

**University of Maryland  
Department of Economics**

**ECON 652: Fall 2018  
Graduate Public Economics I**

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Class: Monday and Wednesday, 9:30 – 10:45am (0101Tydings Hall)  
Office hours: Monday 11:00am – 12:30pm, or by appointment

### **Course Description**

This course is the first in a two-part graduate sequence in Public Economics. We will focus on the role of government intervention in the economy and cover the following topics: externalities, public goods theory, local public finance (with a focus on the economics of education), and social insurance. For each topic, we will focus on theoretical and empirical evidence as well as relevant empirical research methods.

### **Course Requirements**

Students are expected to read the assigned papers and participate in class discussions. Additionally, students are expected to attend both the (generally) Thursday Labor/Public/Development seminar (3:30 – 5:00pm) and the Monday 708 talk (12:30 – 1:30pm).

The grade for the course will be based on:

- 1) One research proposal – **35%**. The proposal should include a clearly defined question, motivation as to why the question is economically important, a brief review of the literature, a discussion of the relevant economic theory, and an overview of the data that will be used to analyze the question and methodological approach.
  - A) Students will submit two to three potential questions, each with a short paragraph of motivation by **September 10**.
  - B) A discussion of the relevant literature and theory will be due **October 8**.
  - C) The data and methodology section should be submitted by **November 14**.
  - D) The full proposal is due **December 10**
  
- 2) Proposal presentations – **15%**. Students are expected to make a 30-minute presentation of their proposal and serve as a discussant for a classmate's proposal on **November 28, December 3, December 5, or December 10**. To ensure that discussants have sufficient time to prepare useful feedback, slides should be distributed to the discussant at least a week in advance.

- 3) One data-intensive problem set – **10%**.
- 4) A presentation of one required article – **10%**. These readings are marked **D**. Students should email me their top three choices by the second class.
- 5) A take-home final – **30%**. The final will be distributed on **December 10** in class and is due at 11:59pm on **December 12**.

### General References

Auerbach, A. J. & Feldstein, M., ed. (2002) *Handbook of Public Economics*, Vol. 3 and 4, Elsevier.

Auerbach, A. J. & Feldstein, M., ed. (2013) *Handbook of Public Economics*, Vol. 5, Elsevier.

Chetty, R., Public Economics Lecture Slides.

Available at: <http://www.rajchetty.com/lectures/>

Saez, E., Graduate Public Economics.

Available at: <http://elsa.berkeley.edu/~saez/course/course.html>

### Econometrics References

Angrist, J. & Pischke, J. (2008) *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press.

Imbens, G. and Wooldridge, J. (2007) What's New in Econometrics: NBER Summer Institute Mini-Course. Available at: <http://www.nber.org/minicourse3.html>

Wooldridge, J. M. (2002) *Econometric Analysis of Cross Section and Panel Data*, MIT Press.

### Course Outline and Reading List

#### 1. Externalities and Random Assignment [4 lectures]

\*\* Weitzman, M. (1974) "Prices versus Quantities," *Review of Economic Studies* 41(4): 477–491.

\*\* Chay, K. and Greenstone, M. (2003) "The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession," *Quarterly Journal of Economics* 118(3): 1121 – 1167

\*\* Moretti, E. (2004) "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions," *American Economic Review* 94(3): 656 – 690.

\*\* Muralidharan, K. and Sundararaman, V. (2015) “The Aggregate Effect of School Choice: Evidence from a two-stage experiment in India,” *Quarterly Journal of Economics* 130(3): 1011 – 1066.

D Currie, J. and Walker, R. (2011) “Traffic Congestion and Infant Health: Evidence from E-ZPass,” *American Economic Journal: Applied Economics* 3(1): 65 – 90.

Keiser, D. and Shapiro, J.S. (2018) Consequences of the Clean Water Act and the Demand for Water Quality,” *Quarterly Journal of Economics*.

## **2. Public Goods and Differences-in-Differences Estimation [3 lectures]**

\*\* Samuelson, P. A. (1954) “The Pure Theory of Public Expenditure,” *Review of Economics and Statistics* 36(4): 387 – 389.

\*\* Hungerman, D. (2005) “Are Church and State Substitutes? Evidence from the 1996 Welfare Reform,” *Journal of Public Economics* 89(11–12): 2245 – 2267.

\*\* DellaVigna, S., List, J. A. and Malmendier, U. (2012) “Testing for Altruism and Social Pressure in Charitable Giving,” *Quarterly Journal of Economics* 127(1): 1 – 56.

D Andreoni, J. (1993) “An Experimental Test of the Public Goods Crowding Out Hypothesis,” *American Economic Review* 83(5): 1317 – 1327.

