

Curriculum vitae Marius Ooms, July 2010

Dr. Marius Ooms
Department of Econometrics
VU University Amsterdam
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Education:

- Doctorate: Erasmus University Rotterdam, 1993, Title: Empirical Vector Autoregressive Modeling, Dissertation committee: Teun Kloek (chair), Franz Palm, Jan Kiviet, Herman van Dijk
Other members: Eduard Bomhoff, Jan de Gooijer.
- MSc Econometrics, University of Amsterdam, 1985, MSc advisor: Jan Kiviet

Current and former positions:

Associate Professor in Econometrics, Department of Econometrics, VU University Amsterdam
2007-present.

Lecturer in Econometrics, Department of Econometrics, VU University Amsterdam
2000-present.

Lecturer in Econometrics, Econometric Institute Erasmus University Rotterdam
1991-2000.

Research Officer, Econometric Institute Erasmus University Rotterdam, 1990-1991.

Research Officer, Netherlands Organization for Scientific Research, 1986-1989, Project: ‘‘An econometric study for a number of macroeconomic relationships for the Netherlands’’.

Research Assistant, University of Amsterdam, department of Macroeconomics, 1985.

Research Areas

Time series econometrics: theory and practice, decomposition methods, forecasting, state space methods, long memory, macroeconometrics, inflation modelling, electricity market dynamics, crime dynamics, political time series analysis. Econometric computing, econometric software development, econometrics and internet.

Teaching experience

Econometrics and time series analysis:

Lectures in introductory and advanced econometrics, financial econometrics, time series analysis and forecasting for undergraduates, graduates, Ph.D. students and postgraduate students in economics, for undergraduates, graduates and PhD students in econometrics and for undergraduates in mathematics, at Erasmus University Rotterdam, VU University Amsterdam, Utrecht University and Tinbergen Institute Amsterdam.

Seminars in introductory econometrics, advanced econometrics, financial econometrics, econometric programming and applied econometrics for undergraduate econometrics students at Erasmus University Rotterdam and VU University Amsterdam.

MSc and BSc thesis supervision for econometrics undergraduates and graduates.

Mathematics and Statistics:

Tutorials in introductory mathematics and statistics for undergraduates in economics and business administration at VU University Amsterdam.

PhD Supervision

Geert Mesters (2009-): Modeling criminal careers through non-Gaussian dynamic factor models
With Siem Jan Koopman and Catrien Bijleveld

Virginie Dordonnat (2006-2009): High frequency time series modelling of French electricity loads.
Promotores VU University Amsterdam. Promotores: Siem Jan Koopman and Marius Ooms.

Irma Hindrayanto (2004-...): Identification, Estimation, and Testing of Panel Time Series with
Unobserved Components, Ph.D. to be completed VU University Amsterdam. Promotores: Siem Jan
Koopman and Marius Ooms.

Reza Anglingkusomo, (2001-2005): 'Preparatory studies for inflation targeting in post crisis
Indonesia', Ph.D. VU University Amsterdam. Promotores: Aage Bakker and Marius Ooms.

Charles S. Bos, (1996-2001): 'Time varying Parameter Models for Inflation and Exchange rates.' Ph.D.
Erasmus University Rotterdam (2001). Supervision Chapters 2 –3, member reading committee.
Promotores: Herman K. van Dijk and Philip Hans Franses.

Member of PhD Committee

Hugo Kruiniger (1996), Maastricht University.
Rob Luginbuhl (2001), VU University Amsterdam
Charles Bos (2001), Erasmus University Rotterdam
Eugenie Hol (2002), University of Birmingham
Michael Pedersen (2003), European University Institute, Florence
Frits Bijleveld (2003), VU University Amsterdam
Suncica Vujic (2009), VU University Amsterdam
Borus Jungbacker (2010), VU University Amsterdam

Fellowships

Fellow Tinbergen Institute (1999-2006)

Grants

3 year PhD research contract (75.000 Euros + salary PhD student) from Électricité de France for time
series modelling of hourly electricity loads. (2006-2009), principal researcher: Virginie Dordonnat,
Supervision: Siem Jan Koopman, Marius Ooms and Alain Dessertaine.

