

14.661 Labor Economics I

Staff:

Instructors: Parag Pathak, E17-240, ppathak@mit.edu; Daron Acemoglu, E18-269D, daron@mit.edu
Teaching fellow: Yusuke Narita, narita@mit.edu

Logistics:

Two lectures per week on Tuesday and Thursday from 10:30-12pm in E51-385
Pathak begins on 9/4/2014 and ends 10/16/2014
Acemoglu begins on 10/21/2014 and ends 12/9/2014

Description:

This is a graduate course in labor economics, appropriate for PhD students in the Department of Economics and other students with permission of the instructor. Pathak and Acemoglu split the fall semester. In the spring, Professors David Autor and Heidi Williams teach Labor Economics II.

The aim is to acquaint students with traditional topics and to encourage the development of independent research interests. The syllabus contains readings of two sorts. The first will be emphasized in lectures. Other readings may be discussed briefly, but are also listed as a guide to the literature.

Students who are interested in pursuing research in labor economics are *strongly* encouraged to attend the weekly Labor Economics student workshop, which meets on Tuesdays from 12:00-1:00pm, the joint MIT Labor/Public Finance seminar in the Fall on Mondays from 4-5:30pm, and the Econ-Sloan Applied Microeconomics seminar which meets in the Spring.

A Stellar website has readings, assignments, and recitation material.

Course Materials:

Working labor economists should have easy access to the following resources:

- Ashenfelter, Orley and David Card (2010): Handbook of Labor Economics, Volumes 4A and 4B.
- Angrist, Joshua and Jorn-Steffen Pischke (2009): Mostly Harmless Econometrics: An Empiricist's Companion, Princeton University Press.
- Deaton, Angus and John Muelbauer (1980): Economics and Consumer Behavior, Cambridge University Press.
- Borjas, George (2010): Labor Economics, 5th Edition, McGraw Hill-Irwin.

Grading and Requirements:

Your grade in this course depends on three parts: final exam in December covering material from both quarters (50%), 5-6 problem sets (25%), and an empirical project (25%) involving replication and extension of published work.

14.661 Labor Economics I - Pathak

Part 1: Labor Supply

• STATIC MODEL

- *Heckman, James (1974): “Shadow Prices, Market Wages, and Labor Supply.” *Econometrica*, 42: 679-694.
- *Ashenfelter, Orley (1983): “Determining Participation in Income-Tested Social Programs.” *Journal of the American Statistical Association*, 78, 517-525.
- *Ashenfelter, Orley and Michael Plant (1990): “Non-parametric estimates of the labor supply effects of negative income tax programs.” *Journal of Labor Economics*, 8, S397-S415.
- *Dickens, William and Shelly Lundberg (1993): “Labor Supply with Hours Restrictions.” *International Economic Review*, 34(1), 169-192.
- *Imbens, Guido, Donald Rubin, and Bruce Sacerdote (2001): “Estimating the Effect of Unearned Income on Labor Supply: Evidence from a Survey of Lottery Players.” *American Economic Review*, 91(4), 778-794.
- *Ashenfelter, O., Kirk Doran, and B. Schaller (2010): “A Shred of Credible Evidence on the Long Run Elasticity of Labor Supply.” NBER Working Paper 15746.
- *Kline, Patrick, and M. Tartari (2014): “Bounding the Labor Supply Responses to a Randomized Welfare Experiment: A Revealed Preference Approach.” Working paper, UC-Berkeley
- Ashenfelter, Orley and James Heckman (1974): “Estimation of Income and Substitution Effects in a Model of Family Labor Supply.” *Econometrica*, 42(1), 73-86.
- Borjas, George (1980): “The Relationship between Wages and Weekly Hours of Work: The Role of Division Bias.” *Journal of Human Resources*, 15(3), 409-423.
- Hausman, Jerry (1985): “The Econometrics of Nonlinear Budget Sets.” *Econometrica*, 1255-1282.
- Mroz, Thomas (1986): “The Sensitivity of an Empirical Model of Married Women’s Hours of Work to Economic and Statistical Assumptions.” *Econometrica*, 55(4), 765-799.
- Eissa, Nada and Jeffrey Liebman (1996). “Labor Supply Responses to the Earned Income Tax Credit.” *Quarterly Journal of Economics*, 111(2), 605-637.
- Blundell, Richard, Alan Duncan, and Costas Meghir (1998): “Estimating Labor Supply Responses Using Tax Reforms.” *Econometrica*, 66, 827-861.
- Chetty, Raj (2011): “Bounds on Elasticities with Optimization Frictions: A Synthesis of Micro and Macro Evidence on Labor Supply.” *Econometrica*, 80(3): 969-1018.

