CHRISTOPHER ROLAND KNITTEL

Sloan School of Management Massachusetts Institute of Technology 100 Main Street Cambridge, MA 02142 Office: 617-324-0015 Fax: 617-258-6786 *knittel@mit.edu http://web.mit.edu/knittel/www*

CURRENT APPOINTMENTS:

2011-present, William Barton Rogers Professor of Energy Economics, Sloan School of Management, Massachusetts Institute of Technology

2012-present, Co-Director, Center for Energy and Environmental Policy Research 2013-present, Associate Scholar, Harvard Environmental Economics Program 2007-present, Research Associate, National Bureau of Economic Research Groups: Environmental Economics and Energy, Industrial Organization, and Productivity 2006-present, Associate Editor, *The Journal of Industrial Economics*

2007-present, Associate Editor, American Economic Journal – Economic Policy

2007-present, Associate Editor, The Journal of Energy Markets

2013-present, Associate Editor, The Journal of Transportation Economics and Policy

PREVIOUS APPOINTMENTS:

2006-2011, Associate Professor of Economics, University of California, Davis
2003-2011, Visiting Research Fellow, University of California Energy Institute
2005-2011, Faculty Affiliate, Institute of Transportation Studies, UC Davis
2006-2011, Strategy and Policy Thread Leader for STEPS
2008-2010, Member, Economic and Allocation Advisory Committee for AB32's cap-and-trade
program, State of California
2008-2011, Chancellor's Fellow, University of California, Davis
2002-2006, Assistant Professor of Economics, University of California, Davis
2004-2007, Faculty Research Fellow, National Bureau of Economic Research.
Groups: Environmental Economics and Energy, Industrial Organization, and Productivity
1999-2002, Assistant Professor of Finance and Economics, School of Management, Boston
University
1996-1999, Research Assistant, University of California Energy Institute

1994-1996, Teaching Assistant, University of California, Davis

EDUCATION:

Ph.D., University of California, Berkeley, 1999 (Economics)

M.A., University of California, Davis, 1996 (Economics)

B.A., California State University, Stanislaus, *summa cum laude*, 1994 (Economics and Political Science)

PUBLICATIONS:

- Knittel, Christopher R. "Transportation Fuels Policy Since the OPEC Embargo: Paved with Good Intentions." *The American Economic Review, Papers & Proceedings*, 103(3), May 2013.
- Knittel, Christopher R. and Konstantinos Metaxoglou. "Estimation of Random Coefficient Demand Models: Challenges, Difficulties and Warnings." Forthcoming in *The Review of Economics and Statistics*.
- Busse, Meghan, Christopher R. Knittel and Florian Zettelmeyer. "Are Consumers Myopic? Evidence from New and Used Car Purchases." *The American Economic Review*, 103(1), February 2013, pp. 220-256.
- Knittel, Christopher R. and Victor Stango. "Celebrity Endorsements, Firm Value and Reputation Risk: Evidence from the Tiger Woods Scandal." Forthcoming *Management Science*.
- Knittel, Christopher R. "Reducing Petroleum Use from Transportation." *The Journal of Economic Perspectives*, 26(1), Winter 2012, 93-118.
- Fowlie, Meredith, Christopher R. Knittel and Catherine Wolfram. "Sacred Cars: Optimal Regulation of Stationary and Non-stationary Pollution Sources." *The American Economic Journal: Economic Policy*, 4(1), February 2012, 98-126.
- Knittel, Christopher R. "Automobiles on Steroids: Product Attribute Trade-offs and Technological Progress in the Automobile Sector." *The American Economic Review*, 101(7), 2011, pp. 3368-3399.
- Knittel, Christopher R. and Konstantinos Metaxoglou. "Challenges in Merger Simulation Analysis," *The American Economic Review, Papers & Proceedings*, 101(3), May 2011, pp. 56-59.
- Knittel, Christopher R. and Victor Stango. "Strategic Incompatibility in ATMs." *The Journal of Banking and Finance*, 35(10), October 2011, pp. 2627-2636.
- Knittel, Christopher R. and Jason J. Lepore. "Tacit Collusion in the Presence of Cyclical Demand and Endogenous Capacity Levels." *The International Journal of Industrial Organization*, 28(2), March 2010, pp. 131-144.
- Stewart, Scott, John J. Neumann, Christopher R. Knittel, and Jeffrey Heisler. "Absence of Value: An Analysis of Investment Allocation Decisions by Institutional Plan Sponsors," *Financial Analyst Journal*, 65(6), November/December 2009. *Winner of the Graham and Dodd Award of Excellence*.
- Knittel, Christopher R. and Victor Stango. "How Does Incompatibility Affect Prices?: Evidence from ATMs," *The Journal of Industrial Economics*, LVII(3), September 2009, pp. 557-582.
- Holland, Stephen P., Jonathan E. Hughes and Christopher R. Knittel. "Greenhouse Gas Reductions under Low Carbon Fuel Standards?," *The American Economic Journal: Economic Policy*, 1(1), February 2009, pp. 106-146.
- Borenstein, Severin, James Bushnell, Christopher R. Knittel and Catherine Wolfram. "Trading Inefficiencies in California's Electricity Markets," *The Journal of Industrial Economics*, LVI(2), June 2008, pp. 347-378.
- Feenstra, Robert and Christopher R. Knittel. "Re-Assessing the Quality Adjustment to Computer Prices: Do U.S. Procedures Overstate the Gains?," *Price Index Concepts and Measurement*, NBER and the Chicago Press.

