CURRICULUM VITAE OF MARTIN WAGNER

July 19, 2024

PERSONAL DATA:

Date and Place of Birth:	September 2, 1972 in
	Amstetten, Lower Austria
Nationality:	Austria

LANGUAGES:

German:	Mother tongue
English:	Fluent
French:	Intermediate
Italian:	Beginner
Slovene:	Beginner

CURRENT POSITIONS:

10/2019 -	Full Professor of Economics, University of Klagenfurt
1/2022 - 12/2025	Vice Dean, Faculty of Management, Economics & Law, University of Klagenfurt
10/2019 —	Chief Economic Advisor, Bank of Slovenia (part-time position); Member of the ESCB Monetary Policy Committee and Heads of Research Forum
10/2011 -	Senior Fellow of the Institute for Advanced Studies Vienna (Member of the Macroeconomics and Business Cycles Group)

CURRENT ADDITIONAL AFFILIATIONS:

- 2019 Euro Area Business Cycle Network, Member of Steering Committee
- 2012 Visiting Professor and Full Professor of Economics, University of Ljubljana

EARLIER POSITIONS, VISTING POSITIONS, AFFILIATIONS:

- 2/2024 6/2024Simone Veil Fellow, Robert Schuman Centre for Advanced
Studies, European University Institute, Firenze, Italy
- 10/2012 9/2019Full Professor of Econometrics and Statistics, Technical
University Dortmund [On leave: 10/2017 1/2019]

- 10/2017 12/2018 Chief Economist/Executive Director with Full Managerial Responsibility for the Economics/Analysis Sector of the Bank of Slovenia
 - The sector comprised four departments: Analysis and Research (Economics), Financial Stability and Macroprudential Policy, Financial Statistics, and International Relations; about 90-95 FTE
 - Responsibility for all managerial and development tasks for the sector.
 - Member of the Monetary Policy, Research and Supervision Committees of the Bank of Slovenia
 - Member of the Monetary Policy Committee and the Heads of Research Committee at the ECB/ESCB level
 - Member of the Advisory Board and Governance Steering Group of the Center for Excellence in Finance (from 12/2017)
 - Consultant from 1/2019-9/2019
- 10/2014 9/2016 External Researcher, Bank of Slovenia
- Fall 2014 Visiting Professor Vienna University of Technology
- 2013 2019 Faculty Member, Ruhr Graduate School in Economics
- 10/2011 9/2012 Full Professor of Empirical Economics and Econometrics, University of Graz; Visiting professor: 10/2012-6/2013
- 4/2011 9/2011 Substitute Professor (1/3 position) for Economics, especially Microeconometrics, University of Hamburg
- 2009 2012 Scientific Advisor, Frisch Centre for Economic Research, Oslo
- 10/2007 12/2007 Economist, Short-term appointment, Directorate General Economics, European Central Bank, Frankfurt
- 4/2007 9/2011 Senior Research Economist in the Department of Economics and Finance, Institute for Advanced Studies, Vienna
- 9/2005 3/2007 Assistant Professor in the Department of Economics and Finance, Institute for Advanced Studies, Vienna
- 1/2005 7/2005 Jean Monnet Fellow, Economics Department, European University Institute, Florence
- 2/2003 1/2004 Visiting Research Fellow, Department of Economics, Woodrow Wilson School and Carbon Mitigation Initiative, Princeton University
- 1/2000 8/2005 Assistant Professor in the Department of Economics, University of Bern
- 9/1998 12/1999 Assistant Professor in the Department of Economics and Finance, Institute for Advanced Studies, Vienna

6/1995 – 8/1998 Assistant at the Institute of Econometrics, Operations Research and Systems Theory, Vienna University of Technology

EDUCATION AND DEGREES:

10/1990 - 4/1995	Technical Mathematics (Mathematics for Economics) at the Vienna University of Technology, degree awarded: Dipl.Ing. (supervisor: Prof. Manfred Deistler)
10/1996 - 9/1998	Postgraduate Program in Economics at the Institute for Advanced Studies, Vienna, awarded: Diploma in Economics
3/2000	Completed doctoral studies at the Vienna University of Technology, degree awarded: Dr. techn. (supervisor: Prof. Werner Ploberger)
7/2007	Habilitation in Economics, University of Bern, title: Privat- dozent (PD), referees: Prof. Manfred Deistler, Prof. Klaus Neusser and Prof. Werner Ploberger

AWARDS, HONORS AND OFFERS:

- "Leistungsstipendium" (Merit scholarship) from Vienna University of Technology (several times)
- Full Scholarship for the Program in Economics, Institute for Advanced Studies Vienna
- Young Economist Award of the Austrian Economic Association (NOeG), 2006
- Gumbel Lecture at the Annual Meeting of the German Statistical Association (Statistische Woche), October 2009
- Morgenstern Award of the Institute for Advanced Studies: December 2011, December 2012
- Offers for Full Professorships: U Konstanz (2007, W3 Statistics and Econometrics), Helmut Schmidt U Hamburg (2007, W3 Statistics and Econometrics), U Hamburg (2010, W3 Economics, especially Microeconometrics), U Graz (2011, Empirical Economics and Econometrics), U Mainz (2011, W3 Statistics), TU Dortmund (2011, W3 Econometrics and Statistics), Karlsruhe Institute of Technology (2012, W3 Econometrics), Maastricht University (2017, Full Professor Econometrics), University of Klagenfurt (2018, Full Professor of Economics), European Business School Oestrich-Winkel (2021, Full Professor of Econometrics)

• Winner of the "Lehrinnovationspreis" (Prize for Innovation in Teaching) of the Faculty of Business, Economics and Social Sciences, TU Dortmund, Fall Semester 2016/17 (for the First Semester Statistics Course)

PUBLICATIONS:

Refereed Journals:

- 1. Stypka, O., M. Wagner, P. Grabarczyk and R. Kawka (2024): *Cointegrating Polynomial Regression Models: Robustness of Fully Modified OLS*. Forthcoming in: <u>Econometric Theory</u>.
- 2. Wagner, M. (2023): Fully Modified Estimation and Inference for Systems of Cointegrating Polynomial Regressions. Economics Letters 228, 111186.
- 3. Wagner, M. and K. Reichold (2023): *Panel Cointegrating Polynomial Regressions: Group-Mean Fully Modified Estimation and Inference*. Econometric Reviews **42**, 358 392.
- 4. Wagner, M. (2023): *Residual Based Cointegration and Non-Cointegration Tests* for Cointegrating Polynomial Regressions. <u>Empirical Economics</u> 65, 1–31.
- 5. de Jong, R. and M. Wagner (2022): *Panel Cointegrating Polynomial Regression Analysis and the Environmental Kuznets Curve*. Econometrics and Statistics, in press.
- 6. Reynolds, J., L. Sögner and M. Wagner (2021): *Deviations from Triangular Arbitrage Parity in Foreign Exchange and Bitcoin Markets*. <u>Central European</u> <u>Journal of Economic Modelling and Econometrics</u> 13, 105 – 146.
- 7. Knorre, F., M. Wagner and M. Grupe (2021): *Monitoring Cointegrating Polynomial Regressions: Theory and Application to the Environmental Kuznets Curves for Carbon and Sulfur Dioxide Emissions.* Econometrics **9**, 12 (35 pages).
- 8. Bauer, D., L. Matuschek, P. de Matos Ribeiro and M. Wagner (2020): A State Space Parameterization for Unit Root Processes: Structure Theory with a Focus on Hypothesis Testing. Econometrics 8, 42 (54 pages).
- Wagner, M., P. Grabarczyk and S.H. Hong (2020): Fully Modified OLS Estimation and Inference for Seemingly Unrelated Cointegrating Polynomial Regressions and the Environmental Kuznets Curve for Carbon Dioxide Emissions. Journal of Econometrics 214, 216 – 255.
- 10. Stypka, O. and M. Wagner (2019): *The Phillips Unit Root Tests for Polynomials* of Integrated Processes Revisited. Economics Letters **176**, 109 113.
- Wagner, M. and A. Zeileis (2019): Heterogeneity and Spatial Dependence of Regional Growth in the European Union: A Recursive Partitioning Approach. German Economic Review 20, 67 – 82.