6 month consultancy contract Électricité de France (33.600 Euros) for time series modelling of daily
electricity loads, researchers (2004-2005): Maarten van Kampen, Siem Jan Koopman and Marius
Ooms

VU University and Tinbergen Institute, "Identification in reduced rank panel time series models"
(2003-2007), Irma Hindrayanto, principal researcher, Supervision: Siem Jan Koopman, Marius Ooms

VU University and Tinbergen Institute, "Econometric Analysis of Weekly and Intra-Weekly Time
Series", (2000-2003). , principal researcher : Kai Ming Lee. Supervision: Prof. Siem Jan Koopman.

Eramus University and Tinbergen Institute, "Stability of long-term economic relations" (1996-2001),
Charles Bos principal researcher, Supervision: Herman van Dijk, Philip Hans Franses Marius Ooms

Minstry of Finance 1999, "Estimation of money flows on a daily basis"
Principal investigators, dr. Marius Ooms, with dr. Siem Jan Koopman.

Ministry of Finance, 1998, "Econometric improvement of treasury balance forecasting".
Principal investigators, dr. Marius Ooms, with dr. Siem Jan Koopman.

Publications

Articles in Refereed Journals

A

Koopman, S. J., M. Ooms, and A. M. Carnero (2007). Periodic seasonal Reg-ARFIMA-GARCH models for daily electricity spot prices. *Journal of the American Statistical Association* 102, 16–27

Ooms, M. and Franses, P. H (1997), "On Periodic Correlations Between Estimated Seasonal and Nonseasonal Components in German and U.S. Unemployment", *Journal of Business and Economic Statistics*, 15, 470-481.

B

Hindrayanto, I., Koopman, S. J., and Ooms, M. (2010), Exact maximum likelihood estimation for non-stationary periodic time series models, *Computational Statistics & Data Analysis* 54, 2641-2654.

Appeared online.

Koopman, S. J., M. Ooms, and I. Hindrayanto (2009). Periodic unobserved cycles in seasonal time series with an application to U.S. unemployment. *Oxford Bulletin of Economics and Statistics* 71, 683–713.

Doornik, J. A. and M. Ooms (2008). Multimodality in GARCH regression models. *International Journal of Forecasting* 24, 432–449.

Dordonnat, V., S. J. Koopman, M. Ooms, A. Dessertaine, and J. Collet (2008). An hourly periodic state space model for modelling French national electricity load. *International Journal of Forecasting* 24, 566–587.

Koopman, S. J., A. Lucas, M. Ooms, K. Van Montfort, and V. Van der Geest (2008). Estimating systematic continuous-time trends in recidivism using a non-Gaussian panel data model. *Statistica Neerlandica*, 62, 104-130

Koopman, S. J. and M. Ooms (2006). Forecasting daily time series using periodic unobserved components time series models. *Computational Statistics & Data Analysis* 51, 885–903.

Marius Ooms, Jurgen A. Doornik (2006). Econometric software development: past, present and future *Statistica Neerlandica* 60 (2), 206–224.

Hobijn, B., P. H. Franses, and M. Ooms (2004). Generalizations of the KPSS-test for stationarity. *Statistica Neerlandica* 58, 483–502.

Koopman, S. J. and M. Ooms (2003). Time series modelling of daily tax revenues. *Statistica Neerlandica* 57, 439–469.

Doornik, J. A. and M. Ooms (2003). Computational aspects of maximum likelihood estimation of autoregressive fractionally integrated moving average models. *Computational Statistics & Data Analysis* 42, 333–348.

