



# Rensselaer

**Dr. VIVEK GHOSAL**

*Professor and Department Head of Economics  
Virginia and Lloyd W. Rittenhouse Chair  
Rensselaer Polytechnic Institute  
Troy NY 12180 USA*

## EDUCATION

- Ph.D. Economics, Warrington College of Business, University of Florida, USA, 1988.  
Dissertation: *Market Structure, Strategic Investment Behavior, and Profitability.*
- M.A. Economics, Delhi School of Economics, India, 1983.
- B.A. Economics (Honors), University of Delhi, India, 1980.

## RESEARCH AND POLICY INTERESTS

Firm Strategy: Innovation, M&As, Pricing, Investment.

Firms' Decisions under Uncertainty: Innovation, Investment, Employment, Entry and Exit.

Antitrust Law & Economics, and Enforcement.

Economic Policy and Regulations: Efficiency, Innovation, Competition, Compliance.

Selected Industries and Topics for Contracts, Grants and Research Projects:

Automobiles; Pharmaceuticals; Medical Devices; Energy; Healthcare; Information Technology;  
Telecommunications & Media; Paper Products; Advanced Manufacturing; Transportation.

## PRIMARY POSITIONS

Rensselaer Polytechnic Institute, School of Humanities and Social Sciences, Department of Economics.  
Professor, and Head of Department (2016 – current).  
Virginia and Lloyd W. Rittenhouse Chair (2016 – current).

Georgia Institute of Technology, Ivan Allen College, School of Economics.  
Inaugural holder of the Richard and Mary Inman Chair (2015 – 2016).  
Director of Programs: MS (2011-2016), and Ph.D. (2012-2016).  
Full Professor (2010 – 2016).  
Associate Professor (2001 – 2009).

U.S. Department of Justice, Antitrust Division (Washington D.C.).  
Economist, Economic Analysis Group (1998 – 2001).  
Investigated antitrust, competition, innovation, and regulatory matters. *Industries:* electricity, energy, information technology, electronics, telecommunications, media, healthcare and postal.

Miami University, Richard T. Farmer School of Business, Department of Economics.  
Associate Professor (with tenure, 1996 – 1998); Assistant Professor (1990 – 1996).

University of Florida, Warrington College of Business.  
Visiting Assistant Professor, Department of Economics (1988 – 1990).  
Research Associate, Public Utilities Research Center (1987 – 1988).  
Analyzed M&As and JVs in telecommunications and media markets.

## PROFESSIONAL APPOINTMENTS

Research Fellow, Center for Economic Studies and the Ifo Institute (*CESifo*, Munich, 2003 – current).

European Business School (Wiesbaden).

Visiting Professor (2010 – 2018). Teach graduate management course on “Regulations and Business Strategy,” focusing on environmental regulations, sustainability and innovation.

Korea Development Institute, School of Public Policy and Management (Seoul).

Visiting Professor (2010 – 2016). Joint OECD–KDI School of Public Policy & Management international program on regulatory reform. Taught training course for business and policy professionals on “Regulatory Reform for Promoting Competition, Growth and Innovation.”

Organization for Economic Cooperation and Development (Paris).

Economics Consultant (2005 – 2013).

Projects on regulatory reform, competition assessments, innovation, and consumer choice.

Research Affiliate, Sloan Foundation, Industry Studies Program (2006 – 2009).

Research Professor, Department of Innovation, Manufacturing and Service, Deutsches Institut für Wirtschaftsforschung (*DIW*, Berlin, 2004 – 2007).

Research Fellow, Economics Network for Competition and Regulation (ENCORE), University of Amsterdam (Amsterdam, 2005 – 2012).

Affiliated Faculty, Center for Materials, Devices, and Integrated Systems (*cMDIS*), Rensselaer Polytechnic Institute (2017 – current). My collaboration is related to energy technologies, economics and policy.

## JOURNAL EDITORIAL BOARDS

Editorial Board, *Review of Industrial Organization* (2004 – current)

Editorial Board, *Business Strategy and the Environment* (2013 – current)

Editorial Board, *Journal of Industry, Competition and Trade* (2018 – current)

Editorial Board, *Review of Professional Management* (2017 – current)

## SHORT LECTURES

Indian Institute of Corporate Affairs and Competition Commission of India (New Delhi).

Training course for policy professionals on “Competition Impact Assessment.” Presented lectures on: “Conceptual Background for Developing Assessment Framework”; “Developing the Competition Assessment Toolkit”; “Competition Assessment for Markets for Consumer Goods and Services”; and “Competition Assessments: Fitting into Policy Development.” 2013.

Development Bank of Japan (Tokyo).

Lecture on Assessment of Mergers and Acquisitions in the US and EU. 2013.

Taiwan Fair Trade Commission (Taipei).

