

ECON 861
Empirical Micro-Economics II
Winter Term 2012/13

Instructor:

Prof. Marco Cozzi, Dunning Hall 306, Department of Economics
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Time and Location:

Tuesday 2.30pm - 4.00pm; Thursday 10.00am - 11.30am
Location DUN 213.

TA:

Kamin Peyrow (peyrowk @ econ.queensu.ca, MC A423, until reading week), Vincent Chandler (chandler @ econ.queensu.ca, DH 333, after reading week).

Office Hours:

Thursday 4:00 - 5.30pm.

Readings:

There is no required text for the course. On the other hand, the book closest to our level and topics is:

- (G): Greene, W. *Econometric Analysis (7th edition)*, Pearson/Prentice Hall, 2011.

For various sections, the following books could be a useful reference:

- (A): Arellano, M. *Panel Data Econometrics*, Oxford University Press, 2003
(free on line at <http://www.oxfordscholarship.com>).
- (B): Baltagi, B. *Econometric Analysis of Panel Data (4th edition)*, John Wiley & Sons, 2008.
- (CT): Cameron, C. and P. Trivedi. *Microeconometrics, Methods and Applications*, Cambridge University Press, 2005.
- (H): Hsiao, C. *Analysis of Panel Data (2nd edition)*, Cambridge University Press, 2003.
- (W): Wooldridge, J. *Econometric Analysis of Cross Section and Panel Data (2nd edition)*, MIT Press, 2010.

At the beginning of the course it will be assumed that every student masters basic econometrics, basic statistics and calculus. The following is an excellent introductory book that you may want to use to catch up before the beginning of the course. Moreover, it provides a very accessible, modern and elegant treatment of some of the topics we are going to cover:

- Wooldridge, J. *Introductory Econometrics: A Modern Approach (4th edition)*, South-Western, 2009.

Prior knowledge of some econometric software (preferably STATA) and some programming language (such as FORTRAN, C++, Gauss, Matlab or Python) is going to be helpful.

Grading:

There will be several (at least five) **COMPULSORY** assignments, which will count toward the final grade.

The actual weighting scheme will depend on the MA/PhD student ratio in the class. The students will be also required to hand in a referee report on a recent working paper related to the course. Roughly speaking, the grading scheme could be as follows:

Assignments	85%
Referee Report	15%

Course Requirements:

A prior sound knowledge of econometrics is essential to understand the material presented in class. In order to get credits for this course, you should have taken and passed the *Graduate Econometrics* course in the Fall term (ECON 850 - Econometrics I, or ECON 852 - Quantitative Methods). If not, you have to prove to me your "proficiency" both in applied and theoretical econometrics (e.g. a high quality undergraduate dissertation in applied econometrics might do, while transcripts with high grades in a couple of undergraduate courses won't necessarily be enough).

As stated above, the problem sets will be an integral part of the course. This is a course where you learn how to address an empirical question, using the most suitable framework to study the problem under consideration. The best way to do this is by "*getting your hands dirty*". Hence, the whole focus is on working with actual data and there will NOT be a 'traditional' written final exam.

Problem sets will include empirical assignments, some basic computational exercises and possibly some simple theoretical questions. You will handle several different data sets (both cross-sections and panel data) and learn how to deal with these data.

Ideally, one of the last problem sets will require some programming. You can do the programming in a language of your choice. Notice, however, that due to time constraints, the "art" of programming will not be discussed in class.

Students are encouraged to work together on the assignments (usually groups of 2/3 people are quite efficient) but MUST submit their own answers, clearly indicating the group they worked in.

The datasets for the assignments will be made available on the course website.

If feasible, I would like to have some sessions with the students discussing the assignments in front of the class. This option will be discussed at the beginning of the course as it depends crucially on how large the class will be.

Active participation in class is encouraged and attendance is a key input to grasp the concepts presented in the course and to perform well. Hence, attendance will be "*monitored*": you can miss up to four classes without any penalty. If you miss five classes, two points will be deducted from your final grade. Any additional absence will involve an additional two-point deduction.