- Grabarczyk, P., M. Wagner, M. Frondel and S. Sommer (2018): A Cointegrating Polynomial Regression Analysis of the Material Kuznets Curve Hypothesis. <u>Resources Policy</u> 57, 236 – 245.
- 13. Wagner, M. and D. Wied (2017): Consistent Monitoring of Cointegrating Relationships: The US Housing Market and the Subprime Crisis. Journal of Time Series Analysis **38**, 960 980.
- 14. Deistler, M. and M. Wagner (2017): *Cointegration in Singular ARMA Models*. <u>Economics Letters</u> **155**, 39 42.
- 15. Wagner, M. and S.H. Hong (2016): *Cointegrating Polynomial Regressions: Fully Modified OLS Estimation and Inference*. Econometric Theory **32**, 1289 – 1315.
- 16. Wagner, M. (2015): *The Environmental Kuznets Curve, Cointegration and Nonlinearity*. Journal of Applied Econometrics **30**, 948 967.
- Wagner, M. and J. Hlouskova (2015): Growth Regressions, Principal Components and Frequentist Model Averaging. Jahrbücher für Nationalökonomie und Statistik 235, 642 – 662.
- 18. Pedroni, P., T.J. Vogelsang, M. Wagner and J. Westerlund (2015): *Nonparametric Rank Tests for Non-Stationary Panels*. Journal of Econometrics **185**, 378 391.
- Vogelsang, T.J. and M. Wagner (2014): Integrated Modified OLS Estimation and Fixed-b Inference for Cointegrating Regressions. Journal of Econometrics 178, 741-760.
- 20. Hlouskova, J. and M. Wagner (2013): *The Determinants of Long-Run Economic Growth: A Conceptually and Computationally Simple Approach*. Swiss Journal of Economics and Statistics 149, 445 492.
- 21. Vogelsang, T.J. and M. Wagner. (2013): A Fixed-b Perspective on the Phillips-Perron Tests. Econometric Theory 29, 609 – 628.
- 22. Bauer, D. and M. Wagner. (2012): A State Space Canonical Form for Unit Root Processes. Econometric Theory 28, 1313 1349.
- 23. Schneider, U. and M. Wagner. (2012): *Catching Growth Determinants with the Adaptive LASSO*. German Economic Review **13**, 71 85.
- 24. Wagner, M. (2012): The Phillips Unit Root Tests for Polynomials of Integrated Processes. Economics Letters 114, 299 303.
- 25. Wagner, M. (2010): Cointegration Analysis with State Space Models. Advances in Statistical Analysis 94, 273 305.

- Wagner, M. and J. Hlouskova (2010): The Performance of Panel Cointegration Methods: Results from a Large Scale Simulation Study. <u>Econometric Reviews</u> 29, 182 – 223.
- 27. Hlouskova, J. and M. Wagner (2009): *Finite Sample Correction Factors for Panel Cointegration Tests*. Oxford Bulletin of Economics and Statistics **71**, 851 881.
- 28. Bauer, D. and M. Wagner (2009): Using Subspace Algorithm Cointegration Analysis: Simulation Performance and Application to the Term Structure. Computational Statistics and Data Analysis 53, 1954 – 1973.
- Hlouskova, J., K. Schmidheiny and M. Wagner (2009): Multistep Predictions for Multivariate GARCH Models: Closed Form Solution and the Value for Portfolio Management. Journal of Empirical Finance 16, 330 – 336.
- 30. Wagner, M. (2008): Economic Valuation of Environmental Problems Using the Contingent Valuation Method. <u>IB Revija</u> **42**, 104 112.
- 31. Wagner, M. (2008): On PPP, Unit Roots and Panels. Empirical Economics 35, 229-249.
- 32. Wagner, M. (2008): *The Carbon Kuznets Curve: A Cloudy Picture Emitted by Bad Econometrics?* <u>Resource and Energy Economics</u> **30**, 388 408.
- 33. Müller-Fürstenberger, G. and M. Wagner (2007): *Exploring the Environmental Kuznets Hypothesis: Theoretical and Econometric Problems*. <u>Ecological Economics</u> **62**, 648 660.
- 34. Hlouskova, J. and M. Wagner (2006): *The Performance of Panel Unit Root and Stationarity Tests: Results from a Large Scale Simulation Study*. Econometric <u>Reviews</u> 25, 85 116.
- 35. Wagner, M. (2005): *The Balassa-Samuelson Effect in 'East & West': Differences and Similarities*. Jahrbuch für Wirtschaftswissenschaften/Review of Economics **56**, 230 248.
- 36. Bradford, D., R. Fender, S. Shore and M. Wagner (2005): *The Environmental Kuznets Curve: Exploring a Fresh Specification*. <u>Contributions to Economic Analysis and Policy</u> **4**, No.1, Article 5, Berkeley Electronic Press.
- 37. Wagner, M. and J. Hlouskova (2005): CEEC Growth Projections: Certainly Necessary and Necessarily Uncertain. Economics of Transition 13, 341 372.
- 38. Wagner, M. (2004): A Comparison of Johansen's, Bierens' and the Subspace Algorithm Method for Cointegration Analysis. Oxford Bulletin of Economics and Statistics 66, 399 424.
- 39. Bauer, D. and M. Wagner (2002): *Estimating Cointegrated Systems Using Subspace Algorithms*. Journal of Econometrics **111**, 47 84.

- 40. Böhm, B., A. Gleiss, M. Wagner and D. Ziegler (2002): *Disaggregated Capital* Stock Estimation for Austria – Methods, Concepts and Results. <u>Applied</u> <u>Economics</u> 34, 23 – 37.
- 41. Wagner, M. (1998): Economic Valuation Methods for Environmental Problems, Part I. <u>IB Revija</u> **32**, 3 13.

Other Publications:

- 1. Pötscher, B.M., Sögner, L. and M. Wagner (2024): Editor's Introduction. Special Issue on High-Dimensional Time Series in Macroeconomics and Finance. <u>Econometrics</u> **12**, 6 (2 pages).
- Wagner, M., Knorre, F. and C. Kopetzky (2024): Gross Domestic Product, Greenhouse Gas Emissions and Global Warming. In: Weihs, C., Buschfeld S. and W. Krämer (Eds.): <u>Statistics Today</u>, Springer, Chapter 16, 133 – 140.
- 3. Kimmich, C., Laa, E., Lappöhn, S., König, T. and M. Wagner (2022): Energiewende beschleunigen? Engpässe berücksichtigen. <u>IHS Policy Brief</u> 7/2022.
- 4. Osbat, C., Sun, Y., and M. Wagner (2022): *Sectoral Exchange Rate Pass-Through in the Euro Area*. <u>SUERF Policy Brief</u> 347.
- Kimmich, C., Koch, S., König, T., Lappöhn, S., Schnabl, A., Wagner, M. Weyerstra
 ß, K. and H. Zenz (2022): Abschätzung der wirtschaftlichen Folgen des Kriegs in der Ukraine und der Sanktionen gegen Russland. <u>IHS Policy Brief</u> 2/2022.
- 6. Kunst, R.M. and M. Wagner (2020): Editor's Introduction. Special Volume on Economic Forecasting. <u>Empirical Economics</u> **58**, 1 5.
- Wagner, M. and F. Knorre (2019): Bruttoinlandsprodukt, Treibhausgase und globale Erderwärmung. In Krämer, W. and C. Weihs (Eds.): <u>Faszination Statistik</u>, Springer, Chapter 16, 120 – 127.
- 8. Wagner, M. (2018): *Estimation and Inference for Cointegrating Regressions*. Oxford Research Encyclopedia in Economics and Finance.
- 9. De Matos Ribeiro, P., L. Matuschek and M. Wagner (2017): Review of: *State-Space Methods for Time Series Analysis: Theory, Applications and Software* by Casals J. et al, Chapman and Hall/CRC, <u>Statistical Papers</u> **58**, 555 556.
- Wagner, M. (2017). Discussion of: *The Quantity of Corporate Credit Rationing with Matched Bank-Firm Data* by Burlon L. et al. In Banerjee, B. and F. Coricelli (Eds.): <u>Crisis, Credit and Resource Misallocation: Evidence from Europe During the Great Recession</u>, CEPR eBook.
- 11. Aschersleben, P., M. Wagner and D. Wied (2015): *Monitoring Euro Area Real Exchange Rates*. <u>Springer Proceedings in Mathematics and Statistics</u> **122**, 363 –

370.

- Banerjee, A. and M. Wagner (2009): *Panel Methods to Test for Unit Roots and Cointegration*. In T.C. Mills and K. Patterson (Eds.): <u>Palgrave Handbook of Econometrics Vol. II</u>, Chapter 13, 632 726.
- Bauer, D. and M. Wagner (2000): Using Subspace Algorithms for the Analysis of Cointegrated Systems. In: Proceedings of the 6th CEMAPRE Conference, 137 – 150.
- 14. Bauer, D. and M. Wagner (2000): Subspace Algorithm Cointegration Analysis An Application to Interest Rate Data. In: Proceedings of the 15th International Workshop in Statistical Modelling: New Trends in Statistical Modelling, 146 – 151.
- 15. Deistler, M. and M. Wagner (2000): *On the Structure of Cointegration*. In Dockner, E. et al (Eds.): <u>Optimization</u>, <u>Dynamics and Economic Analysis</u>, Springer Verlag, 2000, 373 379.
- 16. Wagner, M. and M. Deistler, with Erhan, A. and H. Yildiz (1998): Ökonomische und massenflussbasierte Verfahren zur Bewertung ökologischer Probleme (Economic and Material Flow Based Methods for the Evaluation of Environmental Problems) published by SUSTAIN (85 pp).
- 17. Deistler, M. and M. Wagner (1997): *Comment on Herman Bierens: Nonparametric Cointegration Analysis.* In Heij, Ch. et al. (Eds.): <u>System</u> <u>Dynamics in Economics and Finance</u>, John Wiley and Sons, 241 – 243.

