

Vitae

Name: Jeremy Greenwood

Contact Information: <http://www.jeremygreenwood.net/>

RESEARCH AND TEACHING FIELD: Macroeconomics

DEGREES

- Ph.D. (Eco), University of Rochester, Rochester, N.Y. 1983
- M.A. (Eco), University of Rochester, Rochester, N.Y. 1981
- M.A. (Eco), Carleton University, Ottawa, Canada 1978
- B.A. (Eco), Carleton University, Ottawa, Canada 1977

HONORS, SCHOLARSHIPS, AND FELLOWSHIPS

- Fellow, Society for the Advancement of Economic Theory 2017
- One of the 75 for the 75th, Carleton University 2017
- Fellow, Econometric Society 2008
- Research Associate, National Bureau of Economic Research 2003
- National Science Foundation Awards 2021-2022, 2007-10, 2002-05, 1995-98
- Social Sciences and Humanities Research Council of Canada Research Grants 1992-95, 1989-90, 1985-86
- Social Sciences and Humanities Research Council of Canada Postdoctoral Fellowship 1985-87
- Rush Rhees Fellowship (University of Rochester) 1978-81
- B.A. Awarded with First Class Honours, Carleton University 1977
- Dobbie Scholarship, Carleton University 1975-76
- A. Davidson--Dunton Scholarship, Carleton University 1974-75

TEACHING, RESEARCH, AND OTHER EXPERIENCE

- Professor, University of Pennsylvania Fall 2006-
- Professor, University of Rochester Fall 1992-2006
- Associate Professor, University of Western Ontario Fall 1988-1992
- Assistant Professor, University of Western Ontario Fall 1982-1988
- Visiting Scholar, Federal Reserve Bank of Minneapolis 1989-91
- Visiting Researcher, Institute for International Economic Studies
University of Stockholm Spring 1986

ROCHESTER GRADUATE WORK

Fields of Concentration: International Economics and Monetary Theory.

Dissertation Title, Completion Date, and Supervisors:

"Essays in International Finance," November 1982, Professors R.G. King and A. C. Stockman

PUBLICATIONS

Articles in Journals

- "You Will: A Macroeconomic Analysis of Digital Advertising," joint with Yueyuan Ma and Mehmet Yorukoglu, *Review of Economic Studies*, (2024).
- "The Expansion of Product Varieties in the New Age of Advertising," joint with Salome Baslandze, Ricardo Marto and Sara Moreira, *Review of Economic Dynamics*, 50 (October 2023): 171-210.
- "Synergizing Ventures," joint with Ufuk Akcigit, Emin Dinlersoz, and Veronika Penciakova, *Journal of Economic Dynamics and Control*, 143 (October 2022): 104427.
- "Financing Ventures," joint with Pengfei Han and Juan M. Sanchez, *International Economic Review*, 63, no. 3 (August 2022): 1021-1053.
- "Substance Abuse during the Pandemic: Implications for Labor-Force Participation," joint with Nezih Guner and Karen Kopecky, *HSOA Journal of Addiction and Addictive Disorders*, 9, no. 2 (2022): 100087.
- "An Equilibrium Model of the African HIV/AIDS Epidemic," joint with Philipp Kircher, Cezar Santos and Michele Tertilt, *Econometrica*, 87, no. 4 (July 2019): 1081-1113.
- "Mining Surplus: Modeling James A. Schmitz's Link Between Competition and Productivity," joint with David Weiss, *International Economic Review*, 59, no. 3 (August 2018): 1015-1034.
- "Family Economics Writ Large," joint with Nezih Guner and Guillaume Vandenbroucke, *Journal of Economic Literature* 55, no. 4 (December 2017): 1346-1434.
- "The Role of Marriage in Fighting HIV: A Quantitative Illustration for Malawi," joint with Philipp Kircher, Cezar Santos and Michele Tertilt, *American Economic Review (Papers and Proceedings)* 107, no.5 (May 2017): 158-162.

