

Econ 881
Labor Economics II

Instructor: Jane Fruehwirth
Time: 12:30-1:45pm TR
Location: 112 Hanes Hall

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Office hours: 2:30-4:30pm Tues.

Overview

This course will cover a range of topics in labor economics, including social interactions, economics of education, early childhood intervention, and discrimination. As a unifying theme, we will explore the potential of different policies to alleviate racial and economic inequalities. There will be a heavy emphasis on how economic theory and econometric methods can be used to infer causal, policy-relevant parameters.

Aims

- To introduce students to a range of interesting topics in labor economics
- To develop an understanding of how data can be used to test economic theory, and how economic theory can be used to interpret data, focusing on identification of policy-relevant parameters
- To illustrate how microeconomics can be applied to a range of real world problems
- To develop skills for critically evaluating research, to help distinguish elements of “good” research and develop an understanding of the limitations of a range of approaches
- To help inspire research ideas

Evaluation

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|--------------------|-----|
| Homeworks | 20% |
| Referee reports | 10% |
| Class presentation | 10% |
| Final exam | 25% |
| Research project | 35% |

Homeworks

Students will be assigned 2 homeworks over the course of the semester. These will be designed to reinforce the concepts we cover, particularly focusing on issues of identification. These will be assigned at least 1 week in advance of their due date.

Referee Reports

Students will write 2 referee reports over the course of the semester to be turned in at the beginning of class when the relevant paper is being discussed. You can choose among the papers that we will discuss in class, but it cannot be the paper we will present. At the end of the syllabus you will find some basic guidelines for reading papers, which will help you to write your reports. These reports should be typed. A successful referee report relies on a careful summary as well as a *critical* analysis of the paper.

Class presentation

I will ask you to lead the discussion of one of the papers and will attempt to assign a paper that interests you.

Final Exam

There will be a take home exam at the end of the semester. It will be open book and is intended to help you reflect on and synthesize the material we have learned in class. Expected due date: May 3.

Research Project Proposal

The main goal of this course is to help to prepare you to do research. The research project proposal should be the beginnings of a field paper. It should be loosely related to material we have covered in class. It should include the following elements:

- A clear, well-motivated research question.
- A description of how your paper contributes to the literature.
 - This should go beyond simply describing the relevant literature to being a critical analysis of the literature that motivates your contribution.
- A description of the data that you will use for the topic
 - While you may not be able to acquire the data by the end of the semester, you should demonstrate that the data can be acquired or that you are in the process of doing so.
- Econometric model and/or theoretical model
 - This should include a clear statement of how you propose to identify your causal effect of interest. This is absolutely essential to the success of the proposal.
- Preliminary results, if applicable

Initial proposal due Feb 7

Draft due: March 23

Final due date: April 27

Classroom Participation

Participation is critical for the success of the class. I expect you to come to each class having read the papers and prepared to discuss them. **Bring a printed copy of the paper to class** and questions! The more ready and willing you are to ask questions, the more you will learn. At the end of the course syllabus, I include some helpful guidelines for reading papers. This can be a really useful tool for summarizing papers and making sure that you understand the main points and have thought about them critically. While I do not provide an explicit grade for classroom participation, it will make a difference in borderline cases.

Use of Laptops

To minimize distractions and keep the environment as interactive as possible, I ask that you do not use a laptop during class and that you turn off iPhones and other electronic devices.

Honor Code

It is expected that you have read, understand and abide by UNC's honor code (<http://honor.unc.edu/>).

Reading List

The reading list is preliminary; expect it to evolve according to time constraints and interests. The plan is to focus lectures on articles denoted by “”. The other articles provide additional reading on the topic if you are interested.*

Education Production

- *Hanushek, E. A. (2003) “The Failure of Input-Based Schooling Policies,” *The Economic Journal*, 113:F64-F98.
- Hanushek, E. A. (1986) “The Economics of Schooling: Production and Efficiency in Public Schools,” *Journal of Economic Literature*, 24(3):1147-77.
- *Todd, P. E. and Wolpin, K. I. (2003) ‘On the specification and estimation of the production function for cognitive achievement’, *Economic Journal* 113(485), F3–F33.
- *Andrabi, T., J. Das, A. Ijaz Khwaja, and T. Zajonc (2011, July). Do Value-Added Estimates Add Value? Accounting for Learning Dynamics. *American Economic Journal. Applied Economics* 3(3), 29–54.

