

## CURRICULUM VITAE

**Name:** Helmut Lütkepohl  
**Date of Birth:** July 26, 1951  
**Citizenship:** German  
**Address:** DIW Berlin  
 Mohrenstr. 58  
 10117 Berlin, Germany  
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**Education**

<i>Institution</i>	<i>Degree</i>	<i>Year</i>	<i>Field</i>
University of Bielefeld	Diplom (Masters)	1977	Mathematics
University of Bielefeld	Doctorate	1981	Economics
University of Osnabrück	Habilitation	1984	Statistics and Econometrics

**Academic Experience**

1979 - 1981 Junior teaching and research position, Department of Economics, University of Bielefeld, Germany

1981 - 1984 Teaching position, Department of Economics, University of Osnabrück, Germany

1984/85 Visiting Assistant Professor, Department of Economics, University of California, San Diego, U.S.A.

1985 - 1987 Professor of Statistics, Department of Economics, University of Hamburg, Germany

1987 - 1992 Professor of Statistics, Faculty of Economic and Social Sciences, University of Kiel, Germany

1992 - 2005 Professor of Econometrics, School of Economics and Business Administration, Humboldt University Berlin, Germany

2002 - 2011 Professor of Econometrics at the European University Institute, Florence, Italy (on leave from the Humboldt University until 2005)

2012 - 2016 Dean of the Graduate Center of the German Institute for Economic Research and Bundesbank Professor at the Freie Universität Berlin

since 2017 DIW Berlin and Visiting Professor at the Freie Universität Berlin

## Research Interests

Univariate time series analysis.  
Multivariate time series analysis.  
Forecasting methods.  
Aggregation.  
Transmission of monetary policy.

## Teaching

### *Undergraduate Courses*

Introductory statistics.  
Introductory econometrics.

### *Graduate Courses*

Econometric methods (different levels and courses).  
Econometric projects (econometric applications).  
Univariate time series.  
Multiple time series analysis.  
Multivariate methods.  
Sampling methods.  
Time series econometrics.

## Doctoral Thesis Supervision

Dr. Hans-Eggert Reimers, year of degree 1991

Thesis title: *Analyse kointegrierter Variablen mittels vektorautoregressiver Modelle.*

Dr. Uwe Jensen, year of degree 1992

Thesis title: *Herleitung, Berechnung und ökonomische Anwendung von Rao-Distanzen.*

Dr. Holger Claessen, year of degree 1995

Thesis title: *Spezifikation und Schätzung von VARMA-Prozessen unter besonderer Berücksichtigung der Echelon-Form.*

Dr. Helmut Herwartz, year of degree 1995

Thesis title: *Analyse saisonaler Zeitreihen mit Hilfe periodischer Zeitreihenmodelle.*

Dr. Hans-Martin Krolzig, year of degree 1996

Thesis title: *Markov-Switching Vector Autoregressions.*

Dr. Martin Moryson, year of degree 1998

Thesis title: *Testing for Random Walk Coefficients in Regression and State Space Models.*

Dr. Kirstin Hubrich, year of degree 1999

Thesis title: *Cointegration Analysis of a German Monetary System.*

Dr. Holger Bartel, year of degree 1999  
Thesis title: *Specifying and Analyzing Multiple Time Series Models.*

Dr. Maike Burda, year of degree 2001  
Thesis title: *Testing for Causality with Wald Tests under Nonregular Conditions.*

Dr. Christian Müller, year of degree 2001  
Thesis title: *Money Demand in Europe: An Empirical Approach.*

Dr. Alexander Benkwitz, year of degree 2002  
Thesis title: *The Software JMulTi: Concept, Development, and Application in VAR Analysis.*

Dr. Carsten Trenkler, year of degree 2002  
Thesis title: *Testing for the Cointegrating Rank in the Presence of Level Shifts.*

Dr. Ralf Brüggemann, year of degree 2003  
Thesis title: *Model Reduction Methods for Vector Autoregressive Processes.*

