CURRICULUM VITAE

Hajime Wago

Date & Place of Birth	September 22, 1943 Tokyo, Japan
Office address	Kyoto Sangyo University, Department of Economics
	Motoyama, Kamigamo, Kita-ku, Kyoto 603-8555
Phone & FAX	+81-75-705-1736 +81-75-705-1495
Email address	wago@ism.ac.jp, wago.hajime@gmail.com
Home Address	6–16–12 Okusawa Setagaya-ku, Tokyo 158–0083
Phone & FAX	+81-3-3705-5484 +81-3-3705-5484

Education	MA in Economics (Waseda University:1969)
	Dr. in Economics (Osaka University:1999)

Official Academic Appointments

2010-present	Visiting Professor of Econometrics, Graduate School of Economics, Chuo University
2009-present	Science Council of Japan, Member
2006-present	Professor of Econometrics, Department of Economics, Kyoto Sangyo University
2002-2006	Professor of Econometrics, Graduate School of Economics, Nagoaya University
1999-	Visiting Professor, University of Basel, Inst. of Math. Stat. and Econometrics
1996-2005	Visiting Professor, University of Tokyo
1995-2000	Professor of Econometrics, Department of Economics, Niigata University
1993-1996	Visiting Professor, Insitute of Statistical Mathematics
1994-1996	Visiting Professor, Garduate School of Policy Science, Saitama University
1989-1995	Professor of Economic Statistics, Department of Economics, Toyama University
1989-	Visiting Professor, Institut für Statistik und Wahrsheinlichkeittheorie, Technische Universität Wien, Austria
1986-1995	The Energy Data and Modelling Center, The Institute of Energy Economics, Members of the Research Advisory Committee
1985-1986	Visiting Scholar, Department of Economics, Rutgers University
1984-1985	Visiting Scholar, Graduate School of Business, University of Chicago
1978-1984	Parttime Lecturer, Department of Economics, Waseda University
1975-1989	Assistant Professor, Institute of Socio-Economic Planning, Tsukuba University
1973-1975	Researcher, Fuyo Research Institute
1973-1975	Visiting Researcher, Research Institute of National Economy
1971-1973	Visiting Researcher, Economic Research Institute, EPA, Japanese Government
1972-1973	Committee on Economic Impact of Enlarging European Community, Member, MFA
1969-1971	Researcher, Hitachi Information Systems Laboratory
1968-1969	Researcher, Nippon Business Consultant, Co., Ltd.

Professional Affiliations

Japan Statistical Society(JSS), Econometric Society(ES), The Japanese Economic Association (JEA), American Statistical Association(ASA), American Economic Association(AEA), International Statistical Institute: IAOS, The International Society for Bayesian Analysis (ISBA), Japanese Society of Applied Statistics(JSAS), International Statistical Institute(ISI): Regular Member, Japan Section of the Regional Science Association(JSRSAI), Japanese Classification Society

2010-	local organizing commitee of ISBA2012, Chair
2006-07	local organizing commitee of International Psycometrics society meeting
2006	75th anniversaly Symposium of Japan statistical Society, vice president
2004-05	Society of Applied Economic Time Series Analysis, President
2003	local organizing commitee of Japan statistical Society meeting, Chair
2002-03	board of directors, Japan Statistical Society
1999-00	board of directors, Japanese Economic Association
1996-97	board of directors, Japan Statistical Society
1994-94	board of directors, Japan Statistical Society
1992-93	general board member, Japan Statistical Society
1992-93	founding board member, ISBA
1988-89	board of directors, Japan Statistical Society
1986-87	general board member, Japan Statistical Society

Academic Research Grants and Awards

National Science Grant(Kagaku Kenkyuhi)

21st centuries COE Programs「The Frontier of Computational Science」Project division chair, (project Leader, Prof. Kaneda)	2004-2006
Kiban Research A(1) “Statistical Analysis for Latend Structure Model”, Leader	2003-2006
Kiban Research A(1) “Theoretical and Empirical Analysis in Business Cycle Model and Modelling the New Model”, member (Leader, Asako)	2002-2004
Kiban Research A(1) “Statistical Disclosure for Survey data and Research its Use”, member, (Leader, Prof. Takemura)	2002-2004
Kiban Research A(1) “Theory and Application in Statistics in general fields”, member, (Leader, Prof Sugiyama)	1999-2001
Kiban Research B(1) “Theoretical Problems in Public Survey Data”, member, (Leader Prof. Shibuya)	1999-2001
Kiban Research B(1) “Comparative Econometric Analysis for Economic Growth and Monetary Policy in EC and Asian Countries”, Leader	1998-2000
Kiban Research B(2) “Statistical Data and Analysis for ”sustainable Develepement”, member, (Leader Prof. Takeuchi)	1997-1999
Kiban Research B(1) “Bayesian Semi-Parametric Estimation Using Microdata”, Project Leader	1996-1997
Jyuten Research “Decision Theoretic Evalluation for Disclosure Problems”, member, (Leader Prof. Takemura)	1981-1982
Energy Special Research (I), “Analysis by Economic Modelling for Recent Energy Problems”, General Evaluation for the Energy Resource and Utility System, member, Project leader (Prof. Hayashi, Tokyo University)	1981-1982

