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Current Positions

James A. Baker, III, and Susan G. Baker Fellow in Energy and Resource Economics,
James A. Baker III Institute for Public Policy, Rice University
Adjunct Professor, Economics Department, Rice University

Research Fields

Energy and Environmental Economics and Policy, Energy and Economic Growth, Applied
Microeconomics, Applied Econometrics and Productivity Analysis

Education

Ph.D. – Economics, Rice University, May 2000
“Essays on Economic Development, Energy Consumption, and the Environment”
M.A. – Economics, Rice University, 1999
B.S. – Economics, (minor Anthropology), University of Houston, 1995

Awards/Distinctions/Memberships

Outstanding Paper in *The Energy Journal* in 2001,
awarded by the International Association for Energy Economics.
Who’s Who In America
Best of Faculty Lecturer, Alumni Weekend and Family Weekend, Rice University (2007-2009)
Member of International Association for Energy Economics
Member of Association for Comparative Economic Studies
Member of American Economic Association
Member of American Association for the Advancement of Science

Publications

Peer Reviewed

“The Future of LNG Trade.” In *Handbook of Utility Management* (forthcoming).

“Energy Demand Theory.” In *International Handbook on the Economics of Energy* (forthcoming).

“The Economics of Energy Supply.” In *International Handbook on the Economics of Energy* (forthcoming).

“Recent Developments in the North American Natural Gas Market.” *Diamond Gas Report*, no. 904 (February 25, 2009).

“Potential Futures for Russian Natural Gas,” with Peter Hartley, in “World Natural Gas Markets and Trade: A Multi Modeling Perspective.” Special Issue, *Energy Journal* (2009).

“A Model of the Operation and Development of a National Oil Company,” with Peter Hartley. *Energy Economics* 30, no. 5 (September 2008).

“The Relationship of Natural Gas to Oil Prices,” with Peter Hartley and Jennifer Rosthal. *Energy Journal* 29, no. 3 (2008).

“LNG Trading Evolves” in “Fundamentals of the World Gas Industry.” *Petroleum Economist* (June 2006).

“The Baker Institute World Gas Trade Model,” with Peter Hartley, in *Natural Gas and Geopolitics: 1970-2040*. Edited by David Victor, Amy Jaffe, and Mark Hayes. Cambridge University Press, 2006.

“Political and Economic Influences on the Future World Market for Natural Gas,” with Peter Hartley, in *Natural Gas and Geopolitics: 1970-2040*. Edited by David Victor, Amy Jaffe, and Mark Hayes. Cambridge University Press, 2006.

“Economic Issues of Natural Gas Transmission in Northeast Asia: Political Bridges and Economic Advantages,” with Peter Hartley and Amy Jaffe. *Joint U.S.-Korea Academic Studies* 16 (2006).

“Energy Trade in China and Northeast Asia,” with Amy Jaffe, in *Energy Security in the 21st Century: A New Foreign Policy Strategy*. Woodrow Wilson Center Press, 2005.

“Future World Market for Natural Gas Highly Dependent on Interactions,” with Peter Hartley. *Natural Gas and Electricity* 22, no. 1 (August 2005).

“The Economics of Energy Demand.” *Encyclopedia of Energy*. Elsevier Press, April 2004.

“Energy Trade in Asia: An Overview,” with Amy Myers Jaffe, in *Asian Energy Markets Dynamics and Trends*. The Emirates Center for Strategic Studies and Research, 2004.

“The Present Status and Future Prospects of Energy in China,” with Ron Soligo and Amy Myers Jaffe, in *Asian Energy Markets Dynamics and Trends*. The Emirates Center for Strategic Studies and Research, 2004.

“Automobile Ownership and Economic Development – Forecasting Motor Vehicle Stocks to 2015,” with Ron Soligo. *The Journal of Transport Economics and Policy* (Spring 2002).

“Controlling Carbon Dioxide: An Analysis of Competing Marginal Effects,” with Peter Hartley. *IAEE Newsletter* (Fourth Quarter 2001).

