Lawrence F. Katz Littauer 224 lkatz@harvard.edu

LABOR ECONOMICS EC 2810a SYLLABUS for Fall 2024

Monday, Wednesday 10:30-11:45 AM

This is a graduate course in labor economics, appropriate for graduate students in the Department of Economics and other students with preparation in microeconomic theory and econometrics. The course teaches core topics in the field of labor economics as well as empirical methods for applied microeconomic analysis.

The syllabus contains readings of two sorts. The first, designated by an asterisk, will be emphasized in the lectures. Readings with no asterisk may be discussed in lectures briefly but are primarily offered as a guide to the literature.

Many comprehensive (although some are rather dated) surveys of key topics in labor economics are available in the *Handbook of Labor Economics*, published by Elsevier Science and available on-line from Science Direct through the Harvard Libraries. Volumes 1 and 2 from 1986 are edited by Orley Ashenfelter and Richard Layard. Volume 3 (in three volumes) from 1999 and Volume 4 (in two volumes) from 2010 are edited by Orley Ashenfelter and David Card. Useful undergraduate textbooks in labor economics for introductory background reference include George Borjas, *Labor Economics*, 8th Edition, McGraw Hill, 2020; and Derek Laing, *Labor Economics*, Norton, 2011. An existing graduate level textbook is Pierre Cahuc, Stéphane Carcillo, and André Zylberberg, *Labor Economics*, Second Edition, MIT Press, 2014. And a superb guide to the key empirical methods used in labor economics is Joshua Angrist and Jörn-Steffen Pischke, *Mostly Harmless Econometrics*, Princeton University Press, 2009.

Grading: Students will prepare a final examination (50%), a research paper/detailed proposal (40%), and a referee report (10%). The referee report should be a serious but brief (2 to 4 page) critical evaluation of one (or two related) readings without an asterisk on the syllabus or a recent NBER working paper in labor studies: http://www.nber.org/papersbyprog/LS.html. The referee report is due by October 4. A brief (1 to 2 pages) initial research proposal for the research paper should be turned in by November 8. Students are expected to have a meeting with Prof. Katz and/or the TF Federico Gonzalez <Federico_gonzalez@g.harvard.edu> to discuss paper topics before that date. The full research paper (or extended paper proposal) is due on December 16. The final exam will take place during the final exam period in the time slot and date designated by the registrar (December 11 at 9 AM).

ECONOMICS 2810a: Lecture Schedule for Fall 2024

I. Human Capital, Schooling, and Earnings

- Sep 4 Lecture 1: Course Introduction; Human Capital Investment
- Sep 9 Lecture 2: Human Capital Schooling Models; Estimating Returns to Schooling I
- Sep 11 Lecture 3: Estimating the Returns to Schooling II and Extensions
- Sep 16 Lecture 4: Signaling and Learning Models of Education and Earnings
- Sep 18 Lecture 5: The Education Production Function and Returns to School Resources

II. Program Evaluation, Field Experiments, and Applications

- Sep 23 Lecture 6: Program Evaluation I: The Basics
- Sep 25 Lecture 7: Program Evaluation II: Field Experiments
- Sep 30 Lecture 8: Evaluating School Policies
- Oct 2 Lecture 9: Neighborhood and Peer Effects

III. Immigration, Self-Selection and Equalizing Differences Models

- Oct 7 Lecture 10: Self-Selection, Roy Model, Immigration and Assimilation
- Oct 9 Lecture 11: Theory of Equalizing Differences and Applications
- Oct 14 No Class Indigenous Peoples' Day
- Oct 16 Lecture 12: Spatial Equilibrium Models and Local Labor Markets

IV. Jobs, Matching, Careers, Incentives, Labor Market Frictions, & Segmented Labor Markets

- Oct 21– Lecture 13: Matching, Mobility, and Life-Cycle Earnings
- Oct 23 Lecture 14: Personnel Economics I: Agency Models and Incentives
- Oct 28 Lecture 15: Personnel Economics II: Management Practices; Fairness
- Oct 30 Lecture 16: Labor Market Frictions and Monopsony Power in the Labor Market
- Nov 4 Lecture 17: Segmented Labor Markets; Firm & Industry Wage Differentials

