

ATTACHMENT A: CURRICULUM VITAE

Mark A. Israel
President, Compass Lexecon

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555 12th Street NW, Suite 501
Washington, DC 20004
(202) 753-5205 (direct)
(301) 938-5094 (mobile)
misrael@compasslexecon.com

AREAS OF ECONOMIC EXPERTISE

- Antitrust and competition economics; industrial organization economics
- Applied econometrics
- Economic and econometric analysis of horizontal and vertical mergers
- Economic and econometric analysis of antitrust litigation topics, including: Class certification, damages, and liability issues in cases involving price fixing, exclusive dealing, monopolization, bundling, price discrimination, and exclusionary practices

INDUSTRIES OF PARTICULAR EXPERTISE AND CASE HIGHLIGHTS

- Particular expertise in industries including: Wireline and wireless telecommunications, media, advertising, sports, airlines, railroads, and other transportation services.
- Additional extensive experience in industries including: Internet, software, and other high technology markets; financial markets; credit cards; insurance markets; healthcare; biotech; distribution services; energy markets; metals; hotels; rental cars, and consumer retail.
- Selected case highlights: CCB v. Rogers/Shaw; NFL Sunday Ticket Antitrust Litigation; DOJ v. Google Search Litigation; DOJ v. AA/JetBlue JV; PGA Tour v. LIV Golf; Viamedia v. Comcast; Capacitors Price Fixing Jury Trial; Rail Fuel Surcharge Litigation; Verizon-Tracfone Hearings; Sprint-T-Mobile Hearings; DOJ v. AT&T/Time Warner; AA-US Airways Merger; Comcast-NBCU Merger; DOJ Oneworld Airline Alliance Investigation.
- Research published in leading scholarly and applied journals including *The American Economic Review*, *The Rand Journal of Economics*, *Antitrust Law Journal*, *The Journal of Competition Law and Economics*, and *The Review of Network Economics*.
- Co-author of the chapter on Econometrics and Regression Analysis in the ABA Treatise, *Proving Economic Damages: Legal and Economic Issues*, 2017.

EDUCATION

- Ph.D., Economics, STANFORD UNIVERSITY, June 2001.
- M.S., Economics, UNIVERSITY OF WISCONSIN-MADISON, August 1992.
- B.A., Economics, ILLINOIS WESLEYAN UNIVERSITY, Summa Cum Laude, May 1991.

EMPLOYMENT HISTORY

Compass Lexecon: *President and Member of Three-Person Global Executive Committee*, December 2023 – Present.

Previously: *Senior Managing Director and Head of Compass Lexecon North American Antitrust Practice*, January 2016 – December 2023; *Executive Vice President*, April 2013 – December 2015; *Senior Vice President*, January 2009 – March 2013; *Vice President*, January 2008 – December 2008; *Economist*, January 2006 – December 2007.

Kellogg School of Management, Northwestern University: *Associate Professor of Management and Strategy*, 2007 – 2008; *Assistant Professor of Management and Strategy*, 2000 – 2006.

State Farm Insurance: *Research Administrator*, August 1992 – August 1995.

RECENT PROFESSIONAL RECOGNITIONS

Global Competition Review, Economist of the Year, 2023.

Who's Who Legal, Global Elite Thought Leader: 2022, 2023.

Who's Who Legal, Thought Leader in USA Competition, 2024.

Who's Who Legal, Thought Leader in Competition: 2019, 2020, 2022, 2023.

Who's Who Legal, Expert Witness in Arbitration: 2024.

LIVE TESTIMONIAL EXPERIENCE

Testimony as Economic Expert on behalf of AT&T, Application of Pacific Bell Telephone Company d/b/a AT&T California (U 1001 C) for Targeted Relief from Its Carrier of Last Resort Obligation and Certain Associated Tariff Obligations, Before the Public Utilities Commission of the State of California, A.23-03-003, Opening Testimony: December 19, 2023.

Testimony as Economic Expert on behalf of Express Scripts, Inc., In the Matter of *Series 17-03-615, a designated series of MSP Recovery Claims, Series LLC, et al. v. Express Scripts, Inc., et al.*, In the United States District Court for the Northern District of Illinois Western Division, Case No. 3:20-cv-50056, Deposition: December 7, 2023.

Testimony as Economic Expert on behalf of IQVIA Holdings Inc. and Propel Media, Inc., In the Matter of *Federal Trade Commission v. IQVIA Holdings Inc. and Propel Media, Inc.*, In the United States District Court for the Southern District of New York, Case No. 1:23-cv-06188-ER, Deposition: November 9, 2023; Live Trial Testimony: November 30, 2023.

Testimony of as Economic Expert on behalf of Light & Wonder, Inc., In the Matter of an Arbitration between *Mohawk Gaming Enterprises, LLC, d/b/a Akwesasne Mohawk Casino Resort, on Behalf of Itself and All Others Similarly Situated and Light & Wonder, Inc., a Nevada Company, Formerly a Delaware Corporation, and LNW Gaming Inc., a Nevada Corporation*, American Arbitration Association, Case No. 01-20-0015-6196, and *In Re Automatic Card Shufflers Litigation*, In the United States District Court Northern District of Illinois Eastern Division, Case No. 1:21-cv-1798, Deposition: November 13, 2023.

Testimony as Economic Expert on behalf of Google, LLC, In the Matter of *United States of America, et al. v. Google LLC* (Case No. 1:20-cv-03010-APM), and *State of Colorado, et al. v. Google LLC* (Case No. 1:20-cv-03715-APM), In the United States District Court for the District of Columbia, Deposition: November 3, 2022; November 4, 2022; Live Trial Testimony: November 2, 2023; November 3, 2023; November 6, 2023.

Testimony as Economic Expert on behalf of BNSF Railway Company, et al., *In Re Rail Freight Fuel Surcharge Antitrust Litigation (No. II)*, In the United States District Court for the District of Columbia, MDL Docket No. 2925, Misc. No. 20-8 (BAH), Deposition: October 23, 2023; October 24, 2023.

Testimony as Economic Expert on behalf of Express Scripts Inc, In the Matter of *City of Rockford v. Mallinckrodt ARD, Inc., et al.* (Case No. 3:17-cv-50107), and *Series 17-03-615, a designated series of MSP Recovery Claims, Series LLC, et al. v. Express Scripts Inc., et al.* (Case No. 3:20-cv-50056), In the United States District Court for the Northern District of Illinois Western Division, Deposition: November 18, 2022; August 4, 2023.

Testimony as Economic Expert on behalf of Verra Mobility Corp., In the Matter of *Pluspass, Inc. v. Verra Mobility Corp., et al.*, In the United States District Court Central District of California – Western Division, No. 2:20-cv-10078-FWS-SK, Deposition: May 24, 2023.

Testimony as Economic Expert on behalf of United Chemi-Con, In the Matter of *Avnet Incorporated v. Hitachi Chemical Company (In Re Capacitors Antitrust Litigation*, No.

17-mdl-2801-JD), United States District Court Northern District of California, No. 17-cv-7046-JD, Live Trial Testimony: May 18, 2023.

Testimony as Economic Expert on behalf of Rogers Communications Inc., In the Matter of the *Competition Act*, R.S.C. 1985, c. C-34 as amended; and In the Matter of the proposed acquisition by Rogers Communications Inc. of Shaw Communications Inc.; and In the Matter of an application by the Commissioner of Competition for one or more orders pursuant to section 92 of the *Competition Act*, Between the Commissioner of Competition and Rogers Communications Inc. and Shaw Communications Inc., the Competition Tribunal, CT-2022-002, Live Trial Testimony: November 30, 2022; December 1, 2022.

Testimony as Economic Expert on behalf of National Football League, *In Re National Football League Sunday Ticket Antitrust Litigation*, In the United States District Court Central District of California, Case No. ML 15-02668-PSG (JEMx), Deposition: November 23, 2022.

Testimony as Economic Expert on behalf of American Airlines, Inc., In the Matter of *United States of America, et al. v. American Airlines Group Inc. and JetBlue Airways Corporation*, In the United States District Court for the District of Massachusetts, Civil Action No. 1:21-cv-11558-LTS, Deposition: August 22, 2022; Live Trial Testimony: October 17, 2022; October 24, 2022.

Testimony as Economic Expert on behalf of Comcast Corporation, In the Matter of *Viamedia, Inc. v. Comcast Corporation and Comcast Spotlight, LP*, In the United States District Court Northern District of Illinois Eastern Division, Case No. 16-cv-5486, Deposition: January 5, 2018; October 21, 2022.

Testimony as Economic Expert on behalf of KOA Corporation and KOA Speer Electronics, Inc., In the Matter between *Sean Allott and Panasonic Corporation, et al.*, In the Ontario Superior Court of Justice, Court File No. 1899-2015 CP, Deposition: August 16, 2022.

Testimony as Economic Expert on behalf of Arconic, Inc., et al., In the Matter of *Arconic, Corp., and Howmet Aerospace, Inc. v. Novelis, Inc., and Novelis, Corp.*, United States District Court for the Western District of Pennsylvania, Case No. 2:17-cv-014340-JFC, Deposition: April 29, 2022.

