APPLIED MICROECONOMETRICS

Lecturers:

Jan Hanousek

(Jan.Hanousek@cerge-ei.cz; office 312, phone 326)

Štěpán Jurajda

(Stepan.Jurajda@cerge-ei.cz; office 326, phone 139)

Teaching assistant:

Cagin Keskin

(Cagin.Keskin@cerge-ei.cz)

Office hours:

TBA

Course information
The course's emphasis is to combine recent advances in econometric techniques applicable in cross-sectional and panel data analysis with examples of their field-specific applications.

Course outline

Week 1 Causal Parameters and Policy Analysis in Econometrics, Checklist for empirical work, Data and publication biases.

Week 2 Identification Approaches, introduction

Week 3 Identification Approaches, practical examples from labor and financial economics.

Week 4 Panel data theory – sources of variation, errors in variables

Week 5 Empirical applications of panel data methods, inference in panel data analysis

Week 6 IV Estimation and testing, Weak instruments, Regression Discontinuity

Week 7 Empirical application (simultaneity in corporate finance), application of regression discontinuity, GMM and its Application in Panel Data.

Week 8 Misc. topics: Dynamic Panel Data, Quantile Regressions, The Reflection Problem, Oaxaca-Blinder Decompositions

Week 9 Additional empirical problems (unbalanced panels, quantile regressions), Meta-Analysis, Nonparametric and semiparametric estimation, and extensions.

Week 10 Qualitative response models, Binary and multinomial.

Week 11 Marginal effects, interpretation, computation and problems, zombie econometrics (using LPM and instruments from LPM in estimation), nested and sequential model building, application, and interpretational advantages of conditional estimation.

Week 12 Duration analysis, Models for count data

Week 13 Applications of Censored & Truncated Models including Semiparametric Estimators.

Week 14 Sample Selection Issues, Matching

Week 15 Applications, Matching as a balancing tool, Program, and Policy Evaluation.

Requirements and grading

20% problem sets, 30% midterm, and 50% final; both *exams are open-book, open-notes*

Readings
The leading textbook for the class is *Econometric Analysis of Cross Section and Panel Data*, J.M. Wooldridge, MIT Press, 2002. Additional references will be provided for the various topics.