• DYNAMICS

- *Abowd, John and David Card (1987): “Intertemporal Labor Supply and Long-Term Employment Contracts.” *American Economic Review*, 77(1): 50-68.

- *Abowd, John and David Card (1989): “On Covariance Structure of Earnings and Hours Changes” *Econometrica*, 57(2): 411-445.
- *Eckstein, Zvi and Ken Wolpin (1989): “Dynamic Labour Force Participation of Married Women and Endogenous Work Experience.” *Review of Economic Studies*, 56(3): 375-390.
- *Card, David (1994): “Intertemporal Labor Supply: An Assessment.” In C. Sims, ed. *Advances in Econometrics*, vol. II, Cambridge University Press, 49-78.
- *Blundell, Richard, Thomas MaCurdy, and Costas Meghir (2007): “Labor Supply Models: Unobserved Heterogeneity, Nonparticipation, and Dynamics.” Chapter 69 in *Handbook of Econometrics*, ed. J. J. Heckman and E. Leamer, Volume 6
- *Fehr, Ernst and Lorenz Goette (2007): “Do Workers Work More if Wages are High? Evidence from a Randomized Field Experiment.” *American Economic Review*, 97(1): 298-317
- Lucas, Robert E. and L. Rapping (1969): “Real Wages, Employment and Inflation.” *Journal of Political Economy*, 77(5), 721-764.
- MaCurdy, Thomas (1981): “An Empirical Model of Labor Supply in a Life-Cycle Setting.” *Journal of Political Economy*, 89(6), 1059-1085.
- Altonji, Joseph (1986): “Intertemporal Substitution in Labor Supply: Evidence from Micro Data.” *Journal of Political Economy*, 94(3), S176-S215.
- Ham, J.C. and K.T. Reilly (2002): “Testing Intertemporal Substitution, Implicit Contrast and Hours Restriction Models of Labor Market Using Micro Data.” *American Economic Review*, 92(4): 905-927.
- Altonji, Joseph and L. M. Segal (1996): “Small Sample Bias in GMM Estimation of Covariance Structures.” *Journal of Business and Economic Statistics*, 14, 353-366.
- Geweke, John and Michael Keane (2000): “An empirical analysis of earnings dynamics among men in the PSID: 1968-1989.” *Journal of Econometrics*, 96(2), 293-356.

- HOUSEHOLD AND FAMILY MODELS

- *Becker, Gary (1973): “A Theory of Marriage: Part I.” *Journal of Political Economy*, 81(4), 813-846.
- *Chiaporri, Pierre-Andre, Bernard Fortin, and Guy Lacroix (2001): “Marriage Market, Divorce Legislation, and Household Labor Supply.” *Journal of Political Economy*, 110(1), 37-72.
- *Choo, Eugene and Aloysius Siow (2006): “Who Marries Whom and Why.” *Journal of Political Economy*, 114(1): 175-201.
- Becker, Gary (1981): *A Treatise on the Family*, Cambridge: Harvard University Press.
- Chiaporri, Pierre-Andre and Yoram Weiss (2009): “Investment in Schooling and the Marriage Market.” *American Economic Review*, 99(5), 1689-1713.
- Chiaporri, Pierre-Andre and Sonia Orefice (2008): “Birth Control and Female Empowerment: An Equilibrium Analysis.” *Journal of Political Economy*, 116(1), 113-140.
- Goldin, Claudia and Lawrence Katz (2002): “The Power of the Pill: Oral Contraceptives and Women’s Career and Marriage Decisions.” *Journal of Political Economy*, 110(4): 730-770

