

APPLIED MICROECONOMETRICS

Spring 2015

Instructor:	Derya Uysal	TA:	Bence Bardóczy
Email:	uysal@ihs.ac.at	Email:	bardoczy@ihs.ac.at

Course Page:

- <http://www.deryauysal.com>

Office Hours: After class, or by appointment, or email your questions...

Main References: This is a restricted list of various interesting and useful books that will be touched during the course. You need to consult them occasionally.

Angrist J. D. and Pischke J-S (2009) *Mostly Harmless Econometrics*, Princeton University Press [MHE]

Cameron A.C. and P.K Trivedi (2005), *Microeconometrics Methods and Applications*, Cambridge University Press.

Wooldridge, Jeffrey (2010), *Econometric Analysis of Cross Section and Panel Data*, Mit Press

Imbens, Guido W., and Jeffrey M. Wooldridge. 2009. "Recent Developments in the Econometrics of Program Evaluation." *Journal of Economic Literature*, **47(1)**: 5-86.

Other texts and support material will be introduced as needed.

Objectives: In the first part of the course we will review the standard microeconomic methods to analyse individual level micro data. In the second part we will discuss methods commonly used for causal inference. This course also aims to familiarize you with the basics in Stata.

Prerequisites: Econometrics I

Tentative Course Outline:

- Quantal Response Models (Binary Response, Ordered Response, Multinomial Response)
- Limited Dependent variables
- Count Data Models
- Causality & Potential Outcomes
- Randomized Studies
- Observational Studies and Estimation of Treatment Effects under Unconfoundedness: Regression, Weighting and Matching
- Instrumental Variables Estimation
- Differences-in-Differences
- Regression Discontinuity

Grading Policy: Homework (20%), Presentations+Summaries (40%), Final Project (40%).

Class Policy: Regular attendance is essential and expected.

Reading List: This is the list of papers of which you will choose papers to summarize at least four present in class. We will discuss the details in the class. For the final project (replication of an empirical paper) you can use one of the papers in this list, too. If you would like to replicate another paper than one of those assigned, you are welcome to do so after asking for my approval for the paper you chose.

Not for all empirical papers are data readily available. Part of your assignment is to find out whether the data are online, or whether you can obtain them some other way.

1. Methodological Issues in Statistics and Econometrics (Not for final project)

- Leamer, E. E. 1983. "Let's Take the Con Out of Econometrics," *American Economic Review*, Vol.73(1):31-43.
- Dewald, W. G., Thursby, J. G., and Anderson, R. G. 1986. "Replication in Empirical Economics: The Journal of Money, Credit and Banking Project," *American Economic Review*, Vol. 76(4): 587-603.
- McCloskey, D.N. and Ziliak, S. T. 1996. "The Standard Error of Regressions," *Journal of Economic Literature*, Vol. 34(1): 97-114.
- Summers, L. H. 1991. "The Scientific Illusion in Empirical Macroeconomics," *Scandinavian Journal of Economics*, Vol. 93(2): 129-148.
- Kennedy, P. E. 2002. "Sinning in the Basement: What are the Rules? The Ten Commandments of Applied Econometrics," *Journal of Economic Surveys*, Vol. 16(4): 569-589.
- Hendry, D. F. 2002. "Applied Econometrics Without Sinning," *Journal of Economic Surveys*, Vol. 16(4): 591-604.

2. Randomized experiments [MHE: Chapter 2]

- Krueger, A. 1999. "Experimental estimates of education production functions," *The Quarterly Journal of Economics*, Vol. 114(2): 497-532.
- Miguel, E. and Kremer, M. 2003. "Worms: identifying impacts on education and health in the presence of treatment externalities." *Econometrica*, Vol. 72(1):159-217
- Angrist J., Bettinger E, and Kremer M. 2006. "Long-Term Educational Consequences of Secondary School Vouchers: Evidence from Administrative Records in Colombia," *American Economic Review*, Vol. 96(3): 847-62.
- Banerjee, et al. 2007. "Remedying Education: Evidence from Two Randomized Experiments in India," *Quarterly Journal of Economics*, Vol. 122(3): 1235-64.
- Bertrand M., Mullainathan S. 2004. "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," *American Economic Review*, Vol. 94(4): 991-1013.
- Della Vigna S, List J. A, Malmendier U. 2012. "Testing for Altruism and Social Pressure in Charitable Giving," *Quarterly Journal of Economics*, Vol. 127: 1-56

