University of Maryland Department of Economics

ECON 652: Fall 2015 Graduate Public Economics I

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Class: Tuesday and Thursday, 2:00 - 3:15pm (4118C Tydings Hall) Office hours: Tuesdays 3:30 - 5:00pm, 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 - 5:00 pm) and the Monday 708 talk (12:30 - 1:30 pm).

The grade for the course will be based on:

1) One research proposal -30%. 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 15.

D) The full proposal is due December 10

2) Proposal presentations – **10%**. Students will be expected to make a 30 minute presentation of their proposal and serve as a discussant for a classmate's proposal on **December 3**, **December 8**, or **December 11**. 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 sets/replication exercise – 10%.

4) A presentations on one required article -10%. These readings are marked **D**. Students should email me their top three choices by the second class.

5) Three to four short reaction papers (1 - 2 pages) responding to either Thursday L/P/D seminar or Monday 708 talk – **10%**. These papers should go beyond summarizing the talk – they can discuss strengths, weaknesses, and potential extensions of the paper presented.

6) A take-home final -30%. The final will be distributed on **December 10** in class and is due at midnight 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://obs.rc.fas.harvard.edu/chetty/public_lecs.html

Saez, E., Graduate Public Economics. Available at: <u>http://elsa.berkeley.edu/~saez/course/course.html</u>

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: <u>http://www.nber.org/minicourse3.html</u>

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.

Miguel, E. and Kremer, M. (2004) "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities," *Econometrica* 72(1): 159-217.

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.

** 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.

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

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.

Donald, S. and Lang, K. (2007) "Inference with Differences-in-Differences and Other Panel Data," *Review of Economics and Statistics* 89(2): 221 – 233.

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 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. (2014) "Housing Supply Elasticity and Rent Extraction by State and Local Governments," working paper. Available at: http://web.stanford.edu/~diamondr/gov_housing_supply.pdf.

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, Sorting, and IV

** 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.

Rouse, C. E. (1998) "Private School Vouchers and Student Achievement: An Evaluation of the Milwaukee Parental Choice Program," *Quarterly Journal of Economics* 113(2): 553 – 602.

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.

3.3 Capitalization

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

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

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.

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.

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

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

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

Barreca, A. I., Lindo, J. M., and Waddell, G. R. (2011) "Heaping-Induced Bias in Regression-Discontinuity Designs," NBER working paper 17408.

4. Public Provision of Private Goods [3 lectures]

4.1 Capital Market Imperfections and Higher Education

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

** 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.

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.

Hanushek, E. A. (2002) "Publicly Provided Education," *Handbook of Public Economics, Volume 4*.

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.

4.2 The Regression Kink Design

** Turner, L. J. (2014) "The Road to Pell is Paved with Good Intentions: The Economic Incidence of Need-Based Student Aid," working paper. Available at: <u>http://econweb.umd.edu/~turner/Turner_FedAidIncidence.pdf</u>

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. (2012) "Nonlinear Policy Rules and the Identification and Estimation of Causal Effects in a Generalized Regression Kink Design," NBER Working Paper 18564.

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.

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

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

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

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.

Card, D., Chetty, R., and Weber, A. (2007) "The Spike at Benefit Exhaustion: Leaving the Unemployment System or Finding a Job?" *American Economic Review, Papers and Proceedings* 97(2): 113 – 118.

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

Landais, C., Michaillat, P., and Saez, E. (2010) "Optimal Unemployment Insurance over the Business Cycle," NBER working paper 16526.

Kroft, K. and Notowidigo, M. J. (2011) "Should Unemployment Insurance Vary with the Unemployment Rate? Theory and Evidence," NBER working paper 17173.

Lalive, R., Landais, C., and Zweimüller, J. (2013) "Market Externalities of Large Unemployment Insurance Extension Programs," IZA discussion paper 7650.

5.3 Social Security

** 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. (2014) "Social Insurance and the Marriage Market," working paper. Available at: <u>http://web.stanford.edu/~persson_JMP.pdf</u>. on spillovers

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.

Bernheim, B. D., Skinner, J., and Weinberg, S. (2001) "What Accounts for the Variation in Retirement Wealth among U.S. Households," *American Economic Review* 91(4): 832 – 857.

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.

Gelber, A. M., Jones, D., and Sacks, D. W. (2013) "Earnings Adjustment Frictions: Evidence from the Social Security Earnings Test," NBER Working Paper 19491.

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 [3 lectures]