

Toshihiko Mukoyama

University Address

Department of Economics

Georgetown University

3700 O St NW, Washington, DC 20057

E-mail : tm1309@georgetown.edu

Web : <https://sites.google.com/view/toshimukoyama/home>

Citizenship: Japanese (U.S. Permanent Resident)

Positions

- Professor, Georgetown University, August 2018-
- Associate Fellow, Centre Interuniversitaire de Recherche en Économie Quantitative (CIREQ), February 2007-

Past Positions

- Visiting Professor, Georgetown University, August 2017-July 2018
- Associate Professor, University of Virginia, August 2011-May 2018
- Economist, Federal Reserve Board (Trade and Financial Studies Section, International Finance Division), June 2012-August 2013
- Assistant Professor, University of Virginia, August 2006-August 2011
- Research Fellow, Centre Interuniversitaire de Recherche en Économie Quantitative (CIREQ), December 2002-February 2007
- Assistant Professor, Concordia University, July 2002-May 2006

Editorial Work

- Coeditor, *Japanese Economic Review*, June 2022-
- Associate Editor, *Journal of Economic Dynamics and Control*, January 2010-
- Associate Editor, *Journal of Macroeconomics*, February 2023-
- Associate Editor, *Japanese Economic Review*, June 2015-June 2022
- Associate Editor, *Economics Bulletin*, July 2011-February 2018

Research Grants, Visits (longer than one month), and Awards

- Short-Term Visitor, CIRJE, University of Tokyo, June-July 2022
- Project Professor, University of Tokyo, July 2021
- Excellence in Reviewing Award, *American Economic Journal: Macroeconomics*, 2021
- Nakahara Prize, Japanese Economic Association, June 2018
- Visiting Associate Professor, Keio University, July 2017
- Bankard Fund for Political Economy, 2009, 2010, 2013, 2014, 2016
- Visiting Scholar, Bank of Japan, January-March 2008
- Visitor, Federal Reserve Bank of New York, September-November 2007
- “Professors as Writers” Writing Grant, University of Virginia, 2006
- Social Sciences and Humanities Research Council of Canada (SSHRC), 2004-2006
- Short-Term Visitor (COE Fellow), CIRJE, University of Tokyo, May-June 2004
- CASA Research Fund, Concordia University, 2003
- Fonds Québécois de la Recherche sur la Société et la Culture (FQRSC), 2003-2005
- General Research Fund, Concordia University, 2003
- Faculty Research Development Program, Concordia University, 2002-2003
- Norman M. Kaplan Memorial Prize, University of Rochester, 1999
- Graduation Thesis Award, University of Tokyo, 1995

Education

- Ph.D. in Economics, University of Rochester, October 2002
(Thesis Advisor: Professor Jeremy Greenwood)
- M.A. in Economics, University of Rochester, May 2000
- M.A. in Economics, University of Tokyo, March 1997
(Thesis Advisor: Professor Shin-ichi Fukuda)
- B.A. in Economics, University of Tokyo, March 1995
(Thesis Advisor: Professor Katsuhito Iwai)

Research Interests

Macroeconomics (Business Cycles, Unemployment, Economic Growth), Firm Dynamics, Income and Wealth Distribution

