Johan Lyhagen October 10, 2016

Professor

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Academic Degrees

- 1993 BSc, Economics and Statistics, Uppsala University, Sweden.
- 1997 PhD, Statistics, Uppsala University, Sweden.
- 2001 Docent (Associate Professor), Economic Statistics, Stockholm School of Economics.
- 2008 Professor in Statistics with specialization in Econometrics and Time Series Analysis.
- 2010 Professor, chair in statistics

Employment

- Research Fellow, Department of Statistics, Uppsala University, Feb 1997-Jun 1997.
- Research Fellow, Department of Economic Statistics, Stockholm School of Economics, Jul 1997 – Jun 2002
- Visiting Scholar, Faculty of Economics and Politics, Cambridge University, and visiting member Darwin College, Cambridge, Jul 1999-Jun 2001.
- Senior Lecturer, Department of Information Science, Division of Statistics, Uppsala University, Jul 2002 – Oct 2008.
- Professor in Statistics, specializing in Econometrics and Time Series Analysis, Nov 2008 -2010.
- Professor, chair in statistics, 2010 -
- On parental leave autumn 2004.
- On parental leave November 2006 – Mars 2007.
- Director of Graduate Studies, April 2007-2011.
- Member of Faculty board, July 2008 –June 2011.
- Deputy Head of department, 2010-07-01 – 2010-12-31
- Head of the department 2011-07-01 –
- Head of the commissariat Ekonomikum 2014-07-01 –
- Professor II, NHH, Bergen, Norway, 2015-07-01-

Referee for Journals

- Applied Economics
- Applied Economics Quarterly
- Canadian Journal of Statistics
- CESifo Economic Studies
- Communications in Statistics: Simulation and Computation
- Computational Economics
- Computational Statistics and Data Analysis
- Contemporary Economics
- Econometric Reviews
- Econometrics Journal
- Economic Inquiry
- Economic Modelling
- Economics Letters
- Emerging Markets Finance and Trade
- Empirical Economics
- Engineering with Computers
- Högre utbildning
- International Economic Journal
- International Journal of Aviation Management
- International Journal of Forecasting
- International Journal of Fuzzy Computation and Modelling
- International Review of Law and Economics
- Journal of Applied Econometrics
- Journal of Applied Statistics
- Journal of Business and Economic Statistics
- Journal of Economics and Statistics
- Journal of Multivariate Analysis
- Journal of Public Economics
- Journal of Statistical Computation and Simulation
- Journal of Statistical Planning and Inference
- Metrika
- Oxford Bulletin of Economics and Statistics
- PLOS ONE
- Portuguese Economic Journal
- Psychometrika
- Scandinavian Journal of Economics
- Statistical Methodology
- Statistical Papers
- Statistics
- Structural Equation Modeling
- Studies in Nonlinear Dynamics & Econometrics
- Test
- The Annals of Regional Science
- Urban Affairs Review

Referee for the annual conference *The International Symposium on Symbolic and Algebraic Computation 2008.*

Referee for *BIR 2011, the 10th International Conference on Perspectives in Business Informatics Research*

Co-editor 2007- 2011 of Qvintensen (former Qvartilen) which is the journal of the Swedish Statistical Association.

Referee for Positions

- Two lecturers in statistics, Dalarna University, 2005.
- A lecturer in statistics, the Swedish University of Agricultural Sciences, 2007.
- Adjunct lecturer (swe: biträdande lekotrat), Örebro University, 2008.
- Research associate (swe: forskarassistent), Umeå University, 2008.
- A lecturer in statistics, Örebro University, 2009.
- A lecturer/full professor, BI, Norway, 2010.
- External evaluation of quality of research at Linneus University, 2010 and 2012.
- A lecturer in statistics, Linneus University, 2011.
- Docent (associate professor) at Stockholm School of Economics, 2011.
- Adjunct lecturer (swe: biträdande lekotrat), Gothenburg University, 2011.
- A lecturer in statistics, Umeå University, 2012.
- A lecturer, BI, Norway, 2012.
- Docent in economics (associate professor) at Lund University, 2013.
- Professor in Econometrics, JIBS, 2014.
- Docent in Statistics, Linneus University, 2015.

