

Martin Burda

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ACADEMIC POSITIONS

- University of Toronto, Canada; Department of Economics
 - July 2023 – present: Director of the MA program
 - July 2014 – present: Associate Professor (with tenure)
 - July 2007 – June 2014: Assistant Professor
- University of Sydney, Australia; Business Analytics
 - Winter 2015: Visiting Scholar

EDUCATION

- Ph.D. in Economics, University of Pittsburgh, USA, 2007
Dissertation Title: “Essays in Semiparametric Econometrics and Panel Data Analysis”
Dissertation Advisors: Mehmet Caner, Jean-François Richard, Nese Yildiz
- M.A. in Economics, McGill University, Canada, 2001
- Bc./BSc. in Economics and Bus. Admin., University of Economics, Prague, Czech Republic and Uppsala University, Uppsala, Sweden (joint), 2000

RESEARCH SPECIALIZATION

- Econometrics (theoretical and applied)

PUBLICATIONS

- "Recurrent Neural Network GO-GARCH Model for Portfolio Selection"
(with Adrian Schroeder)
Journal of Time Series Econometrics, 16(2), 67-81, 2024.
- "Hamiltonian Sequential Monte Carlo with Application to Consumer Choice Behavior"
(with Remi Daviet)
Econometric Reviews, 42(1), 54-77, 2023.
- "Copula Multivariate GARCH Model with Constrained Hamiltonian Monte Carlo"
(with Louis Salmon-Bélisle)
Dependence Modeling, 7(1), 133-149, 2019.
- "A Bayesian Semiparametric Competing Risk Model with Unobserved Heterogeneity"
(with M. Harding and J. Hausman)
Journal of Applied Econometrics, 30(3), 353-376, 2015.

- "Constrained Hamiltonian Monte Carlo in BEKK GARCH with Targeting"
Journal of Time Series Econometrics, 7(1), 95-113, 2015.
- "Copula Based Factorization in Bayesian Multivariate Mixture Models"
(with A. Prokhorov)
Journal of Multivariate Analysis, 127, 200-213, 2014.
- "Parallel Constrained Hamiltonian Monte Carlo for BEKK Model Comparison"
Advances in Econometrics, 34, 155-179, 2014.
- "Environmental Justice: Evidence from Superfund Cleanup Durations"
(with M. Harding)
Journal of Economic Behavior & Organization, 107, 380-401, 2014.
- "Bayesian Adaptively Updated Hamiltonian Monte Carlo with an Application to High-Dimensional BEKK GARCH Models" (with J. Maheu)
Studies in Nonlinear Dynamics & Econometrics, 17(4), 345-372, 2013.
- "Panel Probit with Flexible Correlated Effects: Quantifying Technology Spillovers in the Presence of Latent Heterogeneity" (with M. Harding)
Journal of Applied Econometrics, 28(6), 956-981, 2013.
- "A Poisson Mixture Model of Discrete Choice" (with M. Harding and J. Hausman)
Journal of Econometrics, 166(2), 184-203, 2012.
- "Bayesian Analysis of a Probit Panel Data Model with Unobserved Heterogeneity and Autocorrelated Errors" (with R. Liesenfeld and J.-F. Richard)
International Journal of Statistics and Management Systems, 6(1-2), 1-21, 2011.
- "A Bayesian Mixed Logit-Probit Model for Multinomial Choice" (with M. Harding, J. Hausman)
Journal of Econometrics, 147(2), 232-246, 2008.

WORKING PAPERS

- "Bayesian Adaptive Sparse Copula Analysis"
(with Artem Prokhorov)
- "Constrained Bayesian Neural Network Utility in Consumer Choice"
(with Connor Campbell)

PROFESSIONAL ACTIVITIES

- Refereeing: *Journal of Econometrics*, *Journal of Business and Economic Statistics*, *Journal of Applied Econometrics*, *Computational Statistics and Data Analysis*, *Review of Economics and Statistics*, *Econometric Theory*, *International Economic Review*, *Quantitative Economics*, *Econometric Reviews*, *Empirical Economics*, *Advances in Econometrics*, *Journal of Business and Finance*, *Journal of Comparative Economics*, *Journal of Econometric Methods*, *Journal of the American Statistical Association*, *Journal of Applied Statistics*, *Journal of Computational and Graphical Statistics*, *Scandinavian Journal of Statistics*, *Advances in Statistical Analysis*, *European Journal of Operational Research*, *Communications in Statistics - Case Studies and Data Analysis*

