MASAYUKI HIRUKAWA

Address Faculty of Economics	Phone	(+81)(0)72-839-8095
Setsunan University	Fax	(+81)(0)72-839-8138
17-8 Ikeda Nakamachi	E-mail	hirukawa@econ.setsunan.ac.jp
Neyagawa, Osaka 572-8508, Japan	Web	http://www.setsunan.ac.jp/~hirukawa/

Personal

- Citizenship: Japan (Permanent Address: Handa, Aichi, Japan).
- Date of Birth: 7 October 1965.
- Marital Status: Married, 1 child.

Education

- Ph.D. in Economics, University of Wisconsin-Madison, Madison, WI, USA, August 2004.
 - Doctoral Dissertation:
 - > Title: "Heteroskedasticity and Autocorrelation Consistent Covariance Matrix Estimation."
 - Reading Committee: Bruce E. Hansen (Chair); Gautam Tripathi; Kenneth D. West.
 - Minor: Statistics.
- M.S. in Economics, University of Wisconsin-Madison, Madison, WI, USA, December 2000.
- M.S. in Industrial Administration, Carnegie Mellon University, Pittsburgh, PA, USA, May 1997.
- B.A. in Economics, University of Tokyo, Tokyo, Japan, March 1989.

Academic Positions

- Professor, Faculty of Economics, Setsunan University, Neyagawa, Osaka, Japan, September 2010 present.
- Assistant Professor, Department of Economics, Northern Illinois University, DeKalb, IL, USA, August 2007 May 2010.
- Assistant Professor, Department of Economics, Concordia University, Montréal, QC, Canada, July 2004
 May 2007.

Visiting and Adjunct Positions

- Visiting Fellow, Centre Interuniversitaire de Recherche en Économie Quantitative (CIREQ), September 2008.
- Short-Term Visitor, Center for International Research on the Japanese Economy (CIRJE), University of Tokyo, June 2006 and May 2008.
- Adjunct Professor, Department of Economics, Concordia University, June 2007 April 2008.
- Research Fellow, Centre Interuniversitaire de Recherche en Économie Quantitative (CIREQ), April 2006 April 2008.

Professional Services

• Reviewer for Grant-in-Aid for Scientific Research (Field: Economic Statistics), Japan Society for the Promotion of Science, December 2015 - November 2016 and December 2016 - November 2017.

Research Interests

- Fields of Specialization: Theoretical and Applied Econometrics; Statistics.
- Research Interests: Nonparametric Econometrics; Time Series Econometrics; Econometrics of Data Combination; Generalized Method of Moments; Generalized Empirical Likelihood; Simulation-Based Estimation; Indirect Inference; Cointegration; Empirical Analysis on Macroeconomics, Corporate Finance, Investment, and Industrial Organization.

Books

[1] Asymmetric Kernel Smoothing: Theory and Applications in Economics and Finance, JSS Research Series in Statistics, 2018, Heidelberg: Springer, ISBN: 978-981-10-5465-5.

