

Preliminary Version: August 28 , 2004

Yale University
Department of Economics

Econ 630a
Labor Economics

Fall 2004
Joseph G. Altonji

M,W. 2:30-3:30, Luce Hall Room 302

Note: To avoid conflicts with seminars we will always meet from 2:30-3:25 on M. and 2:30-3:55 on Wednesday. Occasionally we will go later on Wednesdays when there is no econometrics seminar.

TOPICS:

- 1.. Education, the Family, and Human Capital.
(4 weeks)
2. Labor Supply
(3 weeks)
3. Market Determination of Wages and Compensating Differentials (1 week)
4. Race and Gender Differences in the Labor Market, Discrimination.
(2 weeks, JA)

Fabian Lange will be covering additional topics in the Spring.

The time allocations are my best guesses, which are usually not very accurate for this course.

The reading list is not intended as general guide to the labor literature. The 5 volume Handbook of Labor Economics, with 3 new volumes in 1999, is the best source for that, and I have assigned several chapters from it. Nevertheless, there are more papers than you can read during the quarter. The starred articles are required reading for the course and must be read before the class in which we will discuss them. One of the main goals in the course is to develop your ability to critically read research papers. In a number of cases I have chosen articles with this purpose in mind rather than because of their importance in the literature. I will provide additional guidance to the reading list as the course proceeds. If you have never taken a labor economics course before I strongly recommend that you immediately read through The Economics of Work and Pay (Filer, Hamermesh, and Rees) to get the lay of the land.

I will be asking the library to place the entire Handbook series on reserve. Most of the articles are available from JSTOR or through the electronic resources available from the Yale library web page. I will be making copies of hard to get articles, which you can borrow from my assistant, Xin Yu.

There is no way that I can lecture on all of the material listed below. For some of the sections we will rely on your reading the material. For others I plan to devote a lot of time in class and will not expect you to read the articles unless you are interested. Students are required to participate actively in the class,

Course Requirements:

- a. Participation in class discussion, which means that you should be reading at least some of the key articles ahead of time.

b. Prepare written notes or slides and present 2 assigned articles in class. Notes or slides can be handwritten but must be legible, and must be available for distribution in class. This presentation should cover the key elements of the article, along with some critical analysis of the article and its contribution to the literature. Articles will be chosen from the starred articles, but there is some flexibility here. I will make initial assignments on the first day of class.

c. Replicate a published empirical paper. The purpose is to give you some experience in doing empirical research and in closely reading the work of others. In some cases, the exercise will lead to a line of research for your econometrics paper or perhaps a thesis essay.

d. In class final exam. We will arrive at a contract concerning the final exam late in the semester.

Below I list the main topics and readings that I will cover in class or expect you to cover as part of the course.

1. Education and Human Capital

A. Human Capital Models of Earnings

Mincer, J., Education, Experience, and Earnings Chapter 1 and 2

*Willis, Robert J. and Sherwin Rosen (1979), "Education and Self Selection." Journal of Political Economy 87, October, Special Issue.

*Card, David, The causal effect of education on earnings, handbook , Vol 3Achapter 30 (in class packet)

Becker, Gary S. (1975), Human Capital 2d ed. New York: Columbia University Press.

Willis, Robert J., "Wage Determinants: A Survey and Reinterpretation of Human Capital Earnings Functions", in O.Ashenfelter and R. Layard (editors) Handbook of Labor Economics (1987).

Siow, A. "Occupational Choice Under Uncertainty." Econometrica (1984).

Education as a Sequential Choice (Will cover later)

*Altonji, J. G., "The Demand for and Return to Education when Education Outcomes are Uncertain" Journal of Labor Economics, (January 1993)

B. Estimating the Returns to Education

*Willis, Robert J. and Sherwin Rosen (1979), "Education and Self Selection." Journal of Political Economy 87, October, Special Issue.

