Julia Schaumburg

Contact

Department of Econometrics and Data Science
School of Business and Economics, Vrije Universiteit Amsterdam
De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands
+31 (0)20 59 82653

j.schaumburg@vu.nl
http://juliaschaumburg.com

Current position and affiliations

9/2023–	**Vrije Universiteit Amsterdam** Professor of Econometric Methods and Applications Head of Department Econometrics and Data Science
2/2019–	**Halle Institute for Economic Research** Research professor
9/2016–	**Tinbergen Institute** Research fellow

Education

10/2008–2/2013	**Dr. rer. pol. (Ph.D.) in Economics** Chair of Econometrics, Humboldt-Universität zu Berlin
10/2003–9/2008	**Diplom (M.Sc. equivalent) in Economics** Universität Mannheim
8/2007–12/2007	**Visiting Student** National University of Singapore

Research interests

Time series econometrics, statistical learning, econometric analysis of high-dimensional data, financial stability, macro-financial spillovers, climate econometrics.

Grants and honors

2021–2026	**NWO Vidi research grant (800.000 €)** Title: "Statistical learning over time: closing the gap between time-series econometrics and the statistical learning literature".
9/2019	**Engle Prize (1.500 US-$)** Prize from Journal of Financial Econometrics for the paper "Beyond dimension two: A test for higher-order tail risk".
2018–2019	**ECB Lamfalussy research fellow (10.000 €)** Title: "Networking the Yield Curve".
2016–2018	**NWO Veni research grant (249.000 €)** Title: "The Econometrics of Dynamic Interdependence and the Empirics of Financial Risks, Nonstandard Monetary Policy, and Economic Growth".
8/2011	**Travel grant awarded by Deutsche Bundesbank (500 €)** Grant to present the paper "Financial Network Systemic Risk Contributions" at the European Meeting of the Econometric Society in Oslo, 2011.

Past positions

9/2013–8/2023	**Vrije Universiteit Amsterdam** Associate professor of econometrics (7/2018–8/2023) Assistant professor of econometrics (9/2014–6/2018; tenured since 8/2017) Postdoctoral researcher (9/2013-8/2014)
10/2012–8/2013	**Institute for Empirical Economics, Leibniz University Hannover** Research and teaching assistant
11/2008–9/2012	**Chair of Econometrics, Humboldt-Universität zu Berlin** Research and teaching assistant.

Visiting positions

5–10/2023	**Part-time external research consultant** World Bank, Washington DC, USA.
4–5/2017	**External research consultant** European Central Bank, Financial Research, Frankfurt/Main, Germany.

Research output

Peer-reviewed academic publications

Increased persistence of warm and wet winter weather in recent decades in north-western Europe, with Barend Spanjers, Eric Beutner, and Dim Coumou, *Communications Earth & Environment*, 6 (2025), Article number: 760.

Evaluation of molecular detection for respiratory syncytial viruses in World Health Organization Europe region laboratories, 2020–2023, with Lance Presser, Amani Yousef, Elaine McCulloch, and Adam Meijer. *Journal of Clinical Virology*, 179 (2025); 105832.

Vector autoregressions with dynamic factor coefficients and conditionally heteroskedastic errors, with Paolo Gorgi and Siem Jan Koopman. *Journal of Econometrics*, 244.2 (2024): 105750.

Dynamic nonparametric clustering of multivariate panel data, with Igor Custodio João, Andre Lucas, and Bernd Schwaab. *Journal of Financial Econometrics*, 22(2), (2024), pp. 335–374.

Dynamic clustering of multivariate panel data, with Igor Custodio João, André Lucas and Bernd Schwaab. *Journal of Econometrics*, Volume 237 (2023), Issue 2, 105281, pp. 1–18.

Financial Linkages and Sectoral Business Cycle Synchronization: Evidence from Europe, with Hannes Boehm and Lena Tonzer. *IMF Economic Review*, 70, (2022), pp. 698–734.

Bank business models at zero interest rates with André Lucas and Bernd Schwaab, *Journal of Business & Economic Statistics*, 37(3) (2019), pp. 542-555.

Do negative interest rates make banks less safe? with André Lucas, Federico Nucera, and Bernd Schwaab, *Economics Letters*, 159 (2017), pp. 112-115.

Spillover Dynamics for Systemic Risk Measurement Using Spatial Financial Time Series Models, with Francisco Blasques, Siem Jan Koopman, and André Lucas, *Journal of Econometrics*, 195 (2016), pp. 211–223.

