Microeconometrics: Panel Data (and Multinomial Choice)

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Your Teacher

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Office Hours: Tuesday afternoon by appointment per email

Class Schedule

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. Dymamic 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

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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

Introduction 10

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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