WORKING PAPERS AND WORK IN PROGRESS:

- 1. Naevdal, E. and M. Wagner: A Note on the Optimal Speed of Transition: Aghion and Blanchard Revisited.
- 2. Veldhuis, S. and M. Wagner: Integrated Modified Least Squares Estimation and (Fixed-b) Inference for Systems of Cointegrating Multivariate Polynomial Regressions.
- 3. Vogelsang, T.J. and M. Wagner: Integrated Modified OLS Estimation and Fixed-b Inference for Cointegrating Multivariate Polynomial Regressions.
- 4. Veldhuis, S. and M. Wagner: A Fixed-b Perspective on the Phillips-Ouliaris Non-Cointegration Z-Tests.
- 5. Reichold, K., M. Wagner, Damjanovic, M. and M. Drenkovska: Sources and Channels of Nonlinearities and Instabilities of the Phillips Curve: Results for the Euro Area and Its Member States.
- 6. Stypka, O. and M. Wagner: *Cointegrating Multivariate Polynomial Regressions: Fully Modified OLS Estimation and Inference.*

- 7. Sögner, L., J. Reynolds and M. Wagner: *Residual-Based Consistent Bubble Detection.*
- 8. Knorre, F. and M. Wagner: Nonparametric Cointegration Analysis of the Environmental Kuznets Curves for Carbon and Sulfur Dioxide Emissions.
- 9. Knorre, F. and M. Wagner: Fully Modified OLS Estimation and Inference for Seemingly Unrelated Cointegrating Polynomial Regressions with Common Integrated Regressors.
- 10. Kawka, R., O. Stypka and M. Wagner: Integrated Modified OLS Estimation and Inference for Seasonally Cointegrating Regressions.
- 11. Li, Y., T.J. Vogelsang and M. Wagner: Integrated Modified OLS Estimation and Fixed-b Inference for Homogenous Cointegrated Panels.
- 12. Sögner, L. and M. Wagner: Fully Modified OLS Estimation and Inference for a System of Spatially Correlated Homogenous Cointegrating Relationships.
- 13. Bauer, D., P. de Matos Ribeiro, L. Matuschek and M. Wagner: Inference on Cointegrating Ranks and Spaces of Multiple Frequency I(1) Processes: A State Space Approach.
- 14. Bauer, D., P. de Matos Ribeiro, L. Matuschek and M. Wagner: *Pseudo Maximum Likelihood Estimation and Inference for Multiple Frequency I(1) Processes: A State Space Approach.*
- 15. Bauer, D., P. de Matos Ribeiro, L. Matuschek and M. Wagner: *Pseudo Maximum Likelihood Estimation and Inference for I(2) Processes: A State Space Approach.*
- 16. Bauer, D., P. de Matos Ribeiro, L. Matuschek and M. Wagner: *Stochastic Trends* and *Economic Fluctuations Reconsidered from the State Space*.
- 17. Veldhuis, S. and M. Wagner: A Fixed-b Cointegration Test for Cointegrating Polynomial Regression.
- 18. Stypka, O. and M. Wagner: *Testing Linear Against Smooth Transition Cointegration*.
- 19. Sakarya, N., M. Wagner and D. Wied: *Monitoring a Change From Spurious Regression to Cointegration*.
- 20. Vetter, M., M. Wagner and R. Kawka: Robust Inference for the Long Run.
- 21. Scholz. M. and M. Wagner: Large Initial Values and Time Series Tests of the Convergence Hypothesis.
- 22. Wagner, M. and S. Zeugner: Model Averaging of Principal Components Augmented Regressions.

- 23. Schneider, U. and M. Wagner: LASSO-Type Estimators with Protected Variables.
- 24. Hong, S.H. and M. Wagner: Fully Modified Estimation of Seemingly Unrelated Nonlinear Cointegration Models.
- 25. Wagner, M. and J. Hlouskova: The Balassa-Samuelson Effect in Western Europe.
- 26. Uhrin, G. and M. Wagner: Enriching Monetary VARs Using Futures Market Data.

COMPLETED PAPERS NOT CURRENTLY SUBMITTED:

- 1. Osbat, C., Y. Sun and M. Wagner: *Sectoral Exchange Rate Pass-Through in the Euro Area.* ECB Working Paper No. 2634 (22 December 2021).
- 2. Linnemann, L., G. Uhrin and M. Wagner: Fiscal Shocks and Labor Productivity.
- 3. Grabarczyk, P. and M. Wagner: Integrated Modified OLS Estimation of Cointegrating Polynomial Regressions with an Application to the Environmental Kuznets Curve.
- 4. Wagner, M. and J. Hlouskova: What's Really the Story with this Balassa-Samuelson Effect in the CEECs?
- 5. Bauer, D. and M. Wagner: Autoregressive Approximations of Multiple Frequency *I*(1) Processes.
- 6. Bauer, D. and M. Wagner: Polynomial Cointegration.
- 7. Wagner, M.: Capital and Goods Market Integration and the Inequality of Nations.

BOOKS AND BOOK PROJECTS:

Neusser, K. and M. Wagner (2022): Zeitreihenanalyse in den Wirtschaftswissenschaften (4. Auflage), Springer, 4th revised edition.

Wagner, M. (2024+): *Econometrics: The Linear Regression Model*, contract with CRC Press/Taylor and Francis

Neusser, K. and M. Wagner (2024+): *Time Series Econometrics*, 2nd revised edition, contract with Springer.

Banerjee, A. and M. Wagner: *The Theory and Practice of the Econometrics of Nonstationary Panels*, book contract with Springer [project dormant]

PROJECT REPORTS:

- Katz, N., D. Janisch, C. Kaltenegger, E. Kirschner, M. Wagner and K. Reichold (2024): *Prognosemodell Nächtigungsvorschau*. Project report for Österreich Werbung.
- Kluge, J., S. Lappöhn, K. Plank, A. Schnabl, M. Wagner, K. Weyerstraß, L. Wimmer and H. Zenz (2021): Austria's Competitiveness and its Determinants: Concepts, Developments, Relative Performance and Policy Options. Project report for Jubiläumsfonds of the Oesterreichische Nationalbank.
- Schmidheiny, K. and M. Wagner (2002): Evaluation von GARCH Modellen in der Portfoliooptimierung (<u>Evaluation of GARCH Models for Portfolio Optimization</u>), Report for OLZ and Partners Asset and Liability Management.
- 4. Institute for Advanced Studies Vienna, several authors (1998 2000): Prognose der österreichischen Wirtschaft (*Forecast of the Austrian Economy*), Five times per year.
- Grozea-Helmenstein, D., C. Helmenstein, J. Hlouskova, and M. Wagner (2000): Die relativen Einkommensaussichten der EU Beitrittswerber (<u>The Relative Income</u> <u>Prospects of EU Accession Countries</u>), Project Report for the Austrian Ministry of Economic Affairs.
- Böhm, B., A. Gleiss, D. Ziegler, and M. Wagner (1998): Kapitalstöcke: Theorie, Konzepte und Schätzung: Der private Sektor in Österreich (<u>Capital Stocks:</u> <u>Theory, Concepts and Estimation: The Private Sector in Austria</u>), Project Report for ÖSTAT (Austrian Statistical Agency), Institute of Econometrics, Operations Research and Systems Theory, Vienna University of Technology.

FUNDED RESEARCH PROJECTS AND CONSULTING:

- 1. "GLASS Global Augmented State Space Error Correction Model". WEAVE project co-funded by Austrian Science Fund (FWF) and German Science Foundation (DFG), joint with Dietmar Bauer, U Bielefeld, Started 2022H2. [Volume: 227.873€ for Klagenfurt, Co-PI]
- 2. "Instability and Nonlinearity of Long-Run Money Demand: Econometric Theory and Empirical Analysis". Funded by Austrian National Bank Jubiläumsfonds, Started 2022H2. [Volume: 249.000€, PI]
- 3. "*The Competitiveness of Austria and its Determinants*". Funded by Austrian National Bank Jubiläumsfonds, January 2018 December 2019. [Volume: 199.000€, Collaborator and Advisor]
- 4. "Analyzing and Testing Arbitrage Parities". Funded by Austrian National Bank Jubiläumsfonds, September 2016 August 2018. [Volume: 85.000€, Collaborator]

- 5. "Estimation and Inference Theory for (Co-)Integrated Processes in the State Space Framework". Funded by German Science Foundation (DFG), joint with Dietmar Bauer, U Bielefeld, December 2015 June 2020. [Volume: 188.334€ for TU Dortmund, PI]
- 6. Project Leader in projects A3 (Dynamic Modelling of Production Technologies; Co-PI with Christoph Schmidt and Manuel Frondel) and A4 (Factor Allocation and Pricing with Aggregate Risks on Financial Markets; Co-PI with Ludger Linnemann) in the Collaborative Research Center 823 (Sonderforschungsbereich 823). Funded by German Science Foundation (DFG). [Volume of subprojects in my research group: approx. 400.000€ for second funding period July 2013 June 2017; approx. 500.000€ for the third funding period July 2017 June 2021]
- 7. "Erweiterungen des IM-OLS Schätzprinzips (Extensions of the IM-OLS Estimation Principle)". Funded by Austrian National Bank Jubiläumsfonds, March 2013 August 2014. [Volume: 106.210€, PI]
- "Development of Dynamic OLS Estimation Theory for Nonlinear Cointegrating Relationships with a Special Focus on Environmental Kuznets Curves". Funded by Austrian National Bank Jubiläumsfonds, September 2009 – August 2010. [Volume: 75.000€, PI]
- 9. "*Managing Risk in Climate Change A Dynamic Perspective*". Project based at the Frisch Centre for Economic Analysis, Oslo, 2009 2012. [Overall project volume about 1 Mio. €, Scientific Advisor and Collaborator]
- 10. "Growth and Convergence: Nonlinear but Smooth" Funded by Austrian National Bank Jubiläumsfonds, January 2006 December 2008, [Volume: 65.000€, PI]
- 11. "The Balassa-Samuelson Effect in the CEECs and its Impact on Growth and Convergence". Funded by Austrian National Bank Jubiläumsfonds, July 2002 December 2003. [Volume: 58.000€]
- 12. *The Relative Income Prospects of EU Accession Countries*, Project for the Austrian Ministry of Economic Affairs, Vienna, 2000. [Volume: 40.000€]

Smaller projects and involvements:

- 13. Developing models for forecasting tourism demand for Austrian tourism regions; in cooperation with Joanneum Research, 2023 2024
- 14. Occasional consultant for the Bank of Slovenia, 2010 2013
- 15. Consultant for the Vienna Institute for International Economic Studies for the Directorate General Regional Policy Project "Analysis of the main factors of regional growth: An in-depth study of the best and worst performing European regions", 2008.
- 16. Consultant at the European Central Bank for modeling exchange rate pass-through, September 2005 December 2005.

