Jihyun Kim

Toulouse School of Economics
1, Esplanade de l'Université
31080 Toulouse, France

Phone: (+33) 05 61 12 88 16
Email: jihyun.kim@tse-fr.eu

Current Position

Assistant Professor, Toulouse School of Economics — September 2014 - present

Education

Ph.D.	Economics, Indiana University	July 2014
M.A.	Economics, Sungkyunkwan University	February 2009
B.A.	Economics, Sungkyunkwan University	August 2007

Published Papers

"Volatility Regressions with Fat Tails" (with N. Meddahi)
accepted by *Journal of Econometrics.*

"Estimation of Volatility Functions in Jump Diffusions Using Truncated Bipower Increments" (with J.Y. Park and B. Wang)
accepted by *Econometric Theory.*

"Asymptotics for Recurrent Diffusions with Application to High Frequency Regression" (with J.Y. Park)
Journal of Econometrics, 2017

"Contests with Bilateral Delegation: Unobservable Contracts" (with K.H. Baik)
Journal of Institutional and Theoretical Economics, 2014

"Local Linear Estimation of Nonparametric Cointegrating Regression" (with C. Kim)
Journal of Economic Theory and Econometrics, 2010

Working Papers

"Unit Root, Mean Reversion and Nonstationarity in Financial Time Series" (with J.Y. Park)
revised and resubmitted to *Journal of Econometrics.*

"Uniform Convergence of Nonparametric Estimations for Diffusions" (with R. Bu, B. Wang)
submitted.

"New Robust Inference for Predictive Regressions" (with R. Ibragimov, A. Skrobotov)
submitted.

"Semiparametric Multiplicative GARCH-X Model: Adopting Economic Variables to Explain Volatility" (with H. Han, D. Kristensen)

"Revisiting Continuous Time Limits of Volatility Processes" (with N. Meddahi)

"Moduli of Continuity of Brownian Motion and Related Processes" (with S. Kanaya, J.Y. Park)

"Forecast Comparison Tests Under Fat Tails" (with N. Meddahi, M. Yamashita)

Works in Progress

"Estimating Stochastic Volatility Diffusions with Fat Tails Using Realized Volatility" (with T. Bollerslev, N. Meddahi, M. Yamashita)

"Semiparametric Maximum Likelihood Estimation of Transformed Diffusions" (with R. Bu, B. Wang)

"Extremum Estimations for High-Frequency Data" (with N. Meddahi)

"Testing for Stationarity in Diffusions Possibly with Infinite Moments" (with J.Y. Park)

"How Infinitesimal Parameters Determine Longrun Behaviors in Diffusion Models" (with J.Y. Park)

"On Stationary Transform of Macroeconomic Time Series" (with Y. Chang, J.Y. Park).

"Nonparametric Time Series Regression with Stochastic Volatility" (with C. Kim)

Invited Seminar, Conference and Workshop Presentations

2020 (scheduled): World Congress of the Econometric Society (Online), University Carlos III of Madrid

2019 Financial Econometrics Conference (Toulouse), Workshop on Energy Economics (Seoul, Jeju), Yonsei University (Seoul), SETA (Osaka), SoFiE (Shanghai), Asian Meeting of the Econometric Society (Xiamen), RANEPA (Moscow), Korean Economic Association International Conference (Seoul), Korea University (Seoul), SKKU (Seoul)

2018: Financial Econometrics Conference (Toulouse), SoFiE (Lugano), Korean Economic Association International Conference (Seoul), SKKU (Seoul), LPEM (Jakarta)

2017: University of Glasgow, American Economic Association Annual Meeting (Chicago), Vienna-Copenhagen Conference on Financial Econometrics (Vienna), Econometrics Workshop (Algeria), Financial Econometrics Workshop (Southampton), Financial Econometrics Conference (Toulouse), International Conference on Recent Trends in Economics (Seoul), Meeting in Econometrics (Toulouse), Korean Econometrics Study Group (Seoul), International Association for Applied Econometrics (Sapporo), Korean-American Economic Association Conference (Seoul), Econometrics Workshop (Toulouse), EC^2 (Amsterdam)

2016: Indiana University, Aarhus University, CREST, Conference on Computational and Financial Econometrics (Seville), French Econometrics Conference (Cergy), Korean-American Economic Association Conference (Seoul), Workshop on Forecasting Agricultural Commodity Prices (Naju), Financial Econometrics Conference (Toulouse)

2015: Technical University of Dortmund , University of York, University of Liverpool, Conference on Computational and Financial Econometrics (London), French Econometrics Conference (Orléans), Korean Econometrics Conference (Seoul), Workshop on Long Memory and Nonstationary Time Series (Frankfurt), Financial Econometrics Conference (Toulouse)

2014: Indiana University, University of Illinois at Urbana-Champaign, Rutgers University, Singapore Management University, Toulouse School of Economics, Maastricht University, University of Cambridge, Korean Econometrics Camp (Seoul), Financial Econometrics Conference (Toulouse), Midwest Economics Association Meeting (Evanston), Midwest Econometrics Group Meeting (Bloomington)

