

**PRINCETON UNIVERSITY:**

**Woodrow Wilson School of Public and  
International Affairs**

Spring 2007

**WWS 523  
Legal and Regulatory Policy Towards Markets**

Ioannis N. Kessides

Thursday 1:00-4:00 pm, Room 014

Office Hours: Thursday 4:00-5:00  
125 Corwin Hall

This course deals with the analysis of the role of government in markets where competitive equilibria fail. Special attention will be paid to the network utilities whose unique economic characteristics make them natural targets for government intervention yet render them difficult to regulate for the public interest. The methodology of the course is to first focus on the economic characteristics of these industries, assess their implications for the design of efficient public policies, and then to apply powerful analytic tools to clarify the relevant principles for policy reform.

The course will examine the world-wide reassessment of the role of the state in national economic activity in general, and the network utilities in particular. In both the advanced industrial countries and the developing and transition economies, views have changed dramatically about how network utilities should be owned, organized, and regulated. The new model calls for increased reliance on private infrastructure to improve efficiency, promote innovation, and enhance services. But after a series of financial crises, corporate scandals, and stock market collapses, the California electricity crisis, and blackouts around the world, clear guidance is needed on what to do about infrastructure—as well as reassurance about (or qualifications of) earlier, more confident messages. This course will analyze the promises and perils of the new model, and consider what principles should guide future efforts to restructure, regulate, and expand infrastructure, especially in developing and transition countries.

Among the most critical tasks for policymakers in developing and transition economies is designing and implementing stable, effective regulation for network utilities. In many advanced industrial economies the challenge has been reforming existing regulations and reducing unwarranted governmental intrusion. By contrast, in nearly every developing and transition economy the most pressing issue is designing—from scratch—regulatory mechanisms for privatized utilities. The course will analyze in some detail the challenges facing developing and transition economies in the design of effective regulatory mechanisms.

The course grade will be based on a short paper (10%), a policy paper for class presentation (40%), class participation (10%), and a final exam (40%).

## Course Outline

### Weeks 1-4

**The Worldwide Reassessment of the Role of Government.** Introduction to the course. Deregulation in the US and the EU. The privatization revolution in developing and transition countries—promises and perils. The challenges of post-privatization regulatory governance.

Kessides, I. 2004. Reforming Infrastructure: Privatization, Regulation, and Competition. World Bank and Oxford University Press.

**Review of Firm Behavior and Market Theory.** Types of markets. The competitive market and economic efficiency. Monopolies and deadweight loss. Gains and losses from government intervention. Oligopoly and collusion. The dominant firm and strategic competition.

Viscusi, W., Harrington, J., and J. Vernon. 2005. Economics of Regulation and Antitrust. The MIT Press.

Katz, M., and H. Rosen. 1998. Microeconomics. Irwin McGraw-Hill.

Cowling, K., and D. Mueller. 1978. "The Social Costs of Monopoly Power." *Economic Journal* 88: 727-48.

Harberger, A. 1954. "Monopoly and Resource Allocation." *American Economic Review* 44 : 77-87.

Leibenstein, H. 1966. "Allocative Efficiency vs. X-Inefficiency." *American Economic Review* 56 (3): 392-415.

**Competition Policy.** Analysis of appropriate governmental policy towards mergers and joint ventures. Competition policy implications for developing countries.

Willig, R. 1991. "Merger Analysis, Industrial Organization Theory, and Merger Guidelines," *Brookings Papers on Economic Activity--Microeconomics*, pp. 281-332.

Singh, A., and R. Dhumale. 1999. "Competition Policy, Development and Developing Countries." The South Centre.

#### Department of Justice and Federal Trade Commission Horizontal Merger Guidelines

Ordoover, J., and R. Willig. 1991. "Economics and the 1992 Merger Guidelines: A Brief Survey," *Collaborations Among Competitors: Antitrust Policy and Economics*, E. Fox and J. Halverson (eds.), pp. 639-654.

Baker, J., and D. Rubinfeld, "Empirical Methods in Antitrust Litigation: Review and Critique," *American Law and Economics Review*, 1999, pp. 386-435.