Testimony as Economic Expert on behalf of Norfolk Southern Railway Corporation, “Reciprocal Switching,” In Front of the Surface Transportation Board, Docket No. EP 711 (Sub-No. 1), Live Testimony: March 16, 2022.

Live testimony in front of arbitration panel in confidential arbitration regarding wholesale roaming rate for wireless telecommunications: December 13, 2021; December 14, 2021.

Testimony as Economic Expert on behalf of Nippon Chemi-Con and United Chemi-Con, *In Re Capacitors Antitrust Litigation*, No. C 14-3264-JD, and *In Re Capacitors Antitrust Litigation (No. III)*, No. MD 17-2801 JD, United States District Court for the Northern District of California Division, No. C 14-3264-JD, Deposition: March 14, 2020; Live Jury Trial Testimony: December 8, 2021.

Testimony as Economic Expert on behalf of Norfolk Southern Railway Company, *In Re Rail Freight Fuel Surcharge Antitrust Litigation*, In the United States District Court for the

District of Columbia, MDL No. 1869, Case No. 07-0489 (PLF/GMH), Deposition: November 18, 2021.

Testimony as Economic Expert on behalf of JPMorgan, Goldman Sachs and Glencore, *In Re Aluminum Warehousing Antitrust Litigation*, MDL 2481, In the United States District Court Southern District of New York, No. 16-CV-5955, Deposition: November 5, 2021.

Testimony as Economic Expert on behalf of Cox Automotive, Inc., et al., In the Matter between *Cox Automotive, Inc., Autotrader.com, Inc., Dealer Dot Com, Inc., Dealertrack, Inc.; Homenet, Inc.; Kelley Blue Book Co., Inc.; Vauto, Inc.; Vinsolutions, Inc.; and Xtime, Inc. vs. The Reynolds and Reynolds Company*, American Arbitration Association, Case No. 01-19-0000-4548, Deposition: October 21, 2021.

Testimony as Economic Expert on behalf of the Joint Defense Group, In the Matter between *Cygnus Electronics Corporation and Sean Allott and Panasonic Corporation, et al.*, In the Ontario Superior Court of Justice, Court File No. 3795-14 CP, Deposition: September 29, 2021.

Testimony as Economic Expert on behalf of American Express, In the Matter of *B & R Supermarket, Inc., d/b/a Milam's Market, et al., Individually and on Behalf of All Others Similarly Situated v. Visa, Inc., et al.*, In the United States District Court Eastern District of New York, Case No. 117-cv-02738-MKB-VMS, Deposition: August 6, 2021.

Testimony as Economic Expert on behalf of Bio-Rad Laboratories, Inc., In the Matter of *Bio-Rad Laboratories, Inc. and President and Fellow of Harvard College v. 10X Genomics, Inc., and 10X Genomics, Inc. v. Bio-Rad Labs, Inc. and President and Fellow of Harvard College as Counterclaimants*, In the United States District Court for the District of Massachusetts, Civil Action No. 1:19-cv-12533-wgy, Deposition: June 1, 2021.

Testimony as Economic Expert on behalf of Joint Applicants, In the Matter of *TracFone Wireless, Inc. (U4321C), América Móvil, S.A.B. de C.V. and Verizon Communications, Inc. for Approval of Transfer of Control over TracFone Wireless, Inc.*, Public Utilities Commission of the State of California, Application 20-11-001, Opening Testimony: March 12, 2021; Rebuttal Testimony: April 9, 2021; Live Trial Testimony: May 5, 2021; Supplemental Testimony: May 28, 2021.

Testimony as Economic Expert on behalf of Peabody Energy Corporation and Arch Coal, Inc., In the Matter of *Federal Trade Commission v. Peabody Energy Corporation and Arch Coal, Inc.*, In the United States District Court for the Eastern District of Missouri, Civil Action No. 4-20-cv-000317-SEP, Deposition: June 29, 2020; Live Trial Testimony: July 24, 2020.

Testimony as Economic Expert on behalf of Authenticom, Inc., *In Re Dealer Management Systems Antitrust Litigation*, MDL 2817, United States District Court for the Northern District of Illinois Eastern Division, No. 1:18-CV-864, Deposition: January 16, 2020; January 17, 2020.

Testimony as Economic Expert on behalf of Trinity, In the Matter of *Jackson County, Missouri, Individually and on behalf of a class of others similarly situated, v. Trinity Industries, Inc., and Trinity Highway Products, LLC*, In the Circuit Court of Jackson County,

Missouri at Independence, Case No. 1516-CV23684, Stage 1 Testimony: May 24, 2017; Stage 2 Deposition: November 14, 2019.

Testimony as Economic Expert on behalf of Joint Applicants, In the Proposed Merger of T-Mobile US, Inc. and Sprint Communications, Inc., Public Utilities Commission, State of California, San Francisco, California, Docket Nos. A.18-07-011 and A.18-07-012, Direct Rebuttal Testimony: January 29, 2019; Live Testimony: February 7, 2019; Direct Supplemental Testimony: November 7, 2019.

Testimony as Economic Expert on behalf of Turner Network Sales, Inc., In the Matter of *DISH Network L.L.C. v. Turner Network Sales, Inc.*, JAMS Arbitration No. 1100103066, Deposition: August 9, 2019; Live Trial Testimony: August 29, 2019.

Testimony of Economic Expert on behalf of Marriott Vacations Worldwide Corporation, et al., In the Matter of *RCHFU, LLC, et al. v. Marriott Vacations Worldwide Corporation, et al.*, In the United States District Court for the Eastern District of Colorado, Civil Action No. 1:16-cv-01301-PAB-GPG, Deposition: July 12, 2019.

Testimony as Economic Expert on behalf of Oscar Insurance Company of Florida, In the Matter of *Oscar Insurance Company of Florida v. Blue Cross and Blue Shield of Florida, Inc., d/b/a/ Florida Blue; Health Options Inc., d/b/a/ Florida Blue HMO; and Florida Health Care Plan Inc., d/b/a/ Florida Health Care Plans*, In the United States District Court Middle District of Florida Orlando Division, Case No. 6:18-cv-01944, Live Preliminary Injunction Hearing Testimony: January 23, 2019.

Testimony as Economic Expert on behalf of Wilh. Wilhelmsen Holding ASA, In the Matter of the *Federal Trade Commission v. Wilh. Wilhelmsen Holding ASA Wilhelmsen Maritime Services As Resolute Fund II, L.P. Drew Marine Intermediate II B.V. and Drew Marine Group, Inc.*, In the United States District Court for the District of Columbia, No. 1:18-cv-00414-TSC, Deposition: May 24, 2018; Live Trial Testimony: June 12, 2018; June 13, 2018.

Testimony as Economic Expert on behalf of Joint Sports Claimants, In the Matter of *Determination of Cable Royalty Funds*, United States Copyright Royalty Judges in the Library of Congress, Docket No. 14-CRB-0010-CD (2010-2013), Live Testimony: March 12, 2018.

Testimony as Economic Expert on behalf of Energy Solutions, Inc., In the Matter of the *United States of America v. Energy Solutions, Inc., Rockwell Holdco, Inc., Andrews County Holdings, Inc., and Waste Control Specialists, LLC*, In the United States District Court for the District of Delaware, Civil Action No. 16-cv-01056-SLR, Deposition: April 17, 2017; Live Trial Testimony: May 2, 2017; May 3, 2017.

Testimony as Economic Expert on behalf of Facebook, Inc., In the Matter of *Social Ranger, LLC v. Facebook, Inc.*, In the District Court of Delaware, C.A. No. 14-1525-LPS, Deposition: March 6, 2017.

Testimony as Economic Expert on behalf of Regal Entertainment Group, In the Matter of *iPic – Gold Class Entertainment, LLC, et al., v. Regal Entertainment Group, AMC Entertainment Holdings, Inc., et al.*, In the District Court of Harris County, Texas, 234th

Judicial District, No. 2015-68745, Deposition: January 12, 2016; February 15, 2017; Live Trial Testimony: January 21, 2016.

Testimony as Economic Expert on behalf of Anthem Inc., In the Matter of the *United States of America, et al. v. Anthem Inc. and Cigna Corp.*, In the District Court of the District of Columbia, No. 16-cv-01493 (ABJ), Deposition: November 9, 2016; Phase 1 Live Trial Testimony: December 1, 2016; December 2, 2016; Phase 2 Live Trial Testimony: December 22, 2016.

Testimony as Economic Expert on behalf of Defendants, In the Matter of *Darren Ewert v. Nippon Yusen Kabushiki Kaisha, et al.*, Supreme Court of British Columbia, No. S-134895, Deposition: September 14, 2016.

Testimony in Commercial Arbitration on Issues Related to Mobile Wireless Competition, New York, NY, April 12, 2016.

Testimony as Economic Expert on behalf of Federal Trade Commission, In the Matter of *Federal Trade Commission, et al. v. Sysco Corporation and USF Holding Corp.*, Civil Action No. 15-cv-00256 (APM), Deposition: April 28, 2015; Live Trial Testimony: May 7, 2015; May 8, 2015; May 14, 2015.

