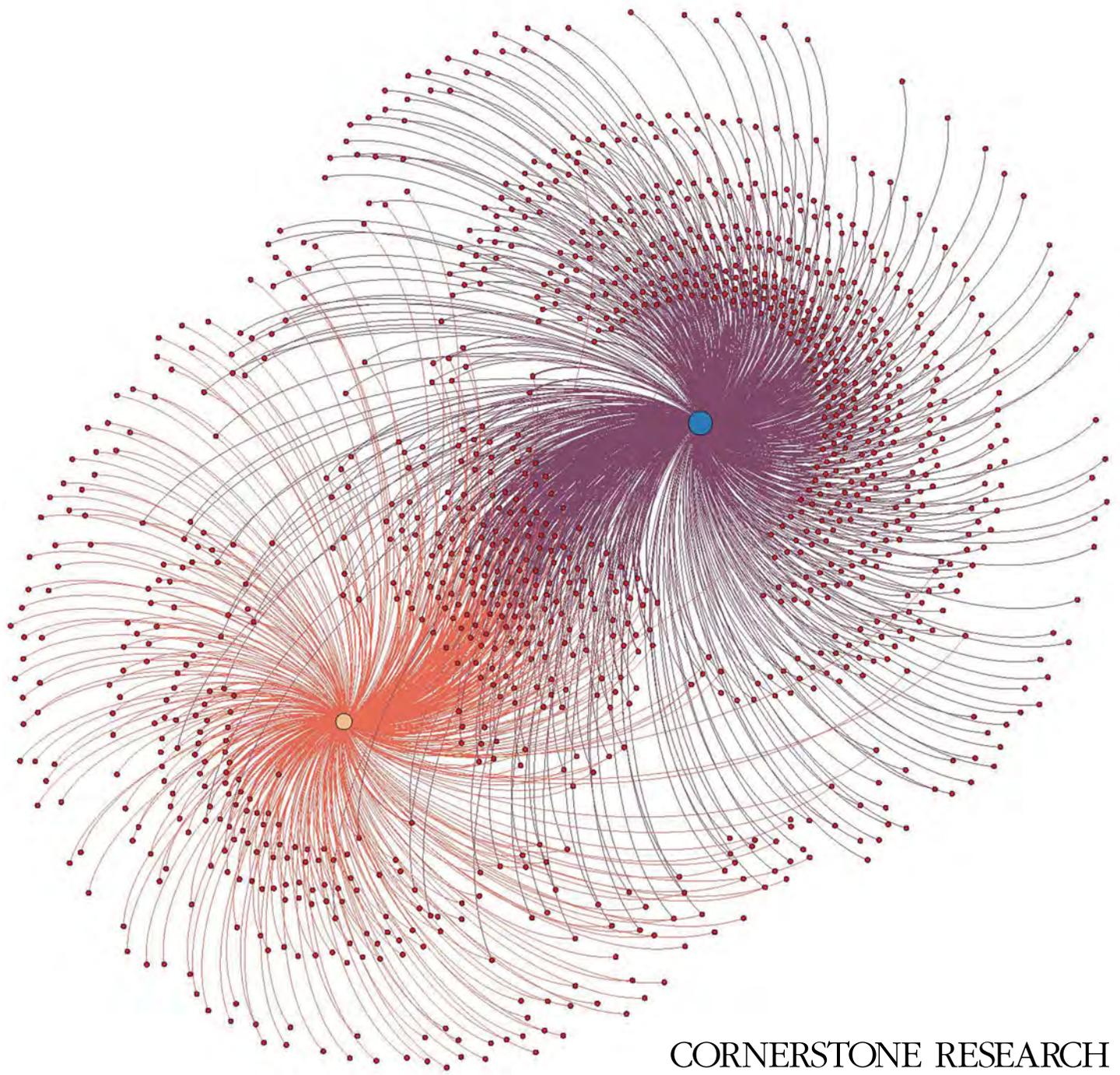


# TWENTY SEVENTEEN

2017 ANNUAL REVIEW



CORNERSTONE RESEARCH

How Is Healthcare Changing? How Is the Government Responding? // Shadow Banking—The Potential Risks and Rewards // Securities Class Action Filings—Year in Review // Drafting Blow Provisions in Securities Class Settlements // *Trends in Merger Investigations and Enforcement at the U.S. Antitrust Agencies: FY 2006–2015* // The Role of Economic Analysis in the Assessment of Vertical Restraints // How to Handle SEC and PCAOB Investigations // Economics at DG Competition: Current Cases and Future Challenges // Who's in the Driver's Seat? Assessing Misrepresentation, Liability, and Injury in a World of Complex Automated Products // 2017 Intellectual Property Institute, USC Gould School of Law // 2017 George Washington University Corporate Antitrust Roundtable // ABA Section of Antitrust Law 2017 Spring Meeting // Securities Class Action Settlements—2017 Review and Analysis // How Do Franchise Termination Restrictions Affect Consumers? // New Risk in Energy 2017: Price Indices, Price Reporting, Price Reporting Agencies (PRAs), and Recent Changes in the Process // Fraud Day at Mendoza College of Business, University of Notre Dame // 11th Annual Juris Investment Treaty Arbitration—Conference on Technology, IP, and Investor-State Arbitration: Remedies in IP Investment Arbitration // CDR Spring Arbitration Symposium // The Law and Economics of Competition Damages Actions // **2017 EVENTS + THOUGHT LEADERSHIP + SPEAKING ENGAGEMENTS** // Suffolk University/Merrill Lynch Wealth Management Symposium Spring 2017 // Asset Management Regulation under the New Administration // Accounting Class Action Filings and Settlements—2017 Review and Analysis // SEC Enforcement Activity—First Half FY 2017 Update // A Broader Perspective on Corporate Governance in Litigation // Approved Claims Rates in Securities Class Actions // Secondary Market // for LP Investments in Private Equity // Reasonable Royalty in Patent Damages: What You Need to Know in 2017 // Testifying Experts Draw Lessons from Recent Healthcare Mergers: What Can We Expect for Merger Review Going Forward? // Securities Enforcement Forum West 2017: The Exploding Role of Big Data and Technology in Securities Enforcement, Regulation and Defense // 13th Annual University of Washington Financial Reporting Conference // Economic Evidence in Competition Law and the Future of the "More Economic" Approach // 27th Annual Meeting American Law and Economics Association // Society for Financial Studies Finance Cavalcade North America Conference // *Proof Agreements, Incentives and Liabilities in Hub-and-Spoke Antitrust Conspiracies: A 2017 Update: What Is a Hub-and-Spoke Conspiracy and Who Benefits?* // Private Enforcement: Different Parties, Different Objectives // WBA Centennial Celebration: Looking Back, and Moving Forward // Estimating Damages in Litigation—Beyond Discounted Cash Flow // Blurred Lines: Assessing Sherman Act Exposure for Hub-And-Spoke Agreements // Antitrust in the Financial Sector: Hot Issues and Global Perspectives // Cornerstone Research Women's Forum // Competition Law in the Financial Services Sector // SEC Enforcement Activity: Public Companies and Subsidiaries—Midyear FY 2017 Update // SEC's Renewed Focus on Non-GAAP Measures: 1 Year Later // GCR Live 3rd Annual Antitrust Litigation USA: Count-the-Moles: The Economist's View on the Management of Litigation // A Brave New World: What's in Store? // The Future of the Markets Regime // 2017 Shareholder Engagement Roundtable at Harvard Law School // 3rd Annual GAR Live Energy Disputes // Why Antitrust? NYSBA Annual Program for Law Students and Junior Lawyers // Stanford Directors' College 2017 // Use (and Misuse) of Statistical Sampling in False Claims Act and Private Reimbursement Disputes // FERC Technical Conference on Developments in Natural Gas Index Liquidity and Transparency // Spikes in Drug Prices: Outrageous or Legitimate? // Characteristics of U.S. Natural Gas Transactions: FERC Form 552 Submissions as of May 2017 // 2017 iHEA World Congress of Health Economics: Revolutions in the Economics of Health Systems // *Expert Testimony of the Future: Machine Learning and How It Will Impact Litigation* // Insider Trading after Salman // ABA Section of Litigation: Roundtable on Surveys and Statistics in Class Certification // CARE Conversation: The CMA Care Homes Market Study // Women Leaders in Life Sciences Law 2017 // Securities Class Action Filings—2017 Midyear Assessment // 2017 Guide to Damages in International Arbitration // The Use of Econometric