

Economics 771 Part I: Labor Economics

Judith K. Hellerstein  
Tydings 3115J  
hellerst@econ.umd.edu  
301-405-3545

Fall, 2010

Office Hours: Monday 2:00-3:15 or by appt.

This syllabus covers the first part of a one semester course in Labor Economics. Please note that this year, Professor John Ham will teach the last seven lectures of the semester, focusing on Labor Supply. This syllabus pertains to all but those last seven lectures.

This reading list contains both readings that will be discussed in the lectures and further references on each topic for those students who wish to pursue more detailed study. Unless I tell you otherwise in class, we will follow the syllabus in the order in which the readings and topics are listed. Readings that will get particular emphasis are marked by a \* -- *you are responsible for reading these papers before I discuss them in class* (and then re-reading them if necessary after class). On occasion during the semester I may point you to papers that are not on the syllabus. I will make it clear at that time whether I expect you to read those papers during the semester or whether you should just make note of their existence for the future.

There will be problem sets assigned, some with an empirical component that will assume proficiency in a statistical software package such as Stata. There will also be a take-home exam covering my section of the course. Your grades on problem sets and on the take-home exam will be partially a function of the quality of your persuasive writing; the ability to write coherently is a key input to a successful research career. Please (re-)familiarize yourself with the Honor Code <http://www.studenthonorcouncil.umd.edu/code.html>.

There are many important topics and papers in labor economics that are not on this syllabus. Many of these are covered in other courses in the department, especially Econ 772 and Econ 773, but also in courses in other fields. Consult me or the faculty in these courses for more information. Students are **strongly** encouraged to take Econ 626 concurrently and to take Econ 773 subsequently.

General References:

O. Ashenfelter and R. Layard, *Handbook of Labor Economics*, Volumes 1 and 2, Amsterdam: North Holland, 1986.

O. Ashenfelter and D. Card, *Handbook of Labor Economics*, Volume 3a,b,c. Amsterdam: North Holland, 1999.

(Note: A New Edition of the *Handbook of Labor Economics* is currently being completed.)

D. Hamermesh, *Labor Demand*, Princeton: Princeton University Press, 1993.

M. Killingsworth, *Labor Supply*, Cambridge University Press, 1983. (currently out of print)

J. Angrist and A. Krueger, "Empirical Strategies in Labor Economics," in O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics*, volume 3a, pp. 1277-1357.

J. Angrist and J.S. Pischke, *Mostly Harmless Econometrics*, Princeton University Press, 2009.

R. Blundell and M. Dias, "Alternative Approaches to Evaluation in Empirical Microeconomics", *Journal of Human Resources* 44(3):565-640 (2009);

I. Introduction *week 1.*

\* A. Smith, *The Wealth of Nations*, Book I, Ch 10.

\* A. Marshall, "Earnings of Labour, Continued," Chapter IV, *Principles of Economics*, London: MacMillan and Co. Ltd., 9th edition, 1961, Book VI, pp. 559-569..

\* Z. Griliches, "Data and Econometricians--The Uneasy Alliance," *American Economic Review*, 75(2), pp. 196-200.

\* R. Freeman, "Introduction," in *Labour Markets in Action: Essays in Empirical Economics*, London: Harvester Wheatsheaf, 1989.

*relevant*  
*Treatise style*

II. Wage Determination: The Human Capital Model

*"Discovery of the Residual"*

A. The Human Capital Model--Theory and Facts

J. Mincer, *Schooling, Experience, and Earnings*, New York Columbia University Press, Ch. 1, 3, 4, 5.

\* G. Becker, *Human Capital*, Chicago: University of Chicago Press, Ch III, IV.