Executive course for regulatory policy professionals on “Regulatory Reform and Competition Assessments.” Lectures on: “Competition and Benefits”; “Competition Assessments and their Implementation”; “Quantitative Analysis of Competition Assessments”; and “Fitting Competition Assessments into Policy Development.” 2008 and 2009.

Maximixe (Lima).

Executive course for business and law professionals on “Competition Policy and Law Enforcement in US and EU: Cartels, Merger Control, and Transnational Mergers.” 2006.

University of Amsterdam, Economics Network for Competition and Regulation (Amsterdam).

Conducted Graduate Summer School on “Competition Law Enforcement.” 2006.

Ludwig Maximilians University, Center for Economic Studies (Munich).

Graduate summer course on “Industry Dynamics: M&As, Efficiency and Market Power.” 2003.

Central European University (Budapest).

Graduate Summer School lectures on “Competition Policy in Transition Economies.” 2003.

## **SHORT-TERM RESEARCH VISITS**

Pontificia Universidad Católica de Chile (Santiago), November 2017.

Research: Evolution of cartel enforcement and cross-country comparisons.

Centre for European Economic Research (ZEW, Mannheim), October and November 2015.

Research: Innovation in automobile markets; Antitrust cartel enforcement.

Research Institute for Industrial Economics (Stockholm), November 2014.

Research: Competition law and enforcement.

Ifo Institute (Munich), November 2013.

Research: Forecasting, uncertainty and firm decision-making.

European School for Management and Technology (Berlin), September 2013.

Research: Environmental regulations, sustainability and innovation.

International Monetary Fund, Research Department (Washington D.C.), July 2012.

Research: Impact of uncertainty on businesses.

Jönköping International Business School (Jönköping), June & November 2011.

Research: Environmental regulations and innovation in Swedish manufacturing.

Jönköping International Business School (Jönköping), May 2009.

Research: Environmental regulations and investments in the Swedish manufacturing.

Ludwig Maximilians University, Center for Economic Studies (Munich), May 2009.

Research: Innovation strategy in the global automobile manufacturing industry.

Deutsches Institut für Wirtschaftsforschung (Berlin), June – July 2004.

Research: Innovation and product quality in the automobile manufacturing industry.

Wissenschaftszentrum für Sozialforschung (Berlin), June – July 2003.

Research: Political-economy of competition law enforcement.

Ludwig Maximilians University, Center for Economic Studies (Munich), May 2003.  
Research: Industry dynamics and the evolution of the size distribution of firms.

Central Planning Bureau (Den Haag), June – August 2002.  
Research: Competition policy issues and healthcare reform in The Netherlands.

## **CONSULTING**

I have consulted for international organizations, governments, consulting firms and companies on issues related to: antitrust enforcement; regulatory reform; business and economic modeling of markets; industry studies; and statistical/econometric modeling.

## **CONTRACTS, GRANTS AND RESEARCH AWARDS**

Ghosal, Vivek and Frank Southworth (Co-PIs). “Micro-Dynamics of Industrial Location, and its effects on Economic Development and the Transportation Network.”  
U.S. Department of Transportation, Georgia Department of Transportation, and Woodruff Foundation, 2012 – 2015.

Ghosal, Vivek (PI). “The Proposed Acquisition by Comcast of Time Warner Cable.”  
National Telephone Cooperative Association (NTCA), 2015.

Ghosal, Vivek. “Advanced Manufacturing and Economic Development.”  
Georgia Institute of Technology, IAC Dean’s Grants for Research, 2015.

Ghosal, Vivek (PI). “Regulatory Reform and Competition Assessments in the Indian Economy.”  
Organization for Economic Cooperation and Development (Paris), 2013.

Ghosal, Vivek (PI). “Assessing Transportation Equipment Manufacturing Capabilities for U.S. High-Speed Rail Infrastructure Investments.”  
U.S. Department of Transportation, Research & Innovative Technology Administration, 2011 – 2012.

Ghosal, Vivek, and Andreas Stephan (Co-PIs). “Environmental Regulations, Innovation and Efficiency: Evidence from Firms in Swedish Forest Products Manufacturing Industry.”  
Ragnar Söderberg’s Foundation (Stockholm), 2011 – 2012.

Ghosal, Vivek. “Adoption of Information Technology by Healthcare Clinics.”  
Georgia Institute of Technology, IAC Dean’s Grants for Research, 2011.

Ghosal, Vivek (PI). “Telecommunications and Media Markets in Taiwan: Evaluating Regulatory Reform, and Effects on Competition and Innovation.”  
Organization for Economic Cooperation and Development (Paris), 2009.

Ghosal, Vivek (PI). “Capacity Building for Implementing Competition Assessments.”  
Project on Competition Assessment Toolkit, Organization for Economic Cooperation and Development (Paris), 2008 – 2009.

Ghosal, Vivek (PI). “Consumer Choice and Decision Making.”  
Project on Competition Assessment Toolkit, Organization for Economic Cooperation and Development (Paris), 2008.

