# Thomas N. Hubbard

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## **Research and Teaching Interests**

Industrial Organization Economics of Strategy Economics of Technology

### **Education**

**Stanford University** Ph. D., Economics, January 1996.

Dissertation: "Agency Relationships in the Vehicle Emission Inspection Market:

Empirical Analysis and Public Policy Implications"

**Princeton University** B.A., Economics, High Honors, June 1989.

## **Employment**

Elinor and H. Wendell Hobbs Professor of Management, Northwestern University, 2012-present. Senior Associate Dean of Strategic Initiatives, Kellogg School of Management, Northwestern University, 2012-2015.

**Chairman, Department of Management and Strategy,** Kellogg School of Management, Northwestern University, 2010-2012.

John L. and Helen Kellogg Professor of Management and Strategy, Northwestern University, 2007-2012.

Associate Professor of Management and Strategy, Northwestern University, 2005-2007.

Visiting Associate Professor of Finance and Economics, Columbia University, 2004-2005.

Associate Professor of Economics and Strategy, University of Chicago, 2002-2005.

Assistant Professor of Economics and Strategy, University of Chicago, 1999-2002.

Assistant Professor of Economics, University of California, Los Angeles, 1995-1999.

Visiting Assistant Professor of Strategy, University of Chicago, 1998-1999.

Junior Staff Economist, President's Council of Economic Advisers, 1991-1992.

Researcher, Economists Incorporated, Washington D.C., 1989-1990.

### **Other Positions**

Research Associate, National Bureau of Economic Research, 2006-present.

Faculty Research Fellow, National Bureau of Economic Research, 1997-2006.

Senior Consultant, Charles River Associates International, 2013-present.

Principal, Navigant Economics, 2008-2013.

Editor, Journal of Industrial Economics, 2005-2009.

Associate Editor, American Economic Review, 2004-2007.

Associate Editor, B.E. Journals of Economic Analysis and Policy, 2004-2010.

Associate Editor, Economic Inquiry, 2004-2005. Associate Editor, Journal of Industrial Economics, 2002-2005. Chairman, Chicago Census Data Research Center, 2006-2008.

### **Honors and Grants**

Best Professor Award, Kellogg-HKUST EMBA Program, 2013.

Kaufmann Foundation Entrepreneurship Grant, 2002.

Charles E. Merrill Scholar, 2000-2001.

NBER/Sloan Pin Factory Project Grant, 2000-2001.

NSF Grant SES-9975143 for "Technological and Organizational Change in the U.S. Trucking Industry," 1999-2002.

UCLA Department of Economics Distinguished Teaching Award, Fall 1997.

UCLA Faculty Career Development Award, 1997-98.

UCLA Department of Economics Distinguished Teaching Award, Fall 1996.

Alfred P. Sloan Doctoral Dissertation Fellowship, 1994-1995.

Harry and Lynde Bradley Dissertation Research Fellowship, 1994.

Outstanding Teaching Assistant Award, Economics Department, Stanford University, 1993.

#### **Academic Publications**

"The Return to Knowledge Hierarchies" (with Luis Garicano), *Journal of Law, Economics and Organization*, forthcoming.

"Learning About the Nature of Production From Equilibrium Assignment Patterns" (with Luis Garicano), *Journal of Economic Behavior and Organization*, September 2012, 136-153.

"Equilibrium, Outcomes, and the Economics of Organization," *International Journal of Industrial Organization*, July 2010, 359-361.

"Specialization, Firms, and Markets: The Division of Labor Within and Between Law Firms" (with Luis Garicano), *Journal of Law, Economics, and Organization*, October 2009, 339-371.

"Empirical Research on Firms' Boundaries," Canadian Journal of Economics, May 2008, 341-359.

"Managerial Leverage Is Limited by the Extent of the Market: Theory and Evidence from the Legal Services Industry" (with Luis Garicano), *Journal of Law and Economics*, February 2007, 1-44.

"Hierarchical Sorting and Learning Costs: Theory and Evidence From the Law" (with Luis Garicano), *Journal of Economic Behavior and Organization*, October 2005, 349-369.

"Contractibility and Asset Ownership: On-Board Computers and Governance in U.S. Trucking" (with George P. Baker), *Quarterly Journal of Economics*, November 2004, 1443-1480.

"Affiliation, Integration, and Information: Ownership Incentives and Industry Structure," *Journal of Industrial Economics*, June 2004, 201-228.