- "What Businesses Attract Unions? Unionization over the Life-Cycle of U.S. Establishments," joint with Emin Dinlersoz and Henry Hyatt, *Industrial and Labor Relations Review* 70, no. 3 (May 2017): 733-766.
- "The Rise and Fall of Unions in the U.S.," joint with Emin Dinlersov, *Journal of Monetary Economics* 83 (October 2016): 129-146.
- "Why Doesn't Technology Flow from Rich to Poor Countries?" joint with Hal L. Cole and Juan M. Sanchez, *Econometrica* 84, no. 4 (July 2016): 1477-1521.
- "Buy, Keep or Sell: Economic Growth and the Market for Ideas," joint with Ufuk Akcigit and Murat Celik, *Econometrica* 84, no. 3 (May 2016): 943-984.
- "Technology and the Changing Family: A Unified Model of Marriage, Divorce, Educational Attainment, and Married Female Labor-Force Participation," joint with Nezih Guner, Georgi Kocharkov and Cezar Santos, *American Economic Journal: Macroeconomics* 8, no. 1 (January 2016): 1-41.
- "Measurement without Theory, Once Again," joint with Ananth Seshadri and Guillaume Vandenbroucke, *Journal of Demographic Economics* 81, no. 3 (September 2015): 317-329.
- "Marry Your Like: Assortative Mating and Income Inequality," *American Economic Review* 104, no. 5 (Papers and Proceedings, May 2014): 348-353.
- "From Shame to Game in One Hundred Years: An Economic Model of the Rise in Premarital Sex and its De-Stigmatization," joint with Jesús Fernández-Villaverde and Nezih Guner, *Journal of the European Economic Association* 12, no. 1 (February 2014): 25-61.
- "Measuring the Welfare Gain from Personal Computers," joint with Karen A. Kopecky, *Economic Inquiry* 51, no. 1 (February 2013): 336-347.
- "Quantifying the Impact of Financial Development on Economic Development," joint with Juan M. Sanchez and Cheng Wang, *Review of Economic Dynamics* 16, no. 1 (January 2013): 194-215.
- "Financing Development: The Role of Information Costs," joint with Juan M. Sanchez and Cheng Wang, *American Economic Review* 100, no. 4 (September 2010): 1875-1891.
- "Social Change: The Sexual Revolution," joint with Nezih Guner, *International Economic Review* 51, no. 4 (November 2010): 893-923.
- "Marriage and Divorce since World War II: Analyzing the Role of Technological Progress on the Formation of Households," *NBER Macroeconomics Annual 2008* 23, edited by Daron Acemoglu, Kenneth Rogoff and Michael Woodford (Chicago: University of Chicago Press), 2009: 231-276.
- "Growth Accounting with Investment-specific Technological Progress: A Discussion of Two Approaches," joint with Per Krusell, *Journal of Monetary Economics* 54, no. 4 (May 2007): 1300-1310.