Ghosal, Vivek (PI). “Competition Policy, and Global Investment and Economic Development.”  
Project on Policy Framework for Investment, Organization for Economic Cooperation and  
Development (Paris), 2007.

Ghosal, Vivek (PI). “Guidance for Performing Competition Assessments.”  
Project on Competition Assessments, Organization for Economic Cooperation and Development  
(Paris), 2005 – 2007. (The framework I helped develop in this project for policy assessment and  
regulatory reform based on competition, growth and innovation is being used by over two dozen  
countries, and has been translated into 17 languages.)

Ghosal, Vivek, and Usha Nair-Reichert (Co-PIs). “Role of Innovation in the Pulp and Paper Industry.”  
Alfred P. Sloan Foundation, 2004 – 2006.

Ghosal, Vivek (PI). “Examining Potential Technology Gap between US and European Paper Firms.”  
Alfred P. Sloan Foundation, 2002 – 2003.

Even, William, and Vivek Ghosal (Co-PIs). “Long-term Healthcare Staffing Needs for Elderly.”  
Scripps Foundation and the Ohio Long-Term Care Research Project, 1996 – 1997.

### **Other Awards**

Foreign travel grants awards for research presentations, Georgia Tech Foundation, 2002 – 2015.

Grant for Incentives for Seeking Extramural Research Funding, Georgia Institute of Technology, 2007.

Awarded doctoral dissertation fellowship in Industrial Organization for research on “Strategic Investment  
Behavior and Firms’ Profitability.” Public Policy Research Center, Warrington College of Business,  
University of Florida, 1987 – 1988.

## RESEARCH

### *Completed Papers*

- “Decentralized Environmental Regulations and Productivity.” (With Andreas Stephan and Jan Weiss. Under review.)
- “Competition and Innovation in Automobile Markets.” (With Jiayao Ni. Under review.)
- “The Impact of Uncertainty on the Number of Businesses.” (With Yang Ye. Under review.)
- “The Rise and (Potential) Fall of U.S. Cartel Enforcement.” (With D. Daniel Sokol. Under review.)
- “Firm-level Human Capital and Innovation.” (With Xiuli Sun and Haizheng Li. Under review.)
- “Adoption and Diffusion of Information Technology in Healthcare Markets.” (With Brant Callaway.)
- “Internationalization of Innovation and Firm Performance in Pharmaceuticals.” (With Zhe Zhai.)

### *Published Books*

Reforming Rules and Regulations: Laws, Institutions and Implementation. Vivek Ghosal (Editor). *MIT Press*: Cambridge, 2011.

The Political Economy of Antitrust. Vivek Ghosal and Johan Stennek (Editors). Contributions to Economic Analysis Series, *Elsevier Science*: Amsterdam, 2007.

### *Published Papers*

- “Promoting Innovation to Foster Competition, Economic Development and Growth in Developing Economies.”  
In Pursuing Competition and Regulatory Reforms for Achieving Sustainable Development Goals, Competition, Regulation and Development Series, CUTS International, 2016, Chapter 10, 193 – 212.
- “Policy Innovations, Political Preferences, and Cartel Prosecutions.” (With D. Daniel Sokol.)  
*Review of Industrial Organization* 48, 2016, 405 – 432.
- “Business Incubators and Accelerators.”  
In Entrepreneurship, Technology, and Innovation, David Audretsch, Albert Link and Chris Hayter (Editors), Edgar Elgar, 2015, Chapter 20, 108 – 118.
- “Uncertainty and the Employment Dynamics of Small and Large Businesses.” (With Yang Ye.)  
*Small Business Economics: An Entrepreneurship Journal* 44, 2015, 529 – 558.  
*International Monetary Fund*, Working Paper 2015-04.
- “Business Strategy and Firm Reorganization: Role of Changing Environmental Standards, Sustainable Business Initiatives, and Global Market Conditions.”  
*Business Strategy and the Environment* 24, 2015, 123 – 144.
- “The Evolution of U.S. Cartel Enforcement.” (With D. Daniel Sokol.)  
*Journal of Law and Economics* 57, 2014, 51 – 65.