“Economic Development and End-Use Energy Demand,” with Ron Soligo. *Energy Journal* 22, no. 2 (2001).

Working Papers and Papers in Review

“Climate policy and energy security: two sides of the same coin?” with Peter Hartley (in review at *Energy Policy*).

“Empirical Evidence of the Efficiency of National Oil Companies,” with Stacy Eller and Peter Hartley (in review at *Empirical Economics*).

“The UK-Qatar Natural Gas Trade and Energy Security,” (in review for volume at *RUSI*).

“Exploiting Bolivia's Natural Gas Resources,” with Peter Hartley.

“Crude Oil and the Price of Gasoline: Short Run Departures from Long Run Equilibrium.”

“An Econometric Evaluation of the Demand for Natural Gas in the Power Generation and Industrial Sectors,” with Peter Hartley and Jennifer Rosthal.

“Forecasting Long Run Energy Demand: Sector Trends and Economic Development,” with Stacy Eller.

“A Cartel in Natural Gas: Is it Possible?”

“The Effect of Oil Price Volatility on Technical Change,” with Weiyu Gao and Robin Sickles.

“Carbon Dioxide: A Limit to Growth?” with Peter Hartley.

Government and Industry Group Studies/Publications

Facing the Hard Truths, Contributing author/study participant, LNG Subgroup and Peak Oil Deliberations, National Petroleum Council (2007).

Western Integrated Energy Policy Report, Contributing author, California Energy Commission (2005).

“Energy and Natural Gas in Northeast Asia: Options for the Future,” prepared for the SIIS conference *Energy Security: Options for US-China-Middle East Relations* (June 2005).

Balancing Natural Gas Policy, National Petroleum Council, Lead modeler and contributing author, Modeling Subgroup of the Supply Task group (2003).

Baker Institute Studies and Papers

“Scenarios for Russian Natural Gas Exports: The Role of Domestic Investment, the Caspian, and LNG,” with Peter Hartley. Working Paper. *Russia and the Caspian States in the Global Energy Balance*. James A. Baker III Institute for Public Policy, May 2009. <http://www.rice.edu/energy>.

“The Future of Russian Natural Gas Exports,” with Peter Hartley. Working Paper. *The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks*. James A. Baker III Institute for Public Policy, May 2008. <http://www.rice.edu/energy>.

“Climate Policy and Energy Security: Two Sides of the Same Coin?” with Peter Hartley. Working Paper. *The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks*. James A. Baker III Institute for Public Policy, May 2008. <http://www.rice.edu/energy>.

“Energy Security in a Context of Hyper-Social Mobilization: Insights from Bolivia,” with David Mares and Peter Hartley. Working Paper. *The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks*. James A. Baker III Institute for Public Policy, May 2008. <http://www.rice.edu/energy>.

“U.S. Energy Policy and Transportation,” with Amy Jaffe. Working Paper. *The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks*. James A. Baker III Institute for Public Policy, May 2008. <http://www.rice.edu/energy>.

“Iran, Energy and Geopolitics,” with Daniel Brumberg, Jareer Elass and Amy Jaffe. Working Paper. *The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks*. James A. Baker III Institute for Public Policy, May 2008. <http://www.rice.edu/energy>.

“North American Security of Natural Gas Supply in a Global Market,” with Peter Hartley. Working Paper. *Natural Gas in North America: Markets and Security*. James A. Baker III Institute for Public Policy, November 2007. <http://www.rice.edu/energy>.

“The Relationship between Crude Oil and Natural Gas Prices,” with Peter Hartley and Jennifer Rosthal. Working Paper. *Natural Gas in North America: Markets and Security*. James A. Baker III Institute for Public Policy, November 2007. <http://www.rice.edu/energy>.

“Electricity Sector Demand for Natural Gas in the United States,” with Peter Hartley and Jennifer Rosthal. Working Paper. *Natural Gas in North America: Markets and Security*. James A. Baker III Institute for Public Policy, November 2007. <http://www.rice.edu/energy>.

