



**VIVEK GHOSAL**  
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Georgia Institute of Technology  
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## **EDUCATION**

- Ph.D. Economics, Warrington College of Business, University of Florida, 1988.  
Dissertation: “*Market Structure, Strategic Investment Behavior, and Profitability.*”  
Specialization: Applied Industrial Organization; Firm Strategy; Econometrics.
- M.A. Economics, Delhi School of Economics, 1983.

## **RESEARCH AND POLICY INTERESTS**

Antitrust/Competition Laws and Enforcement.  
Impact of Regulations and Standards on Firm Strategy: Competition; Innovation.  
Firm Strategy: Product Differentiation; Innovation; M&As; Pricing; Investment; Entry & Exit.  
Selected Industries and Topics for Contract Work, Grants and Research Projects:  
Automobiles; Energy & Electricity; Healthcare; Information Technology; Paper & Forest  
Products; Telecommunications; Transportation & High-Speed Rail; Regional Development.

## **WORK EXPERIENCE**

- School of Economics, Georgia Institute of Technology.  
Full Professor, since 2010; Director MS Program 2011 – ; Associate Professor, 2001 – 2009.  
Applied Industrial Organization; Firm Strategy; Innovation.
- Automotive Institute for Management, European Business School (Wiesbaden).  
Visiting Professor, 2010 – 2012.  
Impact of regulations and standards on innovation in automobile manufacturing firms.
- Organization for Economic Cooperation and Development (Paris).  
Consultant (2005-2009) for a wide range of projects related to regulatory reform, innovation,  
competition and consumer choice. Developed the OECD Competition Assessment Toolkit.
- Antitrust Division, U.S. Department of Justice.  
Economist, Economic Analysis Group, 1998 – 2001.  
Investigated antitrust, competition, innovation and regulatory issues. Markets: electricity, natural  
gas, coal, oilfield services, information technology, electronics, media, healthcare and postal.
- Department of Economics, Richard T. Farmer School of Business, Miami University.  
Associate Professor (with tenure), 1996 – 1998; Assistant Professor, 1990 – 1996.
- Department of Economics, Warrington College of Business, University of Florida.  
Visiting Assistant Professor, 1988 – 1990.
- Research Associate, Public Utilities Research Center, University of Florida, 1987 – 88.  
Research: Analyzed joint-ventures and alliances in telecommunications and media markets.

## PROFESSIONAL APPOINTMENTS

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

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

Research Affiliate, Alfred P. Sloan Foundation, Industry Studies Program, 2006 – 2009.

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

## SHORT COURSES TAUGHT

School of Public Policy and Management, Korea Development Institute (Seoul, Korea).  
Graduate course for business economics and regulatory professionals on: “Assessing Regulatory Reform and Competition: A Framework for Promoting Growth and Innovation.” 2010 and 2011.

Automotive Institute for Management, European Business School (Oestrich-Winkel, Germany).  
Graduate business administration course on: “The Strategic Response of Firms in the Automobile Industry to Market Rules and Regulations.” 2011 and 2012.

Taiwan Fair Trade Commission (Taipei, Taiwan).  
Executive course for regulatory professionals on: “Regulatory Reform and Competition Assessments.” Contained lectures on: “Competition and Benefits”; “Competition Assessments and their Implementation”; “Quantitative Analysis of Competition Assessments”; and “Fitting Competition Assessments into Policy Development.” 2009.

Maximixe (Lima, Peru).  
Executive course for business economics and law professionals on: “Competition Policy and Law Enforcement.” Contained lectures on: “Evolution of Antitrust in the US and EU”; “Cartels: Law Enforcement”; “Cartels: Issues in Detection”; “Merger Control in the US and EU”; and “Perspectives on Transnational Mergers Evaluated by US and EU.” 2006.

Economics Network for Competition and Regulation, University of Amsterdam (Netherlands).  
Graduate Summer School on: “Competition Law Enforcement.” 2006.

Center for Economic Studies (Munich, Germany).  
Graduate summer course on: “Industry Dynamics.” Contained lectures on: “Evaluation of Mergers: Assessment of Efficiency and Market Power Effects”; and “Innovation and Industry Dynamics.” 2003.

Central European University (Budapest, Hungary).  
Graduate Summer School on: “Competition Policy in Transition Economies.” Contained lectures on: “Merger Control”; and “Competition Issues in the Proposed Merger between General Electric and Honeywell.” 2002.