T. Schultz, "Investment in Human Capital," *American Economic Review*, 1961, pp. 1-17.

R. Willis, "Wage Determinants: A Survey and Reinterpretation of Human Capital Earnings Functions," in O. Ashenfelter and Layard, eds., *Handbook of Labor Economics, Vol 1*, 1986, pp. 525-602.  
*derives the mincer model*

\* J. Heckman, L. Lochner, and P. Todd, "Earnings Functions, Rates of Return, and Treatment Effects," *NBER Working Paper no. 11544*, August 2005. Published as a chapter in the *Handbook of the Economics of Education*. (Sections 2 and 3 are required reading; the rest is to be read at your leisure)  
*critical review of mincer model*

\* Y. Ben-Porath, "The Production of Human Capital and the Life Cycle of Earnings," 1967, *Journal of Political Economy*, pp. 352-365.  
*→ Dynamic Investment through year*

K. Murphy and F. Welch, "Empirical Age-Earnings Profiles," *Journal of Labor Economics*, 1990, pp. 202-229.  
*pre-view: post schooling → inv. human capital sequentially*

A. Spence, "Job Market Signalling," *Quarterly Journal of Economics*, 1973, pp. 355-374.

J. Stiglitz, "The Theory of Screening, Education, and the Distribution of Income," *American Economic Review*, 1975, pp. 283-300.

F. Cunha and J. Heckman, "The Technology of Skill Formation," *American Economic Review*, May 2007, 31-47.

*Week 2*

*Genesis of modern human capital theory*  
*↓ cited*  
*"growth theory"*

*week 3*

## B. Returns to Education

- D. Card, "The Causal Effect of Education on Earnings," in O. Ashenfelter and D. Card eds, *Handbook of Labor Economics, Vol. 3a, pp. 1801-1863*.
- \* Z. Griliches, "Estimating the Returns to Schooling: Some Econometric Problems," *Econometrica*, 45(1), pp. 1-22.
- \* Z. Griliches, "Sibling Models and Data in Economics: Beginnings of a Survey." *Journal of Political Economy*, 87(5, Pt. 2), 1979, S37-S64
- D. Card and A. Krueger, "Does School Quality Matter?" *Journal of Political Economy*, 100(1), February 1992, pp. 1-40.
- \* J. Angrist, "Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records," *American Economic Review*, 80(3), June 1990, pp. 313-336.
- O. Ashenfelter and A. Krueger, "Estimates of the Economic Return to Schooling from a New Sample of Twins." *American Economic Review*, 84(5), 1994, pp. 1157-73.
- \* O. Ashenfelter and C. Rouse, "Income, Schooling, and Ability: Evidence from a New Sample of Identical Twins," *Quarterly Journal of Economics*, CXIII, February 1998, pp. 253-284.
- \* J. Kling, "Interpreting Instrumental Variables Estimates of the Returns to Schooling," *Journal of Business and Economic Statistics*, 19(3) July 2001, pp. 358-364.
- \* J. Angrist and A. Krueger, "Does Compulsory School Attendance Affect Schooling and Earnings?" *Quarterly Journal of Economics*, CVI(4), 1991, pp. 979-1014.
- J. Bound, D. Jaeger, and R. Baker, "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), 1995, pp. 443-450.
- R. Barua and K. Lang, "School Entry, Educational Attainment, and Quarter of Birth: A Cautionary Tale of Late." August 2009. NBER Working paper No. 15236.
- \* C. Dobkin, and F. Ferreira, "Do School Entry Laws Affect Educational Attainment and Labor Market Outcomes?" *Economics of Education Review*, 2010, Vol. 29, Issue 1, pp. 40-54.
- K. Buckles and D. Hungerman. (2008) "Season of Birth and Later Outcomes: Old Questions, New Answers," December 2009, NBER Working paper No. 14573.
- \* S. Cameron and C. Taber, "Borrowing Constraints and the Returns to Schooling," *Journal of Political Economy*, February 2004.
- J. Heckman and Ed. Vytlacil, "Identifying the Role of Cognitive Ability in Estimating the Level of and Change in the Return to Schooling," *Review of Economics and Statistics*, 83(1), Feb 2001, pp. 1-12..
- P. Carneiro, K. Hansen, and J. Heckman, "Estimating Distributions of Treatment Effects with an

Application to the Returns to Schooling and the Measurement of the Effects of Uncertainty on College Choice, *International Economic Review*, 44(2), 2003, pp. 361-422.