V. Labor Demand, Unions, and Minimum Wages

- Nov 6 Lecture 18: Labor Demand Models; Unions
- Nov 11 Lecture 19: Labor Demand Applications: Minimum Wages

VI. Changes in the Wage Structure and Wage Inequality

- Nov 13 Lecture 20: Understanding and Decomposing Changes in the Wage Structure
- Nov 18 Lecture 21: Supply-Demand Models of Changes in the Wage Structure
- Nov 20 Lecture 22: Technological Change and the Wage Structure I
- Nov 25 Lecture 23: Technological Change and the Wage Structure II
- Nov 27 No Class Thanksgiving Break
- Dec 2 Lecture 24: Trade, Immigration, and the Wage Structure
- Dec 4 Lecture 25: Labor Market Institutions, Firms, and the Wage Structure

Background Reading

- * A. Smith. (1776) *The Wealth of Nations*, Chapter 10 of Book I.
 - G. Becker. (1975) The Economic Approach to Human Behavior, U. of Chicago Press, pp. 3-14.
 - J. Hicks. (1932) The Theory of Wages, MacMillan.
 - J. Robinson (1933) *The Economics of Imperfect Competition*, Book VI on Monopsony, MacMillan, pp. 211-34.
 - W. Darity. (2005) "Stratification Economics: The Role of Intergroup Inequality." *Journal of Economics and Finance* 29(2): 144-53.
 - D. Kahneman, J.L. Knetsch and R.H. Thaler. (1986) "Fairness as a Constraint on Profit Seeking: Entitlements in the Market," *American Economic Review*, 76 (September), 728-41.
 - J.D. Angrist and J.S. Pischke. (2009) Mostly Harmless Econometrics, Princeton University Press.

I. Human Capital

<u>I.a. Human Capital Investment: Theory and Basic Facts</u> (Lectures 1 and 2)

- * R. Willis. (1986) "Wage Determinants: A Survey and Reinterpretation of Human Capital Earnings Functions," *Handbook of Labor Economics*, Vol. 1, Elsevier, 1986, pp. 525-602.
- * J. Mincer. (1974) <u>Schooling, Experience, and Earnings</u>. New York: Columbia University Press for the National Bureau of Economic Research, pp. 7-22.
- * T. Lemieux. (2006) "The Mincer Equation Thirty Years after Schooling, Experience and Earnings," in S. Grossbard, ed., Jacob Mincer: A Pioneer of Modern Labor Economics, Springer.
- * D. Deming. (2022). "Four Facts about Human Capital." *JEP* 36 (3): 75-102.
- * M. Bhuller, M. Mogstad, and K. Salvanes. (2017) "<u>Life-Cycle Earnings, Education Premiums and Internal Rates of Returns</u>," September; *Journal of Labor Economics* 35(4), 993-1030.
- * S. Jayachandran and A. Lleras-Muney. (2009) "<u>Life Expectancy and Human Capital Investment:</u> Evidence from Maternal Mortality Declines," *QJE* 124 (February), 349-98.
 - R. Jensen. (2010) "The (Perceived) Returns to Education and the Demand for Schooling," *QJE* 125 (May), 515-48.
 - G. Becker. (1993) Human Capital, 3rd ed. Chicago: University of Chicago Press, pp. 1-66.

