DRE 7006 Panel Data/ Microeconometrics

Programme
Finance and Economics

Responsible for the course
Jon H Fiva

Department
Department of Economics

Term
According to study plan

ECTS Credits
6

Language of instruction
English

Introduction
This is an advanced econometric course on specification, estimation, and inference based on microeconometric data. The course covers regression analysis with panel data and other techniques useful for making causal inference with non-experimental data. The course will also cover nonlinear models and self-selection problems.

Learning outcome
After having completed this course, students should be able to critically discuss different strategies in the context of models that include individual (firm, person, etc.) effects. They should be familiar with econometric modeling of discrete phenomena and of the modeling of censored and truncated variables. They should further be familiar with microeconometric methods useful for policy analysis using non-experimental data. Students should be able to implement these methods using statistical software (Stata).

Prerequisites
Admission to a PhD Programme is a general requirement for participation in PhD courses at BI Norwegian School of Management.

External candidates are kindly asked to attach confirmation of admission to a PhD programme when signing up for a course with the doctoral administration. Candidates can be allowed to sit in on courses by approval of the course leader. Sitting in on courses does not permit registration for courses, handing in exams or gaining credits for the course. Course certificates or conformation letters will not be issued for sitting in on courses.

Compulsory reading
Books:
Cameron, Adrian Colin, Pravin K. Trivedi. 2005. Microeconometrics : methods and applications. Cambridge University Press

Articles:
During the course there may be hand-outs and other material on additional topics relevant for the course and the examination

Recommended reading
Books:
Baltagi, Badi H. 2008. Econometric analysis of panel data. 4th ed. Wiley
Cameron, Adrian Colin, Pravin K. Trivedi. 2010. Microeconometrics using Stata. Rev. ed. Stata Press
Wooldridge, Jeffrey M. 2010. Econometric analysis of cross section and panel data. 2nd ed. MIT Press

Course outline
1.Panel data

Fixed effects model
Random effects model
Dynamic models
Difference-in-difference estimator

2.Limited dependent variables
Binary response models
Censored data, sample selection and attrition

3.Estimating average treatment effects
Matching methods
Instrumental variable methods
Regression discontinuity design

Computer-based tools
 STATA

Learning process and workload
Students are required to participate in class – both in discussions and by presenting models/material from the reading lists – as well as solve and hand in solutions to exercises and problems.

Workload (6 ECTS)
Lectures 30 hours
Specified learning activities (including reading) 75 hours
Autonomous student learning (including exam preparation) 75 hours
Total 180 hours

Examination
The final grade is pass/fail. 30 hours individual home exam.

Examination code(s)
DRE 70061 accounts for 100 % of the grade.

Examination support materials
N/A

Re-sit examination
Next time the course is offered

Additional information
Honour Code
Academic honesty and trust are important to all of us as individuals, and represent values that are encouraged and promoted by the honor code system. This is a most significant university tradition. Students are responsible for familiarizing themselves with the ideals of the honor code system, to which the faculty are also deeply committed.

Any violation of the honor code will be dealt with in accordance with BI's procedures for cheating. These issues are a serious matter to everyone associated with the programs at BI and are at the heart of the honor code and academic integrity. If you have any questions about your responsibilities under the honor code, please ask.