“International Influences on the Link between US Crude Oil and Natural Gas Prices,” with Peter Hartley and Amy Jaffe. Working Paper. *Natural Gas in North America: Markets and Security*. James A. Baker III Institute for Public Policy, November 2007. <http://www.rice.edu/energy>.

“A Technical Note on the Long Run U.S. Gasoline – Crude Oil Price Relationship.” Working Paper. James A. Baker III Institute for Public Policy, October 2007. <http://www.rice.edu/energy/publications>.

“Russian Natural Gas Supply: Some Implications for Japan,” with Peter Hartley. Working Paper. *The Energy Dimension in Russian Global Strategy*. James A. Baker III Institute for Public Policy, October 2004. <http://www.rice.edu/energy>.

“The Role of Nuclear Power in Enhancing Japan’s Energy Security,” with Peter Hartley, Baker Institute Study Number 26, September 2004. <http://www.rice.edu/energy>.

“Energy Demand in Latin America to 2015,” with Ron Soligo. Published as part of a Baker Institute Research Grant from the Center for International Political Economy (2002).

“Energy Demand in Japan to 2015,” with Ron Soligo. Published as part of a Baker Institute Research Grant from the Center for International Political Economy (2000).

“The Relationship between Economic Development and Energy Demand in China,” with Ron Soligo. Published as part of a Baker Institute Research Grant from the Center for International Political Economy (1999).

“First Things First – Economic Development and Global Warming,” with Peter Hartley and Michael Warby. Published as part of a Baker Institute Research Grant from the Center for International Political Economy (1999).

Opinion Pieces and Other Publications

“Hacking the Grid: Considering the Cyber Threat to the Nation’s Power Distribution System,” with Chris Bronk and Dan Wallach. *Houston Chronicle*, April 2009.

“U.S. Gasoline Policy: Recommendations for the Next President.” *Houston Chronicle*, January 2009.

“You, Your Car and Energy Policy: Sustaining Conservation on the Road,” with Amy Jaffe. *What We’re Thinking*, November 2008. <http://www.bakerinstitute.org/opinions>.

“Speculation: A Cause or Symptom?” *What We’re Thinking*, September 2008.

<http://www.bakerinstitute.org/opinions>.

“The Price of Gasoline: How High for How Long? (Revisited).” *What We’re Thinking*, August 2008.

<http://www.bakerinstitute.org/opinions>.

“The OCS Leasing Moratorium: Which Way Forward?” *What We’re Thinking*, July 2008.

<http://www.bakerinstitute.org/opinions>. Also published in the *Houston Chronicle* (July 2008).

“U.S. Energy Policy FAQ: The U.S. Energy Mix, National Security and the Myths of Energy Dependence,” with Amy Jaffe and Lauren Smulcer. *What We’re Thinking*, February 2008.

<http://www.bakerinstitute.org/opinions>.

“Gas FAQ: US Gasoline Markets and US Oil Import Dependence,” with Amy Jaffe. *What We’re Thinking*, September 2007. <http://www.bakerinstitute.org/opinions>.

“[Gas FAQ Video Briefing Transcript: U.S. Gasoline Markets and U.S. Oil Dependence](#).” August 2007.

<http://www.bakerinstitute.org/opinions>.

“You, Your Car and U.S. Energy Policy: Things You Need to Know,” with Amy Jaffe. *AAA Magazine*, regional distribution, September/October 2007.

“The Price of Gasoline: How High for How Long? (Revisited)” *What We’re Thinking*, July 2007.

<http://www.bakerinstitute.org/opinions>.

Presentations

“Understanding Oil and Gas Markets.” Port Region’s Educational Seminar Series, *Exploring Financial Options in Today’s Economy*, Pasadena, TX, May 5, 2009.

“A Study Synopsis – Scenarios for Russian Natural Gas Exports: The Role of Domestic Investment, the Caspian, and LNG.” Presentation, *Oil, Natural Gas and Geopolitical Conflict in the Current Economic Climate*, James A. Baker III Institute for Public Policy, Rice University, Houston, TX, April 29, 2009.