Refereed Journal Articles

- [1] "Nonparametric Estimation and Testing on Discontinuity of Positive Supported Densities: A Kernel Truncation Approach," with Benedikt Funke, *Econometrics and Statistics*, forthcoming.
- [2] "Consistent Estimation of Linear Regression Models Using Matched Data," with Artem Prokhorov, *Journal of Econometrics*, forthcoming.
- [3] "Functional-Coefficient Cointegration Models in the Presence of Deterministic Trends," with Mari Sakudo, *Econometric Reviews*, forthcoming.
- [4] "Testing Symmetry of Unknown Densities via Smoothing with the Generalized Gamma Kernels," with Mari Sakudo, *Econometrics*, Volume 4, Issue 2, June 2016, Article No. 28.
- [5] "Reexamination of the Robustness of the Fama-French Three-Factor Model," with Jiro Hodoshima, *Far East Journal of Theoretical Statistics*, Volume 52, Issue 3, May 2016, pp. 215-234.
- [6] "Corrigendum to "Nonparametric Multiplicative Bias Correction for Kernel-Type Density Estimation on the Unit Interval" [Comput. Statist. Data Anal. 54 (2010) 473-495]," *Computational Statistics & Data Analysis*, Volume 95, March 2016, pp. 240-242.
- [7] "Family of the Generalised Gamma Kernels: A Generator of Asymmetric Kernels for Nonnegative Data," with Mari Sakudo, *Journal of Nonparametric Statistics*, Volume 27, Issue 1, January 2015, pp. 41-63.
- [8] "Nonnegative Bias Reduction Methods for Density Estimation Using Asymmetric Kernels," with Mari Sakudo, *Computational Statistics & Data Analysis*, Volume 75, July 2014, pp. 112-123.
- [9] "Nonparametric Estimation of Scalar Diffusion Models of Interest Rates Using Asymmetric Kernels," with Nikolay Gospodinov, *Journal of Empirical Finance*, Volume 19, Issue 4, September 2012, pp. 595-609.
- [10] "Venture Capital and Innovation: Which Is First?" with Masako Ueda, *Pacific Economic Review*, Volume 16, Issue 4, October 2011, pp. 421-465.
- [11] "How Useful Is Yet Another Data-Driven Bandwidth in Long-Run Variance Estimation?: A Simulation Study on Cointegrating Regressions," *Economics Letters*, Volume 111, Issue 2, May 2011, pp. 170-172.
- [12] "A Two-Stage Plug-In Bandwidth Selection and Its Implementation for Covariance Estimation," *Econometric Theory*, Volume 26, Issue 3, June 2010, pp. 710-743.
- [13] "Nonparametric Multiplicative Bias Correction for Kernel-Type Density Estimation on the Unit Interval," *Computational Statistics & Data Analysis*, Volume 54, Issue 2, February 2010, pp. 473-495.
- [14] "A Modified Nonparametric Prewhitened Covariance Estimator," *Journal of Time Series Analysis*, Volume 27, Issue 3, May 2006, pp. 441-476.

Non-Refereed Journal Articles

- [1] "Independence of the Sample Mean and Variance for Normal Distributions: A Proof by Induction," *Setsunan Economic Review*, Volume 5, Issues 1-2, March 2015, pp. 1-5.
- [2] "Stabilizing a GMM Bootstrap for Time Series: A Simulation Study," *Setsunan Economic Review*, Volume 1, Issues 1-2, March 2011, pp. 19-37.
- [3] "The Tenuous Relationship of Venture Capital and Innovation," with Masako Ueda, *VoxEU.org*, 30 January 2009.

Working Papers

- "Two-Sample Estimation as an Altervative to Instrumental Variable Estimation in the Presence of Omitted Variables," with Irina Murtazashvili and Artem Prokhorov, January 2018.
- "Bias Correction for Asymmetric Kernel Density Estimation with a Parametric Start," with Mari Sakudo, January 2018.
- "Two-Sample Estimation of Varying Coefficient Models via Nearest Neighbor Matching," with Artem Prokhorov and Yajing Zhu, July 2017.
- "Venture Capital and Industrial "Innovation"," with Masako Ueda, June 2013.

Work In Progress

- "Skewing Methods for Asymmetric Kernel Regression Estimation," with Benedikt Funke.
- "Consistent Specification Testing for Regression Models via the Piecewise Local Linear Regression Estimation," with Anurag N. Banerjee.
- "Bootstrap Inference on Matched-Sample Indirect Inference Estimation."
- "Two-Sample Estimation of Quantile Regression Models."
- "Alternative Approximations to Nonparametric Estimators for Functional-Coefficient Cointegration Models with Persistent Errors and/or Transition Variables."

