

## Samuel S. Kortum

Department of Economics  
Yale University  
P.O. Box 208264  
New Haven, CT 06511

**telephone:** (203) 432-6217

**fax:** (203) 432-6323

**email:** samuel.kortum@yale.edu

**homepage:** kortum.elisites.yale.edu

**Citizenship:** United States

**Birth Date:** December 18, 1960

### Education:

B.A., Wesleyan University, 1983

Ph.D., Economics, Yale University, May 1992. Dissertation title: "Inventions, R&D and Industry Growth" (advisor, Ariel Pakes)

### Current Position:

James Burrows Moffatt Professor of Economics, Yale University, 2015

Professor of Economics, Yale University, 2012

### Other Positions Held:

Professor of Economics, University of Chicago, 2006-2012

Professor of Economics, University of Minnesota, 2004-2006

Visiting Fellow, Department of Research, INSEE-CREST, Paris, 2005

Associate Professor, University of Minnesota, Department of Economics, 2001-2004

Assistant Professor, Boston University, Department of Economics, 1991-2001

Economist, Board of Governors of the Federal Reserve System, Washington, 1994-1995

National Fellow, National Bureau of Economic Research (NBER), Cambridge, 1999-2000

### Other Affiliations:

Simmons Visiting Scholar, Rhodes Center, Brown University, 2013

Consultant, Federal Reserve Bank of Chicago, 2008-2012

Visitor, Federal Reserve Bank of Minneapolis, 2001-2006

Research Associate, NBER, 2001 (Faculty Research Fellow, 1993-2001)

### Fields of Research:

International Economics, Industrial Organization, Macroeconomics

## Grants and Honors:

- Member of the American Academy of Arts and Sciences, 2016
- National Science Foundation, Economics Panel, 2015
- Fellow of Branford College, Yale University, 2015
- Fellow of the Econometric Society, 2011
- Editor, Journal of Political Economy, May 2008-June 2012
- The Frisch Medal (with Jonathan Eaton), awarded 2004
- Associate Editor, European Economic Review, 2004-2006
- National Science Foundation grant, “Intertemporal Trade” (with Jonathan Eaton), 2008-2010
- National Science Foundation grant, “Penetrating Foreign Markets: A Firm and Product-Level Investigation” (with Jonathan Eaton), 2004-2006
- National Science Foundation grant, “Globalization, Productivity, and Growth: Aggregate and Plant-Level Implications” (with Jonathan Eaton), 2000-2002
- National Bureau of Economic Research, National Fellow, 1999-2000
- National Science Foundation grant, “Research, Technology, and Comparative Advantage” (with Jonathan Eaton), 1996-1999
- National Science Foundation grant, “International Technology Diffusion” (with Jonathan Eaton), 1993-1996
- Environmental Protection Agency grant, “Environmental Policy and the Automobile Market” (with Ariel Pakes and Steven Berry), 1992-1994
- Sloan Foundation Dissertation Fellowship, 1990
- National Science Foundation grant (with Matthew Shapiro), 1988

