

ECONOMICS 698
ECONOMETRIC EVALUATION OF SOCIAL PROGRAMS
COURSE OUTLINE AND READING LIST

Department of Economics
University of Maryland
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Office hours: Monday 11:00-12:00 and by appointment.
Course meetings: Monday and Wednesday in 1120 Jimenez Hall from 2:00-3:15.

COURSE DESCRIPTION

This reading course aims to familiarize the student with the basic issues in the econometric program evaluation, as well as with several current topics in that literature. The course consists entirely of readings from the literature, which will be presented and discussed at the class sessions.

COURSE ORGANIZATION

Given the large volume of students in the course, there will be two groups, a Monday group and a Wednesday group. Each student will be assigned to one group. Most of the topics will be covered twice, once by each group. The first topic and the last two topics will be covered in combined sessions.

GRADING

Grading is based on class attendance and participation. It is imperative for the class to work well that everyone reads all the papers on the reading list every week. It is for this reason that the reading list has been kept fairly short and sweet. It is also important that participants come prepared with questions and comments, and that they be ready to respond to questions about the papers.

BACKGROUND READINGS

These are general introductions to the econometric evaluation literature, arranged in ascending order of technical level.

Smith, Jeffrey. 2000. "A Critical Survey of Empirical Methods for Evaluating Active Labor Market Policies." *Swiss Journal for Economics and Statistics*. 136(3): 1-22.

[Available on www.glue.umd.edu/~jsmithz/papers/jeff_papers.htm]

Smith, Jeffrey. 2004 "Evaluating Local Economic Development Policies: Theory and Practice." In Alistair Nolan and Ging Wong, eds., Paris: OECD, 287-332.

[Available on www.glue.umd.edu/~jsmithz/papers/jeff_papers.htm]

Blundell, Richard, Lorraine Dearden and Barbara Sianesi. 2005. "Evaluating the Impact of Education on Earnings in the UK: Models, Methods and Results from the NCDS." *Journal of the Royal Statistical Society Series A*, forthcoming.

[Available in working paper form at <http://www.ifs.org.uk/wps/wp0320.pdf>]

Heckman, James, Robert LaLonde and Jeffrey Smith [HLS]. 1999. "The Economics and Econometrics of Active Labor Market Programs." In Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics, Volume 3A*. Amsterdam: North-Holland. 1865-2097.

[Available in draft form at <http://128.135.232.155/papers/papers.html> and in hard copy at the UM library]

READING LIST

Topic 1: Causality and social experiments – part one

Holland, Paul. 1986. "Statistics and Causal Inference," *Journal of the American Statistical Association*. 81: 945-970, with discussion. Be sure to read all of the discussions as well as the paper.

[Available on JStor]

Heckman, James and Jeffrey Smith. 1995. "Assessing the Case for Social Experiments." *Journal of Economic Perspectives*. 9(2): 85-100.

[Available on JStor]

Burtless, Gary. 1995. "The Case for Randomized Field Trials in Economic and Policy Research." *Journal of Economic Perspectives*. 9(2): 63-84.

[Available on JStor]

Topic 2: Social experiments – part two

Heckman, James, Jeffrey Smith and Nancy Clements. 1997. "Making the Most Out of Programme Evaluations and Social Experiments: Accounting for Heterogeneity in Programme Impacts." *Review of Economic Studies*. 64(4): 487-535.

[Available on JStor]

Heckman, James, Neil Hohmann, Jeffrey Smith and Michael Khoo. 2000. "Substitution and Drop Out Bias in Social Experiments: A Study of an Influential Social Experiment." *Quarterly Journal of Economics*. 115(2): 651-694.

[Available from the UM library e-journal collection]

Topic 3: Quantile treatment effects

Bitler, Marianne, Jonah Gelbach and Hilary Hoynes. 2004. "What Mean Impacts Miss: Distributional Effects of Welfare Reform Experiments." *American Economic Review*, forthcoming.

[Available at <http://glue.umd.edu/~gelbach/papers/>]

Abadie, Alberto, Joshua Angrist and Guido Imbens. 2002. "Instrumental Variables Estimation of Quantile Treatment Effects." *Econometrica*. 70(1): 91-117.

[Available from the UM library e-journal collection]

Topic 4: Bounds

Manski, Charles. 1989. "The Anatomy of the Selection Problem." *Journal of Human Resources*. 24: 343-360.

