

CURRICULUM VITAE

Joon Y. Park

OFFICE ADDRESS & CONTACTS

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EDUCATION

1978 B.S., Seoul National University, Seoul, Korea.

1983 Ph.D. Candidate in Economics, University of Iowa, Iowa City, Iowa, USA.

1987 Ph.D. in Economics, Yale University, New Haven, Connecticut, USA. Dissertation supervised by P.C.B. Phillips and entitled "Statistical Inference in Linear Models with Integrated Processes."

AWARDS & HONORS

2014, 2020 Trustees Teaching Award, Indiana University

2014 Plura Scripsit Award, *Econometric Theory*

2012 Weatherall Distinguished Fellow, Queens University

2012 Dasan Economics Award, *The Korea Economic Daily*

2010 Cho-Rak-Kyo Economics Award, Yonsei University

2007 Fellow, *Journal of Econometrics*

2004 Economist Award, *The Maeil Business Newspaper*

2002 Fellow, Econometric Society

2001 Faculty of the Year, Alumni, Seoul National University

1999 Teacher of the Year, Department of Economics, Yale University

1999 Multa Scripsit Award, *Econometric Theory*

1996 Cheongram Award, Korean Economic Association

1987 Carl A. Anderson's Award, Cowles Foundation for Research in Economics, Yale University

1986 Doctoral Dissertation Fellowship, Alfred P. Sloan Foundation

ACADEMIC POSITIONS

- 2009.7 - present: Professor of Economics, Wisniewsky Professor of Human Studies, and Adjunct Professor of Statistics, Indiana University.
- 2020.3 - 2024.2: Munhaeng Distinguished Chair Professor, Sungkyunkwan University, Korea.
- 2004.3 - 2020.2: Special Term Professor of Economics, Sungkyunkwan University, Korea.
- 2006.7 - 2009.8: Professor of Economics, and Everett Chair in Liberal Arts, Texas A&M University.
- 2002.7 - 2006.6: Professor of Economics, Rice University.
- 1992.3 - 2004.2: Professor of Economics, Seoul National University, Korea.
- 1997.9 - 2002.6: Adjunct Professor of Economics, Rice University.
- 2000.6 - 2000.7: Visiting Professor, Faculty of Economics, University of Tokyo, Japan.
- 1999.9 - 2000.2: Visiting Professor, Department of Economics, Yale University.
- 1995.9 - 1996.2: Visiting Associate Professor, Department of Economics, Yale University.
- 1991.7 - 1993.8: Associate Professor of Economics, University of Toronto, Canada.
- 1990.2 - 1990.8: Visiting Assistant Professor, Institute of Economics, Aarhus University, Denmark.
- 1987.7 - 1991.6: Assistant Professor of Economics, Cornell University.

ACADEMIC ACTIVITIES

- Associate Editor, Journal of Time Series Econometrics, Berkley Electronic Press, 2007-.
- Associate Editor, Journal of Econometrics, Elsevier, 2012-2019, 2020-2022.
- Associate Editor, Econometric Theory, Cambridge University Press, 1997-2012.
- Guest Co-Editor, Econometric Theory, Cambridge University Press, 2014.
- Associate Editor, Palgrave Dictionary of Economics, Macmillan, 2004-2006.
- Editor, Journal of Economic Theory and Econometrics, Korean Econometric Society, 1999-2002.
- Chair, Far Eastern Standing Committee of the Econometric Society, 2006-2009.
- Member, Council of the Econometric Society, 2006-2009.
- Co-Chair, 2004 Far Eastern Econometric Society Meeting, Seoul, Korea.
- Keynote Speaker, 2012 Canadian Econometric Study Group Meeting, Queens University, Canada, 2013 African Econometric Society Meeting, Accra, Ghana, and 2019 Symposium on Econometric Theory and Applications, Osaka, Japan.
- Invited Speaker, 2001 Econometric Society Australasian Meeting, Auckland, New Zealand, 2006 Far Eastern Econometric Society Meeting, Beijing, China, 2007 Far Eastern Econometric Society Meeting, Taipei, Taiwan, 2011 Econometric Society Australasian Meeting, Adelaide, Australia, 2018 International Conference on Economics of Oil, Rio de Janeiro, Brazil, 2019 Korean Economic Review Conference, Seoul, Korea.