Dr. Markus Krätzig, year of degree 2005  
Thesis title: *A Software Framework for Data Based Analysis.*

Maria Eleftheriou, Ph.D., year of degree 2006  
Thesis title: *Empirical Essays on Interest Rate Rules.*

Dejan Krusec, Ph.D., year of degree 2006  
Thesis title: *Structural Vector Error Correction (SVEC) Models for Fiscal and Monetary Policy Analysis.*

Sebastian Watzka, Ph.D., year of degree 2007  
Thesis title: *Essays in Applied Macroeconometrics.*

Christian Kascha, Ph.D., year of degree 2007  
Thesis title: *Three Essays in Time Series Econometrics.*

Georgios Alaveras, Ph.D., year of degree 2009  
Thesis title: *Convergence in Europe: An Alternative Methodology.*

Katarzyna Maciejowska, Ph.D., year of degree 2010  
Thesis title: *Identification and Estimation of Sources of Common Fluctuations: New Methodologies and Applications.*

Michał Markun, Ph.D., year of degree 2011  
Thesis title: *Bayesian Vector Autoregressive Analysis.*

Andrei Sirchenko, Ph.D., year of degree 2012  
Thesis title: *A Discrete Choice Econometrician's Tale of Monetary Policy Identification and Predictability.*

Tomasz Woźniak, Ph.D., year of degree 2012  
Thesis title: *Granger-Causal Analysis of Conditional Mean and Volatility Models.*

Aleksei Netšunajev, Ph.D., year of degree 2013

Thesis title: *Structural Vector Autoregressions with Markov Switching: Identification via Heteroskedasticity.*

Anton Velinov, Ph.D., year of degree 2013

Thesis title: *On Using Markov Switching Time Series Models to Verify Structural Identifying Restrictions and to Assess Public Debt Sustainability.*

Dr. Maximilian Podstawski, year of degree 2016

Thesis title: *Unconventional Identification in Vector Autoregressive Models: Empirical Essays on Credit, Risk and Uncertainty.*

Dr. Benjamin Beckers, year of degree 2017

Thesis title: *Booms and Busts in Asset Prices: Risk Modeling, Bubble Detection, and the Role of Monetary Policy.*

### **Major Administrative Duties**

Member of the Faculty Committee (various terms in Kiel and Berlin).

Chairman of the Examination Committee, University of Kiel 1991/92.

Member of the Academic Senate, Humboldt University Berlin 1994/95.

Dean of the School of Economics and Business Administration, Humboldt University Berlin 1998 - 2000.

Head of the Economics Department, European University Institute, Florence, 2006 - 2008.

Dean of the DIW Graduate Center, Berlin, 2012 - 2016.

### **Service to the Profession and Related Activities**

Associate Editor of the *Journal of Econometrics* (1992-1997), *Econometric Theory* (1994-2011), *Econometric Reviews* (1996-2004), the *Journal of Applied Econometrics* (1998-2006), *Empirical Economics* (since 1998), *Macroeconomic Dynamics* (1997-2014), *CESifo Economic Studies* (since 2003), *Communications for Statistical Applications and Methods* (since 2013), *Econometrics and Statistics* (since 2016).

Advisor/Editorial Board member of *Statistical Papers* 1992-2012.

Member of the Editorial Board of the *Wiley Series in Financial Economics and Quantitative Analysis* 1992.

Member of the Programme Committee of the *European Meeting of the Econometric Society* 1989, 1991, 1993, 1996 (Econometrics Chairman), 1998, 2002, 2006, 2007, 2008, 2009.

Member of the Programme Committee of the *World Congress of the Econometric Society* 1995.

Regional Consultant of the European Section of the Econometric Society 1998 - 2002.

Chairman of the *Fifth Meeting of the European Conference Series in Quantitative Economics and Econometrics (EC)<sup>2</sup>* 1994.

Referee for numerous journals, the Deutsche Forschungsgemeinschaft and the U.S. National Science Foundation.