Conference Presentations

- 2017: [1] 11th International Conference on Computational and Financial Econometrics (Senate House and Birkbeck College, University of London, London, UK) [December].
 - [2] 4th Conference of the International Association for Applied Econometrics (Hotel Emisia, Sapporo, Japan) [June].
 - [3] 1st International Conference on Econometrics and Statistics (Hong Kong University of Science and Technology, Hong Kong) [June].
 - [4] 18th Annual Meeting on Nonparametric Data Analysis and Bayesian Statistics (Keio University, Tokyo, Japan) [March].
 - [5] Symposium on Current Issues in Statistical Science (Kanazawa University, Kanazawa, Ishikawa, Japan) [January].
- 2016: [6] 10th International Conference on Computational and Financial Econometrics (University of Seville, Seville, Spain) [December].
 - [7] Asian Meeting of the Econometric Society 2016 (Doshisha University, Kyoto, Japan) [August].
 - [8] 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting (Chinese University of Hong Kong, Hong Kong) [June].
 - [9] CORE@50 Conference (Université Catholique de Louvain, Louvain-la-Neuve, Belgium) [May].
- 2015: [10] 16th Annual Meeting on Nonparametric Data Analysis and Bayesian Statistics (Keio University, Yokohama, Japan) [March].
 - 2014: [11] 68th European Meeting of the Econometric Society (Toulouse School of Economics, Toulouse, France) [August].
 - [12] Econometric Society Australasian Meeting 2014 (Hotel Grand Chancellor, Hobart, TAS, Australia) [July].
 - [13] Asian Meeting of the Econometric Society 2014 (Academia Sinica, Taipei, Taiwan) [June].
 - [14] 15th Annual Meeting on Nonparametric Data Analysis and Bayesian Statistics (Keio University, Tokyo, Japan) [March].
 - [15] 24th New Zealand Econometric Study Group Meeting (University of Waikato, Hamilton, New Zealand) [February].
 - [16] Kansai Econometric Society Annual Meeting 2013 (Kyoto University, Kyoto, Japan) [January].
- 2013: [17] International Symposium on New Development in Statistical Science (Kanazawa University, Kanazawa, Ishikawa, Japan) [November].
 - [18] 23rd New Zealand Econometric Study Group Meeting (University of Auckland, Auckland, New Zealand) [February].
 - 2012: [19] Asian Meeting of the Econometric Society 2012 (University of Delhi, Delhi, India) [December].
 - [20] Summer Workshop on Economic Theory 2012 (Otaru University of Commerce, Otaru, Hokkaido, Japan) [August].

- 2011: [21] International Symposium on Recent Development in Statistics, Empirical Finance and Econometrics (Kyoto University, Kyoto, Japan) [November].
 - [22] 21st New Zealand Econometric Study Group Meeting (University of Otago, Dunedin, New Zealand) [February].
 - 2008: [23] Southern Economic Association 78th Annual Meetings (Grand Hyatt Hotel, Washington, DC, USA) [November].
 - [24] 25th Canadian Econometrics Study Group Conference (Hôtel de l'Institut, Montréal, QC, Canada) [September].
- 2007: [25] Midwest Econometric Group 17th Annual Meeting (Saint Louis University, St. Louis, MO, USA) [October].
- 2006: [26] Midwest Econometric Group 16th Annual Meeting (University of Cincinnati, Cincinnati, OH, USA) [October].
- 2005: [27] 1st CIREQ Time Series Conference (Hôtel de l'Institut, Montréal, QC, Canada) [December].
 - [28] 22nd Canadian Econometrics Study Group Conference (Simon Fraser University, Vancouver, BC, Canada) [October].
 - [29] Midwest Econometric Group 15th Annual Meeting (Southern Illinois University, Carbondale, IL, USA) [October].
 - [30] Canadian Economics Association 39th Annual Meetings (McMaster University, Hamilton, ON, Canada) [May].

