

TOPICS IN MICROECONOMETRICS
LABOUR Lectures, EIEF
October 18-19, 2011

Overview

This short course will cover topics in microeconometrics that are of interest to labor economists. The specific topics are program evaluation, control function estimators, stratified sampling, cluster sampling, and difference-in-differences estimation.

I will refer to some chapters from my MIT Press book, *Econometric Analysis of Cross Section and Panel Data*, second edition, MIT Press, 2010. However, most of the material is covered in a set of lecture notes for short courses I have done with Guido Imbens. The most recent set of notes relevant for this course is available at cemmap:

<http://www.cemmap.ac.uk/resources/resources25.php>

These notes contain fairly up-to-date references, although I include some additional references for particular topics.

Schedule

Tuesday, October 18

9:30-11:00: Program Evaluation, I
11:30-1:00: Program Evaluation, II
2:30-4:00: Control Function Estimation

Wednesday, October 19

9:30-11:00: Stratified Sampling
11:30-1:00: Cluster Sampling
2:30-4:00: Difference-in-Differences

Reading Assignments

The unlabelled readings are from my text listed above. Several of the other readings are from the set of lecture notes referred to above; those are labeled “IW.”

Program Evaluation I and II

Sections 21.1, 21.2, 21.3, 21.5

IW (2009), Lectures 1 and 2

Imbens, G.W. and J.M. Wooldridge (2009), “Recent Developments in the Econometrics of Program Evaluation,” *Journal of Economic Literature*, 47(1): 5–86.

Abadie, A. and G.W. Imbens (2011), “Matching on the Estimated Propensity Score,” mimeo, Harvard University Department of Economics.

Imbens, G.W. and K. Kalyanaraman (2011), “Optimal Bandwidth Choice for the Regression Discontinuity Estimator,” mimeo, Harvard University Department of Economics.

Control Function Estimation

Section 6.2, Section 15.7.2, Section 16.2.3, Section 17.5.2

IW (2009), Lecture 14

Blundell, R. and J.L. Powell (2003), “Endogeneity in Nonparametric and Semiparametric Regression Models,” in *Advances in Economics and Econometrics: Theory and Applications*, Eighth World Congress, Volume 2, M. Dewatripont, L.P. Hansen and S.J. Turnovsky, eds. Cambridge: Cambridge University Press, 312-357.

Blundell, R. and J.L. Powell (2004), “Endogeneity in Semiparametric Binary Response Models,” *Review of Economic Studies* 71, 655-679.

Stratified Sampling

Sections 20.1, 20.2

IW (2009), Lecture 9

Cluster Sampling

Sections 20.3, 20.4

IW (2009), Lecture 7

Wooldridge, J.M. (2006), “Cluster-Sample Methods in Applied Econometrics: An Extended Analysis,” manuscript, Michigan State University Department of Economics.

Difference-in-Differences Estimation

Section 6.5

IW (2009), Lecture 11