- Angrist, Joshua D. and William N. Evans (1998): “Children and their Parents’ Labor Supply: Evidence from Exogenous Variation in Family Size.” *American Economic Review*, 88(3), 450-477.
- Browning, Martin, Pierre-Andre Chiappori, and Yoram Weiss (2011): Family Economics, Unpublished manuscript

Part 2: Labor Demand

• FOUNDATIONS, MARSHALL’S LAWS

- *Hamermesh, Daniel (1993): Labor Demand, Princeton University Press (chapters 2 and 6)
- *Welch, Finis (1969): “Linear Synthesis of Skill Distributions.” *Journal of Human Resources*, 311-329.
- *Sattinger, Michael (1979): “Differential Rents and the Distribution of Earnings.” *Oxford Economic Papers*, 31(1)
- *Rosen, Sherwin (1983): “A Note on Aggregation of Skills and Labor Quality.” *Journal of Human Resources*, 425-431.
- *Heckman, James and Jose Scheinkman (1987): “The Importance of Bundling in a Gorman-Lancaster Model of Earnings.” *Review of Economic Studies*, 54(2): 243-255.
- *Li, Hao and S. Rosen (1998): “Unraveling in Matching Markets.” *American Economic Review*, 88(3).
- Cahuc, Pierre and A. Zyllerberg (2004): Labor Economics, MIT Press (chapter 4)

• IMMIGRATION

- *Card, David (1990): “The Impact of the Mariel Boatlift on the Miami Labor Market.” *Industrial and Labor Relations Review*, 43 (January 1990), 245-257.
- *Borjas, George (2003): “The Labor Demand Curve IS Downward Sloping: Re-examining the Impact of Immigration on Labor Market.” *Quarterly Journal of Economics*
- Card, David (2005): “Is the New Immigration Really So Bad?” *Economic Journal*.
- *Card, David (2009): “Immigration and Inequality.” *American Economic Review*, 99(2), 1-21.
- Dustmann, C., T. Fratiini, and I. Preston (2013): “The Effect of Immigration along the Distribution of Wages.” *Review of Economic Studies*, 80(1): 145-173.
- Peri, and C. Sparber (2009): “Task Specialization, Immigration and Wages.” *American Economic Journal: Applied Economics*, 1, 135-169.
- Ottaviani, Gianmarco and Giovanni Peri (2012): “Rethinking the Effect of Immigration on Wages.” *Journal of the European Economic Association*, 10(1): 152-197.

• UNIONS

- *Brown, J and O. Ashenfelter (1986): “Testing the Efficiency of Employment Contracts.” *Journal of Political Economy*, 94, S40-S87.
- *Card, David (1990): “Unexpected Inflation, Real Wages, and Employment Determination in Union Contracts.” *American Economic Review*, 80(4), 669-688.
- *Card, David (1996): “The Effect of Unions on the Structure of Wages: A Longitudinal Analysis, *Econometrica*, 64 (4), 957-979.
- *Holmes, Thomas (1998): “The Effects of State Policies on the Location of Industry: Evidence from State Borders.” *Journal of Political Economy*, 106 (4): 667-705.
- *DiNardo, John and David Lee (2004): “Economic Impact of New Unionization on Private Sector Employers: 1984-2001.” *Quarterly Journal of Economics*, 119: 1383-1442.
- *Mas, Alex (2006): “Pay, Reference Points, and Police Performance.” *Quarterly Journal of Economics*, 71(3): 783-821.
- Lewis, H. Gregg (1986): *Union Relative Wage Effects: A Survey*. Chicago: University of Chicago
- Lee, David and Alex Mas (2012): “Long-run Impacts of Unions on Firms: New Evidence from Financial Markets.” *Quarterly Journal of Economics*, 127(1).
- Frandsen, Brigham (2013): “The Surprising Impacts of Unionization on Establishments: Accounting for Selectino in Close Union Representation Elections.” Working paper, BYU.
- Card, David, F. Devicienti, and A. Maida (2014): “Rent-Sharing, Holdup, and Wages: Evidence from Matched Panel Data.” *Review of Economic Studies*, 81(1): 84-111.