School Resources

- *Krueger, Alan (1999). “Experimental Estimates of Education Production Functions.” *Quarterly Journal of Economics* 114:2, pp. 497-532.
- Cellini, Stephanie Riegg, Fernando Ferreira, and Jesse Rothstein, “The Value of School Facility Investments: Evidence from a Dynamic Regression Discontinuity Design,” *Quarterly Journal of Economics*, 2010, 125, 215–261.
- *C. K. Jackson, R. C. Johnson and C. Persico (2016) "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms," *The Quarterly Journal of Economics*, 131(1): 157-218
- Martorell, F., K. Stange, and I. McFarlin (2015) “Investing in Schools: Capital Spending, Facility Conditions and Student Achievement”, *NBER working paper*.

Teacher Quality

- *Rothstein, J. (2010) "Teacher Quality in Educational Production: Tracking, Decay, and Student Achievement." *Quarterly Journal of Economics* 125(1), February 2010, p.p. 175-214.
- *Chetty, R., J. Friedman and J. Rockoff (2014) Measuring the Impacts of Teachers I: Evaluating Bias in Teacher Value-Added Estimates, *American Economic Review* 104(9): 2593-2632.
- Steven G. Rivkin & Eric A. Hanushek & John F. Kain (2005) "Teachers, Schools, and Academic Achievement," *Econometrica*, Econometric Society, vol. 73(2), pages 417-458, 03.
- Victor Lavy (2015) “What Makes an Effective Teacher? Quasi-Experimental Evidence,” *CESifo Economic Studies*
- Kinsler, J. (2012) Beyond Levels and Growth: Estimating Teacher Value-Added and its Persistence , *J. Human Resources* 47 (3): 722-753
- Kane, Thomas J., and Douglas O. Staiger. 2008. “Estimating Teacher Impacts on Student Achievement: An Experimental Evaluation,” *NBER Working Paper No. 14607*.

Chetty, R, J. Friedman and J. Rockoff (2014) Measuring the Impact of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood, *American Economic Review* 104(9): 2633-2679.

Wiswall, M. (2013) "The Dynamics of Teacher Quality," *Journal of Public Economics*, 100, April 2013, p. 61–78.

Market for Teachers

*Hoxby, C.M. (1996) "How Teachers' Unions Affect Education Production," *The Quarterly Journal of Economics*, 111(3): 671-718.

Corcoran, S.; W. Evans, and R. Schwab (2004). "Changing Labor Market Opportunities for Women and the Quality of Teachers, 1957-2000." *American Economic Review* 94(2): 230-35

*Hoxby, C. M. and A. Leigh (2004) "Pulled Away or Pushed Out? Explaining the Decline of Teacher Aptitude in the United States," *AEA Papers and Proceedings*, 94(2): 236-240.

Early Childhood

*Jens Ludwig & Douglas L Miller, 2007. "Does Head Start Improve Children's Life Chances? Evidence from a Regression Discontinuity Design," *The Quarterly Journal of Economics*, vol. 122(1), pages 159-208, 02.

*Currie, Janet & Thomas, Duncan, 1995. "Does Head Start Make a Difference?," *American Economic Review*, vol. 85(3), pages 341-64, June.

Deming, David. 2009. "Early Childhood Intervention and Life-Cycle Skill Development: Evidence from Head Start." *American Economic Journal: Applied Economics*, 1(3): 111–34.

Del Boca, D., C. Flinn and M. Wiswall (2014) "Household Choices and Child Development," *Review of Economic Studies* 81 (1), 2014, p. 137-85.

Nabanita Datta Gupta, Marianne Simonsen (2010) Non-cognitive child outcomes and universal high quality child care, *Journal of Public Economics*, 94(1-2), February: 30-43.