and Statistical Analysis and Tools // Market Approach or Comparables // 44th Annual European Finance Association (EFA) Meeting // Estimating Damages in Settlement Outcome Modeling // A Deep Dive into Spokeo // The Anthem–Cigna & Aetna–Humana Mergers: A Post Mortem // Competition Law and Economics in Pharmaceutical Markets // Characteristics of U.S. Natural Gas Transactions, Commodity Futures Trading Commission // GCR Live 5th Annual New York // Not so "Rare": The Valuation Method behind the Tethyan Challenge // Economic Analysis in Damages Actions—Insights from Recent Proceedings in the UK // Economic Analysis in Class Certification // GCR Live 9th Annual Competition Litigation: Proving Passing on in a Post Sainsbury's World // Expert Witnesses: The Good, the Bad, and the Ugly // 2017 Corporate Governance Roundtable at Harvard Law School // Accountants' Liability Conference 2017: Emerging Trends in Accountant Litigation // Securities Enforcement Forum 2017: Litigating Securities Fraud Cases against the SEC and DOJ // *GAR Live London Autumn: A 360 Look at Damages: Counsel and Experts React* // Aetna–Humana and Algorithmic Market Definition in the Guidelines // Duty to Disclose, Cryptocoins, Blockchain, and Other SEC Challenges // Was It All That Bad? U.S. Federal Antitrust Policy since 1980: Antitrust Goals (and Is Big Bad?) // Advanced EU Competition Law Conferences // Thomson Reuters Practical Law // 6th Annual Damages in International Arbitration Conference // SEC Enforcement Activity: Public Companies and Subsidiaries—Fiscal Year 2017 Update // Litigators, Wrangle That Data with Content Analysis // Applying Monte Carlo Simulations in Litigation // Competition Law in the Pharmaceutical Sector // Spoofing and Manipulation: A Primer for Healthy Trading Practices // Trends in Securities Litigation Webinar // 18th Annual Berkeley–Stanford Advanced Patent Law Institute: Silicon Valley // Bitcoin Futures: A Closer Look at CME's Contract Design

## 2017 // TWENTY SEVENTEEN

*This review highlights a few of the matters we worked on last year. While this is only a brief summary of our work, these cases provide insight into issues that will continue to be important aspects of the litigation landscape in 2018 and beyond.*

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### FEATURED AREAS //

Antitrust & Competition  
Merger Litigation  
Healthcare & Life Sciences  
Consumer Fraud & Product Liability  
Europe  
Data Analytics  
Valuation  
Financial Institutions  
Initial Coin Offering Disputes  
Securities Class Actions  
Pro Bono

## INTRODUCTION

At the start of 2017, we were awaiting a federal court decision in the proposed \$37 billion Aetna and Humana merger. This was a closely watched case involving a controversial issue—affordable healthcare. We ended the year with a Section 10(b) case in which the judge denied the plaintiffs’ motion for class certification. In both of these matters, and in others during the year, our experts’ solid, thoughtful, and persuasive testimony is cited throughout the judges’ decisions.

This 2017 review describes other selected matters that typify the complex and costly issues our clients face. Billions of dollars in product liability damages. The rapid rise of social media as a driver of consumer perceptions. And the continuing impact of disclosure-related issues in securities fraud class actions.

In these high-stakes matters, judges rely on experts who can provide robust qualitative and quantitative analyses. Sophisticated merger simulations, new content analysis tools, and advanced machine learning methods are tipping the scales in today’s data-intensive environment.

We have much more to share and welcome the opportunity to provide you with additional information on our capabilities and expertise.

# ANTITRUST & COMPETITION

*Econometric models of demand are a key source of inputs for the hypothetical monopolist test used to define relevant product markets. When reinforced by qualitative evidence, such as ordinary course of business documents, such analyses can provide a basis for credible and persuasive expert testimony.*

## FEATURED MATTER //

### UNITED STATES V. AETNA INC. AND HUMANA INC.

After a thirteen-day trial, the USDC for the District of Columbia enjoined the proposed \$37 billion merger of health insurers Aetna and Humana. In accepting the plaintiffs' arguments, the court relied on the analyses and rebuttal critiques of Cornerstone Research experts and senior advisors Professor Aviv Nevo of the University of Pennsylvania and Ms. Christine Hammer, CPA. Following the ruling, the parties abandoned the merger.