COURSE DESCRIPTION

The course has three main goals: 1) present and discuss in some detail selected topics in the field of empirical microeconomics, 2) provide the students with a set of "advanced" applied tools, 3) develop some skills to enable the students to start their own independent empirical research.

LIST OF APPLIED TOOLS COVERED IN THE COURSE

- Panel Data: OLS, Fixed Effects and Random Effects
- Instrumental Variables (IV)
- Limited Dependent Variables
- Sample Selection
- Duration Analysis
- Structural Models of the Labor Market

A TENTATIVE LIST OF TOPICS AND RELATED READINGS:

(The Reading list is very likely to change)

• Human Capital, Returns to Education and Tenure

Altonji, J. and R. Shakotko. (1987). "Do Wages Rise with Job Seniority?," *The Review of Economic Studies*, Vol. 54, 437-459.

Becker, G. (1975). *Human Capital*, University of Chicago Press.

Ben-Porath, Y. (1967). "The Production of Human Capital and the Life Cycle of Earnings," *Journal of Political Economy*, Vol. 75, 352-65.

Heckman, J., L. Lochner and P. Todd, "Fifty Years of Mincer Earnings Regressions," manuscript, (<http://athena.sas.upenn.edu/~petra/papers/llmincer.pdf>).

Mincer, J. (1974). *Schooling, Experience and Earnings*, Columbia University Press.

Ruhm, C. (1991). "Are Workers Permanently Scarred by Job Displacements?," *American Economic Review*, Vol. 81, 319-24

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

Willis, R. (1986). "Wage Determinants: A Survey of Human Capital Earnings," in O. Ashenfelter and R. Layard, (eds.), *Handbook of Labor Economics*, Vol. 1, North-Holland.

• Dynamic Models of Labor Supply and Occupational Choice

Eckstein, Z. and K. Wolpin. (1989). "The Specification and Estimation of Dynamic Discrete Choice Models," *Journal of Human Resources*, Vol. 24, 562-598.

Lee, D. (2005). "An Estimable Dynamic General Equilibrium Model of Work, School and Occupational Choice," *International Economic Review*, Vol. 46, 1-34.

Keane, M. and K. Wolpin. (1997). "The Career Decisions of Young Men," *Journal of Political Economy*, Vol. 105, 473-522.

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

• Wage Inequality

Carneiro, P. and J. Heckman. (2003) "Human Capital Policy," in J. Heckman and A. Krueger, (eds.), *Inequality in America: What Role for Human Capital Policies*, MIT Press.

Chinhui, J., K. Murphy and B. Pierce. (1993). "Wage Inequality and the Rise in Returns to Skill," *Journal of Political Economy*, Vol. 101, 410-42.

Guvenen, F. (2009). "An empirical investigation of labor income processes," *Review of Economic Dynamics*, Vol. 12, 58-79.

Heckman, J., L. Lochner and C. Taber. (1998). "Explaining Rising Wage Inequality with a Dynamic General Equilibrium Model with Heterogeneous Agents," *Review of Economics and Dynamics*, Vol. 1, 1-58.

Katz, L. and D. Autor. (1999). "Changes in the Wage Structure and Earnings Inequality," in O. Ashenfelter and D. Card (eds.), *Handbook of Labor Economics*, volume 3A, Amsterdam: Elsevier Science.

Krueger, D., F. Perri, L. Pistaferri, and G. Violante. (2010). "Cross sectional facts for macroeconomists," *Review of Economic Dynamics*, Vol. 13, 15-51

Krusell, P., L. Ohanian, J.-V. Rios-Rull and G. Violante. (2000). "Capital-Skill Complementarity and Inequality," *Econometrica*, Vol. 68, 1029-1054.

MaCurdy, T. (2007). "A Practitioner's Approach for Modeling Wage Dynamics Using Longitudinal Data," *Handbook of Econometrics*, Vol. 6A, chapter 62, J. Heckman and E. Leamer (eds.), North Holland.

Meghir, C., and L. Pistaferri. (2004). "Income Variance Dynamics and Heterogeneity," *Econometrica*, Vol. 72, 1-32.