others(The Japan Economic Research Foudation, The JAPAN Securities Scholarship Foundation, The Zengin Foundation for Studies on Economics and Finance.)

Organizer of International Conference

- Committee for 2012 ISBA (International Society for Bayesian Analysis) World Meeting, [Kyoto,Japan], 15-19 June 2012, Kyoto Terrsa.
- 4th Japanese - European Bayesian Econometrics and Statistics Meeting, [Barcelona, Spain] University of Pompeu Fabre, August 22-23, 2009.
- 3rd Japanese - European Bayesian Econometrics and Statistics Meeting, [Brescia, Italy] University of Brescia, August 26, 2008.
- Hitotsubashi Conference on Econometrics 2007, [Mercury Hall, Hitotsubashi University], November 24–25, 2007
- 2nd Japanese - European Bayesian Econometrics and Statistics Meeting, [Budapest, Hungary] National Bank of Hungary, August 27, 2007.
- Workshop on Bayesian Statistics and Applied Econometrics, [Sendai, Japan] Tohoku University, October 31- November 1, 2006.
- The Japan Statistical Society 75th Anniversary Symposium on Recent Advances in Applied Econometrics, [Tokyo, Japan] Tokyo University, September 23-24, 2006.
- 1st Japanese - European Bayesian Econometrics and Statistics Meeting, [Wien, Austria] Institute of Advanced Studies, August 23, 2006.
- Latent structural modeling and analysis for spatial-temporal data, [Kyoto, Japan] Kyoto University, Shiran Kaikan, December 1-2, 2005.
- Bayesian Applied Multivariate Analysis, [Tokyo, Japan] The Universiyt of Tokyo, Komaba Campus, August 23-24, 2005.
- Recent Development of Statistical Modeling in Marketing -Latent Variable and Latent Structure Approach-, [Tokyo, Japan] Institute of Statistical Mathmatics, December 1-2, 2004.
- Recent Developments in Latent Variables Modeling, [Tokyo, Japan] The Universiyt of Tokyo, Komaba Campus, August 25-26, 2004.
- Statistical Analysis of the Structure with the Latent Variable Model [Kobe, Japan] Academia Hall, Kobe University, December 19-20, 2003.
- Markov chain Monte Carlo: Recent developements and its applications, [Tokyo, Japan] Institute of Statistical Mathmatics, December 19-20, 2002.
- International Symposium on Exploration of Informational Aspects of Bayesian Statistics, [Fuji, Japan] Institute of Statistical Mathmatics, December 1993.

Fields of Interest

- Bayesian econometrics
- Financial econometrics
- Spatial econometrics
- Macroeconometrics(Modelling Dynamic Stochastic General Equilibrium Model)
- Bayesian Computation:MCMC, Particle Filtering, postrior simulater
- Time series modelling (State Space Modelling)
- Bayesian Statistics and its Appllication to Empirical Econometrics

Publications (Books)