Professor Nevo analyzed the likely effects of the proposed merger on competition involving Medicare Advantage plans and plans sold on the Affordable Care Act exchanges. He testified in the plaintiffs' case in chief and as a rebuttal witness. The court's opinion relied on Professor Nevo's testimony in multiple areas.

**Relevant Market:** "Professor Nevo has performed a battery of tests that all point to the same conclusion: the sale of individual Medicare Advantage plans satisfies the hypothetical monopolist test and thus is a relevant product market. That result generally holds up whether Nevo uses a critical loss analysis or a merger simulation, and whether he uses his own estimates, [the defendants' expert's estimates], or those from the academic literature."

**Competitive Effects:** "Nevo's (largely uncontroverted) analysis suggests that there is substantial competition between Aetna and Humana. Given Nevo's analysis, it is not surprising to find significant evidence of head-to-head competition between Aetna and Humana throughout the country."

**Entry:** "[Nevo's] analysis is persuasive, and alone is enough to conclude that entry is not likely to be sufficient."

Ms. Hammer evaluated whether the defendants' efficiency claims were verifiable and merger-specific, among other areas. The court found that Ms. Hammer "raised valid issues regarding several categories of claimed efficiencies" as well as "issues with the companies' analyses...that serve to further undermine the reliability of the efficiency claims."

**"On balance, the Court is unpersuaded that the efficiencies generated by the merger will be sufficient to mitigate the transaction's anticompetitive effects for consumers in the challenged markets."**

– Memorandum Opinion, USDC for the District of Columbia, January 23, 2017

## ACCOLADES //

**Matter of the Year Nomination** *Global Competition Review*

**Biggest Competition Cases of 2017** *Law360*

**Outstanding Antitrust Litigation Achievement in Economics: Aviv Nevo, University of Pennsylvania**  
*Antitrust Enforcement Awards*

**Women in Antitrust: Andrea Shepard, Cornerstone Research** *Global Competition Review*

**"A huge firm whose established presence in the UK and US allows it to work across borders for clients in major industries."**

*GCR 100 Economics 21*

**FEATURED MATTER //****ANALOG DEVICES' ACQUISITION OF LINEAR TECHNOLOGY CORPORATION**

Counsel for Analog Devices Inc. retained Cornerstone Research staff to evaluate the competitive effects and assist with regulatory reviews in the United States and China.

In July 2016, Analog Devices announced the agreement to acquire Linear Technology for \$14.8 billion. The U.S. Federal Trade Commission granted approval without a second request. The parties completed the acquisition in March 2017, after approval by China's Ministry of Commerce (MOFCOM).

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**TRENDS IN MERGER INVESTIGATIONS AND ENFORCEMENT AT THE U.S. ANTITRUST AGENCIES**

This third edition of our annual study analyzes data from the most recent Hart-Scott-Rodino (HSR) Annual Report, released jointly by the U.S. Federal Trade Commission and the U.S. Department of Justice on October 4, 2017. The FY 2016 report covers October 1, 2015, through September 30, 2016.

**REPORTED TRANSACTIONS AND CLEARANCES**

While the number of reported transactions increased in FY 2016, the number of clearances—transactions cleared for further agency investigation—declined. In fact, the FTC or DOJ received clearance to proceed with additional regulatory reviews in only 13 percent of reported merger transactions—the lowest level in the previous ten fiscal years.

**AGENCY CHALLENGES**

Notably, even though clearances decreased, overall agency enforcement did not. On the contrary, the FTC and the DOJ issued more second requests and challenged more deals in FY 2016 than in FY 2015. Of the 47 mergers that the agencies challenged, eight of these, or 17 percent, resulted in court proceedings, more than double the historical average of three between FY 2007 and FY 2015.

*The report is available for download at [www.cornerstone.com](http://www.cornerstone.com).*

# MERGER LITIGATION

*In merger challenges, parties may assert efficiency claims or “failing firm” defenses. Experts with financial statement or accounting experience can provide valuable input on issues related to merger-specific efficiencies, corporate financials, and asset valuations.*

## FEATURED MATTER //

### UNITED STATES V. ENERGYSOLUTIONS INC.

The U.S. Department of Justice sought to enjoin the proposed \$367 million merger of EnergySolutions and Waste Control Specialists (WCS), arguing that the merger would harm competition in the market for commercial disposal of low-level radioactive waste in 36 states. The agency retained Dr. Greg Eastman of Cornerstone Research as a testifying expert.

The defendants disputed the DOJ’s characterization of the relevant product market and the deal’s likely anticompetitive effects. They claimed that the proposed merger would result in greater operational efficiencies, and also asserted that WCS was a “failing firm” whose assets would exit the market absent the merger.

Dr. Eastman testified that the defendants had not provided sufficient information to reliably quantify the claimed efficiencies. He also testified that WCS was not facing imminent failure and that its key assets were not at risk of leaving the market absent the proposed merger.

In addition, Dr. Eastman opined that WCS’s parent, Valhi Inc., had not undertaken good faith efforts to elicit reasonable alternative offers for WCS’s assets, as required by the DOJ/FTC’s Horizontal Merger Guidelines. He further opined that Valhi’s efforts focused on maximizing the company’s value, rather than on eliciting alternative offers above WCS’s liquidation value.

After a ten-day trial, the court ruled in favor of the DOJ and prohibited the companies from proceeding with the deal. The judge’s ruling was consistent with Dr. Eastman’s analysis in several key areas, including efficiencies, good faith efforts, and reasonable alternative offers.

**“Under the facts presented here, defendants have not shown that Valhi/WCS made good faith efforts to elicit reasonable alternative offers that would pose a less severe danger to competition.”**

– Opinion, USDC for the District of Delaware, July 13, 2017

## ACCOLADES //

**Matter of the Year Nomination** *Global Competition Review*

**Biggest Competition Cases of 2017** *Law360*

# HEALTHCARE & LIFE SCIENCES

Healthcare entities face evolving litigation and regulatory risks, including aggressive merger review, antitrust challenges to contracting and other business practices, and FCA investigations. Pharmaceutical companies saw a rise in litigation involving biologic patents, generic pricing, PBM rebates, and opioids.

## FEATURED MATTERS //

### CLASS ACTION RELATED TO CHANGES IN RETIREES' HEALTH INSURANCE PLANS

Defense counsel retained Cornerstone Research and Professor Laurence Baker of Stanford University in a class action related to retirees' health insurance plans. The plaintiffs alleged that the retirees were harmed by a multinational company's decision to transfer them from employer-sponsored supplemental Medicare insurance to a private healthcare exchange.

