

# LABOR ECONOMICS I

Fall 2008  
ECON 670 (001)  
TR 3:00-4:15

Professor SH Lee

## **Learning Objectives**

The goal of the course is twofold: to survey existing research on a number of topics of current interest in labor economics, and to develop students' abilities to engage in original research at the graduate level. To help achieve the latter goal, there is a fairly heavy emphasis on modeling approach and empirical analysis that are associated with each of the areas.

The topics covered include labor supply and demand, the human capital model, contract and incentive in the labor market, changes in wage structure, job search and mobility, migration, and discrimination in labor markets.

Because of the empirical bend of this course and of labor economics in general, it is essential that you have an understanding of modern empirical methods in economics. You need to understand about how problems such as simultaneity, omitted variables, and measurement error affect ordinary least squares estimates. Having knowledge about panel data estimation techniques and limited dependent variables is an advantage.

## **Course Requirements**

There are four requirements. First, students must complete one empirical exercise (30%). Two, students must submit and present a research paper (40%). Three, students select a paper from reading list and critically review the paper and present in the class (10%). Fourth, students must take an exam (20%).

### *Empirical Exercise*

There will be two exercises in which students are given access to a standard data set, and asked to assemble evidence on a topic covered in a set of papers that we are discussing in class. I will announce the due date later in class. This project will undoubtedly entail major time commitments, even for those students who have developed econometrics and computer skills. Thus, students are also strongly encouraged to help each other out in learning how to use the computers, appropriate software and data manipulation. However, students are not allowed to pair off with another student in data manipulation, nor writing up the paper. Students should start on these early in the semester, and work on them throughout the semester. The quality of topic writing will be an important determinant of the grade on the exercise.

### *Term Paper*

Students should submit a term paper. Although this counts for 40% of final grade, I consider this the most important part of the course. This is envisioned as the nucleus of a final 3<sup>rd</sup> year research paper, with only the actual empirical work or with fully-developed theoretical model without the empirical part. It should have many components of a final research paper, including introduction, and literature review. If it is to be a theoretical paper, it should include a discussion of data and econometric strategy, including anticipated problems and proposed solutions. If it is to be an empirical paper, it should include results and proposed extensions. This proposal might serve as a basis for paper you will write while in graduate school. Students should feel free to consult with other professors. Students should start on these early in the semester, and work on them throughout the semester. We will have a brainstorm session for this project.

**Help:** Office Hours: TR 1:30-2:45 PM  
Office: Saunders 512  
Phone: 956-8590  
E-mail: [leesang@hawaii.edu](mailto:leesang@hawaii.edu)  
Web: [www2.hawaii.edu/~leesang](http://www2.hawaii.edu/~leesang)

## **Reading List**

The following book is required and it is available from the campus bookstore.

Cahuc, Pierre, and André Zylberberg. 2004. *Labor Economics*. MIT Press.

Students may also find it helpful to have access to a number of good econometrics texts and monographs which cover OLS, instrumental variables, panel data, and models with qualitative and limited dependent variables. In addition to the text book, there is a reading list which is limited to the required readings for the course. Many of our readings come from Ashenfelter, Orley C. and David Card ed. 1999. *Handbook of Labor Economics* Volume 3A, 3B and 3C, North-Holland (*Handbook 3A/3B/3C*). Because students may not want copies of every paper, I have not made a course pack. However, I assigned it at the Sinclair library for students to borrow. I also made it possible for students to borrow copies of all of the readings during course. Any edition of Ehrenberg, R.G. and Robert S. Smith (most recent one is 2009, 10<sup>th</sup> edition). *Modern Labor Economics* (Pearson/Addison Wesley) is useful as a background reading. Or any undergraduate level textbook is fine for quick review. \* on the reading materials means the papers I will more likely to refer and cover in class.

### **I. Empirical Strategies**

\*Angrist, Joshua D and Alan B. Krueger. 1999, "Empirical Strategies in Labor Economics," *Handbook 3A*, Ch. 23.

