Curriculum Vitae: Kaiji Motegi, Ph.D.

Professor, Graduate School of Economics, Kobe University, Japan

Contact Information

Postal Address: Graduate School of Economics, Kobe University
2-1 Rokkodai-cho, Nada, Kobe, Hyogo 657-8501 Japan
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Employment History

Research Associate, Faculty of Political Science and Economics, Waseda University, Tokyo, Japan, June 2014—March 2015

Assistant Professor (without tenure), Faculty of Political Science and Economics, Waseda University, April 2015—September 2016

Associate Professor (tenure track), Graduate School of Economics, Kobe University, Hyogo, Japan, October 2016—March 2020

Associate Professor (tenured), Graduate School of Economics, Kobe University, April 2020—March 2026

Professor (tenured), Graduate School of Economics, Kobe University, April 2026—present

Education

B.A. in Economics, March 2008
- School of Political Science and Economics, Waseda University, Tokyo, Japan
- Highest GPA out of 1079 students

M.A. in Economics, March 2009
- Graduate School of Economics, Waseda University
- Highest GPA out of 16 students

Doctor of Philosophy in Economics, May 2014
- Department of Economics, University of North Carolina at Chapel Hill, Chapel Hill, NC
- Thesis title: Granger causality in mixed frequency time series
- Thesis committee members: Eric Ghysels (chair), Michael Aguilar, Saraswata Chaudhuri, Neville Francis, Jonathan B. Hill

Fields of expertise

Econometrics, Time Series Analysis

Books

[1] H. Yamashita, T. Takizawa, J. Inaida, H. Uesu, Y. Okuda, S. Kanagawa, S. Shimizu, H. Chung, K. Shinkai, M. Tomita, E. Tsuda, K. Nagashima, Y. Hashiguchi, K. Motegi, and M. Morioka. *Fuzzy Theory*. Tokyo: Kyoritsu Shuppan, August 2010, written in Japanese.
- Received the *2011 Outstanding Book Award*, Japan Society for Fuzzy Theory and Intelligent Informatics.

Published Journal Articles

[1] E. Ghysels, J. B. Hill, and K. Motegi. Testing for Granger causality with mixed frequency data. *Journal of Econometrics*, vol. 192, May 2016, pp. 207-230.

[2] K. Motegi and A. Sadahiro. Sluggish private investment in Japan's Lost Decade: Mixed frequency vector autoregression approach. *North American Journal of Economics and Finance*, vol. 43, January 2018, pp. 118-128.

[3] J. B. Hill and K. Motegi. Testing the white noise hypothesis of stock returns. *Economic Modelling*, vol. 76, January 2019, pp. 231-242.

[4] S. Hamori, K. Motegi, and Z. Zhang. Calibration estimation of semiparametric copula models with data missing at random. *Journal of Multivariate Analysis*, vol. 173, September 2019, pp. 85-109.

[5] E. Ghysels, J. B. Hill, and K. Motegi. Testing a large set of zero restrictions in regression models, with an application to mixed frequency Granger causality. *Journal of Econometrics*, vol. 218, October 2020, pp. 633-654.

[6] J. B. Hill and K. Motegi. A max-correlation white noise test for weakly dependent time series. *Econometric Theory*, vol. 36, October 2020, pp. 907-960.

[7] K. Motegi, X. Cai, S. Hamori, and H. Xu. Moving average threshold heterogeneous autoregressive (MAT-HAR) models. *Journal of Forecasting*, vol. 39, November 2020, pp. 1035-1042.

[8] S. Hamori, K. Motegi, and Z. Zhang. Copula-based regression models with data missing at random. *Journal of Multivariate Analysis*, vol. 180, November 2020, #104654.

[9] C. Ai, O. Linton, K. Motegi, and Z. Zhang. A unified framework for efficient estimation of general treatment models. *Quantitative Economics*, vol. 12, July 2021, pp. 779-816.

[10] K. Motegi and Y. Iitsuka. Inter-regional dependence of J-REIT stock prices: A heteroscedasticity-robust time series approach. *North American Journal of Economics and Finance*, vol. 64, January 2023, #101840.

[11] K. Motegi and S. Woo. A note on the exponentiation approximation of the birthday paradox. ***Communications in Statistics - Theory and Methods***, vol. 53, 2024, pp. 6417-6426.

[12] K. Motegi and S. Hamori. Conditional threshold effects of stock market volatility on crude oil market volatility. ***Energy Economics***, vol. 143, March 2025, #108189.