## SHORT VISITS

Visiting Professor, Jönköping International Business School (Sweden), June & November 2011.  
Research: Impact of environmental regulations on innovation and production efficiency in firms in the Swedish Paper & Forest Products manufacturing industry.

Research Visitor, Jönköping International Business School (Sweden), May 2009.  
Research: Environmental regulations and investments in the Swedish Paper and Forest Products manufacturing industry.

Visiting Fellow, Center for Economic Studies, Ludwig Maximilians Univ. (Munich), May 2009.  
Research: Innovation strategy in the global automobile manufacturing industry.

Visiting Professor, Deutsches Institut für Wirtschaftsforschung (DIW, Berlin), June – July 2004.  
Research: Innovation and product quality in the automobile manufacturing industry.

Research Visitor, Wissenschaftszentrum für Sozialforschung (WZB, Berlin), June – July 2003.  
Research: Political-economy of competition law enforcement.

Research Visitor, CESifo (Munich), May 2003.  
Research: Industry dynamics and the evolution of the size distribution of firms.

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

Research Visitor, Federal Reserve Board, Washington D.C., December 1996.  
Research: Financing constraints, uncertainty and investment.

## CONSULTING

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

## **PROFESSIONAL ACTIVITIES**

### **Conference Organization**

Member, Scientific Committee, European Association for Research in Industrial Economics conference: Valencia (2007), Toulouse (2008), Ljubljana (2009) and Istanbul (2010).

Member, Organizing Committee, Atlanta Competitive Advantage Conference, 2008 – 2010.  
Conference organized in collaboration between Emory University, Georgia Institute of Technology and Georgia State University.

Member, Program Committee, International Industrial Organization Conference: Atlanta (2005), Savannah (2007) and Boston (2009).

Organizer, Venice Summer Institute workshop on “Reforming Rules and Regulations: Laws, Institutions and Implementation,” Venice International University, Venice (2008).  
Invited Frederic Jenny (ESSEC, Paris) as keynote speaker.

Organizer, International Industrial Organization Conference, Atlanta (2005).  
Responsible for fund-raising and organization of the annual international conference. Over 300 papers were presented at the conference.  
Invited David Sappington (University of Florida) and Margaret Slade (University of Warwick) as keynote speakers.

### **Committee Appointments**

Member, Executive Committee, European Association for Research in Industrial Economics, 2007 – 2012.

Member, Lanzilloti Prize Committee for the best antitrust paper presented at the International Industrial Organization Conference, 2008 and 2009.

Chair, Committee for the Distinguished *CESifo* (Munich) Affiliate Award in Applied Microeconomics, 2009.

Member of Health Information Exchange Subcommittee on Business and Technical Operations, Office of Health Information Technology & Transparency, Georgia Department of Community Health, 2009 – 2010.

### **Journal Boards**

Editorial Board, *Review of Industrial Organization*, 2004 – present.

## **Referee and Reviewer**

### *Refereed Papers for Economics Journals*

American Economic Review; Australian Economic Review; B.E. Journal of Economic Analysis and 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*

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; 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*

Academy of Management (conference tracks on Health Care Management, Technology and Innovation Management, and Business Policy and Strategy); Cambridge University Press; MIT Press; Praeger Publishers; Public Utilities Research Center (Florida); and Social Sciences and Humanities Research Council (Canada).

## **Professional Memberships**

### *Economics*

American Economic Association; Industrial Organization Society; and European Association for Research in Industrial Economics.

### *Management*

Academy of Management; Industry Studies Association; Strategic Management Society; and Institute for Operations Research and the Management Sciences (INFORMS).

## CONTRACTS, GRANTS AND RESEARCH AWARDS

Ghosal, Vivek (PI). “Assessing Transportation Equipment Manufacturing Capabilities for U.S. High-Speed Rail Infrastructure Investments.”

Research and Innovative Technology Administration, U.S. Department of Transportation (Washington D.C.), and Georgia Transportation Institute/University Transportation Center (Atlanta), 2011-2012.

Ghosal, Vivek, and Andreas Stephan (Co-PIs). “Environmental Regulations, Innovation and Efficiency: Evidence from Firms in Swedish Paper & Forest Products Manufacturing Industry.”

Ragnar Söderberg’s Foundation (Stockholm), and Jönköping International Business School (Jönköping), 2011-2012.

Ghosal, Vivek (PI). “Competition Impact Assessment: Global Best Practices, and a Framework for India.”