- “Compliance, Detection, and Mergers and Acquisitions.” (With D. Daniel Sokol.)  
*Managerial and Decision Economics* 34, 2013, 514 – 528.  
 Runner Up, Concurrences Antitrust Writing Awards (2014)
- “Resource Constraints and Competition Law Enforcement: Theoretical Considerations and Observations from Selected Cross-Country Data.”  
 In Competition Law and Development, D. Daniel Sokol, Thomas Cheng and Ioannis Lianos (Editors), Global Competition Law and Economics Series, Stanford University Press, 2013, Chapter 6, 90 – 114.
- “Assessing Potential Competition in Antitrust Markets.”  
 In The International Handbook of Competition, Manfred Neumann and Jürgen Weigand (Editors), Edward Elgar, 2<sup>nd</sup> Edition, 2013, Chapter 10, 265 – 306.
- “The Law and Economics of Enhancing Cartel Enforcement: Using Information from Non-Cartel Investigations to Prosecute Cartels.”  
*Review of Law and Economics* 7, 2011, 501 – 538.
- “Regime Shift in Antitrust Laws, Economics and Enforcement.” (Previously circulated as Regime Shifts in Antitrust.)  
*Journal of Competition Law and Economics* 7, 2011, 733 – 774.
- “Adoption and Reform of Competition Laws and their Enforcement: A Cross-Country Perspective.” (With Siddhartha Mitra.)  
 In Evolution of Competition Laws and their Enforcement: A Political Economy Perspective, Pradeep S. Mehta (Editor), Advances in Global Competition Law Series, Routledge: Oxford, 2011, Chapter 2, 1 – 25.
- “Quantifying the Role Played by Sunk Capital Costs in Real-Options Models.”  
 In special issue on “Operating Uncertainty and Real Options,” *Scottish Journal of Political Economy*, 2010, 343 – 358.
- “Global Initiatives in Reforming Rules and Regulations.” (With Sean Ennis.)  
 In Reforming Rules and Regulations: Laws, Institutions and Implementation, Vivek Ghosal (Editor). MIT Press: Cambridge, 2010, Chapter 1, 1 – 32.
- “Investments in Modernization, Innovation and Gains in Productivity: Evidence from Firms in the Global Paper Industry.” (With Usha Nair-Reichert.)  
*Research Policy*, 2009, 536 – 547.
- “The Effects of Uncertainty and Sunk Costs on Firms’ Decision-Making: Evidence from Net Entry, Industry Structure and Investment Dynamics.”  
 In The Economics of Imperfect Markets, Giorgio Calcagnini and Enrico Saltari (Eds.), Contributions to Economics, Springer: New York, 2009, Chapter 9, 167 – 182.
- “The Genesis of Cartel Investigations: Some Insights from Examining the Dynamic Interrelationships between U.S. Civil and Criminal Antitrust Investigations.”  
*Journal of Competition Law and Economics*, 2008, 61 – 88.
- “Rewarding Whistleblowers: Ratcheting up the Fight Against Cartels.”  
*Global Competition Review*, 2008, 31 – 33.

- “Issues in Antitrust Enforcement.” (With Joseph E. Harrington Jr. and Johan Stennek.)  
In The Political Economy of Antitrust, Vivek Ghosal and Johan Stennek (Editors),  
Contributions to Economic Analysis Series, Elsevier: Amsterdam, 2007, Chapter 1, 1 – 23.
- “Framework for Competition Assessments.”  
In Competition Assessment Toolkit, *OECD Competition Law and Policy*, 2007, Chapter 4, 59  
– 156.
- “Economics, Politics and Merger Control.”  
In Recent Developments in Antitrust: Theory and Evidence, Jay Pil Choi (Ed.). MIT Press:  
Cambridge, 2006, Chapter 5, 125 – 152.
- “Pre-Emptive Investments and Industry Structure.”  
*Economic Issues* 9, 2004, 47 – 68.
- “Potential Foreign Competition in U.S. Manufacturing.”  
*International Journal of Industrial Organization* 20, 2002, 1461 – 1489.
- “Competition in International Postal Markets: Should the Universal Postal Union’s Anti-Retail  
Provisions Be Repealed?”  
*World Competition Law and Economics Review* 26, 2002, 205 – 222.
- “The Cyclical Behavior of the Department of Justice’s Antitrust Enforcement Activity.” (With Joseph  
Gallo.)  
*International Journal of Industrial Organization* 19, 2001, 27 – 54.
- “The Differential Impact of Uncertainty on Investment in Small and Large Firms.” (With Prakash  
Loungani.)  
*Review of Economics and Statistics* 82, 2000, 338 – 343.
- “Product Market Competition and Industry Price-Cost Markup Fluctuations: Role of Energy Price  
and Monetary Changes.”  
*International Journal of Industrial Organization* 18, 2000, 415 – 444.
- “Product Market Competition and the Impact of Price Uncertainty on Investment.” (With Prakash  
Loungani.)  
*Journal of Industrial Economics* 44, 1996, 217 – 228.
- “Evidence on Nominal Wage Rigidity from a Panel of U.S. Manufacturing Industries.” (With Prakash  
Loungani.)  
*Journal of Money, Credit, and Banking* 28, 1996, 650 – 668.
- “Does Uncertainty Influence the Number of Firms in an Industry?”  
*Economics Letters* 50, 1996, 229 – 237.
- “Input Choices under Price Uncertainty.”  
*Economic Inquiry* 33, 1995, 142 – 158.
- “Price Uncertainty and Output Concentration.”  
*Review of Industrial Organization* 10, 1995, 749 – 767.



“Demand Uncertainty and the Capital-Labor Ratio: Evidence from the U.S. Manufacturing Sector.”  
*Review of Economics and Statistics* 73, 1991, 157 – 162.