- K. Lang. (1993) "Ability Bias, Discount Rate Bias and the Return to Education," Boston University mimeo.
- F. Cunha and J. Heckman. (2007). "The Technology of Skill Formation," AER 97 (May), 31-47.
- Y. Ben-Porath. (1967) "The Production of Human Capital and the Life Cycle of Earnings," *Journal of Political Economy*, 75 (August), 352-65.
- E. Lazear. (2009) "Firm-Specific Human Capital: A Skill Weights Approach," JPE 117 (Oct).
- L. Bursztyn and L. Coffman. (2012) "The Schooling Decision: Family Preferences, Intergenerational Conflict, and Moral Hazard in the Brazilian *Favelas*," *JPE* 120(3), 359-97.
- E. Bettinger, B. Long, P. Oreopoulos, and L. Sanbonmatsu. (2012) "The Role of Application Assistance and Information in College Enrollment Decisions: Results from the H&R Block FAFSA Experiment," *QJE* 127 (August), 1205-42.
- S. Dynarksi. (2003) "Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion." *AER* 93 (March), 279-88.
- R. Abramitzky and V. Lavy. (2014) "How Responsive is Investment in Schooling to Changes in Redistributive Policies and Returns?" *Econometrica* 82 (July), 1241-72.
- K. Murphy and F. Welch. (1990) "Empirical Age-Earnings Profiles," JOLE 8 (April), 202-229.
- K. Stange. (2012) "An Empirical Examination of the Option Value of College Enrollment," *AEJ: Applied Economics* 4 (January), 49-84.
- M. Stevens. (1994) "A Theoretical Model of On-the-Job Training with Imperfect Competition." *Oxford Economic Papers* 47 (October): 537-562.
- D. Acemoglu and J. Pischke. (1998) "Why Do Firms Train? Theory and Evidence." *QJE* 113 (February), 79-119.
- L. Katz, J. Roth, R. Hendra, and K. Schaberg. (2022) "Why Do Sectoral Employment Programs Work? Lessons from WorkAdvance." *JOLE* 40 (S1): S249-S291.
- I.b. Estimating the Rate of Return to Schooling on Earnings and Other Outcomes (Lectures 2 and 3)
- * D. Card. (1999) "The Causal Effect of Education on Earnings," in the *Handbook of Labor Economics*, Vol. 3A, O. Ashenfelter and D. Card, eds. Amsterdam: Elsevier Science
- * J. Angrist and A. Krueger. (1991) "Does Compulsory School Attendance Affect Schooling and Earnings?" *Quarterly Journal of Economics*, 106 (November), 979-1015.

- * O. Ashenfelter and C. Rouse. (1998) "Income, Schooling and Ability: Evidence from a New Sample of Identical Twins," *Quarterly Journal of Economics* 113 (February), 253-84.
- * T. Kane, C. Rouse, and D. Staiger. (1999) "<u>Estimating Returns to Schooling When Schooling is Misreported</u>." NBER WP No. 7235, July.
- * S. Zimmerman. (2014) "The Returns to College Admission for Academically Marginal Students," *Journal of Labor Economics* 32(4), 711-54.
- * P. Oreopoulos and K. Salvanes. (2011) "<u>Priceless: The Nonpecuniary Benefits of Schooling</u>," *Journal of Economic Perspectives* 25(1), 159-84.
- * M. Stephens and D. Yang. (2014) "Compulsory Education and the Benefits of Schooling," *AER* 104(6), 1777-92.
- * L. Kirkeboen, E. Leuven, and M. Mogstad. (2016) "Field of Study, Earnings, and Self-Selection," *QJE* 131(3): 1057-1111.
 - D. Card. (2001) "Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems," *Econometrica* 69 (September), 1129-60.
 - Z. Griliches. (1979) "Sibling Models and Data in Economics: Beginnings of a Survey" *Journal of Political Economy (supplement)*, s37-s64.
 - O. Ashenfelter, C. Harmon and H. Oosterbeek. (1999) "A Review of Estimates of the Schooling/Earnings Relationship, with Tests for Publication Bias," *Labour Economics*, 6, 453-70.
 - Ö. Sandewall, D. Cesarini and M. Johannesson. (2014). "The Co-Twin Methodology and Returns to Schooling Testing a Critical Assumption," *Labour Economics* 26 (January), 1-10.
 - K. Buckles and D. Hungerman. (2013) "Season of Birth and Later Outcomes: Old Questions, New Answers," *RESTAT* 95(3), 711-24.
 - M. Nybom (2017) "The Distribution of Lifetime Returns to College," *JOLE* 35(4), 903-52.
 - J. Altonji and L. Zhong (2021) "The Labor Market Returns to Advanced Degrees," *JOLE* 39(2): 303-60.
 - J. Smith, J. Goodman, and M. Hurwitz. (2020) "The Economic Impact of Access to Four-Year Public Colleges," NBER WP No. 27177, May.
 - J. Mountjoy. (2022). "Community Colleges and Upward Mobility." AER 112 (8): 2580-2630.
 - M. Grosz. (2020) "The Returns to a Large Community College Program: Evidence from Admissions Lotteries," *AEJ: Economic Policy* 12(1): 226-53.

