

## **AGUSTIN J. ROS**

### **VICE PRESIDENT**

Dr. Ros is a Vice President at NERA with expertise in competition policy and regulatory economics. In the U.S., Dr. Ros has appeared as an expert witness in telecommunications and energy proceedings and has participated in arbitration proceedings before international regulatory authorities and before the International Chamber of Commerce Arbitration Panel. He has filed expert reports before regulators in the Bahamas, Barbados, Canada, Guatemala, Indonesia, Italy, Mexico, New Zealand, Peru, Singapore, Spain, and Trinidad and Tobago and the United States and has consulted for clients in Brazil, the Cayman Islands, China, the Eastern Caribbean Islands, the Dominican Republic, Panama, and the United Kingdom.

In 2008 Dr. Ros took a two year leave of absence to work for the Organization for Economic Cooperation and Development on a competition policy project in Mexico. Working with the Mexican Competition Commission, Dr. Ros co-led a team of competition experts assessing competition in a number of key sectors of the Mexican economy including, airlines, airports, banking, inter-city bus transport, energy, pharmaceutical, retail superstores, and telecommunications. The team made a series of policy recommendations to improve competition some of which were enacted into law.

Prior to joining NERA, Dr. Ros was an Executive Assistant to the Chairman of the Illinois Commerce Commission providing expert advice and policy analysis on a variety of issues related to the economics and tariff regulation of the telecommunications, energy, gas, and water industries. In 1996, Dr. Ros was selected to participate in the Federal-State partnership in Telecommunications at the Federal Communications Commission. While at the FCC, he worked in the Common Carrier Bureau advising the Bureau and drafting rules implementing the local competition provisions of the Telecommunications Act of 1996, the portion liberalizing local telephone markets.

Dr. Ros was an Adjunct Instructor at Northeastern University, where he taught a course on the Economics of Regulation and Antitrust and he has taught antitrust and competition policy at the University of Anahuac in Mexico City. His articles have appeared in book chapters, in peer-reviewed journals, such as the *Journal of Regulatory Economics*, *Review of Network Economics* and *Telecommunications Policy*, and in numerous industry and trade journals, such as *Public Utilities Fortnightly* and the *Journal of Project Finance*. In addition, his research on local competition has been cited in *Business Week*, and in 2001 he published a book on the productivity of employee-owned firms in the U.S. and Brazil.

Dr. Ros received his B.A. in Economics from Rutgers University and his M.S. and Ph.D. in Economics from the University of Illinois at Urbana. He is bilingual in Spanish and English and speaks fluent Portuguese.

## Education

### **University of Illinois at Urbana-Champaign**

Ph.D., Economics, 1994

M.S., Economics, 1991

### **Rutgers University**

B.A., Economics, 1989

## Professional Experience

### **Organization for Economic Cooperation and Development (OECD)**

2008-2010 Senior Economist

### **NERA Economic Consulting**

2004- present Vice President

1999-2004 Senior Consultant

1996-1999 Consultant

### **Illinois Commerce Commission**

1994-1996 Executive Assistant to the Chairman

### **Crain's Communication**

1993-1994 Research Manager

## Teaching Positions

### **Northeastern University**

2000 Adjunct Instructor

### **Joliet Junior College**

1993 Instructor

### **University of Illinois at Urbana-Champaign**

1990-1993 Teaching Assistant

## Other Teaching Experience

Anti-trust/competition policy with econometric applications training course given to the Mexican Competition Commission, Winter/Spring 2010

Anti-trust policy in the U.S. course given at the Anahuac University, Mexico City Spring 2010

## Testimony and Filed Reports

Before the Commission for the Supervision of Business Competition of the Republic of Indonesia on behalf of Singapore Telecommunications Limited and Singapore Telecom Mobile, “Competitive Assessment of the Indonesian Mobile Sector,” (with William E. Taylor, Nigel Attenborough and Christian Dippon), filed October 15, 2007, rebuttal report filed January 11, 2008.

Before the Ministry of Economic Affairs and Development on behalf of Cable and Wireless Barbados, “An Economic Assessment of Mandating Indirect Access in Barbados,” (with Michael Khyefets and Loren Adler), November 14, 2007.