Gilbert, R. 1989. "The Role of Potential Competition in Industrial Organization," *Journal of Economic Perspectives*, 3(3): 107-128.

Willig, R. 1992. "Antimonopoly Policies and Institutions," in *The Emergence of Market Economies in Eastern Europe*, C. Clague and G. Rausser (eds.), 1992, pp. 187-196.

Ordoover, J., and R. Willig, "Non-Price Anticompetitive Behavior by Dominant Firms Toward the Producers of Complementary Products," *Antitrust and Regulation*, F. Fisher (ed.), 1986.

Litan, R., and C. Shapiro, "Antitrust Policy in the Clinton Administration," in *American Economic Policy in the 1990's*, 2002.

Vagliasindi, M. 2001. "Competition Across Transition Economies: An Enterprise-Level Analysis of the Main Policy and Structural Determinants." Working Paper No. 68, European Bank for Reconstruction and Development.

Baker, J. 2005. "Competition Policy as a Political Bargain." American Antitrust Institute, Working Paper No. 05-02.

Dutz, M., and M. Vagliasindi. 1999. "Competition Policy Implementation in Transition Economies: An Empirical Assessment." Working Paper No. 47, European Bank for Reconstruction and Development.

Evenett, S. 2003. "Competition Law and the Investment Climate in Developing Countries." A contribution to the WDR on Investment Climate, Growth and Poverty.

Scherer, F. 1994. *Competition Policy for an Integrated World Economy*. Brookings Institution, Washington, DC.

Khemani, S. 1999. "International Mergers Activity: Some Concerns for Developing and Emerging Economies." In *Policy Directions for Global Merger Review in Global Competition Review*.

Waverman, L., Comanor, W., and A. Goto. 1997. *Competition Policy in the Global Economy: Modalities for Co-operation*. Routledge Studies in the Modern World Economy: London.

**Weeks 5-12 Introduction to Economic Regulation.** The theory of regulation—normative rationale, interest groups and capture theory, economic theory of regulation. Evidence. The natural monopoly problem. Alternative pricing solutions—marginal or average cost pricing, nonlinear pricing, Ramsey pricing, peak load prices. Franchise bidding.

Stigler, G. 1971. "The Regulation of Industry," *The Bell Journal of Economics and Management Science*, 2: 3-21.

Posner, R. 1971. "Taxation by Regulation." *The Bell Journal of Economics and Management Science*, 2: 22-50.

Posner, R. 1974. "Theories of Economic Regulation." *The Bell Journal of Economics and Management Science*, 5: 335-358.

Peltzman, S. 1976. "Toward a More General Theory of Regulation," *Journal of Law and Economics*, 19: 211-240.

Becker, A. 1983. "Theory of Competition Among Pressure Groups for Political Influence." *Quarterly Journal of Economics*.

Joskow P., and R. Noll. 1988. "Regulation in Theory and Practice." In Gary From ed., Studies in Public Regulation. Cambridge MA: MIT Press.

Joskow, P., and R. Noll. 1994. "Deregulation and Regulatory Reform During the 1980s." In Martin Feldstein, ed., American Economic Policy During the 1980s. Chicago: University of Chicago Press.

Noll, R. 1989. "Economic Perspectives on the Politics of Regulation." Chapter 22 in Handbook of Industrial Organization, vol. 2, pp 1253-1287.

Joskow, P., and N. Rose. 1989. "The Effects of Economic Regulation." Chapter 25 in Handbook of Industrial Organization, vol. 2, pp 1449-1506.

Peltzman, S. 1989. "The Economic Theory of Regulation After a Decade of Deregulation." *Oxford Papers On Economic Activity*, : 1-41.

Winston, C. 1993. "Economic Deregulation: Days of Reckoning for Microeconomists." *Journal of Economic Literature*, XXXI: 1263-89.

Posner, R. 1975. "The Social Costs of Monopoly and Regulation." *Journal of Political Economy*, 83: 807-827.

Peltzman, S. 1993. "George Stigler's Contribution to the Economic Analysis of Regulation." *Journal of Political Economy*, 101: 818-831.