Other Professional Activities

Member of the Evaluation Board of the PhD candidates:

- Gianluigi Rech, “Modelling and Forecasting Economic Time Series with Single Hidden-Layer Feedforward Autoregressive Artificial Neural Networks”, Stockholm School of Economics, 2002.
- Mikael Carlsson, "Macroeconomic Fluctuations and Firm Dynamics: Technology, Production and Capital Formation", Uppsala University, 2002.
- Bharat Barot, "Empirical studies in Consumption, House Orices and the Accuracy of European Growth and Inflation Forecasts", Uppsala University, 2003.
- Anders Holmberg, "Essays on Model Assisted Survey Planning", Uppsala University, 2003 (Chaired the committee).
- Magnus Lundin, "The Dynamic Behaviour of Prices and Investment: Financial Constraints and Customer Markets", Uppsala University, 2003.
- Mattias Bruér, "Empirical Studies in Demography and Macroeconomics", Uppsala University, 2004.
- Hans Malmsten, "Properties and evaluation of volatility models", Stockholm School of Economics, 2004.
- Iida Häkkinen, "Essays on School Resources, Academic Achievement and Student Employment", Uppsala University, 2004.

- Anders Eriksson, "Essays on Gaussian Probability Laws with Stochastic Means and Variances - With Applications to Financial Economics ", Uppsala University, 2005 (Chaired the committee).
- Jie Chen, "Empirical Essays on Housing Allowance, Housing Wealth and Aggregate Consumption", Uppsala University, 2005.
- A.M.M. Shahiduzzaman Quorechi, "Time Series Modelling of High Frequency Stock Transaction Data ", Umeå University, 2006.
- Eleni Savvidou, "Technology, Human Capital and Labor Demand", Uppsala University, 2006.
- Martin Ågren, "Essays on Prospect Theory and the Statistical Modeling of Financial Returns", Uppsala University, 2006.
- Carl Oreland, "Family Control in Swedish Public Companies: Implications for Firm Performance, Dividends and CEO Cash Compensation", Uppsala University, 2007.
- Joachim Landström, "The theory of Homo comperiens, the firm's market price, and the implication for a firm's profitability", Uppsala University, 2007.
- Jiri Novak, "On the Importance of Accounting Information for Stock Market Efficiency", Uppsala University, 2008.
- Johannes Forkman, "Optimal Calibration in Immunoassay and Inference on the Coefficient of Variation", SLU, 2008 (standby member).
- Carl Lönnbark, "On Risk Prediction", Umeå University, 2009.
- Mathias Lundin, "Sensitivity analysis of untestable assumptions in causal inference", Umeå University, 2011.
- Yushu Li, "Essays on Statistical Testing using Wavelet Method"**,** Linnaeus University, 2011.
- Zangin Zeebari, "On Median and Ridge Estimation of SURE models", Jönköping International Business School, 2012.
- Myrsini Katsikatsou, "Composite likelihood estimation for latent variable models with ordinal and continuous, or ranking variables", Uppsala University, 2013.
- Göran Österholm, "Essays on Managerial Compensation", Uppsala University 2013.
- Pia Fromlet, "Essays on Inflation Targeting and Export Price Dynamics", Uppsala University 2013.
- Arizo Karimi, "Impacts of Policies, Peers and Parenthood on Labor Market Outcomes", Uppsala University 2014.
- Karolina Stadin, "Employment Dynamics", Uppsala University 2014.
- Haishan Yu, "Essays on Environmental and Energy Economics", Uppsala University 2014.
- Rafael de Rezende, "Essays on Macro-Financial Linkages", Stockholm School of Economics 2014"
- Yuwei De Gosson De Varennes, "Benefit Design, Retirement Decisions and Welfare Within and Across Generations in Defined Contribution Pension Schemes", Uppsala University 2016.
- Milda Norkute, "A factor analytical approach to dynamic panel data models", Lund University 2016.
- Ratchar Nilavongse, "Housing, Banking and the Macro Economy", Uppsala University 2016.

