



1225 19th Street, NW, Suite 800
Washington, DC 20036

12707 High Bluff Dr., Suite 200
San Diego, CA 92130

Main 858-345-5995

Direct 858-345-5899

mnoel@edgewortheconomics.com

February 2012

Dr. Michael D. Noel
Senior Vice President

Dr. Michael Noel is an expert in antitrust and regulatory matters both domestically and abroad, and uses his knowledge of econometrics to answer difficult economic questions related to liability, damages, class certification, and regulatory compliance. He has performed sophisticated econometric analyses in a wide range of industries including oil & gas, managed health care, pharmaceuticals, packaged software, payment cards, book publishing, online search, communications, auto manufacturing, grocery, and financial services. Dr. Noel is also the Chair of the firm's Oil & Gas practice and has served as economic expert in major Oil & Gas industry matters on three continents including matters of price fixing, collective dominance, coordinated behaviors, mergers, and regulation. His 15 years of experience teaching antitrust economics highlights Dr. Noel's keen ability to make the complex simple and easily understood.

Dr. Noel has published extensively in peer-reviewed professional journals in economics and presented his work at universities and conferences on five continents around the globe. He is widely cited by economists and competition authorities for his breakthrough work on fuel markets competition, and was heavily cited by the FTC in their recent antitrust investigation into the petroleum industry. (The FTC relied on five of Dr. Noel's published studies—the most of any economist—in finding the industry to be competitive.) Dr. Noel has also appeared in television, radio, and print media discussing a variety of competition issues.

Dr. Noel holds a Ph.D. from the Massachusetts Institute of Technology in Economics, specializing in Industrial Organization (the field that deals with the economics of antitrust), Econometrics, and Public Finance. Dr. Noel also holds a Masters degree in Economics and an Honours Bachelor Degree in Economics and Statistics from the University of Toronto, where he received the Gold Medal in Economics.

Dr. Noel is the Head of Edgeworth's San Diego office and has an extensive presence in Washington DC and Houston. Prior to joining Edgeworth Economics, Dr. Noel was on the faculty of the University of California at San Diego, where he taught courses in industrial organization, antitrust and regulation, and where he continues to lecture.

E D U C A T I O N

Massachusetts Institute of Technology
Ph.D., Economics, 2002

University of Toronto
M.A., Economics, 1997
Honours. B. Sc., Economics, Statistics & Computer Science, High Distinction (Gold Medal Recipient), 1996

CURRENT EMPLOYMENT

Edgeworth Economics, Washington, DC, and San Diego, CA
2011-present, Senior Vice President and Head of the San Diego office

University of California San Diego, La Jolla, CA
2011-present, Visiting Lecturer, Department of Economics

EMPLOYMENT HISTORY

University of California San Diego, La Jolla, CA
2002-2011, Assistant Professor, Department of Economics
2006, Visiting Instructor, Rady School of Management

Michael Noel Economic Consulting, La Jolla, CA
2010-2011, President

Law and Economics Consulting Group (LECG), Los Angeles, CA
2005-2010, Special Consultant

National Economic Research Associates (NERA), Chicago, IL and Los Angeles, CA
2002-2004, Special Consultant

Massachusetts Institute of Technology, Cambridge, MA
1999-2002, Instructor

University of Toronto, Toronto, ON
1998-2002, Instructor

TEACHING EXPERIENCE

University of California San Diego Courses:
Regulation and Antitrust
Industrial Organization and Firm Strategy
Industrial Organization (Graduate Level)
Landmark Antitrust Cases in the U.S.
Microeconomics - Consumer Theory
Microeconomics - Monopoly and Oligopoly Theory
How to Take Risks
Management Science Microeconomics
Management Economics (MBA Level)

Massachusetts Institute of Technology Courses:
Microeconomics

University of Toronto Courses:
Industrial Organization and Public Policy

Microeconomic Theory
Microeconomic Theory (Quantitative Version)
Advanced Economic Theory - Microeconomics

M E M B E R S H I P S

American Bar Association
Antitrust Law
Environment, Energy & Resources
Labor and Employment Law

American Economics Association

Econometric Society

S E L E C T E D C O N S U L T I N G A S S I G N M E N T S

Competition and Antitrust:

Performed analysis of market definition, market power, and class certification claims of opposing expert in support of Daubert motion.