- MINIMUM WAGES

- Stigler, George (1946): “The Economics of Minimum Wage Legislation.” *American Economic Review*, 36(3): 358-365.
- *Brown, Charles (1999): “Minimum Wages, Employment and the Distribution of Income.” in O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics*, volume 3B.
- *Card, David (1992): “Using Regional Variation to Estimate the Effects of the Federal Minimum Wage.” *Industrial and Labor Relations Review*, October, 22-37.
- Card, David, and A. Krueger (1994): “Minimum Wages and Employment: A Case Study of the Fast Food Industry in New Jersey.” *American Economic Review*, 84(4): 772-793.
- Card, David and A. Krueger (1995): *Myth and Measurement: The New Economics of the Minimum Wage*. Princeton University Press.
- Kennan, John (1995): “The Elusive Effects of Minimum Wages.” *Journal of Economic Literature*, 33(4), 1949-1965.
- Dube, Arin, T. Lester, and M. Reich (2010): “Minimum Wage Effects across State Borders: Estimating Using Continuous Counties.” *Review of Economics and Statistics*, 92(4), 945-964.
- Hall, E., C. Propper, and J. Van Reenen (2010): “Can Pay Regulation Kill? Panel Data Evidence on the Effects of Labor Markets on Hospital Performance.” *Journal of Political Economy*, 118(2), 222-273.

- Neumark, D., I. Salas, and W. Wascher (2013): “Revisiting the Minimum Wage and Employment Debate: Throwing out the baby with the Bathwater?” NBER Working Paper, 18681.

Part 3: Human Capital

A. BASICS AND ESTIMATING THE RETURNS TO SCHOOLING

- *Ben-Porath, Yoram (1967): “The Production of Human Capital and the Lifecycle of Earnings.” *Journal of Political Economy*, 75, 352-365.
- *Angrist, Joshua and Alan Krueger (1991): “Does Compulsory School Attendance Affect Schooling and Earnings?” *Quarterly Journal of Economics*, 106 (November), 979-1015.
- *Card, David (2001): “Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems.” *Econometrica*, 69 (September), 1129-1160.
- *Lemieux, Thomas (2006): “The Mincer Equation Thirty Years after Schooling, Experience, and Earnings.” in S. Grossbard-Shechtman (ed.) *Jacob Mincer, A Pioneer of Modern Labor Economics*, Springer Verlag.
- *Cunha, Flavio and James Heckman (2007): “The Technology of Skill Formation.” *American Economic Review*, 97 (May), 31-47.
- *Stephens, M. and D. Yang (2014): “Compulsory Education and Benefits of Schooling.” *American Economic Review*, 104(6): 1777-1792.
- Mincer, Jacob (1974): *Schooling, Experience, and Earnings*. New York: Columbia University Press, for the NBER
- Becker, Gary (1993): *Human Capital*. Third Edition, Chicago: University of Chicago Press
- Bound, John, D. Jaeger, and R. Baker (1995): “Problems with Instrumental Variables Estimation when the Correlation between the Instruments and the Endogenous Explanatory Variable is Weak.” *Journal of the American Statistical Association*, 90.430 (June), 443-450.
- Ashenfelter, Orley and Cecilia Rouse (1998): “Income, Schooling and Ability: Evidence from a New Sample of Identical Twins.” *Quarterly Journal of Economics*, 113 (February), 253-284.
- Duflo, Esther (2001): “Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment.” *American Economic Review*, 91 (December), 795-813.
- Keane, Michael and Ken Wolpin (1997): “The Career Decisions of Young Men.” *Journal of Political Economy*, 105, 473-522.
- Eckstein, Zvi and Ken Wolpin (1999): “Youth Employment and Academic Performance in High school.” *Econometrica*, 67, 1295-1339.
- Cameron, S. and Chris Taber (2004): “Estimation of Educational Borrowing Constraints Using Returns to Schooling.” *Journal of Political Economy*, 112 (February), 132-182.
- Heckman, James J. and Alan Krueger (2005): *Inequality in America: What Role for Human Capital Policies?*, MIT Press.