Seminar Presentations

- 2016: [1] University of Tokyo, Graduate School of Economics (Tokyo, Japan) [October].
- 2015: [2] Development Bank of Japan, Research Institute of Capital Formation (Tokyo, Japan) [May].
- 2014: [3] University of Sydney, Discipline of Business Analytics, Business School (Sydney, NSW, Australia) [February].
- 2013: [4] University of Sydney, Discipline of Business Analytics, Business School (Sydney, NSW, Australia) [March].
 - 2012: [5] Kyoto University, Institute of Economic Research (Kyoto, Japan) [December].
 - [6] University of Tokyo, Graduate School of Economics (Tokyo, Japan) [November].
 - [7] Osaka University, Graduate School of Economics (Toyonaka, Osaka, Japan) [July].
 - [8] Development Bank of Japan, Research Institute of Capital Formation (Tokyo, Japan) [February].
- 2011: [9] Queen's University, Department of Economics (Kingston, ON, Canada) [August].
- 2010: [10] Queen's University, Department of Economics (Kingston, ON, Canada) [May].
 - 2009: [11] Purdue University, Department of Economics (West Lafayette, IN, USA) [March].
 - [12] Loyola University, Department of Economics (Chicago, IL, USA) [February].
 - [13] DePaul University, Department of Economics (Chicago, IL, USA) [February].
- 2008: [14] Osaka University, Center for the Study of Finance and Insurance (Toyonaka, Osaka, Japan) [June].
 - [15] Kyoto University, Institute of Economic Research (Kyoto, Japan) [June].
 - [16] Kobe University, Graduate School of Economics (Kobe, Japan) [June].
 - [17] Nagoya University, Graduate School of Economics (Nagoya, Japan) [May].
 - [18] Nagoya City University, Graduate School of Economics (Nagoya, Japan) [May].
 - [19] University of Tokyo, Graduate School of Economics (Tokyo, Japan) [May].
 - [20] Northern Illinois University, Department of Economics (DeKalb, IL, USA) [March].
 - 2007: [21] Northern Illinois University, Department of Economics (DeKalb, IL, USA) [January].
- 2006: [22] Carleton University, Department of Economics (Ottawa, ON, Canada) [December].
 - [23] University of Tokyo, Graduate School of Economics (Tokyo, Japan) [June].
 - [24] Hitotsubashi University, Graduate School of Economics (Kunitachi, Tokyo, Japan) [June].
 - [25] Queen's University, Department of Economics (Kingston, ON, Canada) [April].

- 2004: [26] Montreal Econometrics Workshop (Concordia University, Montréal, QC, Canada) [November].
 - [27] Concordia University, Department of Economics (Montréal, QC, Canada) [January].
 - [28] Oregon State University, Department of Economics (Corvallis, OR, USA) [January].
- 2003: [29] University of Wisconsin-Madison, Department of Economics (Madison, WI, USA) [November].
- 2002: [30] University of Wisconsin-Madison, Department of Economics (Madison, WI, USA) [November].

Other Conference Participations

- Program Committee Member:
 - 2nd CIREQ Time Series Conference (Hôtel de l'Institut, Montréal, QC, Canada), December 2006.
- Session Chair:
 - "Time Series Models 1," Asian Meeting of the Econometric Society 2012 (University of Delhi, Delhi, India), December 2012.
 - "Econometrics of Market Microstructure," Quantitative Finance 2011 (University of Tokyo, Tokyo, Japan), September 2011.
 - "Nonparametric Methods in Time Series Analysis I," Midwest Econometric Group 17th Annual Meeting (Saint Louis University, St. Louis, MO, USA), October 2007.
 - "Asset Pricing," Canadian Economics Association 39th Annual Meetings (McMaster University, Hamilton, ON, Canada), May 2005.
 - "Portfolio Choice," 4th CIREQ-CIRANO Conference on Financial Econometrics (Hôtel de l'Institut, Montréal, QC, Canada), May 2005.
- Discussant (The speaker is <u>underlined</u>.):
 - <u>Doko Tchatoka, Sabro Firmin</u>, "Instrument Endogeneity and Inference in Possibly Unidentified Structural Equations," 24th New Zealand Econometric Study Group Meeting (University of Waikato, Hamilton, New Zealand), February 2014.
 - <u>Giles, David E.</u>, Hui Feng, and Ryan T. Godwin, "Bias-Corrected Maximum Likelihood Estimation of the Parameters of the Generalized Pareto Distribution," 23rd New Zealand Econometric Study Group Meeting (University of Auckland, Auckland, New Zealand), February 2013.
 - <u>Cho, Jin Seo</u>, Isao Ishida, and Halbert White, "Revisiting Tests for Neglected Nonlinearity Using Artificial Neural Networks," 21st New Zealand Econometric Study Group Meeting (University of Otago, Dunedin, New Zealand), February 2011.
 - <u>Cai, Zongwu</u>, Qi Li, and Joon Y. Park, "Functional-Coefficient Models for Nonstationary Time Series Data," Southern Economic Association 78th Annual Meetings (Grand Hyatt Hotel, Washington, DC, USA), November 2008.
 - Hu, Ling, and <u>Robert de Jong</u>, "Nonstationary Censored Regression," 23rd Canadian Econometrics Study Group Conference (Marriott Niagara Falls Hotel, Niagara Falls, ON, Canada), October 2006.
 - <u>Ren, Yu</u>, and Katsumi Shimotsu, "Specification Test Based on the Hansen-Jagannathan Distance with Good Small Sample Properties," Canadian Economics Association 40th Annual Meetings (Concordia University, Montréal, QC, Canada), May 2006.
 - <u>Rombouts</u>, Jeroen V. K., and Marno Verbeek, "Evaluating Portfolio Value-at-Risk Using Semi-Parametric GARCH Models," Canadian Economics Association 39th Annual Meetings (McMaster University, Hamilton, ON, Canada), May 2005.