Before the Supervising Agency for Private Investment in Telecommunications in Peru (OSITPEL) on behalf of Telefonica de Peru, expert report on economic efficiency considerations with respect to termination rates and the impact of capacity-based charges, (with Jose Maria Rodriguez), filed October 17, 2007.

Before the Canadian Radio and Telecommunications Commission (Telecom Public Notice CRTC 2006-14) on behalf of Bell Aliant Regional Communications, “Telecommunications Competition in the US: An Assessment of Wholesale Regulation Policy,” (with William E. Taylor), filed March 15, 2007.

Before the New York Public Service Commission (Case 06-C-0897) on behalf of Verizon New York, “Report on Competition for Retail Business Services,” (with William E. Taylor and Harold Ware), filed report August 31, 2006. Supplemental Report filed October 2, 2006.

Before the Telecommunications Authority of Trinidad and Tobago on behalf of Telecommunications Services of Trinidad and Tobago, response to Digicel’s economic analysis of Interconnections costs and rates, filed May 12, 2006 (with Timothy Tardiff).

Before the Telecommunications Authority of Trinidad and Tobago on behalf of Telecommunications Services of Trinidad and Tobago, expert report on interconnections costs in Trinidad and Tobago, filed May 4, 2006 (with Timothy Tardiff).

Before the Telecommunications Authority of Trinidad and Tobago on behalf of Telecommunications Services of Trinidad and Tobago, expert report on Benchmark Mobile Termination Rates, Evaluation of the .Econ Report, filed February 10, 2006 (with Timothy Tardiff).

Before the Supervising Agency for Private Investment in Telecommunications in Peru (OSITPEL) on behalf of Telefonica de Peru, expert report on OSIPTTEL’s imputation methodology, filed February 7, 2006 (with Jose Maria Rodriguez and Eduardo Prieto Kessler).

Before the Comisión Federal de Telecomunicaciones de México, on behalf of Telcel, S.A., expert report measuring the cost Telcel incurs when providing interconnection services to operators, filed 22 June 2005.

Before the Supervising Agency for Private Investment in Telecommunications in Peru (OSIPTTEL) on behalf of Telefonica de Peru, final report regarding the estimation of Telefonica de Peru's total factor productivity for application in the 2004-2007 price cap regime (with José María Rodríguez Ovejero and Juan Hernández García), 21 June 2004.

Before the Bahamas Public Utilities Commission, on behalf of the Bahamas Telecommunications Company, "Public Consultation on the Universal Service Obligation in The Bahamas," Comments filed 24 March 2004; Reply Comments filed 10 June 2004.

Before the Canadian Radio-television and Telecommunications Commission on behalf of Aliant Telecom Inc., Bell Canada, MTS Communications Inc., Saskatchewan Telecommunications and Télébec, société en commandite, Public Notice 2003-10, "A Review of Rules and Regulations Governing Bundled Telecommunications Services." filed 12 March 2004, updated report filed 26 March 2004.

Before the Bahamas Public Utilities Commission, on behalf of the Bahamas Telecommunications Company, "Public Consultation on Price Control of Bahamas Telecommunications Company," 19 September 2003.

Before the Comisión Federal de Telecomunicaciones de México, on behalf of the Commission, "Telmex's 2003-2006 Price Cap Tariff Proposal," expert report in arbitration regarding the renewal of the price cap plan for Telmex (with William Taylor, Georgina Martinez, and Aniruddha Banerjee), 13 December 2002.

Before the Honorable Arbitration Tribunal of Fairness in Guatemala, Case No. CENAC-A-01-2002, final report in arbitration regarding call termination costs in fixed and wireless networks (with José María Rodríguez Ovejero, Laurent Bensancon, and Juan Hernández García), September 2002.

Before the Federal Communications Commission on behalf of BellSouth Corporation Docket Nos. 01-338, 96-98, 98-47 Reply Declaration (with William Taylor, Aniruddha Banerjee, and Charles Zarkadas) regarding unbundling obligations of local exchange carriers. Filed 17 July 2002.