Caetano, G., J. Kinsler and H. Teng (2015) "Towards Consistent Estimates of Children's Time Allocation on Skill Development", working paper.

Achievement Gaps

*Fryer, R. G. and S. Levitt (2004) "Understanding the black-white test score gap in the first two years of school," *The Review of Economics and Statistics*, 86(2): 447-464.

*Bond and Lang (2012) "The Evolution of the Black-White Test Score Gap in Grades K-3: The Fragility of Results", *The Review of Economics and Statistics*, 95(5):1468-1479

Reardon, S. F. and J. P. Robinson (2007) "Patterns and Trends in Racial/Ethnic and Socioeconomic Academic Achievement Gaps," in *Handbook of Research in Education Finance and Policy*.

Fryer R, Levitt S. Testing for Racial Differences in the Mental Ability of Young Children. *American Economic Review* . 2013;103(2):981-1005.

Dynamic Complementarities

*Cunha, Flavio, and James J. Heckman. 2008. "Formulating, Identifying and Estimating the Technology of Cognitive and Noncognitive Skill Formation." *Journal of Human Resources*, 43(4): 738–82.

Cunha, Flavio, James J. Heckman, and Susanne M. Schennach. 2010. "Estimating the Technology of Cognitive and Noncognitive Skill Formation." *Econometrica*, 78(3): 883–931.

Flavio Cunha, James J. Heckman, Lance Lochner, Dimitriy V. Masterov, Chapter 12 Interpreting the Evidence on Life Cycle Skill Formation, In: E. Hanushek and F. Welch, Editor(s), Handbook of the Economics of Education, Elsevier, 2006, Volume 1, Pages 697-812.

*Aizer, A. and F. Cunha (2012) "The Production of Human Capital: Endowments, Investments and Fertility, NBER working paper 18429

Education Reform

Fryer, Jr., R. (2014) Injecting Charter School Best Practices into Traditional Public Schools: Evidence from Field Experiments, Quarterly Journal of Economics

Dobbie, Will, and Roland Fryer. "The Medium-Term Impacts of High-Achieving Charter Schools". *Journal of Political Economy* 123.5 (2015): 985-1037.

Angrist, J., P. Hull, P. Pathak and C. Walters (2015) "Leveraging Lotteries for School Value-Added: Testing and Estimation" NBER Working paper 21748.

Rokkanen, M. (2015) "Exam Schools, Ability, and the Effects of Affirmative Action: Latent Factor Extrapolation in the Regression Discontinuity Design," working paper.

Neal, D. A. and D. W. Schanzenbach (2010) "Left Behind by Design: Proficiency Counts and Test-Based Accountability", *Review of Economics and Statistics*, 92:262-83.

*Macartney, H. R. McMillan, U. Petronijevic (2015) "Incentive Design in Education: An Empirical Analysis" NBER working paper No. 21835.

Social Interactions

*Manski, C. (1993), 'Identification of endogenous social effects: The reflection problem', *The Review of Economic Studies*, 60(3): 531–542.

*Brock, W. A. and Durlauf, S. N. (2001a), 'Discrete choice with social interactions', *The Review of Economic Studies* 68(2): 235–260.

*Lavy and Schlosser (2011) "Mechanisms and Impacts of Gender Peer Effects at School", *AEJ: Applied Economics*, April.

*Carrell, S. B. Sacerdote and J. West (2013) From Natural Variation to Optimal Policy? The Importance of Endogenous Peer Group Formation," *Econometrica*. 81(3): 855-882.

Fruehwirth, J (2013) "Identifying Peer Achievement Spillovers: Implications for Desegregation and the Achievement Gap" *Quantitative Economics* 4(1).

Sacerdote (2001) "Peer Effects with Random Assignment: Results for Dartmouth Roommates", *Quarterly Journal of Economics*, 116(2).

Gaviria and Raphael (2001) "School-based Peer Effects and Juvenile Behavior", *Review of Economics and Statistics*, 83(2).

Lin, X. (2010), "Identifying peer effects in student academic achievement by a spatial autoregressive model with group unobservables," *Journal of Labor Economics* 28, 825- 860.