Chairman of the Econometrics Committee of the *Verein für Socialpolitik* January 2000 - December 2003.

Member of the Scientific Advisory Council of the *ifo Institute* 2000-2007.

Member of the Extended Council of the *Verein für Socialpolitik* 2011-2014.

## Honors

Member of the Econometrics Committee of the *Verein für Socialpolitik* 1987.

Fellow of the *Journal of Econometrics* 1989.

Member of the *International Statistical Institute* since 1990.

University of Helsinki Medal 1994.

*Econometric Theory Award multa scripsit* 1997.

## Publications

### Doctoral Thesis

*An Alternative Approach to Univariate and Multivariate Time Series Analysis*, Fakultät für Wirtschaftswissenschaften, Universität Bielefeld.

## Books

- (1) *Introduction to the Theory and Practice of Econometrics*, New York: John Wiley & Sons, 1982  
(joint with G.G. Judge, R.C. Hill, W.E. Griffiths & T.-C. Lee)  
Chinese translation 1989.
- (2) *Instructor's Manual to Accompany Introduction to the Theory and Practice of Econometrics*, New York: John Wiley & Sons, 1982  
(joint with G.G. Judge, R.C. Hill, W.E. Griffiths & T.-C. Lee)
- (3) *The Theory and Practice of Econometrics, Second Edition*, New York: John Wiley & Sons, 1985  
(joint with G.G. Judge, R.C. Hill, W.E. Griffiths & T.-C. Lee)
- (4) *Prognose aggregierter Zeitreihen*, Göttingen: Vandenhoeck & Ruprecht, 1986.
- (5) *Forecasting Aggregated Vector ARMA Processes*, Berlin: Springer-Verlag, 1987.
- (6) *Introduction to the Theory and Practice of Econometrics, Second Edition*, New York: John Wiley & Sons, 1988

(joint with G.G. Judge, R.C. Hill, W.E. Griffiths & T.-C. Lee).  
Chinese translation 1993.

- (7) *Instructor's Manual to Accompany Introduction to the Theory and Practice of Econometrics, Second Edition*, New York: John Wiley & Sons, 1988  
(joint with G.G. Judge, R.C. Hill, W.E. Griffiths & T.-C. Lee).
- (8) *Introduction to Multiple Time Series Analysis*, Berlin: Springer-Verlag, 1991.
- (9) *MulTi — A Menu-Driven GAUSS Program for Multiple Time Series Analysis*, Kiel: Institut für Statistik und Ökonometrie, Universität Kiel, 1992  
(joint with K. Haase, H. Claessen, M. Moryson & W. Schneider).
- (10) *Handbook of Matrices*, Chichester: John Wiley & Sons, 1996.
- (11) *New Introduction to Multiple Time Series Analysis*, Berlin: Springer-Verlag, 2005.
- (12) *Structural Vector Autoregressive Analysis*, Cambridge: Cambridge University Press, 2017  
(joint with Lutz Kilian).

### **Edited Books and Special Issues**

- (1) *Readings in Econometric Theory and Practice*, Amsterdam: North-Holland, 1992  
(Editor joint with W.E. Griffiths & M.E. Bock).
- (2) *Nonparametric Modelling, Annals of Econometrics*, Amsterdam: Elsevier, 1997 (Editor).
- (3) *Money Demand in Europe*, Heidelberg: Physica-Verlag, 1999  
(Editor joint with J. Wolters).
- (4) *Econometric Studies: A Festschrift in Honour of Joachim Frohn*, Münster: LIT Verlag, 2001  
(Editor joint with R. Friedmann & L. Knüppel).
- (5) *Applied Time Series Econometrics*, Cambridge: Cambridge University Press, 2004  
(Editor joint with M. Kräzig).  
Chinese translation 2009; Persian translation 2017.
- (6) *Unit Root and Cointegration Testing*, Special Issue of *Econometric Theory*, 2008  
(Editor with P.M.M. Rodrigues).