\*Moffitt, Robert. 1999. "New Development in Econometric Methods for Labor Market Analysis," *Handbook 3A*, Ch. 24.

\*Rosenzweig, Mark, and Kenneth Wolpin. 2000. "Natural 'natural experiments' in Economics," *Journal of Economic Literature* 38: 827-74.

Griliches, Zvi. 1985. "Data and Econometricians--The Uneasy Alliance," *American Economic Review*, 75(2), pp. 196-200.

\*Deaton, Angus. 1997. *The Analysis of Household Surveys*, The Johns Hopkins University Press, Chapters 1 and 2.

Heckman, James J. 1979. "Selection Bias as a Specification Error," *Econometrica*, 47: 153-162.

### **II. Labor Supply**

Cahuc & Zylberberg (C&Z hereafter) Ch. 1.

\*Blundell, Richard and Thomas MaCurdy. 1999. "Labor Supply: a Review of Alternative Approaches," *Handbook 3A*, Ch. 27 (sections 4, 7, and 8).

\*Lumsdaine, Robin, and Olivia S. Mitchell. 1999. "Recent Development in the Economic Analysis of Retirement," *Handbook 3C*, Ch. 49.

Pencavel, John. 1986. "Labor Supply of Men: A Survey," *Handbook I*.

\*Heckman, James. J. 1993. "What Has Been Learned about Labor Supply in the Past Twenty Years," *American Economic Review* (Papers and Proceedings) 83: 116-121.

\*Heckman James J. and Thomas MaCurdy. 1981. "New Methods for Estimating Labor Supply Functions: A Survey," *Research in Labor Economics*, 4: 65-102.

\*MaCurdy, Thomas. 1981. "An Empirical Model of Labor Supply in a Life-Cycle Setting," *Journal of Political Economy* 89, pp. 1059-85.

\*Becker, Gary S. 1965. "A Theory of the Allocation of Time," *The Economic Journal*, September, pp. 493-517.

Gronau, R. 1997. "The Theory of Home Production: the Past Ten Years," *Journal of Labor Economics*,15(2): 197-205.

\*Chiappori, Pierre-Andre. 1992. "Collective Labor Supply and Welfare," *Journal of Political Economy*, Vol. 100, No.3, pp.437-467.

Gustman, A. O.S. Mitchell, and T. Steinmeier. 1994. "The Role of Pensions in the Labor Market," *Industrial and Labor Relations Review*, 47(3): 417-438.

\*Baker, Michael, Jonathan Gruber, and Kevin Miligan. 2008. "Universal Child Care, Maternal Labor Supply, and Family Well-Being" *Journal of Political Economy* 116 (4): 709-745.

### **III. The Human Capital Model**

#### *General Theory*

#### C&Z Ch. 2

\*Mincer, Jacob. 1974. *Schooling, Experience, and Earnings*, New York: Columbia University Press, Chapters 1, 3, 4, and 5.

\*Becker, Gary S. 1993. *Human Capital*, Chicago: University of Chicago Press, Chapters II, III, IV, and V (section 2). (Mostly from his original book of 1964 NBER)

\*Card, David. 1999. "The Causal Effect of Education and Earnings," *Handbook 3A*, Ch. 30.

### *Schooling and Ability*

\*Hanushek, Eric. 2002. "Public Provided Education," In Alan Auerbach and Martin Feldstein (eds) *Handbook of Public Economics*, Vol 4. Chapter 30 (Amsterdam: Elsevier Science).

Hanushek, E, and D. Kimko. 2000. "Schooling, Labor Force Quality, and the Growth of Nations," *American Economic Review* 90: 1184-1208.

\*Arcidiacono, Peter. 2004. "Ability Sorting and the Returns to College Major." *Journal of Econometrics*.

\*Rosen, S. 1981. "The Economics of Superstars," *American Economic Review*, 71: 845-58.

\*Card, David, and Alan B. Krueger. 1992. "Does School Quality Matter? Returns to Education and the Characteristics of Public Schools in the United States," *Journal of Political Economy* 100: 1-40.