- Oreopoulos, P. (2006): “Estimating Average and Local Treatment Effects of Education when Compulsory Schooling Laws Really Matter.” *American Economic Review*, 96: 152-175.

B. EVALUATING THE IMPACTS OF SCHOOL POLICIES ON STUDENT OUTCOMES / PROGRAM EVALUATION PROBLEM

- Angrist, Joshua D., Guido Imbens, and Donald Rubin (1996): “Identification of Causal Effects Using Instrumental Variables.” *Journal of the American Statistical Association*, 91.434 (June), 444-455.
- Angrist, Joshua D. and Jorn Pischke (2008): *Mostly Harmless Econometrics*, esp. chs. 2, 4, 5, and 6
- Krueger, Alan B. (1999): “Experimental Estimates of Education Production Functions.” *Quarterly Journal of Economics*, 114 (May), 497-532.
- Chetty, R., J. Friedman, N. Hilger, Diane Schanzenbach, E. Saez, and D. Yagan (2011): “How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project Star.” *Quarterly Journal of Economics*
- Fredriksson, P., Ockert, B. and H. Oosterbeek (2013): “Long-Term Effects of Class Size.” *Quarterly Journal of Economics*, 128, 249-285.
- Abdulkadiroğlu, Atila, Josh Angrist, Susan Dynarski, Thomas Kane, and Parag Pathak (2011): “Accountability and Flexibility in Public Schools: Evidence from Boston’s Charters and Pilots.” *Quarterly Journal of Economics*, 126(2): 699-748.
- Altonji, Joseph, Todd Elder, and Chris Taber (2005): “Selection on Observed and Unobserved Variables: Assessing the Effectiveness of Catholic Schools.” *Journal of Political Economy*, 113, February
- Angrist, Joshua D., Parag Pathak, and Chris Walters (2011): “Understanding Charter School Effectiveness.” NBER Working Paper 17332.
- Abadie, Alberto (2003): “Semiparametric Instrumental Variable Estimation of Treatment Response Models.” *Journal of Econometrics*, 133(2), 231-263.

C. SCHOOL CHOICE

- Abdulkadiroğlu, Atila and Tayfun Sönmez (2003): “School Choice: A Mechanism Design Approach.” *American Economic Review*, 93(3), 729-747.
- Pathak, Parag and Tayfun Sönmez (2008): “Leveling the Playing Field: Sincere and Sophisticated Players in the Boston Mechanism.” *American Economic Review*, 98(4), 1636-1652.
- Pathak, Parag and Tayfun Sönmez (2014): “School Admissions Reforms in Chicago and England: Comparing Mechanisms by their Vulnerability to Manipulation.” AER
- Epple, Dennis and Richard Romano (1998): “Competition between Private and Public Schools, Vouchers, and Peer-Group Effects,” *American Economic Review*, 88: 33-62.
- Agarwal, Nikhil, Atila Abdulkadiroglu, and Parag Pathak (2014): “The Welfare Effects of Congestion in Uncoordinated Assignment: Evidence from the NYC HS Match.” Working paper, MIT.

- Pathak, Parag and Peng Shi (2014): “Demand Modeling, Forecasting and Counterfactuals, Part I.” NBER Working Paper , 19859.