## Articles Published in Journals:

- “Trade and the Global Recession” (with Jonathan Eaton, Brent Neiman, and John Romalis), *American Economic Review*, 106(11), 2016, 3401-3438.
- “Obstfeld and Rogoff’s International Macro Puzzles: A Quantitative Assessment” (with Jonathan Eaton and Brent Neiman), *Journal of Economic Dynamics and Control*, 72, 2016, 5-23.
- “On Deficits and Unemployment” (with Jonathan Eaton and Brent Neiman), *Revue Économique*, 64(3), May 2013, 405-420
- “Unilateral Carbon Taxes, Border Tax Adjustments, and Carbon Leakage” (with Joshua Elliott, Ian Foster, Gita Khun Jush, Todd Munson, and David Weisbach), *Theoretical Inquiries in Law*, 14(1), 2013, 207-244
- “Putting Ricardo to Work” (with Jonathan Eaton), *Journal of Economic Perspectives*, 26(2), Spring 2012, 65-90
- “An Anatomy of International Trade: Evidence from French Firms” (with Jonathan Eaton and Francis Kramarz), *Econometrica*, 79(5), September 2011, 1453-1498
- “Trade and Carbon Taxes” (with Joshua Elliott, Ian Foster, Todd Munson, Fernando Pérez Cervantes, and David Weisbach), *American Economic Review: Papers and Proceedings*, 100, May 2010, 465-469
- “Global Rebalancing with Gravity: Measuring the Burden of Adjustment” (with Robert Dekle and Jonathan Eaton), *IMF Staff Papers*, 55(3), September 2008, 511-540
- “Unbalanced Trade” (with Robert Dekle and Jonathan Eaton), *American Economic Review: Papers and Proceedings*, 97, May 2007, 351-355
- “Moore’s Law and the Semiconductor Industry: A Vintage Model” (with Ana Aizcorbe), *Scandinavian Journal of Economics*, 107(4), 2005, 603-630
- “Innovating Firms and Aggregate Innovation” (with Tor Jakob Klette), *Journal of Political Economy*, 112(5), 2004, 986-1018
- “Dissecting Trade: Firms, Industries, and Export Destinations” (with Jonathan Eaton and Francis Kramarz), *American Economic Review: Papers and Proceedings*, 94, May 2004, 150-154

- “Plants and Productivity in International Trade” (with Andrew Bernard, Jonathan Eaton, and J. Bradford Jensen), *American Economic Review*, 93(4), 2003, 1268-1290
- “Technology, Geography, and Trade” (with Jonathan Eaton), *Econometrica*, 70(5), 2002, 1741-1779  
Reprinted in S. Katayama and K. Miyagiwa, eds., *New Developments in International Trade: Theoretical and Empirical Investigations*, Kobe University, 2003
- “Trade in Capital Goods” (with Jonathan Eaton), *European Economic Review*, 45(7), 2001, 1195-1235
- “Technology, Trade, and Growth: A Unified Framework” (with Jonathan Eaton), *European Economic Review: Papers and Proceedings*, 45 (4-6), 2001, 742-755
- “Assessing the Contribution of Venture Capital to Innovation” (with Josh Lerner), *RAND Journal of Economics*, 31(4), 2000, 674-692  
Extended versions appear as: “Does Venture Capital Spur Innovation?” in G. Libecap, ed., *Entrepreneurial Inputs and Outcomes, Volume 13*, Amsterdam, Elsevier Science, 2001 and “Venture Capital and Innovation: Clues to a Puzzle” in J. McCahery and L. Renneborg, eds. *Venture Capital Contracting and the Valuation of High Technology Firms*, Oxford, Oxford University Press, 2003  
Reprinted in (forthcoming) L. Busenitz, H. Sapienza, and M. Wright, eds., *Venture Capital*, Edward Elgar
- “International Technology Diffusion: Theory and Measurement” (with Jonathan Eaton), *International Economic Review*, 40(3), 1999, 537-570  
Translated as “La Diffusion de la Technologie au Niveau International: Theorie et Mesures” A. Bouët and J. Le Cacheux, eds., *Globalisation et Politiques Économiques: Les Marges de Manoeuvre*, Paris, Economica  
Reprinted in H. Singer, N. Hatti, and R. Tandon, eds., *Globalization, Technology and Trade in the 21st Century*, New Delhi, India, B.R., 2001
- “European Technology Policy” (with Jonathan Eaton and Eva Gutierrez), *Economic Policy*, 27, 1998, 403-438
- “Stronger Protection or Technological Revolution: What is Behind the Recent Surge in Patenting?” (with Josh Lerner), *Carnegie-Rochester Conference Series on Public Policy*, 48, 1998, 247-304  
Reprinted in condensed form, *Research Policy*, 28, 1999, 1-22.
- “Research, Patenting, and Technological Change,” *Econometrica*, 65(6), 1997, 1389-1419