Ministry of Corporate Affairs (India), and CUTS Institute for Regulation and Competition (Delhi), 2011.

Ghosal, Vivek. “Adoption of Information Technology by Healthcare Clinics.”

Georgia Institute of Technology, Dean’s Grants for Scholarship, 2011-12.

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 Assessment Toolkit, Organization for Economic Cooperation and Development (Paris), 2005 – 2007.

(The broad framework for policy assessment and regulatory reform based on competition and innovation developed in this project is being used by several governments, including: Mexico, United Kingdom, Canada, Spain, Australia, Indonesia, Taiwan, South Korea, Singapore, Romania, among others.)

Ghosal, Vivek, and Usha Nair-Reichert (Co-PIs). “Role and Value of Innovation in the Pulp and Paper Industry.”

Center for Paper Business and Industry Studies, An Alfred P. Sloan Foundation Industry Research Center, Atlanta, 2004-2006.

Ghosal, Vivek (PI). “Examining Potential Technology Gap between US and European Paper Firms.”

Center for Paper Business and Industry Studies, An Alfred P. Sloan Foundation Industry Research Center, Atlanta, 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 (Ohio), 1996-1997.

Intramural grant awards at Miami University

Credit Constraints and Investment under Uncertainty: Evidence from US Manufacturing Industries, 1997; A Case-Study Approach to Teaching Industrial Organization to Business Economics Students, 1996; Monetary Shocks and Product Prices in US Manufacturing Industries, 1995; Industry Structure under Profit Uncertainty: Evidence from US Manufacturing, 1994; Market Conditions and Fluctuations in Firms’ Profitability in US Manufacturing Industries, 1993; Strategic Investment Behavior, 1992; Production Factor Demand under Uncertainty in US Manufacturing, 1991.

### **Other Awards**

Foreign travel grant awards for research presentations, Georgia Institute of Technology, continuous from 2002-2011.

Grant award 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.

### **Grant Proposals In-Progress**

Ghosal, Vivek, and Daniel Sokol. “Antitrust Actions and their Effects on Firms and Industries: Innovation, Entrepreneurship and Growth.”

Ghosal, Vivek. “Competition and Innovation Strategy in the Automobile Industry, 1966-2010.”

Ghosal, Vivek. “Adoption of Information Technology by Healthcare Clinics.”

## RESEARCH PROJECTS AND WRITINGS

### Selected Industry Projects

#### *Transportation Infrastructure Investments, and Economic & Business Development*

In this project I examine the feasibility of high-speed passenger rail infrastructure investments in selected geographic regions in the US. The objectives of the project include: examining the likelihood of using the high-speed rail initiative to re-establish a transportation-related manufacturing base in the US; and the regional economic and business development that may result from such investments. To gain an understanding of the nature of international markets in high-speed rail and scope for regional planning, I have visited Siemens' corporate technologies, urban planning and automation technologies units in Berlin and Munich. This project is funded by the Research and Innovative Technology Administration, U.S. Department of Transportation, and Georgia Transportation Institute/University Transportation Center. In continuing work on this project, I will explore issues related to regional economic development in the Southeastern U.S.

#### *Paper & Forest Products Manufacturing: Environmental Regulations, Investments, Innovation*

My research examines the heterogeneity in firms' business strategies, and analyzes the role played by environmental regulations in shaping technological change, productivity, incremental innovations, IT use and modernization investments across firms. To gain insights into the markets, technologies and nature of investments, I have visited paper mills in Finland, US, Germany and Sweden, and conducted interviews of production and environmental managers. This research has been funded by the Center for Paper Business and Industry Studies (Sloan Foundation Industry Studies Center), and the Ragnar Söderberg's Foundation and Jönköping International Business School in Sweden.

#### *Automobile Manufacturing: Product Differentiation, Innovation, and Market Share Dynamics*

This project examines issues such as: modeling of firms' strategies related to horizontal and vertical product differentiation, and innovation; empirical analysis of the dynamics of inter-firm competition in quality, variety, innovation and market share; and analysis of evolving changes in the global automobile industry. The dataset covers all the domestic and foreign sellers in the US market from 1966-present, and contains data on a wide array of *model-level* product characteristics and quality indicators, and *firm-level* data on innovation, market shares, investment, among other variables. To gain insights into the nature and extent of innovation, characteristics of supply-chains, firms' strategies in responding to competitive and environmental challenges, and use of robotics and Information Technology to enhance productivity, lower product defects, increase safety and improve design, and I have visited Audi, BMW, Nissan and Toyota production facilities, and interviewed production and R&D executives.