Beyond dimension two: A test for higher-order tail risk, with Carsten Bormann and Melanie Schienle. *Journal of Financial Econometrics*, 14 (2016), pp. 552-580.
Winner of 2019 Engle Prize from the Journal of Financial Econometrics for the best paper by a young author in 2016, 2017 and 2018.

Accounting for Missing Values in Score-Driven Time-Varying Parameter Models, with André Lucas and Anne Opschoor. *Economics Letters*, 148, (2016), pp. 96–98.

Financial Network Systemic Risk Contributions, with Nikolaus Hautsch and Melanie Schienle. *Review of Finance* 19 (2015), pp. 685–738.

Forecasting systemic impact in financial networks, with Nikolaus Hautsch and Melanie Schienle. *International Journal of Forecasting* 30 (2014), pp. 781–794.

Predicting extreme Value at Risk: Nonparametric quantile regression with refinements from extreme value theory. *Computational Statistics & Data Analysis* 56 (2012), pp. 4081-4096.

Other publications

Financial Development and Fragility : A Clustering Analysis, joint with Igor Custodio João, Pietro Calice and Andre Lucas, World Bank Policy Research Working Paper No. 10850, 2024.

Responsibility and climate, published in *De Actuaris* (June 2024), 31, 5, p. 38-39.

Opinie: Samenwerken met Shell past universiteiten nu echt niet meer, joint with Petra Verdonk, Hans Ossebaard and Remco Kort, published in *Trouw* on October 1, 2022.

Working papers

Clustering extreme value indices in large panels, with Chenhui Wang, Juan Juan Cai, and Yicong Lin. TI Discussion Paper No. 25-029/III.

Fire-sale channels, portfolio overlap networks and the credit spread puzzle, with Dieter Wang (World Bank) and Iman van Lelyveld (VU and DNB). DNB Working Paper No. 619. TI Discussion Paper No. 18-100/IV.

Bootstrapping GARCH Models Under Dependent Innovations, with Eric Beutner and Barend Spanjers. TI Discussion Paper No. 2024-008/III.

Networking the Yield Curve: Implications for monetary policy, with Tatjana Dahlhaus (Bank of Canada) and Tatevik Sekhposyan (Texas A&M University). ECB Working paper No. 2532.
Winner of a 2018 ECB Lamfalussy Fellowship.

Regularized estimation for panel time series models with dynamic factors and local cross-sectional dependence, with Quint Wiersma and Siem Jan Koopman. TI Discussion Paper No. 21-008/III.

Asset pricing with dynamic peer networks, with Dieter Wang (World Bank). TI Discussion Paper No. 20-023/III.

Ongoing work

Self-driving neural networks for yield curve modelling, with Marcin Zamojski, Sicco Kooiker, and Janneke van Brummelen.

Tensor autoregressions with time-varying parameters, with Quint Wiersma.

Increased persistence in temperature anomalies intensifies global warming trends, with Barend Spanjers, Eric Beutner, and Dim Coumou.

R package TVP-VAR, with Gijs Smeets and Lennart Hoogerheide.

Estimating probabilities for extreme heatwaves in Europe: A multivariate EVT framework, with Chenhui Wang, Juan Juan Cai, and Yicong Lin.

Multi-period Forecasting of Macro variables at Risk using Neural Networks, joint with Sicco Kooiker.

Ph.D. supervision

Completed

Dieter Wang (graduation: 2021), joint supervision with I. van Lelyveld.
Dissertation title: Empirical Studies on Financial Stability and Natural Capital.

First placement: World Bank.

Quint Wiersma (graduation: 2024), joint supervision with S.J. Koopman.
Dissertation title: Dynamic Models for Multi-Dimensional Time Series
First placement: VU Amsterdam.

Igor Custodio João (graduation: 2024), joint supervision with A. Lucas
Dissertation title: Dynamic Clustering Methods in Panel Data
First placement: acmetric.

Ongoing

Barend Spanjers (since 2022), with E. Beutner.

Sicco Kooiker (since 2023), with J. van Brummelen.

Chenhui Wang (since 2023), with J. Cai.

Mick van Rooijen (since 2025), with E. Wijler.

David van der Straten (since 2025), with A. Lucas, S. Telg, and M. Friedrich.