2013: Symposium on Econometric Theory and Applications (Seoul), North American Summer Meeting of the Econometric Society (Los Angeles), Eastern Economic Association Meeting (New York)

2012: Midwest Econometrics Group Meeting (Lexington), Jordan River Conference (Bloomington)

Discussions

"Volatility Estimation and Jump Detection for Drift-diffusion Processes" (S. Laurent)
Financial Econometrics Conference, Toulouse 2019

"Quantile Connectedness: Modeling Tail Behavior in the Topology of Financial Network" (Y. Shin)
Korean Economic Association International Conference, Seoul 2018

"Robust Inference Under Heavy-Tailedness and Nonlinear Dependence" (R. Ibragimov)
Financial Econometrics Conference, Toulouse 2018

"A New Approach to Regime Switching" (Y. Chang)
Financial Econometrics Conference, Toulouse 2018

"Efficient Inference in Continuous Time Asset Pricing Models" (Y. Chang)
International Conference on Recent Trends in Economics, Seoul 2017

"Bootstrapping Noncausal Autoregressions," (G. Cavaliere)
Financial Econometrics Conference, Toulouse 2017

"Explosive Bubble Modelling by Noncausal Process," (C. Gourieroux)
Financial Econometrics Conference, Toulouse 2015

Teaching

Undergraduate

Statistical Analysis for Economist (Spring 2019 at KU)

Time Series Analysis (Spring 2019 at KU)

Master

Advanced Econometrics I (Fall 2015 at TSE)

Advanced Econometrics II (Spring 2015, 2016 at TSE)

Applied Econometrics (Spring 2015, 2016 and Fall 2016, 2017 at TSE)

Panel Data Analysis (Spring 2017, 2018, 2020 at TSE, Fall 2019 at KU and SKKU)

PhD

PhD Econometrics I (Fall 2018 at TSE)

PhD Econometrics II (Spring 2020 at TSE)

PhD Topics Course in Econometrics (Spring 2017, 2018, 2020 at TSE)

Minicourse

Stochastic Calculus and Diffusion Models (Summer 2014, 2018 at SKKU)

High Dimensional Data Analysis (Summer 2015, 2017 at SKKU)

Asymptotics for Recurrent Diffusions with Applications (Fall 2014 at IU, Fall 2015 at TU Dortmund)

Visiting

Korea University March-December 2019

Indiana University October 2014, October 2015

Sungkyunkwan University May-July 2015, June-August 2016, 2017, 2018

Research Grants

ANR Team Research Grant (Covid-Metrics, Team Members: N. Meddahi (head), J.P. Florens, C. Gollier, C. Gouriéroux, S. Centorrino, S. Nyawa, M. Pérez-Urdiales) 2020-2021

IDEX Grant, UT1 2015-2016

Honors and Awards

Susan C. Thrasher Fellowship, IU Fall 2013-Spring 2014

Department Conference Travel Award, IU Fall 2012, Spring 2013

Graduate Assistantship, IU Fall 2009-Spring 2013

College Arts and Sciences Travel Award, IU December 2012

Best Paper Award, Jordan River Conference, IU April 2012

Henry M. Oliver Award for Excellence in Economic Theory, IU April 2012

Graduate Fellowship, IU Fall 2009-Spring 2010

Brain Korea 21 Fellowship, Ministry of Education of Korea Fall 2007-Fall 2008

Graduate Fellowship, SKKU Fall 2007-Fall 2008

Scholarship for Honor Students, SKKU Spring 2005-Fall 2007

Professional Services

Referee
Journal of Econometrics, Econometric Theory, Studies in Nonlinear Dynamics & Econometrics, Journal of Financial Econometrics, Journal of Nonparametric Statistics, Econometric Review, Econometrics Journal, Journal of Business & Economic Statistics, Journal of Banking & Finance

Seminar
Co-Organizer of Econometrics and Empirical Econometrics Seminar (TSE, Spring 2015, Fall 2020-)

Workshop
Co-Organizer of Econometrics Workshop (TSE, Fall 2014-Fall 2018)

Conference
Program Committee Member of EC^2 (Toulouse, 2016), Co-Organizer of Financial Econometrics Conference (Toulouse, 2017, 2018, 2019)

Student
Mamiko Yamashita, PhD, 2020 (dissertation committee); Serge Nyawa, PhD, 2018 (dissertation committee); Nuong Nguyen, MA, 2018 (M2 thesis advisor); Italo Lopez, MA, 2016 (M2 thesis advisor)

Consulting
"Longrun Forecasting of Natural GAS Demand in Korea," Korea GAS Corporation 2020

"Longrun Forecasting of Electricity Demand in Korea," Korea Power Exchange 2019

Personal Information

Citizenship: Republic of Korea

Language: Korean (native), English (fluent)