Professor Baker opined about the common use of private exchanges for supplemental Medicare coverage, their ability to provide a wider range of insurance plans that can better suit the preferences of diverse employees than many employer-sponsored plans with limited choices, and their ability to result in more competitive premiums for workers and employers.

Using publicly available healthcare expenditure and utilization data, Professor Baker conducted a simulation that showed the majority of retirees in the company would likely experience lower total expenses (premiums and out-of-pocket costs). He established that individualized inquiry would be necessary to assess any potential harm to retirees. Professor Baker also responded to the opinions on damages of the opposing expert, revealing calculation inaccuracies and flawed assumptions in the expert's conclusion of harm to the retirees.

A federal judge granted our client's motion for summary judgment.

### UNITED STATES V. CABELL HUNTINGTON HOSPITAL INC. AND ST. MARY'S MEDICAL CENTER INC.

Cornerstone Research worked with Professor Gautam Gowrisankaran of the University of Arizona on a matter involving the merger of two local hospitals. In its review, the West Virginia Health Care Authority was "persuaded by the common sense opinions" of Professor Gowrisankaran. The Authority approved the merger and extended state action immunity to the deal. The U.S. Federal Trade Commission subsequently dropped its challenge of the transaction.

### PHARMACEUTICAL PATENT CHALLENGES

#### COMPANY STRATEGIES AND LITIGATION OUTCOMES

This most-read article in the *American Journal of Health Economics* investigates patent challenges and litigation outcomes based on a unique dataset of new drugs approved from 1994 to 2006.

#### BIOSIMILARS ENTER THE COURTS: HOW WILL PATENT INFRINGEMENT SETTLEMENTS BE TESTED FOR VALIDITY UNDER ANTITRUST LAWS?

The authors examine why patent settlements between biologic and biosimilar companies will be different from those for small-molecule drugs and, thus, why the antitrust considerations may be different.

# CONSUMER FRAUD & PRODUCT LIABILITY

*Multidistrict litigation can be a common feature of large product liability matters. These cases often require quantitative analyses of very large datasets as well as a sophisticated understanding of markets and consumer behavior measurement techniques.*

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## FEATURED MATTERS //

### MULTIPLE CASES OF ALLEGED DEFECTS IN AUTOMOBILES

Cornerstone Research has worked on several prominent cases involving the world's largest automobile manufacturers. These matters typically involve multiple experts who can opine on economic loss claims, provide statistical analyses of complaint databases, and rebut conjoint analyses. Experts in content analysis and other data analytic tools have also played vital roles in these cases by quantifying media coverage and the extent to which it affected market outcomes.

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### FALSE ADVERTISING AND PRODUCT MISREPRESENTATION MATTERS

We were retained in multiple class actions to address issues related to consumer perceptions, purchase intent, and willingness to pay. For example, in “all natural” labeling cases, our experts assessed the labels’ impact on purchasing behavior compared to other factors such as brand, taste, and quality. In matters involving allegations of manufacturer misrepresentation, our experts analyzed data on consumer information sources, product features, return rates, customer satisfaction, and repeat purchases to rebut plaintiffs’ proposed damages theories.

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### BEEF PRODUCTS INC. V. AMERICAN BROADCASTING COMPANIES INC.

Beef Products Inc. (BPI) claimed \$1.9 billion in damages in one of the largest defamation cases ever filed in the United States. Counsel for BPI retained Cornerstone Research and three experts to assess causation, damages, and media content issues.

BPI alleged that ABC News engaged in a disinformation campaign and made numerous false statements about BPI and its lean finely textured beef (LFTB) product. ABC News repeatedly described LFTB as “pink slime,” and as a filler that was approved over the objections of USDA scientists.

Professor Ran Kivetz of Columbia University conducted four surveys to show the effect of ABC’s broadcasts on consumers’ perceptions. Professor Kimberly Neuendorf of Cleveland State University demonstrated that ABC’s coverage of LFTB was unprecedented. She also performed an attribution analysis of tweets about “pink slime,” showing that ABC News primarily drove the social media conversation on the topic.

Professor Daniel Sumner of the University of California, Davis, projected but-for shipments and prices absent the ABC coverage. He developed a regression model that controlled for various factors that could affect demand and supply, including other news and media coverage of the story.

BPI first filed suit in September 2012 and the case settled during trial in June 2017. Notably, the judge admitted the testimony of all three Cornerstone Research experts, and either excluded or limited the testimony of several opposing economics and marketing experts.

## FEATURED EXPERTISE //

### CONSUMER SURVEYS IN CLASS ACTIONS

*Sophisticated conjoint surveys are a growing trend in high-profile consumer class actions.*

In class certification matters, key questions center on whether classwide impact and damages can be determined through common evidence and a common method. Consumer surveys are one of the analytical methods used by quantitative marketing and econometric experts to assess such issues.

Conjoint analysis is a survey-based technique that can examine the trade-offs that consumers make in their purchasing decisions. This method purports to “decompose” consumers’ overall preferences for a product by measuring the value they place on specific product features. For example, in a false advertising or product liability case, conjoint surveys are sometimes used to assess to what extent the alleged misrepresentation may have factored into the proposed class members’ purchase decisions.

Consumer surveys, however, can be susceptible to rebuttal. For example, conjoint analysis cannot assess the impact of alleged misrepresentations on market prices, as it focuses only on the demand side of the market. Furthermore, surveys can be subject to *Daubert* exclusion if they are shown to have design and execution flaws, such as nonrepresentative sampling, false assumptions, or cognitive biases.

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### CONTENT ANALYSIS

*Content analysis is transforming the type and scale of evidence that courts can consider.*

Content analysis is the systematic, objective, quantitative assessment of message characteristics. Messages can be as varied as a Twitter post, a TV commercial, or a speech.

Computer algorithms can quickly and efficiently quantify message characteristics such as length, the number of times a word or phrase is mentioned, and correlations between certain words. For more nuanced or complex content, however, human coding tends to be the preferred method.

With the rise of the Internet, there is a vast amount of content for courts to consider, including social media, websites, and online archives of documents. Content analysis promises to become a key technique to help courts navigate this exploding volume of potential evidence.