Thesis advisor for:

- Ulla Romild, (2006) Essays on Distance Based (Non-Euclidean) Tests for Spatial Clustering in Inhomogeneous Populations – Adjusting For the Inhomogeneity through the Distance Used.
- Andreas Karlsson, (2006) Estimation and Inference for Quantile Regression
- Iris J. Y. Wang, (licentiate degree 2007), Non-Parametric Statistics in the Context of Program Evaluation
- Petra Ornstein (licentiate degree 2012) On Spearman's rank correlation as a dependency measure for ordinal variables with finite support
- Xingwu Zhou (2014) Likelihood-Based Panel Unit Root Tests for Factor Models
- Ronnie Pingel (2014) Some aspects of propensity score-based estimators for causal inference
- Sebastian Andersson

Assisting thesis advisor for:

- Mårten Löf, (2001) On Seasonality and Cointegration.
- Niklas Korsell, (2006) Statistical Properties of Preliminary Test Estimators.
- Daniel Preve, (2008) Essays on Time Series Analysis: With Applications to Financial Econometrics
- Luo Hao, (2011) Some Aspects on Confirmatory Factor Analysis of Ordinal Variables and Generating Non-normal Data.
- Johanna Rickne (Economics, 2011) Essays on Development, Institutions and Gender.
- Katrin Kraus, (2012) On the Measurement of Model Fit for Sparse Categorical Data.
- Martin Solberger, (2013) Likelihood-Based Tests for Common and Idiosyncratic Unit Roots in the Exact Factor Model.
- Xijia Liu, (2014) On Non Parametric Regression and Panel Unit Root Testing.
- David Kreiberg
- Johan Grip (economics)

Discussant at licenciate seminars:

- Abdullah Almasri (Göteborg University), 2000.
- Martin W Johansson (Lund University), 2001.
- Kristian Jönsson (Lund University), 2003.
- Zangin Zeebari (Växjö University), 2009.
- Dao Li, (Örebro University), 2011.
- Xiangli Meng, (Örebro University), 2013.
- Sofia Normark (Stockholm University), 2013.

Discussant at Final seminars:

- Hans Byström's Ph.D. thesis (Lund University), 2000.
- Andreas Graflund's Ph.D. thesis (Lund University), 2001.
- Pär Österholm's Ph.D. thesis (Uppsala University), 2004.
- Kristian Jönsson's Ph.D. thesis (Lund University), 2004.
- Joakim Westerlund's Ph.D. thesis (Lund University), 2005.
- Yushu Li's Ph.D. thesis (Linnaeus University), 2010.
- Zangin Zeebari's Ph.D. thesis (Jönköping University), 2011.
- Dao Li's Ph.D. thesis (Örebro University), 2013.

Other Activities

Member of the committee for Minor Field Studies, joint with Department of Economics, 2006-2011.

Treasurer Darwin College Boat Club, Cambridge, 2000/2001.

Expert witness, county administrative court and Swedish administrative court of appeals (länsrätt respective kammarrätt), six times.

President of the nursery school Nyponet, 2008-2009.

Elector, The Swedish Research Council (Vetenskapsrådet), 2009, (alternate member 2012).

External reviewer, The Swedish Research Council,

- Projects 2006, 2007, 2009 and 2010.
- National PhD program, 2007.

Member of the Swedish National Agency for Higher Education (HSV) Evaluation Committee of the education of the subject Statistics, 2012-2013 and the follow up evaluation in 2014.

Teaching experience and Courses

- 2002 University Training Course for Web Based Teaching, corresponds to two days of full time training.
- 2004 University Teacher Training Course, corresponds to four weeks of full time training.
- 2005 University Supervisor Training Course, corresponds to three weeks of full time training.

- 2011 Legal issues for university teachers, corresponds to one half day of full time training.
- 2011 A two day course in Labour Law.
- 2011 A two day course in University accounting.
- 2011 A two day course in Laws related to the universities.
- 2012 The nine days course Base program for university executives

Publications of Johan Lyhagen

Doctoral Thesis

Lyhagen, J. (1997) Essays on Univariate Long Memory Models. Acta Universitatis Upsaliensis, Comprehensive Summaries of Uppsala Dissertations from the Faculty of Social Sciences, 60, Almqvist & Wiksell International, Stockholm.