Appearances in Federal Communications Commission, Economists Panels:

- Comcast/Time Warner, January 2015
- AT&T/T-Mobile, July 2011
- Comcast/NBCUniversal, August 2010

Appearance before California Public Utility Commission, Public Hearings on Comcast/Time Warner Merger, Los Angeles, April 2015.

Appearance as Economic Expert in front of Department of Justice, Federal Trade Commission, Federal Communications Commission, and State Regulatory Agencies in many additional transactions, including: Danaher/NetScout, AT&T/Leap Wireless, T-Mobile/MetroPCS, American Airlines/US Airways, SpectrumCo/Cox/Verizon Wireless, oneworld antitrust immunity application, PepsiCo/bottlers, Houghton Mifflin/Harcourt, Chicago Mercantile Exchange/Chicago Board of Trade.

EXPERT REPORTS, AFFIDAVITS, AND DECLARATIONS

Declaration of Mark Israel, Bryan Keating, and Allan Shampine, In the Matter of *Safeguarding and Securing the Open Internet*, Before the Federal Communications Commission, WC Docket No. 23-320, December 14, 2023.

Expert Report(s) of Mark A. Israel, Ph.D., *In Re Rail Freight Fuel Surcharge Antitrust Litigation (No. II)*, In the United States District Court for the District of Columbia, MDL Docket No. 2925, Misc. No. 20-8 (BAH), Initial Report: August 15, 2023; Supplemental Report: December 13, 2023.

Reports of Dr. Mark A. Israel, In the Matter between *Topher's Beard Company and Olin Corporation, et al.*, Canadian Federal Court Proposed Class Proceeding, Court File No.: T-1365-20, Initial Report: May 23, 2023; Sur-Reply Report: December 1, 2023.

Expert Reports of Mark A. Israel, Ph.D., *In Re Dealer Management Systems Antitrust Litigation*, United States District Court for the Northern District of Illinois Eastern Division, MDL 2817, No. 1:18-CV-864, Initial Report: August 26, 2019; Reply Report: December 19, 2019; Supplemental Report: November 21, 2023.

Expert Reports of Mark A. Israel, In the Matter of *Commonwealth of Virginia, Ex. rel. and Joshua M. Harman v. Trinity Industries, Inc., and Trinity Highway Products, LLC*, In the Court of Circuit Court for the City of Richmond, Case No. CL 13-698, Initial Report: October 12, 2023; Supplemental Report: November 15, 2023.

Expert Report of Mark A. Israel, In the Matter of *Series 17-03-615, a designated series of MSP Recovery Claims, Series LLC, et al. v. Express Scripts, Inc., et al.*, In the United States District Court for the Northern District of Illinois Western Division, Case No. 3:20-cv-50056-IDJ-LAJ, November 13, 2023.

Submission of Mark A. Israel and Bryan G. M. Keating, "An Economic Analysis of TTC Wireless Access," In the Matter of *Conditions of License relating to the Provision of Services within the Toronto Transit Commission (TTC) Subway System* and In the Matter of *Arbitration Rules and Procedures for Provision of Service within the Toronto Transit Commission (TTC) Subway System*, Between Telus Communications Inc. and Bell Mobility Inc. and Rogers Communications Inc., November 10, 2023.

Verified Statement of Mark A. Israel, Ph.D., "Reciprocal Switching for Inadequate Rail Service," Surface Transportation Board, Docket No. EP 711 (Sub-No. 2), November 6, 2023.

Expert Report of Mark A. Israel, Ph.D., In the Matter of *Federal Trade Commission v. IQVIA Holdings Inc. and Propel Media, Inc.*, In the United States District Court for the Southern District of New York, Civil Action No. 1:23-cv-06188-ER, October 25, 2023.

Expert Report of Mark A. Israel, Ph.D., *In Re Automatic Card Shufflers Litigation*, In the United States District Court for the Northern District of Illinois Eastern Division, Case No. 1:21-CV-01798, August 20, 2023.

Expert Reports of Mark A. Israel, Ph.D., In the Matter of *City of Rockford, on behalf of itself and all others similarly situated v. Mallinckrodt ARD, Inc. formerly known as Questcor Pharmaceuticals, Inc., et al.*, In the United States District Court for the Northern District of Illinois Western Division, Case No. 3:17-cv-50107, Initial Report: October 17, 2022; Reply Report: July 10, 2023.

Expert Report of Mark A. Israel, Ph.D., In the Matter of *Pluspass, Inc. v. Verra Mobility Corp., et al.*, In the United States District Court Central District of California – Western Division, No. 2:20-cv-10078-FWS-SK, May 10, 2023.

Declarations of Mark A. Israel on behalf of AT&T, Application of Pacific Bell Telephone Company d/b/a AT&T California (U 1001 C) for Targeted Relief from Its Carrier of Last Resort Obligation and Certain Associated Tariff Obligations, Before the Public Utilities Commission of the State of California, A.23-03-003, Declaration: March 3, 2023; Reply Declaration: April 17, 2023; Amended Declaration: May 17, 2023.

Expert Report of Mark A. Israel, Ph.D., In the Matter of *TCS John Huxley America, Inc.; TCS John Huxley Europe Limited; TCS John Huxley Asia Limited; and Taiwan Fulgent Enterprise Co., Ltd. Vs. Scientific Games Corporation; Bally Technologies, Inc., d/b/a SHFL Entertainment or Shuffle Master; and Bally Gaming, Inc., d/b/a Bally Technologies, f/k/a Bally Gaming and Systems, f/k/aa SHFL Entertainment, Inc., f/k/a Shuffle Master, Inc.*, In the United States District Court for the Northern District of Illinois Eastern Division, Case No. 1:19-CV-01846, April 14, 2023.

Expert Report of Mark A. Israel, Ph.D., In the Matter of *Home Depot U.S.A., Inc. v. Lafarge North America Inc.*, In the United States District Court Eastern District of Pennsylvania, Case No. 2:18-cv-05305-MMB, March 21, 2023.

Expert Report of Mark A. Israel, Ph.D., *In Re National Football League Sunday Ticket Antitrust Litigation*, In the United States District Court Central District of California, Case No. ML 15-02668-PSG (JEMx), November 4, 2022.

Expert Reports of Mark A. Israel, In the Matter of the *Competition Act*, R.S.C. 1985, c. C-34; and In the Matter of the proposed acquisition by Rogers Communications Inc. of Shaw Communications Inc.; and In the Matter of an application by the Commissioner of Competition for one or more orders pursuant to section 92 of the *Competition Act*, Between Commissioner of Competition and Rogers Communications Inc. and Shaw Communications Inc. and the Attorney General of Alberta and Videotron Ltd., the Competition Tribunal, CT-2022-002, Initial Report: September 23, 2022; Reply Report: October 20, 2022.

Expert Reports of Mark A. Israel, In the Matters of *United States of America, et al. v. Google LLC* (Case No. 1:20-cv-03010-APM), and *State of Colorado, et al. v. Google LLC* (Case No. 1-20-cv-03715-APM), In the United States District Court for the District of Columbia, Initial Report: June 4, 2022; Rebuttal Report: August 5, 2022; Reply Report: September 23, 2022.

Reports of Dr. Mark A. Israel, In the Matter of *Viamedia, Inc. v. Comcast Corporation and Comcast Cable Communications Management, LLC*, In the United States District Court for the Northern District of Illinois Eastern Division, Case No. 16-cv-5486, Rebuttal Report: November 30, 2017; Errata Sheet for Rebuttal Report: January 4, 2018; Rebuttal Report: September 21, 2022.

Expert Declaration of Mark Israel, In the Matter of *Phil Mickelson, et al. v. PGA Tour, Inc.*, In the United States District Court for the Northern District of California San Jose Division, Civil Action No. 5:22-cv-04486-BLF, August 7, 2022.

Expert Report of Mark A. Israel, Ph.D., In the Matter of *United States of America, et al. v. American Airlines Group Inc. and JetBlue Airways Corporation*, In the United States District Court for the District of Massachusetts, Civil Action No. 1:21-cv-11558-LTS, July 11, 2022.

Expert Reports of Mark A. Israel, Ph.D., *In Re Rail Freight Fuel Surcharge Antitrust Litigation*, In the United States District Court for the District of Columbia, MDL No. 1869, Case No. 07-489, Initial Report: April 15, 2021; Surrebuttal Report: May 10, 2022.

Expert Reports of Mark A. Israel, Ph.D., In the Matter of *Arconic Inc. v. Novelis Inc., Novelis Corp.*, In the United States District Court for the Western District of Pennsylvania, No. 2:17-CV-01434, Initial Report: February 11, 2022; Reply Report: March 18, 2022.

Verified Statement of Mark A. Israel, Ph.D., “Reciprocal Switching,” Surface Transportation Board, Docket No. EP 711 (Sub-No. 1), February 14, 2022.

Expert Report of Mark A. Israel, In the Matter between *Sean Allott and Panasonic Corporation, et al.*, In the Ontario Superior Court of Justice, Court File No. 1899-2015 CP, January 17, 2022.