Guasch, J., and R. Hahn. 1999. "The Costs and Benefits of Regulation: Implications for Developing Countries." *The World Bank Research Observer* 14 (1): 137-58.

Demsetz, H. 1968. "Why Regulate Utilities." *Journal of Law and Economics*, 11: 55-65.

Williamson, O. 1976. "Franchise Bidding for Natural Monopolies—In General and with Respect to CATV." *Bell Journal of Economics*, 7: 73-104.

**Public vs. Private Ownership.** The origins of public ownership to regulate economic activity. Performance problems of state-owned enterprises. Attempts to reform public enterprises. The privatization revolution and its outcomes.

Willig, R. 1994. "Public Versus Regulated Private Enterprise." In Proceedings of the World Bank Annual Conference on Development Economics 1993, L. Summers (ed.), The World Bank.

Shleifer, A. 1998. "State Versus Private Ownership." *Journal of Economic Perspectives*, 12(4): 133-150.

Baumol, W. 1993. "On the Perils of Privatization." *Eastern Economic Journal*, 19(4): 419-440.

Meggison, W. L., and J. M. Netter. "From State to Market: A Survey of Empirical Studies on Privatization." *Journal of Economic Literature* 39, 2 (June 2001): 321-89.

Boycko, M., A. Shleifer, and R. W. Vishny. "A Theory of Privatization." *Economic Journal* 106 (1996): 309-19.

Lopez-de-Silanes, F., Shleifer, A., and R. Vishny. 1997. "Privatization in the United States." *Rand Journal of Economics*, 28: 447-471.

La Porta, R., and F. Lopez-de-Silanes. 1999. "The Benefits of Privatization: Evidence from Mexico." *Quarterly Journal of Economics*, 114: 1193-1242.

Frydman, R., Gray, C., Hessel, M., and A. Rapaczynski. 1999. "When Does Privatization Works? The Impact of private Ownership on Corporate Performance in the Transition Economies." *Quarterly Journal of Economics*, 114: 1153-1191.

Vickers, J., and G. Yarrow. 1991. "Economic Perspectives on Privatization." *Journal of Economic Perspectives* 5, 2 (1991): 111-132.

Boardman, A. and A. Vining. 1989. "Ownership and Performance in competitive Environments: A Comparison of the Performance of Private, Mixed, and State-Owned Enterprises." *Journal of Law and Economics*, 32: 1-33.

Dewenter, K., and P. Malatesta. 2001. "State-Owned and Privately-Owned Firms: An Empirical Analysis of Profitability, Leverage, and Labor Intensity." *American Economic Review* 91 (1): 320-34.

Vickers, J., and G. Yarrow. 1988. Privatization: An Economic Analysis, MIT Press.

Domah, P., and M. Pollitt. 2001. "The Restructuring and Privatization of Electricity Distribution and Supply Businesses in England and Wales: A Social Cost-Benefit Analysis." *Fiscal Studies* 22 (1): 107-146.

Niskanen, W. 1968. "The Peculiar Economics of Bureaucracy." *American Economic Review, Papers and Proceedings* 58: 298-305.

Parker, D., and K. Hartley. 1991. "Organizational Status and Performance: The Effects on Employment." *Applied Economics*, 23: 403-416.

Saal, D., and D. Parker. 2001. "Productivity and Price Performance in the Privatized Water and Sewerage Companies of England and Wales." *Journal of Regulatory Economics*, 20 (1): 61-90.

Peltzman, S. "Pricing in Public and Private Enterprises and Electric Utilities in the United States." *Journal of Law and Economics* 14 (1971): 109-147.

Galal, A., L. Jones, P. Tandon, and O. Vogelsang. 1994. Welfare Consequences of Selling Public Enterprises: An Empirical Analysis. Oxford: Oxford University Press.

Torero, M., and A. Pasco-Font. 2001. "The Social Impact of Privatization and Regulation of Utilities in Peru." Discussion Paper 2001/17. United Nations University, WIDER (World Institute for Development Economics Research), Stockholm, Sweden.