Retained in disputed acquisition involving the two largest petrol retailers in Australia. Performed econometric analysis of potential price effects of the acquisition including unilateral and coordinated effects, and effects on the existence of asymmetric price cycles.

Retained in collective dominance matter in the petroleum industry in Europe. Performed economic analysis of competition in European retail gasoline markets and effects of price cycles.

Performed economic analysis and price simulations of a proposed \$3.1 billion merger between Google, Inc. and Doubleclick Inc., the two major online non-search advertising platforms, using advanced techniques newly developed by Evans & Noel for two-sided platform industries.

Retained in an antitrust case stemming from to a \$400 million patent litigation settlement involving a leading brand name pharmaceutical company and a leading generic pharmaceutical company. Performed competitive impact analysis and computed direct and indirect damages.

Performed economic analysis of potential damages from alleged illegal actions by a major distributor of internet browsing software.

Developed a new Critical Loss / SSNIP test for use in antitrust market definition exercises involving two-sided platform industries.

Performed economic analysis of the potential for alleged price fixing amongst major U.S. health care maintenance organizations in their methods for reimbursement to health care providers.

Performed econometric analysis of retail gasoline demand, the potential for price fixing and associated damages by major gasoline retailers along French autoroutes.

Performed econometric analysis of the impact of a proposed \$1.3 billion European merger involving major book publishers using discrete choice econometric techniques and newly designed merger simulation methodologies.

Performed econometric analysis of the demand of the NSAID class of therapeutic drugs in the context of market definition and damage calculations, following a sham patent litigation lawsuit.

Performed econometric analysis of market definition of computer operating systems in Europe, distinguishing between workgroup and enterprise servers.

Performed econometric analysis of strength of network effects in operating system usage.

Regulation:

Performed econometric analysis of proposed tighter emission controls for new vehicles in California (AB 1493) on new and used vehicle sales and total emission output using discrete choice and calibration methodologies.

Performed economic analysis of long and short term shocks to crude oil prices and their impact on the quality of existing predictions of crude oil prices to 2025.

Labor and Employment:

Performed economic analysis of gender discrimination claims in a class action case involving a global financial services firm.

Retained in an age discrimination case at a major integrated grocery supplier. Calculated economic damages due to the alleged discrimination.

E X P E R T R E P O R T S

Kathleen A. Miller v. Supervalu Inc., In the United States District Court, Eastern District of Pennsylvania, Case No. 11-944-ER. Expert Report, November 3, 2011

P U B L I C A T I O N S

Noel, Michael D. (2012). "Blowing Up the Rockets and Feathers Conspiracy", *Law360 (Competition Law and Energy Law)*, online, January 19, 2012.

Noel, Michael D. (forthcoming). "Edgeworth Price Cycles and Intertemporal Price Discrimination", forthcoming in *Energy Economics*.

Noel, Michael D. (2011). "The Promise of Unconventional Oil", *Oil & Gas Monitor*, online, released December 19, 2011.

Lewis, Matthew S. and Noel, Michael D. (2011). "The Speed of Gasoline Price Response in Markets with and without Edgeworth Cycles", *Review of Economics and Statistics* 93(2), pp. 672-682.

Noel, Michael D. (2011). "Upward Price Pressure, Merger Simulation and Merger Simulation Light", *CPI Antitrust Chronicle* Spring 2011 3:1.

Noel, Michael D (2011). "Edgeworth Price Cycles", *The New Palgrave Dictionary of Economics*, Eds. Steven N. Durlauf and Lawrence E. Blume. Palgrave Macmillan.