Member of Advisory Board for the 2007 and 2008 Far Eastern Econometric Society Meeting at Taipei, Taiwan and Singapore.

Member of Program Committee for the 1997, 1999, 2001, and 2009 Far Eastern Econometric Society Meetings at Hong Kong, Singapore, Kobe, Japan and Tokyo, Japan, 2019 Asian Econometric Society Meeting at Xiamen, China, 2019 North American Econometric Society Meeting at Seattle, and the 8th World Congress of the Econometric Society, Seattle, Washington, USA, 2000, the 12th World Congress of the Econometric Society, Milan, Italy, 2020.

SETA (Symposium on Econometric Theory and Applications) Meetings, Member of Program Committee and Advisory Board, 2005, 2007, 2008, 2009, 2010, 2012, 2014-2019, and Program Co-Chair and Co-Organizer, 2013.

President, Vice President, Auditor and Secretary General, Korean Econometric Society, 2007, 2006, 2004-2005 and 1997.

President and President Elect, Korea-America Economic Association, 2007 and 2008.

Advisor, Economic Research Institute, Bank of Korea, 2017.5-2019.4.

PUBLICATIONS

“Asymptotic Equivalence of OLS and GLS in Regressions with Integrated Regressors” (with P.C.B. Phillips), *Journal of the American Statistical Association*, 83, 111-115, 1988.

“On the Formulation of Wald Tests of Nonlinear Restrictions” (with P.C.B Phillips), *Econometrica*, 56, 1065-1083, 1988.

“Statistical Inference in Regressions with Integrated Processes: Part 1” (with P.C.B. Phillips), *Econometric Theory*, 4, 468-498, 1988.

“Statistical Inference in Regressions with Integrated Processes: Part 2” (with P.C.B. Phillips), *Econometric Theory*, 5, 95-132, 1989.

“Testing for a Unit Root in the Presence of a Maintained Trend” (with S. Ouliaris and P.C.B. Phillips), *Advances in Econometrics and Modelling*, ed. by Raj, B., 7-28, 1989.

“Testing for Unit Roots and Cointegration By Variable Addition,” *Advances in Econometrics*, ed. by Fomby and Rhodes, 107-133, JAI Press, 1990.

“Testing Purchasing Power Parity Under the Null Hypothesis of Cointegration” (with E. Fisher), *Economic Journal*, 409, 1476-1484, 1991.

“Canonical Cointegrating Regressions,” *Econometrica*, 60, 119-143, 1992.

“Testing for Unit Roots in Models with Structural Change” (with J. Sung), *Econometric Theory*, 10, 917-936, 1994.

“On the Joint Test of a Unit Root and Time Trends,” *Journal of the Korean Econometric Society*, 4, 136-147, 1994.

“On the Comparison of OLS and GLS in Cointegrating Regressions” (with S. Jo), *Journal of Economic Theory and Econometrics*, 3, 1-12, 1997.