1. "Bayesian Econometrics", Minotani, Nawata and Wago ed. *Econometrics Handbook*, (in Japanese), 665–698, Asakura, 2007.
2. "MCMC:Markov Chain Monte Carlo", *Dictionary of Statistics and Data Science*, (in Japanese), 856–857, Asakura, 2007.
3. "Application of Markov Chain Monte Carlo to Economic Time Series Model", (in Japanese), Amari, Takeuch and Takemura eds. *Forntiers of Statistical Sciences*: Vol.12. Computational Statistics II: Marikov chain Monte Carlo and its neighbour area, Iwanami, 213–292, 2005.
4. *Bayesian Econometrics*：*Applications to the Markov chain Monte Carlo* Wago, H. eds. (in Japanese), Toyo-Keizai, 382. 2005.
5. *Analysis by Bayesian Statistics*, Maki, Wago et al. *Statistics for Economics and Management*, (in Japanese), Chap 9, 243-284, 2005.
6. "Using the Durbin-Watson Ratio to Detect a Spurious Regressions: Can We Make a Rule of Thumb?" in Proceedings of *The International Enviromental Modelling and Software Society*, (iEMSs 2002), 592–596, held at University of Lugano, Switzerland, 24-27 June 2002.
7. "Bayesian inference on gradual switching GARCH models : Gibbs sampling approach", in Proceedings of *The International Symposium on Model and Simulation,* (MODSIM2001), 1337–1342, held at ANU, Canberra, Australia, Dec.10 ∼ 14, 2001.
8. "A Bayesian Analysis of Unit Root and Cointegraion with an Application to a Yen-Dollar Exchange Rate Model," *Advances in Econometrics*, Vol.11, Part B, JAI Press, 51-86, 1996.
9. "Bayesian Forecasting", *Byesian Statistics and its Applications*, (in Japanese), Suzuki, Y. and N. Kunitomo ed., University of Tokyo Press, 139-177, 1989.
10. "Time Series Analysis of Fiscal and Monetary Policies", *Japanese Economy and Fiscal Policy*, (in Japanese), Yabushita, and Asako edit. Chap. 8, Toyo-Keizai, 165–189, 1987.
11. "A Predictive Density Criterion for Selecting Non-Nested Linear Models and Comparison with Other Criteria", in R. Viertl ed. *Probability and Bayesian Statistics*, 477–486, Plenum Press, New-York and London, 1987.
12. "Energy Price Change and Industial Adjustment" *Japanese Economy and Economic Statistics*, (in Japanese), Hayashi and Nakamura ed. University of Tokyo Press, 119-145, 1986.
13. "Time Series Analysis and its Applications" Wolrd Economic Information Service, (in Japanese), Chap. 2∼3, 155-308, 1984.
14. "Transmission mechanizm for crude oil price" Economic Planning Agency, research monograph No.40, *Econometrics Analysis of Energy Demand*, (in Japanese), 165-231, 1983.
15. "Estimation and Testing for Share Model-Application of Translog production model," (in Japanese), Takeuchi, K. ed. *The New Developement of Econometrics*, University of Tokyo Press, 203–233, 1983.
16. "Changes in the Regional Distribution of Population in Japan and their Implication for Social Policy", in R. Stone ed. *Econometric Contribution to the Puplic Policy*, McMillan, 440–463, 1978.

Translation Books

1. Commandeur J. and S. Koopman, *An Introduction to State Space Times Series Analysis*, (translation), Wago, H. CAP, 2008.
2. Durbin J. and S. Koopman, *Time Series Analysis by State Space Modelling* Wago, H. and Y. Matsuda, CAP, 2004.
3. G.S. Maddala,*Econometrics Method*[rev. 2nd ed. (translation), CAP, January, 1995.
4. G.S. Maddala,*Econometrics Method*(translation) McGraw-Hill, July, 1992.

Publications (papers)

1. "Estimation of Regional Business Cycle in Japan using Bayesian Panel Spatial Autoregressive Probit Model" Kakamu, K. and H. Wago and H. Tanizaki, forthcomming in (T.P. Nolin ed) *Handbook of Regional Economics*, 2009, Nova Publisher