“Oil and Gas – A Retrospective Outlook.” Keynote Address, Quorum Group Oil and Gas Symposium, Houston, TX, April 21, 2009.

“Scenarios for Russian Natural Gas Exports: The Role of Domestic Investment, the Caspian, and LNG.” *Russia and the Caspian States in the Global Energy Balance*, Moscow, Russia, March 20, 2009.

“Energy in the United States: Prospects for the Future.” Rice University Alumni Weekend Seminar, Houston, TX, March 14, 2009.

“The Outlook for North American Gas.” Fifth Annual Pipeline Opportunities Conference, Oildom Publishing Company, Houston, TX, March 11, 2009.

“The Energy Component of the Current Crisis.” *How to Interpret and Respond to the Current Financial and Economic Crises*, Buddha’s Light International Association, Chung Mei Temple, Stafford, TX, February 28, 2009.

“The Impact of North American Shale Gas in the RWGTM.” Presentation, El Paso Corporation Executive Group, January 28, 2009.

“The Outlook for Energy in North America.” Breakfast Panel Discussion, CEO 21 – Houston Economic Roundtable, Pannell Kerr Forster, P.C. of Texas, January 28, 2009.

“Exploiting Bolivia’s Natural Gas Resources.” Session, ASSA/AEA Annual Meeting, *Resource Rents and the Economics of the Public Sector in Developing and Post-Transition Economies*, San Francisco, CA, January 4, 2009.

“The Price of Crude Oil and a Stock Flow Model.” Tulane University Executive Speaker Series, Entergy-Tulane Energy Institute, December 1, 2008.

“Energy in the United States: Prospects for the Future.” Lecture, Rice University Homecoming, November 7, 2008.

“Excerpts from ‘The Emerging Role of National Oil Companies.’” Energy Executives Operational Insights, *The Shifting Balance of Power: Impact on NOC, IOC and Service Company Investment Strategies*, Gulf Publishing and Ernst & Young, Houston, TX, October 21, 2008.

“Presidential Candidates' Energy Positions and Energy Industry Outlook.” Address, USAEE Luncheon, Courtyard on St. James Place, Houston, TX, October 16, 2008.

“The Future of North American Energy: Reacting to a Changing Environment.” Informatica/Microstrategy Industry Breakfast, *Energize Your Morning*, Calgary, Alberta, October 9, 2008.

“Considerations for North American Energy in a Global Context.” *American Owners of Mineral Resources Annual Conference*, Blackstone Minerals, Houston, TX, October 2, 2008.

“Turkey’s Future as an International Natural Gas Hub.” 31st Annual IAEE International Energy Conference, Istanbul, Turkey, June 17-21, 2008.

“The Future of Russian Natural Gas Exports.” *The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks*, James A. Baker III Institute for Public Policy, Houston, TX, May 21, 2008.

“The Future Role of the National Oil Company.” Keynote address, API Luncheon, Houston, TX, April 22, 2008.

“The Future of Russian Natural Gas Exports.” Workshop, *Current Issues in Russian Energy Policy & Politics*, Duke Center for International Development and the Carnegie Endowment for International Peace, Duke University, NC, April 3, 2008.

“Energy Security and Climate Change Policy: Risks and Opportunities for the Middle East.” *Enriching the Middle East's Economic Future III Conference, Panel: Integrating Energy, Foreign Policy and Security*, UCLA Center for Middle East Development, Doha, Qatar, March 9-11, 2008.

“Climate Policy and Alternative Energy: Potential Impacts on the Middle East.” *Middle East Energy 2008: Risk and Responsibility: The New Realities of Energy Supply*, Chatham House, London, England, February 4-5, 2008.

“Global Energy in the 21st Century.” Session moderator and discussion leader of membership closing session, *United States Energy in a Global Context*, The Philosophical Society of Texas Annual Meeting, December 7-9, 2007.

“The Future Role of National Oil Companies.” Tulane University Executive Speaker Series, Entergy-Tulane Energy Institute, December 6, 2007.

“North American Security of Natural Gas Supply in a Global Market.” Conference, James A. Baker III Institute for Public Policy, Rice University, Houston, TX, November 16, 2007.