- 17. "Identifying the Wage Setting Behavior in Austria and Slovenia", funded by Austrian-Slovenian Friendship Society, 2002.
- 18. Consulting (on portfolio prediction) for OLZ and Partners Asset and Liability Management, Murten, Switzerland, 2002 2004.
- 19. "The Macroeconomic Interdependenices between Austria and Slovenia", funded by Austrian-Slovenian Friendship Society, 2000.
- 20. *IDEE Industrial Dynamics and Employment in Europe*, Vienna University of Technology, EU Research Project (University of Nice, University of Siena, Vienna University of Technology), external collaborator, 1999.
- 21. Consulting (on modeling futures prices) for Market Research, Vienna, 1998 1999.
- 22. "*Capital Stock Estimation for Austria*", Vienna University of Technology, Project for ÖSTAT (Statistics Austria), 1997 1998.
- 23. "Methods for Evaluating Ecological Problems", Vienna University of Technology, Project for SUSTAIN, 1996.

TEACHING:

University of Klagenfurt

- Common Body of Knowledge: Macroeconomics, Course for the MSc program Management, Economics, and Data Science, Fall 2023
- Empirical Finance, Course for BSc and MSc programs in Business and Economics, Fall 2020
- Macroeconomics, Course for BSc programs in Business and Economics, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023 (alternating between German and English)
- Economic Policy, Course for BSc program in Business and Economics, Fall 2019, Fall 2020, Fall 2021
- Case Studies in Economics, Course for the BSc and MSc programs in Business and Economics:
 - o Money, Banks, Financial Markets and Economic Crises, Spring 2020
 - The Economic Consequences of COVID-19, Fall 2020
 - Entrepreneurship, Innovation and Economic Development, Spring 2021
 - Regional Economic Development, Fall 2021
 - Climate, Environment and the Economy, Spring 2022
 - o Inflation, Fall 2022
 - Labor Markets, Spring 2023
 - o Globalization and Labor Markets, Fall 2023
- Introduction to Economics (StEOP), Course for BSc program in Business and Economics, Spring 2020, Spring 2021, Spring 2022, Spring 2023 (in German or English)

- Quantitative Methods for Business, Economics and Finance, PhD Course, Spring 2021, Spring 2022
- Time Series Econometrics, BSc/MSc/PhD Course for Mathematics, Business and Economics programs, Spring 2023

University of Rijeka

• Panel Data Econometrics, PhD Workshop, September 2021

Technical University Dortmund

- Statistics, Course for BSc program in Economics, Business and Social Sciences, Fall 2012, Fall 2013, Fall 2015, Fall 2016
- Econometrics, Course for BSc and MSc program in Statistics, Fall 2012, Fall 2013, Spring 2015, Spring 2016, Spring 2017
- Panel Data Econometrics, Course for MSc program in Statistics and the RGS-Econ PhD program, Spring 2013
- Advanced Econometrics (Panel Data and Microeconometrics), Course for MSc program in Statistics and the RGS-Economics PhD program, Spring 2014, Fall 2015
- Econometrics, Course for MSc program in Economics and Business, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2019
- Seminar in Econometrics, every semester
- PhD Reading Group: Asymptotic Statistics, Spring 2014, Spring 2015, Fall 2015
- Unit Roots and Cointegration, Course for MSc program in Statistics, Spring 2018
- Sampling Theory, Course for MSc program in Statistics, Spring 2019

University of Ljubljana

- Intermediate Time Series Econometrics (MSc Course): 1999
- Advanced Time Series Econometrics (PhD course): 1999
- An Introduction to Panel Data Econometrics (MSc Course): 2000
- Introduction to Unit Roots and Cointegration (MSc Course): 2001
- A Primer on VAR Econometrics (MSc Course): 2002, 2004
- Applied Econometrics (MSc Course): 2004, 2005
- Econometrics II (MSc Course): 2006
- Advanced Econometrics (PhD Course): Spring 2009 2013, annually Spring 2015 –
- Empirical Methods for Economic Analysis (PhD Summer Course): 2014 2017

Bank of Slovenia, Ljubljana (In House Training)

- 2010: VAR Econometrics
- 2012: Panel Data Econometrics
- 2013: Topics in Applied Time Series Econometrics
- 2015: Using VAR Models for Monetary Policy Analysis

Vienna University of Technology

- Macroeconometrics, MSc Course, Fall 2014 (as visiting professor at TU Wien in Fall 2014)
- Exercises and tutorials for: Introduction to Mathematics of Planning, Econometric Models, Operations Research, 1997 1998

CORE - Université Catholique de Louvain

 Advanced Econometrics II: Time Series Econometrics, 2nd year MSc Course, March 2014

University of Graz

- Econometrics I, Course for BSc program in Economics, Fall 2011
- Econometrics II, Course for BSc program in Economics, Spring 2012, Fall 2012
- Seminar in Econometrics, BSc Seminar, Spring 2012, Spring 2013

Institute for Advanced Studies, Vienna

- Topics in Econometrics: Unit Roots and Cointegration, Course for the joint IHS Vienna University of Technology MSc Program in Economics, Spring 2017
- Econometrics I, Course for the joint IHS –Vienna University of Technology MSc Program in Economics, Fall 1999, Spring 2006, Spring 2008, Spring 2009
- Econometrics III (Econometrics of Panel Data), Course for the joint IHS –Vienna University of Technology MSc Program in Economics, Fall 2007, Fall 2009, Fall 2011, Spring 2013
- Econometrics IV (Empirical Project), Course for the joint IHS –Vienna University of Technology MSc Program in Economics, Spring 2010, Spring 2011
- Seminar in Econometrics, Seminar in Applied Econometrics, Econometrics Reading Group: several years
- Econometric Research Seminar (Organizer): several years

Vienna Graduate School of Economics (Joint PhD Program of Viennese Institutions)

- Research Seminar: Econometrics
- Econometrics of Nonstationary Time Series, Spring 2011

University of Hamburg

• Panel Data Econometrics, Course for the MSc program in Economics, Spring 2011

University of Zürich

• Panel Data Econometrics, Course in the PhD program in Finance, January 2009

Vienna Graduate School of Finance (Joint PhD Program of Viennese Institutions)

• Financial Econometrics II: Panel Data Econometrics, 2nd Year PhD course, Spring 2007

University of Konstanz

• Panel Data Econometrics, Course in the PhD program in Economics, Summer 2007

University of Bern

- Introduction to Macroeconomics, Macroeconomics I, Time Series Analysis I, Time Series Analysis II, Supervision of Master Theses, 2000 2004
- Cooperation in Seminar in Empirical Economics and Workshop in Econometrics, 2000 2004
- Introduction to Development and Transition Economics, Course in the BSc program in Economics, Summer term 2001
- Development and Transition Economics, Course in the MSc program in Economics, Winter term 2002

THESIS SUPERVISION:

Institute for Advanced Studies, Vienna

Diploma thesis:							
Susanne Winklehner, 1999:	How	persistent	are	shocks	on	the	Austrian
	unemp	loyment rate	? A st	ructural V	AR a	pproac	h
Bich Ha Nguyen, 2010:	Cross s	sectional dep	enden	ce and PP	Р		

Comenius University, Bratislava

<i>MSc thesis:</i> Maria Machnova, 2008:	The Balassa-Samuelson effect in the enlarging EU
University of Graz	
BSc thesis:	
Klemens Kurtz, 2012:	Preisindexentwicklung in der europäischen
	Währungsunion. Hält die Kaufkraftparität
Nina Knittel, 2012:	Geschlechterspezifische Lohndifferenzen. Eine nähere
	Betrachtung am Beispiel Österreich
Stefan Waldenberger, 2012:	Inflationsprognose mittels Finanzmarktdaten
Gabriel Ziegler, 2012:	Is there a consumption puzzle in the Eurozone? An
	Econometric Approach