- Knittel, Christopher R. and Konstantinos Metaxoglou. "Diagnosing Unilateral Market Power in Electricity Reserves Market," *The Journal of Energy Markets*, 1(1), Spring 2008.
- Knittel, Christopher R. and Victor Stango. "Incompatibility, Product Attributes and Consumer Welfare: Evidence from ATMs," *The BE Journal of Economic Analysis & Policy, Advances*, 8(1), January 2008. Available at: <u>http://www.bepress.com/bejeap/vol8/iss1/art1</u>.
- Hughes, Jonathan E., Christopher R. Knittel and Daniel Sperling. "Evidence of a Shift in the Short-Run Price Elasticity of Gasoline." *The Energy Journal*, 29(1), January 2008.
- Heisler, Jeffrey, Christopher R. Knittel, John J. Neumann and Scott Stewart. "Why Do Institutional Plan Sponsors Hire and Fire their Investment Managers?" *Best Paper Award for the 31st NBEA Conference. The Journal of Business and Economics Studies*, 13(1), Spring 2007, pp. 88-116.
- Kim, Dae-Wook and Christopher R. Knittel "Biases in Static Oligopoly Models? Evidence from the California Electricity Market," *The Journal of Industrial Economics*, LIV(4), December 2006, pp. 451-470.
- Knittel, Christopher R. "The Adoption of State Electricity Regulation: The Role of Interest Groups," *The Journal of Industrial Economics*, LIV(2), June 2006.
- Knittel, Christopher R. and Michael R. Roberts. "Financial Models of Deregulated Electricity Prices: An Application to the California Market," *Energy Economics*, 27(5), September 2005, pp. 791-817.
- Knittel, Christopher R. "Regulatory Restructuring and Incumbent Price Dynamics: The Case of Local Telephone Markets," *Review of Economics and Statistics*, 86(2), May 2004, pp. 614-625.
- Knittel, Christopher R. and Victor Stango. "Price Ceilings as Focal Points for Tacit Collusion: Evidence from the Credit Card Market," *The American Economic Review*, 93(5), December 2003, pp. 1703-1729.
- Knittel, Christopher R. "Market Structure and the Pricing of Electricity and Natural Gas," *The Journal of Industrial Economics*, LI(2), June 2003, pp. 167-191.
- Knittel, Christopher R. "Alternative Regulatory Methods and Firm Efficiency: Stochastic Frontier Evidence the US Electricity Industry," *Review of Economics and Statistics*, 84(3), August 2002, pp. 530-540.
- Borenstein, Severin, James Bushnell, and Christopher R. Knittel. "Market Power in Electricity Markets: Beyond Concentration Measures," *The Energy Journal*, 20(4), October 1999, pp. 65-88.
- Knittel, Christopher R. "Long Distance Rates: Search Costs, Switching Costs, and Market Power," *Review of Industrial Organization*, 12(4), August 1997, pp. 519-536.