Assessment committee member

Constanza Martinez (Tilburg University, 2024), Dewi Peerlings (Maastricht University, 2024), Terri van der Zwaan (Erasmus University Rotterdam, 2024), Justus Inhoffen (VU Amsterdam, 2025), Yonas Khanna (VU Amsterdam, 2025).

Teaching

Lectures and seminars

"Case Study in Econometrics and Data Science" (VU, course coordinator, 2025)

"Fair, Transparent and Interpretable Machine Learning" (VU, course coordinator, since 2024)

"Econometrics" (part of Ph.D. course, Central-German Doctoral Program Economics, since 2024)

"Data Analytics for Certified Public Controllers" (VU, lecturer, 2025)

"Data Science for Executives" (VU, lecturer, since 2022)

"Data Science" MBA in International Business (VU, lecturer, 2022–2023, 2025)

"Artificial Intelligence: Data Mining & Machine Learning" (VU, lecturer, 2023–2024)

"Econometrics III" (VU, course coordinator, 2017–2023)

"Introductory Econometrics for Business and Economics" (VU, course coordinator, 2019–2020)

"Introduction to Econometrics" (VU, course coordinator, 2016–2018)

"Econometrics II" (VU, lecturer, 2015–2016)

"Applied Quantitative Economics" (VU, course coordinator, 2015–2016)

"Topics in Microeconometric Theory and Applications" (LU Hannover, seminar instructor, 2013)

“Empirische Wirtschaftsforschung” (Empirical Economics) (LU Hannover, lecturer, 2013)

“Econometric Methods” (HU Berlin, exercise sessions, 2009–2012)

“Einführung in die Ökonometrie” (Introduction to Econometrics) (HU Berlin, exercise sessions, 2009–2012)

Theses

Supervision of numerous BSc and MSc theses in Econometrics & Operations Research, as well as MPhil theses at Tinbergen Institute (since 2013).

Teaching qualifications

Seniorkwalificatie onderwijs (Senior teaching qualification), 2022.

Basiskwalificatie onderwijs (Basic teaching qualification), 2017.

Organization, faculty service

Head of Department Econometrics and Data Science, School of Business and Economics (since 2023).

Chair of SBE task force "Revision of Governance of Teaching" (2024–2025).

Member of program committee Econometrics and Operations Research (2016–2018; 2021–2023).

Program coordinator B.Sc. and M.Sc. Econometrics and Operations Research (2018–2021).

Coordinator of faculty minor "Applied Econometrics: A Big Data Experience for All" (2016–2021).

Acting program director B.Sc. and M.Sc. Econometrics and Operations Research (12/2018–9/2019).

Academic Activities

Associate editor: International Journal of Forecasting (since 2023), Oxford Open Economics (since 2021).

Memberships: Standing fields committee of econometrics ("Ausschuss für Ökonometrie") in the German Economic Association (elected member), Society for Financial Econometrics, Econometric Society, German Economic Association, International Association for Applied Econometrics.

Program committee: Econometric Society Summer Meeting 2024, Econometric Society European Winter Meeting 2021, 2022; Society for Financial Econometrics (SoFiE) Annual Conference 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025.

Session organizer: Computational and Financial Econometrics conference 2020, 2024; 15th Workshop on Stochastic Models, Statistics and Their Applications, Delft, 2024.

Referee service for Advances in Statistical Analysis, Computational Statistics & Data Analysis, Economics Letters, Empirical Economics, European Journal of Finance, Extremes, International Journal of Central Banking, International Journal of Forecasting, International Journal of Information Technology & Decision Making, Journal of the American Statistical Association, Journal of Applied Econometrics, Journal of Banking & Finance, Journal of Business & Economic Statistics, Journal of Commodity Markets, Journal of Econometrics, Journal of Economic Dynamics and Control, Journal of Financial Econometrics, Journal of Financial Stability, Journal of International Business Studies, Journal of International Money and Finance, Journal of Multivariate Analysis, Management Science, Quantitative Finance, Regional Science and Urban Economics, Renewable Energy, Review of Financial Studies, Risk Journals, Scandinavian Journal of Economics, Scientific Reports, Statistical Papers.