3. Estimation under unconfoundedness [MHE: Chapter 3]

- Lechner M. 2002. "Program heterogeneity and propensity score matching: an application to the evaluation of active labor market policies," *Review of Economics and Statistics* Vol. 84: 205-220.
- Frölich M, Heshmati A, Lechner M. 2004. "A microeconomic evaluation of rehabilitation of long-term sickness in Sweden," *Journal of Applied Econometrics* Vol. 19 375-396
- Blundell R, Dearden L, Sianesi B. 2005. "Evaluating the effect of education on earnings: models, methods and results from the National Child Development Survey," *Journal of the Royal Statistical Society A* Vol. 168: 473-512.

- Persson, Torsten. 2001. "Currency Unions and Trade: How Large is the Treatment Effect?," *Economic Policy* Vol. 16(33): 433-448 (An application of matching methods to macroeconomics.)

4. Instrumental Variables [MHE: Chapter 4]

- Angrist, J. D. 1990. "Association Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records," *American Economic Review*, Vol. 80(3): 313-336.
- Angrist, J. D. and Krueger, A. 1991. "Does Compulsory Schooling Attendance Affect Schooling and Earnings?," *Quarterly Journal of Economics*, Vol. 106: 979-1014.
- Angrist, J. D. and Krueger, A. 1992. "The Effect of Age at School Entry on Educational Attainment: An Application of Instrumental Variables with Moments from Two Samples," *Journal of the American Statistical Association*, Vol. 87(4):328-336.
- Butcher, K. and Case, A. 1994. "The Effects of Sibling Sex Composition on Womens Education and Earnings," *Quarterly Journal of Economics*, Vol. 109(3):531-564.

5. Differences-In-Differences [MHE: Chapter 5]

- Card, D. and Krueger, A. 1994. "Minimum Wages and Employment: A Case Study of the Fast Food Industry in New Jersey and Pennsylvania", *American Economic Review*, Vol. 84(4):772-784.
- Duflo, E. 2001. "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment," *American Economic Review*, Vol. 91(4):795-813.
- Deschênes, O. and Greenstone, M. 2007. "The Economic Impacts of Climate Change: Evidence from Agricultural Output and Random Fluctuations in Weather," *American Economic Review*, Vol. 97:354-385.
- Kugler, A. and Pica, G. 2008. "Effects of Employment Protection on Worker and Job Flows: Evidence from the 1990 Italian Reform," *Labour Economics*, Vol. 15(1): 78-95.
- Kellogg, R. and Wolff, H. 2008. "Daylight Time and Energy: Evidence from an Australian Experiment." *Journal of Environmental Economics and Management*, Vol. 56:207220.
- Abadie, A., Diamond, A., and Hainmueller, J. 2010. "Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of Californias Tobacco Control Program," *Journal of the American Statistical Association*, Vol. 105(490):493-505.

6. Regression-Discontinuity Designs [MHE: Chapter 6]

- Black, S. E. 1999. "Do Better Schools Matter? Parental Valuation of Elementary Education," *Quarterly Journal of Economics*, 114(2):577-599
- Angrist, J. D. and Lavy, V. 1999. "Using Maimonides Rule to Estimate the Effect of Class Size on Scholastic Achievement," *Quarterly Journal of Economics*, Vol. 114(2): 533-575.
- Kugler, A. and Sauer, R. 2005. "Doctors without Borders? Relicensing Requirements and Negative Selection in the Market for Physicians," *Journal of Labor Economics*, Vol. 23(3): 437-466.