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Curriculum Vitae

Name: Helmut Lütkepohl
Date of Birth: July 26, 1951
Citizenship: German
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10117 Berlin, Germany
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Education

Institution	*Degree*	*Year*	*Field*
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

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 Restictions 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.*

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)*^{2} 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.

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. Krätzig).
Chinese translation 2009.

(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 Netšunajev).

(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*, forthcoming (joint with Aleksei Netšunajev).

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 ökonometrischer 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.

(6) Testing for Time Varying Parameters in Vector Autoregressive Models, in W.E. Griffiths, H. Lütkepohl & M.E. Bock (Eds.), *Readings in Econometric Theory and Practice,* Amsterdam: North-Holland, 1992, 243-264.

(7) Testing for Causation Between Two Variables in Higher-Dimensional VAR Models, in H. Schneeweiß & K.F. Zimmermann (Eds.), *Studies in Applied Econometrics,* Heidelberg: Physica-Verlag, 1993, 75-91.

(8) Kointegration und gemeinsame Trends, in K. H. Oppenländer (Ed.), *Konjunkturindikatoren: Fakten, Analysen, Verwendung*, München: Oldenbourg Verlag, 1995, 144-176.

(9) Konjunkturanalyse mit Markov–Regimewechselmodellen, in K. H. Oppenländer (Ed.), *Konjunkturindikatoren: Fakten, Analysen, Verwendung*, München: Oldenbourg Verlag, 1995, 177-196 (joint with H.–M. Krolzig).

(10) Nichtparametrische Verfahren zur Analyse und Prognose von Finanzmarktdaten, in G. Bol, G. Nakhaeizadeh & K.-H. Vollmer (Eds.), *Finanzmarktanalyse und -prognose mit innovativen quantitativen Verfahren,* Heidelberg: Physica-Verlag, 1996, 145-171 (joint with R. Tschernig).

(11) Statistische Modellierung von Volatilitäten, *Allgemeines Statistisches Archiv,* 81 (1997), 62-84.

(12) Die Geldnachfrage für M3: Neue Ergebnisse für das vereinigte Deutschland, *ifo-Studien,* 43 (1997), 35-54 (joint with J. Wolters).

(13) Editor's Introduction: Nonparametric Dynamic Modelling, *Journal of Econometrics,* 81 (1997), 1-5.

(14) Impulse Response Analysis of Vector Autoregressive Processes, in Heij, C., Schumacher, H., Hanzon, B. & C. Praagman (Eds.), *System Dynamics in Economic and Financial Models*, Chichester: John Wiley, 1997, 299-320 (joint with J. Breitung).

(15) Comment on "Multivariate Structural Time Series Models" by A.C. Harvey and S.J. Koopman, in C. Heij, J.M. Schumacher, B. Hanzon & K. Praagman (Eds.), *System*

Dynamics in Economic and Financial Models, Chichester: John Wiley, 1997, 287-291.

(16) Money Demand in Europe: Editors' Preface, *Empirical Economics*, 23 (1998), 263-266 (joint with J. Wolters).

(17) Consistent Estimation of the Number of Cointegration Relations in a Vector Autoregressive Model, in R. Galata & H. Küchenhoff (Eds.), *Econometrics in Theory and Practice*, Heidelberg: Physica-Verlag, 1998, 87-100 (joint with D.S. Poskitt).

(18) Likelihood Based Systems Cointegration Tests, *Prague Stochastics 98*, 1998, 361-366.

(19) Stabilität der Geldnachfrage in der Bundesrepublik Deutschland, in Nordrhein-Westfälische Akademie der Wissenschaften (Hrsg.), *Vortäge N 437*, Opladen: Westdeutscher Verlag, 1998, 23-36.

(20) Vector Autoregressive Analysis, in S.B. Dahiya (Ed.), *The Current State of Economic Science*, Vol. 1, Rohtak: Spellbound Publications, 1999, 345-369.

(21) Order Selection in Testing for the Cointegrating Rank of a VAR Process, in R.F. Engle & H. White (Eds.), *Cointegration, Causality, and Forecasting: A Festschrift in Honour of Clive W.J. Granger*, Oxford: Oxford University Press, 1999, 168-199 (joint with P. Saikkonen).

(22) Asymptotic Inference on Nonlinear Functions of the Coefficients of Infinite Order Cointegrated VAR Processes, in W.A. Barnett, D.F. Hendry, S. Hylleberg, T. Teräsvirta, D. Tjøstheim & A. Würtz (Eds.), *Nonlinear Econometric Modeling in Time Series Analysis*, Cambridge: Cambridge University Press, 2000, 165-201 (joint with P. Saikkonen).

(23) Bootstrapping Impulse Responses in VAR Analyses, in J.G. Bethlehem & P.G.M. van der Heijden (Eds.), *COMPSTAT Proceedings in Computational Statistics 2000*, Heidelberg: Physica-Verlag, 2000, 109-119.