Expert Reports of Mark A. Israel, Ph.D., *In Re Aluminum Warehousing Antitrust Litigation*, In the United States District Court Southern District of New York, MDL No. 2481, Initial Report: September 17, 2021; Supplemental Declaration: January 14, 2022.

Expert Report of Mark Israel, In the Matter of *Chase Manufacturing, Inc. d/b/a Thermal Pipe Shields v. Johns Manville Corporation*, In the United States District Court for the District of Colorado, Civil Action No. 1:19-cv-00872-MEH, November 20, 2021.

Affidavits in confidential arbitration regarding wholesale roaming rate for wireless telecommunications, Initial Affidavit: August 23, 2021; Reply Affidavit: November 15, 2021.

Expert Report of Mark A. Israel, In the Matter of *Bio-Rad Laboratories, Inc. and President and Fellow of Harvard College v. 10X Genomics, Inc., and 10X Genomics, Inc. v. Bio-Rad Labs., Inc. and President and Fellow of Harvard College as Counterclaimants*, In the United States District Court for the District of Massachusetts, Civil Action No. 1:19-cv-12533-wgy, May 14, 2021.

Expert Report of Mark A. Israel, In the Matter of *B & R Supermarket, Inc., d/b/a Milam's Market, Grove Liquors LLC, Strouk Group LLC, d/b/a Monsieur Marcel, and Palero Food Corp. and Cagueyes Food Corp., d/b/a Fine Fare Supermarket v. Mastercard International Inc., Visa Inc., Visa U.S.A., Inc., Discover Financial Services, and American Express Company*, In the United States District Court for the Eastern District of New York, Case No. 17-CV-02738 (MKB) (JO), March 22, 2021.

Expert Report of Dr. Mark A. Israel, In the Matter of *Joshua M. Harman Qui Tam v. Trinity Industries, Inc., et al.*, In the Commonwealth of Massachusetts, Superior Court Department, Civil Action No. 2014-02364-D, February 26, 2021.

Verified Statement of Mark Israel, “Review of Commodity, Boxcar, and TOFC/COFC Exemptions,” Surface Transportation Board, Docket No. EP 704 (Sub-No. 1), January 29, 2021.

Expert Report of Mark A. Israel, Ph.D., *In Re Comtech/Gilat Merger Litigation*, Court of Chancery of the State of Delaware, Consolidated C.A. No. 2020-0605-JRS, September 24, 2020.

Declaration of Mark Israel and Allan Shampine, In the Matter of *AMC Networks Inc. v. AT&T Inc.*, Before the Federal Communications Commission, MB Docket No. 20-254, File No. CSR-8993, August 20, 2020.

Expert Report of Mark A. Israel, In the Matter between *Ryan Kett and Mitsubishi Materials Corporation, Mitsubishi Cable Industries, Ltd., Mitsubishi Shindoh Co., Ltd., Mitsubishi Aluminum Co., Ltd., Tachibana Metal Mfg. Co., Ltd., and Diamet Corporation*, In the Supreme Court of British Columbia, Case No. VLC-S-S-1813758, July 15, 2020.

Expert Reports of Mark A. Israel, Ph.D., In the Matter of *Federal Trade Commission v. Peabody Energy Corporation and Arch Coal, Inc.*, In the United States District Court for the Eastern District of Missouri, Civil Action No. 4-20-cv-000317-SEP, Initial Report: May 26, 2020; Reply Report: June 19, 2020.

Expert Reports of Mark A. Israel, Ph.D., *In Re Domestic Airline Travel Antitrust Litigation*, United States District Court for the District of Columbia, MDL Docket No. 2656, Misc. No. 15-1404 (CKK), Initial Report: September 30, 2019; Rebuttal Report: November 14, 2019.

Expert Reports of Mark A. Israel, In the Matter of *DISH Network L.L.C. v. Turner Network Sales, Inc.*, JAMS Arbitration No. 1100103066, Initial Report: July 23, 2019; Reply Report: August 2, 2019.

Submission of Mark A. Israel, Maya Meidan, and Robert J. Calzaretta, Jr., "The Atlantic Joint Business Generates Substantial Consumer Benefits," Competition and Markets Authority, United Kingdom, July 1, 2019.

Submission of Philip Haile and Mark Israel, "Alternative Approaches to Airport Slot Allocation: Objectives and Challenges," Department for Transport, United Kingdom, June 20, 2019.

Submission of Mark A. Israel, Maya Meidan, and Robert J. Calzaretta, Jr., "The Atlantic Joint Business Has Not Harmed Competition on Nonstop Overlap Routes, Including Focus Routes," Competition and Markets Authority, United Kingdom, June 14, 2019.

Expert Reports of Mark A. Israel, In the Matter of *RCHFU, LLC, et al. v. Marriott Vacations Worldwide Corporation, et al.*, In the United States District Court for the District of Colorado, Civil Action No. 16-01301-PAB-GPG, Initial Report: December 28, 2018; Supplemental Rebuttal Report, June 14, 2019.

Submission of Mark Israel, "The Fidelity/Stewart Merger Does Not Raise Competitive Concerns in the New York Title Insurance Industry," Revised Section 1506 Application Regarding the Proposed Acquisition of Stewart Title Insurance Company by Fidelity National Financial, Inc., New York State Department of Financial Services, April 12, 2019.

Second Report of Dr. Mark A. Israel, Between *UK Trucks Claim Limited and (1) – (5) Fiat Chrysler Automobiles NV and (1) – (4) MAN Truck & Bus AG & ORS*, In the Competition Appeal Tribunal, Case No. 1282/7/7/18, April 11, 2019.

Expert Report of Mark A. Israel, In the Matter between *Ryan Kett, Erik Oun and Jim Wong and Kobe Steel, Ltd., Shinko Metal Products Co., Ltd., Shinko Aluminum Wire Co., Ltd., Shinko Wire Stainless Company, Ltd., Kobelco & Materials Copper Tube Co., and Nippon Koshuha Steel Co., Ltd.*, In the Supreme Court of British Columbia, Case No. S-1710805, March 28, 2019.

Expert Report of Dr. Mark A. Israel, Between *Road Haulage Association and (1) – (10) MAN SE and Others and (1) Daimler AG, (2) Volvo Lastvagnar Aktiebolag*, In the Competition Appeal Tribunal, Case No. 1289/7/7/18, March 22, 2019.

Submission of Robert J. Calzaretta, Jr., Mark A. Israel, and Maya Meidan, "Assessing the Effects of ATI and JV Overlaps on Nonstop Fares: An Event Study Approach," submitted as part of a Supplement to Joint Motion to Amend Order 2010-7-8 for Approval of and Antitrust Immunity for Amended Joint Business Agreement, In the Application of American Airlines, Inc., British Airways PLC, OpenSkies SAS, Iberia Líneas Aéreas de España, S.A., Finnair OYJ, Aer Lingus Group DAC, Before the U.S. Department of Transportation, Washington, DC, Docket DOT-OST-2008-0252-, January 11, 2019.

Declarations of Mark A. Israel, In the Matter of *Oscar Insurance Company of Florida v. Blue Cross and Blue Shield of Florida, Inc., d/b/a Florida Blue; Health Options Inc., d/b/a Florida Blue HMO; and Florida Health Care Plan Inc., d/b/a Florida Health Care Plans*, In the United States District Court Middle District of Florida Orlando Division, Case No. 6:18-cv-01944, Declaration: November 19, 2018; Supplemental Declaration: December 21, 2018.

Reply Declaration of Mark Israel, Michael Katz, and Bryan Keating, In the Matter of Applications of T-Mobile US, Inc. and Sprint Corporation, Consolidated Applications for Consent to Transfer Control of Licenses and Authorizations, Federal Communications Commission, WT Docket No. 18-197, September 17, 2018.

Expert Report of Gustavo Bamberger, Robert Calzaretta, and Mark Israel, In the Joint Application of Hawaiian Airlines, Inc. and Japan Airlines, Co., Ltd., Appendix 6 to "Joint Application for Approval of and Antitrust Immunity for Alliance Agreements," Department of Transportation, Case No. DOT-OST-2018-0084, June 13, 2018.

Expert Reports of Mark A. Israel, In the Matter between *Cygnus Electronics Corporation and Sean Allott and Panasonic Corporation, et al.*, In the Ontario Superior Court of Justice, Court File No. 3795/14CP, Initial Report: November 17, 2017; Reply Report: February 23, 2018; Supplemental Report: May 22, 2018.

Expert Report of Mark A. Israel, In the Matter of the *Federal Trade Commission v. Wilh. Wilhelmsen Holding ASA Wilhelmsen Maritime Services As Resolute Fund II, L.P. Drew Marine Intermediate II B.V. and Drew Marine Group, Inc.*, In the United States District Court for the District of Columbia, No. 1:18-cv-00414-TSC, May 11, 2018.

Declaration of Mark A. Israel, In the Matter between *Robert Foster and Murray Davenport and Sears Canada Inc., et al.*, In the Ontario Superior Court of Justice, Court File No. 766-2010 CP, November 1, 2017.