*Card, David, The causal effect of education on earnings, handbook , Vol 3Achapter 30 (in class packet)

Griliches, Zvi (1979), "Sibling Models and Data in Economics: Beginnings of a Survey." Journal of Political Economy 87, Oct.

Griliches, Z. "Estimating the Returns to Schooling: Some Econometric Problems." *Econometrica*, January 1977, pp. 1-22.

*J. Angrist and A. Krueger, "Does Compulsory Schooling Attendance Affect Schooling and Earnings?", *Quart. Jour. of Econ.* CVI(4) (Nov. 1991):979-1014

*Ashenfelter, Orley and A. Krueger, *AER* December 1994. (Twins paper, JSTOR)

Education as a Sequential Choice

*Altonji, J. G., "The Demand for and Return to Education when Education Outcomes are Uncertain" *Journal of Labor Economics*, (January 1993)

J. Heckman, L. Lochner, and Petra Todd, "Fifty Years of Mincer Earnings Regressions", <http://www.nber.org/papers/w9732>

S. Cameron and James Heckman, *JPE*

Liquidity Constraints

J. Behrman, R. Pollak, and P. Taubman, "Family Resources, Family Size, and Access to Financing for College Education", *JPE* 97 No.2, (April 1989): 398-419.

Stephen V. Cameron & Christopher Taber, 2004.

"Estimation of Educational Borrowing Constraints Using Returns to Schooling," *Journal of Political Economy*, University of Chicago Press, vol. 112(1), pages 132-182, February.

[Carneiro, Pedro, James J. Heckman, "The Evidence on credit constraints in post-secondary schooling." *Economic Journal*, October 2002, pp 705-734.](#)

[Dynarski, Susan, "Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion," *AER*, 2003](#)

C. Screening/Signalling Models of the Return to Education: Theory and Evidence

Albrecht, J. "A Procedure for Testing the Signalling Hypothesis." *Journal of Public Economics*, 1981, pp. 123-32.

[Weiss, Andrew "Human Capital and Sorting Models" *Journal of Economic Perspectives*, 9\[4\], Autumn 1995, 133-154.](#)

(* [Tyler, John, Richard J. Murnane and John Willett "Estimating the Labor Market Signaling value of the GED" *Quarterly Journal of Economics*, 115\[2\], May 2002, 431-468.](#)

(* [Bedard, Kelly, "Human Capital Versus Sorting Models: University Access and High School Drop-outs," *Journal of Political Economy*, 2001, 190\(4\): 749-775](#)

Lang, K. and D. Kropp. "Human Capital and Sorting: The Effects of Compulsory Attendance Laws." Quarterly Journal of Economics 1986

Riley, J. G. "Testing the Educational Screening Hypothesis." Journal of Political Economy, October 1979, pp. S227-52.

Spence, A. M. "Job Market Signalling." Quarterly Journal of Economics, August 1973, pp. 355-74.

Altonji and Pierret, "Employer Learning and the Signalling Value of Education" (with Charles Pierret). in I. Ohashi and T. Tachibanaki editors, Internal Labour Markets, Incentives and Employment, McMillan Press. (1998): 159-195

*J. Altonji and C. Pierret, "Employer Learning and Statistical Discrimination", Quarterly Journal of Economics, February 2002, on class web page.

F. Lange and R. Topel, "The Social Value of Learning and Human Capital", Handbook of Education and Human Capital, unpublished paper, (August 2004). (Section focusing on testing for signaling. The material on externalities will be covered in the Spring.)

Arrow, Kenneth. "Higher Education as a Filter." Journal of Public Economics 2, 1973, pp. 193-216.

Wise, David. "Academic Achievement and Job Performance." American Economic Review, June 1975, pp. 350-366.

Boissiere, M. et al. "Earnings, Schooling, Ability and Cognitive Skills." American Economic Review, December 1985, pp. 1016-1031.

Weiss, Andrew. "High School Graduation, Performance and Earnings." JPE, 1988

Welch, F. "Education in Production." Journal of Political Economy, (January/February 1970): 35-39.