# EUROPE

## **INTERNATIONAL PERSPECTIVES ON KEY ISSUES IN COMPETITION, FINANCE, AND ARBITRATION**

*Through Cornerstone Research–hosted events, sponsorships, and thought leadership, our consulting experts shared insights into recent cases, evolving issues, and implications for future litigation.*

## **COMPETITION DINNER SERIES**

### **ECONOMICS AT DG COMPETITION—CURRENT CASES AND FUTURE CHALLENGES**

Tommaso Valletti  
Chief Competition Economist  
European Commission

### **SHADOW BANKING—THE POTENTIAL RISKS AND REWARDS**

Peter Andrews  
Chief Economist  
Financial Conduct Authority

### **THE FUTURE OF THE MARKETS REGIME**

Rachel Merelie  
Acting Executive Director, Markets and Mergers  
Competition and Markets Authority

## **EXPERT FORUMS**

### **COMPETITION LAW AND ECONOMICS IN PHARMACEUTICAL MARKETS**

*Reverse payments, product hopping, and excessive pricing claims*

### **ESTIMATING DAMAGES IN LITIGATION—BEYOND DISCOUNTED CASH FLOW**

*Alternative approaches to the discounted cash flow (DCF) methodology*

### **THE LAW AND ECONOMICS OF COMPETITION DAMAGES ACTIONS**

*Recent opt-in and opt-out damages actions and the likely evolution of competition damages actions*

### **LNG DISPUTES—BEYOND HUB INDEXATION**

*Liquefied natural gas disputes landscape in Europe*

## SPEAKING ENGAGEMENTS

CDR Spring Arbitration Symposium: Latest Trends in Energy and Commodities Arbitrations

Economic Evidence in Competition Law and the Future of the “More Economic” Approach

Advanced EU Competition Law Conferences: Private Enforcement of Competition Law

Competition Law in the Financial Services Sector

Third Annual GAR Live Energy Disputes: Damages Claims in Investor-State Cases

CARE Conversation: The Competition Markets Authority Care Homes Market Study

GCR Live Ninth Annual Competition Litigation: Proving Passing on in a Post Sainsbury’s World

GAR Live London Autumn: A 360 Look at Damages

Thomson Reuters Practical Law: Litigation Processes, Class Certification, and the Economics of Competition Litigation

Competition Law in the Pharmaceutical Sector

## THOUGHT LEADERSHIP

Not so “Rare”: The Valuation Method behind the Tethyan Challenge, *Global Arbitration Review*

Reviewing DG Comp’s Recent Investigative Activity, *Global Competition Review*

The Use of Econometric and Statistical Analysis and Tools, *2017 Guide to Damages in International Arbitration*

Economic Analysis in Damages Actions—Insights from Recent Proceedings in the UK, *Journal of European Competition Law & Practice*

Economic Analysis in Class Certification, *Thomson Reuters Practical Law Global Guide 2016/2017, Class Actions*

# DATA ANALYTICS

*Big data is not just big, it is complex. Expert testimony is increasingly relying on sophisticated techniques, such as advanced machine learning, text analytics, and geospatial analytics, to supplement traditional data analytics and statistical methods.*

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## FEATURED MATTERS //

### MACHINE LEARNING

- Explored machine learning approaches to healthcare risk adjustment models, which explained approximately twice as much variation in claims data as the status quo linear regression model.
  - Designed and trained a neural network model to classify 140,000 documents based on appearance where reliable OCR was unavailable.
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### TEXT ANALYTICS

- Applied fuzzy matching capabilities to match entity names across multiple product information databases.
  - Extracted user patterns to determine overlapping permissions and summarize system access levels through a forensic analysis of more than 70 million access logs.
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### GEOSPATIAL ANALYTICS

- Replicated and improved upon the market structure analysis produced by a merging party's in-house geospatial capability.
  - Applied geospatial capabilities to map cities into the U.S. Census's Core Based Statistical Areas.
- 

### DATA VISUALIZATION

- Automated the creation of thousands of market and trader-specific heat maps.
  - Created national and regional maps with location and distance visualization features.
- 

### WEB DATA COLLECTION

- Built a parallel, cloud-based web data collection infrastructure, scaling work across more than a hundred tasks, and reducing run time from several days to under an hour.
  - Downloaded, converted to PDF file format, and performed robust text searches across thousands of SEC filings and dozens of filing form types.
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### DATA EXTRACTION

- Generated an automated pipeline to collect, extract, and summarize the available history of accounting-related SEC and PCAOB enforcement releases.
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### STATISTICS AND SIMULATIONS

- Developed an institutional damages model using Monte Carlo simulations to generate a confidence interval for damages in a securities class action.
- Ported code and used parallel processing to reduce the run time for comparing thousands of distributions from three days to less than 30 seconds.

# VALUATION

Valuation issues are at the heart of most damages analyses. It is critical to evaluate the appropriate methodology for a given case. While DCF is most commonly used, comparable companies/transactions, regression analysis, and financial options analysis are other key methodologies to consider.

## FEATURED MATTER //

### ACP MASTER LTD. V. SPRINT CORPORATION

After a closely watched trial involving alleged breach of fiduciary duty and stock appraisal, the Delaware Court of Chancery found in favor of defendant Sprint Corp. in its \$3.6 billion buyout of Clearwire Corp. Vice Chancellor J. Travis Laster opined that Sprint had presented sufficient evidence at trial to negate claims from a hedge fund company that Sprint improperly pushed its buyout at a low price.

Defense counsel retained Cornerstone Research and Dr. Scott Wallsten of the Technology Policy Institute to opine on Clearwire's spectrum holdings, one of the major assets at issue during both deposition and trial. To value the holdings, Dr. Wallsten conducted hedonic regression analysis using data from several U.S. Federal Communications Commission spectrum auctions and controlling for a variety of important characteristics.

In his testimony, Dr. Wallsten identified several flaws in the plaintiffs' evaluation methods. He showed that Clearwire's 2.5 GHz spectrum holdings were worth only \$0.24 per MHz-pop, compared to \$0.78 per MHz-pop, as calculated by the plaintiffs' expert.

Vice Chancellor Laster concluded that Dr. Wallsten's valuation "aligned closely...with other third-party offers for Clearwire's 2.5 GHz spectrum around the valuation date." The vice chancellor added that Dr. Wallsten's valuation also aligned with a later offer from DISH Network Corp., which initiated a bidding war after Clearwire's shareholders rejected Sprint's initial buyout. In his finding for Sprint, the vice chancellor opined that the plaintiffs' expert's result "relied on an extraordinary number of assumptions...starkly divorced from the market evidence."