2. “Small Sample Properties of Panel Spatial Autoregressive Models: Comparison of Bayesian and Maximum Likelihood Methods,” *Spatial Economic Analysis*, Vol.3, No.3, 305–19, 2008.
3. “Model Choice for Panel Spatial Models: Crime Modeling in Japan,” Kakamu, K., W. Polasek and H. Wago (2007), in (H.-J. Lenz and R. Decker eds) *Advances in Data Analysis*, Springer, 237-244.
4. “Spatial Interaction of Crime Incidents in Japan,” with Kakamu, K. and W. Polasek, *Mathematics and Computers in Simulation*, 78, 2008 276–282.
5. “Bayesian Panel Spatial Probit Model with an Application to Business Cycle in Japan,” *Proceedings of International Congress on Modeling and Simulations*, 856-863. with Kakamu, K. 2005.
6. “Trend of Regional Business Cycle with Spatial Interaction Effect”, *Financial Review*, 78, 71-84, Aug. 2005.
7. “Bayesian Application to Econometrics,” Chap. 1, H.Wago ed. ‘*Bayesian Econometrics*‘, 1-38, Toyo-Keizai, 2005
8. “Markov Chain Monte Carlo method and its Application” Chap. 2, H.Wago ed. ‘*Bayesian Econometrics*‘, 39-998, Toyo-Keizai, 2005
9. “Bayesian estimation of smooth transition GARCH model using Gibbs sampling,” *Mathematics and Computers in Simulation*, Elsevier, 64, 63–78, 2004.
10. “Using the Durbin-Watson Ratio to Detect a Spurious Regressions: Can We Make a Rule of Thumb?”, in Proceedings of *International Environmental Modelling and Software Society (iEMSs)*, pp.592-596, 2002.
11. “Bayesian inference on smooth transition GARCH models” in Proceedings of *The International Symposium on Model and Simulation (MODSIM2001)*, held at ANU Canberra, Australia, pp.1337-1342, Dec.10 ∼ 14, 2001.
12. “Bayesian inference on gradual switching GARCH models : Gibbs sampling approach”, in Proceedings of The International Symposium on Frontiers of Time Series Modelling, held at ISM Tokyo, Feb.7 ∼ 9, 2000, IMS Report No.4, 342–343.
13. “A Bayesian Non-Parametric Density Estimation of Production Function,” *Blletin of the International Statistical Institute, Contributed Papers, Book 2*, 15–16, 1997.
14. “A Bayesian Analysis of Unit Root and Cointegraion with an Application to a Yen-Dollar Exchange Rate Model,” *Advances in Econometrics*, Vol.11, Part B, JAI Press, 51–86, 1996.
15. “An Economic Analysis of CO_2 Emission Control,” *International Symposium on Economic Modelling* held at Goeteborg, Sweeden, 18-20, August 1992.
16. “A Bayesian Analysis of Unit Root Under Unknown Order of an ARMA(p, q) Error and Application to the Foreign Exachange Rate of Yen, Revised Version,” (49th Session of International Statistical Institute Meeting [Firenze, Italy], 1993.)
17. “A Bayesian Method for Detecting Turning Points in Business Cycle,” (*1st Multinational Riverboat Conference on Bayesian Econometrics and Statistics*, Basel-Amsterdam, 1993.)
18. “An Economic Analysis of CO_2 Emissions Control,” paper presented at International Symposium on Economic Modelling held at Göteborg, Sweden, August 1992.
19. “Mean Squared Errors of Forecast for Selecting Non-Nested Linear Models and Comparison with Other Criteria,” *Journal of Econometrics,* Vol. 48, 215-240, April/May 1991.
20. “A Bayesian Analysis of Unit Root and Stationarity Hypotheses with an Application to the Exchange Rate for Yen,” paper presented at *Fourth Valencia International Meeting on Bayesian Statistics,* held at Peniscola, Spain. April 15-20, 1991.
21. “A Bayesian Analysis of Stationarity and Unit Root Hypotheses,” paper presented at seventh Econometric Society World Congress held at Barcelona, Spain. January 1990.
22. “A Bayesian Non-Parametric Density Estimation of Production Function,” *Bulletin of the International Statistical Institute*, Contributed Papers, 51st Session, Book 2, 15–16, 1997.
23. “Recent Developement on Bayesian Econometrics” *Journal Japan Statistical Society*, 28–3, pp.111–150, 1998.
24. “A Bayesian Analysis of Unit Root Under Unknown Order of an ARMA(p, q) Error and Application to the Foreign Exachange Rate of Yen,” in *Bulletin of the International Statistical Institute*, Contributed Papers, 49th Session, Book 2, 493–494, 1993.