“Market Structure, Price-Cost Margins and Unionism.”  
*Economics Letters* 29, 1989, 179 – 182.

*Papers in Progress*

“Determinants of Medical Devices Recalls.” (With D. Daniel Sokol.)

“Impact of Firm-level Human Capital on Productivity.” (With Xiuli Sun and Haizheng Li.)

Ghosal, Vivek. “Innovation Strategy, Economic Development, and Growth.” (With Yang Ye.)

“Innovation Knowledge Stocks and Patent Rivalry.”

“Chain Affiliation and Adoption of Information Technology.” (With Brant Callaway.)

“Uncertainty, Sunk Costs and Industry Dynamics.”

“Advanced Manufacturing Plants, and Economic and Business Development.”

“Changing Dynamics of Public-Private Partnerships in International Infrastructure Investments.”

“Uncertainty, Investment Costs, and the Evolving Patterns of Corporate Partnerships in Infrastructure Investments.”

“Complementarities between Technological Prowess and Service Provision: IBM’s Acquisition of Informix in the Database Management Systems Market.”

## INVITED PANELIST AND FEATURED SPEAKER

- “U.S. Regulatory Reform Initiatives, Policy and Enforcement.”  
Workshop on EU Competition Law and Policy: Competition Assessments and Abuse of Dominance organized by European University Institute (Florence, 2018).
- “Historical Dynamics of U.S. Cartel Enforcement.”  
Research Institute of Economy, Trade, and Industry (RIETI, Tokyo, 2018).
- “Promoting Innovation to Foster Economic Development and Growth.”  
Workshop on the Relevance of Competition & Regulatory Reforms in Pursuing Sustainable Development Goals in Developing Countries organized by CUTS International (Nairobi, 2015).
- “Regulatory Reform to Foster Competition, Innovation and Growth.”  
EGADE Business School, Tecnológico de Monterrey (Mexico City, 2014).
- “Microdynamics of Location of Automobile Assembly Plants and Economic Development.”  
Conference on Production, Logistics and Traffic: Dynamic Integration, Future Trends and Future Solutions Optimization (Darmstadt, 2013).
- “Healthcare Policy and Economics.”  
Research Roundtable, Ivan Allen College Founder’s Day Symposium, Georgia Institute of Technology (Atlanta, 2012).
- “Regulatory Coherence and Effectiveness: Institutional Structure and the Interplay between Regional and National Competition and Regulatory Authorities.”  
Conference on “Reviewing the Global Experience with Economic Regulation: A Forward Looking Perspective,” organized by CUTS International (New Delhi, 2011).
- “Competition, Innovation and Market Share Dynamics in the Automobile Industry: Lessons Learnt from the U.S. Markets and Potential Implications for Europe?”  
International Automobile Association Congress (Frankfurt, 2009).
- “Competition Assessment of Cable TV and Gasoline Markets in Taiwan.”  
Taiwan Fair Trade Commission (Taipei, 2008).
- “Moving Forward with Competition Law Enforcement.”  
Directorate General of Economic and Financial Affairs, European Commission (Brussels, 2008).
- “How to Measure the Welfare Effects of Competition and Consumer Protection Actions.”  
FTC at 100 workshop organized by the U.S. Federal Trade Commission (Washington D.C., 2008).
- “Making Regulation and Competition Compatible: What is the Recipe?”  
Bruegel (Brussels, 2008).
- “Best Practices in Promoting Investment for Development: Pursuing a Common Agenda.”  
Global Forum for International Investment VII, Organization for Economic Cooperation and Development (Paris, 2008).
- “Competition Assessments and Regulatory Reform.”  
Directorate General for Enterprise and Industry, European Commission (Brussels, 2007).