Philipp Danninger, 2013:	Purchasing Power Parity: Empirical Issues. Analyse der Kaufkraftparität im Euroraum
Stefan Holl, 2013:	Der strukturelle Zusammenhang zwischen Wechselkursen und den Preisen von Roherzeugnissen
Nicholas Katz, 2013:	Probleme der Umwelt-Kuznets-Hypothese: Theorie und Empirie
Josef Kulmer, 2013:	Prognose der österreichischen Arbeitslosigkeit mithilfe von Google Suchanfragen
Clemens Possnig, 2013:	CEEC10 projections: efficiency assessment and further issues
Christoph Prokop, 2013:	Kurzfristprognose der Strompreise am Beispiel des Spotmarkts der EXAA
Tanja Roschitz, 2013:	Der Beweis der Effizienzmarkthypothese anhand der Daten des Austrian Traded Index
Patrick Ruppnig, 2013:	Internationale Kapitalflüsse: Eine ökonometrische Analyse des Lucas Paradoxon
Corina Schwarzl, 2013:	Zwillingsstudien zum Bildungsertrag: Methoden, Erkenntnisse, Kritik
Bernhard Siegl, 2013:	Colonial impacts on economic growth: Finding relevant growth determinants for former colonies: Periods of independence and former metropolises
Kevin Tikvic, 2013:	Die Beziehung zwischen Wachstumsraten und Schuldenquoten – eine empirische Analyse für Europa
Cornelia Woller, 2013:	Die Neu-Keynesianische Phillipskurve für Österreich: Eine Erweiterung für die offene Volkswirtschaft
TU Dortmund University	
<i>Diploma thesis:</i> Nadege Niamen, 2013:	The relationship between health care expenditure and GDP: A panel perspective
Michele Bieber, 2016:	Misspezifikation in nichtlinearen Kointegrations- modellen
BSc thesis:	
Philipp Aschersleben, 2013:	Eigenschaften von Monitoringprozeduren für Stationarität und Kointegration
Birte Lüttringhaus, 2014:	Hedonische Regressionsanalyse von Mieten in Halver

und Schalksmühle Thomas Wanner, 2015: Torwahrscheinlichkeiten im Fussball (Zweitbetreuer) Collin Leidgebel, 2015: Untersuchung der Kuznetshypothese mit Kointegrationsverfahren

Maximilian Grupe, 2016:Stationary regressors in cointegrating polynomial
regressionsKarsten Reichold, 2016:On parameter estimation in cointegrating polynomial

regressions:Single equation, seemingly unrelated
regressions and panel estimatorsDaniel Cordes, 2017:Optimale Schätzung von Ratingmigrationsmatrizen mit

Anwendung auf Ratingdaten einer Automobilbank (Zweitbetreuer)

Marie Punsmann, 2020: Sebastian Veldhuis, 2020:	Specification testing for smooth transition regressions Investigating the stability of long-run money demand with modern time series econometric techniques
<i>MSc thesis:</i> Ann-Christin Wagner, 2014: Simone Wallbaum, 2014:	FM-OLS Schätzung translogfunktionaler Beziehungen GMM-Schätzer für die Parameter räumlicher MA- Abhängigkeit in Panelregressionsmodellen (Zweitbetreuer)
Felix Irresberger, 2015:	Schätzrisiko bei Value-at-Risk und Expected Shortfall Backtests (Zweitbetreuer)
Svitlana Levenzon, 2015:	Vergleich von Verteilungsregression und Quantilsregression anhand von Lohnverteilungen in den USA (Zweitbetreuer)
Benjamin Sischka, 205:	Modifikation eines Detektors zur Überwachung von Stationarität und Kointegration (Zweitbetreuer)
Fabian Knorre, 2016: Dmitri Bogonos, 2017:	Measurement of credit rating stability IM- and FM-OLS estimation of Translog production functions
Marco Giese, 2017:	Renditeanomalien am deutschen Aktienmarkt (Zweitbetreuer)
Etienne Theising, 2018:	Monitoring cointegration in a system of homogenous cointegrating regressions
Karsten Reichold, 2018:	Cointegrating polynomial regression with an integrated regressor with drift: (Fully modified) OLS estimation and inference
Maximilian Grupe, 2018: Adrian Mazurkiewicz,	Monitoring cointegrating polynomial regressions
2020:	Nonlinear least squares estimation and smooth transition regressions
PhD thesis:	
Gabor Uhrin, 2017:	In search of Q: Results on identification in structural vector autoregressive models
Peter Grabarczyk, 2017:	Essays on cointegrating polynomial regressions with applications to the EKC
Oliver Stypka, 2020:	Essays on estimation and inference in nonlinear cointegrating regressions
Lukas Matuschek, 2020:	Essays on cointegration analysis in the state space framework
Patrick de Matos, 2020:	Pseudo maximum likelihood estimation of cointegrated multiple frequency I(1) VARMA processes using the state space framework
Karsten Reichold, 2023:	Essays in time series econometrics: nonlinearity and nonstationarity
Fabian Knorre, 20224*:	Essays on stability, functional form and poolability of nonlinear cointegrating regressions

University of Ljubljana

<i>MSc thesis:</i> Mark Pozlep, 2019:	The growth effects of rescue packages: details matter		
<i>PhD thesis</i> : Branko Babic, 2024*:	Climate change (policy) impacts on the Slovene financial sector		
University of Klagenfurt			
<i>BSc thesis:</i> Florian Ponholzer, 2022:	A descriptive analysis of the cost to income ratio and the common equity tier 1 ratio of selected Austrian and Slovene banks using selected macroeconomic metrics		
Markus Köfler, 2023:	Construction of annual data sets for the analysis of long- run money demand		
Wesley Baumgart, 2024:	Monetary policy responses to COVID19		
<i>PhD thesis</i> : Sebastian Veldhuis, 2024*:	The stability and linearity of long-run money demand: Econometric theory and empirical analysis		
Alexandros Konstanto- poulos, 2025*:	Essays on macroeconom(etr)ics		

Membership in External Dissertation or Exam Committees

Suphi Sen, 2014:	Essays in environmental and political economics, Tilburg University
David Preinerstorfer, 2015:	Hypothesis testing in regression models with dependent errors: analytical and finite sample results, University of
	Vienna
Yi Li, 2017:	Estimation and inference in cointegrated panels,
	Michigan State University
Neslihan Sakarya, 2017:	Essays in time series econometrics, Ohio State
	University, Co-Supervisor with Robert M. de Jong
Robert Zorko, ongoing:	Essays on corporate credit allocation, University of Ljubljana

CONFERENCES, WORKSHOPS AND SUMMER SCHOOLS:¹

<u> 1994</u>:

1. Second Summer School on Macro Economics, September (3 weeks), Modra/Harmonia, Slovak Republic. (*)

<u> 1995:</u>

- 2. ERNSI² Meeting in Oud Poelgeest, Netherlands. (*)
- 3. ERNSI Meeting in Padova, Italy. (*)

<u> 1997:</u>

4. ECAS – European Courses in Advanced Statistics: Time Series, September, El Escorial, Spain. (*)

<u> 1998:</u>

5. ERNSI Meeting in Vienna, Austria.

<u> 1999:</u>

- 6. Project LINK Spring Meeting, May, New York, USA. (*)
- 7. BMSS Macroeconomics Summer School, UPF, June, Barcelona, Spain. (*)
- 8. ESEM Econometric Society European Meeting, September, Santiago de Compostela, Spain.
- 9. EEA European Economic Association Meeting, September, Santiago de Compostela, Spain.
- 10. IAES International Atlantic Economic Society Meeting, October, Montreal, Canada. (Two papers presented)
- 11. Project LINK Autumn Meeting, November, Athens, Greece. (*)

<u>2000</u>:

- 12. Austrian Economic Association (NOeG) Meeting, May, Vienna, Austria.
- 13. 6th CEMAPRE Conference, June, Lisbon, Portugal.
- 14. 15th International Workshop on Statistical Modelling, July, Bilbao, Spain.
- 15. Summer Course Study Center Gerzensee: Microeconomics of Banking, Xavier Freixas. (*)
- 16. Econometric Society World Congress, August, Seattle, USA.

<u>2001</u>:

17. 39th East Jour Fix, Austrian National Bank, February, Vienna, Austria.

¹ (*) indicates no conference or workshop presentation, e.g. for the Project LINK conferences only the national forecast has to be provided plus some short statement on Austria upon request. In the listed summer schools I have participated as a student or course participant. The list does not include the central banking related workshops and conferences.

² ERNSI – European Research Network on System Identification.

- 18. Meeting of the Econometrics Working Group of the Swiss Society of Economics and Statistics, May, Bern.
- 19. CEPR Workshop in Transition Economics, June/July, Portoroz, Slovenia.
- 20. ESEM Econometric Society European Meeting, August, Lausanne, Switzerland.
- 21. East West Conference of the Austrian National Bank, Vienna, Austria. (*)
- 22. ECAS European Courses in Advanced Statistics: Bayesian Statistics and Financial Econometrics, October, Lugano, Switzerland. (*)

<u>2002</u>:

- 23. CEPEA Convergence in Europe and the Process of Enlargement and Association, June, Nice, France. (*)
- 24. Summer Course Study Center Gerzensee: New Economic Geography, Anthony Venables. (*)
- 25. ESEM Econometric Society European Meeting, August, Venice, Italy.
- 26. 1st Annual Conference of EMM Network, September, Arona, Italy, *Invited Speaker*.
- 27. LACEA 2002, October, Madrid, Spain.
- 28. East-West Conference of the Austrian National Bank, November, Vienna, Austria. (*)

<u>2003</u>:

- 29. Macroeconomic Transmission Mechanisms: Empirical Applications and Econometric Methods, January, Schæffergården, Copenhagen, Denmark.
- 30. 49th East Jour Fix of the Austrian National Bank, June, Vienna, Austria.
- 31. ESEM Econometric Society European Meeting, August, Stockholm, Sweden.
- 32. EEA European Economic Association Meeting, August, Stockholm, Sweden.
- 33. 2nd Annual Conference of EMM Network, November, Rome, Italy, *Invited Speaker*.