25. “A Bayesian Analysis of Unit Root and Cointegraion,” invited paper for *International Symposium on Exploration of Informational Aspects of Bayesian Statistics*, [Fuji, Japan] Institute of Statistical Mathmatics, December 1993.
26. “Mean Squared Errors of Forecast for Selecting Non-Nested Linear Models and Comparison with Other Criteria,” *Journal of Econometrics*, Vol. 48, 215-240, April/May 1991.
27. “A Measure of Interdependency in Multiple Time Series Model”, in *Bulletin of the International Statistical Institute*, Contributed Papers Book 2, 147–148, 1989.
28. “Bayesian Forecasting,” Y. Suzuki and N. Kunitomo eds., *Bayesian Statistics and its Applications,* University of Tokyo Press, 139–177, 1989, (in Japanese).
29. “A Measure of Interdependency in Multiple Time Series Model,” in *Bulletin of the International Statistical Institute, Contributed Papers : Book 2,* 147–148, 1989.
30. “Applied Econometric Analysis Using TSP,” 1st ed., University of Tokyo Press, 1988.
31. “The Role of Statistical Software for Applied Econometric Research and Education,” in *Proceedings of the fifth Japan and Korea Joint Conference of Statistics*, 80–82, 1988.
32. “A Predictive Density Criterion for Selecting Non-Nested Linear Models and Comparison with Other Criteria,” in R. Viertl ed. *Probability and Bayesian Statistics,* 477-486, Plenum Press, New-York and London, 1987.
33. “Time Series Analysis of Fiscal vs. Monetary Policy in Japan,” in Yabushita and Asako eds. *Japanese Economy and Fiscal Policy*, Toyokeizaishinpo-sha, 165-189, 1987.
34. “An Econometric Analysis of a Capital Gaines Tax on Land,” *The Economic Studies Quarterly*, Vol. 38-2, 159-171, 1987.
35. “ Gradual Switching Multivariate Regression Models with Stochastic Cross-equational Constraints and an Application to the KLEM Translog Production Model”, *Journal of Econometrics*, Vol. 31-3, 235–253, 1986.
36. “Higher Energy Prices and Industry Adjustments : Bayesian Approach,” in S. Hayashi and T. Nakamura eds., *Statistical Analysis of Japanes Economy,* University of Tokyo Press, 119–145, 1986.
37. “Recent Development of Econometrics”, ESP, No.145, 44-48, May 1984.
38. “Time Series Analysis : Theory and its Applications,” Research Report of World Economy and Information Service, with T. Yamamoto and N. Kunitomo, 1984 (in Japanese), Chap. 2,3, 155-308, 1984.
39. “Economic Analysis of Oil Shock”, *Economic Seminar*, No.344, 38-45, 10, 1983.
40. “The Impact of Energy Prices on Macro Economic Performances”, *Japanese Review of Energy Economics*, Vol. 1, 1-28, 1983.
41. “Energy Price, Substitution Elasticities and Technical Change - Econometric Analysis by Translog Cost Function”, *Journal of Japan Statistical Society*, Vol.13–1, 73–88, 1983.
42. “Estimation and Testing on Share Model - An Application to Translog Model,” in K Takeuchi ed., *Recent Development of Econometrics*, University of Tokyo Press, 203-233, 1983, (in Japanese).
43. “Imported Oil Prices and Its Transmission Mechanism : Vector Autoregression Analysis,” in *Econometrics Studies of Energy Problems* : Chapter 5, Economic Monograph No. 40, Economic Planning Agency, Japanese Government, 165-231, 1983.
44. “A model for the Coordination of Recovery Policies in the OECD Region” *Journal of Policy Modeling*, Vol. 2, 35-55, 1979.
    “Erratum: A model for the Coordination of Recovery Policies in the OECD Region”, *Journal of Policy Modeling*, Vol.2–3, 456, 1980.
45. “Measurment of Income inequality” *Keizai-kenkyu*, Vol. 29–4, 361–371, 1978.
46. “Changes in the Regional Distribution of Population in Japan and their Implication for Social Policy”, in R. Stone ed. *Econometric Contribution to the Puplic Policy*, McMillan, 440–463, 1978.
47. “Statistical Evidence of Income Inequality by Occupation in 1965-1975”,*Kokumin-keizai*, Vol.137, 41-60, 1977.
48. “Optimal Energy Policy and Demand Control”, *Economics Research*, Vol. 26-2, 97-107, 1975.