Boubakri, N., and J-C. Cosset. 1998. "The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries." *Journal of Finance* 53 (3): 1081-1110.

Sheshinski, E., and L. Lopez-Calva. 2000. "Privatization and Its Benefits: Theory, Evidence, and Challenges." Center for Applied Energy Research Discussion Paper 35. Harvard University, Harvard Institute for International Development, Cambridge, Mass.

Delfino, J., and A. Casarin. 2001. "The Reform of the Utilities Sector in Argentina." Discussion Paper 2001/74. United Nations University, WIDER (World Institute for Development Economics Research), Stockholm, Sweden.

**The Design of Regulatory Institutions.** Post-privatization regulatory governance. Elements of effective regulation. The structure of regulatory institutions. The importance of regulatory commitment. Getting the economics right. Moving toward more practical regulatory mechanisms.

Willig, R. 1999. "Economic Principles to Guide Post-Privatization Governance." In F. Besanes, E. M. Uribe, and R. Willig, eds., *Can Privatization Deliver? Infrastructure for Latin America*. Washington, D.C.: Inter-American Development Bank and Baltimore, Md.: The Johns Hopkins University Press.

Laffont, J-J. 1996. "Regulation, Privatization, and Incentives in Developing Countries." In M. G. Quibira and J. M. Dowling, eds., *Current Issues in Economic Development—An Asian Perspective*. Oxford: Oxford University Press.

Kahn, A. 1996. "Argentina—The Reform of Regulation: An Overview." World Bank, Washington, D.C.

Helm, D. 1994. "British Utility Regulation: Theory, Practice and Reform." *Oxford Review of Economic Policy* 10 (3): 17-19.

Criales, J., and W. Smith. 1997. "Bolivia's Regulatory Reforms." Paper presented at a World Bank Seminar on Bolivia's Capitalization Program, 23 June, Washington, D.C.

Landau, G. 2002. "The Regulatory-Normative Framework in Brazil." *Policy Papers on the Americas*, vol. 13, study 2. Center for Strategic and International Studies, Washington, D.C.

- Samarajiva, R., A. Mahan, and A. Barendse. 2002. "Multisector Utility Regulation." Discussion Paper 23. Technical University of Denmark, World Dialogue on Regulation for Network Economies, Copenhagen.
- Noll, R. 1999. *The Economics and Politics of the Slowdown in Regulatory Reform*. Washington, D.C.: American Enterprise Institute-Brookings Joint Center for Regulatory Studies.
- Laffont, J-J. 2003. "Enforcement, Regulation and Development." *Journal of African Economies* 12 (supplement 2): 193–211.
- Smith, W. 1997a. "Utility Regulators—Decisionmaking, Structures, Resources, and Start-up Strategy." Public Policy for the Private Sector Note 129. World Bank, Washington, D.C.
- Smith, W. 1997b. "Utility Regulators—Roles and Responsibilities." Public Policy for the Private Sector Note 128. World Bank, Washington, D.C.
- Smith, W. 1997c. "Utility Regulators—The Independence Debate." Public Policy for the Private Sector Note 127. World Bank, Washington, D.C.
- Stern, J. 1997. "What Makes an Independent Regulator Independent?" *Business Strategy Review* 8 (2): 67–74.
- Kessides, I. 1997. "Regulation of the Argentine Network Utilities: Issues and Options for the National Government." Occasional Paper 16. Latin America and the Caribbean Region. World Bank, Washington, D.C.
- Tsaplin, V. 2001. "An Evaluation of the Efficiency of Energy Regulation in Ukraine." M.A. diss. National University of Kyiv, Mohyla Academy, Kyiv, Ukraine.
- Estache, A., and D. Martimort. 1999. "Politics, Transaction Costs, and the Design of Regulatory Institutions." Policy Research Working Paper 2073. World Bank, Washington, D.C.
- IADB (Inter-American Development Bank). 1999. "Profiles of Power Sector Reform in Selected Latin American and Caribbean Countries." Washington, D.C.
- Fischer, R., and A. Galetovic. 2000. "Regulatory Governance and Chile's 1998–1999 Electricity Shortage." *Seria Economia* 84. University of Chile, Department of Economics, Santiago.
- Stirton, L., and M. Lodge. 2001. "Telecommunications Reform in Jamaica: Toward Embedded Regulatory Autonomy?" Paper presented at the Development Studies Association annual conference, University of Manchester, 10–12 September, Manchester, U.K.
- Stern, J. 2000a. "Styles of Regulation: The Choice of Approach to Utility Regulation in Central and Eastern Europe." Regulation Initiative Working Paper 34. London Business School, London.
- Stern, J. 2000b. "Electricity and Telecommunications Regulatory Institutions in Small and Developing Countries." *Utilities Policy* 9 (3): 131–57.
- Stern, J. 2002. "Retrospect and Prospects for 2002." In *Central and Eastern Europe & FSU Electricity Prospects for 2002*. London: Platts.
- Stern, J. 2003. "Regulation and Contracts for Utility Services: Substitutes or Complements? Lessons from UK Historical Experience." Regulation Initiative Working Paper 54. London Business School, London.
- Stern, J., and S. Holder. 1999. "Regulatory Governance: Criteria for Assessing the Performance of Regulatory Systems: An Application to Infrastructure Industries in the Developing Countries of Asia." *Utilities Policy* 8 (1): 33–50.
- Samarajiva, R. 2001. "Regulating in an Imperfect World: Building Independence through Legitimacy." *Policy Forum* 1 (2): 363–68.