Peer-Reviewed Publications

- “In Defense of the Kaldor-Hicks Criterion,” *Economics Letters* 224: 111031, March 2023.
- “Cyclical Part-Time Employment in an Estimated New Keynesian Model with Search Frictions,” (with Mototsugu Shintani and Kazuhiro Teramoto) *Journal of Money, Credit, and Banking* 53 (8): 1929-1968, December 2021.
- “MIT Shocks Imply Market Incompleteness,” *Economics Letters* 198: 10966, January 2021.
- “Gross Worker Flows and Fluctuations in the Aggregate Labor Market,” (Joint with Per Krusell, Richard Rogerson, and Ayşegül Şahin) *Review of Economic Dynamics* 37: S205-S226, August 2020.
- “Job Duration and Match Characteristics over the Business Cycle” (Joint with Ismail Baydur), *Review of Economic Dynamics* 37: 33-53, July 2020.
- “Industrialization and the Evolution of Enforcement Institutions,” (Joint with Latchezar Popov) *Economic Theory* 69 (3): 745-788, April 2020.
- “Jobs Before College Completion and Career Building of Young Workers Through Job Switching,” (Joint with Gang Zhang) *Macroeconomic Dynamics* 23 (7): 2892-2940, October 2019.
- “Barriers to Reallocation and Economic Growth: The Effects of Firing Costs,” (Joint with Sophie Osotimehin) *American Economic Journal: Macroeconomics* 11 (4): 235-270, October 2019.
- “A Model of Entry, Exit, and Plant-level Dynamics over the Business Cycle,” (Joint with Yoonsoo Lee) *Journal of Economic Dynamics and Control* 96: 1-25, November 2018.
- “Economic Policies with Endogenous Entry and Exit of Plants,” (Joint with Yoonsoo Lee), *Journal of Economic Theory and Econometrics* 29 (2): 28-47, June 2018.
- “Job Search Behavior over the Business Cycle,” (Joint with Christina Patterson and Ayşegül Şahin), *American Economic Journal: Macroeconomics* 10 (1): 190-215, January 2018.
- “Gross Worker Flows over the Business Cycle,” (Joint with Per Krusell, Richard Rogerson, and Ayşegül Şahin) *American Economic Review* 107 (11): 3447-3476, November 2017.
- “Productivity and Employment Dynamics of US Manufacturing Plants,” (Joint with Yoonsoo Lee) *Economics Letters* 136: 190-193, November 2015.
- “Entry and Exit of Manufacturing Plants over the Business Cycle,” (Joint with Yoonsoo Lee) *European Economic Review* 77: 20-27, July 2015.
- “The Political Economy of Entry Barriers,” (Joint with Latchezar Popov) *Review of Economic Dynamics* 17 (3): 383-416, July 2014.
- “The Cyclicity of Job-to-Job Transitions and Its Implications for Aggregate Productivity,” *Journal of Economic Dynamics and Control* 39: 1-17, February 2014.
- “Understanding the Welfare Effects of Unemployment Insurance Policy in General Equilibrium,” *Journal of Macroeconomics* 38 (B): 347-368, December 2013.
- “Evaluating the Effects of Entry Regulations and Firing Costs on International Income Differences,” (Joint with Hernan J. Moscoso Boedo) *Journal of Economic Growth* 17 (2): 143-170, June 2012.
- “Asset Prices in a Huggett Economy,” (Joint with Per Krusell and Anthony A. Smith, Jr.) *Journal of Economic Theory* 146 (3): 812-844, May 2011.
- “A Three State Model of Worker Flows in General Equilibrium,” (Joint with Per Krusell, Richard Rogerson, and Ayşegül Şahin) *Journal of Economic Theory* 146 (3): 1107-1133, May

2011.