<u>2004</u>:

- 34. Economic, Econometric and Cross-Disciplinary Aspects of European Union Enlargement, May, Firenze, Italy.
- 35. First Vienna-Bratislava Economics Meeting, May, Bratislava, Slovakia.
- 36. ESEM Econometric Society European Meeting, August, Madrid, Spain.
- 37. 3rd Annual Conference of the EMM Network, September, Alghero, Italy, *Invited Speaker*.

<u>2005</u>:

- 38. 1st Italian Congress of Econometrics and Empirical Economics, January, Venice, Italy.
- 39. Annual Meeting of the Swiss Society of Economics and Statistics, March, Zurich, Switzerland.
- 40. Meeting of the Christian-August Society, May, Schloss Sulzbach, Germany, *Invited Speaker*.
- 41. Frontiers in Time Series Analysis, May, Olbia, Italy.
- 42. Unit Root and Cointegration Testing, September, Faro, Portugal.

2006:

- 43. New Regional Economics in Central European Economics, March, Vienna, Austria. (*)
- 44. Austrian Economic Association (NOeG) Meeting, May, Vienna, Austria. (Recipient of the *Young Economist Award*)
- 45. Volkswirtschaftliche Tagung der Österreichischen Nationalbank, May, Vienna, Austria. (*)
- 46. The Cointegrated VAR Model: Methods and Applications, June, Copenhagen, Denmark.
- 47. ESEM Econometric Society European Meeting, August, Vienna, Austria.
- 48. Conference on European Economic Integration, November, Vienna, Austria. (*)
- 49. Enlarging the Euro Area, CESifo Workshop, November, Munich, Germany.

2007:

- 50. 2nd Italian Congress of Econometrics and Empirical Economics, January, Rimini, Italy.
- 51. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Association of Economists*) February, Rauischholzhausen, Germany, *Invited Speaker*.
- 52. International Workshop on Computational and Financial Econometrics, April, Geneva, Switzerland.
- 53. Austrian Economic Association (NOeG) Meeting, May, Klagenfurt, Austria.
- 54. Persistence in Economic and Financial Time Series, June, Frankfurt, Germany.
- 55. ESEM Econometric Society European Meeting, August, Budapest, Hungary.
- 56. The Interrelation of Cycles and Growth, WIFO, September, Vienna, Austria. (*)
- 57. International Trade and Domestic Growth, Oesterreichische Nationalbank, September, Vienna, Austria. (*)
- 58. EC² Meeting: Recent Advances in Econometric Time Series Analysis, December, Faro, Portugal.

2008:

- 59. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Economic Association*) February, Rauischholzhausen, Germany. (*)
- 60. ETSERN Meeting, June, Frankfurt, Germany.
- 61. 2nd International Workshop on Computational and Financial Econometrics, June, Neuchatel, Switzerland. (Member of Scientific Programme Committee)
- 62. NBER-NSF Time Series Conference, September, Aarhus, Denmark.
- 63. ETSERN Meeting, November, Copenhagen, Denmark.

<u>2009:</u>

64. 3rd Italian Congress of Econometrics and Empirical Economics, January, Ancona, Italy.

- 65. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Association of Economists*) March, Rauischholzhausen, Germany.
- 66. NORKLIMA Kick Off Meeting, June, Oslo, Norway.
- 67. Econometrics, Time Series and Systems Theory: A Conference in Honor of Manfred Deistler, June, Vienna, Austria. (Organizer) (*)
- 68. EAERE European Association of Environmental and Resource Economists Annual Conference, June, Amsterdam, Netherlands.
- 69. 15th International Panel Data Conference, July, Bonn, Germany. (Local Organizer)
- 70. ESEM Econometric Society European Meeting and EEA European Economic Association Meetings, August, Barcelona, Spain.
- 71. Meeting of the German Economic Association (Verein für Socialpolitik), September, Magdeburg, Germany.
- 72. Annual Meeting of the German Statistical Association (Statistische Woche), invited to deliver the *Gumbel Lecture*, October, Wuppertal, Germany.
- 73. 3rd International Conference on Computational and Financial Econometrics, October, Limassol, Cyprus. (Member of Scientific Programme Committee)
- 74. DIW Berlin Macroeconometric Workshop, December, Berlin, Germany. *Invited Keynote Speaker*.

2010:

- 75. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Association of Economists*) March, Rauischholzhausen, Germany.
- 76. DAGStat 2010, March, Dortmund, Germany.
- 77. ETSERN Meeting, June, Pamplona, Spain.
- 78. Meeting of the Swiss Society of Economics and Statistics, June, Fribourg, Switzerland.
- 79. Annual Meeting of the German Statistical Association (Statistische Woche), September, Nürnberg, Germany.
- 80. NORKLIMA Workshop, November, Oslo, Norway
- 81. 37th Macromodels International Conference, December, Pultusk, Poland. *Invited Speaker*.
- 82. 4th International Conference on Computational and Financial Econometrics, December, London, UK.

<u>2011:</u>

- 83. 4th Italian Congress of Econometrics and Empirical Economics, January, Pisa, Italy.
- 84. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Association of Economists*) February, Rauischholzhausen, Germany.
- 85. Austrian Economic Association (NOeG) Meeting, June, Graz, Austria.
- 86. Meeting of the Swiss Society of Economics and Statistics, June, Luzern, Switzerland.
- 87. Annual Meeting of the German Statistical Association (Statistische Woche), Leipzig, September, Germany. *Invited Speaker*.
- 88. Workshop on Nonlinear Time Series, November, Hannover, Germany.

89. 5th International Conference on Computational and Financial Econometrics, December, London, UK.

2012:

- 90. ESEM Econometric Society European Meeting, August, Malaga, Spain.
- 91. 23rd (EC)2-Conference, December, Maastricht, Netherlands.
- 92. 6th International Conference on Computational and Financial Econometrics, December, Oviedo, Spain.

<u>2013:</u>

- 93. 5th Italian Congress of Econometrics and Empirical Economics, January, Genova, Italy.
- 94. 1st Vienna Workshop on High Dimensional Time Series in Macroeconomics and Finance, May, Vienna, Austria.
- 95. ESEM Econometric Society European Meeting, August, Gothenburg, Sweden.
- 96. Annual Meeting of the German Statistical Association (Statistische Woche), Berlin, September, Germany.
- 97. 40th Anniversary Macromodels International Conference, October, Warsaw, Poland. *Invited Speaker*.
- 98. 7th International Conference on Computational and Financial Econometrics, December, London, UK.

<u>2014:</u>

- 99. Meeting of the Swiss Society of Economics and Statistics, April, Bern, Switzerland.
- 100. Joint SFB823 & SFB649 Workshop, May, Kloster Dürnau, Germany.
- 101. ESEM Econometric Society European Meeting, August, Toulouse, France.
- 102. 8th International Conference on Computational and Financial Econometrics, December, Pisa, Italy. *Invited Speaker*.

<u>2015:</u>

- 103. 6th Italian Congress of Econometrics and Empirical Economics, January, Salerno, Italy.
- 104. Stochastic Models, Statistics and Their Applications, February, Wroclaw, Poland. *Invited Speaker*.
- 105. 2nd Vienna Workshop on High-Dimensional Time Series in Macroeconomics and Finance, May, Vienna, Austria.
- 106. Work Shop on Long Memory and Nonstationarity, May, Frankfurt, Germany.
- 107. International Association for Applied Econometrics 2015 Annual Conference, June, Thessaloniki, Greece.
- 108. World Congress of the Econometric Society, August, Montreal, Canada.
- 109. Annual Meeting of the German Statistical Association (Statistische Woche), September, Hamburg, Germany. *Invited Speaker*.
- 110. NBER-NSF Time Series Conference, September, Vienna, Austria.
- 111. 1st Policy Research Conference, European Central Banking Network, October, Ljubljana, Slovenia. (Discussant)

112. 9th International Conference on Computational and Financial Econometrics, December, London, UK.

2016:

- 113. 7th Italian Congress of Econometrics and Empirical Economics, January, Messina, Italy.
- 114. 12th German Probability and Stochastic Days, March, Bochum, Germany.
- 115. International Association for Applied Econometrics 2016 Annual Conference, June, Milano, Italy.
- 116. ESEM Econometric Society European Meeting, August, Geneva, Switzerland.
- 117. 2nd Policy Research Conference, European Central Banking Network, October, Ljubljana, Slovenia (Discussant)
- 118. 1st Econometric Models of Climate Change Conference, October, Aarhus, Denmark.
- 119. 10th International Conference on Computational and Financial Econometrics, December, Sevilla, Spain.

