

Advanced Microeconometrics

June 15–18, 2015 at Uppsala University

The course is lectured by A. Colin Cameron, University of California–Davis

The daily schedule

09:30 - 11:00: First lecture (lecture hall B115)
11:00 - 11:30: Break
11:30 - 13:00: Second lecture (lecture hall B115)
13:00 - 14:00: Lunch
14:00 - 15:30 Computer lab (room F434)

Course outline

Day 1: Count Regression

Lecture 1: Basic cross-section methods: Poisson, negative binomial, hurdle, zero-inated.

Lecture 2: More advanced methods: mixtures, endogeneity, panel data.

Computer Lab: Some general Stata and Stata for Counts

Day 2: Inference for Clustered Data

Lecture 1: Clustered Data: OLS with cluster-robust standard errors, feasible GLS, serially correlated errors, random effects, mixed models; bootstrap without asymptotic refinement.

Lecture 2: Clustered Data: Fixed effects; what to cluster over; twoway clustering; spatial correlation.

Computer Lab: Stata for Clustered Data

Day 3: End Inference for Clustered Data and Begin Simulation Methods

Lecture 1: Clustered Data: Few clusters; bootstrap with asymptotic refinement; nonlinear models, endogenous regressors.

Lecture 2: Simulation: Pseudo random draws, Monte Carlo integration, Gaussian quadrature, Monte Carlo experiment.

Computer Lab: Stata for bootstrap and Monte Carlo experiments.

Day 4: End Simulation Methods

Lecture 1: Maximum simulated likelihood, Bayesian approach, Bayesian analytical example, Bayesian example in Stata 14 (I do not assume you have Stata 14)

Lecture 2: Nonparametric and Semiparametric Estimation.

Computer Lab: Stata for MSL and for non and semi-parametric regression.

Course material

The main material is overhead slides that will be provided and that are self-contained.

Stata programs and data sets will be posted at the course website. My programs are for Stata 12 but should also run in Stata 10, 11, and 13.

The main references will be:

A.C. Cameron and P.K. Trivedi (2005), *Microeconometrics: Methods and Applications*, Cambridge University Press.

A.C. Cameron and P.K. Trivedi (2005) *Microeconometrics using Stata*.

Plus some relevant papers including A.C. Cameron and D.L. Miller (2015) “A Practitioner's Guide to Cluster-Robust Inference”.

Available at [http://cameron.econ.ucdavis.edu/research/Cameron Miller JHR 2015 February.pdf](http://cameron.econ.ucdavis.edu/research/Cameron_Miller_JHR_2015_February.pdf)