WORKING PAPERS:

- Blonigen, Bruce A., Knittel, Christopher R., and Anson Soderbery. "Keeping it Fresh: Strategic Product Redesigns and Welfare."
- Knittel, Christopher R. and Robert S. Pindyck. "The Simple Economics of Commodity Price Speculation." In submission.
- Huckfeldt, Peter, and Christopher R. Knittel. "Pharmaceutical Use Following Generic Entry: Paying Less and Buying Less."
- Holland, Stephen P., Jonathan E. Hughes, Christopher R. Knittel, and Nathan C. Parker "Some Inconvenient Truths About Climate Change Policy: The Distributional Impacts of Transportation Policies." Revisions requested from, *Review of Economics and Statistics*.

• Knittel, Christopher R. and Victor Stango. "The Productivity Benefits of IT Outsourcing."

AWARDS, HONORS, AND GRANTS:

- Graham and Dodd Award of Excellence, from *Financial Analyst Journal*, 2010.
- Tom Mayer Distinguished Teaching Award, 2010
- Chancellor's Fellowship, UC Davis (one of five faculty members), 2008
- Barry D. McNutt Award for Excellence in Automotive Policy Analysis (with Jonathan Hughes and Dan Sperling), 2008
- National Science Foundation Grant (with Victor Stango), 2008-2010, \$240,000
- Chevron Bio-Fuel Research Grant, 2007-2008, \$127,000
- Chevron Bio-Fuel Research Grant, 2007-2008, \$77,000
- Chevron Bio-Fuel Research Grant (Co-PI), 2007-2009, \$370,000
- Woods Institute for the Environment Leadership Scholar Training, 2007
- Distinguished Paper, 2006 Academy of Finance
- University of California Energy Institute Research Grant, 2005-2006, \$50,000
- Best Paper Award for the 31st NBEA Conference
- ASUCD Excellence in Teaching Award, 2004
- University of California Energy Institute Research Grant, 2003
- Faculty Research Grant, UC Davis, 2002, 2003, 20004, 2005, 2006
- Institute of Governmental Affairs Junior Faculty Grant, 2002, 2003, 2004, 2005
- Junior Faculty Research Grant, Boston University, 2001
- Graduate Fellowship, University of California, Berkeley, 1997–1999
- Graduate Fellowship, University of California, Davis, 1994–1996
- Institute of Transportation Fellow, University of California, Davis, 1995–1996
- Student Commencement Speaker, California State University, Stanislaus, 1994

REFEREE SERVICES:

Agricultural Economics, American Economic Review, Bulletin of Economic Research, Census Bureau, Econometrica, Economic Inquiry, The Economic Journal, Economics Letters, Energy Economics, The Energy Journal, Energy Studies Review, European Economic Review, International Journal of Industrial Organization, International Journal of Power and Energy Systems, Journal of Banking and Finance, The Journal of Business, Journal of Business and Economic Statistics, Journal of Economic Behavior and Organization, Journal of Economic Education, Journal of Economics and Management Strategy, Journal of Futures Markets, Journal of Industrial Economics, Journal Institutional and Theoretical Economics, Journal of Law and Economics, Journal of Political Economy, Politics and Economics, Quarterly Journal of Economics, Rand Journal of Economics, Resource and Energy Economics, Review of Economic Studies, Review of Economics and Statistics, Review of Industrial Organization, Review of Network Economics, Southern Economic Journal, Socio-Economic Planning Sciences, Utilities Policy, University of California Energy Institute Grant Program, NSF Grant Program

REGULATORY FILINGS:

 Arons, S.M., A.R. Brandt, M.A. Delucchi, A. Eggert, A.E. Farrell, B.K. Haya, J. Hughes, B.M. Jenkins, A.D. Jones, D.M. Kammen, S.R. Kaffka, C.R. Knittel, D.M. Lemoine, E.W. Martin, M.W. Melaina, J.M. Ogden, R.J. Plevin, D. Sperling, B.T. Turner, R.B. Williams, C. Yang, 2007. "A Low-Carbon Fuel Standard for California, Part 1: Technical Analysis." Available Online: <u>http://www.lcfs.ucdavis.edu</u>.