\*Blackburn, McKinley L., and David Neumark. 1995. "Are OLS Estimates of the Return to Schooling Biased Downward? Another Look," *Review of Economics and Statistics*, LXXVII(2), pp. 217-30.

\*Angrist, Joshua D., and Alan B. Krueger. 1991. "Does Compulsory School Attendance Affect Schooling and Earnings?" *Quarterly Journal of Economics*, CVI(4), p. 979-1014.

Bound, John, David A. Jaeger, and Regina M. Baker. 1995. "Problems with Instrumental Variables Estimation When the Correlation between the Instruments and the Endogenous Explanatory Variables is Weak," *Journal of American Statistical Association*, Vol. 90, No. 430, pp. 443-450.

### *Experience, Tenure, and Marriage*

\*Abraham, Katharine G., and Henry S. Farber. 1987. "Job Duration, Seniority, and Earnings," *American Economic Review*, 77(3), pp. 278-97.

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

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

Korenman, Sanders, and David Neumark. 1991. "Does Marriage Really Make Men More Productive?" *Journal of Human Resources* 26(2): 282-307.

### *Credit Constraint*

\*Carneiro, P., & Heckman, J. J. 2002. “The Evidence on Credit Constraints in Post-Secondary Schooling.” *The Economic Journal*, 112: 705–734.

\*Cameron, V. S., & Heckman, J.J. 2001. “The Dynamics of Educational Attainment for Black, Hispanic, and White Males” *Journal of Political Economy*, 109 (3): 455–499.

### *Intergenerational Mobility*

TBA

## **IV. Labor Demand**

C&Z Ch. 4.

\*Hamermesh, Daniel S. 1993. *Labor Demand*, New Jersey: Princeton University Press, Chapters 2, 3, and 6.

Trejo, S. 1991. “The Effects of Overtime Pay Regulation on Worker Compensation,” *American Economic Review* 81: 719-740.

\*Gruber, Jonathan. 2000. “Health Insurance and the Labor Market,” in Joseph P. Newhouse and Anthony J. Culyer eds. *Handbook of Health Economics*, Vol. 1A, Amsterdam: North Holland, pp.645-706.

Gruber, J. 1994. “The Incidence of Mandated Maternity Benefits,” *American Economic Review*, 84(3): 622-41.

Montgomery, Mark, and James Cosgrove. 1993. “The Effect of Employee Benefits on the Demand for Part-Time Workers,” *Industrial and Labor Relations Review*, 47(1): 87-98.

Lee, S-H, G. Russo, LH. Nitz, and A. Jabbar. 2005. “The Effect of Mandatory Employer-Sponsored Insurance on Health Insurance Coverage and Labor Force Utilization in Hawaii” UHM Working Paper.

\*Card, David, and Alan Krueger. 1995. “Myth and Measurement: the New Economics of Minimum Wage”, selected chapters, (Princeton: Princeton University Press)

## V. Technological Progress, Globalization, and Changes in Wage Structure

C&Z Ch. 10

\*Katz, Lawrence F., and David H. Autor, 1999. Changes in the Wage Structure and Earnings Inequality, *Handbook 3A*, Ch. 26.

\*Bound, John, and George Johnson. 1992. "Changes in the Structure of Wages in the 1980's: An Evaluation of Alternative Explanations." *American Economic Review*, 82(3), pp. 371-92.

\*Katz, Lawrence F., and Kevin M. Murphy. 1992. "Changes in Relative Wages, 1963-1987: Supply and Demand Factors." *Quarterly Journal of Economics*, 35-78.

\*Juhn, Chinhui, Kevin M. Murphy, and Brooks Pierce. 1993. "Wage Inequality and the Rise in Returns to Skill." *Journal of Political Economy*, 101(3), pp. 410-42.

\*Card, David and John E. DiNardo. 2002. "Skill-Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles" *Journal of Labor Economics* 20 (4). Pp. 733-83.

Berman, Eli, John Bound, and Zvi Griliches. 1994. "Changes in the Demand for Skilled Labor within U.S. Manufacturing: Evidence from the Annual Survey of Manufactures." *Quarterly Journal of Economics*, CIX(2), pp. 367-98.

