PG Course Outline

EC5180: Evaluation Economics

2017/18

Spring: Evaluation Economics
20 Credits
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AIMS

- To give students broad advanced-level training in the economics of policy evaluation
- To provide students with the facility to apply economic models to evaluate actual policy interventions
- To provide students with the facility to apply quantitative techniques and qualitative methods to evaluate actual policy interventions in particular fields and countries

LEARNING OUTCOMES

By the end of this course students should:

- Have an advanced level understanding of the principal econometric techniques used to undertake ex post evaluations of economic policies
- Be able to apply their knowledge of econometrics to articles in peer-reviewed journals studying the effects of specific policies in particular countries
- Understand key debates and problems in the economics of policy evaluation
- Be able to apply advanced-level evaluation methods to study independently the effects of a specific policy intervention
- Improved understanding of Stata as a statistical package

COURSE DELIVERY

The course will be delivered through one 2-hour lecture and one 1-hour seminar per week, for 10 weeks. The lecture will also allow for working through problems related to material presented in previous week's lecture, and discussing policy implications of the material.

ASSESSMENT

Formative assessment:

- Formative assessment will consist of problem sets that include data analysis and econometric estimation. The problem sets will be discussed in class and you will be provided with standardized feedback on this work.
- In class discussion of key reading. Students will be requested to have done the reading before the class. These discussions will focus on identifying the research question, the identification strategy and whether the required assumptions are satisfied.

Summative assessment:

- Exam (75% weighting towards final course mark) 2 hour unseen exam during the summer term.
- Coursework (25% weighting towards final course mark): A replication of a published evaluation study and a critical referee report of this study.

Dates of tests and coursework hand-in deadlines can be found in the Departmental Student Handbook and on the Economics Department website.

READING

A list of articles will be provided and articles will be made available on Moodle or in the Library in hard copy. A "*" indicates required reading. Everything else is optional.
The course will be based on "Mostly Harmless Econometrics" by J. Angrist and J.S. Pischke, Princeton University Press. However, this does not cover all the chapters. Additional notes – especially for stata will be available on Moodle

Other books of interest are:

Econometric Analysis of cross section and panel data by J. Wooldridge, MIT press
Microeconometrics: Methods and Application by C. Cameron and P. Trivedi, Cambridge University Press.

WEEKLY TIMETABLE

This is provided for indication only and we may not exactly follow this order. The reading on this list is preliminary and susceptible to changes. Some of the compulsory readings will be presented in the class room, others will be part of your personal work for this course.

Week 1

The evaluation problem + introduction to Stata – MHE Chapter 1
*R Blundell & M Dias Costa, 'Evaluation Methods for Non-Experimental Data', Fiscal Studies, 21(4), 427-68, 2000;
*G. Imbens and J. Angrist, "Identification and Estimation of Local Average Treatment Effects," Econometrica, March 1994.

Week 2

Randomized experiments – MHE Chapter 2
*Rubin, D. B., 1974, "Estimating Causal Effects of Treatments in Randomized and on randomized Studies," Journal of Educational Psychology, 66, 688-701.
* Bertrand Marianne and Sendhil Mullainathan "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination" (joint with), The American Economic Review, 2004, 94(4), 991-1013.
*Kremer, Michael and Edward Miguel, "Worms: Education and Health Externalities in Kenya," (2004), Econometrica.
* Bertrand, M., R. Hanna, S. Djankov and S. Mullainathan, "Obtaining a Driving License in India: An Experimental Approach to Studying Corruption," *Quarterly Journal of Economics* (2007) 122(4), 1639-1676.

* Bandiera, O., I. Barankay and I. Rasul (2005) "Social Preferences and the Response to Incentives: Evidence from Personnel Data". *Quarterly Journal of Economics*, 120(3), pages 917-962
Abhijit Banerjee, Esther Duflo, Rachel Glennerster and Cynthia Kinnan, "The Miracle of Microfinance: Evidence from a Randomized Evaluation ," (2010), mimeo, MIT.
Dearden, L., c. Emmerson, C. Frayne and C. Meghir (2009) "Conditional cash transfers and school drop out" Journal of Human Resources"44, 827-857
Raj Chetty & Emmanuel Saez, 2013. "Teaching the Tax Code: Earnings Responses to an Experiment with EITC Recipients," American Economic Journal: Applied Economics, American Economic Association, vol. 5(1), pages 1-31, January.