- “New Goods and the Transition to a New Economy,” joint with Gokce Uysal, *Journal of Economic Growth* 10, no. 2 (June 2005): 99-134.
- “The Baby Boom and Baby Bust,” joint Ananth Seshadri and Guillaume Vandenbroucke, *American Economic Review* 95, no. 1 (March 2005): 183-207.
- “Engines of Liberation,” joint with Ananth Seshadri and Mehmet Yorukoglu, *Review of Economic Studies* 72, no. 1 (January 2005): 109-133.
- “More on Marriage, Fertility and the Distribution of Income,” joint with Nezih Guner and John Knowles, *International Economic Review* 44, no. 3 (August 2003): 827-862.
- “The U.S. Demographic Transition,” joint Ananth Seshadri, *American Economic Review* 92, no. 2 (Papers and Proceedings, May 2002): 153-159.
- “Efficient Investment in Children,” joint with S. Rao Aiyagari and Ananth Seshadri, *Journal of Economic Theory* 102, no. 2 (February 2002): 290-321.
- “Equilibrium Unemployment,” joint with Joao Gomes and Sergio Rebelo, *Journal of Monetary Economics* 48, no. 1 (August 2001): 109-152.
- “Women on Welfare: A Macroeconomic Analysis,” joint with Nezih Guner and John A. Knowles, *American Economic Review* 90, no. 2 (Papers and Proceedings, May 2000): 383-388.
- “On the State of the Union,” joint with S. Rao Aiyagari and Nezih Guner, *Journal of Political Economy* 108, no. 2 (April 2000): 213-244.
- “The Role of Investment-Specific Technological Change in the Business Cycle,” joint with Zvi Hercowitz and Per Krusell, *European Economic Review*, 44, no 1 (January 2000): 91-115.
- “The IT Revolution and the Stock Market,” joint with Boyan Jovanovic, *American Economic Review* 89, no. 2 (Papers and Proceedings, May 1999): 116-122.
- “Measuring the Rate of Technological Progress in Structures,” joint with Michael Gort and Peter Rupert, *Review of Economic Dynamics*, 2, no. 1 (January 1999): 207-230.
- “The Replacement Problem,” joint with Thomas F. Cooley and Mehmet Yorukoglu, *Journal of Monetary Economics* 40, no. 3 (December 1997): 457-499.
- “Long-Run Implications of Investment-Specific Technological Change,” joint with Zvi Hercowitz and Per Krusell, *American Economic Review* 87, no. 3 (June 1997): 342-362.
- “1974,” joint with Mehmet Yorukoglu, *Carnegie-Rochester Conference Series on Public Policy* 46 (June 1997): 49-95.
- “Financial Markets in Development and the Development of Financial Markets,” joint with Bruce D. Smith, *Journal of Economic Dynamics and Control*, 21, no. 1 (January 1997): 145-181. Also printed as

“Los mercados financieros en el desarrollo, y el desarrollo de los mercados financieros,” *Cuadernos Economicos* 58, no. 3 (1994): 137-169.

- “The Cyclical Behavior of Job Creation and Job Destruction: A Sectoral Model,” joint with Glenn M. MacDonald and Guang-Jia Zhang, *Economic Theory* 7, no.1 (1996): 95-112.
- “On the Existence of Nonoptimal Equilibria in Dynamic Stochastic Economies,” joint with Gregory Huffman, *Journal of Economic Theory* 65, no. 2 (April 1995): 611-623.
- “On the Cyclical Allocation of Risk,” joint with Paul Gomme, *Journal of Economic Dynamics and Control* 19 (1995): 91-124.
- “The Allocation of Capital and Time Over the Business Cycle,” joint with Zvi Hercowitz, *Journal of Political Economy* 99, no. 6 (December 1991): 1188-1214. Reprinted in Alex Cukierman, Zvi Hercowitz and Leonard Leiderman (Eds.), *Political Economy, Growth and Business Cycles*, Cambridge, MA: The MIT Press, 1992.
- “Tax Analysis in a Real Business Cycle Model: On Measuring Harberger Triangles and Okun Gaps,” Joint with Gregory Huffman, *Journal of Monetary Economics* 27, no. 2 (April 1991): 167-190.
- “Externalities and Asymmetric Information,” joint with Preston McAfee, *Quarterly Journal of Economics* CVI, no. 1 (February 1991): 103-121.
- “Financial Development, Growth, and the Distribution of Income,” joint with Boyan Jovanovic, *Journal of Political Economy* 98, no. 5 (October 1990): 1076-1107.
- “International Financial Intermediation and Aggregate Fluctuations Under Alternative Exchange Rate Systems,” joint with Stephen D. Williamson, *Journal of Monetary Economics* 23, no. 3 (May 1989): 401-431.
- “On Modelling the Natural Rate of Unemployment with Indivisible Labour,” joint with Gregory W. Huffman, *Canadian Journal of Economics* XXI, no. 3 (August 1988): 587-609.
- “Investment, Capacity Utilization, and the Real Business Cycle,” joint with Zvi Hercowitz and Gregory W. Huffman, *American Economic Review* 78, no. 3 (June 1988): 402-417.
- “Foreign Exchange Controls in a Black Market Setting,” joint with Kent P. Kimbrough, *Journal of Development Economics* 26, no.1 (June 1987): 129-143.
- “An Investigation in the Theory of Foreign Exchange Controls,” joint with Kent P. Kimbrough, *Canadian Journal of Economics* XX, no. 2 (May 1987): 271-288.
- “A Dynamic Equilibrium Model of Inflation and Unemployment,” joint with Gregory W. Huffman, *Journal of Monetary Economics* 19, no. 2 (March 1987): 203-228.
- “Macroeconomic Effects of Fiscal Policy,” joint with David Aschauer, *Carnegie-Rochester Conference Series on Public Policy* 23, (Autumn 1985): 91-138.