- Z. Bleemer (2022) "<u>Affirmative Action, Mismatch, and Economic Mobility After California's Proposition 209,</u>" *QJE* 137(1), 115-60.
- S. B. Dale and A. Krueger (2002) "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables," *QJE* 177(4), 1491-1527.
- R. Chetty, D. Deming, and J. Friedman (2023) "<u>Diversifying Society's Leaders? The Determinants and Causal Effects of Admission to Highly Selective Private Colleges</u>," NBER WP No. 31492, July.
- Z. Bleemer and S. Quincy. (2024) "Changes in the College Mobility Pipeline since 1900."
- J. Denning, B. Marx, and L. Turner. (2019) "ProPelled: The Effects of Grants on Graduation, Earnings and Welfare," *AEJ: Applied Economics* 11(3), 193-224.
- A. Lleras-Muney. (2005) "The Relationship between Education and Adult Mortality in the United States," *Review of Economic Studies* 72 (January).
- A. Humlum, P. Plato, and J. Munch. (2024) "<u>Changing Tracks: Human Capital Investment after Loss of Ability</u>," August.
- E. Duflo (2001). "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment," *AER* 91 (December), 795-813.
- E. Duflo, P. Dupas, and M. Kremer (2021). "<u>The Impact of Free Secondary Education: Experimental Evidence from Ghan</u>a." NBER WP No. 28937, June.
- I.c. Signaling, Screening, and Learning Models of Education and Earnings (Lecture 4)
- * A.M. Spence. (1973) "Job Market Signaling," *Quarterly Journal of Economics* 87 (Aug), 355-74.
- * P. Martorell and D. Clark. (2014) "The Signaling Value of a High School Diploma," *JPE* 122(2), 283-318.
- * J. Altonji and C. Pierret. (2001), "Employer Learning and Statistical Discrimination," *QJE* 116(1), 313-50.
- * G. Aryal, M. Bhuller, and F. Lange. (2022) "<u>Signaling and Employer Learning with Instruments</u>," *AER* 112(5): 1669-1702
 - H.S. Farber and R. Gibbons. (1996) "Learning and Wage Dynamics," *Quarterly Journal of Economics*, 111.4 (November), 1007-47.
 - F. Lange. (2007) "The Speed of Employer Learning," JOLE, 25(1), 1-35.

- U. Schönberg. (2007). "Testing for Asymmetric Employer Learning." *JOLE* 25(4), 651–691.
- L. Kahn and F. Lange. (2014) "Employer Learning, Productivity, and the Earnings Distribution: Evidence from Performance Measures," *RESTUD* 81(4), 1575-1613.
- J. Stiglitz. (1975) "The Theory of Screening, Education, and the Distribution of Income," *American Economic Review*, 65 (June), 283-300.
- K. Lang and D. Kropp. (1986) "Human Capital vs. Sorting: The Effects of Compulsory Schooling Laws," *Quarterly Journal of Economics*, 101 (August), 609-24.
- J. Tyler, R. Murnane, and J. Willett. (2000) "Estimating the Impact of the GED on the Earnings of Young Dropouts Using a Series of Natural Experiments," *QJE*, 115 (May), 431-69.
- K. Bedard. (2001) "Human Capital Versus Signaling Models: University Access and High School Dropouts," *Journal of Political Economy*, 109 (August), 749-775.
- K. Lang and M. Manove. (2011) "Education and Labor Market Discrimination," *AER* 101(4), 1467-96.
- W.B. McLeod, E. Riehl, J. Saavedra, and M. Urquiola. (2017) "The Big Sort: College Reputation and Labor Market Outcomes," *AEJ: Applied Economics* 9(3), 223-61.
- D. Austen-Smith and R. Fryer. (2005) "An Economic Analysis of 'Acting White'," *QJE* 120(2), 551-83.
- <u>I.d.</u> Estimating the Labor Market Returns to School Quality and School Inputs (Lecture 5)
- * D. Card and A. Krueger. (1992) "Does School Quality Matter? Returns to Education and Characteristics of Public Schools in the United States" *JPE*, 100 (February), 1-40.
- * C.K. Jackson, R. Johnson, and C. Persico. (2016) "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms," *QJE* 131(1): 157-218.
- * R. Chetty, J. Friedman, N. Hilger, E. Saez, D. Schanzenbach, and D. Yagan. (2011) "How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project STAR" *Quarterly Journal of Economics* 126 (November), 1593-1660.
 - E. Lazear. (2001) "Education Production," Quarterly Journal of Economics 116 (Aug.), 777-803.
 - D. Card and A. Krueger. (1992) "School Quality and Black-White Relative Earnings: A Direct Assessment," *QJE* 107 (February), 151-200.
 - D. Card and A. Krueger. (1996) "Labor Market Effects of School Quality: Theory and Evidence," NBER WP 5450, February.