- “Welfare Effects of Unanticipated Policy Changes with Complete Asset Markets,” *Economics Letters* 109 (2): 134-138, November 2010.
- “Labour-Market Matching with Precautionary Savings and Aggregate Fluctuations,” (Joint with Per Krusell and Ayşegül Şahin) *Review of Economic Studies* 77 (4): 1477-1507, October 2010.
- “Aggregate Labor Market Outcomes: The Roles of Choice and Chance,” (Joint with Per Krusell, Richard Rogerson, and Ayşegül Şahin) *Quantitative Economics* 1 (1): 97-127, July 2010.
- “Revisiting the Welfare Effects of Eliminating Business Cycles,” (Joint with Per Krusell, Ayşegül Şahin, and Anthony A. Smith, Jr.) *Review of Economic Dynamics* 12 (3): 393-404, July 2009.
- “Why Did the Average Duration of Unemployment Become So Much Longer?” (Joint with Ayşegül Şahin) *Journal of Monetary Economics* 56(2): 200-209, March 2009.
- “A Simple Model of Productivity Slowdown,” *Applied Economics Letters* 16 (5): 455-458, March 2009.
- “Specialization and Efficiency with Labor-Market Matching,” (Joint with Ayşegül Şahin) *Journal of Economic Dynamics and Control* 33 (1): 221-236, January 2009.
- “Aggregate Implications of Indivisible Labor, Incomplete Markets, and Labor Market Frictions,” (Joint with Per Krusell, Richard Rogerson, and Ayşegül Şahin) *Journal of Monetary Economics* 55 (5): 961-979, July 2008.
- “Endogenous Depreciation, Mismeasurement of Aggregate Capital, and the Productivity Slowdown,” *Journal of Macroeconomics* 30 (1): 513-522, March 2008.
- “Costs of Business Cycles for Unskilled Workers,” (Joint with Ayşegül Şahin) *Journal of Monetary Economics* 53 (8): 2179-2193, November 2006.
- “Rosenberg’s “Learning by Using” and Technology Diffusion,” *Journal of Economic Behavior and Organization* 61 (1): 123-144, September 2006.
- “Repeated Moral Hazard with Persistence,” (Joint with Ayşegül Şahin) *Economic Theory* 25 (4): 831-854, June 2005.
- “Diffusion and Innovation of New Technologies under Skill Heterogeneity,” *Journal of Economic Growth* 9 (4): 451-479, December 2004.
- “Innovation, Imitation, and Growth with Cumulative Technology,” *Journal of Monetary Economics* 50 (2): 361-380, March 2003.

Other Publications

- “The Macroeconomics of Job-to-Job Transitions,” (in Japanese) *Japanese Journal of Labour Studies* 738, January 2022.
- “Heterogeneous Jobs and the Aggregate Labor Market,” *Japanese Economic Review* 70 (1): 30-50, March 2019. (JEA Nakahara Lecture)
- “On the Establishment Dynamics in the United States and Japan,” *Monetary and Economic Studies* 27: 53-74, November 2009.
- “Specialization and Human Capital in Search Equilibrium,” (Joint with Ayşegül Şahin) *Journal of the European Economic Association, Papers and Proceedings*, 4 (2-3): 503-512, April 2006.

- “Imitation and Competition in R&D-based Growth Models,” (in Japanese) *Financial Review* 46: 87-109, July 1998.

Working Papers

- “Firm Growth through New Establishments” (with Dan Cao, Henry R. Hyatt, and Erick Sager)
- “Gross Worker Flows over the Life Cycle” (Joint with Tomaz Cajner and İlhan Güner) Revise and Resubmit, *Journal of Money, Credit, and Banking*
- “A Note on Cyclical Discount Factors and Labor Market Volatility”

Presentations

2023:

RIETI (scheduled)
Federal Reserve Bank of Cleveland (scheduled)
Federal Reserve Board (scheduled)

2022:

University of Toronto (April, “Firm Growth through New Establishments”)
University of North Carolina, Chapel Hill (April, “Occupational Reallocations within and across Firms: Implications for the Labor Market Polarization”)
Virginia Commonwealth University (April, online, “Firm Growth through New Establishments”)
National University of Singapore (June, “Firm Growth through New Establishments”)
University of Tokyo (July, “Heterogeneous Firms in Macroeconomics”)
Development Bank of Japan (July, “Firm Growth through New Establishments”)
University of Arkansas (October, “Firm Growth through New Establishments”)
Singapore Management University (November, “Occupational Reallocations within and across Firms: Implications for the Labor Market Polarization”)

2021:

Bank of Portugal (March, online, “Firm Growth through New Establishments”)
KER Conference (July, online, “Firm Growth through New Establishments”)
University of Tokyo (July, online, “Population and Firm Dynamics with Labor Market Frictions”)
Pontificia Universidad Católica de Chile (November, online, “Firm Growth through New Establishments”)

2020:

AEA Meetings (January, “Firm Growth through New Establishments”)
Canon Institute for Global Studies (June, online, “Occupational Reallocations within and across Firms: Implications for the Labor Market Polarization”)
VEAMS (July, online, “Occupational Reallocations within and across Firms: Implications for the Labor Market Polarization”)
University of Tokyo (July, online, “Gross Worker Flows over the Life Cycle”)