- “Canonical Cointegrating Regression and Testing for Cointegration in the Presence of I(1) and I(2) Variables” (with I. Choi and B. Yu), *Econometric Theory*, 13, 850-876, 1997.
- “A Cointegration Approach to Estimating Preference Parameters” (with M. Ogaki), *Journal of Econometrics*, 82, 107-134, 1998.
- “Efficient Estimation of Models with Unknown Mixtures of Stationary and Integrated Time Series” (with C. Kim), *Journal of Economic Theory and Econometrics*, 4, 69-103, 1998.
- “Cointegrating Regressions with Time Varying Coefficients” (with S. Hahn), *Econometric Theory*, 15, 652-696, 1999.
- “Asymptotics for Nonlinear Transformations of Integrated Time Series” (with P.C.B. Phillips), *Econometric Theory*, 15, 269-298, 1999.
- “Nonstationary Binary Choice” (with P.C.B. Phillips), *Econometrica*, 68, 1249-1280, 2000.
- “Nonlinear Regressions with Integrated Time Series” (with P.C.B. Phillips), *Econometrica*, 69, 1452-1498, 2001.
- “Nonlinear Econometric Models with Cointegrated and Deterministically Trending Regressors,” (with Y. Chang and P.C.B. Phillips), *Econometrics Journal*, 4, 1-36, 2001.
- “An Invariance Principle for Sieve Bootstrap in Time Series,” *Econometric Theory*, 18, 469-490, 2002.
- “Nonstationary Nonlinear Heteroskedasticity,” *Journal of Econometrics*, 110, 383-415, 2002.
- “On the Asymptotics of ADF Tests for Unit Roots,” (with Y. Chang), *Econometric Reviews*, 21, 431-448, 2002.
- “Index Models with Integrated Time Series” (with Y. Chang), *Journal of Econometrics*, 114, 73-106, 2003.
- “A Sieve Bootstrap for the Test of a Unit Root,” (with Y. Chang), *Journal of Time Series Analysis*, 24, 379-400, 2003.
- “Bootstrap Unit Root Tests,” *Econometrica*, 71, 1845-1895, 2003.
- “Nonlinear Instrumental Variable Estimation of an Autoregression” (with Y. Chang and P.C.B. Phillips), *Journal of Econometrics*, 118, 219-246, 2004.
- “A Test of the Martingale Hypothesis” (with Y.J. Whang), *Studies in Nonlinear Dynamics and Econometrics*, 9-2, Article 2, 2005.
- “A Bootstrap Theory for Weakly Integrated Processes”, *Journal of Econometrics*, 133, 639-672, 2006.
- “Bootstrapping Cointegrating Regressions” (with Y. Chang and K. Song), *Journal of Econometrics*, 133, 703-739, 2006.
- “Nonstationary Nonlinear Heteroskedasticity in Regression” (with H. Chung), *Journal of Econometrics*, 137, 230-259, 2007.
- “Time Series Properties of ARCH Processes with Persistent Covariates” (with H. Han), *Journal of Econometrics*, 146, 275-292, 2008.

- “Functional-Coefficient Models for Nonstationary Time Series Data” (with Z. Cai and Q. Li), *Journal of Econometrics*, 148, 101-113, 2009.
- “Extracting a Common Stochastic Trend: Theory with Some Applications” (with Y. Chang and J.I. Miller), *Journal of Econometrics*, 150, 231-247, 2009.
- “Nonstationarity, Nonlinearity and Thick Tails: How They Interact to Generate Persistency in Memory” (with J.I. Miller), *Journal of Econometrics*, 155, 83-89, 2010.
- “Cointegrating Regressions with Time Heterogeneity” (with C. Kim), *Econometric Reviews*, 29, 397-438, 2010.
- “A Semiparametric Cointegrating Regression: Investigating the Effects of Age Distributions on Consumption and Saving” (with K. Shin and Y. Whang), *Journal of Econometrics*, 157, 165-178, 2010.
- “Endogeneity in Nonlinear Regressions with Integrated Time Series” (with Y. Chang), *Econometric Reviews*, 30, 51-87, 2011.
- “ARCH/GARCH with Persistent Covariate: Asymptotic Theory of MLE” (with H. Han), *Journal of Econometrics*, 167, 95-112, 2012.
- “Functional Regression of Continuous State Distributions” (with J. Qian), *Journal of Econometrics*, 167, 397-412, 2012.
- “Random Walk or Chaos: A Formal Test on the Lyapunov Exponent” (with Y.J. Whang), *Journal of Econometrics*, 169, 61-74, 2012.
- “Stationarity-Based Specification Tests for Diffusions When the Process is Nonstationary” (with Y. Ait-Sahalia), *Journal of Econometrics*, 169, 279-292, 2012.
- “Nonstationary Regression with Logistic Transition” (with Y. Chang and B. Jiang), *Econometrics Journal*, 15, 255-287, 2012.
- “An Asymptotic Analysis of Likelihood-Based Diffusion Model Selection Using High Frequency Data” (with H. Choi and M. Jeong), *Journal of Econometrics*, 178, 539-557, 2014.
- “Nonstationary Nonlinearity: A Survey on Peter Phillips’ Contributions with a New Perspective”, *Econometric Theory*, 30, 894-922, 2014.
- “GARCH with Omitted Persistent Covariate” (with H. Han), *Economics Letters*, 124, 248-254, 2014.
- “Time-Varying Longrun Income and Output Elasticities of Electricity Demand with an Application to Korea” (with Y. Chang, C. Kim, I.J. Miller and S. Park), *Energy Economics*, 46, 334-347, 2014.
- “Does Ambiguity Matter? Estimating Asset Pricing Models with a Multiple-Priors Recursive Utility” (with D. Jeong and H. Kim), *Journal of Financial Economics*, 115, 361-382, 2015.
- “Testing for a Unit Root Against Transitional Autoregressive Models” (with M. Shintani), *International Economic Review*, 57, 635-664, 2016.
- “Bandwidth Selection and Asymptotic Properties of Local Nonparametric Estimators in Possibly Nonstationary Continuous-Time Models” (with Y. Ait-Sahalia), *Journal of Econometrics*, 192, 119-138, 2016.