[Available on JStor]

Manski, Charles. 1990. "Nonparametric Bounds on Treatment Effects." *American Economic Review, Papers and Proceedings*. 80: 319-323.
[Available on JStor]

Manski, Charles, Gary Sandefur, Sara McLanahan, and D. Powers. 1992. "Alternative Estimates of the Effect of Family Structure During Adolescence on High School Graduation." *Journal of the American Statistical Association*. 87: 25-37.
[Available on JStor]

Topic 5: Further issues in matching

Lechner, Michael. 2002. "Programme Heterogeneity and Propensity Score Matching: An Application to the Evaluation of Active Labour Market Policies." *Review of Economics and Statistics*. 84(2): 205-220.
[Available from the UM library e-journal collection and in working paper form at www.siaaw.unisg.ch]

Eichler, Martin and Michael Lechner. 2002. "An Evaluation of Public Employment Programmes in the East German State of Sachsen-Anhalt." *Labour Economics*. 9(2): 143-186.
[Available from the UM library e-journal collection and in working paper form at www.siaaw.unisg.ch]

Frölich, Markus. 2004. "Finite Sample Properties of Propensity Score Matching and Weighting Estimators." *Review of Economics and Statistics* 86(1): 77-90.
[Available from the UM library e-journal collection and in working paper form at www.siaaw.unisg.ch]

Topic 6: Dynamic treatment assignment

Sianesi, Barbara. 2004. "An Evaluation of the Swedish System of Active Labor Market Programs in the 1990s." *Review of Economics and Statistics* 86(1): 133-155.
[Available from the UM library e-journal collection and in working paper form as IFAU Working Paper No. 2001:5 at www.ifau.se]

Fredriksson, Peter and Per Johansson. 2003. "Program Evaluations and Random Program Starts." IFAU Working Paper. No. 2003:1. [Available at www.ifau.se]

Abbring, Japp and Gerard van den Berg. 2004. "Analyzing the Effect of Dynamically Assigned Treatments Using Duration Models, Binary Treatment Models and Panel Data Models." *Empirical Economics* 29(1): 5-20.
[Available from the UM library e-journal collection and in working paper form as IZA Working Paper No. 831 at www.iza.org]

Topic 7: Regression discontinuity designs

HLS, Section 7.4.6.

[To be distributed in hard copy; see also the background reading section]

Van der Klaauw, Wilbert. 2002. "Estimating the Effect of Financial Aid Offers on College Enrollment: A Regression-Discontinuity Approach." *International Economic Review* 43(4): 1249-87.

[Available from the UM library e-journal collection.]

Hahn, Jinyong, Petra Todd and Wilbert van der Klaauw. 2001. "Identification and Estimation of Treatment Effects with a Regression-Discontinuity Design." *Econometrica* 69(1): 201-09.

[Available on JStor]

Buddelmeyer, Hielke, and Emmanuel Skoufias. 2004. "An Evaluation of the Performance of Regression Discontinuity Design in Progresa." World Bank Policy Research Working Paper No. 3386.

[Available at http://econ.worldbank.org/files/38157_wps3386.pdf]

Topic 8: Instrumental variables

Angrist, Joshua, Guido Imbens and Donald Rubin. 1996. "Identification of Causal Effects Using Instrumental Variables [with discussion]." *Journal of the American Statistical Association*. 91(434). 444-472.

[Available on JStor]

Heckman, James. 1997. "Instrumental Variables: A Study of Implicit Behavioral Assumptions Used in Making Program Evaluations." *Journal of Human Resources*. 32(3). 441-452.

[Available on JStor]

Kling, Jeffrey. 2001. "Interpreting Instrumental Variables Estimates of the Returns to Schooling." *Journal of Business and Economic Statistics* 19(3): 358-364.

[Available from the UM library e-journal collection]

Topic 9: Longitudinal methods

Meyer, Bruce. 1995. "Natural and Quasi-Experiments in Economics." *Journal of Business and Economic Statistics*. 13: 151-161.

[Available from the UM library e-journal collection]

Moffitt, Robert. 1991. "Program Evaluation with Nonexperimental Data." *Evaluation Review*. 15(3). 291-314.

[Available on <http://www.econ.jhu.edu/People/Moffitt/progEv.html> as "Paper on Introduction to Program Evaluation"]

Eissa, Nada. 1996. "Labor Supply and the Economic Recovery Tax Act of 1981." In Martin Feldstein and James Poterba, eds., *Empirical Foundations of Household Taxation*. Chicago: University of Chicago Press. 5-32.

[To be circulated in hard copy]

Heckman, James. 1996. "Comment." In Martin Feldstein and James Poterba, eds., *Empirical Foundations of Household Taxation*. Chicago: University of Chicago Press. 32-38.

[To be circulated in hard copy]

McKinnish, Terra. 2000. "Model Sensitivity In Panel Data Analysis: Some Caveats About the Interpretation of Fixed Effects and Differences Estimators."

[Available at <http://spot.colorado.edu/~mckinnis/fe053100.pdf>]

Bertrand, Marianne, Esther Duflo and Sendhil Mullainathan. 2004. "How Much Should We Trust Differences-in-Differences Estimates?" *Quarterly Journal of Economics* 119(1): 249-275.

[Available from the UM library e-journal collection]

Topic 10: Comparing non-experimental estimators

LaLonde, Robert. 1986. "Evaluating the Econometric Evaluations of Training Programs with Experimental Data." *American Economic Review*. 76(4): 604-620.