### **Articles in Refereed Journals**

- (1) Slices for Proper Actions of Non-compact Lie Groups, *Bulletin of the Greek Mathematical Society*, 18 (1977), 149-156 (joint with H. Abels).

- (2) Approximation of Arbitrary Distributed Lag Structures by a Modified Polynomial Lag: An Extension, *Journal of the American Statistical Association*, 75 (1980), 428-430.
- (3) A Model for Non-negative and Non-positive Distributed Lag Functions, *Journal of Econometrics*, 16 (1981), 211-219.
- (4) Discounted Polynomials for Multiple Time Series Model Building, *Biometrika*, 69 (1982), 107-115.
- (5) Non-causality Due to Omitted Variables, *Journal of Econometrics*, 19 (1982), 367-378.
- (6) Differencing Multiple Time Series: Another Look at Canadian Money and Income Data, *Journal of Time Series Analysis*, 3 (1982), 235-243.
- (7) Non-linear Least Squares Estimation under Non-linear Equality Constraints, *Economics Letters*, 13 (1983), 191-196.
- (8) The Optimality of Rational Distributed Lags: A Comment, *International Economic Review*, 25 (1984), 503-506.
- (9) Linear Aggregation of Vector Autoregressive Moving Average Processes, *Economics Letters*, 14 (1984), 345-350.
- (10) Linear Transformations of Vector ARMA Processes, *Journal of Econometrics*, 26 (1984), 283-293.
- (11) Forecasting Contemporaneously Aggregated Vector ARMA Processes, *Journal of Business & Economic Statistics*, 2 (1984), 201-214.
- (12) Comparison of Criteria for Estimating the Order of a Vector Autoregressive Process, *Journal of Time Series Analysis*, 6 (1985), 35-52, Correction, 8 (1987), 373.
- (13) The Joint Asymptotic Distribution of Multistep Prediction Errors of Estimated Vector Autoregressions, *Economics Letters*, 17 (1985), 103-106.
- (14) Forecasting Vector ARMA Processes With Systematically Missing Observations, *Journal of Business & Economic Statistics*, 4 (1986), 375-390.
- (15) Forecasting Temporally Aggregated Vector ARMA Processes, *Journal of Forecasting*, 5 (1986), 85-95.
- (16) Comparison of Predictors for Temporally and Contemporaneously Aggregated Time Series, *International Journal of Forecasting*, 2 (1986), 461-475.
- (17) Asymptotic Distribution of the Moving Average Coefficients of an Estimated Vector Autoregressive Process, *Econometric Theory*, 4 (1988), 77-85.

- (18) Prediction Tests for Structural Stability, *Journal of Econometrics*, 39 (1988), 267-296.
- (19) Bemerkung zur Lösung der Yule-Walker-Gleichungen, *Metrika*, 35 (1988), 287-289 (joint with E.-O. Maschke).
- (20) Prediction Tests for Structural Stability of Multiple Time Series, *Journal of Business & Economic Statistics*, 7 (1989), 129-135.
- (21) The Stability Assumption in Tests of Causality Between Money and Income, *Empirical Economics*, 14 (1989), 139-150.
- (22) Testing for Nonnormality of Autoregressive Time Series, *Computational Statistics Quarterly*, 5 (1989), 151-168 (joint with W. Schneider).
- (23) A Note on the Asymptotic Distribution of Impulse Response Functions of Estimated VAR Models with Orthogonal Residuals, *Journal of Econometrics*, 42 (1989), 371-376.
- (24) Prediction of Temporally Aggregated Systems Involving both Stock and Flow Variables, *Statistical Papers*, 30 (1989), 279-293.
- (25) Asymptotic Distributions of Impulse Response Functions and Forecast Error Variance Decompositions of Vector Autoregressive Models, *Review of Economics and Statistics*, 72 (1990), 116-125.
- (26) Measures of Multivariate Skewness and Kurtosis for Tests of Nonnormality, *Statistical Papers*, 32 (1991), 179-193 (joint with B. Theilen).
- (27) Estimating Orthogonal Impulse Responses via Vector Autoregressive Models, *Econometric Theory*, 7 (1991), 487-496 (joint with Don S. Poskitt).
- (28) Impulse Response Analysis of Co-integrated Systems, *Journal of Economic Dynamics and Control*, 16 (1992), 53-78 (joint with H.-E. Reimers).
- (29) Granger-causality in Cointegrated VAR Processes: The Case of the Term Structure, *Economics Letters*, 40 (1992), 263-268 (joint with H.-E. Reimers).
- (30) MulTi – A Menu-Driven GAUSS Program for Multiple Time Series Analysis, *Computational Statistics*, 8 (1993), 161-163.
- (31) The Sources of the U.S. Money Demand Instability, *Empirical Economics*, 18 (1993), 729-743.
- (32) Interpretation of Cointegration Relations – Comments on "Estimating Systems of Trending Variables" by Søren Johansen, *Econometric Reviews*, 13 (1994), 391-394.