Before the New Zealand Commerce Commission on behalf of Telecom New Zealand, "Review of CostQuests' Associates Benchmarking Survey" (with William Taylor, Greg Houston, Tom Hird, Jaime D'Almeida, and Carol Osborne), May 2002.

Before the Federal Communications Commission on behalf of Verizon Communications, Docket Nos. 01-339, 01-337, 02-33, Statement of 43 Economists on the Proper Regulatory Treatment of Broadband Internet Access Service, 3 May 2002.

Before the State of Illinois on behalf of Verizon North Inc. and Verizon South Inc., Docket No. 98-0195, surrebuttal testimony regarding investigation into certain payphone issues as directed in Docket 97-0225, 16 July 2001.

Before the Supervising Agency for Private Investment in Telecommunications in Peru (OSIPTTEL) on behalf of Telefonica de Peru, final report regarding the estimation of Telefonica de Peru's total factor productivity for application in the 2001-2003 price cap regime (with Timothy Tardiff, José María Rodríguez Ovejero, and Juan Hernández García), 22 June 2001.

Before the State of Illinois on behalf of Verizon North Inc. and Verizon South Inc., Docket No. 98-0195, rebuttal testimony regarding investigation into certain payphone issues as directed in Docket 97-0225, 20 April 2001.

Before the New Zealand Commerce Commission, on behalf of Telecom New Zealand, "Costs of Telecommunications Competition Policies," final report exploring the indirect economic costs of changing competition policy to a more regulatory approach (with Harold Ware, Timothy Tardiff, and Nigel Attenborough), May 2000.

Before the State of Illinois on behalf of GTE North Incorporated and GTE South Incorporated, Docket No. 98-0195, direct testimony regarding investigation into certain payphone issues as directed in Docket No. 97-0225, 21 December 1999.

Before the Federal Communications Commission on behalf of US West, An Economic and Policy Analysis of Efficient Inter-Carrier Compensation Mechanisms for ISP-Bound Traffic, 12 November 1999.

Before the Pennsylvania Public Utility Commission on behalf of Bell Atlantic Pennsylvania, Promised Fulfilled: Bell Atlantic-Pennsylvania's Infrastructure Development (with William Taylor, Charles Zarkadas, and Jaime D'Almeida), 15 January 1999.

Before the State of Illinois on behalf of Illinois Gas Transmission Company, Docket No 98-0510, rebuttal testimony regarding certification of Illinois Gas Transmission Company as a Common Carrier by Pipeline and approval of rates and accounting, and for cancellation of the Certificate of Illini Carrier, LP, 11 January 1999.

Before the Spanish Regulatory Commission on behalf of Telefónica, final report "Assessment of the methodology used by Telefónica in the calculation of the prices included in the interconnection reference offer and comparison with BT's interconnection prices" (with Nigel Attenborough, David Robinson, Yogesh Sharma, and José María Rodríguez Ovejero), October 1998.

Before the Italian Regulatory Commission on behalf of Telecom Italia, final report "Volume Discounts: A Report for Telecom Italia" (with Nigel Attenborough, Andrea Coscelli, and Andrea Lofaro), October 1998.

Before the Federal Communications Commission on behalf of Bell Atlantic, Docket Nos. 96-262, 94-1, 91-213, 96-263, "An Analysis of the Effects of Exchange Access Reform on Demand Stimulation" (with Charles Zarkadas), 27 April 1997.

## Publications

“X-factor Updating and Total Factor Productivity Growth: The Case of Peruvian Telecommunications, 1996-2003,” (with Jeffrey I. Bernstein, Juan Hernandez and Jose Maria Rodriguez), *Journal of Regulatory Economics*, vol. 30:3 (2006), pp 316-342.

“Crecimiento de la demanda por servicios de comunicación móviles. Mitos y realidades (International Mobile Demand Growth: Myths and Reality)” (with Aniruddha Banerjee), *AHCIET Móvil* (September 2005).

“Concepto de costes básicos para la modelización entelecomunicaciones (Basic Economic Cost Concepts for Telecommunications Cost Modeling), *Perspectivas en Telecomunicaciones (Perspectives in Telecommunications)* (July 2005).