Blume, L., W. Brock, S. Durlauf and Y. Ioannides "Identification of Social Interactions," in *Handbook of Social Economics*, J. Benhabib, A. Bisin, and M. Jackson, eds., Amsterdam: North Holland, forthcoming.

Graham, B. S. (2008) "Identifying Social Interactions through Conditional Variance Restrictions," *Econometrica*, 76(3).

Austen-Smith, D. and R. G. Fryer (2005) "An Economic Analysis of 'Acting White'," *The Quarterly Journal of Economics* (May).

Imberman, S. A., A. D. Kugler, and B. I. Sacerdote (2012) "Katrina's Children: Evidence on the Structure of Peer Effects from Hurricane Evacuees," *American Economic Review* 102 (5), 2048–82.

Lazear, E. P. (2001), 'Educational production', *Quarterly Journal of Economics* 116(3), 777–803.

Network Models

*Bramouille, Y., H. Djebbari, and B. Fortin (2009, May). Identification of peer effects through social networks. *Journal of Econometrics* 150(1), 41–55.

Boucher, V., Y. Bramouille, H. Djebbari and B. Fortin (2014) "Do Peers Affect Student Achievement? Evidence from Canada Using Group Size Variation", *Journal of Applied Econometrics*, 29: 91-109.

Goldsmith-Pinkham, P. and G. W. Imbens (2013, May). Social Networks and the Identification of Peer Effects. *Journal of Business & Economic Statistics* 31(3), 253–264.

E. Patacchini, E. Rainone and Y. Zenou (2013) "Heterogeneous Peer Effects in Education", working paper.

Graham, B. (2015) "An Econometric Model of Link Formation with Degree Heterogeneity", working paper.

Leung, M. (2015) "Two-Step Estimation of Network-Formation Model with Incomplete Information", *Journal of Econometrics*, 188(1): 182-195.

Neighborhood Effects

*Katz, Lawrence E., Jeffrey R. Kling and Jeffrey B. Liebman (2001) "Moving to Opportunity in Boston: Early Results of a Randomized Mobility Experiment", *Quarterly Journal of Economics* 116 (May 2001), 607-54.

Jacob, B. A., M. Kapustin and J. Ludwig (2014) "The Impact of Housing Assistance on Child Outcomes: Evidence from a Randomized Housing Lottery" *The Quarterly Journal of Economics*.

*Chyn, E. (2015) "Moved to Opportunity: The Long-Run Effects of Public Housing Demolition on Labor Market Outcomes of Children", working paper http://ericchyn.com/files/Chyn_Moved_to_Opportunity.pdf

Social Effects in Welfare and Labor Markets

*Bertrand, M., E.F.P. Luttmer and S. Mullainathan (2000) "Network Effects and Welfare Cultures" *Quarterly Journal of Economics* 115(3): 1019-1055.

Dahl, G. B., A. R. Kostel and M. Mogstad (2014) "Family Welfare Cultures" *The Quarterly Journal of Economics*

*Kroft, K. (2008) "Takeup, Social Multipliers and Optimal Social Insurance" *Journal of Public Economics*, 92(3-4):722-737.

Aslund, O. And P. Fredriksson (2009) "Peer Effects in Welfare Dependence: Quasi-experimental Evidence" *Journal of Human Resources*

Kramarz, F. and O. Norstrom Skans (2014) "When Strong Ties are Strong: Networks and Youth Labour Market Entry" *Review of Economics Studies* 81(3): 1164-1200.

Hedonics

*Bajari, Cooley, Kim and Timmins, (2012) "A Rational Expectations Approach to Hedonic Price Regressions with Time-Varying Unobserved Product Attributes: The Price of Pollution," *American Economic Review*

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

Discrimination

*Knowles, J., N. Persico, and P. Todd, (2001), "Racial Bias in Motor Vehicle Searches: Theory and Evidence," *Journal of Political Economy*, 109, 1, 203-229.

*Anwar, S. and H. Fang, (2006), "An Alternative Test of Racial Prejudice in Motor Vehicle Searches: Theory and Evidence," *American Economic Review*, 96, 1, 127-151

Persico, N., (2002), "Racial Profiling, Fairness, and the Effectiveness of Policing," *American Economic Review*, 92, 5, 1472-1497.