Major Conference Presentations

1. "Estimating new Keynesian DSGE Models in a liquidity trap using the Monte Carlo particle filter: an application to the Japanese economy", Yano, K. Y. Iida, and H. Wago, paper presented for Econometric Society World Congress (August 17-21), 2010.¡BR¿
2. "Multivariate stochastic volatility models with dynamic correlations: a Monte Carlo particle filtering approach," Yano K., H. Wago, and S. Sato, (International Symposium on Financial Engineering and Risk Management 2010 [FERM 2010]), [Invited], National Taiwan University, June 18 - 12, 2010.
3. "Liquidity-constrained Households and A Liquidity Trap in DSGE models : A Sequential Monte Carlo Approach," Koiti Yano, Yasuyuki Iida and Hajime Wago, paper presented for ESRI International Joint Research Conference, March 9, 2010, Tokyo]
4. "Are 'structural parameters' in the New Keynesian models really structural? A Test based on Sequential Monte Carlo Mehods" , Iida, Yasuyuki, Yano, K. and H. Wago, (4th Japanese - European Bayesian Econometrics and Statistics Meeting (JeuBes 4): Aug. 22-23, 2009) [Barcelona, Spain]
5. "Estimation of regional business cycle in Japan using Bayesian panel spatial autoregressive probit model" , (International Conference on Econometrics and the World Economy), The Center for Advanced Economic Study (CAES), Fukuoka University, 23-24, March 2009
6. "Multivariate stochastic volatility models with dynamic correlations: a Monte Carlo particle filtering approach" , Yano, Wago, and Sato, (*The 1st Institute of Mathematical Statistics - Asia Pacific Rim Meeting*[IMS-APRM2009]), (Invited), Seoul National University, June 28 - July 1, 2009.
7. "Spatial agglomeration and spill-over analysis for Japanese prefectures during 1991-2000" , IFCS2009, University of Technology, [Dresden] March 13-18, 2009
8. "Multivariate stochastic volatility models with dynamic correlations: a Monte Carlo particle filtering approach" (3rd Japanese - European Bayesian Econometrics and Statistics Meeting (JeuBes 3): August 26, 2008) [Brescia, Italy]
9. "Bayesian panel spatial autoregressive probit model with an application to business cycle in Japan " International Society for Bayesian Analysis (ISBA 2008) held at Hamilton Island, July 21-25, 2008
10. "Multivariate stochastic volatility models with dynamic correlations: a Monte Carlo particle filtering approach" 2nd International Workshop on 'Computational and Financial Econometrics'(CFE '08), June 19-21, 2008 Neuchhatatel, Switzerland
11. "Small Sample Properties of Panel Spatial Autoregressive Models: Comparison of Bayesian and Maximum Likelihood Methods," (MODSIM2007, [Cristchurch, Newsealand], Dec. 10-13, 2007)
12. "Bayesian panel spatial autoregressive probit model with an application to business cycle in japan" *International Symposium on Spatio-Temporal Data for making Statistical Sience Modelling and Analysys* , December 1st, Okayama Koryu Center, International Conference Center.
13. "Small Sample Properties of Panel Spatial Autoregressive Models: Comparison of Bayesian and Maximum Likelihood Methods," (2nd Japanese - European Bayesian Econometrics and Statistics Meeting (JeuBes 2): Aug. 27, 2007) [Budapest, Hungary], (Joint Statitical Meeting:[Kobe University], Sep. 6-9, 2007) (Japan Economic Association[Nihon University], Sep. 23-24, 2007)
14. "Spatial agglomeration and spill-over analysis for Japanese prefectures during 1991-2000" (56th Session of International Statistical Institute Meeting [Lisboa, Poltugal] August 22-29, 2007.)
15. "Spatial agglomeration and spill-over analysis for Japanese prefectures during 1991-2000" (Econometric Society European Meeting : August 24-28, 2006)[Vienna, Austria]
16. "Bayesian Spatial Panel Probit Model with an Application to Business Cycle in Japan" (1st Japanese - European Bayesian Econometrics and Statistics Meeting: August 23, 2006) [Vienna, Austria]
17. "Spatial agglomeration and spill-over analysis for Japanese prefectures during 1991-2000" (Joint Statistical Meeting 2006 [Seatle, U.S.A.], August 4-8, 2006)
18. "Spatial agglomeration and spill-over analysis for Japanese prefectures during 1991-2000" (Recent Development of Econometrics [Kyoto University], July 16-17, 2006)
19. "Spatial agglomeration and spill-over analysis for Japanese prefectures during 1991-2000" (In-

ternational Valencia Meeting 8 [Benidorm, Spain], June 1-7, 2006)