#### *Healthcare Services: Adoption of Information Technology by Healthcare Clinics*

This project examines Information Technology adoption by healthcare clinics in US States. The dataset includes: *clinic-specific* information on the size of the clinic, type of care, age of the clinic, when IT was adopted, among others; and *location-specific* data on indicators of health status, incomes, insurance status, demographics, education, among others. In a framework examining the benefits and costs of adoption, the data are used to identify the key factors influencing clinics' decisions to adopt health IT. The empirical analysis is complemented by interviews of practitioners and clinics, and survey questionnaires, to paint a comprehensive picture of why IT adoption is low or high in specific instances. The issues examined in this project are at the forefront of current US healthcare policy and management debates.

## Published Books and Papers

### *Books*

Ghosal, Vivek (Editor). Reforming Rules and Regulations: Laws, Institutions and Implementation. MIT Press: Cambridge, 2010.

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

### *Publications in Antitrust/Competition Laws and Enforcement, and Business Regulation*

Ghosal, Vivek. “Resource Constraints and Competition Law Enforcement: Theoretical Considerations and Observations from Selected Cross-Country Data.”

In Competition Laws and their Development, Ioannis Lianos and Daniel Sokol (Editors), Global Competition Law & Economics Series, Stanford University Press 2012 (*forthcoming*), 22 pages.

Ghosal, Vivek. “Assessing Potential Competition in Antitrust Markets.”

In The International Handbook of Competition Economics, Manfred Neumann and Jürgen Weigand (Editors), Edward Elgar, 2<sup>nd</sup> Edition, 2012 (*forthcoming*), 40 pages.

Ghosal, Vivek. “The Law and Economics of Enhancing Cartel Enforcement: Using Information from *Non*-Cartel Investigations to Prosecute Cartels.”

*Review of Law and Economics* 7, 2011, pages 501 – 538.

Ghosal, Vivek. “Regime Shift in Antitrust Laws, Economics and Enforcement.”

*Journal of Competition Law and Economics* 7, 2011, pages 733 – 774.

Ghosal, Vivek and Siddhartha Mitra. “Adoption and Reform of Competition Laws and their Enforcement: A Cross-Country Perspective.”

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, 16 pages.

Ennis, Sean, and Vivek Ghosal. “Global Initiatives in Reforming Rules and Regulations.”

In Reforming Rules and Regulations: Laws, Institutions and Implementation, Vivek Ghosal (Editor). MIT Press: Cambridge, 2010, Chapter 1, pages 1 – 32.

Ghosal, Vivek. “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, pages 61 – 88.

Ghosal, Vivek. “Rewarding Whistleblowers: Ratcheting up the Fight Against Cartels.”

*Global Competition Review*, 2008, pages 31 – 33.

Ghosal, Vivek, Joseph E. Harrington Jr., and Johan Stennek. “Issues in Antitrust Enforcement.”

In The Political Economy of Antitrust, Vivek Ghosal and Johan Stennek (Editors), Contributions to Economic Analysis Series, Elsevier: Amsterdam, 2007, Chapter 1, pages 1 – 23.

Ghosal, Vivek. “Guidance for Competition Assessments.”

In Competition Assessment Toolkit, *OECD Competition Law and Policy*, 2007, Chapter 4, pages 59 – 156.

Ghosal, Vivek. “Economics, Politics and Merger Control.”

In Recent Developments in Antitrust: Theory and Evidence, Jay Pil Choi (Ed.), MIT Press: Cambridge, 2006, Chapter 5, pages 125 – 152.

Ghosal, Vivek. “Competition in International Postal Markets: Should the Universal Postal Union’s Anti-Remail Provisions be Repealed?”

*World Competition Law and Economics Review* 26, 2002, pages 205 – 222.

Ghosal, Vivek, and Joseph Gallo. “The Cyclical Behavior of the Department of Justice’s Antitrust Enforcement Activity.”

*International Journal of Industrial Organization* 19, 2001, pages 27 – 54.

#### *Publications in Applied Industrial Organization, and Business Economics*

Ghosal, Vivek. “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, pages 343 – 358.

Ghosal, Vivek, and Usha Nair-Reichert. “Investments in Modernization, Innovation and Gains in Productivity: Evidence from Firms in the Global Paper Industry.”

*Research Policy*, 2009, pages 536 – 547.

Ghosal, Vivek. “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, pages 167 – 182.

