auction Markets with Application to Merger Effects.” 2019.
- Yu, Xiaowei, and Keith Waehrer. “Recursive Nash-in-Nash Bargain Solution.” 2019.
- Kennedy, Pauline, Daniel P. O’Brien, Minjae Song, and Keith Waehrer. “The Competitive Effects of Common Ownership: Economic Foundations and Empirical Evidence.” 2017.
- Waehrer, Keith. “Online Services and the Analysis of Competitive Merger Effects in Privacy Protections and Other Quality Dimensions.” 2016.
- Crawford, Gregory S., Nicola Tosini, and Keith Waehrer. “The Impact of ‘Rollover’ Contracts on Switching in the UK Voice Market: Evidence from Disaggregate Customer Billing Data.” 2011.
- Waehrer, Keith, and Charles J. Thomas. “Horizontal Mergers in Negotiation Markets with Differentiated Products.” 2006.
- Waehrer, Keith, and Patrick Greenlee. “The Effect of Profit Sharing on Auction Markets.” Discussion Paper 04-3, Economic Analysis Group, US Department of Justice, 2004.
- Waehrer, Keith, and Martin Perry. “Vertical Integration in Open Auction Markets.” 2004.
- Waehrer, Keith, and Patrick Greenlee. “Profit Sharing Among Asymmetric Bidders.” 2004.
- Waehrer, Keith. “A Comparison of the Substitution Effects for Input and Output Price Indexes.” Working Paper 327, US Bureau of Labor Statistics, 2000.
- Waehrer, Keith, Mary Kokoski, and Patricia Rozaklis. “Using Hedonic Methods for Quality Adjustment in the CPI: The Consumer Audio Products Component.” Working Paper 344, US Bureau of Labor Statistics, 2000. Presented at the NBER, Summer Institute, 2000.
- Waehrer, Keith, and Mary Kokoski. “Hedonics and Quality Adjustment of Price Indices for Consumer Electronics Products.” 1998. Presented at the NBER, Summer Institute, 1998.
- Waehrer, Keith. “Wasteful Capital Expenditures Resulting from Rate-of-Return and Used-and-Useful Regulation.” 1996.
- Waehrer, Keith. “Coase and Ethics.” Letter to the Editor, *Journal of Applied Philosophy* 11 (1993): 129–30.

Speaking Engagements

- “Lessons from the Sprint/T-Mobile Merger Investigations, Litigation, and Remedy.” Presentation via live webinar to the Mannheim Competition Policy Forum seminar series organized by the Mannheim Centre for Competition and Innovation, September 16, 2021.

- “What to Expect from Biden Antitrust?” Panelist, live webinar, Georgetown Law's 15th Annual Global Antitrust Enforcement Symposium, September 14, 2021.
- “Digital Markets: Big Data, Privacy Protection and AI.” Panelist, CRESSE Conference, Heraklion, Crete, Greece, September 3-5, 2021.
- “Merger Enforcement.” Panelist, live webinar, Georgetown Law's 14th Annual Global Antitrust Enforcement Symposium, October 6, 2020.
- “Update on State Antitrust Enforcement: A Panel Discussion with State Attorneys General.” Moderator, live webinar, May 14, 2020.
- CRESSE Conference, Rhodes, Greece, July 5–7, 2019.
 - “Pass-Through of Cost Reductions in Open Auction Markets with Application to Merger Effects.” Presentation.
 - “Developments in Vertical Merger Enforcement.” Panel chair and participant.
 - “Lessons from the EU and US Google and Qualcomm Cases.” Panel discussion.
- “Case Study: *Federal Trade Commission v. Qualcomm Inc.*” Hal White Antitrust Conference, Washington, DC, June 10, 2019.
- Economist Roundtable with the Competition Bureau, Canadian Bar Association, May 30, 2019.
 - Keynote address, “3 Mildly Interesting Aspects of the ‘Antitrust Trial of the Century.’”
 - “Competition Analysis Involving Vertical Merger.” Panel discussion.
- E.CA Competition Law & Economics Expert Forum, Berlin, Germany, October 1, 2018.
 - “Digital Markets—Key Issues.” Panel discussion.
 - “Data-Driven Services, Online Advertisement, and Privacy.” Research presentation.
- “Merger Enforcement.” Panelist, 12th Annual Global Antitrust Enforcement Symposium, Georgetown Law, Washington, DC, September 25, 2018.
- CRESSE Conference, Crete, Greece, June 29–30, 2018.
 - “The AT&T-TW Case.” Panel discussion.
 - “Conglomerate Mergers: Is There an Economic Theory of Harm?” Panel discussion.
- “The Use of Bargaining Models in Merger Analysis.” Panel moderator, 15th Annual Hal White Antitrust Conference, Washington, DC, June 12, 2018.