Papers in Refereed Journals

1. Lyhagen, J. (1997) A matrix evaluation of the moving average representation. Economics Letters 55, 2, 179-183.
2. Berg, L. and Lyhagen, J. (1998) Short and long run dependence in Swedish stock returns. Applied Financial Economics 8, 435-443.
3. Lyhagen, J. (1999) Identification of the order of a fractionally differenced ARMA model. Computational Statistics 14, 2.99, 161-169.
4. Oké, T. and Lyhagen, J. (1999) Small-sample properties of some tests for unit root with data-based choice of the degree of augmentation. Computational Statistics and Data Analysis 30, 4, 457-469.
5. Andersson, M., Eklund, B. and Lyhagen, J. (1999) A Simple Linear Time Series Model with Misleading Nonlinear Properties. Economics Letters 65, 3, 281-284.
6. Lyhagen, J. (2001) The effect of precautionary saving on consumption in Sweden. Applied Economics 33, 673-681.
7. Lyhagen, J. and Forsberg, L. (2001) Starting values in estimation of cointegrating vectors with restrictions. Applied Econmics Letters 8, 521-524.
8. Larsson, R., Lyhagen, J and Löthgren, M. (2001) Likelihood based cointegration tests in heterogenous panels. Econometrics Journal 4, 109-142.
9. Löf, M. and Lyhagen, J. (2002) Forecasting performance of seasonal cointegration models. International Journal of Forecasting 18, 31-44.
10. Lyhagen, J. and Löf, M. (2003) On seasonal error correction when the processes include different numbers of unit roots. Journal of Forecasting 22, 377-389.
11. Lyhagen, J. (2005) The Exact Covariance Matrix of Dynamic Models with Latent Variables. Statistics and Probability Letters 75, 133-139.
12. Lyhagen, J. (2006) The seasonal KPSS statistic. Economics Bulletin 3(13), 1-9.
13. Lyhagen, J. (2007) Estimating Non-Linear Structural Models: EMM and the Kenny-Judd Model. Structural Equation Modeling: A Multidisciplinary Journal 14, 391-403.
14. Larsson, R. and Lyhagen, J. (2007) Inference in panel cointegration models with long panels. Journal of Business & Economic Statistics 25, 473-483.
15. Jacobson, T., Lyhagen, J., Larsson, R. and Nessén, M. (2008) Inflation, exchange rates and PPP in a multivariate panel cointegration model. Econometrics Journal 11, 58-79.
16. Lyhagen, J. (2008) Why not use standard panel unit root test for testing PPP. Economics Bulletin 3 (26), 1-11.

17. Lyhagen, J. (2008) A method to generate multivariate data with the desired moments. Communications in Statistics - Simulation and Computation 37, 2063-2075.
18. Lyhagen, J. (2012) A note on the representation of E(x⊗xx’) and E(xx’⊗ xx’) for the random vector x. Statistical Papers 53(3), 697-701.
19. Lyhagen, J. and Kraus, K. (2013) The small sample performance of estimators of the standard errors of structural equation models. Journal of Statistical Computation and Simulation 83(3), 458-471.
20. Lyhagen, J. and Rickne, J. (2014) Income inequality between Chinese regions: newfound harmony or continued discord? Empirical Economics 47 (1), 93-110.
21. Eidestedt, R., Ekberg, S. and Lyhagen, J. Beating the VAR: Improving Swedish GDP forecasts using error and intercept corrections, forthcoming Journal of Forecasting
22. Ander, M., Grönqvist, H., Cernvall, M., Engvall, G., Hedström, M., Ljungman, G., Lyhagen, J., Mattsson, E., *and* von Essen, L. *(*2015*)* Development of health-related quality of life and symptoms of anxiety and depression among persons diagnosed with cancer during adolescence: a 10-year follow-up study. Psycho-Oncology, forthcoming
23. Öst, J., Lyhagen, J. and Reggiani, A.(2016) A new way of determining distance decay parameters in spatial interaction models with application to job accessibility analysis in Sweden, European Journal of Transport and Infrastructure Research, 16 (2), 344-362.
24. Ornstein, P. Lyhagen, J. (2016) Asymptotic properties of Spearman's rank correlation for variables with finite support, PLoS ONE 11(1).
25. Lyhagen, J., Larsson, R., Westerlund, J. (2016) Likelihood Ratio Tests for a Unit Root in Panels with Random Effects. Statistics, forthcoming

Non-refereed publications:

1. Lyhagen, J. (2006) Är statistiker lata? Qvartilen, 21, 3.
2. Lyhagen, J. and Kraus, K. (2007) Sommartider – konferenstider. Qvartilen, 22, 3.