- “Capital Controls and Fiscal Policy in the World Economy,” joint with Kent P. Kimbrough, *Canadian Journal of Economics* XVIII, no. 4 (November 1985): 743-765.
- “Dual Exchange Rate Systems and Capital Controls: An Investigation,” joint with Charles Adams, *Journal of International Economics* 18, no. 1/2 (February 1985): 43-63.
- “Nontraded Goods, the Trade Balance, and the Balance of Payments,” *Canadian Journal of Economics* XVII, no. 4 (November 1984): 806-823.
- “Expectations, the Exchange Rate, and the Current Account,” *Journal of Monetary Economics* 12, no. 4 (November 1983): 543-569.
- “A Further Exploration in the Theory of Exchange Rate Regimes,” joint with David Aschauer, *Journal of Political Economy* 91, no. 5 (October 1983): 868-875.

Book

- *Evolving Households: The Imprint of Technology on Life*. Cambridge MA, The MIT Press, 2019.

Articles in Books and Policy Institution Publications

- "The Household Equipment Revolution," joint with Effrosyni Adamopoulou and Nezih Guner, in *Creators of Quality. Since 1899*, Gutersloh: Miele & Cie. KG, 2024.
- "The Great Transition: Kuznets Facts for Family-Economists," joint with Nezih Guner and Ricardo Marto, in Shelly Lundberg and Alessandra Voena (eds.), *Handbook of Family Economics*, Vol 1, Amsterdam: Elsevier North-Holland, 2023.
- “An Elementary Model of VC Financing and Growth,” joint with Pengfei Han, Hiroshi Inokuma, and Juan M. Sanchez, *Federal Reserve Bank of St Louis Review* 105, no. 1 (First Quarter 2023).
- “Venture Capital: A Catalyst for Innovation and Growth,” joint with Pengfei Han and Juan M. Sanchez, *Federal Reserve Bank of St Louis Review* 104, no. 2 (Second Quarter 2022).
- “The Wife's Protector: A Quantitative Theory Linking Contraceptive Technology with the Decline in Marriage,” joint with Nezih Guner and Karen A. Kopecky, in Alberto Bisin and Giovanni Federico (eds.), *Handbook of Historical Economics*, Amsterdam: Academic Press, Elsevier North-Holland, 2021.
- “Hours Worked: Long-Run Trends,” joint with Guillaume Vandenbroucke, in Lawrence E. Blume and Steven N. Durlauf (eds.). *The New Palgrave Dictionary of Economics*, 2nd edition, Vol 4, New York, N.Y.: Palgrave Macmillan, 2008.
- “Technological Progress and Economic Transformation,” joint with Ananth Seshadri, in Philippe Aghion and Steven N. Durlauf (eds.), *Handbook of Economic Growth*, Vol 1B, Amsterdam: Elsevier North-Holland, 2005.