*Note: On April 23, 2018, the Delaware Supreme Court affirmed the Chancery Court's ruling.*

## APPRAISAL LITIGATION

### HOW COURTS VIEW VALUATION METHODOLOGIES

Often in M&A-related appraisal claims cases, certain shareholders abstain from a merger offer and opt instead to let a court determine the "fair value" of their shares. Courts have long considered the discounted cash flow (DCF) approach as a standard method for valuing firms. Judges also consider a multiples approach that uses comparable companies or transactions as a valid valuation technique, but may discard it when the court does not find the comparables to be adequately similar.

The choice and implementation of an appropriate methodology requires judgment and thoughtful assessment. With valuation typically at the heart of these cases, it is important for experts and counsel to stay current on the key issues surrounding valuation methodologies and how the courts view these strategies.

# FINANCIAL INSTITUTIONS

*Under Section 11, an affirmative defense of negative loss causation, as used by the defendants in Barclays, asserts that certain stock price declines are not attributable to the misrepresentations alleged by plaintiffs.*

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## FEATURED MATTER //

### BARCLAYS BANK PLC SECURITIES LITIGATION

A U.S. district judge granted the defendants' motion for summary judgment in this Section 11 case involving a \$2.5 billion offering of preferred American Depository Shares (ADS) in April 2008. Plaintiffs alleged that, in the offering documents, Barclays failed to disclose its exposure to various risky credit market assets and misrepresented its ability to manage the accompanying credit risk. The shares lost 80 percent of their value during the year following the offering, and plaintiffs claimed that all of those price declines were recoverable as damages caused by the alleged misrepresentations.

Barclays' counsel retained Dr. Allan Kleidon of Cornerstone Research, along with five other experts: Professor John Coates of Harvard Law School; John Dolan of Second Order Strategies Inc.; Professor Gary Lawrence of the Center for Advanced Due Diligence Studies; Patricia O'Malley, a founding member of the International Accounting Standards Board (IASB); and Professor René Stulz of The Ohio State University.

Dr. Kleidon conducted an event study to determine whether any declines in the price of the ADS were attributable to the misrepresentations alleged by the plaintiffs. His analysis supported a finding of negative loss causation—that is, no correction of any of the alleged misrepresentations was associated with a stock price decline, and all statistically significant stock price declines occurred on days when no corrective information was released.

In his opinion, Judge Paul Crotty of the Southern District of New York explicitly rejected all of the plaintiffs' criticisms of Dr. Kleidon's opinions, stating that their arguments "are speculative and insufficient to exclude Dr. Kleidon's testimony." Further, in granting Barclays' motion for summary judgment, the judge found "the results of Dr. Kleidon's event study persuasive," concluding that "the alleged misrepresentations in the Series 5 Offering did not cause the Series 5 ADS price declines."

Cornerstone Research also worked with experts who opined on various aspects of the plaintiffs' allegations. Professor Stulz examined the economics of preference shares and assessed aspects of Barclays' risk management policies and procedures. His analysis showed that these were consistent with industry standards and best practices.

Ms. O'Malley evaluated alleged material misstatements and omissions in Barclays' financial statements regarding asset impairments and related losses. Her analysis demonstrated that Barclays' disclosures complied with relevant accounting standards and SEC regulations.

Mr. Dolan concluded that Barclays' valuations of its credit market assets were reasonable based on what was known at the time they were conducted. Professor Lawrence examined issues related to due diligence and Professor Coates opined on SEC disclosure issues.

# INITIAL COIN OFFERING DISPUTES

*Understanding the economics of the crypto tokens at issue will likely be one of the first steps in evaluating future ICO-related claims.*

## FEATURED TOPIC //

### THE ECONOMICS OF ICO LITIGATION AND REGULATION

Initial Coin Offerings (ICOs) are a rapidly growing method of raising capital for new ventures using blockchain technology. The money raised from ICOs has skyrocketed from approximately \$100 million globally in 2016 to over \$6 billion in 2017. In the first three months of 2018 alone, approximately \$5 billion was raised.

Regulators across the world are scrambling to keep up with the growth of ICO fundraising, and guidance is continuously evolving. Typically, ICO disputes—either brought by civil litigation or regulatory enforcement actions—have involved allegations of business fraud and/or failure to register securities. As ICO structures and associated regulatory guidance continue to mature, these claims may give way to issues more commonly seen in traditional securities suits.

Going forward, a number of questions will likely require economic analysis in order to better inform regulatory investigations and assess private litigation.

#### **What are the economic benefits of the at-issue crypto tokens?**

Tokens can have more than one type of economic benefit that drives their value. They can have nonmonetary value or utility comparable to commodities. They can have asset-like features that change in value over time, like securities. Tokens can also be used as currency to pay for goods and services.

#### **How do those benefits drive the value of the at-issue crypto tokens?**

Token production and consumption factors can change the perceived value of utility tokens, leading to price movements. As is generally the case with commodities, the increased use of and demand for tokens is associated with higher prices. The prices of some crypto tokens can react to company-specific factors. For example, a positive news story about an issuer may be correlated with a price increase. Payment factors, such as the use of crypto tokens as a substitute currency, may cause the market value of a token to rise or fall.

#### **How has the value of the at-issue crypto tokens been affected by alleged wrongdoing?**

In future ICO-related disputes, understanding the economics of the crypto tokens at issue will likely be an important step in evaluating claims. For example, traditional securities issues may become prevalent in litigation involving registered tokens that derive their value, at least in part, from asset-like features.

While the economic tools required to evaluate issues in traditional suits are relatively well established, the economic landscape is still in flux for suits concerning crypto tokens. Despite the dearth of case precedent, relevant economic questions for ICO-related disputes will likely be informed by the underlying benefits and value drivers of the at-issue crypto tokens.

# SECURITIES CLASS ACTIONS

Halliburton II found that defendants can introduce a direct price impact analysis, such as an event study, in cases where plaintiffs have demonstrated that the stock traded in an efficient market.

## FEATURED MATTER //

### FINISAR CORPORATION SECURITIES LITIGATION

A U.S. district judge denied plaintiffs' motion for class certification in this Section 10(b) case involving Finisar Corporation, a technology company. Plaintiffs alleged that on December 2, 2010, during market hours, a statement by Finisar's CEO misled investors to believe that the company's growth was the result of an increase in demand and not a build-up of inventory for future use.