- “Nonstationarity in Time Series of State Densities” (with Y. Chang and C.S. Kim), *Journal of Econometrics*, 192, 152-167, 2016.
- “A Reexamination of Stock Return Predictability” (with Y. Choi and S. Jacewitz), *Journal of Econometrics*, 192, 168-189, 2016.
- “Evaluating Factor Pricing Models Using High Frequency Panels” (with Y. Chang, Y. Choi and H. Kim), *Quantitative Economics*, 7, 889-933, 2016.
- “A New Approach to Modeling the Effects of Temperature Fluctuations on Monthly Electricity Demand” (with Y. Chang, C. Kim, I.J. Miller and S. Park), *Energy Economics*, 60, 206-216, 2016.
- “Disentangling Temporal Patterns in Elasticities: A Functional Coefficient Panel Analysis of Electricity Demand” (with Y. Chang, Y. Choi, C. Kim and I.J. Miller), *Energy Economics*, 60, 232-243, 2016.
- “Asymptotics for Recurrent Diffusions with Application to High Frequency Regression” (with J. Kim), *Journal of Econometrics*, 196, 37-54, 2017.
- “A New Approach to Model Regime Switching” (with Y. Chang and Y. Choi), *Journal of Econometrics*, 196, 127-143, 2017.
- “Estimation of Longrun Variance of Continuous Time Stochastic Process Using Discrete Sample” (with Y. Lu), *Journal of Econometrics*, 210, 236-267, 2019.
- “Evaluating Trends in Time Series of Distributions: A Spatial Fingerprint of Human Effects on Climate” (with Y. Chang, R.K. Kaufman, C. Kim, I.J. Miller and S. Park), *Journal of Econometrics*, 214, 274-294, 2020.
- “Testing for Stationarity at High Frequency” (with Y. Lu and B. Jiang), *Journal of Econometrics*, 215, 341-374, 2020.
- “Nonparametric Estimation of Jump Diffusion Models” (with B. Wang), *Journal of Econometrics*, 222, 688-715, 2021.
- “Estimation of Volatility Functions in Jump Diffusions Using Truncated Bipower Increments” (with J. Kim and B. Wang), *Econometric Theory*, 37, 926-958, 2021.
- “Forecasting Regional Long-Run Energy Demand: A Functional Coefficient Panel Approach” (with Y. Chang, Y. Choi, C. Kim and J. Miller), *Energy Economics*, 96, 105-117, 2021.
- “An Asymptotic Theory of Jump Diffusion Model” (with M. Jeong), Forthcoming in *Econometric Theory*.

COMPLETED PAPERS

- “Understanding Regressions with Observations Collected at High Frequency over Long Span” (with Y. Chang and Y. Lu), Revised and resubmitted to *Quantitative Economics*.
- “Analysis of Distributional Dynamics for Repeated Cross-Sectional and Intra-Period Observations” (with B. Hu and J. Qian), Under revision for *Journal of Econometrics*.
- “Unit Root, Mean Reversion and Nonstationarity in Financial Time Series” (with J. Kim), Under revision for *Journal of Econometrics*.