Bos, C. S., P. H. Franses, and M. Ooms (2002). Inflation, forecast intervals and long memory regression models. *International Journal of Forecasting* 18, 243–262.

Bos, C. S. and Franses, P. H. B. F. and Ooms, M. (1999), "Long Memory and Level Shifts: Reanalyzing Inflation Rates", *Empirical Economics* 24, 427–449 (1999).

Eisinga, R., Franses, P. H. and Ooms, M., (1999), Forecasting long memory right-left political orientations, *International Journal of Forecasting*, 15, 185–199.

Franses, P. H. and Ooms, M. (1997), "A Periodic Long Memory Model for Quarterly UK Inflation", *International Journal of Forecasting*, 13, 119–128.

Ooms, M. and Hassler, U. (1997), "On the Effect of Seasonal Adjustment on the Log-periodogram Regression", *Economics Letters*, 56, 135–141.

C

Dordonnat, V., S. J. Koopman, and M. Ooms (2010). Intradaily smoothing splines for time-varying regression models of hourly electricity load. *Journal of Energy Markets* 3, 17–52

Dordonnat, V., S. J. Koopman, and M. Ooms (2009). Dynamic factors in state-space models for hourly electricity load signal decomposition and forecasting. *Power Engineering Society General Meeting (PES) July 26–30, 2009, Calgary* -, 1–8
DOI:10.1109/PES.2009.5275885.

Doornik, J. A. and M. Ooms (2004). Inference and forecasting for ARFIMA models with an application to US and UK inflation, *Studies in Nonlinear Dynamics & Econometrics*, 8(2), Article 14, <http://www.bepress.com/snede/vol8/iss2/art14>.

Gras, H., P. H. Franses, and M. Ooms (2003). Did men of taste and civilization save the stage? Theater-going in Rotterdam, 1860–1916. a statistical analysis of ticket sales. *Journal of Social History* 36, 615–655.

Ooms, M. and P. H. Franses (2001). A seasonal periodic long memory model for monthly river flows. *Environmental Modelling & Software* 16, 559–569.

Ooms, M. and Van Dijk, H. K. (1994), "Comment on "Estimating Systems of Trending Variables: Estimating Pushing Trends and Pulling Equilibria", *Econometric Reviews*, 13, 395–422.

Books

Ooms, M. (1994), "Empirical Vector Autoregressive Modeling", Springer-Verlag, Berlin.

Doornik, J. A. and Draisma, G. and Ooms, M. (1998), "Introduction to Ox, an Object-Oriented Matrix Programming Language", Timberlake Consultants Press, London, U.K.,

Doornik, J. A. and Ooms, M. (2006), "Introduction to Ox : an Object-Oriented Matrix Programming Language", Timberlake Consultants Press, London, U.K.. Edition for Ox 4.

Articles in books

Ooms, M. (2009). Trends in applied econometrics software development 1985–2008. In K. Patterson and T. Mills (Eds.), *Palgrave Handbook of Econometrics Volume 2: Applied Econometrics*, pp. 1321–1347, Basingstoke, U.K.: Palgrave Macmillan.

Koopman, S. J. and M. Ooms (2002). Periodic structural time series models: Estimation and forecasting with application. In Y. Kawasaki (Ed.), Proceedings of the 3rd International Symposium on Frontiers of Time Series Modeling: Modeling Seasonality and Periodicity, Institute of Statistical Mathematics, Tokyo, Japan, January 2002, pp.151–172. Institute of Statistical Mathematics, Tokyo, Japan.