Defense counsel retained Dr. Alexander "Sasha" Aganin of Cornerstone Research to assess the effect of the alleged misrepresentation on Finisar's stock price. In his expert report, Dr. Aganin opined that if the alleged misstatement had an impact on Finisar's stock price, as asserted by plaintiffs, one would expect the price impact to be discernible by market close on December 2, 2010.

Dr. Aganin conducted an event study to analyze Finisar's stock price. Specifically, he analyzed changes in Finisar's trading prices from the time just before the alleged misstatement through the remaining trading hours following the statement and to the end of the next trading day. He concluded that the alleged misstatement did not result in a statistically significant increase in Finisar's stock price.

Plaintiffs claimed Dr. Aganin's report was unreliable and criticized numerous aspects of his event study methodology. The judge cited Dr. Aganin's responses to these criticisms, and roundly rejected plaintiffs' arguments. "The [regression] results confirm Aganin's opinion that [the alleged misstatements] on December 2nd did not result in [a] statistically significant increase of Finisar's stock price on December 2 or 3."

In denying the motion for class certification, the judge again cited Dr. Aganin's report: "The Court finds Aganin's conclusion persuasive."

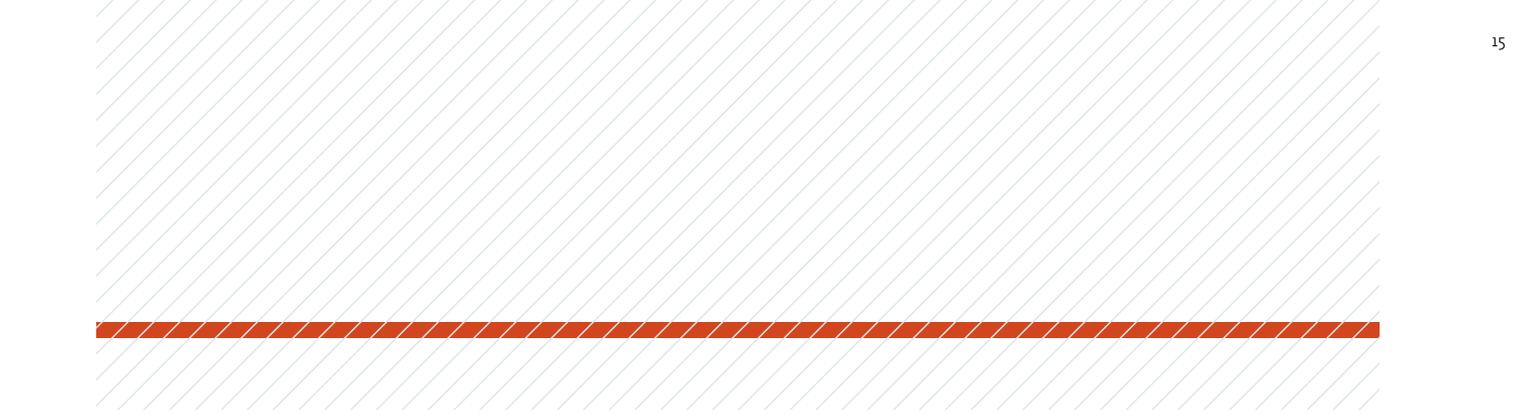
## EVENT STUDIES

*An event study is an objective, widely accepted methodology for measuring the effect of information on stock prices.*

Securities class actions often proceed under the assumption of an "efficient market." In an efficient market, stock prices reflect all publicly available information, including information about the market, the industry, and the company itself. Therefore, only new and unexpected information will cause stock price changes.

Quantifying recoverable damages in a securities class action requires, among other things, determining what part of a stock price decline, if any, can be reliably attributed to plaintiff allegations. When performed correctly, event studies can aid in the assessment of damages because they estimate the impact of company-specific news on stock prices by removing estimated market and industry effects.

Event studies do have limitations that often come into play in damages assessment. For example, they generally cannot disaggregate the price effects of multiple, simultaneous company-specific news items. In addition, they cannot isolate the impact of alleged misrepresentations that differ from any corrective information that was ultimately disclosed. In these cases, an expert can turn to a number of other financial economic tools to supplement an event study analysis.

**FEATURED REPORTS //**

## SECURITIES CLASS ACTION FILINGS

### RECORD NUMBER OF FILINGS FUELED BY M&A CASES

By several measures, 2017 was the most active year since the enactment of the PSLRA, as plaintiffs filed a record 412 securities fraud class actions. Filings against companies with large market capitalizations, however, did not peak in the same manner, as smaller firms were relatively more common targets.

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## SECURITIES CLASS ACTION SETTLEMENTS

### TOTAL SETTLEMENT DOLLARS DIP DRAMATICALLY

While the number of settlements remained at a relatively high level, the average settlement size decreased from \$72 million in 2016 to just over \$18 million in 2017. More than half of 2017 settlements were for \$5 million or less as the number of mid-range to large settlements declined significantly.

*Both reports are available for download at [www.cornerstone.com](http://www.cornerstone.com).*

# PRO BONO

*Cornerstone Research's pro bono initiatives provide litigation support to a number of nonprofit legal services organizations. We also consult to a wide range of nonprofits on data management and analysis and conduct skills-based training seminars.*

## FEATURED MATTERS //

### ACLU

- Analyzed data on behalf of inmates who allegedly did not receive adequate medical care.

### CENTER FOR EFFECTIVE GLOBAL ACTION (CEGA)

- Developed an agricultural research database and created data visualizations for various projects.

### CHILDREN'S RIGHTS

- Determined that children in Arizona's foster care system did not receive the medical and dental care to which they were entitled.

### ENACT

- Created a database and dashboard to efficiently store, query, and summarize survey data.

### LAWYERS' COMMITTEE FOR CIVIL RIGHTS (LCCR)

- Analyzed data to investigate alleged discrimination in disciplinary practices in a California public school district.
- Prepared research reports on political, religious, and ethnic persecution in Afghanistan and violence against women in Burkina Faso for lawyers taking up asylum cases.

### NAACP

- Assessed whether hiring practices for police and firefighters in Boston communities yielded sufficient racial diversity to match the racial diversity of the qualified workforce in the local communities.

### PAPER AIRPLANES

- Coached the organization on how to build a dynamic database and tools for visualizing survey response data.

### STUDENT SUCCESS NETWORK (SSN)

- Worked with SSN to automate its process of matching student data from various sources.
- Led Excel and statistics training seminars for the employees of member organizations.