Expert Report of Mark Israel and Bryan Keating, "Economic Analysis of Dr. Evans' Claims as They Relate to *Restoring Internet Freedom*," Federal Communications Commission, WC Docket No. 17-108, October 31, 2017.

Written Rebuttal Testimony of Dr. Mark A. Israel, In the Matter of *Distribution of Cable Royalty Funds*, Before the Copyright Royalty Judges, Washington, D.C., No. 14-CRB-0010-CD, September 15, 2017; Written Direct Testimony: December 22, 2016.

Declaration of Mark A. Israel, Allan L. Shampine, and Thomas A. Stemwedel, In the Matter of *Restoring Internet Freedom*, Federal Communications Commission, WC Docket No. 17-108, July 17, 2017.

Expert Report of Dr. Mark A. Israel, In the Matter of *St. Clair County, Illinois, and Macon County, Illinois, Individually and on behalf of all other counties in the State of Illinois, v. Trinity Industries, Inc. and Trinity Highway Products, LLC*, In the United States District Court for the Southern District of Illinois, Civil Action No.: 3:14-cv-1320, April 25, 2017.

Expert Reports of Mark A. Israel, In the Matter of the *United States of America v. Energy Solutions, Inc., Rockwell Holdco, Inc., Andrews County Holdings, Inc., and Waste Control Specialists, LLC*, In the United States District Court for the District of Delaware, Civil Action No. 16-cv-01056-SLR, Initial Report: March 27, 2017; Rebuttal Report: April 10, 2017.

Expert Report of Mark A. Israel, In the Matter of *Jackson County, Missouri, Individually and on behalf of a class of others similarly situated, v. Trinity Industries, Inc., and Trinity Highway Products, LLC*, In the Circuit Court of Jackson County, Missouri at Independence, Case No. 1516-CV23684, March 24, 2017.

Expert Report of Mark A. Israel, In the Matter of *Honeywell International Inc. v. iControl Networks, Inc. and Alarm.com Holdings, Inc.*, In the United States District Court for the District of New Jersey, No. 2:17-cv-01227, February 26, 2017.

Expert Report of Mark Israel, In the Matter of *Social Ranger, LLC v. Facebook, Inc.*, In the United States District Court for the District of Delaware, C.A. No. 14-1525-LPS, November 23, 2016.

Expert Report of Mark A. Israel, In the Matter between *Darren Ewert and DENSO Corporation, et al.*, In the Supreme Court of British Columbia, Vancouver Registry, No. S-135610, November 15, 2016.

Expert Reports of Mark A. Israel, In the Matter of the *United States of America, et al. v. Anthem Inc. and Cigna Corp.*, In the United States District Court, District of Columbia, No. 16-cv-01493 (ABJ), Initial Report: October 7, 2016; Supplemental and Rebuttal Report: October 28, 2016.

Verified Statements of Mark Israel and Jonathan Orszag, “Review of Commodity, Boxcar, and TOFC/COFC Exemptions,” Surface Transportation Board, Docket No. EP 704 (Sub-No. 1), Initial Verified Statement: July 26, 2016; Reply Verified Statement: August 26, 2016.

Declarations of Mark Israel, Daniel Rubinfeld, and Glenn Woroch, “Analysis of the Regressions and Other Data Relied Upon in the Business Data Services FNPRM And a Proposed Competitive Market Test,” Federal Communications Commission, WC Docket Nos. 16-143, 15-247, 05-25, RM-10593, Second Declaration: June 28, 2016; Third Declaration: August 9, 2016.

Expert Declaration of Mark A. Israel, In the Matter of *Liberman Broadcasting, Inc. and LBI Media, Inc. v. Comcast Corporation and Comcast Cable Communications, LLC*, Federal Communications Commission, MB Docket No. 16-121, June 7, 2016.

Expert Report of Mark A. Israel, In the Matter of *La Crosse County, Individually, and on behalf of all others similarly situated v. Trinity Industries, INC. and Trinity Highway Products, LLC*, In the United States District Court, Western District of Wisconsin, Case No. 3:15-cv-00117-scl, May 27, 2016.

Expert Report of Mark A. Israel, In the Matter between *Darren Ewert and Nippon Yusen Kabushiki Kaisha, et al.*, In the Supreme Court of British Columbia, Vancouver Registry, No. S-134895, May 20, 2016.

Declarations of Mark Israel, Daniel Rubinfeld, and Glenn Woroch, In the Matter of *Special Access Rates for Price Cap Local Exchange Carriers*, Federal Communications Commission, WC Docket No. 05-25, Declaration: February 19, 2016; Supplemental Declaration: March 24, 2016; Second Supplemental Declaration: April 20, 2016.

Declaration of Mark Israel, Daniel Rubinfeld, and Glenn Woroch, “Competitive Analysis of the FCC’s Special Access Data Collection,” Federal Communications Commission, WC Docket No. 05-25, January 26, 2016.

Declaration of Dr. Mark Israel, In the Matter of *iPic – Gold Class Entertainment, LLC, et al., v. Regal Entertainment Group, AMC Entertainment Holdings, Inc., et al.*, In the District Court of Harris County, Texas, 234th Judicial District, No. 2015-68745, January 18, 2016.

Declaration of Dennis Carlton, Mark Israel, Allan Shampine & Hal Sider, “Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans,” Federal Communications Commission, WC Docket No. 15-247, January 7, 2016.

Declaration of Mark A. Israel, Attached to “Response of AT&T Mobility LLC to Notice of Apparent Liability for Forfeiture,” Federal Communications Commission, File No. EB-IHD-14-00017504, July 17, 2015.

Reports in the Matter of *Federal Trade Commission, et al. v. Sysco Corporation and USF Holding Corp.*, In the United States District Court for the District of Columbia, Civil Action No. 1:15-cv-00256 (APM), Declaration: February 18, 2015; Report: April 14, 2015; Rebuttal Report: April 21, 2015.

Declaration of Mark A. Israel, Bryan G. M. Keating, and David Weiskopf, “Economic Analysis of the Effect of the Comcast-TWC Transaction on Voice and Broadband Services in California,” December 3, 2014.

Expert Report of Mark A. Israel, “Economic Analysis of the Effect of the Comcast-TWC Transaction on Broadband: Reply to Commenters,” Federal Communications Commission, MB Docket No. 14-57, September 22, 2014.

Supplemental Declaration of Mark Israel and Allan Shampine, In the Matter of *Amendment of the Commission’s Rules Related to Retransmission Consent, Appendix A to “Reply Comments of the National Association of Broadcasters,”* Federal Communications Commission, MB Docket No. 10-71, July 24, 2014.

Declaration of Mark Israel and Allan Shampine, In the Matter of *Amendment of the Commission’s Rules Related to Retransmission Consent, Appendix B to “Comments of the National Association of Broadcasters,”* Federal Communications Commission, MB Docket No. 10-71, June 26, 2014.

Expert Report of Mark A. Israel, "Implications of the Comcast/Time Warner Cable Transaction for Broadband Competition," Federal Communications Commission, MB Docket No. 14-57, April 8, 2014.

Declaration of Michael L. Katz, Philip A. Haile, Mark A. Israel, and Andres V. Lerner, "Sprint's Proposed Weighted Spectrum Screen Defies Economic Logic and Is Inconsistent with Established Facts," Federal Communications Commission, WT Docket No. 12-269, March 14, 2014.

Reply Declaration of Mark A. Israel, "Competitive Effects and Consumer Benefits from the Proposed Acquisition of Leap Wireless by AT&T: A Reply Declaration," Federal Communications Commission, WT Docket No. 13-193, October 23, 2013.

Declaration of Mark A. Israel, "An Economic Analysis of Competitive Effects and Consumer Benefits from the Proposed Acquisition of Leap Wireless by AT&T," Federal Communications Commission, WT Docket No. 13-193, August 1, 2013.

Supplemental Reply Declaration of Michael L. Katz, Philip A. Haile, Mark A. Israel, and Andres V. Lerner, "Comments on Appropriate Spectrum Aggregation Policy with Application to the Upcoming 600 MHz Auction," Federal Communications Commission, WT Docket No. 12-269, June 13, 2013.

Reply Declaration of Michael L. Katz, Philip A. Haile, Mark A. Israel, and Andres V. Lerner, "Comment on the Submission of the U.S. Department of Justice Regarding Auction Participation Restrictions," Federal Communications Commission, WT Docket No. 12-269, June 13, 2013.

Reply Declaration of Michael L. Katz, Philip A. Haile, Mark A. Israel, and Andres V. Lerner, "Spectrum Aggregation Policy, Spectrum-Holdings-Based Bidding Credits, and Unlicensed Spectrum," Federal Communications Commission, GN Docket No. 12-268, March 12, 2013.

Declaration of Igal Hendel and Mark A. Israel, "Econometric Principles That Should Guide the Commission's Analysis of Competition for Special Access Service," Federal Communications Commission, WC Docket No. 05-25, February 11, 2013.

Declarations of Mark A. Israel and Michael L. Katz, "Economic Analysis of Public Policy Regarding Mobile Spectrum Holdings," Federal Communications Commission, WT Docket No. 12-269, Declaration: November 28, 2012; Reply Declaration: January 7, 2013.