P. Oreopoulos, Estimating Average and Local Average Treatment Effects of Education when Compulsory Schooling Laws Really Matter, *American Economic Review* 96(1), March 2006, pp. 152-175. (Also see online "corrigendum": [http://www.aeaweb.org/aer/contents/corrigenda/corr\\_aer.96.1.152.pdf](http://www.aeaweb.org/aer/contents/corrigenda/corr_aer.96.1.152.pdf))

#### C. Alternative Models of the Age-Earnings Profiles and Incentive Mechanisms

\* E. Lazear, "Why Is There Mandatory Retirement?" *Journal of Political Economy*, 87(6), 1979, pp. 1261-84.

E. Lazear, "Agency, Earnings Profiles, Productivity, and Hours Restrictions." *American Economic Review*, 71(4), 1981, pp. 606-20.

E. Lazear and S. Rosen, "Rank-Order Tournaments as Optimum Labor Contracts." *Journal of Political Economy*, 89(5), 1981, pp. 841-64.

S. Rosen. "Prizes and Incentives in Elimination Tournaments." *American Economic Review*, 1986, pp. 701-15.

G. Loewenstein and N. Sicherman, "Do Workers Prefer Increasing Wage Profiles?" *Journal of Labor Economics*, 9, 1991, pp. 67-84.

L. Kotlikoff and J. Gokhale, "Estimating a Firm's Age-Productivity Profile Using the Present Value of Workers' Earnings." *Quarterly Journal of Economics*, CVII(4), 1992, pp. 1215-42.

J. Hellerstein and D. Neumark, "Are Earnings Profiles Steeper than Productivity Profiles: Evidence from Israeli Firm-Level Data," *Journal of Human Resources* 30(1), 1995, pp. 89-112.

P. Beaudry and J. DiNardo, "The Effect of Implicit Contracts on the Movement of Wages over the Business Cycle: Evidence from Micro Data," *Journal of Political Economy*, 99(4), 1991; pp. 665-88.

E. Lazear, "Performance Pay and Productivity," *American Economic Review*, 90, December 2000, pp. 1346-1361.

C. Shapiro and J. Stiglitz, "Equilibrium Unemployment as a Worker Discipline Device," *American Economic Review*, 1984, pp. 433-444.

\* G. Akerlof and L. Katz, "Workers' Trust Funds and the Logic of Wage Profiles," *Quarterly Journal of Economics*, 104, 1989, pp. 525-536.

\* G. Akerlof, "Gift Exchange and Efficiency Wages: Four Views," *American Economic Review*, 74, May 1984, pp. 79-83.

\* E. Lazear, "The Peter Principle: Promotions and Declining Productivity," *Journal of Political Economy*, 112:1 part 2, pp. S141-S163.

O. Bandiera, I. Barankay, and I. Rasul, "Social Preferences and the Response to Incentives," *Quarterly*

*Journal of Economics* 120, 2005, pp. 917-962.

A. Mas and E. Moretti, "Peers at Work," *American Economic Review*, Aug 2006, 121(3), pp. 783-821.

C. Camerer et al., "Labor Supply of New York City Cab Drivers: One Day at a Time," *Quarterly Journal of Economics*, May 1997, pp. 407-442.

H. Farber, "Is Tomorrow Another Day? The Labor Supply of New York City Cabdrivers," *NBER Working Paper no. 9706*, May 2003.

E. Fehr and Goette, "Do Workers Work More if Wages are High? Evidence from a Randomized Field Experiment," *American Economic Review*, March 2007.

A. Mas, "Pay, Reference Points, and Police Performance" *Quarterly Journal of Economics*, August 2006, pp. 783-821.

#### D. Returns to Experience and Tenure

R. Topel and M. Ward, "Job Mobility and the Careers of Young Men," *Quarterly Journal of Economics*, May 1992, pp. 439-479.

K. Abraham and H. Farber, "Job Duration, Seniority, and Earnings." *American Economic Review*, 77(3), 1982 pp. 278-97.

Altonji, Joseph, and J. Shakotko. 1987. "Do Wages Rise with Seniority?" *Review of Economic Studies*, LIV, pp. 437-59.

\* R. Topel, "Specific Capital, Mobility, and Wages: Wages Rise with Job Seniority." *Journal of Political Economy*, 99(1), 1991, pp. 145-76.