Ghosal, Vivek. “Pre-Emptive Investments and Industry Structure.”

*Economic Issues* 9, 2004, pages 47 – 68.

Ghosal, Vivek. “Potential Foreign Competition in U.S. Manufacturing.”

*International Journal of Industrial Organization* 20, 2002, pages 1461 – 1489.

Ghosal, Vivek, and Prakash Loungani. “The Differential Impact of Uncertainty on Investment in Small and Large Firms.”

*Review of Economics and Statistics* 82, 2000, pages 338 – 343.

Ghosal, Vivek. “Product Market Competition and Industry Price-Cost Markup Fluctuations: Role of Energy Price and Monetary Changes.”

*International Journal of Industrial Organization* 18, 2000, pages 415 – 444.

Ghosal, Vivek, and Prakash Loungani. “Product Market Competition and the Impact of Price Uncertainty on Investment.”

*Journal of Industrial Economics* 44, 1996, pages 217 – 228.

Ghosal, Vivek, and Prakash Loungani. “Evidence on Nominal Wage Rigidity from a Panel of U.S. Manufacturing Industries.”

*Journal of Money, Credit, and Banking* 28, 1996, pages 650 – 668.

Ghosal, Vivek. “Does Uncertainty Influence the Number of Firms in an Industry?”

*Economics Letters* 50, 1996, pages 229 – 237.

Ghosal, Vivek. “Input Choices under Price Uncertainty.”

*Economic Inquiry* 33, 1995, pages 142 – 158.

Ghosal, Vivek. “Price Uncertainty and Output Concentration.”

*Review of Industrial Organization* 10, 1995, pages 749 – 767.

Ghosal, Vivek. “Demand Uncertainty and the Capital-Labor Ratio: Evidence from the U.S. Manufacturing Sector.”

*Review of Economics and Statistics* 73, 1991, pages 157 – 162.

Ghosal, Vivek. “Market Structure, Price-Cost Margins and Unionism.”

*Economics Letters* 29, 1989, pages 179 – 182.

### **Completed Papers**

Ghosal, Vivek. “Small is Beautiful but Size Matters: The Asymmetric Impact of Uncertainty and Sunk Costs on Small and Large Businesses.” [Revise and resubmit.]

Ghosal, Vivek. “Endemic Volatility of Firms and Establishments.” [Revise and resubmit.]

Ghosal, Vivek. “Business Strategy and Firm Reorganization under Changing Global Market Conditions. [Under review.]

Callaway, Brant, and Vivek Ghosal. “Determinants of Adoption of Information Technology by Healthcare Clinics.”

Ghosal, Vivek. “Quality Competition, Innovation and Market Share Dynamics in the Automobile Industry, 1969-2009.”

Ghosal, Vivek. “Strategic Behavior in Electricity Markets.”

## Books and Papers In Progress

### *Books*

Ghosal, Vivek. Reforming Regulations to Enhance Business Efficiency and Innovation.  
[A single-authored monograph.]

### *Papers*

Ghosal, Vivek, Michael Meyer and Wen Zheng. “Assessing Transportation Equipment Manufacturing Capabilities for U.S. High Speed Rail Investments: An Analysis Based on Examining the International Supply-Chain and Contracts Awarded.”

Ghosal, Vivek, Andreas Stephan and Jan Weiss. “How Firms Reduce Emissions: Role of Investments, Innovation and Production Efficiency in Swedish Paper Products Manufacturing Firms.”

Ghosal, Vivek. “IBM’s Acquisition of Informix in the Database Management Systems Market: A Study of Business Strategy under Competitive Pressures in Information Technology Markets.”

Ghosal, Vivek. “Additional Mechanisms in the Antitrust Enforcers Toolkit for Distorting Incentives for Formation and Stability of Cartels.”

Ghosal, Vivek. “Intellectual Property Laws: Sector-Specific *versus* Uniform Laws.”

## Other Writings

Ghosal, Vivek. “A Competition Impact Assessment Toolkit for India,”  
Submitted to the Ministry of Corporate Affairs (India) and the CUTS Institute for Regulation and Competition (Delhi), 2011.

Ghosal, Vivek. “Competition Policy and Global Investment.”  
In Policy Framework for Investment, *Organization for Economic Cooperation and Development* (Paris), 2008.

Ghosal, Vivek, and Usha-Nair Reichert. “The Role and Value of Innovation in the Pulp and Paper Industry.”  
Center for Paper Business and Industry Studies, 2007.