- (33) Stabilitätsanalyse der bundesdeutschen Geldnachfrage anhand alternativer Ansätze zur Modellierung variierender Regressionskoeffizienten, *Kredit und Kapital*, 28 (1995), 107-133 (joint with M. Moryson & J. Wolters).
- (34) Specification of Varying Coefficient Time Series Models via Generalized Flexible Least Squares, *Journal of Econometrics*, 70 (1996), 261-290 (joint with H. Herwartz).
- (35) Testing for Nonzero Impulse Responses in Vector Autoregressive Processes, *Journal of Statistical Planning and Inference*, 50 (1996), 1-20.
- (36) Testing for Causation Using Infinite Order Vector Autoregressive Processes, *Econometric Theory*, 12 (1996), 61-87 (joint with D.S. Poskitt).
- (37) Specification of Echelon-Form VARMA Models, *Journal of Business & Economic Statistics*, 14 (1996), 69-79 (joint with D.S. Poskitt).
- (38) Infinite Order Cointegrated Vector Autoregressive Processes: Estimation and Inference, *Econometric Theory*, 12 (1996), 814-844 (joint with P. Saikkonen).
- (39) Making Wald Tests Work for Cointegrated VAR Systems, *Econometric Reviews*, 15 (1996), 369-386 (joint with Juan J. Dolado).
- (40) A Review of Nonparametric Time Series Analysis, *International Statistical Review*, 65 (1997), 49-72 (joint with W. Härdle & R. Chen).
- (41) Modified Wald Tests under Nonregular Conditions, *Journal of Econometrics*, 78 (1997), 315-332 (joint with M.M. Burda).
- (42) Analysis of Cointegrated VARMA Processes, *Journal of Econometrics*, 80 (1997), 223-239 (joint with H. Claessen).
- (43) Impulse Response Analysis in Infinite Order Cointegrated Vector Autoregressive Processes, *Journal of Econometrics*, 81 (1997), 127-157 (joint with P. Saikkonen).
- (44) Estimating the Kronecker Indices of Cointegrated Echelon-form VARMA Models, *Econometrics Journal*, 1 (1998), C76-C99 (joint with H. Bartel).
- (45) A Money Demand System for German M3, *Empirical Economics*, 23 (1998), 371-386 (joint with J. Wolters).
- (46) Modeling the Demand for M3 in the Unified Germany, *Review of Economics and Statistics*, 80 (1998), 399-409 (joint with J. Wolters & T. Teräsvirta).
- (47) Local Power of Likelihood Ratio Tests for the Cointegrating Rank of a VAR Process, *Econometric Theory*, 15 (1999), 50-78 (joint with P. Saikkonen).