Bitcoin Futures: A Closer Look at CME's Contract Design // 18th Annual Berkeley-Stanford Advanced Patent Law Institute: Silicon Valley // Trends in Securities Litigation Webinar // Spoofing and Manipulation: A Primer for Healthy Trading Practices // Competition Law in the Pharmaceutical Sector // Applying Monte Carlo Simulations in Litigation // Litigators, Wrangle That Data with Content Analysis // SEC Enforcement Activity: Public Companies and Subsidiaries—Fiscal Year 2017 Update // 6th Annual Damages in International Arbitration Conference // Thomson Reuters Practical Law // *Advanced EU Competition Law Conferences* // Was It All That Bad? U.S. Federal Antitrust Policy since 1980: Antitrust Goals (and Is Big Bad?) // Duty to Disclose, Cryptocoins, Blockchain, and Other SEC Challenges // Aetna–Humana and Algorithmic Market Definition in the Guidelines // GAR Live London Autumn: A 360 Look at Damages: Counsel and Experts React // Securities Enforcement Forum 2017: Litigating Securities Fraud Cases against the SEC and DOJ // Accountants' Liability Conference 2017: Emerging Trends in Accountant Litigation // 2017 Corporate Governance Roundtable at Harvard Law School // Expert Witnesses: The Good, the Bad, and the Ugly // GCR Live 9th Annual Competition Litigation: Proving Passing on in a Post Sainsbury's World // Economic Analysis in Class Certification // Economic Analysis in Damages Actions—Insights from Recent Proceedings in the UK // Not so "Rare": The Valuation Method behind the Tethyan Challenge // GCR Live 5th Annual New York // Characteristics of U.S. Natural Gas Transactions, Commodity Futures Trading Commission // Competition Law and Economics in Pharmaceutical Markets // The Anthem–Cigna & Aetna–Humana Mergers: A Post Mortem // A Deep Dive into Spokeo // Estimating Damages in Settlement Outcome Modeling // 44th Annual European Finance Association (EFA) Meeting // Market Approach or Comparables // The Use of Econometric and Statistical Analysis and Tools // 2017 Guide to Damages in International Arbitration // Securities Class Action Filings—2017 Midyear Assessment // *Women Leaders in Life Sciences Law 2017* // CARE Conversation: The CMA Care Homes Market Study // ABA Section of Litigation: Roundtable on Surveys and Statistics in Class Certification // Insider Trading after Salman // Expert Testimony of the Future: Machine Learning and How It Will Impact Litigation // 2017 iHEA World Congress of Health Economics: Revolutions in the Economics of Health Systems // Characteristics of U.S. Natural Gas Transactions: FERC Form 552 Submissions as of May 2017 // Spikes in Drug Prices: Outrageous or Legitimate? // FERC Technical Conference on Developments in Natural Gas Index Liquidity and Transparency // Use (and Misuse) of Statistical Sampling in False Claims Act and Private Reimbursement Disputes // Stanford Directors' College 2017 // Why Antitrust? NYSBA Annual Program for Law Students and Junior Lawyers // 3rd Annual GAR Live Energy Disputes // 2017 Shareholder Engagement Roundtable at Harvard Law School // The Future of the Markets Regime // A Brave New World: What's in Store? // GCR Live 3rd Annual Antitrust Litigation USA: Count-the-Moles: The Economist's View on the Management of Litigation // SEC's Renewed Focus on Non-GAAP Measures: 1 Year Later // *SEC Enforcement Activity: Public Companies and Subsidiaries—Midyear FY 2017 Update* // Competition Law in the Financial Services Sector // Cornerstone Research Women's Forum // Antitrust in the Financial Sector: Hot Issues and Global Perspectives // Blurred Lines: Assessing Sherman Act Exposure for Hub-And-Spoke Agreements // Estimating Damages in Litigation—Beyond Discounted Cash Flow // WBA Centennial Celebration: Looking Back, and Moving Forward // Private Enforcement: Different Parties, Different Objectives // Proof Agreements, Incentives and Liabilities in Hub-and-Spoke Antitrust Conspiracies: A 2017 Update: What Is a Hub-and-Spoke Conspiracy and Who Benefits? // Society for Financial Studies Finance Cavalcade North America Conference // 27th Annual Meeting American Law and Economics Association // Economic Evidence in Competition Law and the Future of the "More Economic" Approach // 13th Annual University of Washington Financial Reporting Conference // Securities Enforcement Forum West 2017: The Exploding Role of Big Data and Technology in Securities Enforcement, Regulation and Defense // Testifying Experts Draw Lessons from Recent Healthcare Mergers: What Can We Expect for Merger Review Going Forward? // Reasonable Royalty in Patent Damages: What You Need to Know in 2017 // Secondary Market for LP Investments in Private Equity // Approved Claims Rates in Securities Class Actions // A Broader Perspective on Corporate Governance in Litigation // SEC Enforcement Activity—First Half FY 2017 Update // Accounting Class Action Filings and Settlements—2017 Review and Analysis // Suffolk University/Merrill Lynch Wealth Management Symposium Spring 2017: Asset Management Regulation under the New Administration // **2017 EVENTS + THOUGHT LEADERSHIP + SPEAKING ENGAGEMENTS** // The Law and Economics of Competition Damages Actions // CDR Spring Arbitration Symposium // 11th Annual Juris Investment Treaty Arbitration Conference on Technology, IP, and Investor-State Arbitration: Remedies in IP Investment Arbitration // Fraud Day at Mendoza College of Business, University of Notre Dame // New Risk in Energy 2017: Price Indices, Price Reporting, Price Reporting Agencies (PRAs), and Recent Changes in the Process // How Do Franchise Termination Restrictions Affect Consumers? // Securities Class Action Settlements—2017 Review and Analysis // ABA Section of Antitrust Law 2017 Spring Meeting // 2017 George Washington University Corporate Antitrust Roundtable // 2017 Intellectual Property Institute, USC Gould School of Law // *Who's in the Driver's Seat? Assessing Misrepresentation, Liability, and Injury in a World of Complex Automated Products* // Economics at DG Competition: Current Cases and Future Challenges // How to Handle SEC and PCAOB Investigations // The Role of Economic Analysis in the Assessment of Vertical Restraints // Trends in Merger Investigations and Enforcement at the U.S. Antitrust Agencies: FY 2006–2015 // Drafting Blow Provisions in Securities Class Settlements // Securities Class Action Filings—Year in Review // Shadow Banking—The Potential Risks and Rewards // How Is Healthcare Changing? How is the Government Responding?

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