D. EDUCATION, HOUSING MARKETS, AND RESIDENTIAL SORTING

- *Black, Sandra (1999): “Do Better Schools Matter? Parental Evaluation of Elementary Education.” *Quarterly Journal of Economics*, 114 (May), 577-600.
- *Bayer, Patrick, Fernando Ferreira, and Robert McMillan (2007): “A Unified Framework for Measuring Preferences for Schools and Neighborhoods.” *Journal of Political Economy*, 115(4): 588-638.
- Kling, Jeff, Liebman, J., and Larry Katz (2007): “Experimental Analysis of Neighborhood Effects.” *Econometrica*, 75(1): 83-119.
- Fernandez, Raquel and Richard Rogerson (1996): “Income Distribution, Communities, and the Quality of Public Education.” *Quarterly Journal of Economics*, 111(1), 135-164.
- Nechyba, Thomas (2003): “Introducing School Choice into Multidistrict Public School Systems.” Chapter in, *The Economics of School Choice*, ed. C. Hoxby, 145-194.
- Epple, Dennis and Holger Sieg (1999): “Estimating Equilibrium Models of Local Jurisdictions.” *Journal of Political Economy*, 107-84: 645-681
- Rothstein, Jesse (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.
- Glaeser, Edward (2008): *Cities, Agglomeration, and Spatial Equilibrium*. Oxford University Press.
- Autor, David, Christopher Palmer, and Parag Pathak (2014): “Housing Market Spillovers: Evidence from the End of Rent Control in Cambridge, MA,” *Journal of Political Economy*, 122(3): 661-717.

E. EXTERNALITIES AND PEERS

- *Sacerdote, Bruce (2001): “Peer Effects with Random Assignment: Results for Dartmouth Roommates.” *Quarterly Journal of Economics*, 116 (May), 681-704.
- Abdulkadiroglu, Atila, J. Angrist, and P. Pathak (2014): “The Elite Illusion: Achievement Effects at Boston and New York Exam Schools.” *Econometrica*, 82(1): 137-196.
- Carrell, Sacerdote, and West
- Card, David and Laura Giuliano (2011): “Peer Effects and Multiple Equilibria in the Risky Behavior of Friends.” NBER Working Paper, 17088.
- Graham, Bryan (2011): “Econometric methods for the analysis of assignment problems in the presence of complementarity and social spillovers.” *Handbook of Social Economics*, 965-1052.
- Lazear, Edward (2001): “Education Production.” *Quarterly Journal of Economics*, 116 (Aug.), 777-803.
- Mas, Alexandre and Enrico Moretti (2009): “Peers at Work.” *American Economic Review*, 91(9), 2009.

F. AFFIRMATIVE ACTION IN EDUCATION

- Coate, Stephen and Glenn Loury (1993): “Will Affirmative Action Policies Eliminate Negative Stereotypes?” *American Economic Review*, 83(5): 1220-40.
- Chan, Jimmy and Erik Eyster (2003): “Does Banning Affirmative Action Lower College Student Quality?” *American Economic Review*, 93(2): 858-872.
- Fryer, Roland and Glenn Loury (2005): “Affirmative Action and Its Mythology.” *Journal of Economic Perspectives*, 19(3).
- Fryer, Roland and Glenn Loury (2013): “Valuing Diversity.” *Journal of Political Economy*, 121(4): 747-774.
- Bowen, William and Derek Bok (1998): Shape of the River. Princeton: Princeton University Press.
- Loury, Glenn (2002): The Anatomy of Racial Inequality. Cambridge, MA: Harvard University Press
- Dale, Stacy, and Alan Krueger (2002): “Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables.” *Quarterly Journal of Economics*, 117(4): 1491-1527.
- Dale, Stacy and Alan Krueger (2011): “Estimating the Return to College Selectivity over the Career Using Administrative Earnings Data.” NBER Working Paper 17159.
- Arcidiacono, P., Esteban Aucejo, P. Coate, and J. Hotz (2014): “Affirmative Action and University Fit: Evidence from Proposition 209.” Working Paper, Duke.