20. "Spatial Interaction of Bussiness Index in Japan: An Application of Hierarchical Bayes model of Spatial Panel Probit" (MODSIM2005, [Melbourne, Australia], Dec. 12-15, 2005)
21. "Spatial Interaction of Crime Incidents in Japan" (MODSIM2005, [Melbourne, Australia], Dec. 12-15, 2005)
22. "Two-level latent class analysi with Bayesian inference" (Conference on Bayesian Applications and Methods in Marketing, Johannes Kepler University Linz, Sept. 19-21, 2005.
23. "Spatial Interaction of Bussiness Index in Japan: An Application of Hierarchical Bayes model of Spatial Panel Probit" (Japan Economic Association:Chuou University, Tama Campus, Sep. 17-18, 2005)
24. "Spatial Interaction of Bussiness Index in Japan: An Application of Hierarchical Bayes model of Spatial Panel Probit" (Joint Statitical Meeting: Hiroshima Prince Hotel, Sep. 11-14, 2005)
25. "Spatial Interaction of Crime Incidents in Japan" (Joint Statistical Meeting, Mineapolis, [Minnesota, U.S.A.], Aug. 7-11, 2005)
26. "Spatial Interaction of Crime Incidents in Japan" (25th European Meeting of Statisticians, [Oslo, Norway] July 24-28, 2005)
27. "Spatial Interaction of Crime Incidents in Japan" (Workshop on recent advances in modelling spatio-temporal data, University of Southampton, UK, May 25-26, 2005)
28. "Bayesian inference on gradual switching GARCH models : Gibbs sampling approach" , (54th Session of International Statistical Institute Meeting [Berlin, Germany] August 13-20, 2003.)
29. "Using the Durbin-Watson Ratio to Detect a Spurious Regressions: Can We Make a Rule of Thumb?" , in Proceedings of International Environmental Modelling and Software Society (iEMSs), held at University of Lugano, Switzerland [June 24 ∼ 27, 2002].
30. "Bayesian inference on smooth transition GARCH models" , in Seventh Valencia Meeting on Bayesian Statistics held at Tenerife, Canary Island [June 2 ∼ 7, 2002]
31. "Bayesian inference on gradual switching GARCH models : Gibbs sampling approach" , (The International Symposium on Model and Simulation(MODSIM2001)), [ANU Canberra, Australia, Dec.10 ∼ 14, 2001].
32. "Bysiness Cycle Asymmetrics based on Markov Switching Models," (IDA2000,[Innsbruck, 9.18-9.22.2000]
33. "Bayesian inference on gradual switching GARCH models : Gibbs sampling approach" , (68th-Japan Statistical Association[Hokkaido University]: July, 2000)
34. "Bayesian inference on gradual switching GARCH models : Gibbs sampling approach" (The International Society on Bayesian Analysis, [Creta, 5.28-6.2.2000]).
35. "Bayesian inference on gradual switching GARCH models : Gibbs sampling approach" , held at ISM in *The International Symposium on Frontiers of Time Series Modelling*, Feb.7 ∼ 9, 2000.
36. "Bayes Estimation of GARCH model using Gibbs Sampling" Workshop on Bayesian Statistics, University of Tokyo, Janualy, 22
37. "Estimation of exchange rate model under price limits," Institute of Statistics and Econometics(ISO) Seminar, University of Basel, 1999.2.
38. "A Bayesian Non-Parametric Density Estimation of Production Function," (Sixth Valencia International Meeting on Bayesian Statistics [Alcossbra, Spain], May 31 - June 5, 1998.)
39. "A Bayesian Non-Parametric Density Estimation of Production Function," (51th Session of International Statistical Institute Meeting [Istanbul, Turkey], August 18-26, 1997.)
40. "A Bayesian Non-Parametric Density Estimation of Production Function," (The Fifth International Society for Bayesian Analysis Meeting:Istanbul, Turkey, August 16-18, 1997)
41. "Bayesian Non-parametrics estimation of production frontier using micro-data" (65th Japan Statistical Association[Osaka University]: July, 1997)
42. "Recent Developement on Bayesian Econometrics Analysis" Seminar at Tohoku University, February, 1997
43. "A Bayesian Non-Parametric Density Estimation of Production Function," (The Fourth International Society for Bayesian Analysis Meeting: Cape Town, South Africa, December 17-20, 1996)
44. "Recent Developement of Bayesian tatistics" (64th Japan statistical Society Tutorial semi-