"Information, Decisions, and Productivity: On Board Computers and Capacity Utilization in Trucking," *American Economic Review*, September 2003, 1328-1353.

"Make Versus Buy in Trucking: Asset Ownership, Job Design, and Information" (with George P. Baker), *American Economic Review*, June 2003, 551-572.

"Firms' Boundaries and the Division of Labor: Empirical Strategies" (with Luis Garicano), *Journal of the European Economic Association*, April/May 2003, 495-502.

"How Do Consumers Motivate Experts? Reputational Incentives in an Auto Repair Market," *Journal of Law and Economics*, October 2002, 437-468.

"Contractual Form and Market Thickness in Trucking," RAND Journal of Economics, Summer 2001, 369-386.

"Empirical Strategies in Contract Economics: Information and the Boundary of the Firm" (with George P. Baker), *American Economic Review*, May 2001, 189-194.

"The Demand for Monitoring Technologies: The Case of Trucking," *Quarterly Journal of Economics*, May 2000, 533-560.

"An Empirical Examination of Moral Hazard in the Vehicle Inspection Market," *RAND Journal of Economics*, Summer 1998, 406-426.

"Using Inspection and Maintenance Programs to Regulate Vehicle Emissions," *Contemporary Economic Policy*, 15 (1997), 52-62.

#### **Other Publications**

"GH and Applied Theory," in *The Impact of Incomplete Contracts on Economics*, Aghion et al eds, Oxford, New York, 2016.

"Firm Boundaries (Empirical Studies)," in *New Palgrave Dictionary of Economics*, Palgrave MacMillan, New York, 386-389.

"Integration Strategies and the Scope of the Firm," in Mastering Strategy, Prentice-Hall, London, 2000.

## **Working Papers**

"The Economics of 'Radiator Springs:' Industry Dynamics, Sunk Costs, and Spatial Demand Shifts" (with Jeffrey R. Campbell), December 2015.

"Earnings Inequality and Coordination Costs: Evidence from U.S. Law Firms" (with Luis Garicano), November 2015.

#### Work In Progress

"The Utilization of Frontier Scientific Knowledge" (with Ben Jones)

"Specialization, Organization, and Growth in the Developed and Developing Worlds (with Ben Jones)

"Infrastructure Investments and Employment Dynamics: The Case of Highways" (with Jeff Campbell)

"Capabilities, Organization, and Strategy: The Case of Professional Services" (with Luis Garicano)