Shirley, M., F. Tusubira, F. Gebreab, and L. Haggarty. 2002. "Telecommunications Reform in Uganda." Policy Research Working Paper 2864. World Bank, Washington, D.C.

Bruce, R., and R. Macmillan. 2002. "Telecommunications in Crisis: Perspectives of the Financial Sector on Regulatory Impediments to Sustainable Investment." Debevoise & Plimpton, London.

Spiller, P., and W. Savedoff. 1999. "Commitment and Governance in Infrastructure Sectors." In F. Besanes, E. M. Uribe and R. Willig, eds., *Can Privatization Deliver? Infrastructure for Latin America*. Washington D.C.: Inter-American Development Bank and Baltimore, Md.: The Johns Hopkins University Press.

Spiller, P. 1992. "Institutions and Regulatory Commitment in Utilities Privatization." Working Paper IPR51. Institute for Policy Reform, Washington, D.C.

Spiller, P. 1996. "Electricity Regulation in Argentina, Brazil, Uruguay and Chile." In R. J. Gilbert and E. P. Kahn, eds., *International Comparisons of Electricity Regulation*. New York: Cambridge University Press.

McCubbins, M., R. Noll, and B. Weingast. 1987. "Administrative Procedures as Instruments of Political Control." *Journal of Law, Economics, and Organization* 3: 243–77.

Guasch, J., A. Kartacheva, and L. Quesada. 2000. "Concessions Contracts Renegotiations in Latin America and Caribbean Region: An Economic Analysis and Empirical Evidence." World Bank, Washington, D.C.

Guasch, J. 2001. "Concessions and Regulatory Design: Determinants of Performance—Fifteen Years of Evidence." World Bank, Washington D.C.

Guasch, J., J-J. Laffont, and S. Straub. 2003. "Renegotiation of Concession Contracts in Latin America." Policy Research Working Paper 3011. World Bank, Washington, D.C.

Spiller, P., and L. Martorell. 1996. "How Should It Be Done? Electricity Regulation in Argentina, Brazil, Uruguay and Chile." In R. Gilbert and A. E. Kahn, eds., *International Comparisons of Electricity Regulation*. Cambridge: Cambridge University Press.

Fischer, R., and P. Serra. 2000. "Regulating the Electricity Sector in Latin America." *Serie Economia* 86. University of Chile, Department of Economics, Santiago.

**Restructuring the Electricity Supply Industry.** The industry's traditional structure. Technological innovation and pressures for reform. Options for restructuring electricity markets. Regulatory challenges. Reform experiences and lessons. Achievements in Latin America. Problems in East Asia. The California crisis and renewed doubts about competitive restructuring.