[13] K. Motegi and S. Sugano. Cross-regional spillover effects of sustainability indices: A heteroscedasticity-robust VAR approach. ***International Review of Financial Analysis***, vol. 108, December 2025, #104678.

[14] K. Motegi and S. Hayashi. A groupwise approach to the birthday paradox. ***Communications in Statistics - Theory and Methods***, vol. 55, 2026, pp. 640-658.

Working Papers

[1] J. W. Dennis and K. Motegi (2022). Asymptotic properties of spurious regression and random walks with generalized drifts. SSRN Working Paper #3381194.

[2] K. Motegi, J. W. Dennis, and S. Hamori (2024). Conditional Threshold Autoregression (CoTAR). SSRN Working Paper #3960058.

[3] K. Motegi, J. W. Dennis, and S. Y. Hong (2025). Regular and reverse Midastar models: Threshold autoregression with mixed frequency data. SSRN Working Paper #4286939.

[4] K. Motegi and J. W. Dennis (2024). An over-rejection puzzle of bootstrap average tests for the no-threshold-effect hypothesis. SSRN Working Paper #4739462.

Honors and Awards

[1] JJSM Competition Session Best Presentation Award, 2014 Japanese Joint Statistical Meeting. Japanese Federation of Statistical Science Associations, University of Tokyo, September 2014.

[2] JJSM Competition Session Presentation Award, 2015 Japanese Joint Statistical Meeting. Japanese Federation of Statistical Science Associations, Okayama University, September 2015.

[3] Waseda University Teaching Award, Introduction to Microeconomics, Spring Semester 2015. Waseda University, March 2016.

[4] Best Poster Presentation Award, 10th Spring Meeting of the Japan Statistical Society, Japan Statistical Society, Tohoku University, March 2016.

[5] Best Poster Presentation Award, 11th Spring Meeting of the Japan Statistical Society, Japan Statistical Society, National Graduate Institute for Policy Studies, March 2017.

[6] 33rd JSS Ogawa Award, Japan Statistical Society, September 2019.

[7] Best Young Researcher Award, Kobe University, January 2020.

[8] Third Hosoya Prize, Graduate School of Economics and Management, Tohoku University, November 2021.

[9] 13th Maenosono Memorial Award for Young Researchers, Keiai Machizukuri Foundation and Kobe University, July 2024.

Scholarships (Selected)

[1] Fulbright Scholarship (Graduate Study), Institute of International Education and Japan-U.S. Educational Commission, 2009–2014.

[2] Yoshida Scholarship (Overseas Study Program for Japanese Students), Yoshida Scholarship Foundation, 2010–2013.

Research Grants (Selected)

[1] Suntory Foundation Grant for Young Researchers, Suntory Foundation, April 2016—March 2017.

[2] JSPS KAKENHI, Grant-in-Aid for Young Scientists (B), Grant Number 16K17104, April 2016—March 2019.

[3] Grant for Research, Mitsubishi UFJ Trust Scholarship Foundation, April 2017—March 2018.

[4] Research Grant, Kikawada Foundation, April 2017—March 2019.

[5] Grants for Social Science, Nomura Foundation, April 2017—March 2019.

[6] Research Grant, Japan Center for Economic Research (JCER), April 2018—March 2020.

[7] Research Grant, Nihon Hoseigakkai Foundation, April 2018—March 2019.

[8] JSPS KAKENHI, Grant-in-Aid for Early-Career Scientists, Grant Number 19K13670, April 2019—March 2022.

[9] Grant-in-Aid for Research, Zengin Foundation for Studies on Economics and Finance, April 2020—March 2022.

[10] Research Grant, Ishii Memorial Securities Research Promotion Foundation, August 2020—March 2022.

[11] Grants for Social Science, Nomura Foundation, October 2022—September 2024.

[12] Research Grant, Japan Securities Scholarship Foundation, October 2022—September 2023.

[13] Research Grant, Murata Science Foundation, August 2023—July 2024.

[14] JSPS KAKENHI, Grant-in-Aid for Challenging Research (Exploratory), Grant Number 23K17555, June 2023—March 2026.

[15] Research Grant, Trust Forum Foundation, April 2025—March 2027.

[16] Research Grant, Nihon Hoseigakkai Foundation, April 2025—March 2026.

[17] JSPS KAKENHI, Grant-in-Aid for Scientific Research (B), Grant Number 26K00326, April 2026—March 2030.

Presentations at Conferences and Seminars (Selected)

[1] North American Summer Meeting of the Econometric Society, University of Southern California, CA, June 2013.