Declaration of Mark Israel, "An Economic Assessment of the Prohibition on Exclusive Contracts for Satellite-Delivered, Cable-Affiliated Networks," Federal Communications Commission, MB Docket Nos. 12-68, 07-18, & 05-192, September 6, 2012.

Expert Report of Mark Israel, "Implications of the Verizon Wireless & SpectrumCo/Cox Commercial Agreements for Backhaul and Wi-Fi Services Competition," Federal Communications Commission, WT Docket No. 12-4, August 1, 2012.

Expert Report of Mark A. Israel, Michael L. Katz, and Allan L. Shampine, "Promoting Interoperability in the 700 MHz Commercial Spectrum," Federal Communications Commission, WT Docket No. 12-69, July 16, 2012.

Affidavits of Dr. Mark A. Israel in the Matter of *Bloomberg L.P. v. Comcast Cable Communications, LLC*, Federal Communications Commission, MB Docket No. 11-104, Declaration: June 21, 2012; Declaration: June 8, 2012; Supplemental Declaration: September 27, 2011; Declaration: July 27, 2011.

Expert Report of Robert Willig, Mark Israel, Bryan Keating, and Jonathan Orszag, "Response to Supplementary Comments of Hubert Horan," Docket DOT-OST-2009-1055, October 22, 2010.

Expert Report of Robert Willig, Mark Israel, Bryan Keating, and Jonathan Orszag, "Measuring Consumer Benefits from Antitrust Immunity for Delta Air Lines and Virgin Blue Carriers," Docket DOT-OST-2009-1055, October 13, 2010.

Expert Report of Mark Israel and Michael L. Katz, "Economic Analysis of the Proposed Comcast-NBCU-GE Transaction," Federal Communications Commission, MB Docket No. 10-56, July 20, 2010.

Expert Report of Mark Israel and Michael L. Katz, "The Comcast/NBCU Transaction and Online Video Distribution," Federal Communications Commission, MB Docket No. 10-56, May 4, 2010.

Expert Report of Mark Israel and Michael L. Katz, "Application of the Commission Staff Model of Vertical Foreclosure to the Proposed Comcast-NBCU Transaction," Federal Communications Commission, MB Docket No. 10-56, February 26, 2010.

Expert Report of Robert Willig, Mark Israel, and Bryan Keating, "Competitive Effects of Airline Antitrust Immunity: Response of Robert Willig, Mark Israel, and Bryan Keating" in Docket DOT-OST-2008-0252, January 11, 2010.

Affidavit of Dr. Mark A. Israel on Class Certification in the Matter of Puerto Rican Cabotage Antitrust Litigation, in the United States District Court for the District of Puerto Rico, MDL Docket No. 3:08-md-1960 (DRD), December 10, 2009.

Expert Report of Robert Willig, Mark Israel, and Bryan Keating, "Competitive Effects of Airline Antitrust Immunity," Docket DOT-OST-2008-0252, September 8, 2009.

Expert Report and Supplemental Expert Report of Dennis W. Carlton and Mark Israel in the Matter of *Toys "R" Us-Delaware, Inc., and Geoffrey Inc. v. Chase Bank USA N.A.*, in American Arbitration Association New York, New York, Commercial Arbitrations No. 13-148-02432-08, Expert Report: February 27, 2009; Supplemental Expert Report: March 20, 2009.

Expert Reports of James Levinsohn and Mark Israel, In the Matter of *2006 NPM Adjustment Proceeding pursuant to Master Settlement Agreement*, October 6, 2008; January 16, 2009; March 10, 2009.

SELECTED OTHER EXPERT WORK IN REVIEW OF MERGERS/TRANSACTIONS

Successful acquisition of NWEA by Houghton Mifflin Harcourt, 2023. Served as lead economic expert for Veritas Capital, owner of Houghton Mifflin Harcourt. Provided analyses demonstrating no significant competitive overlaps, no significant vertical concerns, and

substantial pro-competitive benefits via integration of curriculum materials and assessment tools. Deal cleared by DOJ without a second request.

Successful merger of Sony's Crunchyroll and AT&T's Funimation anime streaming platforms. 2021. Served as lead economic expert for AT&T. Made multiple presentations to DOJ, demonstrating lack of significant competitive interaction between the parties, including extremely limited consumer switching between them, as well as extensive competition with a broader marketplace including Netflix, Amazon, and others. DOJ closed the investigation allowing the merger to proceed with no conditions.

Successful acquisition of Innovative Industries, Inc. by Ex Libris. 2020. Served as lead economist in interactions with FTC. Demonstrated that the acquisition would not harm competition due to the *de minimis* extent of head-to-head competition between Ex Libris and Innovative and the recent decline of Innovative's business. FTC closed investigation allowing acquisition to proceed with no conditions.

Successful acquisition of TD Ameritrade by Charles Schwab. 2020. Served as lead economist in interactions with DOJ. Presented analyses demonstrating broad market for investor dollars rather than narrow market for RIA Custodian Services. DOJ closed investigation allowing acquisition to proceed with no conditions.

Successful acquisition of Reinhart Foodservice by Performance Food Group Company. 2019. Served as lead economic expert on behalf of the parties in the FTC's investigation of the merger. Presented data analyses showing ample competition and lack of harm to competition in any geographic market. FTC closed the investigation with no conditions.

Successful acquisition of SGA's Food Group of companies by US Foods. 2019. Served as lead economic expert on behalf of the parties in the FTC's investigation of the merger. Presented detailed economics and econometric analyses showing ample competition and lack of harm to competition in any geographic market. FTC cleared the merger subject to divestitures in three geographic markets in the Fall of 2019.

Successful acquisition of Time Warner by AT&T Inc. 2017-2019. Lead economist throughout the DOJ investigation. Then director of all economic work during trial, serving as the central connection point between all experts and counsel and directing development of all aspects of the economic case. Defendants ultimately prevailed in trial and the merger closed in June 2018.

Successful acquisition of Keystone Foods by Tyson Foods, Inc. 2018. Served as lead economic expert for U.S. jurisdiction. Presented economic analyses demonstrating that competition would remain strong post-merger. Ultimately, antitrust agencies in the U.S., China, Japan, and Korea cleared the transaction.

Successful acquisition of NEX Group PLC by CME Group Inc. 2018. Co-lead economic expert with Thomas Stemwedel. Presented several econometric analyses demonstrating that Treasury futures contracts and cash Treasury securities were economic complements rather than substitutes. Based heavily on these Compass Lexecon submissions, the DOJ and CMA closed their investigations without requiring any divestitures.

Successful acquisition of VCA Inc. by Mars, Inc. 2017. Co-lead economic expert with Mary Coleman. Made multiple presentations to FTC demonstrating ample competition in

general, emergency, and specialty veterinary services, including econometric analyses showing lack of direct competitive impact of Mars and VCA on one another. Transaction was ultimately cleared subject to a small number of divestitures.

Successful acquisition of Mobileye by Intel. 2017. Served as lead economic expert for Intel.

Assisted counsel in preparing FTC presentations and materials demonstrating lack of significant head-to-head competition and lack of valid vertical foreclosure theories. Investigation was closed without Second Request.

FTC litigation against DraftKings, Inc. and FanDuel Inc. (Civil Action No. 17-cv-1195 (KBJ)).

2017. Served as economic expert for FTC and prepared to serve as FTC's testifying expert against the merger, prior to the parties' abandonment of the deal. Developed economic and econometric evidence that the merging parties were closest substitutes and thus likely would have increased prices as a result of their proposed merger.

Successful merger of ASE Group and SPIL. 2017. Lead economic expert on behalf of ASE Group. Submitted reports and testified to the Taiwan Fair Trade Commission, which ultimately cleared the transaction, then made multiple presentations to U.S. FTC, which also cleared the transaction. Economic analyses focused on implications of profit margins for market definition and competitive effects, ultimately demonstrating that the transaction was unlikely to cause significant harm to competition.

Successful acquisition of Alarm.com of two business units (Connect and Piper) from iControl Networks. 2017. Led team that demonstrated substantial and growing competition in home security and connected home marketplace and thus lack of competitive harm from acquisition. Work focused on importance of downstream market definition as well as empirical evidence of impact of competition on Alarm.com pricing and profitability.

Successful acquisition of Samsung Electronics, Ltd.'s printer business by HP Inc. 2016. Led team in evaluating the competitive effects of the acquisition, including assessing shares and competitive effects in overlap areas. Notably, the transaction gained regulatory approval in the U.S. during the initial review period without issuing a Second Request.

Successful acquisition of Sun Products Corp. by Henkel AG. 2016. Led team demonstrating lack of competitive impact despite overlaps in laundry detergent and related products.

Successful acquisition of Starwood Hotels & Resorts by Marriott International. 2016. Led team that performed detailed analysis of competitive conditions, extensive econometric analysis of pricing, and full review of Marriott's internal pricing models to demonstrate that Starwood and Marriott were not close competitors, combined ownership of the brands would not lead to upward pricing pressure, and competition would remain robust post-merger.