Joskow, P. 2003. "Electricity Sector Restructuring and Competition: Lessons Learned." *Cuadernos de Economia* Ano 40 (121): 548–58.

Bacon, R., and J. Besant-Jones. 2001. "Global Electric Power Reform: Privatization and Liberalization of the Electric Power Industry in Developing Countries." *Annual Reviews of Energy and the Environment* 26: 331–59.

Newbery, D. 2001. "Issues and Options for Restructuring the ESI." University of Cambridge, Department of Applied Economics, Cambridge, U.K.

Newbery, D. 2000. *Privatization, Restructuring and Regulation of Network Utilities*. Cambridge, Mass.: MIT Press.

Bialek, J. 2004. "Recent Blackouts in US and Continental Europe: Is Liberalization to Blame?" University of Edinburgh, School of Engineering and Electronics.

Besant-Jones, J., and B. Tenenbaum. 2001. "The California Power Crisis: Lessons for Developing Countries." World Bank, Energy Sector Management Assistance Program, Washington, D.C.

Joskow P. 2001 "California's Electricity Crisis." NBER Working Paper 8442. National Bureau of Economic Research, Cambridge, Mass.

Joskow, P. 1998. "Electricity Sectors in Transition." *Energy Journal* 19 (2): 25–62.

Joskow, P. 2000. "Deregulation and Regulatory Reform in the U.S. Electric Power Sector." In Sam Peltzman and Clifford Winston, eds., *Deregulation of Network Industries: What's Next?* Washington, D.C.: Brookings Institution Press.

Joskow, P. 2000. "Why Do We Need Electricity Retailers? Or Can You Get It Cheaper Wholesale?" Massachusetts Institute of Technology, Center for Energy and Environmental Policy Research, Cambridge, Mass.

Joskow, P. 1999. "Comments of Professor Paul L. Joskow." Docket RM99-2-000. Federal Energy Regulatory Commission, Washington, D.C.

Borenstein, S., 2000. "Understanding Competitive Pricing and Market Power in Wholesale Electricity Markets." *The Electricity Journal* 13 (6): 49–57.

Borenstein, S., and J. Bushnell. 2001. "Electricity Restructuring: Deregulation or Reregulation?" *Regulation* 23 (2): 46–52.

IEA (International Energy Agency). 1999. *Electricity Market Reform: An IEA Handbook*. Paris: Organisation for Economic Co-operation and Development.

Henisz, W., and B. Zelner. 2001. "The Political Economy of Private Electricity Provision in Southeast Asia." *East Asian Economic Perspectives* 15 (1): 10–36.

Bayless, C. 1994. "Less Is More: Why Gas Turbines Will Transform Electric Utilities." *Public Utilities Fortnightly* 132 (22): 21–25.

Casten, T. 1995. "Electricity Generation: Smaller Is Better." *The Electricity Journal* 8 (10): 69–73.

Balzhiser, R. 1996. "Technology—It's Only Begun to Make a Difference." *The Electricity Journal* 9 (4): 32–45.

Taud, R., J. Karg, and D. O'Leary. 1999. "Gas Turbine Power Plants: A Technology of Growing Importance for Developing Countries." *Energy Issues* 20. World Bank, Washington, D.C.

Thomas, R., and T. Schneider. 1997. "Underlying Technical Issues in Electricity Deregulation." Paper presented at the 30th Hawaii International Conference on System Sciences, 7–10 January, Maui, Hawaii.

Ehrhardt, D., and R. Burdon. "Free Entry in Infrastructure." Policy Research Working Paper 2093. World Bank, Washington, D.C.

Tynan, N. 2002. "Role and Design of Free Entry Policies: Expanding Service Options for Low-Income Households." Paper prepared for the PPIAF/ADB Conference on Infrastructure Development—Private Solutions for the Poor: The Asian Perspective, 28–30 October, Manila.