Week 3

Natural experiments
* Meyer, Bruce D. (1995), "Natural and quasi-experiments in economics," Journal of Business and Economic Statistics, 13 (2), pp. 151-161. link to 1994's NBER working paper.
*Eric D. Gould, Victor Lavy and M. Daniele Paserman, "Immigrating to Opportunity: Estimating the Effect of School Quality Using A Natural Experiment on Ethiopians in Israel", The Quarterly Journal of Economics, May 2004.
*Bruce Sacerdote, 2002. "The Nature and Nurture of Economics Outcomes," American Economic Review, vol. 92(2), pages 344-348, May.
*Goldin, Claudia and C. Rouse, "Orchestrating Impartiality: The Impact of Blind Auditions on the Sex Composition of Orchestras." American EconomicReview 90(4), 2000, 715-41.
Sacerdote, Bruce. 2001. "Peer Effects with Random Assignment: Results for Darthmouth Roommates," *Quarterly Journal of Economics*, 116(2): 681-704.
Almond, D., Edlund, L., and Palme, M. (2009) "Chernobyl's subclinical legacy: prenatal exposure to radioactive fallout and school outcomes in Sweden", Quarterly Journal of Economics, 1729-1772.
Almond, D. (2006) "Is the 1918 Influenza Pandemic Over? Long-Term Effects of In Utero Influenza Exposure inthe Post-1940 U.S. Population". Journal of Political Economy, 114, 672-712

Week 4

Review of regression analysis – MHE Chapter 3
*J. Angrist and A. Krueger, "Empirical Strategies in Labor Economics," chapter 23 in volume 3A of The Handbook of Labor Economics, 1278-1357, Sections 3 and 4.

Week 5

Propensity score matching methods
*P. Rosenbaum and R. Rubin, "Reducing Bias in Observational Studies Using Sub-classification on the Propensity Score," JASA 79[387], September 1984, 516-524.
*Rosenbaum, P. R. And D. B. Rubin, 1983, "The Central Role of the Propensity Score in Observational Studies for Causal Effects," Biometrika 70[1], April 1983, 41-55.
*R. LaLonde, "Evaluating the Econometric Evaluations of Training Programs with Experimental Data," American Economic Review 76 (September 1986): 604-620.
*R. Dehejia and S. Wahba, "Causal Effects in Non-experimental Studies: Re-evaluating the Evaluation of Training Programs," JASA 94 (Sept. 1999).
J. Smith and P. Todd, "Reconciling Conflicting Evidence on the Performance of Propensity Score Matching Methods," American Economic Review 91 (May 2001).
J. Smith and P. Todd, "Does Matching Overcome LaLonde's Critique of Non-experimental Estimators?" Journal of Econometrics, 2005(1-2).

J. Angrist, "Estimating the Labor Market Impact of Voluntary Military Service Using Social Security Data on Military Applicants," Econometrica, March 1998.
Card, David and Daniel Sullivan. 1988. "Measuring the Effects of Subsidized Training Programs on Movements in and out of Unemployment," *Econometrica*, 56(3): 497-451.
Heckman, James, Hidechiko Ichimura and Petra Todd. 1997. "Matching as an Econometric Evaluation Estimator: Evidence from Evaluating a Job Training Programme," *Review of Economic Studies*, 64(4): 605-654.

Week 6

Controlling for Unobservables: Twins and Fixed Effects - MHE Chapter 5
*Rothstein, Jesse. 2007. "Do Value-Added Models Add Value? Tracking, Fixed Effects, and Causal Inference," Mimeo.
* Paul Bingley, Kaare Christensen & Vibeke Myrup Jensen. 2009, "Parental Schooling and Child Development: Learning from Twin Parents" SFI working paper.
http://www.sfi.dk/Default.aspx?ID=4067&Action=1&NewsId=2168&PID=9285
* Vikesh Amin (2011) "Returns to Education: Evidence from UK Twins: Comment" American Economic Review, 101, 1629-1635

