

CRAIG SCHULMAN, PH.D.

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SUMMARY

Craig T. Schulman is an Associate Professor of the Practice in the Department of Economics at Texas A&M University. Dr. Schulman has been engaged as a testifying expert and consultant in large-scale litigation in the areas of antitrust, intellectual property, international trade, and general litigation.

Dr. Schulman's engagements have occurred in a variety of industries, including petrochemicals, petroleum refining, petroleum product markets, crude-oil markets, heavy manufacturing, chemicals, pharmaceuticals, healthcare, insurance, financial services, consumer products, and computer hardware. These engagements have included settings in state and federal courts, in international arbitration, and with the Federal Trade Commission and the U.S. International Trade Commission. In addition, Dr. Schulman has provided support and analysis for presentation to the Federal Trade Commission and Department of Justice during their merger review process.

Dr. Schulman currently serves on the faculty in the Department of Economics at Texas A&M. His research and teaching interests include international trade policy, econometrics, industrial organization and financial economics. He has published articles in *Energy Economics*, *Journal of International Economics*, *National Tax Journal*, *Annales D'Economie et de Statistique*, and *Review of International Economics*, among others.

Before joining Berkeley Research Group, Dr. Schulman served as an associate professor of economics at the University of Arkansas. He joined the faculty of the University of Arkansas as an assistant professor of economics in 1990. During the 1995–1996 academic year, Dr. Schulman served as the senior economist for the Applied Economics Division of the U.S. International Trade Commission, including service as a special advisor on trade policy to the government of Russia. After returning to the university in 1996, Dr. Schulman was promoted to associate professor of economics in 1997. From January 1998 to August 1999, Dr. Schulman served as the director of the Center for Business and Economic Research in the university's Sam M. Walton College of Business. He also served as a member of the Arkansas Governor's Council of Economic Advisors from January 1998 to July 2001.



EDUCATION

Ph.D., Economics Texas A&M University, 1990
Dissertation: *The Optimal Choice of Trade Policy in Oligopolistic Industries.*Fields of specialization: Industrial Organization, Antitrust, International Economics and Econometrics.

B.S., Economics, Texas A&M University, 1985

PRESENT POSITIONS

Berkeley Research Group, College Station, TX Director

- Testify in deposition and trial
- Develop economic analysis for complex litigation, including antitrust matters, international trade law and contract and business damages
- Prepare white papers, consulting reports, expert witness reports, and affidavits
- Engagements have included industries such as petrochemicals, petroleum refining, oil, heavy manufacturing, chemicals, insurance, healthcare, financial services, consumer products, and computer hardware
- Work has included a number of cases for parties investigated by the FTC

Texas A&M University Associate Professor of the Practice, 2015—present Visiting associate professor of Economics, 2002–2015 Adjunct associate professor of Economics, 2001–present

 Teach International Trade Policy, Development Economics, Econometrics, Economic Forecasting, and Data Analytics.

PROFESSIONAL EXPERIENCE

LECG, College Station, TX Principal 2004–2010 Managing economist 2001–2004

University of Arkansas Associate professor, 1997–2001 Director, Center for Business and Economic Research, 1998–1999 Assistant professor, 1990–1997

- Researched and published papers in various fields of economics, including Industrial Organization and International Trade
- Taught courses at undergraduate, masters, and Ph.D. levels, including Antitrust Economics, International Trade and Econometrics
- Led effort to completely restructure MBA curriculum



- Led a strategic planning exercise to reshape and refocus the mission of the Center for Business and Economic Research
- Helped develop a new major in International Business and Economics

Arkansas Governor's Council Of Economic Advisors Member, 1998–2001

- Reviewed and advised the Office of Finance and Administration regarding quarterly tax revenue forecasts
- Prepared white papers on economic development strategy for the Office of the Governor

U.S. International Trade Commission

Senior International economist, Applied Economics Division, 1995–1996

- Provided technical support and advice regarding modeling of economic damages in anti-dumping and countervailing duty cases
- Prepared economic damages reports for anti-dumping and countervailing duty cases
- Helped prepare white paper reports on the economic effects changes in U.S. international trade law

SELECTED CASEWORK AND CONSULTING PROJECTS

- For a logistics company: Estimated demand systems for consumer products for use in inventory management systems.
- For a major consumer products company: Analyzed the relevant geographic and product market in a merger involving consumer products.
- For a wastewater treatment company: Analyzed the relevant geographic and product market, assessed extent of market power and economic damages in an antitrust claim of monopolization.
- For a commercial real estate firm: Assessed economic damages from a breach of contract.
- For a petrochemical firm: Assessed economic damages from a breach of contract.
- For a major petroleum services firm: Developed methodology for assessing economic damages from a breach of confidentiality.
- For an insurance firm: Analyzed the relevant geographic and product market in a merger involving medical insurance firms.
- For petroleum products firm: Analyzed the economic impact of alleged fraud.
- For a major consumer products company: Analyzed the relevant geographic and product market, assessed extent of market power and economic damages in an antitrust claim of monopolization.
- For a major financial services firm: Developed a simulation model of world oil market.
- For a major oil company: Modeled the world oil market and provided strategic advice regarding production and pricing.