Kloek, T. and Ooms, M. (1997), "National Accounts and Time Series Analysis"
In: "The valued added of national accounting: Commemorating 50 years of national accounts in the Netherlands", pp. 209-226, Editors: De Vries, W.F.M. and Den Bakker, G.P. and Gircour, M.B.G. and Keuning, S.J. and Lenson, A, Statistics Netherlands, Voorburg, The Netherlands

Ooms, M. (1997), "Comment on Data Transformations and De-trending and Econometrics", in: "System Dynamics in Economic and Financial Models", Chapter 11, pp. 346-350
Editors: Heij, C. Schumacher, H., Hanzon, B. and Praagman, C., Wiley and Sons, Chichester, U.K.,

Eisinga, R. and M. Ooms (2007). Convergence and persistence of left-right political orientations in the netherlands 1978-1995. In G. Loosveldt, M. Swyngedouw, and B. Cambr'e (Eds.), Measuring Meaningful Data in Social Research, Leuven, Belgium, pp. 53–70. Acco, Leuven, Belgium.

Book reviews and software reviews:

Ooms, M. (1999), "Review of SsfPack 2.2: Statistical Algorithms for Models in State Space", The Econometrics Journal, 2, 76-81 (1999).

Ooms, M. (2000), Review of Akaike, H.; Kitagawa, G., (Eds.): The Practice of Time Series Analysis, Kwantitatieve Methoden (2000), 21, 168–170.

Unpublished Working papers

Dordonnat, V, S.J. Koopman, M. Ooms, A. Dessertaine and J. Collet (2008), [An Hourly Periodic State Space Model for Modelling French National Electricity Load](#), Collet Tinbergen Institute Discussion Paper # 08-008/4

Koopman, S. J., M. Ooms, and I. Hindrayanto (2006). Periodic unobserved cycles in seasonal time series, identification and estimation. Paper Discussion paper TI 2006-101/4, Tinbergen Institute Amsterdam, The Netherlands. Revised and Submitted.

Doornik, J. A. and Ooms, M. (2006), "A Package for Estimating, Forecasting and Simulating Arfima Models: Arfima package 1.1 for Ox", Working paper, Nuffield College, Oxford, UK.

Doornik, J. A. and M. Ooms (2005). Outlier detection in GARCH models. Discussion Paper 05-92/4, Tinbergen Institute Amsterdam. Submitted.

Doornik, J.A. and Ooms, M. (2003), Multimodality in the GARCH regression model, by (.pdf), Nuffield College Economics Working paper 2003-W20. Revised.

Ooms, M. (1995), "Flexible Seasonal Long Memory and Economic Time Series", Econometric Institute Report No. 9515/A, Erasmus University Rotterdam, presented at World Congress Econometric Society 1995, Tokyo.

Editorial Activities:

Software Reviews editor of The Econometrics Journal of the Royal Economic Society, 2007-...
Econometric Links editor of The Econometrics Journal, <http://econometriclinks.com>, 1998-...
Member Netherlands Econometric Study Group organizing and programme committee 2005-...

University Management and Administration:

Member Lustrum committee Faculty of Economics and Business Administration, VU University Amsterdam (2008)

Member Library committee Faculty of Economics and Business Administration, VU University Amsterdam (2007-...)

Member Library committee Faculty of Economics, Erasmus University (1995-2000)

Student advisor cohort 2000, Econometrics and Operations Research, VU University Amsterdam (2001-2007)

Member exam committee Business Administration, VU University Amsterdam (2000-2006)

Member exam committee Econometrics and Operations Research VU University Amsterdam (2002-...)

Referee for

Biometrika, Journal of Econometrics, The Econometrics Journal, Econometric Reviews, Economic Modelling, Oxford Bulletin of Economics and Statistics, Journal of Applied Econometrics, Computational Statistics and Data Analysis, Studies in Nonlinear Dynamics and Econometrics, Journal of Financial Econometrics, International Journal of Forecasting, Journal of Empirical Finance, Journal of Business and Economic Statistics, Journal of the Royal Statistical Society, Series B, Statistica Neerlandica, Statistical Papers, Computational Economics, The Manchester School, Oxford Economic Papers, Empirical Economics, Louvain Economic Review, Journal of Statistical Planning and Inference, Scandinavian Journal of Statistics, European Journal of Agricultural Economics, Economics Bulletin.