<u>2017:</u>

- 120. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Association of Economists*) February, Rauischholzhausen, Germany.
- 121. Austrian Economic Association (NOeG) Meeting, May, Linz, Austria.
- 122. International Association for Applied Econometrics 2016 Annual Conference, June, Sapporo, Japan.
- 123. European Meeting of Statisticians, July, Helsinki, Finland.
- 124. 2nd Econometric Models of Climate Change Conference, September, Oxford, UK.
- 125. 3rd Policy Research Conference, European Central Banking Network, September, Ljubljana, Slovenia. (Session chair)
- 126. 1st Workshop of the European Network on Research in Investment, November, Luxemburg. (Discussant)
- 127. 11th International Conference on Computational and Financial Econometrics, December, London, UK.

<u>2018:</u>

- 128. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Association of Economists*) February, Rauischholzhausen, Germany.
- 129. 2nd Conference New Trends and Developments in Econometrics, June, Ilhavo, Portugal. *Invited Speaker*.
- 130. NBER/NSF Time Series Conference, September, San Diego, USA.
- 131. 2018 Asian Regional Forum on Investment Management of Foreign Exchange Reserves, October, Yerevan, Armenia. (Panelist)
- 132. Research Conference of the Croatian Central Bank, October, Zagreb, Croatia (Panelist)
- 133. 2nd Workshop of the European Network on Research in Investment, November, Luxembourg. (Discussant)

134. 12th International Conference on Computational and Financial Econometrics, December, Pisa, Italy.

2019:

- 135. 8th Italian Congress of Econometrics and Empirical Economics, January, Lecce, Italy.
- 136. 4th Vienna Workshop on High-Dimensional Time Series in Macroeconomics and Finance, May, Vienna, Austria.
- 137. Symposium in Honor of Klaus Neusser, Bern, May, Switzerland.
- 138. Future of the Euro Area, Czech National Bank-OMFIF Seminar, May, Prague, Czech Republic. (Panelist)
- 139. International Association for Applied Econometrics 2019 Annual Conference, June, Nicosia, Cyprus.
- 140. 46th Macromodels International Conference, November, Wroclaw, Poland.
- 141. 3rd Workshop of the European Network on Research in Investment, November, Luxembourg. (Discussant)
- 142. 13th International Conference on Computational and Financial Econometrics, December, London, UK.

2020:

- 143. 2nd Italian Workshop of Econometrics and Empirical Economics, January, Venice, Italy.
- 144. Austrian Economic Association (NOeG) Meeting, February, Vienna, Austria.
- 145. Procurement Conference, October, Portoroz, Slovenia. Opening presentation on the economic situation and outlook and round table discussion. (virtual)
- 146. 14th International Conference on Computational and Financial Econometrics, December, London, UK. (virtual)

2021:

- 147. 9th Italian Congress of Econometrics and Empirical Economics, January, Cagliari, Italy. (virtual)
- 148. Procurement Conference, June, Portoroz, Slovenia. Presentation on the economic situation and outlook and round table discussion.
- 149. ITISE Conference, July, Gran Canaria, Spain. *Plenary Speaker*.
- 150. Meeting of the German Economic Association (Verein für Socialpolitik), September, Regensburg, Germany. (virtual)
- 151. 15th International Conference on Computational and Financial Econometrics, December, London, UK. (virtual)

<u>2022:</u>

- 152. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Association of Economists*) April, Hegne, Germany.
- 153. ITISE Conference, July, Gran Canaria, Spain. *Plenary Speaker*.
- 154. Austrian Economic Association (NOeG) Meeting, September, Vienna,

Austria.

155. 16th International Conference on Computational and Financial Econometrics, December, London, UK.

<u>2023:</u>

- 156. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Association of Economists*) March/April, Hasenwinkel, Germany.
- 157. 10th Italian Congress of Econometrics and Empirical Economics, May, Cagliari, Italy.
- 158. ITISE Conference, July, Gran Canaria, Spain. *Plenary Speaker*.
- 159. ESEM Econometric Society European Meeting, August, Barcelona, Spain.
- 160. NBER NSF Time Series Conference, September, Montreal, Canada.
- 161. 2nd Annual Conference of the Research Cluster on Climate Change, November, Frankfurt, Germany. Discussant.
- 162. Workshop on Forecasting in Uncertain Times, IWH Halle, November, Halle, Germany.
- 163. 16th International Conference on Computational and Financial Econometrics, December, Berlin, Germany.

2024:

- 164. 4th Italian Workshop of Econometrics and Empirical Economics, January, Bolzano, Italy.
- 165. Meeting of the "Ökonometrischer Ausschuss des Vereins für Socialpolitik", (*Econometrics Study Group of the German Association of Economists*) March, Berlin, Germany. (*)
- 166. 26th Dynamic Econometrics Conference, April, Oxford, UK. (*)
- 167. 6th Vienna Workshop on High-Dimensional Time Series in Macroeconomics and Finance, May, Vienna, Austria.
- 168. Conference on New Trends and Developments in Econometrics, June, Ponta Delgada, Portugal. *Invited Speaker*.
- 169. The Eighth Conference on the Econometric Models of Climate Change (EMCC VIII), July, Cambridge, UK.

SEMINARS AND INVITED TALKS:

From 1996 to 1999: various seminars at the Vienna University of Technology, the Vienna University of Economics and Business Administration and the Institute for Advanced Studies Vienna.

- 2000: Institute for Advanced Studies Vienna, Vienna University of Technology
- 2001: Vienna Institute for Comparative Economic Studies (WIIW)
- 2002: University of Copenhagen
- 2003: Princeton University, University of Rochester, University of Ljubljana
- 2004: Institute for Advanced Studies Vienna (2x), Swiss National Bank, University of Bern

- 2005: University of Kiel, European University Institute, Austrian National Bank, Institute for Advanced Studies Vienna, University of Madeira (2x), European Central Bank
- 2006: Comenius University Bratislava, University of Bern, University of Konstanz, University of Maastricht, Austrian Institute for Economic Research (WIFO), Vienna University of Economics and Business Administration
- 2007: University of Oslo, Concordia University Montreal, Williams College (Williamstown, Mass.), Helmut Schmidt University Hamburg, University of Bielefeld, Free University of Berlin, ifo Institute Munich, University of Dortmund
- 2008: Helmut Schmidt University Hamburg, University of Mainz, University of Innsbruck, University of Linz, Universitat Pompeu Fabra (Barcelona), Universitat Autonoma (Barcelona), University of Tübingen, Free University of Amsterdam
- 2009: Joint Vienna Macroeconomics Seminar, University of Ljubljana (2x), University of Giessen
- 2010: Technical University of Dortmund, University of Hamburg, University of Mainz, Bank of Slovenia, Michigan State University, Institute for Advanced Studies Vienna
- 2011: University of Graz (2x), University of Ljubljana, Karlsruhe Institute of Technology
- 2012: Institute for Advanced Studies Vienna, Wegener Center Graz, University of Basel, CORE Louvain, University of Bielefeld, University of Linz
- 2013: University of Graz (2x), Ohio State University, University of Michigan, University of Duisburg-Essen, RWI Essen
- 2014: CREATES (Aarhus University), University of Leipzig, University of Graz, Ohio State University, Humboldt University Berlin
- 2015: University of Bern, University of Ljubljana, CentER-Tilburg University, University of Graz
- 2016: University of Kiel, University of Nürnberg, Mannheim University, Technical University Graz
- 2017: Vienna University of Technology, University of Mallorca, Maastricht University
- 2018: University of Nürnberg, Essex University Business School, Einaudi Institute for Economics and Finance Rome, The Federal Reserve Board Washington DC, The New School New York, University of Graz, University of Klagenfurt
- 2019: University of Vienna, University of Bern, RWI Essen
- 2020: University of Regensburg, University of Passau
- 2021: ESCB Webinar Series on Climate Research (virtual)
- 2022: University of Graz, University of Vienna, Saint Petersburg State University (virtual)
- 2023: Bank of Slovenia & University of Ljubljana, Oesterreichische Nationalbank

Since I have joined the Bank of Slovenia fulltime in 2017 and again more often since I moved to the University of Klagenfurt, partly in conjunction with the position at the Bank of Slovenia, I give general interest public talks (discussions, interviews etc.) related to the economic situation and/or outlook. The above list of conferences and seminars furthermore does not include numerous central bank related conference participations in different policy and central banking fora.