“Russian Gas Supply: Implications for NE Asia and Europe.” *Global Energy: Policy Needs and Priorities*, Windsor Energy Group, November 6, 2007.

“World Natural Gas Outlook.” Global Oil & Gas Conference, *U.S. Energy Policy in a World of Rising Energy Demand and Constrained Supply*, Center for the Study of Energy and Environmental Stewardship and the Life Cycle Institute of The Catholic University of America, Catholic University of America, November 1, 2007.

“The Price of Gasoline: Where We Have Been, Where We Are Going, and What You Can Do.” Families Weekend Lecture, Rice University, Houston, TX, October 19, 2007.

“The Geopolitics of Gas.” Keynote presentation, Desk and Derrick Club, Houston, TX, October 16, 2007.

“The Emerging Global Natural Gas Market.” Workshop to the U.S. Army, Natural Gas 25 Year Outlook, Booz Allen Hamilton, Washington, D.C., October 4, 2007.

“LNG.” Presided over Plenary Session, 27th Annual Conference of the United States Association for Energy Economics, Houston, TX, September 16-19, 2007.

“Market and Policy Issues.” Presided over Plenary Session, Eighth Annual U.S.-China Oil Gas Industry Forum, San Francisco, CA, September 9-11, 2007.

“The Outlook for LNG – Think Global.” Market Outlook Workshop, Valve Manufacturers Association, San Diego, CA, August 8-10, 2007.

“Security of EU Gas Supply.” Ninth Annual IAEE/AIEE European Energy Conference, Florence, Italy, June 10-13, 2007.

“Natural Gas Market Outlook.” RMI Oilfield Breakfast Forum, Houston, TX, March 22, 2007.

“Exploring Global Economic Developments and Forecasting Energy Demand; LNG Trading and Market Behavior.” Sparks and Flames, Amsterdam, Netherlands, December 2006.

“The Geopolitics of Natural Gas.” Economic Forum for College and University Faculty, *Critical Issues in Energy*, Federal Reserve Bank of Dallas, November 2, 2006.

“The Geopolitics of Energy.” Address, International Energy Credit Association conference, Palm Desert, CA, October 2, 2006.

“Natural Gas in North America.” Workshop address, International Energy Credit Association (IECA) conference, Palm Desert, CA, October 1, 2006.

“The Future of World Gas.” Meeting, Engineering and Construction Forum Roundtable, Rice University, September 2006.

“Oil Prices and Economic Growth in Less Developed Countries.” 29th Annual Conference of the International Association for Energy Economics, Potsdam, Germany, June 2006.

“Insights from the Rice World Gas Trade Model.” 29th Annual Conference of the International Association for Energy Economics, Potsdam, Germany, June 2006.

“Global LNG Markets.” KPMG Global Energy Conference, Houston, TX, May 2006.

“The Geopolitics of Natural Gas.” Energy Integration in North America vis-à-vis South America: Regulation and Geopolitics, UNAM, Mexico City, Mexico, May 2006.

“Critically Examining the Long Term Picture for LNG: Competition from Coal and Nuclear and the Implications of LNG Market Globalization for Price.” FLAME, Amsterdam, Netherlands, March 2006.

“A Forward Look at Natural Gas – 2006 and Beyond.” Presentation to management, Direct Energy strategy conference, November 3, 2005.

“A Look at Energy Markets – Past, Present and Future.” Keynote address, Petroleum Equipment Suppliers Association (PESA) Credit Interchange Division (CID) conference, Marble Falls, TX, October 27, 2005.

“The Rice World Gas Trade Model: Options for Russian Natural Gas.” 25th Annual Conference of the United States Association for Energy Economics/International Association for Energy Economics, Denver, CO, September 2005.

“A Cartel in Natural Gas: Is it Possible?” 25th Annual Conference of the United States Association for Energy Economics, Denver, CO, September 2005.

“The Energy Agenda: Consumers, Natural Gas and the Rockies.” Media event, American Petroleum Institute, Houston, TX, May 3, 2005.