2019:

University of Illinois (March, “Firm Growth through New Establishments”)
North Carolina State University (March, “Firm Growth through New Establishments”)
University of Alberta (April, “Firm Growth through New Establishments”)
Uppsala University (May, “Firm Growth through New Establishments”)
GCER Biennial Alumni Conference (May, “Firm Growth through New Establishments”)
Queensland University (August, “Firm Growth through New Establishments”)
University of Texas, Austin (September, “Firm Growth through New Establishments”)
Loughborough University (October, “Firm Growth through New Establishments”)
Warwick University (October, “Firm Growth through New Establishments”)

Federal Reserve Bank of Atlanta (November, “Firm Growth through New Establishments”)
University of California, San Diego (December, “Firm Growth through New Establishments”)

2018:

George Mason University (March, “Firm Growth through New Establishments”)
University of Connecticut (April, “Firm Growth through New Establishments”)
Arizona State University (April, “Firm Growth through New Establishments”)
Japanese Economic Association Nakahara Prize Lecture (June, “Labor Market Dynamics and the Business Cycle”; background paper: “Heterogeneous Jobs and the Aggregate Labor Market”)
Hitotsubashi University (June, “Firm Growth through New Establishments”)
University of Tokyo (June, “Firm Growth through New Establishments”)
CICM Conference, Beijing (June, “Firm Growth through New Establishments”)

2001-2017:

University of Rochester, University of Pittsburgh, Queen’s University, Clemson University, Concordia University (6), York University, Cornell University, the Rochester Wegmans Conference (2002, 2003, 2004, 2005, 2006, 2007, 2008), Montreal Macro Reading Group (2), the CEA Annual Meetings (2003, 2006, 2013), the SED Meetings (2003, 2004, 2008, 2010, 2011, 2013), Université de Montréal, Purdue University, Federal Reserve Bank of Richmond (3), University of Tokyo (6), Doshisha University (Kyoto, Japan), Waseda University (Tokyo, Japan), Kobe University (Kobe, Japan), Keio University (Tokyo, Japan, 3), Bank of Japan (4), Midwest Macroeconomics Meetings (2005, 2008), University of Virginia, University of Iowa, Yokohama National University (Yokohama, Japan), Federal Reserve Bank of Cleveland (2), Federal Reserve Bank of New York (3), Carnegie-Rochester Conference Series on Public Policy, New York/Philadelphia Workshop on Quantitative Macroeconomics (2007), Tokyo Macro Workshop (2008), Korea University, Workshop on Firm Dynamics and the Usage of T2LEAP (2008), Winter Institute of Macroeconomics in Japan (2009), Georgetown University (3), Northern Illinois University, Wharton School, “Recent Development in Macroeconomics” at Yonsei University (2009, 2010), Federal Reserve Bank of Philadelphia, George Washington University, “Frontier Research on Markets with Frictions” at UQAM, IIES (2), Okayama University (Okayama, Japan), Search Theory Workshop (Kansai University), Hitotsubashi University (Tokyo, Japan, 2), Tohoku University (Sendai, Japan), Econometric Society World Congress (2010), University of Western Ontario, Arizona State University, Johannes Gutenberg-Universität Mainz, Universität Bonn, Goethe Universität Frankfurt, Universität Konstanz, Hitotsubashi Macro Econometrics Conference (2011), National University of Singapore (2), Singapore Management University (2), Federal Reserve Bank of St.Louis (2), APET Workshop on the Political Economy of Development (2011), Federal Reserve Bank of San Francisco, HEC Montréal, DSGE Conference at Okinawa International University, Federal Reserve Board (2), Federal Reserve Bank of Atlanta (2), University of Washington, RCAST (University of Tokyo), Federal Reserve Bank of Minneapolis, Census Bureau (2), University of Calgary, Vanderbilt University, Symposium on Labor Market Frictions and the Business Cycle (HEC Montréal, 2013), NBER Summer Institute (2013), Uppsala University, the Stockman Conference at University of Rochester, Georgia State University, Federal Reserve Bank of Kansas City, AEA Meetings (2014), CUNY Hunter College, “Market Imperfections and the Macroeconomy” conference at Universidad de Chile, the 14th Econ Day at