- “Accounting for Growth,” joint with Boyan Jovanovic, in Charles R. Hulten, Edwin R. Dean and Michael J. Harper (eds.), *New Developments in Productivity Analysis*, NBER Studies in Income and Wealth Volume 63, Chicago: University of Chicago Press, 2001. Also printed as “Contabilidad del crecimiento,” *Cuadernos Economicos* 72, (December 2006): 11-60.
- “How Much of Economic Growth is Fueled by Investment-Specific Technological Progress?,” joint with Michael Gort and Peter Rupert, *Economic Commentary*, Federal Reserve Bank of Cleveland, March 1st 1999.
- *The Third Industrial Revolution: Technology, Productivity and Income Inequality*, AEI Studies on Understanding Economic Inequality, Washington, DC: The AEI Press, 1997. Reprinted in *Economic Review*, 35, no.2 (Quarter 2 1999), Federal Reserve Bank of Cleveland: 2-12.
- “Household Production in Real Business Cycle Theory,” joint with Richard Rogerson and Randall Wright, in Thomas F. Cooley (ed.), *Frontiers of Real Business Cycle Theory*, Princeton, NY: Princeton University Press, 1995.
- “Home Economics in Macroeconomics,” joint with Randall Wright and Richard Rogerson, *Quarterly Review* 17, no. 3 (Fall 1993), Federal Reserve Bank of Minneapolis: 2-11.

Review Articles and Book Reviews

- “Indexing, Inflation, and Economic Policy: A Review Essay,” by Stanley Fisher, *Journal of Monetary Economics* 22, no. 1 (July 1988): 165-173.
- “Inflation: Causes and Effects,” edited by Robert E. Hall, *Journal of Political Economy* 92, no. 3 (June 1984): 553-558.

WORKING PAPERS

- “Technifying Ventures,” joint with Yoshiki Ando, Emin Dinlersoz and Ruben Piazzesi, NBER Working Paper 33993.
- “The Role of Friends in the Opioid Epidemic,” joint with Effrosyni Adamopoulou, Nezih Guner and Karen Kopecky, IZA Discussion Paper No 16709.
- “The Downward Spiral,” joint with Nezih Guner and Karen Kopecky, NBER Working Paper 24808.

ONLINE ARTICLES—VOXEU, VOXDEV, AND PENN LAW

VOXEU

- “Contraceptive technology and the decline in marriage,” joint with Nezih Guner and Karen A. Kopecky, 22 January 2020.
- “The impact of venture capital-backed firms on the aggregate economy,” joint with Ufuk Akcigit, Emin Dinlersoz, and Veronika Penciakova, 24 September 2019.
- “US income inequality and assortative marriages,” joint with Nezih Guner, Georgi Kocharkov, and Cezar Santos, 22 February 2014.
- “An equilibrium model of the African HIV/AIDS epidemic,” joint with Philipp Kircher, Cezar Santos, and Michele Tertilt, 25 May 2013.
- “Shame, peer effects, and sexual behavior,” joint with Jesús Fernández-Villaverde and Nezih Guner, 19 January 2012.
- “Premarital sex: An economic model of its rise and de-stigmatisation,” joint with Jesús Fernández-Villaverde and Nezih Guner, 20 February 2010.
- “What is your PC worth?” joint with Karen A. Kopecky, 03 March 2008

VOXDEV

- “What caused the HIV/AIDS decline in Africa? Anti-retroviral therapy or better information?” joint with Philipp Kircher, Cezar Santos, and Michele Tertilt, 09 August 2019.

PENN LAW

- “A macroeconomic analysis reveals the benefits for consumers of digital advertising,” joint with Yueyuan Ma and Mehmet Yorukoglu, 11 October 2021.

FORMER PhD STUDENTS

<https://www.mathgenealogy.org/id.php?id=204390>

November 2025