- Co-organizer of the Stanford Institute for Theoretical Economics (SITE) summer workshop
 - "Advances in Nonparametric Econometrics," with M. Harding and H. Hong, 2009
 - "Complex Data in Economics: Spatial Models, Social Networks and Factor Models," with M. Harding, 2008
- Annual Doctoral Workshop in Applied Econometrics (DWAE)
 - University of Toronto 2019, 2016, 2014 main organizer
 - Ryerson University 2018, 2015, 2013, co-organizer
 - Carleton University 2017, co-organizer
- Project reviewer:
 - U.S. National Science Foundation 2009, 2010, 2011, 2013, 2014
 - Government of Canada (2011)
 - Czech Science Foundation – GAČR 2010, 2011, 2012, 2014
 - Ministry of Science, Education and Sports of Croatia 2007
- Research Fellow at IES, Charles University, Prague, Czech Republic, 2012-2018

SHORT RESEARCH VISITS

- Stanford University – July 2008, July 2009
- CIREQ (Concordia, Montreal) – February 2012, April 2012, November 2012
- IES, Charles University, Prague – May 2012, 2014, 2016, 2018

INVITED SEMINAR PRESENTATIONS

Brown University, Columbia University, Concordia University (CIREQ), Cornell University, Fudan University (Shanghai, China), Georgetown University, University of Glasgow, Harvard-MIT joint econometric seminar, HEC Montreal, University of Montreal, University of North Carolina, Chapel Hill, Ohio State University, Oxford University (Nuffield College), Pennsylvania State University, University of Pennsylvania, Princeton University, Purdue University, Queen's University, University of Rochester, Simon Fraser University, Stanford University, University of Sydney, University of Texas at Austin, Tilburg University, Warwick University, Western University

CONFERENCE PRESENTATIONS

- Econometric Society Meetings (Tokyo U., Japan 2009; Boston U. 2009; Bocconi U., Milan, Italy 2008; Singapore Management University, Singapore 2008; New Orleans 2008; Duke 2007)
- Stanford Institute for Theoretical Economics (SITE), summer workshop, *co-organizer* (Stanford U., CA 2009, 2008)
- Midwest Econometrics Group (Michigan State U., East Lansing, 2022; U. of Illinois Urbana-Champaign 2016; U. of Indiana, Bloomington, 2013; U. of Kentucky, Lexington 2012; U. of Chicago, Booth School of Business 2011; Washington U. St. Louis 2010; Purdue U. West Lafayette 2009; U. of Kansas, Lawrence 2008; SLU St. Louis 2007; UC Cincinnati 2006)
- Canadian Economics Association Conference (HEC Montreal 2013; Toronto 2009; University of British Columbia 2008)

- Seminar on Bayesian Inference in Econometrics and Statistics (Chicago Booth 2014; Washington U. in St. Louis 2013, 2011, 2009; Chicago GSB 2008)
- Canadian Econometric Study Group Meetings (York U. 2024; McMaster 2023; Western 2016; Waterloo 2013; Toronto 2011; Ottawa 2009; Concordia 2008; McGill 2007)
- International Conference on Computational and Financial Econometrics (Seville, Spain 2016; London, UK 2017, 2015, 2013)
- International Conference on Panel Data (McGill U., Montreal 2011; Xiamen U., China 2007)
- European Seminar on Bayesian Econometrics (ESOBE), The New Orleans Branch of the Atlanta Federal Reserve Bank (New Orleans, LA, USA 2018)
- International Society for Bayesian Analysis World Meeting, ISBA (Cancun, Mexico, 2014)
- Advances in Econometrics Conference on Bayesian Model Comparison (UC Irvine, 2014)
- Conference on Bayesian Methods in Microeconomic Modeling (California Institute of Technology 2013)
- Ninth American Institute of Mathematical Sciences (AIMS) International Conference On Dynamical Systems and Differential Equations (Orlando, FL 2013)
- Cowles Foundation Econometrics Summer Conference (Yale 2011)
- Workshop on High-Dimensional Econometric Modelling (Cass School of Business, London, UK 2011)
- Econometric Analysis of Scanner Data workshop, Institute of Fiscal Studies and Cemmap (London, UK 2010)
- Conference of the Society for Nonlinear Dynamics & Econometrics (SNDE), *invited session* (U.S. Federal Reserve, San Francisco, CA 2008)
- 7th workshop on Spatial Econometrics and Statistics (Paris, France 2008)
- CIREQ Conference on GMM (Montreal 2007)
- Royal Economic Society, 2nd PhD Presentation Meeting (LSE, London, UK 2007)