Ghosal, Vivek. “Productivity Gap Between U.S. and European Pulp and Paper Producers”  
White Paper written for the *Center for Paper Business and Industry Studies* (An Alfred P. Sloan Foundation Industry Research Center), 2003.

Even, William, Vivek Ghosal, and Suzanne Kunkel. “Long-term Care Staffing Needs for the Elderly in Ohio.”  
The *Scripps Foundation*, 1998.

## INVITED PANELIST AND FEATURED SPEAKER

“Regulatory Coherence and Effectiveness: Institutional Structure and the Interplay between Regional and National Competition and Regulatory Authorities.”

Panelist in 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?”

Featured speaker at the International Automobile Association Congress (Frankfurt, 2009).

“Competition Assessment of Cable TV and Gasoline Markets in Taiwan.”

Featured speaker and panelist at workshop organized by Taiwan Fair Trade Commission (Taipei, 2008).

“Moving Forward with Competition Law Enforcement.”

Panelist in roundtable organized by the Directorate General of Economic and Financial Affairs, European Commission (Brussels, 2008).

“How to Measure the Welfare Effects of Competition and Consumer Protection Actions.”

Panelist in roundtable at the 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?”

Featured speaker on regulatory reform at Bruegel (Brussels, 2008).

“Role of Competition Policy in Promoting Global Investment.”

Featured speaker at “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.”

Featured speaker at the Directorate General for Enterprise and Industry, European Commission (Brussels, 2007).

## INVITED AND CONFERENCE PRESENTATIONS

“Assessing Transportation Equipment Manufacturing Prospects for High Speed Rail Investments in the U.S.”

Research and Innovative Technologies Administration, U.S. Department of Transportation (Washington D.C.), 2011.

“Adoption of Information Technology by Healthcare Clinics.”

Conference on the “Economics of Innovation and Patenting,” Center for European Economic Research (Mannheim, 2011); Korea Development Institute (Seoul, 2011); Workshop on Applied Microeconomics, Center for Economic Studies, Ludwig Maximilian University (Munich, 2011).

“Quality Competition, Innovation and Market Share Dynamics in the Automobile Industry.”

Jönköping International Business School (Jönköping, 2011); WHU Otto Beisheim Graduate School of Management (Vallendar, 2010); Korea Development Institute (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).

“The Law and Economics of Enhancing Cartel Enforcement: Using Information from *Non*-Cartel Investigations to Prosecute Cartels.”

Global Competition Law Conference: Implementing Competition Law and Policy, Global Perspectives (New Delhi, 2010); Conference on the “Quantitative Analysis in Competition Assessments,” Center for European Economic Research (Mannheim, 2010); Center for Economic Studies, Ludwig Maximilian University (Munich, 2010).

“Business Strategy and Firm Reorganization under Changing 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); Conference 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); Jönköping International Business School (Jönköping, 2009); Workshop on “Organization and Performance: Understanding the Diversity of Firms” organized by Maison Franco Japonaise and RIETI (Tokyo, 2008); Strategic Management Society annual conference (Cologne, 2008); European School of Management and Technology (Berlin, 2008); Workshop on “Economics of Innovation and Patenting,” Center for European Economic Research (Mannheim, 2008).

“The Effects of Uncertainty and Sunk Costs on Firms’ Decision-Making: Evidence from Net Entry, Industry Structure and Investment Dynamics.”

Workshop on Applied Microeconomics (Munich, 2009).

“Competition Assessments and Regulatory Reform.”

Dutch Competition Authority (Den Haag, 2008); Workshop on “Strategic Firm-Authority Interaction in Antitrust and Regulation,” Amsterdam Center for Law and Economics (Amsterdam, 2007).

“Investments in Modernization, Innovation and Gains in Productivity: Evidence from Firms in the Global Paper Industry.”

Sloan Industry Conference (Boston, 2008); EARIE (Valencia, 2007); CESifo workshop on Productivity and Growth (Munich, 2007), Atlanta Competitive Advantage Conference (Atlanta, 2007), TAPPI Engineering & Environmental Conference (Atlanta, 2006).

“Small is Beautiful but Size Matters: The Asymmetric Impact of Uncertainty and Sunk Costs on Small and Large Businesses.”

Owen School of Management, Vanderbilt University (2008); Workshop on Economics of Imperfect Competition (Rome, 2008); Workshop on “The Economics of Aggregate Shocks in Heterogeneous Firm Models” (Venice, 2007); EARIE (Amsterdam, 2006).