- For a major pharmaceutical products firm: Analyzed issues relating to class certification and damages in nation-wide and state level actions involving allegations of fraud.
- For a major computer technology firm: Analyzed the relevant geographic and technology markets, assessed extent of market power and economic damages in an antitrust counterclaim to a claim for patent infringement.
- For a major integrated petroleum products firm: Analyzed retail market structure and pricing to address allegations of predatory pricing of gasoline.
- For a major consumer products company: Assessed economic damages for a breach of contract.
- For a major consumer products company: Analyzed market structure in the context of allegations of monopsony.
- For an insurance firm: Analyzed the price determinants of petrochemical products in the context of a business interruption claim.
- For a major petroleum products firm: Analyzed crude oil quality differentials and assessed economic damages associated with a breach of contract.
- For a major petroleum products firm: Analyzed market structure and assessed economic damages associated with allegations of commodity price manipulation.
- For a major petroleum products firm: Developed price forecasts and analyzed crude oil price differentials owing to crude quality for an international arbitration related to expropriated assets.
- For a regional equipment manufacturer: Analyzed market structure and assessed economic damages associated with allegations of monopolization and breach of contract.
- For an equipment rental company: Assessed economic damages associated with allegations of breach of fiduciary duty and theft of intellectual property.
- For a regional petroleum products company: Analyzed market structure and the extent of entry barriers associated with allegations of breach of fiduciary duty.
- For an international equipment manufacturer: Assessed economic damages associated with allegations of breach of contract.
- For a major petroleum products firm: Analyzed market structure and assessed economic causation and damages associated with allegations of price discrimination in wholesale petroleum products markets.
- For a major oil and gas exploration and production firm: Analyzed issues related to class certification associated with allegations of underpayment of royalties related to natural gas liquids.

ACADEMIC HONORS AND AWARDS

The Lynde and Harry Bradley Foundation Fellowship, 1989–1990



COURSES TAUGHT

Econometric Theory and Applications, Ph.D., M.A., and Undergraduate International Trade Theory and Policy, Ph.D., M.A., and Undergraduate Economic Forecasting, M.A. and Undergraduate Economic Data Analysis/Statistics, M.A. and Undergraduate Applied Microeconomics, M.A. Antitrust Economics, M.A. Principles of Economics, Undergraduate

GRANTS AND SPONSORED RESEARCH

- "Setting Transformer Efficiency Standards: Potential Unintended Consequences," with James Griffin, AK Steel Corporation and Allegheny Technologies Incorporated, 2012, co-principal investigator
- "Scientific Games: Cooperative Services," with William Hamm and David Najvar, Scientific Games Corporation, 2012, co-principal investigator
- "Aramco Production Strategies: Their Implications for World Oil Prices and Saudi Wealth Maximization," with James Griffin, Aramco Services Company, 2003, coprincipal investigator
- "World Oil Supply and Demand," with James Griffin, UBS Global Asset Management, 2002, co-principal investigator
- "The Efficacy of Classroom Experiments in Teaching Introductory Economics," with Thomas McKinnon and Yvonne Durham, National Science Foundation, \$221,000, 1999–2004, principal investigator and project director
- "Priming the Pump: Research as a Catalyst for Economic Growth," University of Arkansas Center for Business and Economic Research, \$7,500, 2000, co-principal investigator
- Alternatives for Expanded School Bus Liability Insurance Coverage, Arkansas State Board of Education, \$5000, 1998, principal investigator
- Over the Road Transportation Forecast, University of Arkansas Supply Chain Management Research Center, \$5,000, 1998, principal investigator
- "Corporate Tax Integration and the Interaction Between Dividend Policy and Capital Gains," with Keith Sellers and Deborah Thomas, Ernst & Young Foundation, 1994 Tax Research Grant Program, \$30,000, co-principal investigator

PROFESSIONAL ACTIVITY

- Ad-hoc referee Journal of International Economics, International Economic Review, Economica, Review of International Economics, Social Science Quarterly, Canadian Journal of Economics, National Tax Journal, Economic Inquiry, Energy Journal.
- Texas Advanced Research/Advanced Technology Programs Social and Behavioral Sciences Review Panelist, August 1999.