Noel, Michael D. (2009). "Do Gasoline Prices Respond Asymmetrically to Cost Shocks? The Effect of Edgeworth Cycles", *RAND Journal of Economics* 40:3, pp.582-595.

Basker, Emek and Noel, Michael D. (2009). "The Evolving Food Chain: Competitive Effects of Walmart's Entry into the Supermarket Industry", *Journal of Economics and Management Strategy* 18:4, pp. 977-1009.

Noel, Michael D. (2008). "Edgeworth Cycles and Focal Prices: Computational Dynamic Markov Equilibria", *Journal of Economics and Management Strategy* 17:2, pp. 345-377.

Evans, David S. and Noel, Michael D. (2008). "The Analysis of Mergers that Involve Multi-Sided Platforms", *Journal of Competition Law and Economics* 2008:4, pp. 663-695.

Noel, Michael D. (2007). "Edgeworth Price Cycles: Evidence from the Toronto Retail Gasoline Market", *Journal of Industrial Economics* 55:1, pp. 69-92.

Noel, Michael D. (2007). "Edgeworth Price Cycles, Cost-based Pricing, and Sticky Pricing in Retail Gasoline Markets", *Review of Economics and Statistics* 89:2 pp. 324-334.

Noel, Michael D. (2005). "Is the City's Recently Passed Gas-Gouging Bill Responsible Public Policy?", San Diego Daily Transcript, San Diego: September 14, 2005, p. A9.

Evans, David S. and Noel, Michael D. (2005). "Defining Antitrust Markets when Firms Operate Two-Sided Platforms", *Columbia Business Law Review* 2005:3 pp. 667-702.

WORKING PAPERS

Noel, Michael D. and Schankerman, Mark (2006). "Patent Thickets and Software Innovation: Theory and Evidence from a Panel of U.S. Firms", CEPR Working Paper #5701. New title: "Strategic Patenting and Software Innovation".

Noel, Michael D. (2010). "Edgeworth Price Cycles, Competition and Antitrust", working paper.

PRESENTATIONS

"It's Still the Economy: Have We Turned a Corner?"

National Association of Energy Service Companies Conference, San Diego, CA, 2011

"Upward Price Pressure, Merger Simulation and Merger Simulation Light"

Freehills Law Firm, Sydney, Australia, 2011

"The Speed of Gasoline Price Response in Markets with and without Edgeworth Cycles"

University of Sydney Economics Department, Sydney, Australia, 2011

Peking University HSBC Business School, Shenzhen, China, 2011

- Shanghai University School of Finance and Economics, Shanghai, China, 2011
 Waikato University Economics Department, Hamilton, New Zealand, 2011
 Monash University Economics Department, Melbourne, Australia, 2011
 SUNY Stony Brook Economics Department, Stony Brook, NY, 2011
 Wilfred Laurier University Economics Department, Waterloo, ON, Canada, 2011
 University of Delaware Economics Department, Newark, DE, 2011
 College of William and Mary Economics Department, Williamsburg, VA, 2011
 University of Alabama Economics Department, Tuscaloosa, AL, 2011
 Compass Lexecon, Chicago, IL, 2011
 Quant Economics, San Diego, CA, 2011
 Purdue University Economics Department, West Lafayette, IN, 2010
 Edgeworth Economics, Washington, D.C., 2010
 GCBE Conference, Rome, Italy 2010
 Texas A&M University Economics Department, College Station, TX, 2010
 University of Waterloo Economics Department, Waterloo, ON, Canada, 2010
 African Econometric Society Annual Conference, Cairo, Egypt, 2010
 Industrial Organization Society Conference, Vancouver, BC, 2010
 University of British Columbia Sauder School of Business, Vancouver, BC, 2010
- “Edgeworth Price Cycles, Competition and Antitrust”
 GCBE Conference, Rome, Italy, 2010
- “Comments on Price Leadership and Coordination”
 University of California Energy Institute POWER Conference, Berkeley, CA, 2009
- “Comments on Patent Rights and Economic Growth”
 Conference on Empirical Legal Studies, University of Southern California Law School, Los Angeles, CA, 2009
- “The Evolving Food Chain: Competitive Effects of Walmart’s Entry into the Supermarket Industry”
 Yale University Economics Department, 2008
 International Industrial Organization Conference, Savannah, GA, 2007
- “Strategic Patenting and Software Innovation”
 Comparative Analysis of Enterprise Data Conference, Budapest, Hungary, 2008
 Toulouse Conference on the Software and Internet Industries, Toulouse 2007
 LECG Conference on Software Patents, Cambridge 2004 and 2005
 MIT Economics Department, 2004
- “Comments on Academic Journals as Two-Sided Platforms”
 Toulouse Conference on the Software and Internet Industries, Toulouse 2007
- “Do Gasoline Prices Respond Asymmetrically to Cost Shocks? The Effect of Edgeworth Cycles”
 University of California Davis Economics Department, Davis, CA, 2007
 International Industrial Organization Conference, Savannah, GA, 2007
 University of California San Diego Economics Department, San Diego, CA, 2005
- “Gasoline Prices: Why are Canada and the U.S. Different?”
 University of California San Diego, Dean’s Policy Luncheon, San Diego, CA, 2006