“Regime Shift in Antitrust.”

“The Effectiveness of Competition Policy” organized by Center for Economic Policy and Research and the European Science Foundation (Paris, 2005); Washington University (2004); Emory University (2004); IIOC (Chicago, 2004); CESifo Industrial Organization Workshop (Munich, 2004); German Economic Institute (Berlin, 2004); WZB (Berlin, 2003).

“The Intertemporal Path of U.S. Criminal Antitrust Enforcement.”

EARIE (Porto, 2005); University of Amsterdam (Amsterdam, 2005); Workshop on Applied Industrial Organization (Munich, 2005); IIOC (Atlanta, 2005).

“Economics, Politics and Merger Control.”

Venice Summer Institute (Venice, 2004); EARIE (Berlin, 2004); IIOC (Atlanta, 2005).

“Potential Foreign Competition in U.S. Manufacturing.”

EUNIP (Tilburg, 2000); EARIE (Lausanne, 2000); Research Institute for Industrial Economics (Stockholm, 2000).

“Discovering Cartels: Dynamic Interrelationships between Civil and Criminal Antitrust Investigations.”

Directorate General for Competition, European Commission (Brussels, 2007); Copenhagen Business School (Copenhagen, 2006); Italian Competition Authority (Rome, 2006); European University Institute (Florence, 2006); Econometric Society meetings (Mexico City, 2006); European School for Management and Technology (Berlin, 2006); Workshop on “Forensic Economics in Competition Law Enforcement,” Amsterdam Center for Law and Economics (Amsterdam, 2006).

“Endemic Volatility of Firms and Establishments: Are Real Options Effects Important?”

International Business and Economic Research conference (Las Vegas, 2005); IIOC (Boston, 2003); University of Heidelberg (Heidelberg, 2003); “Role of Technology and Firm Survival,” University of Bologna (Bologna, 2002).

“US versus EU Competition Policy Comparisons: Understanding the Proposed Merger between General Electric and Honeywell.”

Center for Economic Studies (Munich, 2003); Central Planning Bureau, Netherlands Bureau for Economic Policy Analysis (Den Haag, 2002).

- “Impact of Uncertainty and Sunk Costs on Firm Survival and Industry Dynamics.”  
WZB (Berlin, 2003); EARIE (Madrid, 2002); Schumpeter Society Annual Conference (Gainesville, 2002); Catholic University of Leuven (Leuven, 2002); Workshop on “Entrepreneurship and the Demography of Firms,” Center for European Economic Research (Mannheim, 2002); Royal Economic Society (Warwick, 2002); EUNIP (Vienna, 2001); New York University (2001); University of Florida (2001); Econometric Society (Maryland, 2001); Tilburg University (Tilburg, 2001); “New Perspectives on Fixed Investment,” City University of London Business School (London, 2001).
- “The Cyclical Behavior of the Department of Justice’s Antitrust Enforcement Activity.”  
American Economic Association (Chicago, 1998); City University of New York (1997); University of Texas (1997); Department of Justice (Washington DC, 1996).
- “Product Market Competition and Fluctuations in Industry Price-Cost Markups.”  
Western Economic Association (Lake Tahoe, 1997); University of Cincinnati (1995); Indiana University (1994).
- “The Differential Impact of Uncertainty on Investment in Small and Large Businesses.”  
Workshop on “Uncertainty and Factor Demand,” University of Hamburg, 1999; Claremont McKenna College, 1998; Federal Reserve Bank of New York, 1998; Federal Reserve Bank of Philadelphia, 1998; American Economic Association meetings, 1997; Board of Governors of the Federal Reserve System (Washington D.C., 1997).
- “Input Choices under Uncertainty: An Econometric Evaluation.”  
American Economic Association meetings (Washington D.C., 1990).

### **Other Conference Participation**

- Invited to participate in conference on “Fifty Years of EU Treaty: Assessment and Perspectives of Competition Policy in Europe,” IESE Business School (Barcelona, 2007). Discussed paper “Cartels in the European Union: Economics, Law and Practice” by Massimo Motta.
- Invited to participate in the conference on “Understanding and Predicting Productivity Growth,” Sveriges Riksbank (Stockholm, 2007). Discussed paper “Effects of Organizational Change on Firm Productivity” by Christina Håkanson.
- Participated in conference on “Institutional Foundations for Industry Self-Regulation,” Harvard Business School (2007).
- Invited to participate in the conference on “International Energy Security: Economic Vulnerability to Oil Price Shocks,” U.S. Department of Energy (Washington D.C., 1996).