- “Introduction to Regression Analysis.” Presentation to Crowell & Moring, December 12, 2017.
- “Anticompetitive Effects of Horizontal Shareholding.” Panel tele-discussion, Canadian Bar Association Economic and Law Committee, December 5, 2017.
- “When the Crystal Ball Cracks: Why Are Divestitures Failing?” Panel discussion, 5th Annual GCR Live, New York, September 28, 2017.
- “Quantifying Merger Effects.” Presentation, WilmerHale, Washington, DC, March 6, 2017.
- “Economics 101: Theory” and “Quantifying Merger Effects.” Presentation, Competition Bureau Canada, Ottawa, ON, Canada, January 19, 2017.
- “Online Services and the Analysis of Competitive Merger Effects in Privacy Protections and Other Quality Dimensions.”
 - CRESSE Conference, Rhodes, Greece, July 1, 2016.
 - Antitrust Enforcement Symposium, Oxford, United Kingdom, June 25, 2016.
- “Antitrust Lessons for Privacy Regulators.” Panel discussion, 19th Annual Antitrust Symposium, George Mason Law Review, Arlington, VA, February 18, 2016. The panel explored the intersection of privacy protection and antitrust.
- “Empirical Methods in Merger Analysis.” This presentation reviews methods for quantifying merger effects including natural experiments, simulation methods, and upward pricing pressure calculations.
 - New York Women’s Antitrust Bar Association, New York, NY, October 22, 2015.
 - Hunton & Williams LLP, Washington, DC, June 25, 2014.
- “The Economics of Unilateral Effects from Mergers.” Presentation, Hunton & Williams LLP, Washington, DC, August 13, 2015. This training session included the economics of unilateral effects in differentiated goods markets with price setting, auction markets, and markets where price is determined through bargaining.
- “Theory of the Firm and Oligopoly.” Presentation, Hunton & Williams LLP, Washington, DC, March 18, 2015. This training session included basic demand faced by firms in perfectly and imperfectly competitive markets, profit maximization in both types of markets, and oligopoly theory including by quantity and prices setting models.
- “Economics 101: Theory and Merger Application.” Presentation, Crowell & Moring LLP, Washington, DC, November 7, 2013. This presentation included basic microeconomic theory of the firm with application to unilateral effects in mergers.