Successful acquisition of PR Newswire by GTCR. 2016. Lead economic expert for GTCR. Made presentations to DOJ showing lack of competitive harm from the transaction, based on detailed analysis of win/loss data, including calculations showing no possible upward pricing pressure (UPP) concerns regardless of the level of margins.

Successful acquisition of Schurz Communications' Broadcast Stations by Gray Television. 2015. Lead economic expert for Gray. Made presentations to DOJ demonstrating output

expanding effects of proposed transaction in light of the scale economies in television production and advertising and the small size of the DMAs affected by the transaction.

Successful acquisition of the Communications Business of Danaher Corporation by NetScout Systems. 2015. Lead economic expert for NetScout. Made presentations to DOJ describing proper economic framework for analysis of competition and potential merger harms, and demonstrated that the presence of multiple viable competitors and numerous other credible threats to be used by powerful buyers in a dynamic industry made theories of anti-competitive harm from the merger implausible.

Successful acquisition of Windmill Distribution Co. by Manhattan Beer Distributors. 2015. Lead economic expert for Manhattan Beer Distributors. Submitted White Paper to DOJ demonstrating, based on margin data, that the merger would be highly unlikely to lead to anti-competitive effects. Transaction was granted early termination from the Hart Scott Rodino process by the DOJ.

Proposed acquisition of Time Warner Cable by Comcast Corporation. 2014-2015. Served as lead economic expert on broadband issues on behalf of Comcast Corporation. Submitted multiple Declarations and made multiple presentations to DOJ and FCC, explaining lack of horizontal, bargaining, or vertical/foreclosure concerns with regard to broadband competition as a result of the transaction.

Successful acquisition of Leap Wireless by AT&T. 2014. Lead economic expert for AT&T. Submitted multiple Declarations to FCC and made presentation to DOJ, demonstrating the transaction would generate substantial consumer benefits, while generating at most minimal upward pricing pressure in a properly defined mobile wireless services market and no issues related to spectrum concentration or other competitive concerns.

Successful merger of American Airline and US Airways. 2013. Lead consulting expert, managing Compass Lexecon team of over 25 economists supporting multiple experts. Made multiple presentations to DOJ, worked on expert reports in litigation, and assisted counsel with the analysis leading to settlement of litigation, permitting transaction to close.

Successful merger of T-Mobile USA and MetroPCS. 2013. Lead economic expert for T-Mobile USA. Conducted economic analyses of competitive effects and consumer benefits from the transaction, as well as consumer benefits from reduced costs and increased network quality. Presented analyses to both DOJ and FCC.

FTC investigation of acquisition of Dollar Thrifty Automotive Group by Hertz. 2012. Served as a lead economic expert for FTC and prepared to serve as FTC's testifying expert against the merger, prior to case settlement. Conducted empirical analyses based on previous rental car mergers demonstrating likely price increases from the transaction.

Decision by Federal Communications Commission not to extend the ban on exclusive contracts for satellite-delivered, cable-affiliated networks. 2012. Lead economic expert for National Cable and Telecommunications Association. Submitted economic analysis demonstrating that the ban on exclusive distribution of satellite-delivered, cable affiliated networks is no longer warranted given increased marketplace competition. FCC made decision to allow the ban to sunset.

Successful sale of wireless spectrum by SpectrumCo and Cox (“Cable Companies”) to Verizon Wireless and successful completion of related commercial agreements. 2012. On behalf of the Cable Companies, performed economic analyses demonstrating lack of competitive harm from the transaction on markets for backhaul and Wi-Fi services. Presented analyses to FCC.

Successful acquisition by LIN Media of broadcast television stations from NTV. 2012. Lead economic expert for LIN Media. Prepared economic analysis demonstrating lack of competitive concern over potential issues related to SSA and JSA Arrangements.

Proposed acquisition of T-Mobile USA by AT&T. 2011. Served as one of the lead economists, initially for T-Mobile (along with Michael Katz) and ultimately for both parties (along with Michael Katz and Dennis Carlton). Made multiple presentations to DOJ and FCC. Appeared in FCC Workshop, ex parte meeting.

Successful application for antitrust immunity by Delta and Virgin Blue. 2010. Together with Robert Willig, Bryan Keating, and Jon Orszag, prepared economic analyses demonstrating substantial net consumer benefits from antitrust immunity. Submitted results in expert reports to Department of Transportation.

Successful joint venture between Comcast and NBC Universal (and ultimate full acquisition of NBC Universal by Comcast). 2010. Served as one of the lead economists (along with Michael Katz) on behalf of the merging parties. Wrote multiple reports submitted to FCC (with Michael Katz) demonstrating lack of significant competitive concerns from the transaction. Made multiple presentations to DOJ and FCC. Appeared in FCC Workshop of economists, ex parte meeting.

Successful application for antitrust immunity for oneworld alliance and associated joint venture of American Airlines, British Airways, and Iberia Airlines. 2009-2010. Together with Robert Willig and Bryan Keating, prepared economic analyses demonstrating substantial net consumer benefits associated with antitrust immunity for the joint venture. Submitted results in expert reports to Department of Transportation.

Successful acquisition by PepsiCo of bottlers, PBG and PAS. 2009. Performed econometric and simulation analyses demonstrating pro-competitive effect of merger on PepsiCo’s own brands, other brands distributed by PBG and PAS, and overall marketplace. Presented results to FTC (together with Dennis Carlton).

Successful merger of Delta Airlines and Northwest Airlines. 2008. In support of Dennis Carlton, developed empirical and theoretical analyses to demonstrate merger’s pro-competitive nature. Work focused on (ultimately settled) private litigation opposing the merger.

Successful acquisition of Harcourt Education by Houghton Mifflin. 2007. Along with Daniel Rubinfeld and Frederick Flyer, developed econometric analyses demonstrating lack of competitive harm from proposed merger. Presented results to DOJ.

Successful acquisition of Chicago Board of Trade by Chicago Mercantile Exchange. 2007. Along with Robert Willig and Hal Sider, developed and presented multiple empirical analyses demonstrating lack of competitive harm from merger. Submitted multiple white papers and made multiple presentations to DOJ.

SELECTED OTHER EXPERT/CONSULTING WORK

Led team supporting Dennis Carlton's testimony in Toshiba/Hannstar TFT-LCD Antitrust litigation vs. Plaintiff Best Buy, 2013.

Led team supporting Dennis Carlton's testimony in Toshiba's TFT-LCD Class Action Antitrust litigation. Named Litigation Matter of the Year for 2012 by *Global Competition Review*, 2012.

As economic expert for US Airways, developed econometric analysis of air traffic at major US airports, presented to Philadelphia Airport management team, 2011.

Prepared analysis of the competitive impact of low-cost-carrier competition in Washington, D.C. and New York airports. Filed with DOT, 2011.

ON BEHALF OF MAJOR PHARMACEUTICAL FIRM, DEVELOPED ECONOMETRIC MODEL TO FORECAST PHARMACEUTICAL EXPENDITURES, 2009.

Developed econometric model to measure of the importance of network effects in credit cards in the context of measuring damages incurred by a major credit card issuer, 2007-2008.

OTHER CONFIDENTIAL CONSULTING WORK IN THE FOLLOWING INDUSTRIES

Automobiles and Components

Consumer Durables

Consumer Services

Financial Services

Energy

Food, Beverage, and Tobacco

Healthcare Equipment and Services

Media

Pharmaceuticals, Biotechnology, and Life Sciences

Retail

Semiconductors and Semiconductor Equipment

Software and Related Services

Technology: Hardware and Equipment

Telecommunication Services

Transportation

Utilities

PUBLICATIONS

“Guidelines Lacking Guidance: Improving the FTC/DOJ Draft Merger Guidelines,” (with Daniel P. O’Brien, Jonathan Orszag, Jeremy Sandford, Loren Smith, and Nathan Wilson), available at <https://papers.ssrn.com/abstract=4575390>, September 18, 2023.

“Evaluating a Theory of Harm in a Vertical Merger: AT&T/Time Warner,” (with Dennis W. Carlton, Georgi V. Giozov, and Allan L. Shampine), Chapter 5 in *Antitrust Economics at a Time of Upheaval: Recent Competition Policy Cases on Two Continents*, John Kwoka, Jr., Tommaso M. Valletti, and Lawrence J. White, eds., August 2023.

“Cheap Exclusion in Markets with Multiple Complements,” (with Erica Benton and Daniel P. O’Brien), forthcoming in *International Journal of Industrial Organization*, available at <https://ssrn.com/abstract=4328818>, June 17, 2023.

“A Retrospective Analysis of the AT&T/Time Warner Merger” (with Dennis W. Carlton, Georgi V. Giozov, and Allan L. Shampine), Volume 65, Number S2, in the *Journal of Law and Economics*, November 2022.

“New Merger Guidelines Should Keep the Consumer Welfare Standard” (with Jonathan Orszag and Jeremy Sandford), *CPI Antitrust Chronicle*, November 2022.