- J. Heckman, A. Layne-Farrar, and P. Todd. (1996) "Human Capital Pricing Equations with an Application to Estimating the Returns to School Quality" *RESTAT* 78 (Nov), 562-610.
- S. Dale and A. Krueger. (2002) "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables," *QJ E* 117 (Nov), 1491-1527.
- J. Bound and S. Turner. (2007) "Cohort Crowding: How Resources Affect Collegiate Attainment," *Journal of Public Economics* (June), 877-899.
- C. Pop-Eleches and M. Urquiola. (2013) "Going to a Better School: Effects and Behavioral Responses." *American Economic Review 103* (4), 1289–1324.
- C.K. Jackson and C. Mackevicius. (2021) "The Distribution of School Spending Effects," NBER WP No. 28517, February.
- B. Biasi, J. LaFortune, and D. Schönholzer. (2024) "What Works and For Whom? Effectiveness and Efficiency of School Capital Investments Across the U.S."

II. Program Evaluation and Applications

II.a. Program Evaluation, RCTs, and Quasi-Experimental Approaches: The Basics (Lecture 6)

- * J.D. Angrist, G.W. Imbens, and D.B. Rubin. (1996) "Identification of Causal Effects Using Instrumental Variables," *Journal of the American Statistical Association*, 91.434 (June), 444-55.
- * R. LaLonde. (1986) "Evaluating the Econometric Evaluations of Training Programs with Experimental Data," *American Economic Review* 76 (September), 604-620.
- * R. Dehejia and S. Wahba. (1999) "Causal Effects in Non-Experimental Studies: Re-Evaluating the Evaluation of Training Programs," *JASA*, 94.448 (December), 1053-1062.
 - E. Oster. (2019) "<u>Unobservable Selection and Coefficient Stability: Theory and Evidence</u>;" *JBES* 37(2): 187-204.
 - J. Altonji, T. Elder, and C. Taber. (2005) "Selection on Observed and Unobserved Variables: Assessing the Effectiveness of Catholic Schools," *JPE* 113(1), 151-84.
 - J. Angrist and J. Pischke. (2009) Mostly Harmless Econometrics, especially chs. 2, 4, 5, and 6.
 - J. Heckman and E. Vytlacil. (2005) "Structural Equations, Treatment Effects and Econometric Policy Evaluation," *Econometrica* 73(3), 669-738.
 - G. Imbens and T. Lemieux. (2008) "Regression Discontinuity Designs: A Guide to Practice," *Journal of Econometrics* 142 (February), 615-35.

- R. Chetty. (2009) "<u>Sufficient Statistics for Welfare Analysis: A Bridge between Structural and Reduced Form Models</u>," *Annual Review of Economics* 1, 451-88.
- D. Card, J. Kluve, and A. Weber. (2017) "What Works? A Meta-Analysis of Recent Labor Market Program Evaluations." *JEEA* 17(3): 894-931.
- O. Ashenfelter and D. Card. (1985) "Using the Longitudinal Structure of Earnings to Estimate the Effect of Training Programs on Earnings," *RESTAT*, 67 (November), 648-60.
- D. Miller. (2023). "An Introductory Guide to Event Study Models." JEP 37(2), 203-30.
- A. Rambachan and J. Roth. (2022) "A More Credible Approach to Parallel Trends," *RESTUD* 90(5), 2555-91.
- J. Roth, P. Sant'Anna, A. Bilinski, and J. Poe (2023) "What's Trending in Difference-in-Differences? A Synthesis of the Recent Econometrics Literature," *Journal of Econometrics* 235, 2218-44.
- K. Borusyak, X. Jaravel, and J. Speiss. (2024) "Revisiting Event Study Designs: Robust and Efficient Estimation," *RESTUD*.
- M. Mogstad, A. Torgovitsky, and C. Walters. (2024) "Policy Evaluation with Multiple Instrumental Variables," *Journal of Econometrics* 243(1-2).
- P. Goldsmith-Pinkham, P. Hull, and M. Kolesar. (2024) "Contamination Bias in Linear Regression," *AER*, forthcoming.