ENSAI, Conference on Economic Growth and Productivity in Tokyo, Bureau of Labor Statistics, University of Georgia, UVa-Richmond Fed Research Jamboree (2), Ohio State University, GRIPS, Asian Meeting of the Econometric Society, SEA Meetings, “Macroeconomics, Search & Matching” Conference at Universidad de Chile, ECUST, RCAST Macroeconomic Analysis Workshop, CAED conference (2017)

Teaching Experience

- Graduate level (Ph.D.): Macroeconomics (core, topics)
- Graduate level (MA): Macroeconomics, Monetary Economics, Labor Economics, Industrial Organization, Advanced Macroeconomics
- Undergraduate level: Advanced Macroeconomics, Intermediate Macroeconomics, Intermediate Microeconomics, Introductory Microeconomics.

Major Administrative Roles

- Director of Graduate Studies, Department of Economics, Georgetown University, 2021-
- Junior Search Committee Chair, Department of Economics, Georgetown University, 2018-2019

Other Work Experience

- Conference Organizing:
 - Joint Organizer, Rochester Wegmans Conference, October 2007
 - Joint Organizer, Macroeconomics Sessions of the Canadian Economic Association meetings 2006
 - Program Committee Member, CICM Conference 2022, 2021, 2019, 2018
 - Program Committee Member, Asian Meeting of the Econometric Society 2022, 2016
 - Program Committee Member, the Society for Economic Dynamics Meetings 2004
- Ph.D. Supervising as the Main Advisor
 - Ismail Baydur (2014, University of Virginia) ADA University (tenure-track assistant professor), Singapore Management University (tenure-track assistant professor). JMP published in *American Economic Journal: Macroeconomics*
 - Ilhan Guner (2017, University of Virginia) University of Kent (tenure-track assistant professor). JMP published in *Review of Economic Dynamics*
 - Umberto Muratori (2021, Georgetown University) EUI (postdoc), Universidad del Rosario (tenure-track assistant professor)
 - Rodimiro Rodrigo Flores (2022, Georgetown University) George Washington University School of Business (tenure-track assistant professor)
 - Lina Yu (2022, Georgetown University) Capital One
 - Subhadhra Sankaran (current, Georgetown University)
 - Angelica Sanchez Diaz (current, Georgetown University)
 - Tracy Xu (current, Georgetown University)
 - Yagmur Menzilcioglu (current, Georgetown University)
 - Lu Yu (current, co-advisor, Georgetown University)
- Ph.D. Committees at University of Virginia: Kyungsoo Cha (2007, 3rd reader), Masahiro Kodama (2008, 3rd reader), Ponpoje Porapakkarm (2009, 3rd reader), Young-Joon Park (2009, 3rd reader), Xuan Tam (2010, 3rd reader), Soyoung Lee (2010, 3rd reader), Giandomenico Sarolli (2010, 3rd reader), Svetlana Pashchenko (2011, 3rd reader), Elizabeth Cabbage (2012, 3rd reader), Aaron Butz (2012, 3rd reader), Ruwei Wang (2012, 3rd reader), Parth Havnurkar (2013, 2nd reader), Yohei Okawa (2013, 2nd reader), Asli Senkal (2014, 3rd reader), Raju Huidrom (2014, 2nd reader), Bingbing Dong (2015, 3rd reader), Radu Pustelenghe (2015, 2nd reader), Jieran Wu (2015, 2nd reader), Jorge Miranda-Pinto (2017, 2nd reader), Woo Jin Choi (2017, 3rd reader), Meltem Poyraz (2018, 2nd reader), Jeffrey Schafer (2018, 2nd reader), Albert Zhu (2018, 2nd reader), Nick Embrey (2018, 2nd reader), Gang Zhang (2018, 3rd reader), Xiaohui (Ivy) Huang (2018, 2nd reader), Ia Vardishvili (2019, 2nd reader), Salim Ergene (2020, 2nd reader)
- Ph.D. Committees at Georgetown University: Muran Chen (2020), Pedro Juarros (2021), Yangfan Sun (2021), Daniel Valderrama-Gonzalez (2022)
- External-to-Program Examiner of Ph.D. Thesis Defense