- “Comments on Atkinson and Hoskin”
University of California Energy Institute Oil and Gas Conference, Berkeley, CA, 2006
- “Edgeworth Cycles and Focal Prices: Computational Dynamic Markov Equilibria”
International Industrial Organization Conference, Atlanta, GA, 2005
University of California San Diego Economics Department, 2002
- “Comments on: Do Brick-and-Clicks Price Discriminate?”
International Industrial Organization Conference, Atlanta, GA, 2005
- “Edgeworth Price Cycles, Cost-based Pricing, and Sticky Pricing in Retail Gasoline Markets”
University of Oregon Economics Department, 2003
Bates White, 2002
Clemson University Economics Department, 2002
Charles River Associates, 2002
Duke University Economics Department, 2002.
Massachusetts Institute of Technology Economics Department, 2002
Northwestern University Economics Department, 2002
Stanford University Graduate School of Business, 2002
University of California Berkeley Haas School of Business, 2002
University of California San Diego Economics Department, 2002
University of Chicago Graduate School of Business, 2002
University of Michigan Economics Department, 2002
- “Edgeworth Price Cycles: Evidence from the Toronto Retail Gasoline Market”
University of Oregon Economics Department, 2003
Bates White, 2002
Clemson University Economics Department, 2002
Charles River Associates, 2002
Duke University Economics Department, 2002
Massachusetts Institute of Technology Economics Department, 2002
Northwestern University Economics Department, 2002
Stanford University Graduate School of Business, 2002
University of California Berkeley Haas School of Business, 2002
University of California San Diego Economics Department, 2002
University of Chicago Graduate School of Business, 2002
University of Michigan Economics Department, 2002

REFeree SERVICE

American Economic Review
American Economic Journal: Applied Economics
American Journal of Agricultural Economics
Addison-Wesley Publishing Economics Group
B.E. Journal in Theoretical Economics
B.E. Journal of Economic Analysis and Policy
Canadian Journal of Economics
Canadian Public Policy
Contemporary Economic Policy
Economic Inquiry

Economic Journal
Energy Economics
Energy Journal
Energy Policy
International Journal of Industrial Organization
International Journal of the Economics of Business
Journal of Competition Law and Economics
Journal of Economic Surveys
Journal of Economics
Journal of Economics and Management Strategy
Journal of Industry Competition and Trade
Journal of Industrial Economics
Journal of Law, Economics, and Organization
Journal of Political Economy
Management Science
Marketing Science
National Science Foundation
RAND Journal of Economics
Review of Economics and Statistics
Review of Industrial Organization
Scandinavian Journal of Economics
Science
Social Sciences and Humanities Research Council of Canada
University of California Energy Institute CES Program
University of California Energy Institute EST Program
Wiley-Blackwell Publishing: Economics Books