Jeff Grogger Harris School Fall 2018 University of Chicago

# **PP 346: Program Evaluation**

Section I: TThu 9:30-10:50 am, Location TBD Section II: TThu 11:00am-12:20 pm, Location TBD

**Instructor**: Jeffrey Grogger

139 Harris School jgrogger@uchicago.edu Office hours: TBA

## **Teaching Assistants:**

| Name | Office hours | Email |
|------|--------------|-------|
| TBA  | TBA          | TBA   |
| TBA  | TBA          | TBA   |
|      |              |       |

NOTE: There will be no class on Thursday, November 15.

**Web site**: All materials for the class will be posted to its site on Canvas.

**Course content**: To introduce students to program evaluation and provide an overview of current issues and methods.

**Texts**: There are no required texts, but you may find it useful to refer to a standard econometrics text such as *Introductory Econometrics: A Modern Approach*, by Jeffrey Wooldridge. Specific readings for each topic appear below. Other useful references are:

Richard Blundell and Monica Costa Dias. "Alternative Approaches to Evaluation in Empirical Microeconomics," *Journal of Human Resources* 44 (3), 2009, 565-640.

Joshua Angrist and Joern-Steffen Pischke. *Mostly Harmless Econometrics*. Princeton Press.

**Grading**: Grades will be based on four problem sets and a final exam. The problem sets will count collectively for 70 percent of the grade and the final exam will count for 30 percent.

<u>Problem sets</u>: The problem sets are mostly empirical exercises that have you employ a number of evaluation techniques, using real data and real computer programs. Many students have found the problem sets to be quite challenging. Both the TA's and Harris's Stata and R consultants are available to provide support, but if you struggled with the empirical exercises during the econometrics sequence, you should reconsider whether this is the right class for you.

Problem sets must be submitted electronically and late problem sets will not be accepted. Each assignment will receive equal weight. You may ask classmates, the TA's, or Harris' Stata and R consultants for help with the problem sets, but you must do your own work. Copying the work of another student is cheating, as is allowing another student to copy yours. Cheaters can expect no leniency.

<u>Final exam</u>. For the final exam, you will read a set of evaluation articles, then critique them according to a set of questions with which you will be provided. The format of the exam, that is, in-class vs. take-home, has yet to be determined. If this uncertainty is a problem for you, you should not enroll in this class.

## **Topics and readings**

#### I. The Evaluation and Selection Problems

Heckman, James J., Robert J. Lalonde and Jeffrey A. Smith, "The Economics and Econometrics of Active Labor Market Programs" in *Handbook of Labor Economics*, Volume 3, eds. Orley Ashenfelter and David Card. Amsterdam: North-Holland Chapter 3, sections 1 through 3.

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

Earth Institute. 2010. Harvests of Development in Rural Africa: The Millennium Villages after Three Years.

Clemens, Michael A., and Gabriel Demombynes. 2011. "When Does Rigorous Impact Evaluation Make a Difference? The Case of the Millennium Villages." *Journal of Development Effectiveness* 3 (3): 305-339.

#### **II. Treatment Parameters**

Blundell and Dias, section II

Heckman, James J., Robert J. Lalonde and Jeffrey A. Smith, "The Economics and Econometrics of Active Labor Market Programs" in *Handbook of Labor Economics*, Volume 3, eds. Orley Ashenfelter and David Card. Amsterdam: North-Holland Chapter 3, sections 1 through 3.

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

#### III. Instrumental Variables

Blundell and Dias, section VI

Joshua D. Angrist and Alan B. Krueger. "Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments" *Journal of Economic Perspectives*(15:4) Autumn, 2001 69-85.

Joshua Angrist, Guido W. Imbens, and Donald B. Rubins. "Identification of Causal Effects using Instrumental Variables" (with discussion) *Journal of the American Statistical Association* 91 1996, 444-72.

Aizer, A., & Doyle, J. J. (2017). Juvenile Incarceration, Human Capital, and Future Crime: Evidence From Randomly Assigned Judges, *Quarterly Journal of Economics*, (December), 759–804. https://doi.org/10.1093/qje/qjv003

Dobbie, Will, et al. (2018). "The Effects of Pretrial Detention on Conviction, Future Crime, and Employment: Evidence from Randomly Assigned Judges." *American Economic Review* 108, 201-240. DOI: 10.1257/aer.20161503

# IV. Social Experiments

Blundell and Dias, section III

James Heckman and Jeffrey Smith. "Assessing the Case for Social Experiments" *Journal of Economic Perspectives* (9:2) Spring 1995 85-110.

Finkelstein, A. N., Taubman, S. L., Wright, B. J., Bernstein, M., Gruber, J., Newhouse, J. P., Oregon Health Study Group, . (2012). The Oregon Health Insurance Experiment: Evidence From The First Year. Quarterly Journal of Economics, 127(August (3)), 1057–1106. https://doi.org/10.1093/qje/qjs020.Advance

King, G., Gakidou, E., Imai, K., Lakin, J., Moore, R. T., Nall, C., Llamas, H. H. (2009). Public policy for the poor? A randomised assessment of the Mexican universal health insurance programme. The Lancet, 373(9673), 1447–1454. https://doi.org/10.1016/S0140-6736(09)60239-7

# V. Regression Discontinuity

Guido Imbens and Thomas Lemieux. "Regression Discontinuity Designs: A Guide to Practice" *Journal of Econometrics* 142(2) 2008. 615-635.