SECOND PART -- ACEMOGLU

Books and manuscripts:

Acemoglu, Daron and David Autor, *Lectures in Labor Economics*, Web notes.

Becker, Gary, *Human Capital*, The University of Chicago Press, 1964.

Pierre Cahuc and Andre Zilberberg *Labor Economics* MIT Press, 2004.

Lazear, Edward *Personnel Economics*, MIT Press, 1995

Pissarides, Christopher; *Equilibrium Unemployment Theory*, MIT Press, 2000.

I. Topics in The Theory of Human Capital

Overview:

Becker, Gary, *Human Capital*, The University of Chicago Press, 1964.

A. Investment in Education and Skills

* AA, Chapter 1.

* CZ, Chapter 2.

* Ben-Porath, Yoram (1967). "The Production of Human Capital Over the Life Cycle," *Journal of Political Economy*, Vol. 75, No. 4-1, pp. 352-365.

* Richard Willis, and Sherwin Rosen, "Education and Self-Selection," *Journal of Political Economy* (Supplement) 87: S7-S36, 1979.

Roy, A. (1951) "Some Thoughts on the Distribution of Earnings" *Oxford Economic Papers*, 235 – 46.

* Becker, Gary and Nigel Tomes "Human capital and the rise and fall of families," *Journal of Labor Economics* 4, (1986) S1-S39.

Richard Freeman, "Demand for Education," Chapter 6 in *The Handbook of Labor Economics*, Volume I.

Solon, Gary "Intergenerational Income Mobility in the United States" *American Economic Review* v82, n3 (June 1992): 393-408

Zimmerman, David J. "Regression toward Mediocrity in Economic Stature" *American Economic Review* v82, n3 (June 1992): 409-29

Mulligan Casey, *Parental Priorities and Economic Inequality*, (1997) University of Chicago Press.

Acemoglu, Daron and Steve Pischke (2001) "Changes in the Wage Structure, Family Income and Children's Education" *European Economic Review, Papers and Proceedings*, vol 45.

B. Signaling

* AA, Chapter 2.

* Spence, Michael (1973) "Job Market Signaling" *Quarterly Journal of Economics*, 87(3), 355 – 374.

Stiglitz, Joseph (1986) "The Theory of Screening, Education, and the Distribution of Income" *American Economic Review*, 66, 283 – 300.

Lang, Kevin, and David Kropp (1986) "Human Capital Versus Sorting: The Effects of Compulsory Attendance Laws," *Quarterly Journal of Economics* 101(2), 609-624.

* Tyler, John, Richard J. Murnane and John Willett (2000) "Estimating the Labor Market Signaling value of the GED" *Quarterly Journal of Economics*, 115(2), 431-468.

C. Externalities, Sorting, Peer Effects and Network Effects

* AA, Chapter 3.

* Roback, Jennifer (1982) "Wages, Rents and the Quality of Life" *Journal of Political Economy*, 90(6), 1257-1278.

* Benabou, Roland (1993) "Workings of a City: Location, Education and Production", *Quarterly Journal of Economics*, Vol. 108, No. 3, pp. 619-652.

* Benabou, Roland (1996) "Heterogeneity, Stratification and Growth: Macroeconomic Implications of Community Structure in School Finance" *American Economic Review* Vol. 86, No. 3, pp. 584-609.

Fernandez, Racquel and Richard Rogerson (1996) "Income Distribution, Communities and the Quality of Public Education," *Quarterly Journal of Economics* 111(1), 135-164.

Hoxby, Caroline (1996) "Are Efficiency and Equity in School Finance Substitutes or Complements", *Journal of Economic Perspectives*, Vol. 10, No. 4, pp. 51-72.

Lazear, Edward P. (2001) "Educational Production" *Quarterly Journal of Economics*, 116(3), 777-803.