MEMBERSHIPS:

- Econometric Society
- Verein für Socialpolitik (German Economic Association)
- International Association for Applied Econometrics
- Member of the *Ausschuss für Ökonometrie* (Econometrics Study Group) of the Verein für Socialpolitik, elected 2008.
- Italian Society of Econometrics
- Network member of the European Science Foundation Network: Econometric Methods for the Modeling of Nonstationary Data, Policy Analysis, and Forecasting (EMM)
- Founding member of ETSERN European Time Series Econometrics Research Network

EDITORIAL ACTIVITIES:

2010 -	Central European Journal of Economic Modelling and
	Econometrics; Associate Editor
2012 -	Empirical Economics; Editorial Board Member; Co-Editor of
	Special Volume on Forecasting in 2020
2013 - 2017	Bank i Kredyt (Bank and Credit); Member of Scientific Board
2014 -	Our Economy – Journal of Contemporary Issues in Economics and
	Business; Editorial Board Member
2017 - 2020	Econometrics; Editorial Board Member
2020 - 2023	Econometrics; Co-Editor-in-Chief; Co-Editor of Special Issues on
	Forecasting (2020-2022) and High-Dimensional Time Series (2022-
	2023)
2023 -	Bancni Vestnik – The Journal for Money and Banking; Editorial
	Board Member
2023 - 2026	German Economic Review; Managing Editor

REFEREE ACTIVITY:

Scientific Journals:

Annals of Operations Research, Applied Stochastic Models in Business and Industry; ASTA Advances in Statistical Analysis; Automatica; Bank of Slovenia Working Paper Series; Bundesbank Discussion Papers; Business Strategy and the Environment; Canadian Journal of Economics; Climatic Change; Communications in Statistics -Theory and Methods, Computational Economics; Computational Statistics and Data Analysis; Control Engineering Practice; ECB Working Paper Series; Ecological Economics: Econometrica: Econometric Reviews: Econometric Theory: Econometrics; Econometrics and Statistics; Econometrics Journal; Economic and Business Review; Economic Inquiry; Economic Modelling; Economic Systems; Economics; Economics Bulletin; Empirica; Empirical Economics; Energy Economics; Energy Journal; Environment and Development Economics; Environment, Development and Sustainability; Environmental and Resource Economics; Focus on European Economic Integration; German Economic Review; Jahrbücher für

Nationalökonomie und Statistik; Journal of Business and Economic Statistics; Journal of Econometrics; Journal of Environmental Economics and Policy; Journal of Environmental Management; Journal of Environmental Planning and Management; Journal of the European Economic Association; Journal of Financial Econometrics; Journal of International Money and Finance; Journal of International Relations and Development; Journal of Multivariate Analysis; Journal of Public Economics; Journal of Statistical Planning and Inference; JRSS B, Journal of Time Series Analysis; Mathematical Population Studies; Metroeconomica; Natural Resources Research; Oesterreichische Nationalbank Working Paper Series; Oxford Bulletin of Economics and Statistics; PNAS Nexus; Portuguese Economic Review; Quantitative Economics; Resource and Energy Economics; Review of Economics and Statistics; Review of Income and Wealth; Review of International Economics; Scandinavian Journal of Statistical Papers; Statistical Science, Structural Change and Economic Dynamics; Studies in Nonlinear Dynamics and Econometrics; Sustainability; Swiss Journal of Economics and Statistics; The World Bank Economic Review; Zeitschrift für Wirtschafts- und Sozialwissenschaften

Review of Book Proposals:

CRC Press, Oxford University Press

Review of Research Proposals:

Anniversary Fund of the Oesterreichische Nationalbank, Belgian Science Foundation, German Science Foundation, Grantova Agentura Ceske Republike, Social Sciences and Humanities Research Council of Canada, Fritz Thyssen Foundation, National Science Center of Poland

CONFERENCE ORGANIZATION:

2008: <u>Member of the Scientific Programme Committee</u>: 2nd International Workshop on Computational and Financial Econometrics, June, Neuchatel, Switzerland.

2009: Organizer: Econometrics, Time Series and Systems Theory: A Conference in Honor of Manfred Deistler, June, Vienna, Austria.
 <u>Local Organizer</u>: 15th International Panel Data Conference, July, Bonn, Germany.
 <u>Member of the Scientific Programme Committee</u>: 3rd International Conference on Computational and Financial Econometrics, October, Limassol, Cyprus.

- 2010: <u>Member of the Scientific Programme Committee</u>: 4th International Conference on Computational and Financial Econometrics, December, London, UK.
- 2011: <u>Member of the Scientific Programme Committee</u>: 5th International Conference on Computational and Financial Econometrics, December, London, UK.
- 2012: <u>Member of the Scientific Programme Committee</u>: 6th International Conference on Computational and Financial Econometrics, December, Oviedo, Spain.
- 2013: <u>Member of the Scientific Programme Committee</u>: 1st Vienna Workshop on High Dimensional Time Series in Macroeconomics and Finance, May, Vienna, Austria.
 <u>Member of the Scientific Programme Committee</u>: 7th International Conference on Computational and Financial Econometrics, December, London, UK.

- 2014: <u>Member of the Scientific Programme Committee</u>: 8th International Conference on Computational and Financial Econometrics, December, Pisa, Italy.
- 2015: <u>Member of the Scientific Programme Committee</u>: 2nd Vienna Workshop on High Dimensional Time Series in Macroeconomics and Finance, May, Vienna, Austria.
 Member of the Scientific Programme Committee: 9th International Conference

<u>Member of the Scientific Programme Committee</u>: 9th International Conference on Computational and Financial Econometrics, December, London, UK.

- 2016: <u>Member of the Scientific Programme Committee</u>: 10th International Conference on Computational and Financial Econometrics, December, Sevilla, Spain.
- 2017: <u>Member of the Scientific Programme Committee</u>: 3rd Vienna Workshop on High Dimensional Time Series in Macroeconomics and Finance, June, Vienna, Austria.

<u>Member of the Scientific Programme Committee</u>: ITISE, September, Granada, Spain.

<u>Member of the Scientific Programme Committee</u>: 11th International Conference on Computational and Financial Econometrics, December, London, UK.

2018: <u>Organizer</u>: 1st Vienna Workshop on Forecasting in Economics, Institute for Advanced Studies, February, Vienna, Austria.

<u>Member of the Scientific Programme Committee</u>: ITISE, September, Granada, Spain.

<u>Member of the Scientific Programme Committee</u>: 12th International Conference on Computational and Financial Econometrics, December, Pisa, Italy.

2019: <u>Member of the Scientific Programme Committee</u>: 4th Vienna Workshop on High Dimensional Time Series in Macroeconomics and Finance, Vienna, Austria.

<u>Member of the Scientific Programme Committee</u>: ITISE, September, Granada, Spain.

<u>Member of the Scientific Programme Committee</u>: 13th International Conference on Computational and Financial Econometrics, December, London, UK.

2020: <u>Member of the Scientific Programme Committee</u>: 2nd Italian Workshop of Econometrics and Empirical Economics, January, Venice, Italy.

Local Organizer: Conference on Mechanism and Institution Design 2020, June, Klagenfurt, Austria.

<u>Organizer</u>: 2nd Vienna Workshop on Forecasting in Economics, Institute for Advanced Studies, October, Vienna, Austria.

<u>Member of the Scientific Programme Committee</u>: 14th International Conference on Computational and Financial Econometrics, December, London, UK.

2021: <u>Member of the Scientific Programme Committee</u>: 9th Italian Congress of Econometrics and Empirical Economics, January, Cagliari, Italy. Member of the Scientific Programme Committee: ITISE, July, Gran Canaria,

Spain.

<u>Co-Chair</u>: 15th International Conference on Computational and Financial Econometrics, December, London, UK.

<u>Member of the Scientific Programme Committee</u>: EC² Conference, December Aarhus, Denmark.

- 2022: Organizer: 5th Vienna Workshop on High-Dimensional Time Series in Macroeconomics and Finance, June, Vienna, Austria.
 <u>Member of the Scientific Programme Committee</u>: Austrian Economic Association (NOeG) Meeting, September, Vienna, Austria.
 <u>Member of the Scientific Programme Committee</u>: 15th International Conference on Computational and Financial Econometrics, December, London, UK.
- 2023: <u>Member of the Scientific Programme Committee</u>: ITISE, July, Gran Canaria, Spain. <u>Member of the Scientific Programme Committee</u>: 16th International Conference on Computational and Financial Econometrics, December, Berlin, Germany.
- 2024: Organizer: 6th Vienna Workshop on High-Dimensional Time Series in Macroeconomics and Finance, May, Vienna, Austria.
 <u>Member of the Scientific Programme Committee</u>: IWH Workshop on Forecasting in Times of Structural Change and Uncertainty, June, Halle, Germany.
 <u>Member of the Scientific Programme Committee</u>: ITISE, July, Gran Canaria, Spain.

<u>Member of the Scientific Programme Committee</u>: Austrian Economic Association (NOeG) Meeting, September, Vienna, Austria.

2025: <u>Organizer</u>: 3nd Vienna Workshop on Forecasting in Economics, Institute for Advanced Studies, June, Vienna, Austria.

SUMMER SCHOOL ORGANIZATION:

- 2017: <u>Organizer and Lecturer</u>: 1st Dortmund-Bielefeld Summer School on Modern Topics in Time Series Analysis, September, Dortmund, Germany.
- 2019: <u>Organizer and Lecturer</u>: 2nd Dortmund-Bielefeld Summer School on Modern Topics in Time Series Analysis, September, Bielefeld, Germany.
- 2022: <u>Organizer and Lecturer</u>: 3rd Klagenfurt-Bielefeld Summer School on Modern Topics in Time Series Analysis, September, Klagenfurt, Austria.
- 2024: <u>Organizer and Lecturer</u>: 4th Klagenfurt-Bielefeld Summer School on Modern Topics in Time Series Analysis, September, Klagenfurt, Austria.