McCrary, J. (2008). Manipulation of the running variable in the regression discontinuity design: A density test. *Journal of Econometrics*, 142(2), 698–714. https://doi.org/10.1016/j.jeconom.2007.05.005

Almond, Douglas, et al (2010). "Estimating Marginal Returns to Medical Care: Evidence from At-Risk Newborns." *Quarterly Journal of Economics*, 591-634.

Deshpande, M. (2016). Does Welfare Inhibit Success? The Long-Term Effects of Removing Low-Income Youth from the Disability Rolls. *American Economic Review*, 106(11), 3300–3330. https://doi.org/10.1257/aer.20151129

Hansen, B. (2015). Punishment and Deterrence: Evidence from Drunk Driving, *American Economic Review*105, 1581–1617. https://www.aeaweb.org/articles?id=10.1257/aer.20130189

### VI. Natural Experiments/Differences-in-Differences

Blundell and Dias, section IV

Bruce D. Meyer. "Natural and Quasi-Experiments in Economics," *JBES* (13:2) April 1995 151-162.

Agan, A., & Starr, S. (2018). Ban The Box, Criminal Records, and Racial Discrimination: A Field Experiment. Quarterly Journal of Economics, (January), 191–235. https://doi.org/10.1093/qje/qjx028.Advance

Doleac, J. L., & Hansen, B. (2017). Does "ban the box" help or hurt low-skilled workers? Retrieved from http://jenniferdoleac.com/wp-content/uploads/2015/03/Doleac\_Hansen\_BanTheBox.pdf

# VII. Matching

Blundell and Dias, section V

Dan Black, Amelia Haviland, Seth Sanders, and Lowell Taylor. "Gender Wage Disparities among the Highly Educated" *Journal of Human Resources* Summer 2008 42(3) 630-59.

Dan Black and Jeffrey Smith. "How Robust is the Evidence on the Effects of College Quality? Evidence from Matching" *Journal of Econometrics* August 2004 121(1-2) 99-124

Desmond and Gershenson (2016). "Housing and Employment Insecurity among the Working Poor." *Social Problems* 63, 46-67. doi: 10.1093/socpro/spv025

## **VIII. Permutation Inference**

Fisher, S. R. A. (1971). *The Design of Experiments*. Hafner Publishing Company, pp. 1-26.

Rosenbaum, Paul R. *Observational Studies*, 2nd edition. New York: Springer-Verlag, 2002, ch. 2

Chetty, Raj, et al. (2009). "Salience and Taxation: Theory and Evidence." American Economic Review 99, 1145-1177.

Cunningham, S., & Shah, M. (2017). Decriminalizing Indoor Prostitution: Implications for Sexual Violence and Public Health. *Review of Economic Studies*, (February), 1–33. <a href="https://doi.org/10.1093/restud/rdx065">https://doi.org/10.1093/restud/rdx065</a>

## IX. Synthetic Control

Abadie, A., Diamond, A., & Hainmueller, J. (2010). Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program. *Journal of the American Statistical Association*, 105(490), 493–505. https://doi.org/10.1198/jasa.2009.ap08746

Abadie, A., & Gardeazabal, J. (2003). The Economic Costs of Conflict: A Case Study of the Basque Country The Economic Costs of Conflict: A Case Study of the Basque Country. *The American Economic Review*, 93(1), 113–132. https://doi.org/10.1257/000282803321455188

Grogger, J. (2017). Soda taxes and the prices of sodas and other drinks: Evidence from Mexico. *American Journal of Agricultural Economics*, 99(2), 481–498. <a href="https://doi.org/10.1093/ajae/aax024">https://doi.org/10.1093/ajae/aax024</a>

# X. Multiple Hypothesis Testing

Benjamini, Yoav and Yosef Hochberg. (1995) "Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing." *Journal of the Royal Statistical Society, Series B*, 57, 289-3000.

Anderson, M. L. (2008). Multiple inference and gender differences in the effects of early intervention: A reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects. *Journal of the American Statistical Association*, 103(484), 1481–1495. <a href="https://doi.org/10.1198/016214508000000841">https://doi.org/10.1198/016214508000000841</a>

Ridgeway, G., & Macdonald, J. M. (2009). Doubly robust internal benchmarking and false discovery rates for detecting racial bias in police stops. *Journal of the American Statistical Association*, 104(486), 661–668. https://doi.org/10.1198/jasa.2009.0034

Jacob, B. A., Ludwig, J., Devitt, C., Ferrier, M., Goerge, R., Graf, R., Wu, P. (2015). The Impact Of Housing Assistance On Child Outcomes: Evidence From A Randomized Housing Lottery. *The Quarterly Journal of Economics*, 130(1), 465–506. https://doi.org/10.1093/qje/qju030.Advance