- “Incremental Factor Model for High Frequency Observations with Large Dimension and Long Span” (with Y. Lu), Submitted to *Econometric Theory*.
- “A Factor Model for Functional Time Series” (with Y. Chang and M. Choi), Submitted to *Journal of Econometrics*.
- “Econometric Analysis of Functional Dynamics in the Presence of Persistence” (with Y. Chang and B. Hu).
- “Identifying and Estimating the Longrun Effect of Income Distribution on Aggregate Consumption” (with Y. Chang, C. Kim and H. Kim).
- “Asymptotic Theory of Maximum Likelihood Estimator for Jump Diffusion Model” (with M. Jeong).
- “Estimation of Continuous Time Asset Pricing Models with Heteroskedasticity, Endogeneity, Latency and Persistency” (with Y. Chang and H. Kim).
- “Identifying and Estimating Longrun Effect of Income Distribution on Aggregate Consumption” (with Y. Chang, C. Kim, H. Kim).
- “Macroeconomic Uncertainty and Asset Prices: A Stochastic Volatility Model” (with H. Kim, H. Lee and H. Yeo), Under second revision for *Journal of Finance and Quantitative Analysis*.
- “Martingale Regressions on Conditional Mean Models in Continuous Time”, Under revision for *Journal of Econometrics*.
- “Asymptotic Theory of Maximum Likelihood Estimator for Diffusion Model” (with M. Jeong).
- “Testing for No Arbitrage in Continuous Time: A Resolution to the Forward Premium Puzzle” (with S. Jacewitz and H. Kim), Working paper.
- “A General Approach to Extract Stochastic Volatilities with an Application to the Analysis of Volatility Premium” (with H. Kim and H. Lee), Working paper.
- “Using Kalman Filter to Extract and Test for Common Stochastic Trends” (with Y. Chang and B. Jiang), Working paper.
- “Weak Unit Roots”, Working paper.
- “The Spatial Analysis of Time Series”, Working paper.
- “Iterative Maximum Likelihood Estimation of Cointegrating Vectors” (with I. Kim), Working paper.

WORK IN PROGRESS

- “From Functional Autoregressions to Vector Autoregressions” (with Y. Chang and D. Pyun).
- “Error Correction Models for Functional Autoregressions with Unit Roots” (with Y. Chang and D. Pyun).
- “How Does Economic Activity Interact with Climate?: What We Learn from Global Temperature Anomaly Distributions” (with Y. Chang and I.J. Miller).

“A Trajectories-Based Approach to Measuring Intergenerational Mobility” (with Y. Chang, S. Durlauf and S. Lee).

“How Do Macroaggregates and Income Distribution Interact? A Novel Structural VAR with Functional Variables” (with Y. Chang and S. Kim).

“An Empirical Investigation of Intergenerational Mobility in Korea” (with Y. Chang, S. Durlauf and S. Lee).

“Machine Learning in Econometric Models: Using SVM to Estimate and Predict Binary Choice Models” (with Y. Chang and G. Yan).

“Regime Switching Models with Multiple Dynamic Factors” (with Y. Chang and S. Qiu).

“How Do Climate Changes and Business Cycles affect the Mortality in the US and Japan?” (with Y. Chang and Y. Choi).

“Testing for Unit Roots in Functional Autoregressive Models” (with Y. Chang, F. Gómez-Rodríguez and D. Pyun).

“Panel Regression with Endogenous Regime Switching” (with Y. Chang and A. Marahel).

CONSULTING WORKS

1996 - present: Forecast Consultant, Korea Power Exchange, Seoul, Korea.

2002 - present: Forecast Consultant, Korea Gas Corporation, Seoul, Korea.

2001 - 2005: Director, Korea Fixed Income Research Institute, Seoul, Korea.

RESEARCH GRANTS

Research grant from the *Korea Research Foundation*. Title of research: “Simultaneous Cointegrated Models.” For one year from September 1, 1994.

Research grant from the *Korea Research Foundation*. Title of research: “Regressions with Integrated Time Series.” For one year from September 1, 1997.

Research grant from the *Korea Research Foundation*. Title of research: “Asymptotics for Nonlinear Transformations of Nonstationary Time Series.” For one year from September 1, 1998.