“Natural Gas in Northeast Asia: Opportunities for Regional Cooperation.” Conference, Shanghai Institute for International Studies, Shanghai, China, July 2005.

“Energy and Natural Gas in Northeast Asia: China’s Impact.” Conference, Shanghai Academy of Social Sciences, Shanghai, China, July 2005.

“Energy and Natural Gas in Northeast Asia: Regional Trends and Implications for Japan.” Workshop, IEEJ, Tokyo, Japan, July 2005.

“Energy and Environment in China.” China and Sustainable Development Seminar, Shell Center for Sustainable Development, Rice University, Houston, TX, September 2004.

“Natural Gas in Northeast Asia.” National Intelligence Council workshop, Eurasia Group, September 2004.

“A Global Market for Natural Gas? Prospects to 2035.” Conference, *Geopolitics of Natural Gas*, James A Baker III Institute for Public Policy, Rice University, Houston, TX, May 2004.

“The Energy Security Value of Nuclear Power in Japan.” Workshop for Tokyo Electric Power Company, Tokyo, Japan, April 2004.

“Conventional Versus Innovative Technologies in the Transportation Sector: External Costs and Benefits.” 26th Annual Conference of the International Association for Energy Economics (IAEE), Prague, Czech Republic, June 2003.

“The Future of Energy Trade in Asia.” Seventh Annual Conference of the Emirates Center for Strategic Studies and Research (ECSSR), The Energy Markets in East Asia, Abu Dhabi, UAE, January 2002.

“Controlling Carbon Dioxide: An Analysis of Competing Marginal Effects.” 24th Annual Conference of the International Association for Energy Economics (IAEE), Houston, TX, April 2001.

“Residential Energy Demand in the OECD - Patterns of Economic Development.” 21st Annual North American Conference of the United States Association for Energy Economics (USAEE), Philadelphia, PA, September 2000.

“Controlling Carbon Dioxide - Let's Wait and See.” Conference on *Global Warming Science and Policy*, James A. Baker Institute III Institute for Public Policy, Rice University, Houston, TX, September 2000.

“The Urgency of Controlling CO₂ Emissions.” 23rd Annual International Association for Energy Economics Conference, Sydney, Australia, June 2000.

“Energy Demand in Japan – The Implications of Future Development in an Industrialized Nation.” Baker Institute Energy Forum Workshop on East Asian Energy Markets and Energy Cooperation in Northeast Asia, October 1999.

“The Relationship between Economic Development and Energy Demand in Asia.” 22nd Annual International Association for Energy Economics Conference, Rome, Italy, June 1999.

“The Effect of Oil Price Volatility on Technical Change.” 19th Annual United States Association for Energy Economics/International Association for Energy Economics Conference, Albuquerque, NM, October 1998.

“The Relationship between Economic Development and Automobile Ownership.” 21st Annual International Association for Energy Economics Conference, Quebec City, Quebec, Canada, May 1998.

“Economic Structure, the Level of Development and Energy Demand.” 18th Annual United States Association for Energy Economics/International Association for Energy Economics Conference, San Francisco, CA, September 1997.

Teaching Experience

Energy Economics I, Energy Economics II, Economics of the Energy Industries, Macroeconomic Theory, Principles of Macroeconomics, Mathematical Economics, Environmental and Resource

Economics (Guest Lecturer)

Senior Independent Research (42 Thesis Submissions)

Doctoral Dissertations (6 Thesis Committees)

Media

Interviews have appeared in *USA Today*, *Minneapolis Star Tribune*, *San Francisco Chronicle*, *Congressional Quarterly*, *Financial Times*, *Fortune*, *Hard Assets Investors* online, *Business Week*, *New York Times*, *Wall Street Journal*, *Wirtschaftswoche*, *Platts Gas Daily*, *Natural Gas Intelligence Weekly*, *Time Magazine*, *Boston Globe*, *Dallas Morning News*, *New Orleans Times-Picayune*, *Detroit Free Press*, *Houston Chronicle*, *San Antonio Express* and other publications. Various television and radio appearances.