Week 7

Difference in differences methods MHE Chapter 5
*Card, David (1990). "The Impact of the Mariel Boatlift on the Miami Labor Market." Industrial and Labor Relations Review 43(2): 245-257.
*M. Bertrand, E. Duflo, and S. Mullainathan, "How Much Should We Trust Differences-in-Differences Estimates?," QJE 119(1), 2004
*Duflo, Esther, "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment," American Economic Review, 91 (2001), 795–813.
*Angrist, Joshua and Alan Krueger. 2001. "Instrumental Variables and the Search for Identification: from Supply and Demand to Natural Experiments," *Journal of Economic Perspectives*, 13(2): 69-85.
*Dynarski, S. 2000 "Hope for Whom? Financial Aid for the Middle Class and Its Impact on College Attendance" National Tax Journal, 53, 629-662
Rosenzweig, Mark and Kenneth Wolpin. 2000. "Natural 'Natural Experiments' in Economics," *Journal of Economic Literature*, 38(4): 827-874.

Week 8

Instrumental variable methods MHE Chapter 4
*J. Angrist and A. Krueger(2001) "Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments" Journal of Economic Perspectives, 15, 69-85
*Angrist, J.D. and A. Krueger, "Does Compulsory Schooling Attendance Affect Schooling and Earnings?" *Quarterly Journal of Economics*, 106[4], Nov 1991, 979-1014.
* Bound, John, David A. Jaeger, Regina M. Baker (1995) Problems with Instrumental Variables Estimation When the Correlation Between the Instruments and the Endogeneous Explanatory Variable is Weak Journal of the American Statistical Association, Vol. 90, No. 430 (Jun., 1995), pp. 443-450
J. Angrist, "Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records," American Economic Review, June 1990.
D. Card and A. Krueger (2000): "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Reply," American Economic *Review*, 90(5), December, 1397-1420.

Jane Currie and Enrico Morreti "Mothers education and the intergenerational transmition of human capital: evidence from college openings." QJE, August 2003.
Acemoglu, Daron, Simon Johnson, and James A. Robinson, "The Colonial Origins of Comparative Development: An Empirical Investigation," American Economic Review, 91 (2001), 1369– 1401.
Lochner, Lance, and Enrico Moretti. "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports," NBER Working Paper No. 8605, 2001
(and AER)
C. Hoxby (2000) "Does Competition Among Public Schools Benefit Students and Taxpayers?" *American Economic Review*, 90.5 (December).

Week 9

Regression discontinuity MHE Chapter 6
* Imbens, G. and T. Lemieux(2008) Regression Discontinuity Design: a guide to practice" Journal of Econometrics, 142, 615-635
http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6VC0-4NSMMVX-3-1&_cdi=5940&_user=122871&_pii=S0304407607001091&_origin=browse&_zone=rslt_list_item&_coverDate=02%2F29%2F2008&_sk=998579997&wchp=dGLzVzz-zSkzV&md5=29870e3e099fec73c1791ee94b23d53b&ie=/sdarticle.pdf
* David S. Lee & Thomas Lemieux, 2010. "Regression Discontinuity Designs in Economics," Journal of Economic Literature, American Economic Association, vol. 48(2), pages 281-355
*Angrist J. and V. Lavy. "Using Maimonides' Rule to Estimate the Effect of Class Size on Scholastic Achievement", Quarterly Journal of Economics, May 1999.
Lalive, R. (2008) "**How do extended benefits affect unemployment duration? A regression discontinuity approach**", journal of Econometrics, 142, 785-806
http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6VC0-4P12J78-1-R&_cdi=5940&_user=122871&_pii=S0304407607001170&_origin=browse&_zone=rslt_list_item&_coverDate=02%2F29%2F2008&_sk=998579997&wchp=dGLzVzz-zSkzV&md5=028367f863f1eb4f87510d2b2cbd9bc3&ie=/sdarticle.pdf
Carpenter and Dobkin (2009) The Effect of Alcohol Consumption on Mortality: Regression Discontinuity Evidence from the Minimum Drinking Age", *American Economic Journal: Applied Economics, 1:1, 164–182*

Week 10

Review and Discussion in class of the replication projects [If time allows]