Hankins, M. 2000. "A Case Study on Private Provision of Photovoltaic Systems in Kenya." In *Energy and Development Report 2000: Energy Service for the World's Poor*. Washington, D.C.: World Bank.

Besant-Jones, J. 1993. "Reforming the Policies for Electric Power in Developing Countries." World Bank, Washington, D.C.

Mangwengwende, S. 2002. "Tariffs and Subsidies in Zimbabwe's Reforming Electricity Industry: Steering a Utility through Turbulent Times." *Energy Policy* 30 (11–12): 947–58.

Hunt, S., and G. Shuttleworth. 1996. *Competition and Choice in Electricity*. Chichester, U.K.: John Wiley and Sons.

- Littlechild, S. 2000. "Why We Need Electricity Retailers: A Reply to Joskow on Wholesale Spot Price Pass-Through." Cambridge Working Papers in Economics (No 0008). University of Cambridge, Department of Applied Economics.
- Lovei, L. 2000. "The Single Buyer Model: A Dangerous Path toward Competitive Electricity Markets." Public Policy for the Private Sector Note 225. World Bank, Washington D.C.
- Barker, J., L. Mauer, and T. Storm van Leeuwen. 2003. "The Evolution of the Single Buyer Model and Introduction of Competition." World Bank, Washington, D.C.
- Wolak, F. 2003. "Designing Competitive Wholesale Electricity Markets for Latin American Countries." Paper prepared for the First Meeting of the Latin American Competition Forum, sponsored by the Organisation for Economic Co-operation and Development and the Inter-American Development Bank, 7–8 April, Paris.
- Wolak, F. 2000. "Report on Electricity Industry Restructuring in Romania." In I. Kessides, ed., *Romania: Regulatory and Structural Assessment in the Network Utilities*. Report 20546-RO. Washington, D.C.: World Bank.
- Arizu, B. 2003. "Market Surveillance—Lessons Learned in Latin America." Paper presented at the World Bank Energy Forum, February, Washington, D.C.
- Bushnell, J., and S. Soft. 1997. "Improving Private Incentives for Electric Grid Investment." *Resource and Energy Economics* 19: 85–108.
- Newbery, D. 2003. "The Relationship between Regulation and Competition Policy for Network Utilities." University of Cambridge, Department of Applied Economics, Cambridge, U.K.
- Newbery, D. 1997. "Privatization and Liberalization of Network Utilities." *European Economic Review* 41 (3-5): 357–83.
- Wolak, F., and R. Nordhaus. 2001. "Comments on 'Staff Recommendation on Prospective Market Monitoring and Mitigation for the California Wholesale Electricity Market.'" California Independent System Operator, Market Surveillance Committee, Sacramento.
- Wolak, F., R. Nordhaus, and C. Shapiro. 2000. "An Analysis of the June 2000 Price Spikes in the California ISO's Energy and Ancillary Services Markets." [<http://www.caiso.com/docs/2000/09/14/200009141610025714.html>].
- Borenstein, S., J. Bushnell, and C. Knittel. 1999. "Market Power in Electricity Markets: Beyond Concentration Measures." *The Energy Journal* 20 (4).
- Borenstein, S., J. Bushnell, and F. Wolak. 2000. "Diagnosing Market Power in California's Restructured Wholesale Electricity Market." NBER Working Paper 7868. National Bureau of Economic Research, Cambridge, Mass.
- Millan, J., E. Lora, and A. Micco. 2001. "Sustainability of the Electricity Sector Reforms in Latin America." Inter-American Development Bank, Research Department, Santiago, Chile. [[http://www.iadb.org/res/seminars\\_events.htm](http://www.iadb.org/res/seminars_events.htm)].
- Jamasb, T. 2002. "Reform and Regulation of the Electricity Sector in Developing Countries." University of Cambridge, Department of Applied Economics, Cambridge, U.K.
- Suding, P. 1996. "Opening Up and Transition, Success and Problems: Financing and Reforms the Electric Power Sector in Latin America and the Caribbean." *Energy Policy* 24 (5): 437–45.
- Rudnick, H., and J. Zolezzi. 2001. "Electric Sector Deregulation and Restructuring in Latin America: Lessons to be Learnt and Possible Ways Forward." In *IEEE Proceedings: Generation, Transmission and Distribution* 148: 180-84.
- Bitran, E., and P. Serra. 1998. "Regulation of Privatized Utilities: The Chilean Experience." *World Development* 26 (6): 945–62.