- (48) A Lag Augmentation Test for the Cointegrating Rank of a VAR Process, *Economics Letters*, 63 (1999), 23-27 (joint with P. Saikkonen).
- (49) Investigating Stability and Linearity of a German M1 Money Demand Function, *Journal of Applied Econometrics*, 14 (1999), 511-525 (joint with T. Teräsvirta und J. Wolters).
- (50) Testing for the Cointegrating Rank of a VAR Process with a Time Trend, *Journal of Econometrics*, 95 (2000), 177-198 (joint with P. Saikkonen).
- (51) Testing for the Cointegrating Rank of a VAR Process with an Intercept, *Econometric Theory*, 16 (2000), 373-406 (joint with P. Saikkonen).
- (52) Multivariate Volatility Analysis of VW Stock Prices, *International Journal of Intelligent Systems in Accounting, Finance & Management*, 9 (2000), 35-54 (joint with H. Herwartz).
- (53) Trend Adjustment Prior to Testing for the Cointegrating Rank of a Vector Autoregressive Process, *Journal of Time Series Analysis*, 21 (2000), 435-456 (joint with P. Saikkonen).
- (54) Problems Related to Bootstrapping Impulse Responses of Autoregressive Processes, *Econometric Reviews*, 19 (2000), 69-103 (joint with A. Benkwitz & M. Neumann).
- (55) Testing for the Cointegrating Rank of a VAR Process with Structural Shifts, *Journal of Business & Economic Statistics*, 18 (2000), 451-464 (joint with P. Saikkonen).
- (56) Testing for Unit Roots in Time Series with Level Shifts, *Allgemeines Statistisches Archiv*, 85 (2001), 1-25 (joint with P. Saikkonen).
- (57) Comparison of Bootstrap Confidence Intervals for Impulse Responses of German Monetary Systems, *Macroeconomic Dynamics*, 5 (2001), 81-100 (joint with A. Benkwitz & J. Wolters).
- (58) A Review of Systems Cointegration Tests, *Econometric Reviews*, 20 (2001), 247-318 (joint with K. Hubrich & P. Saikkonen).
- (59) On the Reliability of Chow-type Tests for Parameter Constancy in Multivariate Dynamic Models, *Economics Letters*, 73 (2001), 155-160 (joint with B. Candelon).
- (60) Maximum Eigenvalue versus Trace Tests for the Cointegrating Rank of a VAR Process, *Econometrics Journal*, 4 (2001), 287-310 (joint with P. Saikkonen & C. Trenkler).
- (61) Unit Root Tests for Time Series with Level Shifts: A Comparison of Different Proposals, *Economics Letters*, 75 (2002), 109-114 (joint with M. Lanne).

- (62) Testing for a Unit Root in a Time Series with a Level Shift at Unknown Time, *Econometric Theory*, 18 (2002), 313-348 (joint with P. Saikkonen).
- (63) Comparison of Unit Root Tests for Time Series with Level Shifts, *Journal of Time Series Analysis*, 23 (2002), 667-685 (joint with M. Lanne & P. Saikkonen).
- (64) Comparison of Tests for the Cointegrating Rank of a VAR Process with a Structural Shift, *Journal of Econometrics*, 113 (2003), 201-229 (joint with P. Saikkonen & C. Trenkler).
- (65) Test Procedures for Unit Roots in Time Series with Level Shifts at Unknown Time, *Oxford Bulletin of Economics and Statistics*, 65 (2003), 91-115 (joint with M. Lanne & P. Saikkonen).
- (66) Transmission of German Monetary Policy in the Pre-Euro Period, *Macroeconomic Dynamics*, 7 (2003), 711-733 (joint with J. Wolters).
- (67) Testing for the Cointegrating Rank of a VAR Process with Level Shift at Unknown Time, *Econometrica*, 72 (2004), 647-662 (joint with P. Saikkonen & C. Trenkler).
- (68) On Unit Root Tests in the Presence of Transitional Growth, *Economics Letters*, 84 (2004), 323-327 (joint with B. Lucke).
- (69) A Note on Testing Restrictions for the Cointegration Parameters of a VAR with I(2) Variables, *Econometric Theory*, 21 (2005), 653-658 (joint with S. Johansen).
- (70) Uncovered Interest Rate Parity and the Expectations Hypothesis of the Term Structure: Empirical Results for the U.S. and Europe, *Applied Economics Quarterly*, 51 (2005), 143-154 (joint with R. Brüggemann).
- (71) Practical Problems with Reduced-rank ML Estimators for Cointegration Parameters and a Simple Alternative, *Oxford Bulletin of Economics and Statistics*, 67 (2005), 673-690 (joint with R. Brüggemann).
- (72) Break Date Estimation for VAR Processes with Level Shift with an Application to Cointegration Testing, *Econometric Theory*, 22 (2006), 15-68 (joint with P. Saikkonen & C. Trenkler).
- (73) A Small Monetary System for the Euro Area Based on German Data, *Journal of Applied Econometrics*, 21 (2006), 683-702 (joint with R. Brüggemann).
- (74) Residual Autocorrelation Testing for Vector Error Correction Models, *Journal of Econometrics*, 134 (2006), 579-604 (joint with R. Brüggemann & P. Saikkonen).
- (75) Structural Vector Autoregressive Analysis for Cointegrated Variables, *Allgemeines Statistisches Archiv*, 90 (2006), 75-88.