Antonovics, K. and B. Knight, (2009), "A New Look at Racial Profiling: Evidence from the Boston Police Department," *Review of Economics and Statistics*, 91, 1, 163-177.

*Neal, Derek A & Johnson, William R (1996) "The Role of Pre-market Factors in Black-White Wage Differences," *Journal of Political Economy*, vol. 104(5), pages 869-95, October.

*Joseph G. Altonji & Charles R. Pierret (2001) "Employer Learning And Statistical Discrimination," *The Quarterly Journal of Economics*, MIT Press, vol. 116(1), pages 313-350, February.

*Bertrand, M. and S. Mullainathan (2004) "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," *American Economic Review*, 94(4): 991-1013.

Arcidiacono, Peter, Bayer, Patrick, and Hizmo, Aurel (2010) "Beyond Signaling and Human Capital: Education and the Revelation of Ability", *American Economic Journal: Applied Economics* 2(4): 76-104.

Becker, G. (1957), *The Economics of Discrimination*, Chicago; University of Chicago Press.

Charles, K. and J. Guryan, (2008), "Prejudice and Wages: An Empirical Assessment of Becker's The Economics of Discrimination" *Journal of Political Economy*, 116, 5, 773- 809.

Heckman, J. (1998), "Detecting Discrimination," *Journal of Economic Perspectives* 12, 2, 101-116.

Heckman, J. and P. Siegelman, (1993), "The Urban Institute Audit Studies: Their Methods and Findings" in *Clear and Convincing Evidence*, M. Fix and R. Struyk, eds. Washington D.C.: Urban Institute Press.

Economics of Religion

*Dehejia, Rajceev, Thomas DeLeire, and Erzo F. P. Luttmer. 2007. "Insuring Consumption and Happiness through Religious Organizations." *Journal of Public Economics* 91: 259–79.

Patacchini, E. and Y. Zenou (2016) "Social Networks and Parental Behavior in the Intergenerational Transmission of Religion", *Quantitative Economics*.

Gruber, J. and D. Hungerman (2008) "The Church vs. The Mall: What Happens When Religion Faces Secular Competition?" *Quarterly Journal of Economics*.

Glaeser, Edward. L., Giacomo A. M. Ponzetto, and Jesse M. Shapiro. 2005. "Strategic Extremism: Why Republicans and Democrats Divide on Religious Values." *The Quarterly Journal of Economics* 120 (4): 1283–330.

Hungerman, Daniel. M. 2013. "Substitution and Stigma: Evidence on Religious Markets from the Catholic Sex Abuse Scandal." *American Economic Journal: Economic Policy* 5(3): 227-53.

Montgomery, James D. 1996. "Contemplations on the Economic Approach to Religious Behavior." *American Economic Review* 86(2): 443–7.

*Hungerman, D. M. (2007) "Race and Charitable Church Activity", *Economic Inquiry*.

Some Helpful Guidelines for Reading Papers

The first set of questions are geared toward helping you to make sure you have understood the main part of the paper. A good introduction should hit most (often all) of these points.

1. What is the primary question/issue/hypothesis that the author wanted to address?
2. Why is the question interesting or important? (This often includes a description of how the paper contributes to the literature)
3. What data does the author use (if empirical paper)?
4. Give an intuitive description of the author's test or model. (This is absolutely key to making sure you've understood the paper. If the details of the model are confusing, take a step back and try to think about the underlying intuition.)
5. What are the author's findings or conclusions?

The second set of questions may help you to think critically about the paper.

6. Did you find the question interesting and relevant?
7. Are you convinced by the author's results/arguments? Why or why not?
8. Did they identify the effect they claimed to identify? Why or why not?
9. Did the results obtained justify the interpretation and conclusions? (Often this may include concerns about external validity or heterogeneous treatment effects)
10. Were the findings well supported by economic theory? In the cases where the paper does not have a clear theoretical model, do you think a model would have been helpful or that the lack thereof might lead to erroneous conclusions?