(24) Vector Autoregressions, Chapter 32 in B. Baltagi (Ed.), *A Companion to Theoretical Econometrics*, Oxford: Blackwell, 2001, 678-699.

(25) Comment on Essays on Current State and Future Challenges of Econometrics, *Journal of Econometrics*, 100 (2001), 81-82.

(26) Unit Root Tests for Time Series with a Structural Break when the Break Point is Known, Chapter 12 in C. Hsiao, K. Morimune & J.L. Powell (Eds.), *Nonlinear Statistical Modeling*, Cambridge: Cambridge University Press, 2001, 327-348 (joint with C. Müller & P. Saikkonen).

(27) Lag Selection in Subset VAR Models with an Application to a U.S. Monetary System, in R. Friedmann, L. Knüppel & H. Lütkepohl (Eds.), *Econometric Studies*, Münster: LIT Verlag, 2001, 107-128 (joint with R. Brüggemann).

(28) Forecasting Cointegrated VARMA Processes, Chapter 8 in M.P. Clements & D.F. Hendry (Eds.), *A Companion to Economic Forecasting*, Oxford: Blackwell, 2002, 179-205.

(29) Unit Root Tests in the Presence of Innovational Outliers, in S. Mittnik & I. Klein (Eds.), *Contributions to Modern Econometrics*, Dordrecht: Kluwer, 2002, 151-167 (joint with M. Lanne & P. Saikkonen).

(30) Koreferat zum Referat J. Wolters, in W. Franz, H.J. Ramser, M. Stadtler (Eds.), *Empirische Wirtschaftsforschung: Methoden und Anwendungen*, Tübingen: Mohr Siebeck, 2003, 77-82.

(31) Initial Tasks and Overview, in H. Lütkepohl & M. Krätzig (Eds.), *Applied Time Series Econometrics*, Cambridge: Cambridge University Press, 2004, 1-7.

(32) Univariate Time Series Analysis, in H. Lütkepohl & M. Krätzig (Eds.), *Applied Time Series Econometrics*, Cambridge: Cambridge University Press, 2004, 8-85.

(33) Vector Autoregressive and Vector Error Correction Models, in H. Lütkepohl & M. Krätzig (Eds.), *Applied Time Series Econometrics*, Cambridge: Cambridge University Press, 2004, 86-158.

(34) Structural Vector Autoregressive Modeling and Impulse Responses, in H. Lütkepohl & M. Krätzig (Eds.), *Applied Time Series Econometrics*, Cambridge: Cambridge University Press, 2004, 159-196 (joint with J. Breitung and R. Brüggemann).

(35) Recent Advances in Cointegration Analysis, in A. Welfe (Ed.), *New Directions in Macromodelling*, Amsterdam: Elsevier, 2004, 107-146.

(36) Vector Autoregressive Models, in T.C. Mills & K. Patterson (Eds.), *Palgrave Handbook of Econometrics, Volume 1, Econometric Theory*, Houndmills: Palgrave Macmillan, 2006, 477-510.

(37) Forecasting with VARMA Models, Chapter 6 in G. Elliott, C.W.J. Granger & A. Timmermann (Eds.), *Handbook of Economic Forecasting, Volume 1*, Amsterdam: Elsevier, 2006, 287-325.

(38) General-to-Specific or Specific-to-General Modelling? An Opinion on Current Econometric Terminology, *Journal of Econometrics*, 136 (2007), 319-324.

(39) Unit Root and Cointegration Testing: Guest Editors' Introduction, *Econometric Theory*, 24 (2008), 1-6 (joint with P.M.M. Rodrigues).

(40) Impulse response function, in S.N. Durlauf & L.E. Blume (Eds.), *The New Palgrave Dictionary of Economics*, Houndmills: Palgrave Macmillan, 2008, 154-157.

(41) Variance decomposition, in S.N. Durlauf & L.E. Blume (Eds.), *The New Palgrave Dictionary of Economics*, Houndmills: Palgrave Macmillan, 2008, 598-599.

(42) Econometric Analysis with Vector Autoregressive Models, in D.A. Belsley & E.J. Kontoghiorghes (Eds.), *Handbook of Computational Econometrics*, Chichester: Wiley, 2009, 281-319.

(43) Vector Autoregressive Models, in M. Lovric (Ed.), *International Encyclopedia of Statistical Science*, Berlin: Springer-Verlag, 2011, 1645-1647.

(44) Vector Autoregressive Models, in N. Hashimzade & M.A. Thornton (Eds.), *Handbook of Research Methods and Applications in Empirical Macroeconomics*, Cheltenham: Edward Elgar, 2013, 139-164.

(45) Fundamental Problems with Nonfundamental Shocks, in N. Haldrup, M. Meitz & P. Saikkonen (Eds.), *Essays in Nonlinear Time Series Econometrics*, Oxford: Oxford University Press, 2014, 198-214.