- (76) Problems Related to Over-identifying Restrictions for Structural Vector Error Correction Models, *Economics Letters*, 99 (2008), 512-515.
- (77) Testing for the Cointegrating Rank of a VAR Process with Level Shift and Trend Break, *Journal of Time Series Analysis*, 29 (2008), 331-358 (joint with C. Trenkler & P. Saikkonen).
- (78) Forecasting Euro Area Variables with German Pre-EMU Data, *Journal of Forecasting*, 27 (2008), 465-481 (joint with R. Brüggemann & M. Marcellino).
- (79) Identifying Monetary Policy Shocks via Changes in Volatility, *Journal of Money, Credit and Banking*, 40 (2008), 1131-1149 (joint with M. Lanne).
- (80) Testing for the Cointegrating Rank of a Vector Autoregressive Process with Uncertain Deterministic Trend Term, *Econometrics Journal*, 12 (2009), 414-435 (joint with M. Demetrescu and P. Saikkonen).
- (81) Structural Vector Autoregressions with Nonnormal Residuals, *Journal of Business & Economic Statistics*, 28 (2010), 159-168 (joint with M. Lanne).
- (82) Structural Vector Autoregressions with Markov Switching, *Journal of Economic Dynamics and Control*, 34 (2010), 121-131 (joint with M. Lanne and K. Maciejowska).
- (83) Acquisition of Information and Share Prices: An Empirical Investigation of Cognitive Dissonance, *German Economic Review*, 11 (2010), 381-396 (joint with E. Argentesi and M. Motta).
- (84) Forecasting Aggregated Time Series Variables – A Survey, *Journal of Business Cycle Measurement and Analysis*, 2010/2, 37-62.
- (85) Forecasting Annual Inflation with Seasonal Monthly Data: Using Levels versus Logs of the Underlying Price Index, *Journal of Time Series Econometrics*, 3 (2011), Article 7 (joint with Fang Xu).
- (86) Forecasting Nonlinear Aggregates and Aggregates with Time-varying Weights, *Jahrbücher für Nationalökonomie und Statistik*, 231 (2011), 107-133.
- (87) Generalized Least Squares Estimation for Cointegration Parameters Under Conditional Heteroskedasticity, *Journal of Time Series Analysis*, 32 (2011), 281-291 (joint with Helmut Herwartz).
- (88) Forecasting Levels of log Variables in Vector Autoregressions, *International Journal of Forecasting*, 27 (2011), 1108-1115 (joint with Gunnar Bårdsen).
- (89) The Role of the log Transformation in Forecasting Economic Variables, *Empirical Economics*, 42 (2012), 619-638 (joint with Fang Xu).