Andreoni, J. and Payne, A. (2003) “Do Government Grants to Private Charities Crowd Out Giving or Fundraising?” *American Economic Review* 93(3): 792 – 812.

Bertrand, M., Duflo, E., and Mullainathan, S. (2004) “How Much Should We Trust Difference-in-Differences Estimates?” *Quarterly Journal of Economics* 119(1): 249 – 275.

Cameron, A. C., Gelbach, J. B., and Miller, D. M. (2008) “Bootstrap-Based Improvements for Inference with Clustered Errors,” *Review of Economics and Statistics* 90(3): 414 – 427.

Abadie, A., Diamond, A., and 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.

## **3. Local Public Finance [6 lectures]**

### **3.1 The Tiebout Model and Fiscal Federalism**

\*\* Tiebout, C. M. (1956) "A Pure Theory of Local Public Expenditures," *Journal of Political Economy* 65(5): 416 - 424.

\*\* Oates, W. (1999) “An Essay on Fiscal Federalism,” *Journal of Economic Literature* 37(3): 1120 – 1149.

\*\* Diamond, R. (2017) "Housing Supply Elasticity and Rent Extraction by State and Local Governments," *American Economic Journal: Economic Policy* 9(1): 74 – 111.

**D** Gordon, Nora (2005) "Do Federal Grants Boost School Spending? Evidence from Title I," *Journal of Public Economics* 88: 1771-1798.

Oates, W. and Schwab, R. (1988) "Economic Competition among Jurisdictions: Efficiency Enhancing or Distortion-Inducing?" *Journal of Public Economics* 35(3): 333 – 354.

Hines, J. and Thaler, R. (1995) "Anomalies: The Flypaper Effect," *Journal of Economic Perspectives* 9(4): 217 – 226.

Besley, T. and Coate, S. (2003) "Centralized versus Decentralized Provision of Local Public Goods: A Political Economy Analysis," *Journal of Public Economics* 87(12): 2611 – 2637.

### **3.2 School Choice and Sorting**

\*\* Hoxby, C. M. (2000) "Does Competition among Public Schools Benefit Students and Taxpayers?" *American Economic Review* 90(5): 1209 - 1238.

\*\* Urquiola, M. (2005) "Does School Choice Lead to Sorting? Evidence from Tiebout Variation," *American Economic Review* 95(4): 1310 - 1326.

**D** Hastings, J. S. and Weinstein, J. M. (2008) "Information, School Choice, and Academic Achievement: Evidence from Two Experiments," *Quarterly Journal of Economics* 123(4): 1373 - 1414.

Epple, D. and Romano, R. E. (1998) "Competition between Private and Public Schools, Vouchers, and Peer-Group Effects," *American Economic Review* 88(1): 33 – 62.

Rothstein, J. M. (2006) "Good Principals or Good Peers? Parental Valuation of School Characteristics, Tiebout Equilibrium, and the Incentive Effects of Competition Among Jurisdictions," *American Economic Review* 96(4): 1333 - 1350.

Abdulkadiroğlu, A., Angrist, J., Dynarski, S. M., Kane, T. J., and Pathak, P. A. (2011) "Accountability and Flexibility in Public Schools: Evidence from Boston's Charters and Pilots," *Quarterly Journal of Economics* 126(2): 699 – 748.

Abdulkadiroğlu, A., Pathak, P., Schellenberg, and Walters, C. R. (2017) "Do Parents Value School Effectiveness?" NBER working paper 23912.

### **3.3 Capitalization**

\*\* Black, S. E. (1999) "Do Better Schools Matter? Parental Valuation of Elementary Education," *Quarterly Journal of Economics* 114(2): 577 - 599.

D Linden, L. L. and Rockoff, J. E. (2008) "Estimates of the Impact of Crime Risk on Property Values from Megan's Laws," *American Economic Review* 93(3): 1103 - 1127.

Figlio, D. N. and Lucas, M. E. (2004) "What's in a Grade? School Report Cards and the Housing Market," *American Economic Review* 94(3): 591 - 604.

Chay, K. and Greenstone, M. (2005) "Does Air Quality Matter? Evidence from the Housing Market," *Journal of Political Economy* 113(2): 376 – 424.

### **3.4 The Regression Discontinuity Design and Extensions**

\*\* Lee, D. and Lemieux, T. (2010) "Regression Discontinuity Designs in Economics," *Journal of Economic Literature* 48(2): 281 – 355.

\*\* Cellini, S. R., Ferreira, F., and Rothstein, J. (2010) "The Value of School Facility Investments: Evidence from a Dynamic Regression Discontinuity Design," *Quarterly Journal of Economics* 125(1): 215 – 261.