[2] NBER-NSF Time Series Conference, Federal Reserve Board, Washington DC, September 2013.

[3] 2014 Japanese Joint Statistical Meeting, University of Tokyo, Tokyo, Japan, September 2014.
- Selected as the **JJSM Competition Session Best Presentation Award Winner 2014**.

[4] NBER-NSF Time Series Conference, Federal Reserve Bank of St. Louis, MO, September 2014.

[5] 25th $(EC)^2$ Conference, Universitat Pompeu Fabra, Barcelona, Spain, December 2014.

[6] SETA Conference 2015, Hitotsubashi University, Tokyo, Japan, May 2015.

[7] 11th World Congress of Econometric Society, Palais des Congres de Montreal, Montreal, Canada, August 2015.

[8] 2015 Japanese Joint Statistical Meeting, Okayama University, Okayama, Japan, September 2015.
- Selected as the **JJSM Competition Session Presentation Award Winner 2015**.

[9] Recent Developments in Time Series and Related Fields, Tohoku University, Miyagi, Japan, December 2015.

[10] 10th Spring Meeting of the Japan Statistical Society, Tohoku University, Miyagi, Japan, March 2016.
- Received the **Best Poster Presentation Award**.

[11] AMES 2016, Doshisha University, Kyoto, Japan, August 2016.

[12] NBER-NSF Time Series Conference, Columbia University, NY, September 2016.

[13] UNC Econometrics Workshop, Department of Economics, University of North Carolina at Chapel Hill, NC, February 2017.

[14] 11th Spring Meeting of the Japan Statistical Society, National Graduate Institute for Policy Studies, Tokyo, Japan, March 2017.
- Received the **Best Poster Presentation Award**.

[15] 50th Anniversary Seminar, Department of Statistics and Actuarial Science, University of Hong Kong, Hong Kong, June 2017.

[16] EcoSta Conference 2017, Hong Kong University of Science and Technology, Hong Kong, June 2017 (session organizer and speaker).

[17] 4th Annual Conference of IAAE, Hotel Emisia Sapporo, Hokkaido, Japan, June 2017.

[18] 3rd Annual International Conference on Applied Econometrics in Hawaii, Honolulu, Hawaii, September 2017.

[19] Economics and Economic Growth Centre Seminar Series, School of Social Sciences, Nanyang Technological University, Singapore, January 2018.

[20] EcoSta Conference 2018, City University of Hong Kong, Hong Kong, June 2018 (session organizer and speaker).

[21] Departmental seminar, Department of Statistics and Actuarial Science, University of Hong Kong, Hong Kong, June 2018.

[22] Departmental seminar, Institute of Statistics and Big Data, Renmin University of China, Beijing, China, August 2018.

[23] UNC Econometrics Workshop, Department of Economics, University of North Carolina at Chapel Hill, NC, November 2018.

[24] Presidential session, 88th Annual Meeting of Southern Economic Association, Washington DC, November 2018.

[25] Essex Centre for Macro and Financial Econometrics Seminar Series, Department of Economics and Business School, University of Essex, Colchester, UK, January 2019.

[26] 15th International Conference of WEAI, Keio University, Tokyo, Japan, March 2019.

[27] SETA Conference 2019, Osaka University, Osaka, Japan, June 2019.

[28] **Memorial lecture for the 33rd JSS Ogawa Award**, 2019 Japanese Joint Statistical Meeting, Shiga University, Shiga, Japan, September 2019.

[29] Departmental seminar, Department of Economics, University of Essex, Colchester, UK, September 2019.

[30] **The Third Hosoya Prize Lecture**, Graduate School of Economics and Management, Tohoku University, Miyagi, Japan, November 2021.

[31] 6th Annual International Conference on Applied Econometrics in Hawaii, virtual session, November 2021 (organizer and speaker).

[32] EcoSta Conference 2022, virtual session, June 2022 (session organizer and speaker).

[33] SETA Conference 2022, virtual session, July 2022.

[34] 2022 AMES in East and South-East Asia, virtual session, August 2022.

[35] 7th Annual International Conference on Applied Economics in Hawaii, virtual session, November 2022 (organizer and speaker).

[36] 17th International Conference of WEAI, virtual session, April 2023.

[37] 98th Annual Conference of WEAI, virtual session, July 2023.

[38] EcoSta Conference 2023, Waseda University, Tokyo, Japan, August 2023 (scientific program committee member and speaker).