D. Effects of Family Background, Neighborhood, and Peers on Education and Earnings

Intergenerational Correlations in Income and Education

*Gary Solon, "Intergenerational mobility in the labor market" handbook, chapter 29

*Altonji, J.G. and Thomas Dunn, "An Intergenerational Model of Wages, Hours, and Earnings", JHR 2001

Becker, A Treatise on the Family Chapter 6, 7

Becker, G.S., and Nigel Tomes, "Human Capital and the Rise and Fall of Families" Journal of Labor Economics (July 1986):S1-S39.

Goldberger, A.S. "Economic and Mechanical Models of Intergenerational Transmission", AER 79 No.3 (June 1989): 504-513. (see also Becker's reply)

Family Background, Ethnicity, and Neighborhood Effects

Borjas, George, "Ethnic Capital and Intergenerational Mobility" Quarterly Journal of Economics 117 No. 1 (February 1992):123-150.

(Borjas has a good chapter on immigration in the Handbook.)

*Borjas, George, "Ethnicity, Neighborhoods, and Human-Capital Externalities" (AER, 1994)

Case, Anne C. and L.F. Katz, "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youths" NBER working paper No. 3705.

*L.F. Katz, J. Kling, and J. Liebman, QJE article on Moving to Opportunity

E. The Effects of the Type of Education on Earnings

Altonji, J, "The Effects of High School Curriculum on Education and Labor Market Outcomes", Journal of Human Resources, 1995

Heather Rose and Julian R. Betts, "The Effect of High School Courses on Earnings", *Review of Economics and Statistics*, (86:2), pp. 497-513.

The Determinants and Consequences of Primary and Secondary School Quality

*D. Card and A. Krueger, "Does School Quality Matter: Returns to Education and Characteristics of Public Schools in the United States." QJE 117 No. 1 (February 1992):151-200.

Altonji, J., and T. Dunn (1996), "Using Siblings to Estimate the Effects of School Quality on Wages" *Review of Economics and Statistics*, November 1996, 665-671.

Studies of School Quality Using School District Administrative Data

*Dan Aaronson, Lisa Barrow and William Sander, "Teachers and Student Achievement in the Chicago Public Schools", unpublished paper, Federal Reserve Bank of Chicago. Feb. 2003.

E. Hanushek, J. Kain and S. Rivkin "Teachers, Schools, and Academic Achievement" <http://edpro.stanford.edu/eah/papers/basic.july2002.PDF>

Private Schools

* Altonji, Taber and Elder, "Selection on Observed and Unobserved Variables: Assessing the Effectiveness of Catholic Schools". <http://faculty.econ.nwu.edu/faculty/tabercathrs31te.pdf>

2. CONSUMPTION, LABOR SUPPLY AND HOURS DETERMINATION

A.1 Trends and Cross Section Differences in weekly hours and labor force participation.

*Pencavel, J. "Labor Supply of Men: A Survey." in Handbook of Labor Economics, ed. by O. Ashenfelter and R. Layard Chapter 1 (1986): Empirical material at beginning

*M. Killingsworth and James Heckman, "Female Labor Supply: A Survey" in Handbook of Labor Economics, ed. by O. Ashenfelter and R. Layard Chapter 2 (1986) Empirical material at the beginning.

Labor Supply and Labor Force Participation, Introduction to Selection Bias

*R. Blundell and T. MaCurdy, "Labor Supply: a Review of Alternative Approaches" Handbook Vol 3A, Chapter 27: 1560-1603 (skim life cycle stuff for now)

Killingsworth, M. Labor Supply. Cambridge: Cambridge University Press, 1983 (Chapters 1 and 2).

*James Heckman. "Sample Selection Bias as a Specification Error." Econometrica, January 1979. (JSTOR) (also in Smith volume)

B. Labor Supply, Taxes, and Nonlinear Budget Constraints.

Cogan, J. "Fixed Costs and Labor Supply." Econometrica, July 1981, pp. 945-963. (JSTOR)

Hausman, J. A. "The Effect of Wages, Taxes, and Fixed Costs on Women's Labor Force Participation." Journal of Public Economics, 1980, pp. 161-194.