\* J. Altonji and N. Williams, "Do Wages Rise with Job Seniority? A Reassessment," *Industrial and Labor Relations Review*, April 2005, Vol. 58, no. 3, pp.

\* L. Jacobson, R. LaLonde, and D. Sullivan, "Earnings Losses of Displaced Workers," *American Economic Review*, September 1993, pp. 685-709.

A. Stevens, "Persistent Effects of Job Displacement: The Importance of Multiple Job Losses," *Journal of Labor Economics*, January 1997, pp. 165-88.

P. Oreopoulos, M. Page, A. Stevens, "The Intergenerational Effects of Worker Displacement", *Journal of Labor Economics*, October 2008, pp. 455-483.

S. Bender and T. Von Wachter, "In the Right Place at the Wrong Time: The Role of Firms and Luck in Young Workers' Careers," *American Economic Review*, January 2005.

\* T. Von Wachter, J. Song, and J. Manchester, "Long-Term Earnings Losses due to Mass Layoffs During the 1982 Recession," Columbia University working paper.

D. Sullivan and T. Von Wacher, "Job Displacement and Mortality: An Analysis using Administrative Data" *Quarterly Journal of Economics*, August 2009, pp. 1265-1306

#### E. Specific Human Capital and Matching

M. Hashimoto, "Firm-Specific Human Capital as a Shared Investment," *American Economic Review*, 71, 1981, pp. 475-482.

D. Acemoglu and J. Pischke, "Beyond Becker: Training in Imperfect Labor Markets," *Economic Journal*, Vol.109 (February 1999): F112-F142.

\* B. Jovanovic, "Job Matching and the Theory of Turnover," *Journal of Political Economy*, 87, 1979, pp. 972-990.

B. Jovanovic, "Firm Specific Capital and Turnover," *Journal of Political Economy*, 87, 1979, pp. 1246-1260.

\* H. Farber and R. Gibbons, "Learning and Wage Dynamics," *Quarterly Journal of Economics*, November 1996, pp. 1007-1047.

L. Katz, T. Lemieux, D. Parent, "Comparative Advantage, Learning, and Sectoral Wage Determination," *Journal of Labor Economics*, 23(4), 2005, pp. 681-724.

D. Neal, "The Complexity of Job Mobility among Young Men", *Journal of Labor Economics*, April 1999, pp. 232-261.

G. Kambourov and I. Manovskii, "Rising Occupational and Industry Mobility in the United States: 1968-1997," *International Economic Review*, 2008, 49(1), pp. 41-79.

P. Arcidiacono, P. Bayer, and A. Hizmo, "Beyond Signaling and Human Capital: Education and the Revelation of Ability," 2008, NBER Working Paper No. 13951.

#### III. Equalizing Differences and Self-Selection in the Labor Market (Immigration)

A. D. Roy, "Some Thoughts on the Distribution of Earnings," *Oxford Economic Papers*, 3, 1951, 235-246.

\* R. Willis and S. Rosen, "Education and Self-Selection." *Journal of Political Economy*, 1979, Vol. 87, October, pp. S7-S36.

\* G. Borjas, "Self-Selection and the Earnings of Immigrants," *American Economic Review*, 77, September 1977, 531-553.

D. Chiquiar and G. Hanson. (2005) "International Migration, Self-Selection and the Distribution of Wages," *Journal of Political Economy* 113 (April), 239-81.

J. Heckman and B. Sedlacek, "Heterogeneity, Aggregation and Market Wage Functions," *Journal of*

*Political Economy*, 93(6), 1985, pp. 1077-1125.

J. Heckman and B. Honore, "The Empirical Content of the Roy Model," *Econometrica*, 58(5), 1990, pp. 1121-49.

\* S. Rosen, "The Theory of Equalizing Differences," in O. Ashenfelter and R. Layard, eds., *Handbook of Labor Economics*, Vol 1, 1986, pp. 641-692.

S. Kahn and K. Lang, "Efficient Estimation of Structural Hedonic Systems," *International Economic Review*, February 1988.

\* J. Roback, "Wages, Rent and the Quality of Life," *Journal of Political Economy*, 1982.

J. Gyourko and J. Tracy, "The Importance of Local Fiscal Conditions in Analyzing Local Labor Market Conditions," *Journal of Political Economy*, October 1989, pp. 1208-1231.

