

Education

My **dissertation** is titled “Spillovers and Other Issues in Environmental Economics” and was completed in August 2024. My main **advisor** was Jesús Crespo Cuaresma; other **references** are Bryan Graham, Angelo Mele, and Michael Obersteiner.

- **Ph.D.** in Economics (WU Vienna) (2024)
 - › Research visit, University of California, Berkeley (hosted by *Bryan Graham*) (09–12/2023)
 - › Research visit, Johns Hopkins Carey Business School (hosted by *Angelo Mele*) (02–04/2023)
 - › Research visit, University of Oxford (hosted by *Michael Obersteiner*) (09/2022)
- **M.Sc.** in Economics (WU Vienna) (2019)
- **B.Sc.** in Business, Economics & Social Sciences (WU Vienna) (2017)
 - › Exchange semester, Copenhagen Business School (08–12/2016)

Research

My *research interests* lie in **environmental economics** and **applied econometrics**; my work is focused on gaining insights into environmental economic issues with new and established econometric methods. In my **job market paper**, “[Networks in Space – Spillovers in Amazon Deforestation](#),” I develop a hierarchical approach to jointly model both spillovers and the latent networks behind them, and use it to investigate the deforestation impacts of blacklisting priority municipalities in the Brazilian Amazon.

Journal articles

1. **Kuschnig, N.**, Vashold, L., Soterroni, A., and Obersteiner, M. (2023). Eroding resilience of deforestation interventions – Evidence from Brazil’s lost decade. *Environmental Research Letters*, 18(7):074039, DOI: [10.1088/1748-9326/acdfe7](https://doi.org/10.1088/1748-9326/acdfe7).
2. Giljum, S., Wegner Maus, V., **Kuschnig, N.**, Luckeneder, S., Tost, M., Sonter, L., and Bebbington, A. (2022). A pantropical assessment of deforestation caused by industrial mining. *Proceedings of the National Academy of Sciences*, 119(38):e2118273119, DOI: [10.1073/pnas.2118273119](https://doi.org/10.1073/pnas.2118273119).
3. **Kuschnig, N.** (2022). Bayesian spatial econometrics: A software architecture. *Journal of Spatial Econometrics*, 3(1):6–25, DOI: [10.1007/s43071-022-00023-w](https://doi.org/10.1007/s43071-022-00023-w).
4. **Kuschnig, N.** and Vashold, L. (2021). BVAR: Bayesian vector autoregressions with hierarchical prior selection in R. *Journal of Statistical Software*, 100(14):1–27, DOI: [10.18637/jss.v100.i14](https://doi.org/10.18637/jss.v100.i14).
5. **Kuschnig, N.**, Crespo Cuaresma, J., Krisztin, T., and Giljum, S. (2021). Spillover effects in agriculture drive deforestation in Mato Grosso, Brazil. *Scientific Reports*, 11(1):1–9, DOI: [10.1038/s41598-021-00861-y](https://doi.org/10.1038/s41598-021-00861-y).
6. **Kuschnig, N.** (2021). Inadequate methods undermine a study of malaria, deforestation and trade. *Nature Communications*, 12(1):1–3, DOI: [10.1038/s41467-021-22514-4](https://doi.org/10.1038/s41467-021-22514-4).
7. Bruckner, M., Wood, R., Moran, D., **Kuschnig, N.**, Wieland, H., Maus, V., and Börner, J. (2019). FABIO – The construction of the food and agriculture biomass input-output model. *Environmental Science & Technology*, 53(19):11302–11312, DOI: [10.1021/acs.est.9b03554](https://doi.org/10.1021/acs.est.9b03554).

Working papers

- **Kuschnig, N.** (2024). Networks in space – Deforestation spillovers in a hierarchical model. *Job Market Paper*. [WiP](#).
- **Kuschnig, N., Zens, G., and Crespo Cuaresma, J.** (2023). Hidden in plain sight: Influential sets in linear regression. *CESifo Working Paper*. [WP](#).
- **Sepin, P., Vashold, L., and Kuschnig, N.** (2024). Mapping mining areas in the Tropics from 2016–2024. *Working Paper*. [WP](#).
- **Vashold, L., Pirich, G., Heinze, M., and Kuschnig, N.** (2024). Mines–Rivers–Yields: Downstream mining impacts on agriculture in Africa. *Working Paper*. [WP](#).
- **Kuschnig, N. and Vashold, L.** (2024). Man eats forest – Impacts of cattle ranching on Amazon deforestation. *Work-in-progress*.

Other publications

- **Kuschnig, N., and Vashold, L.** (2022). The economic impacts of malaria: past, present, future. In: *Planetary health approaches to understand and control vector-borne diseases*. Wageningen Academic. DOI: [10.3920/9789004688650_008](https://doi.org/10.3920/9789004688650_008). [WP](#).
- **Kramer, M., Kind-Rieper, T., Munayer, R., Giljum, S., Masselink, R., van Ackern, P., Maus, V., Luckeneder, S., Kuschnig, N., Costa, F., and Rüttinger, L.** (2023). Extracted Forests: Unearthing the role of mining-related deforestation as a driver of global deforestation. *WWF Report*. [Link](#).