II.b. Program Evaluation II: RCTs, External Validity, Spillovers, and GE Effects (Lecture 7)

- * L. Bursztyn and R. Jensen. (2015) "How Does Peer Pressure Affect Educational Investments?" *QJE* 130(3), 1329-67.
- * K. Muralidharan and V. Sundararaman. (2015) "The Aggregate Effects of School Choice: Evidence from a Two-Stage Experiment in India." *QJE* 130(3), 1011-66.
- * B. Crépon, E. Duflo, M. Gurgand, R. Rathelot, P. Zamora. (2013) "Do Labor Market Policies Have Displacement Effects? Evidence from a Clustered Randomized Design," *QJE* 128(2).
 - S. Athey and G. Imbens. (2016) "The Econometrics of Randomized Experiments," *Handbook of Field Experiments*; https://arxiv.org/pdf/1607.00698.pdf.
 - D. Card, S. DellaVigna, and U. Malmendier. 2011. "The Role of Theory in Field Experiments." *JEP*, 25 (3): 39-62.
 - J. List. (2011) "Why Economists Should Conduct Field Experiments and 14 Tips for Pulling One Off." *JEP* 25(3), 3-16.

- J. Ludwig, J. Kling, and S. Mullainathan. (2011) "Mechanism Experiments and Policy Evaluations," *Journal of Economic Perspectives* 25 (Summer), 17-38.
- H. Allcott. (2015) "Site Selection Bias in Program Evaluation," QJE 130(3), 1117-65.
- B. Olken. (2015) "Promises and Perils of Pre-Analysis Plans," JEP, 29(3), 61-80.
- K. Muralidharan, M. Romero, and K. Wuthrich. (2022) "<u>Factorial Design, Model Selection and (incorrect) Inference in Randomized Experiments</u>," *RESTAT*, forthcoming.
- E. Miguel and M. Kremer (2004). "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities." *Econometrica* 72(1), 159-217.
- K. Muralidharan, P. Neihaus, and S. Sukhtankar (2023). "General Equilibrium Effects of (Improving) Public Employment Programs," *Econometrica* 91(4), 1261-95.
- P. Todd and K. Wolpin. (2023) "The Best of Both Worlds: Combining Randomized Controlled Trials with Structural Modeling," *JEL* 61(1), 41-85.
- S. DellaVigna, J. List, and U. Malmendier (2012). "Testing for Altruism and Social Pressure in Charitable Giving" *Quarterly Journal of Economics* 1(127): 1-56.
- J. Rothstein and T. von Wachter (2016). "Social Experiments in the Labor Market," NBER WP No. 22585, September.

II.c. Evaluating the Impacts of School Policies on Student Outcomes (Lecture 8)

- * J. Angrist and V. Lavy. (1999) "Using Maimonides' Rule to Estimate the Effect of Class Size on Scholastic Achievement," *Quarterly Journal of Economics*, 114 (May), 533-575.
- * A. Krueger. (1999) "Experimental Estimates of Education Production Functions," *Quarterly Journal of Economics*, 114 (May), 497-532.
- * P. Fredriksson, B. Öckert, and H. Oosterbeek. (2013) "Long-Term Effects of Class Size," *QJE* 128 (February), 249-85.
- * R. Chetty, J. Friedman, and J. Rockoff. (2014) "Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes as Adults," *AER* 104(9): 2593-2632.
- * J. Ludwig and D. Miller. (2007) "Does Head Start Improve Children's Life Chances? Evidence from a Regression Discontinuity Design," *Quarterly Journal of Economics* 122 (Feb), 159-208.
- * M. Bailey, S. Sun, B. Timpe. (2021) "Prep Schools for Poor Kids: The Long-Run Impacts of Head Start on Human Capital and Economic Self-Sufficiency," *AER* 111 (12), 3963-4001.