\*Krueger, A.B. 1993. "How Computers Have Changed the Wage Structure: Evidence from Microdata, 1984-1989." *Quarterly Journal of Economics*, CVII(1), pp. 33-60.

DiNardo, John E., and Jörn-Steffen Pischke. 1997. "The Returns to Computer Use Revisited: Have Pencils Changed the Wage Structure Too?" *Quarterly Journal of Economics* 112: 291-303.

Lee, Sang-Hyop and Jonghyuk. Kim, 2004. "Has the Internet Changed the Wage Structure Too?" *Labour Economics* 11(1): 119-127.

### *Immigration*

\*Borjas, George B. 1999. "The Economic Analysis of Immigration", *Handbook 3A*, Ch. 28.

Borjas, G.B. 2005. "The Labor Market Impact of High Skill Immigration", *American Economic Review*, Papers and Proceedings 95(2): 56-60.

\*Borjas, George B. 1987. "Self-Selection and the Earnings of Immigrants", *American Economic Review* 77 (4), pp. 531-553.

Mincer, Jacob. 1978. "Family Migration Decisions", *Journal of Political Economy*, pp. 749-774.

## **VI. Contract, Incentive, and Mobility**

C&Z Ch. 6

Laffont, Jean-Jacques, and David Martimort. 2002. *The Theory of Incentives* (Princeton NJ: Princeton University Press)

\*Prendergast, Canice. 1999. "The Provision of Incentives in Firms" *Journal of Economic Literature* 37: 7-63.

Prendergast, Canice. 1993. "A Theory of Yes Men," *American Economic Review* 83(4): 757-770.

Lazear, Edward P. 2004. "The Peter Principle: A Theory of Decline" *Journal of Political Economy* 112(1): S141-163.

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

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

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

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

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

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

Medoff, James L., and Katharine G. Abraham. 1980. "Experience, Performance, and Earnings." *Quarterly Journal of Economics*, XCV(4), pp. 703-36.

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

Ehrenberg, Ronald G., and Michael L. Bognanno. 1990. "Do Tournaments Have Incentive Effects?" *Journal of Political Economy*, 98(6), pp. 1307-24.

## *Job Mobility*

### *Mobility*

\*Farber, Henry S. 1999. "Mobility and Stability: The Dynamics of Job Change in Labor Markets", *Handbook 3B*, Ch. 37.

\*Farber, Henry S. 1994. "The Analysis of Interfirm Worker Mobility," *Journal of Labor Economics*, Vol. 12 no. 4, pp. 554-93.

Mincer, Jacob and Boyan Jovanovic, 1981. "Labor Mobility and Wages", in *Studies in Labor Markets*, Sherwin Rosen (ed.), pp. 21-63. Chicago: University of Chicago Press

Topel, Robert H. and Michael P. Ward, 1992. "Job Mobility and the Careers of Young Men", *Quarterly Journal of Economics*, vol. 107, 441-79.

## **VII. Job Search**

### C&Z Ch. 3

\*Mortensen, D., and C. Pissarides. 1999. "New Developments in Models of Search in the Labor Market" *Handbook 3B* Chapter 39.

Stigler, G. 1962. "Information in the Labor Market," *Journal of Political Economy*, 70: 94-105.

\*Topel, Robert H. and Michael P. Ward, 1992. "Job Mobility and the Careers of Young Men", *Quarterly Journal of Economics*, vol. 107, 441-79.

## **VIII. Discrimination in Labor Markets**

Altonji, Joseph G. and Rebecca Blank. 1999. "Race and Gender in the Labor Market." *Handbook 3C*. Ch. 48.

\*Becker, Gary S. 1971. *The Economics of Discrimination* (Chicago, IL: The University of Chicago Press), Chapters 1-5.

Becker, Gary S. 1985. "Human Capital, Effort, and the Sexual Division of Labor." *Journal of Labor Economics*, 1, pp. S33-S58.

