

Microeconometrics: Panel Data (and Multinomial Choice)

Your Teacher

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Office Hours: Tuesday afternoon by appointment per email

Class Schedue

Lecture:

Tue 10:15 - 12:00 (WWZ, S14/S13)

Exercise sessions:

During lecture time.

Course Homepage

There is a course homepage with slides and additional readings:

<http://www.schmidheiny.name/teaching/unibas/microeconometrics2/>

(username: unibas; password:)

Outline

1. Basic Panel Data Models:

- Fixed and random effects
- Cluster-robust standard errors
- Bootstrap methods for small numbers of clusters
- Testing RE vs. FE effects
- Time trends, cohort vs. time effects
- Difference-in-differences estimator
- Event study design with staggered treatment
- Effect shape and distributed-lag model

Outline

2. Generalized Method of Moments

- Efficient IV estimation

3. Dynamic Panel Data Models:

- Anderson-Hsiao
- Arellano-Bond
- System GMM

Outline

5. Multinomial Choice Models:
 - Multinomial/conditional Logit
 - Multinomial Probit
 - Nested Logit
 - Mixed Logit

Level of the course

The level of this course is of *advanced* textbooks.

It is advanced concerning ...

- ... most of its topics
- ... its mathematical rigor (we do proofs, we use matrices)
- ... the applications

Textbooks

- ▶ Cameron, A. Colin and Pravin K. Trivedi (2005)
Microeconometrics: Methods and Applications
Cambridge University Press
- ▶ Wooldridge, Jeffrey M. (2002)
Econometric Analysis of Cross Section and Panel Data
MIT Press

Slides

There will be slides, handouts and articles for the course.

Slides and handouts are ...

- ... brief

- ... not self-contained

⇒ You will *absolutely need* to work with one or more textbooks

Statistical Software

- Handouts provide *STATA* and *R* code
- I will use STATA and/or R in our solutions for problem sets
- I assume you are familiar with some statistical software

Problem Sets

There will be regular problem sets:

- You do not have to hand them in ...
- ... or they will be graded with 0, 1 or 2 points.
- They will be discussed during the lecture.
- You will get my solutions with software commands.

Assessment

- 100% (or 80%) final exam

Final exam:

- Part with open question based on output from statistical software
- Part with derivations and proofs