D. Black, N. Kolesnikova, and L. Taylor. "Earning Functions when Wages and Prices Vary by Location," *Journal of Labor Economics* 27, January 2009, pp. 21-47.

I. Ekeland, J. Heckman, and L. Nesheim, "Identification and Estimation of Hedonic Models," *Journal of Political Economy*, 112(S1), 2004, pp. S60-S109.

C. Brown, "Equalizing Differences in the Labor Market," *Quarterly Journal of Economics*, 1980, pp. 115-134.

J. Gruber and A. Krueger, "The Incidence of Mandated Employer-Provided Insurance: Lessons from Workers' Compensation Insurance," in D. Bradford ed., *Tax Policy and the Economy vol 5*, MIT Press.

L. Summers, "Some Simple Economics of Mandated Benefits," *American Economics Review*, May 1989, 177-83

R. Friedberg, "You Can't Take it With You? Immigration Assimilation and the Portability of Human Capital," *Journal of Labor Economics* 18, 2000, pp. 221-251.

\* E. Moretti, "Estimating the Social Return to Higher Education: Evidence from Longitudinal and Repeated Cross-Section Data," *Journal of Econometrics*, 121(1-2), pp. 175-212.

G. Dahl, "Mobility and Returns to Education: Testing a Roy model with Multiple Markets," *Econometrica*, 2001, 70(Dec), pp. 2367-2420.

#### IV. Wage Inequality *14 lectures*

S. Rosen, "The Economics of Superstars," *American Economic Review*, December 1981, pp. 845-858

\* L. Katz and D. Autor, "Changes in the Wage Structure and Earnings Inequality," in O. Ashenfelter and D. Card, *Handbook of Labor Economics*, Vol 3a, pp. 1463-1555.

L. Katz and K. Murphy, "Changes in Relative Wages, 1963-1987: Supply and Demand Factors," *Quarterly*

- Journal of Economics* (Feb. 1992), pp. 35-78.
- \* C. Juhn, K. Murphy, and B. Pierce, "Wage Inequality and the Rise in the Return to Skill," *Journal of Political Economy*, (June 1993), pp. 410-442.
- K. Murphy and F. Welch, "The Structure of Wages," *Quarterly Journal of Economics* (Feb. 1992), pp. 285-326.
- \* T. Piketty and E. Saez, "Income Inequality in the United States, 1913-1998," *Quarterly Journal of Economics*, February 2003, pp. 1-39; updates at <http://elsa.berkeley.edu/~saez/>
- M. Buchinsky and J. Hunt, "Wage Mobility in the United States," *Review of Economics and Statistics*, 1999, August.
- P. Gottschalk and R. Moffitt, "The Growth of Earnings Instability in the U.S. Labor Market," *Brookings Papers on Economic Activity*, 1994, pp. 217-272.
- T. Lemieux, "Increasing Residual Wage Inequality: Composition Effects, Noisy Data, or Rising Demand for Skill?," *American Economic Review*, September 2006, pp. 461-98.
- W. Kopczuk, E. Saez, and J. Song (2009), "Earnings Mobility and Inequality in the United States: Evidence from Social Security Data since 1937," *Quarterly Journal of Economics*, February 2010, pp. 91-128
- D. Krueger and F. Perri (2006), "Does Income Inequality Lead to Consumption Inequality? Evidence and Theory," *Review of Economic Studies*, January 2003, pp. 163-93.

#### VI. Possible Explanations for Rising Wage Inequality:

- E. Berman, J. Bound, and Z. Griliches, "Changes in the Demand for Skilled Labor within U.S. Manufacturing Industries: Evidence from the Annual Survey of Manufacturing," *Quarterly Journal of Economics*, May 1994, pp. 367-397.
- \* D. Card and J. DiNardo, "Skill Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles," *Journal of Labor Economics*, October 2002, pp. 733-83.
- \* D. Autor, L. Katz, and M. Kearney, "Trends in U.S. Wage Inequality: Re-assessing the Revisionists," *Review of Economics and Statistics*, 2008, 90(May), pp. 23-30.
- T. Lemieux, "Increasing Residual Wage Inequality: Composition Effects, Noisy Data, or Rising Demand for Skill?," *American Economic Review*, 2006, May, pp. 1- 64
- M. Kremer, "How Much does Sorting Increase Inequality?" *Quarterly Journal of Economics*, February 1997, pp. 115-139.
- Borjas and V. Ramey, "Foreign Competition, Market Power, and Wage Inequality," *Quarterly Journal of Economics*, November 1995, pp. 1075-1110.