“Drivers of Demand Growth for Mobile Telecommunications Services: Evidence from International Panel Data” (with Aniruddha Banerjee), *Global Economy and Digital Society*, Elsevier (2004).

“Patterns in Global Fixed and Mobile Telecommunications Development: A Cluster Analysis” (with Aniruddha Banerjee), *Telecommunications Policy*, vol. 28 (2004), pp. 107-132.

“The Impact of the Regulatory Process and Price Cap Regulation in Latin American Telecommunications Markets,” *Review of Network Economics*, vol. 2 (2003), pp. 270-286.

“Does Employee Ownership Motivate Workers? Worker Effort, Shirking and Horizontal Monitoring in ESOP,” *The Determinants of the Incidence and the Effects of Participatory Organizations, Advances in the Economic Analysis of Participatory and Labor Management*, edited by Takao Kato and Jeffrey Pliskin, Elsevier Science, vol. 7 (2003).

“The Internet: Market Characteristics and Regulatory Conundrums” (with Aniruddha Banerjee), *Forecasting the Internet: Understanding the Explosive Growth of Data Communications*, edited by David G. Loomis and Lester D. Taylor, Kluwer Academic Publishers (2002), pp. 187-216.

*Profits for All? The Costs and Benefits of Employee Ownership*, Nova Science Publishers, (2001).

“Are Residential Local Exchange Prices Too Low? Drivers to Competition in the Local Exchange Market and the Impact of Inefficient Prices,” (with Karl McDermott), *Expanding Competition in Regulated Industries*, edited by Michael Crew, Kluwer Academic Publishers (2000), pp. 149-168.

“Telecommunications Privatization and Tariff Rebalancing: Evidence from Latin America” (with Aniruddha Banerjee), *Telecommunications Policy*, vol. 24 (2000), 233-252.

“Utility Regulation in Latin America,” (with Leonardo Giacchino, Cesar Herrera, Siôn Jones, Phillip Maggs, and Kristina Sepetys), *Privatisation International*, edited by Mark Baker, vol. 2 (2000).

*Essential Facilities, Economic Efficiency, and a Mandate to Share: A Policy Primer* (with Karl McDermott, Kenneth Gordon, and William Taylor), Edison Electric Institute (January 2000).

“Does Ownership or Competition Matter? The Effects of Telecommunications Reform on Network Expansion and Efficiency,” *Journal of Regulatory Economics*, vol.15 (1999), pp. 65-92.

“Telecommunication Restructuring in Brazil: Issues and Options (A Report Based on the Proceedings of the U.S./Brazil Aspen Global Forum)”, *International Center for Public Administration and Policy Institute for Policy Research and Implementation*, Graduate School of Public Affairs, University of Colorado at Denver (December 1997).

“When, Where and How?: Implementing Effective Telecommunications Competition & Regulatory Policy,” *Journal of Project Finance* (Winter 1997).

“Telecommunications in Brazil: Restructuring and Privatization” (et. al.), A Report Based on the Proceedings of the Brazil/U.S. Aspen Global Forum, *International Center for Public Administration and Policy Institute for Policy Research and Implementation*, Graduate School of Public Affairs, University of Colorado at Denver, August (1997).

“Another Look at What’s Driving Utility Stock Prices” (with John L. Damagalski and Philip R. O’Connor), *Public Utilities Fortnightly* (January 1997).

"Regulatory Change and the Dismantling of the Bottleneck," *Tenth NARUC Biennial Regulatory Information Proceedings* (October 1996).

"Stranded Costs: Is the Market Paying Attention? A Look at Market-to-Book Ratios" (with John L. Damagalski and Philip R. O'Connor), *Public Utilities Fortnightly* (May 1996).

"The Gas Storage Market: What Does it Tell Us?" (with Ruth Kretschmer), *Public Utilities Fortnightly* (April 1996).

"Incentive Ratemaking in Illinois: The Transition to Competitive Markets" (with Terry S. Harvill), *Public Utilities Fortnightly* (July 1995).