Rosen, H. S. "Taxes in a Labor Supply Model with Joint Wage-Hours Determination." Econometrica, May 1976.

*Burtless, G. and J. Hausman. "The Effect of Taxation on Labor Supply." JPE, December 1978, pp. 1103-31. (JSTOR)

*Heim, B. and B. Meyer, "Structural Labor Supply Models when Budget Constraints are Nonlinear" November 2001 (pdf file available on Brad Heim's web page through economics department web page.)

The Static Model: Evidence

Blundell and MaCurdy

Killingsworth, M. Labor Supply, Cambridge, Cambridge University Press (Chapters 3 and 4).

*Mroz, T. A. "The Sensitivity of an Empirical Model of Married Women's Hours of Work to Economic and Statistical Assumptions." Econometrica (1987)

Pencavel, J. "Labor Supply of Men: A Survey." in Handbook of Labor Economics, ed. by O. Ashenfelter and R. Layard Chapter 1 (1986):3-102. (focus on empirical material)

M. Killingsworth and James Heckman, "Female Labor Supply: A Survey" in Handbook of Labor Economics, ed. by O. Ashenfelter and R. Layard Chapter 2 (1986):103-206

*Angrist and Evans, "Children and their Parent's labor Supply: Evidence from Exogenous Variation in Family Size" (July 1966)

(*) [Eissa, N. and J.B. Liebman. 1996. "Labour Supply response to the Earned Income Tax Credit". *Quarterly Journal of Economics* 111:605-637.](#)

(*) [Gelbach, J., "Public Schooling for Young Children and Maternal Labor Supply," *American Economic Review*, 92, March 2002, 307-322.](#)

C. Life Cycle Models of Consumption and Labor Supply with Exogenous Wage Rates

Killingsworth, M. Labor Supply, Chapter 5, 6.1, 6.6.

*Blundell and MaCurdy, (rest of paper)

*MaCurdy, T. "An Empirical Model of Labor Supply in a Life Cycle Setting," JPE, Vol. 89, December 1981, 1059-1089. (JSTOR)

MaCurdy, T. "Interpreting Empirical Models of Labor Supply in a Framework with Uncertainty." In Longitudinal Analysis of Labor Market Data, ed. by J. Heckman and B. Singer, Cambridge University Press, 1985.

MaCurdy, T. "A Simple Scheme for Estimating an Intertemporal Model of Labor Supply and Consumption in the Presence of Taxes and Uncertainty." International Economic Review, June 1983, 265-289.

Heckman, J. J. and T. E. MaCurdy. "A Life Cycle Model of Female Labour Supply." Review of Economic Studies (1980), pp. 47-74.

*Altonji, J. "Intertemporal Substitution in Labor Supply: Evidence from Micro Data." Journal of Political Economy, June 1986. (JSTOR)

*Myles Kimball and Matthew Shapiro, "Labor Supply: Are the Income and Substitution Effects Both Large or Both Small?" unpublished paper

Browning, M., A. Deaton, and M. Irish. "A Profitable Approach to Labor Supply and Commodity Demand Over the Life-Cycle." Econometrica, May 1985, 503-543.

*Casey Mulligan, "Substitution Over Time: Another Look at Lifecycle Labor Supply" <http://papers.nber.org/papers/w6585.pdf>.

Blundell, Duncan and Meghir, "Estimating Labor Supply Responses Using Tax Reforms" (1998) Econometrica. 66 827-861

Retirement Behavior and an Introduction to Empirical Dynamic Optimization Models

R. Lumsdaine and O. Mitchell, "new developments in the economic analysis of retirement", handbook Vol. 3C, chapter 49. (this paper has extensive references)

*Eric French, "The Effects of Health, Wealth and Wages on Labor Supply and Retirement Behavior", Review of Economic Studies

Gustman, A. and T. Steinmeier. "A Structural Retirement Model." Econometrica, May 1986, 555-584.