D. Card, "Immigration and Inequality," *American Economics Review*, May 2009 , 1-21.

\* J. DiNardo, N. Fortin, and T. Lemieux, "Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semiparametric Approach," *Econometrica*, 64(5), 1996, pp. 1001-1044.

O. Galor and O. Moav, "Ability-Biased Technological Transition, Wage Inequality and Economic Growth," *Quarterly Journal of Economics* 118, 2000, pp. 469-497.

M. Mobius and R. Schoenle, "The Evolution of Work," NBER Working Paper No. 12694, 2007.

D. Autor and D. Dorn. (2009) "The Growth of Low-Skill Service Jobs and the Polarization of the U.S. Labor Market," 2010, MIT working paper.

D. Lee (1999) "Wage Inequality in the U.S. during the 1980s: Rising Dispersion or Falling Minimum Wage?" *Quarterly Journal of Economics* 114 (August), 977-1023.

T. Lemieux, W.B. MacLeod and D. Parent. (2009) "Performance Pay and Wage Inequality," *Quarterly Journal of Economics*, 124 (February), 1-49.

G. Peri and C. Sparber, "Task Specialization, Immigration, and Wages," *AEJ: Applied Economics*, July 2009, pp. 135-69.

P. Cortes (2008), "The Effect of Low-Skilled Immigration on U.S. Prices: Evidence from CPI Data," *Journal of Political Economy* 116 (June), 381-422.

## V. Labor Demand

### A. Theory and Applications

\* Hamermesh, Chapters 2,3,6,7.

S. Nickell, "Dynamic Models of Labor Demand." *Handbook of Labor Economics*, ed. by O. Ashenfelter and R. Layard.

W. Oi, "Labor as a Quasi-Fixed Factor." *Journal of Political Economy*, 1962, pp. 538-555.

J. Abowd, F. Kramarz, and D. Margolis, "High Wage Workers and High Wage Firms," *Econometrica*, March 1999, pp. 251-333.

J. Hellerstein, D. Neumark, and K. Troske. "Wages, Productivity, and Worker Characteristics: Evidence from Plant-Level Production Functions and Wage Equations," *Journal of Labor Economics*, July 1999, pp. 409-446.

D. Sullivan, "Monopsony Power in the Market for Nurses," *Journal of Law and Economics* 32, 1989, pp. S135-S78.

E. Basker, "Job Creation or Destruction: Labor Market Effects of Wal-Mart Expansion" *Review of Economics and Statistics*, 2006, pp. 174-183

### B. Labor Demand and the Minimum Wage

- C. Brown, C. Gilroy, and A. Kohen, "The Effect of the Minimum Wage on Employment and Unemployment." *Journal of Economic Literature* 20, 1982, pp. 487-528.
- D. Neumark and W. Wascher, "Employment Effects of Minimum and Subminimum Wages: Panel Data on State Minimum Wage Laws." *Industrial and Labor Relations Review* 46(1), 1992, pp. 55-81.
- Machin, Stephen, and Alan Manning, "The Effects of Minimum Wages on Wage Dispersion and Employment: Evidence from the U.K. Wages Councils." *Industrial and Labor Relations Review*, 47(2), 1994, pp. 319-329.
- \* D. Card and A. Krueger, "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *American Economic Review* 84(4) 1994, pp. 772-793.
- D. Lee and E. Saez, "Optimal Minimum Wage Policy in Competitive Labor Markets," 2009, UC Berkeley Working Paper.
- A. Falk, E. Fehr, and C. Dehdner, "Fairness Perceptions and Reservation Wages—the Behavioral Effects of Minimum Wages," *Quarterly Journal of Economics*, 2006, 121(Nov), 1347-1382.