

School of Economics and Management

EEH007F, Econometrics II, 7.5 credits *Ekonometri II, 7,5 högskolepoäng* Third Cycle / Doktorandnivå

Details of approval

Approved by the Board of the Department of Economic History, Lund University School of Economics and Management 2021-03-09. It was revised 2023-01-17, to be valid from autumn semester 2023.

General Information

This is an optional course at the PhD programme. The language of instruction is English.

Learning outcomes

On a general level the student will acquire advanced knowledge and skills in the use of econometrics with a focus on causal approaches with respect to economic history issues. More specifically, students will be able to:

Knowledge and understanding

- demonstrate knowledge about advanced statistical concepts and issues of econometrics;
- have a deeper understanding of causal approaches in econometrics, and understand the difference between various approaches and when they should be applied;
- understand potential shortcomings and benefits of various approaches and discuss when they should be applied;
- have a deeper understanding of panel data analysis with micro and macro data

Competence and skills

- apply advanced econometric tools and analyse empirical data with the help of regressions including fixed effects and extensions using panel data of relevance for the topic;
- proficiently use computer software for econometric analysis and implement econometric analysis in an independent manner

• recognize models for identification of causal effects as they are used in scientific literature and be able to interpret and discuss the results using relevant theory from statistics and econometrics

Judgement and approach

- understand and be able to interpret econometrically estimated models from scientific literature and be able to interpret and discuss the results using statistical and econometric theory
- understand relevant empirical and econometric research and be able to generalize their knowledge to economic problems that have not been discussed during the course.

Course content

The course uses statistical theory and methods relating to causal approaches surpassing the content covered by Econometrics I. It considers how to apply these methods through examples of how such methods are used in economic history. It discusses issues like selection bias, the bad control problem, and unobserved heterogeneity and the pitfalls associated with them as well as the possibilities to deal with these issues using multivariate regression methods and panel data regressions. The course then extends this knowledge through the introduction of advanced causal identification methods including instrumental variables, difference-in-differences and regression discontinuity design.

The content of the course is delimited of both teaching and literature.

Course design

The course is designed as a series of lectures, data labs/exercises and project reports.

Assessment

Grading is based on individual performance, via written exams, papers, presentations, and other mandatory activities. Examination may draw on information presented in class as well as the course literature.

The University views plagiarism very seriously and will take disciplinary actions against students for any kind of attempted malpractice in examinations and assessments. The penalty that may be imposed for this, and other unfair practice in examinations or assessments, includes suspension from the University.

Grades

Marking scale: Fail or Pass.

Entry requirements

PhD students applying for this course should have at least 60 credit points in either economic history, business administration, economic and social geography, economics, history, sociology or the equivalent knowledge.

Further information

This course cannot be included in the same degree as EKHM66.