- National Science Foundation, Division of Undergraduate Education Course, Curriculum and Laboratory Improvement Program Review Panelist, July 2000.
- National Science Foundation, Division of Undergraduate Education Undergraduate Assessment Program Workshop (July, 2000). Invited participant in workshop to define objectives for a new NSF program supporting assessment of undergraduate programs in science, mathematics, engineering, and technology.
- American Economic Association, Member.
- American Bar Association, Member.

PUBLICATIONS

Refereed

- (1) "Strategic Non-intervention and the Choice of Trade Policy for International Oligopoly," with Hae-Shin Hwang, *Journal of International Economics* 34, 1993, 73–93.
- (2) Effects of Tax Policy on Corporate Financing Decision: Integration and Capital Gains, with Keith Sellers and Deborah Thomas, The Tax Foundation and Ernst & Young, Washington, DC, October 1994, 33 pp.
- (3) "Estimation of SUR Model with Non-nested Missing Observations," with Hae-shin Hwang, *Annales D'Économie et de Statistique* 44, 1996, 21 pp.
- (4) "Effects of Tax Integration and Capital Gains Tax on Corporate Leverage," with Deborah Thomas, Keith Sellers, and Duane Kennedy, *National Tax Journal* 49:1, 1996, 31–54.
- (5) "Performance Pay as a Screening Devise," with Marc Chopin, *Studies in Economics and Finance* 18:1, 1997, 94–108.
- (6) "Free Entry, Quasi Free Trade and Strategic Trade Policy," *Review of International Economics* 5:1, 1997, 83–100.
- (7) "Active Management, Fund Size, and Bond Mutual Fund Returns," with James Philpot, Douglas Hearth, and James Rimbey, *Financial Review* 33, 1998, 115–125.
- (8) "The Effect of the Tax Reform Act of 1986 and Over-Built Markets on Commercial Office Property Values," with Stanley Smith and Larry Woodward, *Journal of Real Estate Research* 19:3, 2000, 301–320.
- (9) "The Weekend Effect, 'Reverse' Weekend Effect and Firm Size," with Jorge Brusa and Pu Liu, *Journal of Business Finance and Accounting* 27:5-6, June 2000, 863–890.
- (10) "Are Treasury Securities Free of Default?" with Srinivas Nippani and Pu Liu, *Journal of Finance and Quantitative Analysis* 36:2, June 2001.
- (11) "An Analysis of the Effect of Management Participation in Director Selection on the Long-Term Performance of the Firm," with William Callahan and James Millar, *Journal of Corporate Finance* 9, 2003.
- (12) "The Weekend Effect and 'Reverse' Weekend Effect: An Analysis by Month of the Year, Week of the Month and Industry," with Jorge Brusa and Pu Liu, *Journal of Business Finance and Accounting* 30:5–6, June 2003.
- (13) "The 'Reverse' Weekend Effect: The U.S. Market vs. International Markets," with Jorge Brusa and Pu Liu, *International Journal of Financial Analysis* 12:3, 3rd Quarter 2003.



- (14) "An International Investigation of the Influence of Dividend Taxation on Research and Development Tax Credits," with Tracy S. Manly and Deborah Thomas, *Journal of the American Taxation Association* 25:2, Fall 2003.
- (15) "Price Asymmetry in Energy Demand Models: A Proxy for Energy Saving Technical Change?" with James M. Griffin, *Energy Journal* 26:2, Spring 2005.
- (16) "Weekend Effect, 'Reverse' Weekend Effect, and Investor Trading Activities," with Jorge Brusa and Pu Liu, *Journal of Business Finance and Accounting* 32:7–8, Spring 2005.
- (17) "Tax Incentives for Economic Growth: Capital Investment or Research," with Tracy S. Manly and Deborah Thomas, *Advances in Taxation* 17, 2007.
- (18) "The Efficacy of Using Classroom Experiments to Teach Introductory Economics," with Yvonne Durham and Thomas McKinnon, *Economic Inquiry* 45:1, January 2007.

Refereed Proceedings

- "Tax Integration and Corporate Dividend Policy The Canadian Experience," with Deborah Thomas and Keith Sellers, Eighth Asian-Pacific Conference on International Accounting Issues, 1996. Awarded outstanding paper of the Conference by the CGAA of Canada.
 "The Relative Impact of Capital Inputs and Retail Structure on Labor Productivity in Retailing: A Longitudinal Analysis in Japan," with Robert Stassen, in Enhancing Knowledge Development in Marketing, American Marketing Association, 1995, 274.
- "Tax Policy and Corporate Leverage in Australia and New Zealand," with Keith Sellers, Deborah Thomas, Charles Robnett, and Patty Huff, Fifth Asian-Pacific Conference on International Accounting Issues, 1993.
- "An Examination of Factors Affecting Productivity in Japanese Retailing, 1976–1988," with Robert Stassen and Mayuresh Kelkar, in *Enhancing Knowledge Development in Marketing*, American Marketing Association, 1992, 310.