Research Grants

- External Funding:
 - Grant-in-Aid for Scientific Research (C), Japan Society for the Promotion of Science, "Improvement and Development of Nonparametric and Semiparametric Methods in Applied Econometrics" (grant number 15K03405), April 2015 - March 2019, JPY3,500,000 in total [ongoing].
 - Grant-in-Aid for Scientific Research (C), Japan Society for the Promotion of Science, "Smoothing Techniques and Their Implementations in Time Series Econometrics" (grant number 23530259), May 2011 - March 2015, JPY3,800,000 in total [complete].

- Standard Research Grants Program, Social Sciences and Humanities Research Council of Canada (SSHRC), "Improving Finite Sample Performances of GMM" (grant number 410-2007-2071), March 2007 - March 2010, C\$45,000.00 in total [returned due to move to USA].
- Programme d'Éstablishment de Nouveaux Professeurs-Chercheurs, Fonds Québécois de la Recherche sur la Société et la Culture (FQRSC), « Deux améliorations dans les propriétés des échantillons finis estimés par la méthode des moments generalizes » (numéro de dossier 114142), April 2006 - March 2009, C\$38,192.00 in total [returned due to move to USA].
- Internal Funding:
 - College of Liberal Arts & Sciences Summer Research & Artistry Grant, Northern Illinois University, May - June 2008, US\$3,000.00 [complete].
 - General Research Fund, Concordia University, February December 2005, C\$3,525.60 in total [complete].
 - Faculty Research Development Program, Concordia University, June 2004 May 2007, C\$15,000.00 in total [complete].

Awards

- Full Scholarship for Graduate Study in Business, Chubu Electric Power Co., Inc. (employer), June 1995
 May 1997.
- 8th Annual *Ouchi Hyoe* Award (best economic thesis), Faculty of Economics, University of Tokyo, March 1989.

Referee and Review Activities

- Academic Journals: African Economic Research Consortium (AERC) Research Papers (1).
 - African Journal of Agricultural Research (1).
 - Annals of Operations Research (3).
 - Canadian Journal of Statistics (1).
 - Computational Statistics & Data Analysis (3).
 - Econometric Reviews (3).
 - *Econometric Theory* (5).
 - Econometrics (2).
 - *Economic Modelling* (9).
 - Electronic Journal of Statistics (3).
 - *Emerging Markets Finance and Trade* (1).
 - Far East Journal of Theoretical Statistics (1).
 - IEEE Transactions on Systems, Man and Cybernetics Part B (1).
 - Journal of Applied Mathematics (1).
 - Journal of Business & Economic Statistics (1).
 - Journal of International Development (1).
 - Journal of Money, Credit, and Banking (13).
 - Journal of Statistical Computation and Simulation (2).
 - Journal of Statistical Theory and Practice (1).
 - Journal of Testing and Evaluation (1).
 - Journal of the Franklin Institute (1).
 - Journal of the Korean Statistical Society (6).
 - Journal of Time Series Econometrics (1).
 - Pacific Economic Review (2).
 - *Review of Economics and Statistics* (1).
 - Science China Mathematics (1).
 - *Stat* (2).
 - Statistical Methods & Applications (1).
 - Statistics (1).
 - Statistics & Probability Letters (2).