Fischer, R., R. Gutierrez, and P. Serra. 2003. "The Effects of Privatization on Firms and on Social Welfare: The Chilean Case." Research Network Paper R-456. Inter-American Development Bank, Washington, D.C.

Arellano, M. 2003. "Diagnosing and Mitigating Market Power in Chile's Electricity Industry." Cambridge Working Paper in Economics CWPE 0327, University of Cambridge.

Rudnick, H. 1998. "Competitive Markets in Electricity Supply: Assessment of the South American Experience." *Revista ABANTE* 1 (2): 189–211.

Pollitt, M. 2003. "Electricity Reform in Argentina—Lessons for Developing Countries." World Bank, Washington, D.C.

Platts. 2002. "More Energy Companies Hit Bottom in Argentina." *Platts—Power in Latin America* 86, 3 May.

World Bank. 1999. *Energy and Development Report 1999: Energy after the Financial Crises*. Washington, D.C.

**International Policy Developments in Transportation.** Economic characteristics of railroads. Current issues of public policy in the rail industry. Options for railway restructuring. Regulatory challenges—protection of captive rail shippers. Effects of rail restructuring, deregulation, and privatization. Economic characteristics of ports. Reform experiences and lessons in ports. The deregulation of the airline industry and impacts on market structure, fares, and productivity.

Baumol, W., and R. Willig. 1987. "Using Competition as a Guide." *Regulation* 11 (1): 28–35.

Gómez-Ibáñez, J., and J. Meyer. 1993. *Going Private: The International Experience with Transport Privatization*. Washington, D.C.: Brookings Institution.

Kessides, I., and R. Willig. 1995. "Restructuring Regulation of the Rail Industry for the Public Interest." Policy Research Working Paper 1506. World Bank, Washington, D.C.

Braeutigam, R., 1999. "Learning about Transport Costs." In J. Gomez-Ibanez, W. Tye, and C. Winston, eds., *Essays in Transportation Economics and Policy: A Handbook in Honor of John Meyer*. Washington, D.C.: Brookings Institution.

Baumol, W., M. Koehn, and R. Willig. 1990. "How Arbitrary Is 'Arbitrary'? Or, Toward the Deserved Demise of Full Cost Allocation." *Public Utilities Fortnightly* 120 (5): 16–21.

Grimm, C., and C. Winston. 2000. "Competition in the Deregulated Railroad Industry: Sources, Effects, and Policy Issues." In S. Peltzman and C. Winston, eds., *Deregulation of Network Industries: What's Next?* Washington, D.C.: American Enterprise Institute-Brookings Joint Center for Regulatory Studies.

Gómez-Ibáñez, J. 1999. "Regulating Coordination: The Promise and Problems of Vertically Unbundling Private Infrastructure." Discussion Paper. Harvard University, Kennedy School of Government, Taubman Center for State and Local Government, Cambridge, Mass.

Nash, C., and J. Toner. 1998. "Railways: Structure, Regulation and Competition Policy." Organisation for Economic Co-operation and Development, Paris.

Ordober, J., and R. Pittman. 1994. "Restructuring the Railway for Competition." Paper presented at an Organisation for Economic Co-operation and Development–World Bank conference on Competition and Regulation in Network Infrastructure Industries, 28 June–1 July, Budapest, Hungary.

Bailey Elizabeth E., and John C. Panzar. 1981. "The Contestability of Airline Markets during the Transition to Deregulation." *Journal of Law and Economics*, 44: 125-145.

- Bailey, Elizabeth E., David R. Graham, and Daniel P. Kaplan. 1985. *Deregulating the Airlines*. Cambridge, MA: The MIT Press.
- Kahn, Alfred E. 1988. "Surprises of Airline Deregulation." *American Economic Review*, :316-321.
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