[Available on JStor]

Heckman, James and V. Joseph Hotz. 1989. "Choosing Among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case of Manpower Training." *Journal of the American Statistical Association*. 84(408): 862-874 (includes comments by Holland and Moffitt).

[Available on JStor]

Dehejia, Rajeev and Sadek Wahba. 1999. "Causal Effects in Non-Experimental Studies: Reevaluating the Evaluation of Training Programs." *Journal of the American Statistical Association*. 94: 1053-1062.

[Available on JStor]

Smith, Jeffrey and Petra Todd. 2004. "Does Matching Overcome LaLonde's Critique of Nonexperimental Estimators?" *Journal of Econometrics* 125(1-2): 305-353 (with rejoinder by Rajeev Dehejia and response by Jeffrey Smith and Petra Todd).

[Available from the UM library e-journal collection and in working paper form on www.glue.umd.edu/~jsmithz/papers/jeff_papers.htm]

HLS, Sections 8.3 and 8.4.

[To be distributed in hard copy; see also the background reading section]

Topic 11: Meta-analysis

Stanley, T.D. 2001. "Wheat from Chaff: Meta-analysis as Quantitative Literature Review." *Journal of Economic Perspectives* 15(3): 131-50. See also the two responses and the reply in *Journal of Economic Perspectives* 16(3): 131-50.
[The 2001 paper is available in JStor. The 2002 paper is available from the UM library e-journal collection.]

Hedges, Larry. 1992. Meta-analysis. *Journal of Educational Statistics* 17: 279-296.
[To be distributed in hard copy.]

Weichselbaumer, Doris and Rudolf Winter-Ebmer. 2003. "A Meta-Analysis of the International Gender Wage Gap." IZA Working Paper No. 906.
[Available at www.iza.org]

Shapiro, S. 1994. "Meta-analysis/Shmeta-analysis." *American Journal of Epidemiology* 140(9): 771-778.
[To be distributed in hard copy.]

Topic 12: Partial equilibrium structural evaluation

Todd, Petra and Kenneth Wolpin. 2003. "Using a Social Experiment to Validate a Dynamic Behavioral Model of Child Schooling and Fertility: Assessing the Impact of a School Subsidy Program in Mexico." Unpublished manuscript, University of Pennsylvania.
[Available at <http://athena.sas.upenn.edu/~petra/papers/revpaper.pdf>]

Cohen-Goldner, Sarit and Zvi Eckstein. 2004. "Estimating the Return to Training and Occupational Experience: The Case of Female Immigrants." Unpublished working paper, Tel Aviv University.
[Available at <http://www.tau.ac.il/%7Eeckstein/pdf/femjuly21-04.pdf>]

Topic 13: General equilibrium evaluation

Calmfors, Lars. 1994. "Active Labour Market Policy and Unemployment--A Framework for the Analysis of Crucial Design Features." OECD Economic Studies 22: 7-47.
[To be distributed in hard copy.]

Lise, Jeremy, Shannon Seitz and Jeffrey Smith. 2004. "Equilibrium Policy Experiments and the Evaluation of Social Programs." Unpublished manuscript.
[Available on www.glue.umd.edu/~jsmithz/papers/jeff_papers.htm]

Heckman, James, Lance Lochner and Christopher Taber. 1999. "General Equilibrium Cost Benefit Analysis of Education and Tax Policies." National Bureau of Economic Research Working Paper No 6881.
[Available at www.nber.org]

COURSE SCHEDULE

- 1/26 No meeting
- 1/31 Everybody: Course introduction
- 2/2 Everybody: Experiments – part one
- 2/7 Monday group: Experiments – part two
- 2/9 Wednesday group: Experiments – part two
- 2/14 Monday group: Quantile treatment effects
- 2/16 Wednesday group: No meeting
- 2/21 Monday group: Bounds
- 2/23 Wednesday group: Quantile treatment effects
- 2/28 No meeting (snow)
- 3/2 Wednesday group: Bounds
- 3/7 Monday group: Matching – further issues
- 3/9 Wednesday group: Matching – further issues
- 3/14 Monday group: Dynamic treatment assignment
- 3/16 Wednesday group: Dynamic treatment assignment
- 3/21 No meeting (spring break)
- 3/23 No meeting (spring break)
- 3/28 Monday group: Regression discontinuity designs
- 3/30 Wednesday group: Regression discontinuity designs
- 4/4 Monday group: Instrumental variables
- 4/6 Wednesday group: Instrumental variables
- 4/11 No meeting
- 4/13 No meeting
- 4/18 Monday group: Longitudinal methods
- 4/20 Wednesday group: Longitudinal methods
- 4/25 Monday group: Comparing non-experimental estimators
- 4/27 Wednesday group: Comparing non-experimental estimators
- 5/2 Monday group: Meta-analysis
- 5/4 Wednesday group: Meta-analysis

- 5/9 Everybody: Partial equilibrium structural evaluation
- 5/11 Everybody: General equilibrium evaluation