TEACHING EXPERIENCE (COURSE INSTRUCTOR)

- University of Toronto
 - Econometrics MA (ECO1400), **G**, fall 2010 – present
 - Mathematics and Statistics for PhD Students (ECO2010), **G**, summer 2009 – 2011 (joint with Shouyong Shi), summer 2012 – present
 - Econometrics II (ECO2401), **G**, winter 2008 – 2010 (joint with Victor Aguirregabiria)
 - Empirical Macroeconomics and Policy (ECO466), **U**, fall 2017 – present
 - Forecasting and Time Series Econometrics (ECO374), **U**, fall 2008 – present
 - Applied Econometrics I (ECO375), **U**, winter 2016 – 2018
 - Applied Econometrics (ECO327), **U**, fall 2007, winter 2008
- University of Pittsburgh
 - Applied Econometrics (ECON 1150), **U**, winter 2005, summer 2005

STUDENT SUPERVISION

- Zhongfang He (PhD 2009), first placement: Bank of Canada
- Yong Song (PhD 2011), first placement: University of Technology Sydney
- Xin Jin (PhD 2012), first placement: Shanghai University of Finance and Economics
- Paul Karapanagiotidis (PhD 2014), first placement: Canada Pension Plan Investment Board
- Ding Ding (PhD 2014), first placement: Australian National University
- Qiao Yang* (PhD 2016), first placement: Shanghai Tech University
- Remi Daviet* (PhD 2018), first placement: Wharton School, University of Pennsylvania (post-doc), faculty position: University of Wisconsin-Madison
- Louis Bélisle* (PhD 2021), first placement: Office of the Superintendent of Financial Institutions (OSFI), Government of Canada
- Connor Campbell* (PhD 2023), first placement: Wharton School, University of Pennsylvania
- Quinlan Lee*
- Adrian Schroeder*

(* denotes Dissertation Committee Chair or Co-Chair)

AWARDS AND FELLOWSHIPS

- SSHRC Insight Grant, \$89,217 (with Victor Aguirregabiria), 2012 - 2015
- SSHRC Standard Research Grant, 2010 – 2012
- SSHRC University of Toronto Institutional Grant (SIG), 2008, 2009
- Connaught Start-up Award, University of Toronto, 2007
- Andrew W. Mellon Research Fellowship, University of Pittsburgh, 2006 – 2007
- Richard S. Thorn Excellence in Teaching Award, University of Pittsburgh, 2004
- Faculty of Arts & Sciences Research Fellowship, University of Pittsburgh, 2001
- Departmental Scholarship, McGill University, 2000
- Faculty of Graduate Studies and Research Fellowship, McGill University, 2000
- European Union Academic Scholarship ERASMUS, Uppsala University, 1998 – 1999
- University Scholarship, University of Economics, Prague, 1997
- Full Academic Scholarship, Clifton College, A-levels, 1994 – 1996

COMPUTER SKILLS

MPI Modern Fortran, R, Python, Stata, Matlab, Unix/Linux

LANGUAGES

Czech (native), English (fluent), Russian (advanced), German (advanced), Swedish (intermediate)

OTHER INFORMATION

Citizenship: Czech Republic, Canada

Marital status: widowed, 2 children (born 2011 and 2013)