Abadie, A. (2003) "Semiparametric Instrumental Variable Estimation of Treatment Response Models," *Journal of Econometrics* 113: 231 – 263.

Almond, D., and Doyle, J. J. (2008) "After Midnight: A Regression Discontinuity Design in Length of Postpartum Hospital Stays," NBER working paper 13877.

McCrary, J. (2008) "Manipulation of the Running Variable in the Regression Discontinuity Design: A Density Test," *Journal of Econometrics* 142(2): 698 – 714.

Urquiola, M. and Verhoogen, E. (2009) "Class-size Caps, Sorting, and the Regression-Discontinuity Design," *American Economic Review* 99(1): 179 – 215.

Angrist, J. D. and Rokkanen, M. (2015) "Wanna Get Away? Regression Discontinuity Estimation of Exam School Effects Away from the Cutoff," *Journal of the American Statistical Association* 110(512): 1331 – 1344.

Barreca, A. I., Lindo, J. M., and Waddell, G. R. (2016) "Heaping-Induced Bias in Regression-Discontinuity Designs," *Economic Inquiry* 54(1): 268 – 293.a

## **4. Public Provision of Private Goods [3 lectures]**

### **4.1 Capital Market Imperfections and Higher Education**

\*\* Dynarski, S. M. (2003) "Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion," *American Economic Review* 93(1): 279-288.

\*\* Cameron, S. V. and Taber, C. (2004) "Borrowing Constraints and the Returns to Schooling," *Journal of Political Economy* 112(1): 132 – 182.

D Rothstein, J. and Rouse, C. E. (2011) “Constrained After College: Student Loans and Early-Career Occupational Choices,” *Journal of Public Economics* 95(1-2): 149-163.

Garratt, R. and Marshall, J. (1994) “Public Finance of Private Goods: The Case of College Education,” *Journal of Political Economy* 102(3): 566 – 582.

Carneiro, P. and Heckman, J. J. (2002) “The Evidence on Credit Constraints in Post-Secondary Schooling,” *Economic Journal* 112(482): 705 – 734.

Scholz, J. K. and Seshadri, A. (2012) “A New Test of Borrowing Constraints in Education,” *Review of Economic Studies* 79(2): 511 – 538.

Marx, B. M. and Turner, L. J. (2018) “Borrowing Trouble? Human Capital Investment with Opt-In Costs and Implications for the Effectiveness of Grant Aid,” *American Economic Journal: Applied Economics* 10(2): 163 – 201.

## 4.2 The Regression Kink Design

\*\* Turner, L. J. (2017) “The Economic Incidence of Federal Student Grant Aid,” working paper. Available at: [http://econweb.umd.edu/~turner/Turner\\_FedAidIncidence\\_Jan2017.pdf](http://econweb.umd.edu/~turner/Turner_FedAidIncidence_Jan2017.pdf)

Nielsen, H. S., Sørensen, T., and Taber, C. (2010) “Estimating the Effect of Student Aid on College Enrollment: Evidence from a Government Grant Policy Reform,” *American Economic Journal: Economic Policy* 2(2): 185-215.

Card, D., Lee, D. S., Pei, Z., and Weber A. (2015) “Inference on Causal Effects in a Generalized Regression Kink Design,” *Econometrica* 83(6): 2453 – 2483.

## 5. Social Insurance [7 lectures]

### 5.1 Rationale for Government Involvement

\*\* Akerlof, G. A. (1970) “The Market for “Lemons”: Quality Uncertainty and the Market Mechanism,” *Quarterly Journal of Economics* 84(3): 488 – 500.

\*\* Rothschild, M. and Stiglitz, J. (1976) “Equilibrium in Competitive Insurance Markets,” *Quarterly Journal of Economics* 90(4): 629 – 649.

\*\* Hendren, N. (2013) “Private Information and Insurance Rejections,” *Econometrica* 81(5): 1713 – 1762.

Baily, M. (1978) “Some Aspects of Optimal Unemployment Insurance,” *Journal of Public Economics* 10: 379 – 402.

Chetty, R. (2006) “A General Formula for the Optimal Level of Social insurance,” *Journal of Public Economics* 90(10-11) 1879 – 1901.

Einav, L. and Finkelstein, A. (2011) “Selection in Insurance Markets: Theory and Empirics in Pictures,” *Journal of Economic Perspectives* 25(1): 115-38.

## 5.2 Unemployment Insurance

\*\* Gruber, J. (1997) “The Consumption Smoothing Benefits of Unemployment Insurance,” *American Economic Review* 87(1): 192 – 205.