(46) A Statistical Comparison of Alternative Identification Schemes for Monetary Policy Shocks, in J. Knif and B. Pape, *Contributions to Mathematics, Statistics, Econometrics, and Finance - Essays in Honour of Professor Seppo Pynnönen*, University of Vaasa, ACTA WASAENSIA 296, STATISTICS 7, Vaasa, Finland, 2014, 137-152 (joint with M. Lanne).

(47) Forecasting Unpredictable Variables, in J. Beran, Y. Feng & H. Hebbel (Eds.), *Empirical Economic and Financial Research: Theory, Methods and Practice*, Heidelberg: Springer, 2015, 287-304.

Book Reviews

(1) Leserer, M.: *Grundlagen der Ökonometrie.*
In *Agrarwirtschaft,* 30 (1981), 280.

(2) Fahrion, R.: *Endliche Lagstrukturen - Klassifikation und schätztheoretische Behandlung von Spline-Lags.*
In *Allgemeines Statistisches Archiv,* 66 (1982), 415.

(3) Kirchgässner, G.: *Einige neuere statistische Verfahren zur Erfassung kausaler Beziehungen zwischen Zeitreihen: Darstellung und Kritik.*
In *Allgemeines Statistisches Archiv,* 67 (1983), 122-123.

(4) Harvey, A.C.: *Time Series Models.*
In *Jahrbücher für Nationalökonomie und Statistik,* 198 (1983), 572-573.

(5) Nichols, D.F. & B.G. Quinn: *Random Coefficient Autoregressive Models: An Introduction.*
In *Allgemeines Statistisches Archiv,* 69 (1985), 236-237.

(6) Tong, H.: *Threshold Models in Non-linear Time Series Analysis.*
In *Allgemeines Statistisches Archiv,* 70 (1986), 230.

(7) Taylor, S.: *Modelling Financial Time Series.*
In *Statistische Hefte,* 28 (1987), 330.

(8) Newbold, P.: *Statistics for Business and Economics.*
In *Allgemeines Statistisches Archiv,* 72 (1988), 206.

(9) Krämer, W. & H. Sonnberger: *The Linear Regression Model under Test.*
In *Statistische Hefte,* 29 (1988), 80-81.

(10) Hylleberg, S.: *Seasonality in Regression.*
In *Allgemeines Statistisches Archiv,* 73 (1989), 108-109.

(11) Epstein, R.J.: *A History of Econometrics.*
In *Allgemeines Statistisches Archiv,* 73 (1989), 107-108.

(12) Gallant, A.R.: *Nonlinear Statistical Models.*
In *Statistische Hefte,* 30 (1989), 161-162.

(13) Magnus, J.R.: *Linear Structures.*
In *Allgemeines Statistisches Archiv,* 73 (1989), 320-321.

(14) Brockwell, P.J. & R.A. Davis: *Time Series: Theory and Methods.*
In *Allgemeines Statistisches Archiv,* 74 (1990), 157-158.

(15) Rüdel, T.: *Kointegration und Fehlerkorrekturmodelle.*
In *Allgemeines Statistisches Archiv,* 74 (1990), 393-394.

(16) Choi, B.S.: *ARMA Model Identification.*
In *Allgemeines Statistisches Archiv,* 78 (1994), 351.

(17) Reinsel, G.C.: *Elements of Multivariate Time Series Analysis.*
In *Metrika,* 42 (1995), 147-148.

(18) Bierens, H.J.: *Topics in Advanced Econometrics: Estimation, Testing, and Specification of Cross-Section and Time Series Models.*
In *Allgemeines Statistisches Archiv,* 80 (1996), 350.

(19) Johnson, N.L., S. Kotz & N. Balakrishnan: *Continuous Univariate Distributions, Vol.1,* Second Edition.
In *Statistics,* 28 (1996), 85-86.

(20) Brockwell, P.J. & R.A. Davis: *Introduction to Time Series and Forecasting.*
In *Metrika*, 48 (1998), 69-71.

(21) Hayashi, F.: *Econometrics.*
In *Journal of Economic Literature*, 39 (2001), 905-907.

(22) Davidson, R. & J.G. MacKinnon: *Econometric Theory and Methods.*
In *Journal of Economic Literature*, 43 (2005), 137-138.

(23) Bernstein, D.S.: *Matrix Mathematics: Theory, Facts, and Formulas.*
In *IMAGE*, 43 (2009), 28-29.

(24) Pfaff, B.: *Analysis of Integrated and Cointegrated Time Series with R.*
In *Statistical Papers*, 52 (2011), 495-496.

(25) I Gusti Ngurah Agung: *Time Series Data Analysis Using EViews.*
In *Statistical Papers*, 52 (2011), 497-499.

(26) Mulaik, S. A.: *Foundations of Factor Analysis.*
In *Statistical Papers*, 55 (2014), 1229-1230.