## SELECTED INVITED AND CONFERENCE PRESENTATIONS

- “Internationalization of Innovation: Patents and Firm Performance in the Pharmaceutical Industry.”  
Research Institute of Economy, Trade, and Industry (RIETI, Tokyo, 2018); Centre for European Economic Research (Mannheim, 2018); DRUID innovation conference (Copenhagen, 2018); German Institute for Economic Research (DIW, Berlin, 2018).
- “Historical Dynamics of U.S. Cartel Enforcement.”  
Fiscalía Nacional Económica (Santiago, 2017).
- “Firm-level Human Capital and Innovation: Evidence from China.”  
Workshop on Applied Microeconomics, Center for Economic Studies, Ludwig Maximilian University (Munich, 2017); Industry Studies Association conference (Washington DC, 2017); Asian Econometric Society conference (Hong Kong, 2017).
- “Determinants of Medical Devices Recalls.”  
Workshop on “The Economics of Innovation,” organized by The Robert F. Lanzillotti Public Policy Research Center and University of Florida Competition Policy Initiative (Gainesville, 2016).
- “Knowledge Gaps and Patent Rivalry.”  
Center for European Economic Research (ZEW, Mannheim, 2015).
- “Competition and Innovation in Automobile Markets.”  
Goethe University of Frankfurt (Frankfurt, 2015); Conference on “Overcoming the Crisis: How to Foster Innovation and Entrepreneurship in a Diverging European Economy?” (Mannheim, 2015); Düsseldorf Institute for Competition Economics (Düsseldorf, 2015); University of Tokyo (2015); Center for European Economic Research (ZEW, Mannheim, 2015); Workshop on Applied Microeconomics (Munich, 2015); Shanghai Jiao Tong University (Shanghai, 2014).
- “Policy Innovations, Political Preferences, and Cartel Enforcement.”  
Center for European Economic Research (ZEW, Mannheim, 2015); Social Sciences Korea International Conference on Competition Law Enforcement (Seoul, 2015); Research Institute for Industrial economics (Stockholm, 2014); Workshop on “The Influence of Robert H. Bork on Antitrust Law: A Retrospective,” organized by the Yale Law School, and sponsored by The Federalist Society and The Kauffman Program in Law, Economics and Entrepreneurship, Yale Law School (2013).
- “Decentralized Environmental Regulation and Manufacturing Productivity.”  
Conference on the “Economics of Low-Carbon Markets,” organized by the University of São Paulo (Ribeirão Preto, 2014).
- “Adoption of Information Technology in Healthcare Markets.”  
Shanghai Jiao Tong University (Shanghai, 2014); Workshop on the “Economics of Innovation and Patenting,” Center for European Economic Research (Mannheim, 2013); Workshop on “ICT, R&D and Intangibles, and ICT Diffusion to the Economy,” sponsored by the European Commission and OECD and hosted by Imperial College (London, 2012); Workshop on “Management and Economics of ICT,” organized by Institute for Strategy, Technology and Organization, Munich School of Management (Munich, 2012); Industry Studies Association Annual Conference (Pittsburgh, 2012); Korea Development Institute of Public Policy and Management (Seoul, 2011).

- “Business Decision-Making under Uncertainty: Evidence from Employment and Number of Businesses.”  
Ratio Institute (Stockholm, 2014); Mizuho Research Institute (Tokyo, 2013); Development Bank of Japan (Tokyo, 2013); Workshop on Applied Microeconomics, Center for Economic Studies, Ludwig Maximilian University (Munich, 2013).
- “Advanced Manufacturing Plant Location and its effects on Economic Development and Transportation.”  
University Transportation Centers Conference (Orlando, 2013); Institute for Supply Chain Management, European Business School (Wiesbaden, 2012).
- “Quality Competition, Innovation and Market Share Dynamics in the Automobile Industry.”  
Recanati School of Business, Tel Aviv University (Tel Aviv, 2012); Industry Studies Association Annual Conference (Pittsburgh, 2012); WHU Otto Beisheim Graduate School of Management (Vallendar, 2010); Korea Development Institute of Public Policy and Management (Seoul, 2010); Institute for the World Economy, University of Kiel (Kiel, 2010); Center for Economic Studies, Ludwig Maximilian University (Munich, 2010); European Business School (Wiesbaden, 2009).
- “Assessing Transportation Equipment Manufacturing Prospects for High Speed Rail Investments.”  
Research and Innovative Technologies Administration, U.S. Department of Transportation (Washington DC), 2011.
- “The Law and Economics of Enhancing Cartel Enforcement.”  
Buchmann School of Law, Tel Aviv University (Tel Aviv, 2012); Israel Antitrust Authority (Jerusalem, 2012); Global Competition Law Conference on “Implementing Competition Law and Policy, Global Perspectives” (New Delhi, 2010); Workshop on the “Quantitative Analysis in Competition Assessments,” Center for European Economic Research (Mannheim, 2010).
- “Small is Beautiful but Size Matters: The Asymmetric Impact of Uncertainty and Sunk Costs on Entry and Investment of Small and Large Businesses.”  
Korea Development Institute of Public Policy and Management (Seoul, 2012); Owen School of Management, Vanderbilt University (2008); Workshop on Applied Microeconomics (Munich, 2009); Workshop on Economics of Imperfect Competition (Rome, 2008); Workshop on “The Economics of Aggregate Shocks in Heterogeneous Firm Models” (Venice, 2007).
- “Business Strategy and Firm Reorganization: Role of Changing Environmental Standards, Sustainable Business Initiatives, and Global Market Conditions.”  
Department of Industrial Engineering and Management, Helsinki University of Technology (Helsinki, 2010); Graduate School of Decision Sciences and Technology, Tokyo Institute of Technology (Tokyo, 2009); Workshop on “Advancing the Study of Innovation and Globalization in Organizations” organized by the German Institute for Employment Research and European Cooperation in Science and Technology (Nürnberg, 2009); Workshop on “Organization and Performance: Understanding the Diversity of Firms” organized by Maison Franco Japonaise and RIETI (Tokyo, 2008); European School of Management and Technology (Berlin, 2008); Sloan Industry Conference (Boston, 2008); European Assoc. for Research in Industrial Economics (Valencia, 2007); CESifo workshop on Productivity and Growth (Munich, 2007); Atlanta Competitive Advantage Conf. (Atlanta, 2007).
- “Regime Shift in Antitrust Laws, Economics and Enforcement.”  
“Effectiveness of Competition Policy” Center for Economic Policy and Research and the European Science Foundation (Paris, 2005); Washington University (2004); Emory University (2004); International Industrial Organization Conference (Chicago, 2004); CESifo Industrial Organization Workshop (Munich, 2004); German Economic Institute (Berlin, 2004); WZB (Berlin, 2003).