#### **Presentations at Conferences and Seminars**

Emory University, Feburary 2011

CSIO/IDEI Conference on Industrial Organization, May 2010

Yale University, April 2010

University of Aberdeen, November 2009

University of Edinburgh, November 2009

London School of Economics, November 2009

University of Toronto, October 2009

Stanford University, October 2009

Boston University, September 2009

Searle Antitrust Economics and Competition Policy Conference, September 2009

EARIE Meetings, September 2009

Econometric Society Meetings, June 2009

Universidad de Chile, December 2008

New York University, December 2008

Harvard University, November 2008

University of Missouri, August 2008

Washington University, St. Louis, August 2008

University of Chicago, May 2008

University of Texas, Austin, April 2008

London School of Economics, March 2008

Econometric Society Meetings, January 2008

American Economic Association, January 2008

Bureau of the Census, September 2007

Stanford Institute for Theoretical Economics, August 2007

National Bureau of Economic Research, July 2007

University of California, Los Angeles, April 2007

University of California, Berkeley, March 2007

Stanford University, December 2006

Northwestern Law School, December 2006

Washington University, St. Louis, September 2006

Comparative Analysis of Enterprise Data Conference (Chicago Fed), September 2006

University of Chicago, September 2006

National Bureau of Economic Research, July 2006

Econometric Society Meetings, June 2006

Center for Economic Policy Research IO Meetings (keynote address), May 2006

University of Virginia, February 2006

Northwestern University, February 2006

University of Southern California, February 2006

Federal Reserve Bank of Chicago, September 2005

University of Southern California, September 2005

Massachusetts Institute of Technology, August 2005

Northwestern University, August 2005

U.S. Bureau of the Census, May 2005

University of Arizona, April 2005

Duke University, April 2005

University of Chicago Law School, February 2005

European Science Days Conference, July 2004

Conference Board Productivity and Innovation Conference, June 2004

Northwestern University, March 2004

Midwest Economics Association, March 2004

Northwestern University Transportation Center, March 2004

Carnegie-Mellon University, February 2004

Columbia University, January 2004

American Economic Association, January 2004

University of Pennsylvania-The Wharton School, December 2003

Yale University, December 2003

University of Chicago, December 2003

University of California, Los Angeles, November 2003

University of Indiana, October 2003

University of Toronto, September 2003

University of California, San Diego, September 2003

Federal Reserve Bank of Chicago, May 2003

Dartmouth College, April 2003

Cornell University, April 2003

U.S. Department of Justice, April 2003

University of Virginia, April 2003

University of California, Los Angeles, April 2003

National Bureau of Economic Research, January 2003

INSEAD, November 2002

London School of Economics, November 2002

University of Chicago, November 2002

Yale University, November 2002

New York University, November 2002

Bureau of the Census, September 2002

European Economic Association, July 2002

Stanford Institute for Theoretical Economics, June 2002

Harvard University, April 2002

Dartmouth College, April 2002

U.S. Department of Justice, April 2002

American Economic Association, January 2002

University of Chicago, December 2001

University of Texas, November 2001

National Bureau of Economic Research, November 2001

Argonne National Labs, October 2001

University of Arizona, October 2001

Stanford Institute for Theoretical Economics, August 2001

National Bureau of Economic Research, July 2001

Center for Economic Research, Mannheim, Germany, June 2001

Stanford University, May 2001

Brookings Institution, May 2001

Iowa State University, April 2001

University of Chicago, April 2001

Northwestern University, April 2001

Columbia University, April 2001

University of California, Berkeley, March, 2001

North Carolina State University, February, 2001

American Economics Association, January 2001

University of Pennsylvania–The Wharton School, December 2000

National Bureau of Economic Research, December 2000

Society of Government Economists, November 2000

University of Toronto, October 2000

Northwestern University, September 2000

University of Maryland, September 2000

Yale University, September 2000

National Bureau of Economic Research, July 2000

University of California, Los Angeles, May 2000

University of Oregon, May 2000

University of California-Davis, May 2000

Stanford Graduate School of Business, February 2000

University of Chicago, January 2000

Duke University, November 1999

Carnegie-Mellon University, October 1999

Stanford University, October 1999

National Bureau of Economic Research, August 1999

University of California, Los Angeles, May 1999

University of Southern California, April 1999

Harvard/MIT Organizations Workshop, March 1999

University of Wisconsin, March 1999

University of Chicago, February 1999

University of Michigan, October 1998

University of Rochester, October 1998

University of California, Berkeley, September 1998

University of British Columbia Summer IO Conference, July 1998

Stanford Graduate School of Business, February 1998

University of Chicago, October 1997

Northwestern University, October 1997

University of Michigan, September 1997

National Bureau of Economic Research, August 1997

Stanford University, April 1997

Princeton University, December 1996

Berkeley/Stanford Industrial Organization Meeting, October 1996

University of Southern California, September 1996

University of Illinois, Champaign-Urbana, April 1996

University of California, Los Angeles, April 1996

National Bureau of Economic Research, February 1996

Federal Trade Commission, February 1996

American Economics Association Meetings, January 1996

Brown University, February 1995

Cornell University, February 1995

Princeton University, February 1995

University of California, Los Angeles, January 1995

University of Toronto, January 1995

Texas A&M University, January 1995

University of Western Ontario, January 1995

#### Referee

American Economic Review

**Economic Inquiry** 

Economic Journal

International Journal of the Economics of Business

Journal of Business

Journal of Economic Behavior and Organization

Journal of Economic Theory

Journal of Finance

Journal of Financial Economics

Journal of Industrial Economics

Journal of Law and Economics

Journal of Law, Economics, and Organization

Journal of Economics and Management Strategy

Journal of Political Economy

Quarterly Journal of Economics Rand Journal of Economics Review of Economics and Statistics

## **Outside Activities**

Kellogg encourages its faculty members to disclose any activities that might present a real or apparent conflict of interest. The following list includes the organizations that I have worked with, typically speaking and designing custom programs or sessions related to strategy, since 2010:

Booz and Company Eastman Chemical Company Symantec Corporation

In addition, I consult on antitrust and intellectual property cases through Charles River Associates, International (and before February 2013, through Navigant Economics).