Paul Haimerl

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Research Interests

- Time-Series Econometrics, Climate Econometrics, Statistical Learning.

Education

Ph.D. in Economics (Econometrics), Aarhus University, Department of Economics and Business Economics — Sept 2024 – Aug 2027

- Project: Grouped Trends in Environmental Time Series.
- Supervision: Eric Hillebrand and Morten Ørregaard Nielsen.

M.Sc. in Economic and Financial Research spec. Econometrics, Maastricht University — Sept 2022 – July 2024

- GPA: 8.9 (on a scale from 0 to 10, where 10 is the best grade).
- Thesis: Estimation of Latent Group Structures in Time-Varying Panel Data Models (9.5), supervised by Stephan Smeekes and Ines Wilms.

B.Sc. honors in Economics, University of Regensburg — Sept 2022 – July 2024

- GPA: 1.29 (on a scale from 5 to 1, where 1 is the best grade, second best of the cohort).
- Thesis: Nonlinear Unobserved-Components Models for the COVID-19 Infecation Rates (1.0), supervised by Rolf Tschernig and Tobias Hartl.

Semester abroad, University of Southern Denmark — Sept 2021 – Feb 2022

- GPA: 12 (on a scale from 1 to 12, where 12 is the best grade).

Practical Experience

Research Assistant, Maastricht University, Department of Quantitative Economics – Maastricht — Sept 2023 – June 2024

- Joint work with Stephan Smeekes and Ines Wilms on simultaneous estimation of clusters as well as cluster-specific trends in environmental time series.

Research Assistant, University of Regensburg, Chair of Empirical Economic Research – Regensburg — Dec 2022 – Aug 2023

- Finalization of the peer-reviewed publication Haimerl and Hartl (2023).
- Joint work with Tobias Hartl on the effect of misspecifying the order of the trend in a trend-cycle decomposition of GDP, in particular regarding the trend-cycle correlation.

Intern, d-fine GmbH, Applied AI Cluster – Frankfurt — April 2022 – June 2022

- Visiting member of a 3-person project team to develop a machine learning model to estimate asset correlations for the credit portfolio model of a major German financial institute.
- Analyses to evaluate the representativity of the model training sample in R, execution of univariate analyses, automatization of data processing tests in SAS, harmonization and interlinking of different industry classifications, creation of model documentation and slides.

Working Student, Deutsche Pfandbriefbank AG, Credit Risk & ICAAP Models – Munich — April 2022 – July 2022

- Creation of the Downturn Add-on for the IRB performing Loss Given Default models in SAS.
- Implementation of EBA guidelines, identification of downturn periods, estimation of the downturn effect and its impact on risk weighted assets, documentation and presentation of results.

Intern, Deutsche Pfandbriefbank AG, Credit Risk & ICAAP Models – Munich — Feb 2021 – April 2021

- Creation of a statistical IRRBB model to estimate Prepayments of Real Estate Finance loans.
- Data wrangling, essential participation in creating the econometric approach, implementation of the two-step model in SAS, estimation of the resulting material benefit on operations, creation of documentation and multiple presentations in front of senior stakeholders.

Voluntary Social Year, Bavarian Red Cross – Landshut Feb 2021 – April 2021

- Care and transportation of immobile and vulnerable patients.

Awards and Scholarships

Christa-Lindner Prize for the best Bachelor´s thesis of the Economics department at University of Regensburg. 2023

Scholarship of the German Ministry of Education (Deutschlandstipendium). 2021

Admission to the Honors Bachelor-Program, elite program of the Economics department at University of Regensburg. 2020

Peer-Reviewed Publications

Haimerl, P. and Hartl, T. (2023). Modeling COVID-19 Infection Rates by Regime-Switching Unobserved Components Models. *Econometrics*, 11(2):10. DOI 10.3390/econometrics11020010.
Replication files are available at github.com/Paul-Haimerl/Regime-SW-UC-COVID-19.

Work in Progress

Haimerl, P., Smeekes, S., and Wilms, I. (202x). Latent Group Structures in Time-Varying Panel Data Models.

Haimerl, P., Lembrechts, J., Smeekes, S., and Wilms, I. (202x). Taking the Pace of Microclimate Change - Grouped Trends in the In-Situ and Free-Air Temperature Offset.

Software

PAGFL: R-package to simultaneously identify latent group structures and estimate group-specific coefficients in panel data models.

BTtest: R-package to estimate the number of factors in large nonstationary datasets.

Talks and Presentations

Econometric Models for Climate Change VIII (EMCC), talk. Cambridge University, 2024

National Econometrics Study Group 2024 (NESG), poster presentation. Maastricht University, 2024

Languages and Technologies

Languages: German (native), English (C1), Spanish (B1), Dutch (A2)

Technologies: R (advanced), C++/ Rcpp (intermediate), Julia (basic), Python (basic), SAS (intermediate)