- “Antitrust Economics 101.” Presentation, Paul Hastings LLP, Washington, DC, September 10, 2013. This presentation included modules unilateral effects from mergers and an introduction to regression analysis.
- “Vertical Foreclosure in Front of the Agencies and the Courts.” Panel discussion, 2013 Hal White Antitrust Conference, Bates White Economic Consulting, Washington, DC, June 3, 2013.
- “Cost Reductions and Pass-Through in Open Auction Markets with Application to Vertical Integration and Merger Analysis.” Presenter and discussant, 11th International Industrial Organization Conference, Industrial Organization Society, Boston, MA, May 18, 2013.
- “Methods for Quantifying Merger Effects: What Are They and How Do They Work?” Panel discussion, Ninth Annual Antitrust Conference, Bates White Economic Consulting, Washington, DC, June 7, 2012.
- “Introduction to Upward Pricing Pressure Analysis.” This presentation explains how UPP analysis can be useful to defend a merger in concentrated industries with low margins and how UPP brings efficiencies and margins directly into the competitive effects analysis.
 - Crowell & Moring LLP, Washington, DC, November 2010.
 - Proskauer Rose LLP, Washington, DC, November 2010.
 - Crowell & Moring LLP, Brussels, Belgium, June 2010.
 - Cleary Gottlieb Steen & Hamilton LLP, Brussels, Belgium, June 2010.
 - Skadden, Arps, Slate, Meagher & Flom LLP, Brussels, Belgium, June 2010.
- “The Use of Economic Evidence in Litigation.” Panel moderator, Fifth Annual Antitrust Conference, Bates White Economic Consulting, Washington, DC, June 2, 2008.
- “DeltaPineland Case Presentation.” Fifth Annual Antitrust Conference, Bates White Economic Consulting, Washington, DC, June 3, 2008.
- “The Effect of Profit Sharing on Auction Markets.”
 - Securities and Exchange Commission, Washington, DC, April 2006.
 - Charles River Associates, Washington, DC, March 2004.
 - University of Maryland, College Park, MD, February 2004.
 - North American Winter Meetings of the Econometric Society, Philadelphia, PA, January 2004.

- “Changing Market Institutions and the Role of Competition Authorities.” Asia-Pacific Economic Cooperation (APEC) Workshop on Regulation and Competition in the Financial Services Sector, Mexico City, November 2003.
- “Assessing Competitive Effects in Auction and Bid Markets.” Training session for US Department of Justice, Antitrust Division’s legal staff, Washington, DC, March 2002 and November 2003.
- “The Effects of Mergers in Open Auction Markets.”
 - Southern Economic Association Meetings, Tampa, FL, November 2001.
 - North American Summer Meetings of the Econometric Society, College Park, MD, June 2001.
 - Department of Justice, Washington, DC, January 1999.
 - Georgetown University, Washington, DC, October 1998.
 - INFORMS Seattle National Meeting, October 1998.
- “An Introduction to Auction Theory.” Economics Working Group, Department of Energy, Washington, DC, October 2000.
- “The Division of Labor and Revenue Sharing in Joint Ventures.” Indiana University–Purdue University at Indianapolis, February 1998.
- “Hazardous Facility Siting when Cost Information is Private: An Application of Multidimensional Mechanism Design.”
 - North American Summer Meeting of the Econometric Society, Quebec City, Canada, June 1997.
 - University of Maryland, College Park, MD, March 1997.
 - Rutgers University, New Jersey, April 1997.
- “Auction Contract Enforcement When Bidders Have Different Levels of Limited Liability.” Operations Research and the Management Sciences, meetings, Los Angeles, CA, April 1995.

Distinctions and Honors

- Global Competition Review, *International Who’s Who* of Competition Economists, 2012, 2018–2020.
- Best Academic Economics Article, Antitrust Writing Awards, for “The Competitive Effects of Common Ownership: We Know Less than We Think,” 2018.
- The Commissioner’s Award for Eminent Achievement, Bureau of Labor Statistics, May 1997 and July 1996.

- Peter Asch Memorial Scholarship (dissertation award), Rutgers University, May 1991.
- Faculty Honors, Trinity College, May 1985.

Referee

- ACM Conference on Electronic Commerce
- American Economic Review
- The Economic and Social Review
- The Economic Journal
- Economic Inquiry
- Economic Theory
- Electronic Commerce Research
- Games and Economic Behavior
- The Gerontologist
- International Journal of Industrial Organization
- Journal of Business
- Journal of Economics and Management Strategy
- Journal of Economic Theory
- Journal of Gerontology: Social Sciences
- Journal of Industrial Economics
- Journal of Law and Economics
- Management Science
- Mathematical Social Sciences
- Quarterly Review of Economics and Finance
- RAND Journal of Economics

- Southern Economic Journal

Professional Associations and Activities

- American Bar Association, Antitrust Section
- American Economic Association
- CRESSE Associate (Law, Policy, and Practice)
- Econometric Society