Technical Reports

- (1) "Priming the Pump: Research as a Catalyst for Economic Growth," University of Arkansas Center for Business and Economic Research, 2000.
- (2) "Arkansas Public School Performance: How Does Your District Rank?" *Arkansas Business and Economic Review* 32:1, Spring 1999, 7–15.
- (3) Alternatives for Expanded School Bus Liability Insurance Coverage, Report to the Arkansas State Board of Education, Center for Business and Economic Research, University of Arkansas, 1998.
- (4) Over the Road Transportation Forecast, University of Arkansas Center for Business and Economic Research, 1998.
- (5) Survey of the Labor Market for New Ph.D.s in Economics: 1999–2000, with William P. Curington, University of Arkansas Center for Business and Economic Research, 1998.
- (6) Large Newspaper Printing Presses and Components Thereof, Whether Assembled or Unassembled, from Germany and Japan, Staff report to the Commission on Investigations Nos. 731-TA-736 and 737 (Preliminary), U.S. International Trade Commission, August 1995. (Pricing section of report)



TESTIMONY

- Intergraph Hardware Technologies Company v. Dell Inc., Hewlett-Packard Company, and Gateway, Inc., U.S. District Court for the Eastern District of Texas, Marshall Division, Report and Deposition: October 2004
- Paramount Pictures Corporation v. Johnson Broadcasting, Inc., U.S. District Court for the Southern District of Texas, Houston Division, Report: May 2006
- K&H Manufacturing v. Strong Industries, Inc., U.S. District Court for the Southern District of Texas, Houston Division, Report: September 2008
- RSC Equipment Rental, Inc. v. Charles Rouse and Hertz Equipment Rental Corporation, District Court, Galveston County, Texas, Trial Testimony: January 2009
- Turner Gas Company v. Mark Harris et al., District Court, Salt Lake County, Utah, Report and Deposition: February 2009
- Western Technology Services International, Inc. v. Cauches Industriales, S.A., ICDR International Arbitration matter, Report and Deposition: September 2009, Hearing Testimony: November 2009
- Doyle Sims et al. vs. Bayer CropScience LP et al., and Bill Schwartz et al. vs. Bayer CropScience LP et al., Circuit Court for Desha County, Arkansas, Report: May 2010, Trial Testimony: July 2010
- Jesse Briggs et al. vs. Bayer CropScience LP et al., Circuit Court for Desha County, Arkansas, Report: August 2010
- In re: Genetically Modified Rice Litigation, 4:06-md-1811, Report: July 2010, Deposition: December 2010
- Kelly Neely v. Debusk Industrial Services Corporation, District Court, Orange County, Texas, Report: May 2011
- Public Health Equipment and Supply Co., Inc. v. Clarke Mosquito Control Products, Inc. et al., U.S. District Court for the Western District of Texas, San Antonio Division, Report: September 2011
- Wilson Industries, L.P. v. Select Energy Services, LLC and Bell Supply, LLC, District Court, Ector County, Texas, Report: January 2012
- Southern Chemical Corporation vs. Celanese, Ltd., District Court, Harris County, Texas, Deposition: May 2012
- Mark D. Idstrom, M.D. vs. Alliance Radiology, P.A. et al., District Court, Johnson County, Kansas, Report: August 2013, Depositions: October 2013, December 2014, Hearing testimony: February 2015, Trial testimony: May 2015.



- High Sierra Transportation, LLC vs. Flint Hills Resources, LP et al., District Court of Harris County, Texas, Expert Designation: September 2014
- Grapevine Ice House, LLC vs. Dallas Sports and Entertainment, L.P. et al., District Court of Tarrant County, Texas, Deposition, January 2015
- In re: Bank of New York Mellon Corp. Forex Transactions Litigation, 12-md-2335-LAK, Report: January 2015
- LyondellBasell Acetyls, LLC vs. Ralph Stockton Valve Products, Inc. et al., District Court of Harris County, Texas, Expert Designation: July 2015
- Alpha Pro Tech, Inc. vs. VWR International, LLC, U.S. District Court for the Eastern District of Pennsylvania, Report: August 2015, Deposition: September 2015
- Branta, LLC et al. vs. Newfield Production Company, U.S. District Court for the District of Colorado, Report: May 2016