## PROFESSIONAL ACTIVITIES

### Referee and Reviewer

#### *Refereed Papers for Economics Journals*

American Economic Review; Australian Economic Review; B.E. Journal of Economic Analysis and Policy; Contemporary Economic Policy; Economic Inquiry; Economic Journal; Economics Letters; European Economic Review; International Journal of Industrial Organization; Journal of Industrial Economics; Journal of Money, Credit, and Banking; Journal of Political Economy; Journal of the European Economic Association; Oxford Economic Papers; RAND Journal of Economics; Review of Economics and Statistics; Review of Industrial Organization; Scandinavian Journal of Economics; and Southern Economic Journal.

#### *Refereed Papers for Business and Management Journals*

Business Strategy and the Environment; Journal of Business; Journal of Economics and Business; Journal of Economics and Management Strategy; Journal of Policy Analysis and Management; Journal of Strategy and Management; Managerial and Decision Economics; Research Policy; Review of Financial Economics; and Small Business Economics.

#### *Refereed Papers for Law and Economics Journals*

International Review of Law and Economics; Journal of Law and Economics; Journal of Law, Economics, and Organization; and Review of Law and Economics.

#### *Reviewer*

National Science Foundation; Cambridge University Press; MIT Press; Praeger Publishers; Routledge Publishers; Public Utilities Research Center (Florida); Kuwait Foundation for the Advancement of Sciences; and Social Sciences and Humanities Research Council (Canada).

## Conference Organization and Committee Appointments

### Organizer

1. Venice Summer Institute workshop on “Reforming Rules and Regulations: Laws, Institutions and Implementation,” Venice International University, Venice (2008).
2. International Industrial Organization Conference, Atlanta (2005).

### Member

1. Executive Committee, European Association for Research in Industrial Economics, 2007 – 2012.
2. Scientific Committee, European Association for Research in Industrial Economics conference: Valencia (2007), Toulouse (2008), Ljubljana (2009) and Istanbul (2010).
3. Organizing Committee, Atlanta Competitive Advantage Conference, 2008 – 2010.
4. Program Committee, International Industrial Organization Conference: Atlanta (2005), Savannah (2007) and Boston (2009).
5. Lanzilloti Prize Committee for the best antitrust paper presented at the International Industrial Organization Conference, 2008 and 2009.
6. Health Information Exchange Subcommittee on Business and Technical Operations, Office of Health Information Technology & Transparency, Georgia Department of Health, 2009 – 2010.

## ACADEMIC SERVICE

\* At Georgia Institute of Technology (2001-2016).

Director: Ph.D. Program in Economics (2012-2016).  
Director: MS Program in Economics (2011-2016).  
Chair: Department Promotion and Tenure Committees.  
Chair: Department Recruiting Committees (multiple years).  
Coordinator: Department Information Technology Committee.  
Member: Dean's Faculty Advisory Committee.  
Member: College Ph.D. Management Working Group.  
Member: College Promotion and Tenure Committee.  
Member: Chair Search Committee for the School of International Affairs.  
Member: College Diversity Committee.  
Member: College Student Scholarship Committee.  
Member: College Academic Appeals Committee.  
Member: College Faculty Research Grants Committee.  
Member: Department Ph.D. Program and Admissions Committee.  
Member: Department M.S. Program and Admissions Committee.  
Member: Georgia Tech Responsible Conduct in Research Advisory Committee.  
Member: Georgia Tech Academic Senate.

## TEACHING

### Graduate Courses

Microeconomics of Innovation  
Regulations and their Impact on Business Strategy  
Industrial Organization: Theory and Applications  
Microeconomic Theory

### Undergraduate Courses

*Senior:* Health Economics; Economics of Government Regulations; Economics of Biotech and Medical Innovations; Regulations and their Impact on Business Strategy; Industrial Organization Theory & Applications; Economics of Technology & Innovation.  
*Intermediate:* Microeconomic Theory; Macroeconomic Theory.  
*Introductory:* Principles of Economics (Microeconomics; Macroeconomics; Survey of Economics).

### Teaching Evaluations

\* At Rensselaer Polytechnic Institute

Criteria: "Overall, is excellent." Ratings scale 1 to 5(highest).