- “Assigning Patents to Industries: Tests of the Yale Technology Concordance” (with Jonathan Putnam), *Economic Systems Research*, 9(2), 1997, 161-175
- “Engines of Growth: Domestic and Foreign Sources of Innovation” (with Jonathan Eaton), *Japan and the World Economy*, 9(2), 1997, 235-259
- “Environmental Change and Hedonic Cost Functions for Automobiles” (with Steven Berry and Ariel Pakes), *Proceedings of the National Academy of Sciences*, 93(23), 1996, 12731-12738
- “Measuring Technology Diffusion and the International Sources of Growth” (with Jonathan Eaton), *Eastern Economic Journal*, 22(4), 1996, 401-410
- “Trade in Ideas: Patenting and Productivity in the OECD” (with Jonathan Eaton), *Journal of International Economics*, 40, May 1996, 251-278  
Reprinted in J. Oxley and B. Yeung, eds., *Structural Change, Industrial Location and Competitiveness*, Cheltenham, U.K., Edward Elgar, 1998. Also in H. Singer, N. Hatti, and R. Tandon, eds., *Technological Diffusion in the Third World*, New Delhi, India, B.R., 1999
- “Equilibrium R&D and the Patent-R&D Ratio: US Evidence,” *American Economic Review: Papers and Proceedings*, 83, May 1993, 450-457

#### Articles Published in Books:

- “International Trade: Linking Micro and Macro,” (with Jonathan Eaton and Sebastian Sotelo) in Daron Acemoglu, Manuel Arellano, and Eddie Dekel, eds., *Advances in Economics and Econometrics Tenth World Congress, Volume II: Applied Economics*, Cambridge University Press, 2013
- “Trade, Technology Diffusion, and Growth,” (with Jonathan Eaton) in Lawrence Blume and Steven Durlauf, eds., *The New Palgrave Dictionary of Economics*, Second Edition, Macmillan, 2008
- “Patents and Information Diffusion,” (with Jonathan Eaton) in Keith Maskus, ed., *Intellectual Property, Growth, and Trade*, Elsevier, 2008, 87-121
- “Innovation, Diffusion, and Trade” (with Jonathan Eaton) in Eytan Sheshinski, Robert J. Strom, and William J. Baumol, eds., *Entrepreneurship, Innovation, and the Growth Mechanism of the Free-Enterprise Economies*, Princeton University Press, 2007, 276-299

- “International Patenting and the European Patent Office: A Quantitative Assessment” (with Jonathan Eaton and Josh Lerner) in *Patents, Innovation and Economic Performance: OECD Conference Proceedings*, OECD, 2004, 27-52
- “Are All Patent Examiners Equal? Examiners, Patent Characteristics and Litigation Outcomes” (with Iain Cockburn and Scott Stern) in Wesley Cohen and Steven Merrill, eds., *Patents in the Knowledge-Based Economy*, National Academies Press, 2003
- “A Rising Tide Raises All Ships: Trade and Diffusion as Conduits of Growth” (with Jonathan Eaton) in Luigi Paganetto and Edmund Phelps, eds., *Finance, Research, Education and Growth*, Palgrave, McMillan, 2003
- “Technological Specialization in International Patenting” (with Jonathan Eaton, Robert Evenson, Poorti Marino, and Jonathan Putnam) in Gary Saxonhouse and T.N. Srinivasan, eds., *Development, Duality, and the International Regime: Essays in Honor of Gustav Ranis*, University of Michigan Press, 1999
- “Competitiveness and Invention: Some Simple Measures” (with Jonathan Eaton) in Patrick Darlap and Heinz Handler, eds., *Future Competitiveness of Europe*, Austrian Federal Ministry of Economic Affairs, 1998