“The Economics of the LCD Cartel: Organization, Incentives, and Practical Challenges,” *Cartels Diagnosed: New Insight on Collusion* (with Dennis W. Carlton, Ian MacSwain, and Allan Shampine), available at <https://ssrn.com/abstract=4190535>, August 15, 2022.

“Vertical Mergers with Bilateral Contracting and Upstream and Downstream Investment,” (with Daniel P. O’Brien), available at <https://ssrn.com/abstract=3886048>, July 15, 2021.

“International Broadband Price Comparisons Tell Us Little about Competition and Do Not Justify Broadband Regulation,” working paper (with Michael Katz and Bryan Keating), commissioned by NCTA – The Internet & Television Association, May 11, 2021.

“Effects of the 2010 Horizontal Merger Guidelines on Merger Review: Based on Ten Years of Practical Experience,” (with Dennis W. Carlton), Volume 58, Issue 2, in the *Review of Industrial Organization*, November 10, 2020.

“Lessons from AT&T/Time Warner,” (with Dennis W. Carlton and Allan L. Shampine), *Competition Policy International*, July 2019.

“Are You Pushing Too Hard? Lower Negotiated Input Prices as a Merger Efficiency,” (with Thomas A. Stemwedel and Ka Hei Tse), Volume 82, Issue 2, Pages 623-642, in the *Antitrust Law Journal*, April 2019.

“Vertical Integration in Multichannel Television Markets: Revisiting Regional Sports Networks Using Updated Data,” (with Georgi Giozov, Nauman Ilias, and Allan Shampine), Volume 4:1 in *The Criterion Journal on Innovation*, 2019.

“Are Legacy Airline Mergers Pro- or Anti-Competitive? Evidence from Recent U.S. Airline Mergers,” (with Dennis Carlton, Ian MacSwain, and Eugene Orlov), Volume 62, Pages 58-95, in the *International Journal of Industrial Organization*, January 2018.

“Competitive Effects of International Airline Cooperation,” (with Robert J. Calzaretta and Yair Eilat), Volume 13, Issue 3, Pages 501-548, in the *Journal of Competition Law & Economics*, September 2017.

“Econometrics and Regression Analysis,” (with Chris Cavanagh, Paul Denis, and Bryan Keating), Chapter 6 in the *American Bar Association’s Proving Antitrust Damages: Legal and Economic Issues, Third Edition*, 2017.

“Do Premiums Increase After Health Insurance Mergers? – A Reassessment of Guardado et al.’s Findings,” (with Robert C. Bourke, Ben Wagner, and David A. Weiskopf), available at <https://ssrn.com/abstract=2933062>, March 16, 2017.

“Complementarity without Superadditivity,” (with Steven Berry, Philip Haile, and Michael Katz), Volume 151, Pages 28-30, in *Economics Letters*, December 1, 2016.

“Antitrust in a Mobile World,” (with Yonatan Even, Jonathan M. Jacobson, Scott Martin, and Dr. Helen Weeds), Chapter 17 in *International Antitrust Law & Policy: Fordham Competition Law 2015*, James Keyte, ed., 2016.

“Buyer Power in Merger Review,” (with Dennis W. Carlton and Mary Coleman), Chapter 22 in *The Oxford Handbook of International Antitrust Economics*, Volume 1, Roger D. Blair and D. Daniel Sokol, eds., 2015.

“Airline Network Effects and Consumer Welfare,” (with Bryan Keating, Dan Rubinfeld, and Robert Willig), *Review of Network Economics*, available at <https://ssrn.com/abstract=2473243>, November 2013.

“The Evolution of Internet Interconnection from Hierarchy to ‘Mesh’: Implications for Government Regulation,” (with Stanley M. Besen), Volume 25 in *Information Economics and Policy*, July 24, 2013.

“The Delta-Northwest Merger: Consumer Benefits from Airline Network Effects (2008),” (with Bryan Keating, Daniel L. Rubinfeld, and Robert D. Willig), *The Antitrust Revolution*, Sixth Edition, John E. Kwoka, Jr. and Lawrence J. White, eds., July 2013.

“Proper Treatment of Buyer Power in Merger Review,” (with Dennis W. Carlton), *Review of Industrial Organization*, July 2011.

“Response to Gopal Das Varma’s Market Definition, Upward Pricing Pressure, and the Role of the Courts: A Response to Carlton and Israel,” (with Dennis W. Carlton), *The Antitrust Source*, December 2010.

“Will the New Guidelines Clarify or Obscure Antitrust Policy?” (with Dennis W. Carlton), *The Antitrust Source*, October 2010.

“Should Competition Policy Prohibit Price Discrimination?” (with Dennis W. Carlton), *Global Competition Review*, 2009.

“The Empirical Effects of Collegiate Athletics: An Update Based on 2004-2007 Data,” (with Jonathan Orszag), Paper commissioned by National Collegiate Athletic Association, available at http://www.epi.soe.vt.edu/perspectives/policy_news/pdf/NCAASpending.pdf, February 2009.

“Services as Experience Goods: An Empirical Examination of Consumer Learning in Automobile Insurance,” *The American Economic Review*, December 2005.

“Tenure Dependence in Consumer-Firm Relationships: An Empirical Analysis of Consumer Departures from Automobile Insurance Firms,” *The Rand Journal of Economics*, Spring 2005.

“The Impact of Youth Characteristics and Experiences on Transitions Out of Poverty,” (with Michael Seeborg), *Journal of Socio-Economics*, 1998.

“Racial Differences in Adult Labor Force Transition Trends,” (with Michael Seeborg), *Journal of Economics*, 1994.

SELECTED RECENT PRESENTATIONS

American Bar Association Section of Antitrust Law, “Nuts & Bolts of Presenting Economic Evidence to the Agencies: Common Pitfalls and Best Practices, Panelist, October 2019.

Dechert LLP, 2019 Annual Antitrust Spring Seminar, Keynote Speaker, March 2019.

Concurrences Review and The George Washington University Law School, 6th Bill Kovacic Antitrust Salon: Where is Antitrust Policy Going?, “A Judge’s Eye View on Antitrust: Mergers, Cartels, Remedies...,” Panelist, September 2018.

Fordham Competition Law Institute, 45th Annual Conference on International Antitrust Law and Policy, “Merger Remedies,” Panelist, September 2018.

Georgetown Center for Business and Public Policy, “Airline Competition Conference,” Panelist, July 2017.

J.P. Morgan Special Situations Investor Forum, “The Antitrust Merger Review Process,” Panelist, March 2017.

American Bar Association Section of Antitrust Law, “Economic Issues Raised In The Comcast – Time Warner Cable Merger,” Panelist, February 2016.

Fordham Competition Law Institute, 42nd Annual Conference on International Antitrust Law and Policy, “Antitrust in a Mobile World,” Panelist, October 2015.

American Bar Association Section of Antitrust Law, “Merger Practice Workshop,” Faculty Member, October 2015.

Searle Center Conference on Antitrust Economics and Competition Policy, Panel on Recent Transactions in the Telecom Industry, Panelist, September 2015.

National Bureau of Economic Research, Summer Institute 2015, Industrial Organization Meetings, “Panel Discussion of the Comcast-Time Warner Merger,” Panelist, July 2015.

Federal Communications Bar Association, “How the Antitrust Agencies and the FCC are Likely to Analyze Vertical Mergers,” Panelist, November 2014.

The Coca Cola Company Global Antitrust Forum, “Round Table Discussion on Use of Economics and Economists,” Panel Chair, November 2014.

Compass Lexecon Competition Policy Forum, Lake Como Italy, “Consolidation of the Telecoms Industry in the EU and the U.S.,” Panelist, October 2014.

The IATA Legal Symposium 2014, Aviation Law: Upfront and Center, “Merger Analysis – A sudden shift in approach by DOJ in the American Airlines and US Airways merger,” Panelist, February 2014.

Georgetown Law 7th Annual Global Antitrust Enforcement Symposium, “Merger Enforcement and Policy,” Panelist, September 2013.

American Bar Association Section of Antitrust Law, “Airline Mergers: First Class Results or Middle-Seat Misery?” Panelist, May 2013.

American Bar Association Section of Antitrust Law, “Go Low or Go Home! Monopsony a Problem?” Panelist, March 2012.

Federal Communications Bar Association Transactional Committee CLE Seminar, “The FCC’s Approach to Analyzing Vertical Mergers,” Panelist, October 2011.

The Technology Policy Institute Aspen Forum, “Watching the Future: The Economic Implications of Online Video,” Panelist, August 2011.

American Bar Association Forum on Air & Space Law, 2011 Update Conference, “Antitrust Issues: What’s on the Horizon for the Industry,” Panelist, February 2011.

American Bar Association Section of Antitrust Law, “Antitrust in the Airline Industry,” Panelist, September 2010.

GRANTS AND HONORS

Searle Fund for Policy Research Grant, 2004-2006, for “An Empirical Examination of Asymmetric Information in Insurance Markets.”

Kellogg School of Management Chairs’ Core Course Teaching Award, 2003 & 2005.

Bradley Dissertation Fellowship, Stanford University, 1999-2000.

Stanford University, Outstanding Second Year Paper Prize, 1997.

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