\*\* Chetty, R. (2008) “Moral Hazard versus Liquidity and Optimal Unemployment Insurance,” *Journal of Political Economy* 116(2): 173 – 234.

\*\* Spinnewijn, J. (2015) “Unemployed but Optimistic: Optimal Insurance Design with Biased Beliefs,” *Journal of the European Economic Association* 13(1): 130 – 167.

D Schmieder, J. F., von Wachter, T., and Bender, S. (2012) “The Effects of Extended Unemployment Insurance over the Business Cycle: Evidence from Regression Discontinuity Estimates over Twenty Years,” *Quarterly Journal of Economics* 127(2): 701 – 752.

Shimer, R. and Werning, I. (2007) “Reservation Wages and Unemployment Insurance,” *Quarterly Journal of Economics* 122(3): 1145 – 1185.

Lalive, R., Landais, C., and Zweimüller, J. (2015) “Market Externalities of Large Unemployment Insurance Extension Programs,” *American Economic Review* 105(12): 3564-3596.

Kroft, K. and Notowidigdo, M. J. (2016) “Should Unemployment Insurance Vary with the Unemployment Rate? Theory and Evidence,” *Review of Economic Studies* 83(3): 1092-1124.

Marinescu, I. (2017) “The General Equilibrium Impacts of Unemployment Insurance: Evidence from a Large Online Job Board,” *Journal of Public Economics* 150: 14-29.

## 5.3 Social Security and Bunching Estimation

\*\* Diamond, P. (1977) “A Framework for Social Security Analysis,” *Journal of Public Economics* 8(3): 275 – 298.

\*\* Manoli, D. S. and Weber, A. (2011) “Nonparametric Evidence on the Effects of Financial Incentives on Retirement Decisions,” NBER Working Paper 17320.

\*\* Chetty, R., Friedman, J. N., Leth-Peterson, S., Nielsen, T., and Olsen, T. (2014) “Active vs. Passive Decisions and Crowd-Out in Retirement Savings Accounts: Evidence from Denmark,” *Quarterly Journal of Economics* 129(3).

\*\* Persson, P. (2017) “Social Insurance and the Marriage Market,” working paper. Available at: [https://web.stanford.edu/~perssonp/Persson\\_IFAU.pdf](https://web.stanford.edu/~perssonp/Persson_IFAU.pdf).

Kruger, A. B. and Pischke, J. (1992) “The Effect of Social Security on Labor Supply: A Cohort Analysis of the Notch Generation,” *Journal of Labor Economics* 10(4): 412 – 437.

Feldstein, M. and Leibman, J. B. (2002) “Social Security,” *Handbook of Public Economics, Volume 4*, 2245 – 2324.

Scholz, K., Seshadri, A., and Khitatrakun, S. (2007) “Are Americans Saving Optimally for Retirement?” *Journal of Political Economy* 114(4): 607 – 643.

Coile, C. and Gruber, J. (2007) “Social Security and Retirement,” *Review of Economics and Statistics* 89(2): 234 – 246.

Saez, E. (2010) “Do Taxpayers Bunch at Kink Points?” *American Economic Journal: Economic Policy* 2: 180 – 212.

Kleven, H. and Waseem M. (2013) “Using Notches to Uncover Optimization Frictions and Structural Elasticities: Theory and Evidence from Pakistan,” *Quarterly Journal of Economics* 128: 669 – 723.

Kleven, H. J. (2016) “Bunching,” *Annual Review of Economics* 8: 435 – 464.

Gelber, A. M., Jones, D., Sacks, D. W., and Song, J. (2017) “Using Non-Linear Budget Sets to Estimate Extensive Margin Responses: Method and Evidence from the Social Security Earnings Test,” NBER working paper 23362.

## **5.4 Disability Insurance**

\*\* Autor, D. H. and Duggan, M. D. (2006) “The Growth in the Social Security Disability Rolls: A Fiscal Crisis Unfolding,” *Journal of Economic Perspectives* 20(3): 71 – 96.

\*\* Maestas, N., Mullen, K. J. and Strand, A. (2013) “Does Disability Insurance Receipt Discourage Work? Using Examiner Assignment to Estimate Causal Effects of SSDI Receipt,” *American Economics Review* 103(5): 1797-1829.

D Moore, T. (2015) “The Employment Effects of Terminating Disability Benefits,” *Journal of Public Economics* 124: 30 – 43.

Bound, J. (1989) “The Health and Earnings of Rejected Disability Insurance Applicants,” *American Economic Review* 79(3): 482 – 503.

Gruber, J. (2000) “Disability Insurance Benefits and Labor Supply,” *Journal of Political Economy* 108(6): 1162 – 1183.

## **6. Student Presentations [4 lectures]**