## SELECTED TIDBITS

My comments and interview related to the U.S. economy's innovation, education and industrial performance and prospects were published in *WirtschaftsWoche*, 2011 (*WirtschaftsWoche* is the leading German business and finance magazine published by Handelsblatt GmbH).

My comments on the Federal Trade Commission's investigation of alleged antitrust practices by Google appeared in: "Engine Knock: Feds Launch Antitrust Probe into Google's Market Influence," *The Daily*, 2011.

My comments on innovation by businesses appeared in: "Kentucky Manufacturer Big Ass Fans Turns a Commodity into a Brand," *Bloomberg News*, 2011.

My comments on information technology investments, organizational changes and transformation of the global Pulp and Paper industry appeared in: "Industry at Crossroads, Hardware or Intelligence," *Paperi ja Puu*, Vol. 92:7, 2010, pages 40 – 41. (*Paperi ja Puu* is the leading trade journal of forest-based industries, published by Metsäkustannus Oy, Finland.)

My comments on retrospective studies in antitrust enforcement appeared in: "The Federal Trade Commission at 100: Into Our 2nd Century, The Continuing Pursuit of Better Practices," A Report by U.S. Federal Trade Commission Chairman William E. Kovacic (January, 2009).

I was interviewed by *CNN* regarding the financial crisis and the economic rescue package (January 22, 2009).

My comments on merger enforcement appeared in: "Sirius-XM, Microsoft-Yahoo, and White House: The predictions," *CNET.com*, 2009.

My comments on UK's Office of Fair Trading's whistleblower program were reported by the *Global Competition Review* (February 29, 2008): "OFT to pay whistleblowers."

My comments on cartel leniency programs made during the "Fifty Years of the Treaty: Assessment and Perspectives of Competition Policy in Europe," workshop were reported by *Reuters* (November 20, 2007): "Big payoffs eyed for antitrust whistleblowers."

I was an invited guest speaker at the *CESifo* (Munich) Internet Forum (May, 2004). Topic: Ideology and Antitrust Enforcement.

The findings of my article "The Cyclical Behavior of the Department of Justice's Antitrust Enforcement Activity" (published in the *International Journal of Industrial Organization*, 2001) were featured in *BusinessWeek* (April 2001).

## ACADEMIC SERVICE

Chair, Department Promotion and Tenure Committee.  
Chair and Co-chair, Department Recruiting Committees.  
Coordinator, Department Information Technology Committee.  
Coordinator, Department Seminar Series.  
Director, MS Economics Program.  
Member, College Promotion and Tenure Committee.  
Member, Chair Search Committee for the School of International Affairs.  
Member, College Faculty Advisory Committee.  
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

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

### Undergraduate Courses

*Senior* Business Strategy & Government Policies; Economics of Technology & Innovation; Healthcare Markets; Industrial Organization Theory & Applications.  
*Intermediate* Macroeconomic Theory; Microeconomic Theory.  
*Introductory* Principles of Economics (Microeconomics; Macroeconomics; Survey).

### Teaching Evaluations

Criteria: "Instructor Was An Effective Teacher." Ratings scale: 1 to 5(highest). Scores for all courses I have taught at Georgia Institute of Technology, 2001 – 2011.

Economics of Innovation (Graduate):	4.5
Healthcare Markets (Senior, Undergraduate):	4.7
Industrial Organization: Theory and Applications (Graduate):	4.8
Industrial Organization: Theory and Applications (Senior, Undergraduate):	4.6
Microeconomic Theory (Graduate):	4.5
Principles of Economics (Undergraduate, large classes of 200+ students):	3.8
Special Topics Courses and Supervised Research:	4.9
<u>Average across all courses taught at Georgia Tech:</u>	<u>4.6</u>

## Student Guidance at Georgia Institute of Technology

### *B.S. Economics Honors Thesis and Undergraduate Research Paper*

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.

### *M.S. Economics Thesis*

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.

### *Ph.D.*

2. Samuel Ransbotham. “Acquisition and Diffusion of Technology Innovation.” Ph.D. in Management, Georgia Institute of Technology. Committee member, 2007.
1. I-Hsuan Hong. “Decentralized Decision-making and Protocol Design for Recycled Material Flows.” Ph.D. in Industrial and Systems Engineering, Georgia Institute of Technology. Committee member, 2005.