- Book Chapters:
 The New Palgrave Dictionary of Economics, 2nd Edition/Macroeconometrics and Time Series Analysis (Chapter: "Heteroskedascitity and Autocorrelation Corrections" by Kenneth D. West).
 - Grant-in-Aid for Scientific Research (120).
 - Social Sciences and Humanities Research Council of Canada (SSHRC) (1).
 - S: "Topics in Dependence Modelling" by Fujie Xia (University of Sydney).
- Doctoral Dissertations:

Research Grants:

•

Professional Memberships

- American Economic Association, May 1997 present.
- American Statistical Association, January 2000 present.
- Econometric Society, January 2000 present.
- International Association for Applied Econometrics, October 2017 present.
- Japan Statistical Society, April 2006 present.

Teaching and Research Experiences

• Instructor:

- Faculty of Economics, Setsunan University, September 2010 present:
 - Undergraduate: Mathematics for Economists; Microeconomics I; Macroeconomics I; Statistics; Econometrics; Industrial Organization; Modern Finance.
- Department of Economics, Northern Illinois University, August 2007 May 2010:
 - > Undergraduate: Principles of Microeconomics; Intermediate Microeconomics.
 - Graduate: Econometrics I; Econometrics II; Seminar in Quantitative Economics.
 - Department of Economics, Concordia University, August 2004 May 2007:
 - ➢ Undergraduate: Statistical Methods II; Econometrics I; Applied Econometrics.
 - Graduate: Financial Economics II; Econometric Theory II.
- Teaching Assistant:
 - Department of Economics, University of Wisconsin-Madison, August 2000 May 2001 and January May 2004:
 - > Undergraduate: *Principles of Microeconomics; Introductory Econometrics.*
 - Graduate: *Time Series Econometrics.*
 - Department of Finance, Investment and Banking, School of Business, University of Wisconsin-Madison, August 2002 - May 2004:
 - ➤ Undergraduate: Entrepreneurial Finance.
 - Graduate: Entrepreneurial Finance; Theory of Finance I.
- Project Assistant:
 - Department of Finance, Investment and Banking, School of Business, University of Wisconsin-Madison, for Masako Ueda, May - August 2003.
 - Institute for Research on Poverty, University of Wisconsin-Madison, for Robert H. Haveman, Karen C. Holden, and Barbara L. Wolfe, September 2001 June 2002.

University Services

- Member, Committee of Entrance Exam Questions (Subject: Mathematics), Setsunan University, April 2011 present.
- Member, Editorial Board of *Setsunan Economic Review* (in-house journal), Faculty of Economics, Setsunan University, September 2010 March 2012.
- Member, Committee of Initial Teacher Certificate, Northern Illinois University, August 2009 May 2010.
- Member, Graduate Program Committee, Department of Economics, Concordia University, June 2005 May 2007.

Language Skills

- Japanese (fluent/native speaker).
- English (fluent).
- Mandarin Chinese (intermediate).

Other Experiences

- Chubu Electric Power Co., Inc. (Headquarters, Nagoya, Japan), August 1991 July 1999.
 - Senior Staff of Budget Section, Finance & Accounting Department, October 1997 July 1999. (Responsibilities: planning and controlling annual budget of plant and equipment investment and maintenance.)
 - Senior Staff of Finance Section, Finance & Accounting Department, May October 1997. (Responsibilities: making quarterly and monthly fund-raising plans.)
 - Company-sponsored graduate study at Carnegie Mellon University, June 1995 May 1997.
 - Staff Member of Finance Section, Finance & Accounting Department, August 1991 June 1995. (Responsibilities: issuing domestic and Euro bonds and commercial papers by negotiating agreements and other documents with investment bankers, lawyers, and certified public accountants, and implementing financial risk-hedging concerned with the issues.)
- Chubu Electric Power Co., Inc. (Hamamatsu Customer Service Office, Hamamatsu, Japan), April 1989 July 1991.
 - Staff Member of Customer Service I, April 1989 July 1991.
 (Responsibilities: writing and examining customer contracts on 200V or less electric power usage.)

Other Interests

- Kendo (Ranking: 5 dan).
- Photography.

Last update: 31 January 2018.