nar[Makkuhari messe:Chiba]: September, 1996

45. "A Bayesian Analysis of Unit Root and Cointegraion," (Seventh Econometric Society World Congress [Tokyo, Japan], August 1995.)
46. "A Bayesian Analysis of Unit Root and Cointegraion with an Application to a Yen-Dollar Exchange Rate Model," (Japan Economic Association[Nanzan University]:September,1994
47. "Co-itegration Analysis for Japanese Economy" (62th Japan Statistical Society[ISM]: July, 1994
48. "A Bayesian Analysis of Unit Root and Cointegraion with an Application to a Yen-Dollar Exchange Rate Model," (Fifth Valencia International Meeting on Bayesian Statistics [Alicante, Spain], June 5-9, 1994.)
49. "A Bayesian Analysis of Unit Root and Cointegraion," invited paper for International Symposium on Exploration of Informational Aspects of Bayesian Statistics, [Fuji, Japan] Institute of Statistical Mathmatics, December 1993. and (Econometrics Conference[Hitotsubashi University IER] Janualy, 1994.
50. "A Bayesian Analysis of Unit Root Under Unknown Order of an ARMA(p,q) Error and Application to the Foreign Exachange Rate of Yen, Revised Version" (49th Session of International Statistical Institute Meeting [Firenze, Italy], 1993.)
51. "A Bayesian Method for Detecting Turning Points in Business Cycle" (1st Multinational Riverboat Conference on Bayesian Econometrics and Statistics, Basel-Amsterdam, 1993.)
52. "An Economic Analysis of CO_2 Emission Control" , (International Symposium on Economic Modelling held at Göteborg, Sweeden, 18-20, August 1992.)
53. "Econometrics Application for the Bayesian Statiistics" (Japan Statistical Society[Ishinomaki Sensyuu University]: 1992)
54. "A Bayesian Analysis of Unit Root Under Unknown Order of an ARMA(p,q) Error and Application to the Foreign Exachange Rate of Yen," (Yale-NSF Symposium on 'Bayes Methods and Unit Root' held at April 24-25, 1992, Yale University.
55. " On Productivity Change: Case Study of the Prewar Japanese Cotton Industry," (NBER-TCER Joint Conference of Growth and Development: New Theory and Evidence held at Tokyo JAPAN. Jan. 1992.)
56. " A Bayesian Analysis of Unit Root and Stationarity Hypotheses with an Application to the Exchange Rate for Yen," (Fourth Valencia International Meeting on Bayesian Statistics held at Peniscola, Spain. April 15–20, 1991.)(Japanese Economic Association[Hokkaido Univ.]: 1991).
57. " A Bayesian Analysis of Stationarity and Unit Root Hypotheses" (Seventh Econometric Society World Congress [Barcelona, Spain], August 1990.) (IMS Seminar on Time Series Analysis, 1990.)
58. " Time Varying Parameter SUR Estimation of a Multifactor Asset Pricing Model" (58th Japan Statistical Association[Hokkaido Univ.]: 1990)
59. " Mean Squared Errors of Forecast for Selecting Non-Nested Linear Models and Comparison with Other Criteria" (The Japanese Economic Association[Tsukkuba Univ.]: 1989).
60. "A Measure of Interdependency in the Multiple Time Series Models" , (47th Session of *International Statistical Institute Meeting* [Paris], 1989).
61. "Bayesian Forecasting:Theory and Applications" (Statistical Conference: Bayesian Statistics and its Applications): 1988)
62. "The Role of Statistical Software for Applied Econometric Research and Education" (The fifth Japan and Korea Joint Conference of Statistics[Invited lecture], 80-82, 1988.)
63. "The Role of Statistical Software for Applied Economic Data" (56th Japan Statistical Society [Fukushima Univ.]: 1988)
64. "Time Series Analysis of Macro index" (56th Japan Statistical Society [Fukushima Univ.]: 1988)
65. "The Role of Statistical Software for Applied Econometric Research and Education" (The Fifth Japan-Korea Joint Conference of Statistics:[Tokyo,Japan])
66. "Mean Squared Errors of Forecast for Selecting Non-Nested Linear Models and Comparison with Other Criteria" (Satellite Meeting on *Mathematical Statistics and Probability* for the 46th Session of ISI: *Bernoulli Society* [Kyoto University]: 1987)
67. "Comparing Dimensionality Statistics for the VAR Method" (The Japanese Economic Association[Aoyama-Gakuin Univ.]: 1987)

68. “Comparing Dimensionality Statistics for the VAR Method” (55th Japan Statistical Society [Nanzan Univ.]: 1987)
69. “A Predictive Density Criterion for Selecting Non-Nested Linear Models and Comparison with Other Criteria, ” (*International Symposium on Probability and Bayesian Statistics* held at Innsbruck in Austria, September 23-26, 1986.)
70. “Hypothese testing in Non-Nested model” (54th Japan Statistical Society [Iwate Univ.]: 1986)
71. “Seasonality in Econometric Analysis” (52nd Japan Statistical Society [Tsukuba Univ.]: 1984)
72. “Structural Change Model under Stochastic Constrains and its Application to KLEM Trans-log Model” (52nd Japan Statistical Society [Tsukuba Univ.]: 1984)
73. “Features and Evaluation for Econometrics Software Program” (52nd Japan Statistical Society [Tsukuba Univ.]: 1984)
74. “Gradual Switching Multivariate Regression Models with Stochastic Cross–equational Constraints” (*Econometric Society Winter Meeting* [San Fransisco]:1983 and Sixth Econometric Society World Congress [Boston]: 1985)
75. “Analysis of Japanese Economy by Mulivariate Time Series Model” (51th Japan Statistical Society [Hiroshima Univ.]: 1983)
76. “Time Series Analysis for Japanese Economy” (The Japanese Economic Association[Sophhia Univ.]: 1983)
77. “Factor Substitution and Market Performance in Higher Energy Price” (The Japanese Economic Association[Kyoto Sangyo Univ.]:1982)
78. “Energy Price, Elasticity and Technical Change” (The Japanese Economic Association[Kyoto Sangyo Univ.] : 1982)
79. “Elasticities of energy demand for several industries” (The Japanese Economic Association[Yokohama National Univ.]: 1981)
80. “ Technical change and elasticities of energy on production function” (The Japanese Economic Association[Yokohama National Univ.]: 1981)
81. “elasticities of energy demand for several industries” (49th Japan Satistical Society[Kansai Univ.]:1981)
82. “Technical change and elasticities of energy on production function” (48th Japan Satistical Society[Waseda Univ.] : 1980)