Minchul Shin

Federal Reserve Bank of Philadelphia
Ten Independence Mall, Philadelphia, PA 19106

E–mail: visiblehand@gmail.com
Website: www.minchulshin.com

Employment (current and past)

2019– Senior Machine Learning Economist, Research Department, Federal Reserve Bank of Philadelphia.

2015–2019 Assistant Professor/Lecturer, Department of Economics, University of Illinois at Urbana-Champaign.

Education

Ph.D., Economics, University of Pennsylvania (Penn), December 2015.
– Thesis title: "Bayesian GMM"
– Advisors: Francis X. Diebold and Frank Schorfheide; Committee members: Xu Cheng and Francis J. DiTraglia.
B.A./M.A., Economics, Sungkyunkwan University (SKKU), (February 2007/August 2008).

Publications (peer-reviewed academic articles including accepted and forthcoming papers)

1. "Machine Learning for Regularized Survey Forecast Combination: Partially-Egalitarian Lasso and its Derivatives," with Francis X. Diebold (Penn), *International Journal of Forecasting*, Forthcoming.
2. "A New Approach to Identifying the Real Effects of Uncertainty Shocks," with Molin Zhong (FRB), *Journal of Business and Economic Statistics*, Forthcoming.
3. "Bayesian Estimation and Comparison of Moment Condition Models," with Siddhartha Chib (WUSTL) and Anna Simoni (CNRS), *Journal of the American Statistical Association (Theory & Methods)*, 2018.
4. "On the Comparison of Interval Forecasts," with Ross Askanazi (Cornerstone), Francis X. Diebold (Penn), and Frank Schorfheide (Penn), *Journal of Time Series Analysis*, 2018.
5. "Metropolitan Land Values," with David Albouy (UIUC) and Gabriel Ehrlich (Michigan), *Review of Economics and Statistics*, 2018.
6. "Measuring International Uncertainty: the Case of Korea," with Boyuan Zhang (UIUC), Molin Zhong (FRB), and Dong Jin Lee (Bank of Korea), *Economics Letters*, 2018.
7. "Real-Time Forecast Evaluation of DSGE Models with Stochastic Volatility," with Francis X. Diebold (Penn) and Frank Schorfheide (Penn), *Journal of Econometrics*, 2017.
8. "Assessing Point Forecast Accuracy by Stochastic Error Distance," with Francis X. Diebold (Penn), *Econometric Reviews*, 2017.
9. "Does Realized Volatility Help Bond Yield Density Prediction?," with Molin Zhong (FRB), *International Journal of Forecasting*, 2017.
10. "Assessing Point Forecast Accuracy by Stochastic Loss Distance," with Francis X. Diebold (Penn), *Economics Letters*, 2015.

Working Papers

11. "Capital-Based Corporate Tax Benefits: Endogenous Misallocation through Lobbying," with Tanida Arayavechkit (World Bank) and Felipe E. Saffie (Maryland), last revised 2018, *r&r*.
12. "Bayesian Estimation and Comparison of Conditional Moment Models," with Siddhartha Chib (WUSTL) and Anna Simoni (CNRS), last revised April 2019.
13. "Bayesian GMM," last revised December 2015.

Presentations

Seminars: Federal Reserve Bank of Philadelphia (Dec, 2018), Binghamton (Oct, 2017), Vanderbilt (Nov, 2016), Penn State (Oct, 2016), Purdue University (April, 2016), Federal Reserve Bank of Atlanta (Mar, 2016), UIUC (Internal seminar, March, 2016), Indiana University (Nov, 2015), Boston College (Nov, 2015), Federal Reserve Bank of Cleveland (Nov, 2015), Brown University (Oct, 2015), Université of Montréal (Oct, 2015), Federal Reserve Bank of Philadelphia (Jun, 2015), Sungkyunkwan University (Feb, 2015), Universitat Pompeu Fabra (Feb, 2015), University of Illinois at Urbana-Champaign (Feb, 2015), Board of Governors (Jan, 2015), University of Chicago (Booth, Jan, 2015), University of Toronto (Jan, 2015), University of Pennsylvania (Oct, 2014).