Altonji, Joseph G. 1999. "Race and Gender in the Labor Market", *Handbook 3C*, Ch. 48.

\*Oaxaca, Ronald. 1973. "Male-Female Wage Differentials in Urban Labor Markets." *International Economic Review*, 14, pp. 693-709.

\*Goldin, Claudia. and Cecilia Rouse. 2000. "Orchestrating Impartiality: The Impact of "blind" Auditions on Female Musicians," *American Economic Review*, 90:715-741.

\*Bertrand, Marianne, and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable than Lakisha and Jamal?" *American Economic Review* 94(4): 991-1013.

\*Blau, Francine D. and Andrea H. Beller. 1988. "Trends in Earning Differentials by Gender, 1971-1981," *Industrial and Labor Relations Review*, 41(4): 513-29.

Polachek, Solomon William. 1981. "Occupational Self-Selection: A Human Capital Approach to Sex Differences in Occupational Structure." *Review of Economics and Statistics*, pp. 60-9.

Fields, Judith and Edward N. Wolff. 1995. "Interindustry Wage Differentials and the Gender Wage Gap", *Industrial and Labor Relations Review*, Vol. 49, No. 1, pp. 105-120.

Kuhn, Peter. 1987. "Sex Discrimination in Labor Markets: The Role of Statistical Evidence," *American Economic Review*, Vol. 77, No. 4, pp. 567-83.

\*Blau, Francine D. and Lawrence M. Kahn. 1995. "The Gender Earnings Gap: Some International Evidence", in Richard B. Freeman & Lawrence F. Katz (eds.), *Differences & Changes in Wage Structures*, NBER Comparative Labor Markets Series, The University of Chicago Press.

## How to use NLSY (National Longitudinal Survey of Youth)

1. Visit <http://stats.bls.gov/nls/home.htm>
2. Choose NLSY 79, download data and install extraction software. Also order a hardcopy of the Handbook
3. After installation of the software, click the DB' Gator icon.
4. Three windows:
  - 1) Contents: Indexes: Any word in context  
Area of interest  
Survey year  
Refnum  
Qname

Ex) Area of interest:

COMMON : Choose identification code and sex (does not change and need to merge)

KEYVAR: most variables

2) Variables

3) The code book: mouse right button click (F2)

5. Extract: extract tagged variables  
choose Stata dictionary option and choose extract codebook file option  
: they will create filename.dct, filename.dat, and filename.cdb

6. Abbreviation, jargons:

R: respondent

INT: interview

Collapsed

Revised

7. In the Stata command, type

infile using c:\directory\filename.dct

Then you created a stata file!!!

## **Economics 670 Empirical Project**

There is one exercise in which students are given access to a standard data set, and asked to assemble evidence on a topic covered in a set of papers that we are discussing in class. I will announce the due date later in class. This project will undoubtedly entail major time commitments, even for those students who have developed computer skills. Students are also encouraged to help each other out in learning how to use the computers and appropriate software. However, students are not allowed to pair off with another student in data manipulation, nor writing up. On the day the projects are due, each student or group of students will make a brief presentation. Students should start on these early in the semester, and work on them throughout the semester. The quality of writing and presentation will be an important determinant of the grade on the exercise.

<Project>

Use the NLSY to obtain OLS estimates of the returns to schooling, experience, and tenure for men and women. What functional forms for the dependent variable and these independent variables best fit the data? What is the estimated return to schooling with and without controlling for experience and tenure? Which estimate provides a better measure of the financial benefit of additional schooling? I have obviously left a host of the details unspecified, including sample period, model specification, etc. Regarding these issues, make your own decisions as to how best to estimate these returns. Explain the rationale for these decisions. Discuss the econometric problems inherent in interpreting your estimated returns as causal effects of additional schooling, experience, or tenure. Discuss some possible solutions to these problems.

Your results and discussion should be written up in a professional manner, including typed text and tables. See the syllabus for additional guidelines for doing this exercise.

\*\*\*Alternatively, you can use other versions of NLS or other data sets such as Health and Retirement Survey. If you are interested in using other data sets, let me know.