Seminar and conference presentations

* scheduled

2026	Transregio 391 Research Seminar, TU Dortmund*.
2025	EEA, Bordeaux; Econometrics committee annual meeting, Berlin; Rome Tor Vergata University.
2024	ICSDS conference, Nice (invited); Econometric Institute Rotterdam; De Nederlandsche Bank; Quantitative Finance and Financial Econometrics Workshop, Marseille (invited); 15th Workshop on Stochastic Models, Statistics and Their Applications, Delft (session organizer and invited speaker); Maastricht University; Cologne University.
2023	DSSV-ECDA 2023, Antwerp (invited); ECB Forecasting Conference (invited discussion and poster); Workshop on Financial Econometrics, Machine Learning, and Big Data, Universitat Pompeu Fabra Barcelona (invited); Tilburg University; Econometrics committee annual meeting, Schloss Hasenwinkel (invited); CREST, Paris.

2022 Virtual Israel Macro Meeting; Tinbergen Econometrics Workshop, Rotterdam (invited); Universität Duisburg-Essen; NBER-NSF Time Series Conference, Boston; Statistische Woche, Münster (invited), ESEM Milano.

2021 Conference in Honor of Fabio Canova, Hydra, Greece; Armenian Economics Association Annual Meeting; IBRN Meeting: Low Interest Rates and International Banking (invited discussion); 13th Annual SoFiE Conference, San Diego; Konstanz University.

2020 Technical University Dortmund; Mathematical Statistics Seminar, Weierstrass Institute Berlin; Standing fields committee of econometrics in the German Economic Association, Schloss Rauischholzhausen (invited).

2019 CFE London (invited); Heidelberg University; George Washington University, D.C.; Bayreuth University; German Economic Association Annual Conference, Leipzig (invited); ESEM Manchester; IAAE Annual Conference, Nicosia; Workshop on Bank Business Models, Cass Business School London (invited discussion).

2018 University of Gothenburg; Conference on "Financial Cycles and Regulation", Deutsche Bundesbank, Frankfurt (invited discussion); TI Dutch Network Economics Day, Amsterdam; Workshop Applied Time Series Econometrics, Federal Reserve St. Louis (invited); IAAE Annual Conference, Montreal; 11th Annual SoFiE Conference, Lugano.

2017 University of Rotterdam; University of Exeter; ECB Workshop Money markets, monetary policy implementation and central bank balance sheets, Frankfurt (invited discussion), HeiKaMEtrics Conference on Financial Econometrics, Heidelberg; ESEM Lisbon; IAAE Annual Conference, Sapporo; EABCN-PWC-EUI Conference: Time-varying models for monetary policy and financial stability, Florence; Society for Nonlinear Dynamics and Econometrics Annual Symposium, Paris; RMSE Meeting, Rotterdam; Risk and Macro Finance Research Seminar, University of Amsterdam.

2016 13th Christmas Meeting of German Economists Abroad, DIW Berlin; De Nederlandsche Bank, Amsterdam; 7th Bundesbank-CFS-ECB Workshop on Macro and Finance, Frankfurt; RiskLab/BoF/ESRB Conference on Systemic Risk Analytics, Helsinki; Karlsruhe Institute of Technology; Workshop Forecasting and Financial Markets, Rotterdam (invited discussion); University of Groningen; Tinbergen Institute, Amsterdam.

2015 RMSE Meeting, Cologne; Banque de France Conference on Endogenous Financial Networks and Equilibrium Dynamics, Paris (invited discussion); SYRTO Conference on Systemic Risk, Amsterdam (invited discussion); Halle Institute for Economic Research; ETH Zurich Risk Center.

2014 German Economic Association Annual Conference, Hamburg; ESEM, Toulouse; IAAE Annual Conference, London; 7th Annual SoFiE Conference, Toronto; Workshop on Dynamic Models driven by the Score of Predictive Likelihoods, La Laguna.

2013 Computational and Financial Econometrics Conference (CFE), London; 2nd Workshop in Applied Economics, NIW Hannover; Vrije Universiteit Amsterdam; Leibniz Universität Hannover.

2012 Computational and Financial Econometrics Conference (CFE), Oviedo; Workshop "Methods and Challenges in Financial Risk Measurement", Kloster Drübeck; Deutsche Bundesbank, Frankfurt/Main; Campus for Finance Research Conference, Vallendar.

2011 Econometric Society European Meeting (ESEM), Oslo; CRC 649 Conference, Motzen; 2nd Humboldt-Copenhagen Conference in Financial Econometrics, Copenhagen.

2010 International Symposion on Econometric Theory and Applications (SETA), Singapore; Netherlands Econometric Study Group Conference, Leuven.

2009 Spring Meeting of Young Economists, Istanbul.