Economics of Government Regulations (UG/MS): 4.9

\* At Georgia Institute of Technology

Criteria: "Instructor Was an Effective Teacher." Ratings scale: 1 to 5(highest). The scores are based on all the lecture-based courses I taught at the Georgia Institute of Technology, 2001 – 2016.

Microeconomics of Innovation (Graduate): 4.7  
Industrial Organization: Theory & Applications (Graduate): 4.8  
Microeconomic Theory (Graduate): 4.5  
Health Economics & Policy (Senior Undergraduate/Graduate): 4.7  
Industrial Organization: Theory & Applications (Senior Undergraduate): 4.6  
Principles of Economics (Undergraduate, large classes of 200 students): 3.9

## Student Guidance

### *A. Ph.D. Thesis and Research Papers (Georgia Institute of Technology)*

9. Carrie Zhai. "Internationalization of Innovation and Patenting in Pharmaceuticals," Advisor, 2016.
8. Jiayao Ni. "Competition, Patenting and Innovation in the Automobile Industry." Advisor, 2015.
7. Emily Galloway. "Environmental Regulations, Market Power, Cap-and-Trade." Committee Member, 2014.
6. Ran Wang. "Market Power and Cost Efficiency in the Airline Industry." Committee member, 2014.
5. Xiuli Sun. "Firm-level Human Capital and Innovation: Evidence from China." Committee member, 2015.
4. Joseph Greene. "Dynamics of Competition in the Video Games Industry." Advisor, 2014.
3. Gaoyuan Zhao. "Trade Liberalization and Productivity." 2<sup>nd</sup> year Ph.D. Paper. Advisor, 2014.
2. Samuel Ransbotham. "Acquisition and Diffusion of Technology Innovation." Committee member, 2008.
1. I-Hsuan Hong. "Decentralized Decision-making and Protocol Design." Committee member, 2005.

### *B. M.S. Thesis and Research Papers (Georgia Institute of Technology)*

8. Yang Ye. "Business Decision-Making under Uncertainty." Advisor, 2013.
7. Mingtao Xu. "Effect of Automobile Plant Location on Economic Development." Advisor, 2013.
6. Wen Zheng. "Rail Infrastructure Investments and Economic Development." Advisor, 2012.
5. Brant Callaway. "Adoption of Health Information Technology." Advisor, 2010.
4. Anthony Schmitz. "Development of Alternative Energy Sources." Advisor, 2009.
3. Ling Yang. "Competition in the U.S. Passenger Car Industry in the 1980s." Advisor, 2007.
2. Gewei Wang. "Developments in the Paper Industry." Member, 2006.
1. Justin Joffrion. "Determinants of Foreign Direct Investment." Member, 2004.

### *C. M.S. Thesis (European Business School, Germany)*

3. Mohit Sharma. "Analysis of Germany's EV adoption policies." Advisor, 2018.
2. Tarek Ibrahim. "Efficiency Gains through Process Innovation: Volkswagen." Advisor, 2013.
1. Lara Fries. "IPR in the Pharmaceuticals Industry: A Comparison of India and China." Advisor, 2013.

### *D. B.S. Economics Honors Thesis and Research Papers (Georgia Institute of Technology)*

17. Eli Casteron. "M&As in Pharmaceuticals Markets." Advisor, 2016.
16. Ashley Jameson. "Affordable Care Act, Insurance Premiums and Employment." Advisor 2013.
15. Tucker Hildreth. "Structural Barriers to Financing SMEs in Mexico." Advisor, 2012.
14. Lauren Barrow. "Measuring Healthcare Outcomes and Quality." Advisor, 2011.
13. Alex Henke. "Cross-Country EMR Adoption Rates in Primary Care." Advisor, 2011.
12. Allen Tignor. "Impact of Steroids on Performance Statistics in Baseball." Advisor, 2009.
11. Martin Plazyk. "Externalities and Taxes on Cigarettes and Soft Drinks." Advisor, 2009.
10. Michael Warwick. "Public and Private Antitrust Enforcement in the U.S." Advisor, 2009.
9. Maria Iglesia. "State Insurance Coverage Policies and Healthcare Access." Advisor, 2008.
8. Nate Watkins. "Regulation in Georgia's Brewing Industry." Advisor, 2008.
7. Jacob Smith. "Electric Utility Mergers." Advisor, 2007.
6. Kimberley Lawson. "Innovation in the U.S. Automobile Industry." Advisor, 2006.
5. Gregory Leo. "Antitrust Evaluation of Mergers and Cartels." Advisor, 2006.
4. Matthew Taylor. "Determinants of Future U.S. Oil Strategy." Advisor, 2005.
3. William Pop. "Innovation in the Automobile Industry." Advisor, 2005.
2. Sean Arnold. "World Oil Prices and their Effect on Domestic Drilling." Advisor, 2004.
1. Colin Gatewood. "Market Power in the Airline Industry." Advisor, 2003.