Microeconometrics using Stata

Doctoral Course, 7.5 ECTS, Jönköping International Business School, Spring 2026

Maximum number of participants: 15

Schedule

All sessions are broadcast on Zoom (https://ju-se.zoom.us/j/61241696825) but attendance on site is preferable for didactic reasons.

# Date, time, and place	Method	Main reference	Session leader
1 Tue, May 19, 10:00 – 13:00, TBA	Non-linear models	Economic Journal (n.d.)	Marcel Garz
2 Tue, June 2, 10:00 – 13:00, TBA	Cluster-robust inference	Cameron and Miller (2015)	
3 Wed, June 3, 10:00 – 13:00, TBA	Difference-in-differences estimation	Roth et al. (2023)	
4 Thu, June 4, 10:00 – 13:00, TBA	Instrumental variables	Imbens (2014)	
5 Tue, June 9, 10:00 – 13:00, TBA	Regression discontinuity designs	Cattaneo et al. (2024)	
6 Wed, June 10, 10:00 – 13:00, TBA	Matching	Caliendo and Ko- peinig (2008)	
7 Tue, June 16, 10:00 – 13:00, TBA	Reserve slot (only used if others need to be canceled)		

Course examination

The course is examined through two examination elements, which are graded on fail/pass scale. Both examination elements need to be passed for a "pass" on the course:

- Presentation of a method and toy example (50%)
- Written assignment in the form of a report and replication package (50%)

A pass regarding the *presentation of a method and toy example* requires the successful leadership of a session, as assigned during the first meeting. Leading a session involves an instructive presentation of the respective method, including:

- The overall idea and theoretical foundations underlying the method (avoid excessive math and formulae)
- Key areas of application and application examples
- Best practices when using the method
- A critical discussion of the method's strengths and weaknesses
- Recent extensions or further developments of the method

In addition, the session leader walks the class through a toy example where a Stata do-file is used to apply the method to real data. While this toy example can be based on Stata's documentation (e.g., https://www.stata.com/manuals/rregress.pdf), students are strongly encouraged to use data from their dissertation. While the primary objective is to familiarize ourselves with core microeconometric methods, the sessions are also considered an opportunity to acquire skills for teaching and collaborative learning. Hence, students are advised to think about didactical aspects when preparing a session, for instance, by initiating discussions or assigning small tasks that keep fellow students engaged, and by accounting for different types of learners (e.g., visual, auditory, kinesthetic, or social learners).

The written assignment in the form of a report and replication package requires a report of max. 10 pages (including everything) that explains the application of a microeconometric method in a research context chosen by the student, including a description of the data and approach, as well as an interpretation of the results with appropriate graphs, tables, and robustness checks. The replication package needs to match this report and fulfil the requirements of the Economic Journal's (n.d.) Data Editor. Students are encouraged to use data and analyses that are relevant to their dissertation.

Teacher

Marcel Garz Associate Professor Room: B5042 marcel.garz@ju.se

marcelgarz.com mediabiasworkshop.org datamethodsinitiative.org Marcel's work explores themes related to human behavior, media, and politics, especially in the context of digital technologies like algorithms and AI. He approaches these topics from an interdisciplinary perspective, drawing on economics, communication studies, political science, and others. His research often involves methods supporting causal inference from observational data, as well as deep learning, computational linguistics, and computer vision.

Literature

Caliendo, M., & Kopeinig, S. (2008). Some Practical Guidance For The Implementation Of Propensity Score Matching. *Journal of Economic Surveys*, 22, 31–72.

Cameron, A. C., & Miller, D. L. (2015). A Practitioner's Guide to Cluster-Robust Inference. *Journal of Human Resources*, 50, 317–372.

Cameron, A. C., & Trivedi, P. K. (2005). *Microeconometrics – Methods and Applications*. Princeton University Press.

Cattaneo, M. D., Idrobo, N., & Titiunik, R. (2020). *A Practical Introduction to Regression Discontinuity Designs: Foundations.* Cambridge University Press.

Economic Journal (n.d.). The Economic Journal's Data Editor Website, URL: https://ejdataeditor.github.io/

Imbens, G. W. (2014). Instrumental Variables: An Econometrician's Perspective. *Statistical Science*, 29, 323–358.

Roth, J., Sant'Anna, P., Bilinski, A., & Poe, J. (2023). What's trending in difference-in-differences? A synthesis of the recent econometrics literature. *Journal of Econometrics*, 235, 2218–2244.