* Black, Sandra (1999) "Do Better Schools Matter? Parental Evaluation of Elementary Education" *Quarterly Journal of Economics*, 114(3), 577-600.

Bayer, Patrick Fernando Ferreira and Robert MacMillan (2007) "Unified Framework for Measuring Preferences for Schools and Neighborhoods," *Journal of Political Economy*, 115(4), 588-68.

Rauch, James E. (1993) "Productivity Gains from Geographic Concentration of Human Capital: Evidence from the Cities" *Journal of Urban Economics* 34, 380-400.

Manski, Charles (1993) "Identification of Endogenous Social Effects: the Reflection Problem," *Review of Economic Studies*, 60, 531-542.

Acemoglu, Daron (1996), "A Microfoundation for Social Increasing Returns in Human Capital Accumulation," *Quarterly Journal of Economics* 111 [3], 779-804.

* Acemoglu, Daron and Joshua Angrist (2000). "How Large Are The External Returns to Education: Evidence from Compulsory Schooling Laws" *NBER Macro Annual 2000*.

Mas, Alex and Enrico Moretti (2006) "Peers at Work" NBER Working Paper # 12508.

Card, David and Laura Giuliano (2011) "Peer Effects in Multiple Equilibria in the Risky Behavior of Friends" University of California, Berkeley mimeo.

Bramoulle, Yann, Rachel Kranton and Martin D'Amours (2014) "Strategic Interaction and Networks" *American Economic Review*

* Bramoulle, Yann, Habiba Djebbari, and Bernard Fortin (2009) "Identification of Peer Effects through Social Networks" *Journal of Econometrics*, 150, 41-55.

* Angrist, Joshua (2014) "The Perils of Peer Effects" *Labour Economics*.

* Acemoglu, Daron, Camilo Jimeno Garcia and James a Robinson (2014) "State Capacity and Economic Development: A Network Approach" MIT mimeo.

* Crepon, Bruno, Esther Duflo, Grugand, Marc, Rathelot, Roland and Philippe Zamora (2014) "The Labor Market Policies Have Displacement Effects: Evidence from a Clustered Randomized Experiment" MIT mimeo.

* Sacerdote, Bruce (2001) "Peer Effects with Random Assignment: Results from Dartmouth Roommates" *Quarterly Journal of Economics*, 116, 681-704.

Zimmerman, David (2003) "Peer Effects in Higher Education: Evidence from a Natural Experiment," *Review of Economics and Statistics*, 85, 9-23.

* Carrell, Scott, Bruce Sacerdote and James West (2013) "From Natural Variation to Optimal Policy? The Lucas Critique Meets Peer Effects" *Econometrica*, 81(3), 855-882.

II. Incentives, Agency and Efficiency Wages

For an overall overview of this part see:

* Prendergast, Canice (1999) "The Provision of Incentives in Firms" *Journal of Economic Literature*, 28, 7-63

* Lazear, Edward (1996) *Personnel Economics*, MIT University Press.

Gibbons, Robert (1996) "Incentives and Careers in Organizations" in *Advances in Economics and Econometrics: Theory and Applications* edited by David Kreps and Ken Wallis, Cambridge University Press, Cambridge.

A. Basic Theory of Moral Hazard and Incentives, and Applications to CEO Pay and Unemployment Insurance

* AA, Chapter 4.

* CZ Chapters 6 and 11.

Salanie, Bernard (1997) *The Economics of Contracts: A Primer*, MIT University Press, Chapter 5.

Laffont, Jean-Jacques and David Martimort (2002) *The Theory of Incentives: The Principa- Agent Model*, Princeton University Press, Chapter 4.

* Holmstrom, Bengt (1979) "Moral Hazard and Observability" *Bell Journal of Economics*, 10, 74-91.

* Lazear, Edward (1996) *Personnel Economics*, MIT University Press, Chapter 2.

Lazear, Edward (2000) "Performance Pay and Productivity." *American Economic Review* 90: 1346-61.

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