Conferences: [**2015-16**] Annual Conference on Real-Time Data Analysis, Methods, and Applications in Macroeconomics and Finance (CIRANO, Oct), SNDE conference (Univ. of Alabama, Mar), Boneyard Conference (UIUC, April); [**2014-15**] NBER-NSF Seminar on Bayesian Inference in Econometrics and Statistics (Washington University in St. Louis, May), NBER Summer Institute (July); [**before 2014**] SoFiE-OMI Summer School (University of Oxford), International Symposium on Forecasting (KAIST, Seoul), Western Economic Association International 83rd Annual Conference.

Professional Activities

- Referee: *Quantitative Economics* (×3), *Journal of Applied Econometrics (×4)*, *Oxford Bulletin of Economics and Statistics (×3)*, *Macroeconomic Dynamics* (×2), *Journal of Econometrics* (×2), *Statistica Sinica*, *Economic Notes, Journal of Business and Economic Statistics (×3)*, *Review of Economics and Statistics*, *Econometrics and Statistics (×2)*, *Journal of Empirical Finance*, *International Journal of Central Banking*, *Journal of Business Cycle Research*, *Brazilian Journal of Probability and Statistics*, *Journal of Economic Theory and Econometrics*, *Empirical Economics*, *Economics Letters*, *International Journal of Forecasting*, *Entropy*.
- Reviewer: National Science Foundation (×3), Society for Computational Economics (student prize)

Teaching Experience

- Time Series Analysis in Economics (Master), UIUC, Spring 2018, Fall 2018.
- Economic Forecasting (Undergraduate), UIUC, Spring 2016, Fall 2016, Spring 2018, Spring 2019.
- Applied Macroeconometrics (Ph.D.), UIUC, Fall 2015 and Fall 2016, Spring 2018.
- A One-day Lecture on Sequential Monte Carlo Methods (Ph.D.), Boston College, Spring 2015.
- Predictive Modeling in Economics (Undergraduate), Teaching Assistant, Penn, Spring 2013 and Spring 2014.
- Econometrics I: Fundamentals (Ph.D.), Teaching Assistant, Penn, Fall 2012 and Fall 2013.
- Econometrics II: Methods (Ph.D.), Teaching Assistant, Penn, Spring 2011 and Spring 2012.
- Statistics for Economists (Undergraduate), Recitation Instructor, Penn, Fall 2010 and Fall 2011.

Other Experience

- Research collaborator for the project on "Developing Korean Uncertainty Index," Bank of Korea, 2016.
- Visiting Research Scholar, Department of Economics, Texas A&M University, 2008–2009.
- Research Assistant for Professor Frank Schorfheide (Penn), 2011–2015.
- Research Assistant for Professor Joon Y. Park (SKKU and Indiana Univ.), 2007–2008.

Fellowships, Honors, and Awards

- David C. Lincoln Fellow, 2019–2020 (joint with David Albouy (UIUC)).
- List of Teachers Ranked as Excellent (outstanding with *), UIUC, Fall 2015, Spring 2018*, Fall 2018*.
- Excellence in Teaching a Field Course (Ph.D.), UIUC, Spring 2016.
- University Fellowship, Penn, 2009–2010.
- Dean's Award and Alumni President's Award, SKKU, 2007.

Ph.D. Dissertation Supervision {name (year*), first position, (co-)main adviser}, *as a main adviser

- Cesare Buiatti (2019*), T. Rowe Price, Co-Main Adviser: Stephen Parente.
- Gustavo Cortes (2019), University of Florida, Main Adviser: Dan Bernhardt/George Pennacchi.
- Ryan Cumings-Menon (2019), US Census Bureau, Main Adviser: Roger Koenker.
- Camila Henao (2018*), T. Rowe Price.
- Jiah-Chian Wu (2018*), National Chengchi University, Co-Main Adviser: Eliza Forsythe.
- Ran Gao (2017), Sichuan University, (note: served as a faculty partner for the Freeman Fellows program).
- Joao B. Duarte (2016), Cambridge, Main Adviser: Dan Bernhardt.
- Kijin Kim (2016), Asian Development Bank, Main Adviser: Geoffrey Hewings.

Past Service (at UIUC)

- Organizer of econometrics seminar, UIUC, 2015–2016, 2018–2019.
- Junior faculty recruiting committee, UIUC, 2015–2016, 2016–2017.
- Awards committee, UIUC, 2015–2016.
- Faculty partner for the Freeman Fellows Program (Ran Gao, Peking University), UIUC, 2015–2016.