- P. Todd and K. Wolpin. (2006) "Assessing the Impact of a School Subsidy Program in Mexico: Using a Social Experiment to Validate a Dynamic Behavioral Model of Child Schooling and Fertility." *American Economic Review*, 96(5), 1384–1417.
- A. Abdulkadiroglu, J. Angrist, Y. Narita, and P. Pathak. (2017) "Research Design Meets Market Design: Using Centralized Assignment for Impact Evaluation," *Econometrica* 85(4), 1373-1432.
- R. Fryer. (2014) "Injecting Charter School Best Practices into Traditional Public Schools: Evidence from Field Experiments," *QJE* 129 (3), 1355-1407.
- J. Chabrier, S. Cohodes, and P. Oreopoulos. (2016) "What Can We Learn from Charter School Lotteries?" *Journal of Economic Perspectives* 30(3): 57-84.
- H. Chiang. (2009) "How Accountability Pressure on Failing Schools Affects Student Achievement," *Journal of Public Economics* 93 (October), 1045-57.
- S. Black. (1999) "Do Better Schools Matter? Parental Evaluation of Elementary Education," *Quarterly Journal of Economics* 114 (May), 577-600.
- E. Duflo, P. Dupas, and M. Kremer. (2011) "Peer Effects and the Impacts of Tracking: Evidence from a Randomized Evaluation in Kenya." *American Economic Review* 101(5): 1739-1774.
- T. Kane, D. Staiger, and B. Johnson. (2024) "Why Does Value-Added Work? Implications of a Dynamic Model of Student Achievement," July.
- P. Kline and C. Walters. (2016) "Evaluating Programs with Close Substitutes: The Case of Head Start," *QJE* 131(4), 1795-1848.
- G. Gray-Lobe, P. Pathak, and C. Walters. (2023) "The Long-Term Effects of Universal Preschool in Boston," *QJE* 138(1), 363-411.
- J. Heckman, S. Moon, R. Pinto, P. Savelyev, and A. Yavitz. (2010) "Analyzing Social Experiments as Implemented: A Reexamination of the Evidence from the HighScope Perry Preschool Program," *Quantitative Economics* 1(1), 1-46.

II.d. Neighborhood Effects and Peer Effects (Lecture 9)

- * J. Kling, J. Liebman, and L. Katz. (2007) "<u>Experimental Analyses of Neighborhood Effects</u>," *Econometrica* 75 (January), 81-119.
- * R. Chetty, N. Hendren, and L. Katz. (2016) "<u>The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment,</u>" *AER* 106(4): 855-902.
- * R. Chetty and N. Hendren. (2018) "The Effects of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects," *QJE* 133(3), 1107-62.

- * E. Chyn and L. Katz. (2021) "Neighborhoods Matter: Assessing the Evidence for Place Effects," *JEP* 35(4), 197-222.
- * E. Duflo and E. Saez. (2003) "The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment," *QJE* 118 (August), 815.-42.
 - S. Mayer and C. Jencks. (1989) "Growing Up in a Poor Neighborhood: How Much Does it Matter?" *Science*, (March 17), pp. 1441-45.
 - C. Manski. (2000) "Economic Analysis of Social Interactions," JEP 14(3), 115-36.
 - R. Chetty, J. Friedman, N. Hendren, M. Jones, and S. Porter (2020) "The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility," January.
 - R. Chetty et al. (2022) "Social Capital I: Measurement and Associations with Economic Mobility," *Nature* 608, 108-21.
 - R. Chetty et al. (2022) "Social Capital II: Determinants of Economic Connectedness," Nature 608, 122-34.
 - P. Bergman, R. Chetty, S. DeLuca, N. Hendren, L. Katz, and C. Palmer. (2024) "Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice," *AER*, 114(5).
 - E. Chyn. (2018) "Moved to Opportunity: The Long-Run Effects of Public Housing Demolition on Children," *AER*, 108(10), 3028-56.
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