• Discrimination

Altonji, J. and R. Blank. (1999). "Race and Gender in the Labor Market," in: O. Ashenfelter & D. Card (ed.), *Handbook of Labor Economics*, edition 1, volume 3, chapter 48, 3143-3259, Elsevier.

Aigner, D. and A. Cain. (1977). "Statistical Theories of Discrimination in Labor Markets," *Industrial and Labor Relations Review*, Vol. 30, 175-187.

Bertrand, M. and S. Mullainathan. (2004). "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," *The American Economic Review*, Vol. 94, 991-1013.

Fang, H. and Moro, A. (2010). "Theories of Statistical Discrimination and Affirmative Action: A Survey," Chapter 5 in *Handbook of Social Economics*, Vol IA, edited by Jess Benhabib, Alberto Bisin, and Matthew Jackson, North-Holland, 133-200.

Moro, A. (2003). "The Effect of Statistical Discrimination on Black-White Wage Inequality: Estimating a Model with Multiple Equilibria," *International Economic Review*, Vol. 44, 467-500.

Neal, D. and W. Johnson. (1996). "The Role of Pre-market Factors in Black-White Wage Differences," *Journal of Political Economy*, Vol. 104, 869-895.

Wolpin, K. I. (1992). "The Determinants of Black-White Differences in Early Employment Careers: Search, Layoffs, Quits and Endogenous Wage Growth," *Journal of Political Economy*, Vol. 100, 535-60.

• 'Natural Experiments' and Program Evaluation

Angrist, J. and Krueger, A. (2001). "Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments," *Journal of Economic Perspectives*, Vol. 15, 69-85.

Angrist, J. and Pischke, J. (2010). "The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics," *Journal of Economic Perspectives*, Vol. 24, 3-30.

Keane, M. A. (2010). "Structural Perspective on the Experimentalist School," *Journal of Economic Perspectives*, Vol. 24, 47-58.

B. Meyer. (1995). "Natural and Quasi-Experiments in Economics," *Journal of Business and Economic Statistics*, Vol. 13, 151-161.

Leamer, E. (2010). "Tantalus on the Road to Asymptopia," *Journal of Economic Perspectives*, Vol. 24, 31-46.

Rosenzweig, M. and K. Wolpin. (2000). "Natural 'Natural Experiments' in Economics," *Journal of Economic Literature*, Vol. 38, 827-874.

Sims, C. (2010). "But Economics Is Not an Experimental Science," *Journal of Economic Perspectives*, Vol. 24, 59-68.

Stock, J. (2010). "The Other Transformation in Econometric Practice: Robust Tools for Inference," *Journal of Economic Perspectives*, Vol. 24, 83-94.

• Equilibrium Unemployment: Search and Matching

Postel-Vinay, F. and J-M. Robin. (2002). "Equilibrium Wage Dispersion With Worker and Employer Heterogeneity," *Econometrica*, Vol. 70, 2295-2351.

Wolpin, K. (1987). "Estimating a Structural Search Model: The Transition from School to Work," *Econometrica*, Vol. 55, 801-17.

• Labor Market Institutions and Optimal Unemployment Insurance

Hopenhayn, H. and J. P. Nicolini. (1997). "Optimal Unemployment Insurance," *Journal of Political Economy*, Vol. 105, 412-38.

Hopenhayn, H. and R. Rogerson. (1993). "Job Turnover and Policy Evaluation: A General Equilibrium Analysis" *Journal of Political Economy*, Vol. 101, 915-38.

Lazear, E. (1990). "Job Security Provisions and Employment," *The Quarterly Journal of Economics*, Vol. 105, 699-726.

Ljungqvist, L. (2002). "How Do Layoff Costs Affect Employment?" *The Economic Journal*, Vol. 112, 829-853.

Shavell, S. and Weiss, L. (1979). "The Optimal Payment of Unemployment Insurance Benefits over Time," *Journal of Political Economy*, Vol. 87, 1347-62.

Statement on Academic Integrity

Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see www.academicintegrity.org). These values are central to the building, nurturing and

sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities). Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1), on the Arts and Science website (see <http://www.queensu.ca/calendars/artsci/pg532.html>), and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.