- Brandt, A.R., A.E. Farrell, B.K. Haya, J. Hughes, B.M. Jenkins, A.D. Jones, D.M. Kammen, C.R. Knittel, M.W. Melaina, M. O'Hare, R.J. Plevin, D. Sperling, 2007. "A Low-Carbon Fuel Standard for California, Part 2: Policy Analysis." Available Online: http://www.lcfs.ucdavis.edu.
- Peer Review Comments on AB 1493, California Environmental Protection Agency Air Resource Board, September 2004.
- "Comments on the Use of Computer Models for Merger Analysis in the Electricity Industry," (Joint with Severin Borenstein and James Bushnell), Federal Energy Regulatory Commission. Docket No. PL98-6-000, June 1998.
- "A Cournot-Nash Equilibrium Analysis of the New Jersey Electricity Market," December 1997. (Joint with Severin Borenstein and James Bushnell). Filed with the New Jersey Public Utility Commission as testimony on the potential for market power in a deregulated Pennsylvania-Jersey-Maryland Power Pool.

CONSULTING:

Customers First! Coalition Energy Information Agency Korean Electric Power Company California Air Resource Board City of West Sacramento Rembrandt Vision Technologies, L.P. St. Clair Intellectual Property Consultants, Inc.

PH.D. COMMITTEES (FIRST JOB):

MIT: Stephen Zoepf (on-going) Parisa Bastini (on-going) Donald MacKenzie (on-going) Jennifer Peck (Swarthmore) UC Davis: Anson Soderbery (Purdue University) Nick Sanders (chair, SIEPR Post Doc, Stanford University) Chia-Wen Chen (chair, on-going) Chenguang Li (University of Wisconsin) Jonathan Hughes (chair, University of Colorado, Boulder) Adib Bagh (University of Kentucky, Math and Economics) Seungioon Lee (Korean Insurance Research Institute) Jason Lepore (chair, Cal Poly) Wei-Min Hu (Peking University) Byeongil Ahn (Gyeongsang University) Konstantinos Metaxoglou (chair, Bates and White LLC) Lan Li (University of Melbourne) Neil Norman (Cornerstone Research) Dae-Wook Kim (chair, Korean Institute for Industrial Economics and Trade) Boston University: Gustavo Genoni (2002, Finance, IAE, School of Business, Universidad Austral) John Neumann (2003, Finance, St. John's University)

TEACHING:

- MIT
- Energy Economics and Policy
 - Rating: Mean 6.3/Median 7 (out of 7)
- UC Davis
 - Graduate Empirical Industrial Organization (6 times)
 - Ratings: Mean 4.9 (out of 5)
 - Transportation Economics (4 times)
 - Ratings: Mean 4.7
 - o Intermediate Microeconomics (1 time),
 - Ratings: Mean 4.8
 - Undergraduate Industrial Organization (9 times)
 - Ratings: Mean 4.8
- Boston University

0

- Modeling Business Decision Making,
 - Spring 2000, Spring 2001 and Spring 2002
 - Ratings: 4.53 (out of 5), 4.77, 4.70
- Modeling Business Decision Making (honors),
 - Spring 2001 and Spring 2002
 - Ratings: 4.88, 4.70

UNIVERSITY SERVICE:

MIT:

Variety of personnel committees Energy Minor Oversight Committee Energy Education Task Force

UC Davis:

2007-2008, Co-writer (with Jean Vandergehst) of a proposal for a Graduate Program in "Energy Science and Technology" and "Energy Policy and Management" 2006-Present, Member, Energy Institute Steering Committee 2008, Founding Faculty Member, UC Davis Energy Institute 2005-2006, Hiring Committee and Interviewing Committee 2004-2005, Hiring Committee and Interviewing Committee 2002-2003, Hiring Committee and Interviewing Committee 2002-2007, Graduate Advisor Oral committees: Dae-Wook Kim, Konstantinos Metaxoglou, Neil Norman (chair), Seungjoon Lee, Wei-Min Hu, Lan Li (ARE), Sunhwa Lee, Byeongil Ahn (ARE), Michele Amaral, David Ong, Adib Bagh, Jason Lepore, Bei Li, Chenguang Li (ARE), Tina Saitone (ARE), Carlo Russo (ARE), Sandhya Patlolla (ARE), Jon Hughes (TTP), Peter Huckfeldt, Kyungwon Rho, Nick Sanders, Chia-Wen Chen, Joeri de Witt (ARE), In-Sung Lee (TTP), Anson Soderbery, Nils Johnson (TTP), David McCollum (TTP)

Boston University: 2000-2001, Finance Hiring Committee and Interviewing Committee 1999-2000, Finance Hiring Committee