#### Published Comments:

- “Comment: ‘Productivity and Potential Output Before, During, and After the Great Recession’ (by John Fernald)” (with Unni Pillai) forthcoming in J. Parker and M. Woodford, eds., *NBER Macroeconomics Annual 2014*, University of Chicago Press
- “Discussion: ‘Trade Wedges, Inventories, and International Business Cycles’ (by George Alessandria, Joseph Kaboski, and Virgiliu Midrigan),” *Journal of Monetary Economics*, 60(1), January 2013, 21-24
- “Comment: ‘Competition and Innovation’ (by Michele Boldrin, Juan Correa Allamand, David K. Levine, and Carmine Ornaghi),” *Cato Papers on Public Policy*, 1, 2011, 159-164
- “Comment: ‘Diversity and Technological Progress’ (by Daron Acemoglu),” in J. Lerner and S. Stern, eds., *The Rate and Direction of Inventive Activity Revisited*, University of Chicago Press, 2012
- “Comment on ‘Analytical General Equilibrium Effects of Energy Policy on Output and Factor Prices’ *The B.E. Journal of Analysis & Policy*, 10 (2), 2010, Article 16

- “Comment: TRIPS and Technology Transfer – Evidence from Patent Data” in K. Maskus and J. Reichman, eds., *International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime*, Cambridge University Press, 2004, 282-287
- “Comment: ‘Importing Technology’ (by Francesco Caselli and Daniel Wilson),” *Journal of Monetary Economics*, 51, 2004, 33-38
- “Review of *Networks and Markets* (by James E. Rauch and Alessandra Casella),” *Journal of International Economics*, 61, 2003, 249-252
- “An R&D Roundtable,” *Economics of Innovation and New Technology*, 13, 2004, 349-363
- “Comment: ‘Taxation and the Sources of Growth: Estimates from United States Multinational Corporations’ (by Jason Cummins),” in James Hines, Jr., ed., *International Taxation and Multinational Activity*, University of Chicago Press, 2001, 259-263
- “Comment: ‘1974’ (by Jeremy Greenwood and Mehmet Yorukoglu),” *Carnegie-Rochester Conference Series on Public Policy*, 46, 1997, 96-105
- “Discussion: ‘Microeconomic Policy and Technological Change’ (by Edwin Mansfield),” in Jeffrey C. Fuhrer and Jane S. Little, eds. *Technology and Growth*, Conference Series No. 40, Federal Reserve Bank of Boston, 1996, 201-207

### **Manuscript in Progress:**

- *Technology and the Global Economy: A Framework for Quantitative Analysis* (with Jonathan Eaton) manuscript in progress for Princeton University Press

### **Working Papers:**

- “The Design of Border Adjustment for Carbon Prices” (with David Weisbach)
- “Firm-to-Firm Trade: Imports, Exports, and the Labor Market” (with Jonathan Eaton and Francis Kramarz)
- “Dissecting the French Export Wage Premium” (with Jonathan Eaton, Francis Kramarz, and Raul Sampognaro)

- “Staggered Adjustments and Trade Dynamics” (with Jonathan Eaton and Costas Arkolakis)
- “Capital Services in Microprocessor Production: Quantitative Implications of a Vintage Model,” (with Ana Aizcorbe and Unni Pillai)

### Other Working Papers:

- “Unraveling the Patent Paradox” (with Josh Lerner)
- “Comparative Advantage in Research” (with Jonathan Eaton and Eva Gutierrez)
- “Patents and Productivity Growth in U.S. Manufacturing Industries” (with Saul Lach)
- “Estimating an Equilibrium Model of R&D”
- “Value Function Approximation in an Estimation Routine”
- “Can a Search Model Account for the Time Series Behavior of R&D and Patenting?,” in *Econometrics in Tel Aviv, 1993: Workshop and Lecture Series*
- “R&D, Patents and the Progress of Technology in a Search Model,” Boston University Department of Economics Working Paper # 17, 1991
- “Least Squares Disaggregation of Consumption: Alternative Estimates of Personal Consumption Expenditure by Type of Product”

### Lectures:

- The Prybyla/Riew Lecture, Pennsylvania State University, 2016
- Plenary Lecture, Society for Economic Dynamics, Warsaw, 2015
- C. Woody Thompson Lecture, Midwest Economics Association, Columbus, 2013
- Semi-Plenary Lecture, World Congress of the Econometric Society, Shanghai, 2010