[39] **International Conference on Time Series Econometrics (ICTSE)**, Kobe University, Hyogo, Japan, March 2024 (organizer, chair, and speaker).

[40] 99th Annual Conference of WEAI, virtual session, June 2024.

[41] NTU Economics Seminar, School of Social Sciences, Nanyang Technological University, Singapore, July 2024.

[42] Singapore Economic Review Conference, voco Orchard Singapore, Singapore, July 2024.

[43] 9th Annual International Conference on Applied Economics in Hawaii, Honolulu, September 2024.

[44] 92nd Marunouchi Quantitative Finance Seminar, Tokyo, Japan, November 2024.
[45] 100th Annual Conference of WEAI, virtual session, June 2025.
[46] Internal Seminar, Institute for Monetary and Economic Studies, Bank of Japan, July 2025.
[47] EcoSta Conference 2025, Waseda University, Tokyo, Japan, August 2025.
[48] Workshop "Research on the Frontier of Modern Economics", Institute of Economic Research, College of Economics, Aoyama Gakuin University, October 2025.
[49] SETA Conference 2026, University of Tokyo, Tokyo, Japan, June 2026.
[50] 101st Annual Conference of WEAI, virtual session, June 2026.
[51] EcoSta Conference 2026, Ryukoku University, Kyoto, Japan, August 2026 (scientific program committee member, session organizer, and speaker).

Editorial Services

[1] Associate Editor, ***Singapore Economic Review***, January 2018—present.
[2] Associate Editor, ***Econometrics and Statistics*** (Part A: Econometrics), January 2026—present.

Courses Taught (Selected)

[1] Waseda University (April 2015—September 2016)
- Time Series Analysis (Master's level)
- Macroeconomics (Master's level)
- Introduction to Microeconomics (Undergraduate level)
- Introduction to Macroeconomics (Undergraduate level)
- Fresh-start Seminar (Undergraduate level)

[2] Kobe University (October 2016—present)
- Analysis of Stationary Time Series (Master's level)
- Analysis of Nonstationary Time Series (Master's level)
- Econometrics (Master's and Undergraduate levels)
- Thesis Advisor (Graduate and Undergraduate levels)
- Fresh-start Seminar (Undergraduate level)
- Statistics (Required course for undergraduate freshmen)

[3] Intensive course on time series analysis, Yokohama City University (December 2024).

Other Research and Educational Activities (Selected)

[1] Studying at a U.S. graduate school (written in Japanese). An invited blog article. Yoshida Scholarship Foundation, October 2014.
https://www.ysf.or.jp/blog/article_detail.php?repoId=16
[2] On unifying copula models, missing data analysis, and causal inference (written in Japanese). ***Kokumin Keizai Zasshi***, vol. 218, November 2018, pp. 65-75.

[3] Mixed frequency vector autoregressive (MF-VAR) models and Granger causality tests (written in Japanese). An invited article for the 33rd JSS Ogawa Award Winner. ***Journal of the Japan Statistical Society***, vol. 50, September 2020, pp. 191-204.

[4] Heterogeneous autoregressive (HAR) model with time-varying thresholds (written in Japanese). ***Kokumin Keizai Zasshi***, vol. 222, September 2020, pp. 61-72.

[5] Program Committee Member, 2021 Japanese Joint Statistical Meeting, virtual format, September 2021.

[6] Reviewer, Section 07030 (Economic Statistics), Grant-in-Aid for Early-Career Scientists, JSPS KAKENHI, 2021–2022.

[7] Why does the infection status of COVID-19 differ between Japan and the U.S.? (written in Japanese) ***Weekly Toyo Keizai Magazine***, January 15, 2022, pp. 78-79.

[8] On time-varying threshold autoregressive models (written in Japanese). ***Kokumin Keizai Zasshi***, vol. 225, April 2022, pp. 83-93.

[9] Program Committee Member, 2022 Japanese Joint Statistical Meeting, Seikei University, Tokyo, Japan, September 2022.

[10] Scientific Program Committee Member, EcoSta Conference 2023, Waseda University, Tokyo, Japan, August 2023.

[11] On Midastar models: Threshold autoregressive models with mixed frequency data (written in Japanese). ***Kokumin Keizai Zasshi***, vol. 228, September 2024, pp. 107-117.

[12] Mentor, Networking Session, 2025 Spring Meeting of the Japanese Economic Association, Chukyo University, Nagoya, Aichi, Japan, May 24, 2025.

[13] Scientific Program Committee Member, EcoSta Conference 2026, Ryukoku University, Kyoto, Japan, August 2026.