- (90) Forecasting Contemporaneous Aggregates with Stochastic Aggregation Weights, *International Journal of Forecasting*, 29 (2013), 60-68 (joint with Ralf Brüggemann).
- (91) Does the BoxCox Transformation Help in Forecasting Macroeconomic Time Series?, *International Journal of Forecasting*, 29 (2013), 88-99 (joint with Tommaso Proietti).
- (92) Reducing Confidence Bands for Simulated Impulse Responses, *Statistical Papers*, 54 (2013), 1131-1145.
- (93) Identifying Structural Vector Autoregressions via Changes in Volatility, *Advances in Econometrics*, 32 (2013), 169-203.
- (94) Disentangling Demand and Supply Shocks in the Crude Oil Market: How to Check Sign Restrictions in Structural VARs, *Journal of Applied Econometrics*, 29 (2014), 479-496 (joint with Aleksei Netsunajev).
- (95) Structural Vector Autoregressions with Markov Switching: Combining Conventional with Statistical Identification of Shocks, *Journal of Econometrics*, 183 (2014), 104-116 (joint with Helmut Herwartz).
- (96) Confidence Bands for Impulse Responses: Bonferroni vs. Wald, *Oxford Bulletin of Economics and Statistics*, 77 (2015), 800-821 (joint with Anna Staszewska-Bystrova and Peter Winker).
- (97) Comparison of Methods for Constructing Joint Confidence Bands for Impulse Response Functions, *International Journal of Forecasting*, 31 (2015), 782-798 (joint with Anna Staszewska-Bystrova and Peter Winker).
- (98) Structural Vector Autoregressions: Checking Identifying Long-run Restrictions via Heteroskedasticity, *Journal of Economic Surveys*, 30 (2016), 377-392 (joint with Anton Velinov).
- (99) Testing for Identification in SVAR-GARCH Models, *Journal of Economic Dynamics & Control*, 73 (2016), 241-258 (joint with George Milunovich).
- (100) Structural Vector Autoregressions with Heteroskedasticity: A Review of Different Volatility Models, *Econometrics and Statistics*, 1 (2017), 2-18 (joint with Aleksei Netsunajev).
- (101) Estimation of structural vector autoregressive models, *Communications for Statistical Applications and Methods*, 24 (2017), 1-21.
- (102) Structural vector autoregressions with smooth transition in variances, *Journal of Economic Dynamics & Control*, 84 (2017), 43-57 (joint with Aleksei Netsunajev).

- (103) Estimation of structural impulse responses: Short-run versus long-run identifying restrictions, *Advances in Statistical Analysis*, forthcoming (joint with Anna Staszewska-Bystrova and Peter Winker).
- (104) Calculating joint confidence bands for impulse response functions using highest density regions, *Empirical Economics*, forthcoming (joint with Anna Staszewska-Bystrova and Peter Winker).
- (105) Inference in partially identified heteroskedastic simultaneous equations models, *Journal of Econometrics*, forthcoming (joint with George Milunovich and Minxian Yang).
- (106) Choosing between different time-varying volatility models for structural vector autoregressive analysis, *Oxford Bulletin of Economics and Statistics*, forthcoming (joint with Thore Schlaak).

### Miscellaneous other Articles

- (1) The Impact of Omitted Variables on the Structure of Multiple Time Series, in O.D. Anderson (Ed.), *Time Series Analysis: Theory and Practice 2*, Amsterdam: North-Holland, 1982, 143-159.
- (2) Prognose multipler Zeitreihen, in J. Frohn (Ed.), *Zur Spezifizierung und Analyse ökonomischer Modelle*, Göttingen: Vandenhoeck & Ruprecht, 1984, 90-108.
- (3) Comparison of Three Predictors for Contemporaneously Aggregated Time Series, *Methods of Operations Research*, 50 (1985), 317-333.
- (4) Prognose und Interpretation cointegrierter Systeme, in G. Nakhaeizadeh & K.-H. Vollmer (Eds.), *Anwendungsaspekte von Prognoseverfahren*, Heidelberg: Physica-Verlag, 1991, 1-17.
- (5) Analyse trendbehafteter multipler Zeitreihen, *Allgemeines Statistisches Archiv*, 75 (1991), 103-123.
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