*Stock, James H. and David A. Wise, "Pensions, the option value of work and retirement", Econometrica 58(5): 1151-1180.

Rust, John, "A Dynamic Programming Model of Retirement Behavior", NBER Working Paper No. 2470.

Wolpin, Kenneth and Zvi Eckstein, The Journal of Human Resources (survey on dynamic discrete choice models)

D. Labor Supply, Hours Constraints, and Hours Determination

Ham, J. C. "Testing Whether Unemployment Represents Life-Cycle Labor Supply Behavior." Review of Economic Studies 52 July (1986).

*Abowd, J. and D. Card. "Intertemporal Labor Supply and Long Term Employment Contracts." American Economic Review, 77 No. 1 March 1987):50-68

J. Altonji with C. Paxson "Labor Supply Preferences, Hours Constraints, and Hours-Wage Tradeoffs", in Journal of Labor Economics, Vol. 6, No. 2 (April 1988): 254-276.

Altonji, J. and C. Paxson. "Job Characteristics and Hours of Work." Research in Labor Economics Vol. 8 Part A (1986): 1-55.

E. Labor Supply and the Business Cycle

I am still looking for a recent discussion of this. I am not sure how much time we will spend here.

Lucas, R. E. and L. A. Rapping. "Real Wages, Employment, and Inflation." Journal of Political Economy, Sept./Oct. 1969.

Altonji, J. "The Intertemporal Substitution Model of Labour Market Fluctuations: An Empirical Analysis." Review of Economic Studies, 1982, pp. 783-824.

Alogoskoufis, G., "On Intertemporal Substitution and Aggregate Labour Supply", JPE 95 No. 5 (October 1987): 893-920.

II. Labor Supply, Fertility, and the Theory of the Household (Skipped this quarter)

3. A. **Market Clearing Models: implicit markets, hedonic functions, compensating wage differentials, and comparative advantage**

*Rosen, S. "The Theory of Equalizing Differences." In O. Ashenfelter and R. Layard, eds., Handbook of Labor Economics

Rosen, S. "Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition." Journal of Political Economy, 1974.

Smith, A. The Wealth of Nations, Chapter 10.

Smith, R. "Compensating Wage Differentials and Public Policy: A Review." Industrial and Labor Relations Review, April 1979, pp. 339-353.

Abowd, J. and O. Ashenfelter. "Anticipated Unemployment, Temporary Layoffs and Compensating Wage Differentials." In S. Rosen, ed., Studies in Labor Markets (University of Chicago Press, 1981).

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

*Thaler, R. and S. Rosen. "The Value of Saving a Life: Evidence from the Labor Market." In Household Production and Consumption, ed. by N. Terleckyj. New York: National Bureau of Economic Research, 1975.

Killingsworth, Mark R. (1987) "Heterogeneous Preferences, Compensating Wage Differentials, and Comparable Worth", The Quarterly Journal of Economics, November:727-742.

B. Nonmarket clearing models (Efficiency Wage Models).

*Lawrence Katz, "Efficiency Wage Theories: A partial Evaluation", in NBER Macroeconomics Annual 1986, 236-275. Also read the comment by Altonji

Weiss, Andrew (1988) "Efficiency Wage Models of Unemployment".

W. Dickens and K. Lang, "A Test of Dual Market Theory", American Economic Review, 1985.

W. Dickens and K. Lang, "Labor Market Segmentation Theory: Reconsidering the Evidence", NBER Working paper No. 4087.

5. Race and Gender in the the Labor Market

*J. Altonji and R. Blank, "Race and Gender in the Labor Market", Handbook Chapter 48.