- Zied Guedri (John Molson School of Business, Concordia University) 2003,
- Juliana Yu Sun (Department of Economics, George Washington University) 2013.
- MA Thesis Supervising at Concordia University: Dinghui Wu (2004), Nu Zhang (2004), Wenliang He (2005), Zhenyu Wang (2005), Galina Shelkovicova (2005), Wen Juan Zhang (2005), Fei Xue (2005), Yi Tuo (2005), Anissa Seghier (2005), Enmin Guo (2005), Li Guan Nan (2006), JinXi Li (2006), Mehmet Dinc Alniak (2006), Bei Ding (2006), Yang Gao (2006)
- Referee for *American Economic Journal: Macroeconomics*, *American Economic Journal: Microeconomics*, *American Economic Review*, *American Economic Review: Insights*, *B.E. Journals in Macroeconomics*, *Canadian Journal of Economics*, *Economic Inquiry*, *Economic Journal*, *Economics Letters*, *European Economic Review*, *International Economic Review*, *Japanese Economic Review*, *Journal of Economic Behavior and Organization*, *Journal of Economic Dynamics and Control*, *Journal of Economic Growth*, *Journal of Economics*, *Journal of Economic Theory*, *Journal of European Economic Association*, *Journal of Labor Economics*, *Journal of Macroeconomics*, *Journal of Monetary Economics*, *Journal of Money, Credit, and Banking*, *Journal of Political Economy*, *Journal of the Japanese and International Economies*, *Labour Economics*, *Macroeconomic Dynamics*, *Metroeconomica*, *Oxford Economic Papers*, *Quantitative Economics*, *Quarterly Journal of Economics*, *Review of Development Economics*, *Review of Economic Dynamics*, *Review of Economic Studies*, *Review of Economics and Statistics*, *Review of International Economics*, *Scandinavian Journal of Economics*, *SERIEs*, *Telecommunications Policy*, *Theoretical Economics*, *World Bank Economic Review*, National Science Foundation, Social Sciences and Humanities Research Council (Canada), Fondo Nacional de Desarrollo Científico y Tecnológico (Chile), Israel Science Foundation, Research Grant Council of Hong Kong.
- Conference Discussions:
 - Hall and Kudlyak, “Job-Finding and Job-Losing: A Comprehensive Model of Heterogeneous Individual Labor-Market Dynamics” at DC Search and Matching Conference, April 2019.
 - Bachmann, Bai, Lee, and Zhang, “The Welfare and Distributional Effects of Fiscal Volatility: a Quantitative Evaluation,” at CICM conference, June 2018.
 - Petrosky-Nadeau, Tengelsen, and Wasmer, “Credit and Labor Market Frictions over the Business Cycle,” at MQS MINI Conference, November 2015.
 - Carroll, Slacalek, and Tokuoka, “The Distribution of Wealth and MPC: Implications from New European Data,” at AEA conference, January 2014.
 - Fujita and Moscarini, “Recall and Unemployment,” at the New Developments in the Macroeconomics of Labor Markets conference at the Federal Reserve Bank of Richmond, November 2012.
 - Elsby and Michaels, “Marginal Jobs, Heterogeneous Firms, and Unemployment Flows,” at New York/Philadelphia Workshop on Quantitative Macroeconomics, April 2008.
 - Huynh and Petrunia, “Entry Penetration in Canadian Manufacturing,” at CEA Conference, May 2006.
 - Jeong and Townsend, “Discovering the Source of TFP Growth: Occupational Choice and

Financial Deepening,” at NEUDC Conference, October 2004.

- Other Services:
 - Mentoring Committee, Japanese Economic Association, 2021-2022
 - Nominating Committee, Midwest Economic Association, 2021

Updated: February 2023