Professional activities

Presentations

- '24 **LACEA-LAMES 2024**, Econometric Society (URY); **SEAM 2024**, Slovak Economic Association (SVK); **EEA-ESEM 2024**, European Economic Association (NLD); **EAERE 2024**, Association of Environmental and Resource Economists (BEL); **IAAE 2024**, Applied Econometrics (GRE); **GDE 2024**, German Economic Association (DEU); **RES 2024**, Royal Economic Society (GBR);
- '23 **MEG 2023**, Midwest Econometrics Group (USA); **AMES 2023**, Econometric Society (SGP); **IAAE 2023**, Applied Econometrics (NOR); **BaYSM 2023**, Young Statisticians Meeting (online); **ERSA 2023**, Regional Science Association (ESP); **NOeG Winter Workshop 2023**, Austrian Economic Association (AUT);
- '22 **EEA-ESEM 2022**, European Economic Association (ITA); **ISBA 2022**, Bayesian Analysis (CAN); **BaYSM 2022**, Young Statisticians Meeting (CAN); **user! 2022**, R User Conference (online); **NOeG Winter Workshop 2022**, Austrian Economic Association (AUT)
- ≤ '21 **BaYSM 2021**, Young Statisticians Meeting (online); **user! 2020**, R User Conference (online); 13th **ISIE-SEM**, Society for Industrial Ecology (GER);

Invited talks, external seminars, and workshops

- '24 **WIFO**, workshop presentation (AUT); **CEU**, workshop presentation (AUT)
- '23 **Stanford GSB**, invited talk (USA); **UC Berkeley**, seminar (USA); **University of Victoria**, seminar (CAN); **JH Carey Business School**, seminar (USA); **University of Vienna**, workshop presentation (AUT); **WU**, department conference (SVK)
- ≤ '22 **Ecosta 2022**, invited talk (online); **Nagoya University**, invited workshop (online); **CEU**, workshop presentation (AUT); **Wageningen University & Research**, *cancelled* seminar, (NLD); **IIASA**, seminar (AUT);

Teaching and supervision

- **Spatial Economics** (M.Sc.), lecturer at WU Vienna (S24)
- **Advanced Macroeconometrics** (M.Sc.), lecturer at WU Vienna (S22, S23)
- **Macroeconomics** (B.Sc.), lecturer at WU Vienna (W23)
- **Econometrics 2** (B.Sc.), lecturer at WU Vienna (W20, W21, W22)

- **Econometrics 2** (M.A.), teaching assistant at the Central European University (S22)
- **Applied Econometrics** (B.Sc.), lecturer at WU Vienna (S21)

Thesis supervision

- *Maximilian H.* (2024): Does mining activity make food insecurity worse? (M.Sc.)
- *Gustav P.* (2024): From mines to minds: The impact of artisanal gold mining on human capital formation. (M.Sc.)
- *Elisabeth F.* (2024): Influential periods in macroeconomic data. (M.Sc.)
- *Maximilian H.* (2022): The forest be mine: The impact of mines on deforestation. (B.Sc.)
Received an award for the best Bachelor's thesis at WU Vienna.
- *Theresa B.* (2022): Change of land use in the Brazilian Legal Amazon. (M.Sc.)
- *Magdalena M.* (2021): The impacts of Amazon deforestation on human health. (B.Sc.)
Awarded a 1,000 EUR cash prize for climate research by 'Europaplattform'.

Professional service

- I **refereed** for *Empirica*, *Journal of Spatial Econometrics*, *Journal of Statistical Software*, *Spatial Economic Analysis*, *European Association of Young Economists*, *Communications Earth & Environment*.
- I organized two **reading groups** with various guests on Economics- and research-related issues.
- I am a **representative** of the 'Mittelbau' at the WU Economics Department.
- I develop and maintain a number of **free & open source software** packages, including **BVAR** for Bayesian vector autoregression (with over 50,000 downloads), **bsreg** for Bayesian spatial regression, **influence** for assessing sensitivity to influential sets, and **sanic** for solving linear equations.

Professional experience

- **Research and Teaching Associate**, WU Department of Economics (PhD program) (2020–2025)
- **Research Associate**, WU Institute for Ecological Economics (FWF and OeNB projects) (2019–2025)
- **Research Assistant**, WU Institute for Ecological Economics (ERC project) (2018–2019)

Research grants and awards

- OeNB Anniversary Fund (PI, with Stefan Giljum), project grant (233,000 EUR) (2022–2025)
- Hochschuljubiläumsfonds Wien (PI, with Lukas Vashold), project grant (5,000 EUR) (2024)
- NOeG Dissertation Fellowship, project fellowship (4,000 EUR) (2022)
- Heinrich Graf Hardegg Stiftung, project fellowship (5,500 EUR) (2022)
- WU Small Project, project grant (4,000 & 2,000 & 4,000 EUR) (2020, 2022, 2024)
- WU International Research Fellowship, travel (7,200 & 4,000 & 2,500 EUR) (2022, 2023)
- ÖFG Internationale Kommunikation, travel (2,000 EUR) (2023)
- Nowotny Mobility Grant, travel (900 & 2,000 & 1,600 EUR) (2020, 2022, 2024)
- Best Master's thesis at the WU Economics Department, award (2019)
- Merit scholarships at WU

Skills

- **Languages:** German (native), English (proficient), Italian (intermediate), Spanish (basic)
- **Programming:** R (+), C++, Python, Matlab, C, VBA
- **Other:** Git (+), Excel (+), Linux (+), Slurm, Office, \LaTeX , (Q)GIS, (Postgre)SQL, Docker, Skiing, ...