"Statistical Analysis of Observational Data" in Blank, Dabady and Citro, Eds, Measuring Racial Discrimination, National Academy Press, Chapter 7. (See class server)

Becker, G., The Economics of Discrimination

*Black, Dan A., "Discrimination in an Equilibrium Search Model," JOLE 13(2), 1995 309-334.

Bowlus, A. and Z. Eckstein, "Discrimination and Skill Differences in an equilibrium search model" <http://www.econ.umn.edu/~eckstein/research/discrim.pdf>

G. Cain and D. Aigner, "Statistical Theories of Discrimination", Industrial and Labor Relations Review, January 1977.

*Neal and Johnson, ""The role of premarket factors in black-white wage differences", JPE 104 (5) (1996):869-895: (JSTOR)

Goldin, Claudia, Understanding the Gender Gap Oxford University

Press, New York (1990)

Emiko Usui, "Wages, Non-Wage Characteristics and Predominantly Female Jobs", unpublished paper (see class server)

*Stephen Coate and Glenn Loury, "Will Affirmative-Action Policies Eliminate Negative Stereotypes?", *AER* 83(5): 1220-1240.

Lundberg, S. and R. Startz (1983) "Private Discrimination and Social Intervention in Competitive Labor Markets," *American Economic Review*, June.

*Sandra Black and Philip Strahan, "The Division of Spoils: Rent-Sharing and Discrimination in a Regulated Industry.", *AER* Sept 2001.

Killingsworth, Mark Comparable Worth (Upjohn Institute)

Ronald Ehrenberg, "Econometric Analyses of the Empirical Consequences of Comparable Worth: What have we learned?"

G. Johnson and G. Solon, "Estimates of the Direct Effects of Comparable Worth Policy", *AER* 76(5) December 1986 1117-1125.

Johnson, George E. and Frank P. Stafford. 1998. "Alternative Approaches to Occupational Exclusion", in I. Persson and C. Jonung (Eds.) *Women's Work and Wages*, London and New York. Routledge.

Borjas, George and Stephen G. Bronars, "Consumer Discrimination and Self-Employment", *JPE* 97 no. 3 (June 1989): 581-605.

*Juhn, Chinhui, Kevin M. Murphy, and Brooks Pierce, "Accounting for the Slowdown in Black-White Wage Convergence", In *Workers and Their Wages*, Marvin H. Koster, ed. Washington, D.C.: AEI Press.

Donohue, John J. III and James Heckman, "Continuous versus Episodic Change: The Impact of Civil Rights Policy on the Economic Status of Blacks." *Journal of Economic Literature* 29 (December 1991): 1603-43.

*Derek Neal, [The Measured Black-White Wage Gap Among Women is Too Small](#), **NBER** Working Paper No. w9133, August 2002.

Derek Neal, "Has Black-White Skill Convergence Stopped" (on class server as draft-hbk.pdf)

*David Autor and D. Scarborough, "Will Job Testing Harm Minority Workers?", August 2004 http://econ-www.mit.edu/faculty/download_pdf.php?id=968

*M. Bertrand, E. Duflo and S. Mullinathan, "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination", <http://papers.nber.org/papers/w9873.pdf>

Goldin, Claudia and Cecilia Rouse. 1997. "Orchestrating Impartiality: The Impact of 'Blind' Auditions on Female Musicians." *American Economic Review*, 1999 or 2000.

*Judith Hellerstein, David Neumark, and Ken Troske, "Wages, Productivity, and Worker Characteristics: Evidence from Plant-Level Production Function and Wage Equations," *Journal of Labor Economics*, 1999,

_____ "New Evidence on Sex Segregation and Sex Differences in Wages from Matched Employee-Employer Data," *Journal of Labor Economics*, forthcoming

Judith Hellerstein and David Neumark, "Production Function and Wage Equation Estimation with Heterogenous Labor: Evidence from a New Matched Employer-Employee Data Set", NBER Working Paper 10325.

J. Altonji and C. Pierret, "Employer Learning and Statistical Discrimination", *Quarterly Journal of Economics*, February 2002, on class web page.