Research grant from the *Korea Research Foundation*. Title of research: “Nonlinear Nonparametric Models with Nonstationary Time Series.” For two years from September 1, 2000.

Research grant from the *Bank of Korea*. Title of research: “Diffusion Models for Interest Rates.” For one year from September 1, 2002.

Research grant from the *Korea Research Foundation*. Title of research: “Inference on Continuous Time Stochastic Processes.” For three years from December 1, 2004.

Research grant from the *National Science Foundation*. Title of research: “The Spatial Analysis of Economic Time Series.” For three years from September 1, 2005.

Ph.D. STUDENTS

- Sang-Buhm Hahn (1994) “Three Essays in Nonstationary Time Series.” First position: Korea Securities Research Institute, Seoul, Korea.
- Kyusoong Chung (2003) “Three Essays in Time Series Econometrics.” First position: Samsung Economic Research Institute, Seoul, Korea.
- J. Issac Miller (2005) “Three Essays on Time Series with Nonstandard Nonstationary Models.” First position: Department of Economics, University of Missouri, Columbia, Missouri, USA.
- Heejoon Han (2006) “Essays on Volatility Models with Nonlinear Persistent Covariates.” First position: Department of Economics, National University of Singapore, Singapore.
- Rahul Vasudev (2006) “Essays on Time Series: Time Change and Applications to Testing, Estimation and Inference in Continuous Time Models.” First position: Ernst & Young LLP, Houston, USA.
- Junhui Qian (2007) “Autoregressive Modeling and Forecasting in Functional Space.” First position: School of Economics, Shanghai Jiao Tong University, Shanghai, China.
- Bibo Jiang (2008) (Co-Chaired with Yoosoon Chang) “Three Essays on Nonlinear Nonstationary Time Series Models.” First position: Bates & White, San Diego, USA.
- Stefan Jacewitz (2009) “Price Prediction in Continuous Time.” First position: Federal Deposit Insurance Corporation (FDIC), Washington, DC, USA.
- Daehee Jeong (2009) “Essays in Financial Econometrics.” First position: Korea Development Institute (KDI), Seoul, Korea.
- Minsoo Jeong (2009) “Essays on Maximum Likelihood Estimation of Diffusion Models.” First position: Post Doctoral Fellow at Department of Economics, Indiana University, Bloomington, Indiana, USA.
- Chi Mai Nguyen (2011) (Co-Chaired with Yoosoon Chang). “Three Essays on Time Series and Panel Models.”
- Bin Wang (2012) “Testing for Continuous Time Models Using High Frequency Data.” First position: Shanghai Jiao Tong University, Shanghai, China.
- Manuel Gonzalez-Astudillo (2012) (Co-Chaired with Eric Leeper) First position: Federal Reserve Board, Washington, D.C., USA.
- Joon-Young Hur (2012) (Co-Chaired with Eric Leeper) First position: California State University, Northridge, California, USA.
- Yongok Choi (2012) First position: Korea Development Institute (KDI), Seoul, Korea.
- Jihyun Kim (2014) “Three Essays in Financial Econometrics.” First position: Toulouse School of Economics, Toulouse, France.
- Ye Lu (2017) “Three Essays in Continuous Time Econometrics.” First position: University of Sydney, Sydney, Australia.
- Bo Hu (2017) “Econometric Analysis of Distributional Dynamics.” First position: Peking University, Peking, China.

Shi Qiu (2019) (Co-Chaired with Yoosoon Chang) “Essays on Regime Switching Models with Endogenous Feedback.” First position: Fudan University, Shanghai, China.

Chaojun Li (2020) “Three Essays in Econometrics.” First position: East China Normal University, Shanghai, China.

Fabio Gómez-Rodríguez (2021) (Co-Chaired with Yoosoon Chang) “Essays on Functional Time Series: Nonstationary Models.” First position: Lehigh University, Pennsylvania, USA.

Guo Yan (2023) (Co-Chaired with Yoosoon Chang) “Three Essays on Econometrics of Machine Learning.” First position: Melbourne University, Melbourne, Australia.