

# UCLAAnderson

## School of Management

### **MGT 298D, Section 20: “Special Topics in Management: Empirical Methods in Strategic Management 2”**

Location and Time: Wednesdays, 9a-12p (Apr 7<sup>th</sup> – May 5<sup>th</sup>), D 307

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#### **Overview:**

Establishing causal relationships is the primary challenge that every empirical researcher faces. This course will help you appreciate the difficulties associated with establishing causality in empirical research and study common methodological remedies to these difficulties. We will pay close attention to the practical problems associated with the implementation of these methods. Though this course is being taught for business school students we are going to focus on reading and replicating papers that provide the best means of learning the methods. The articles chosen for the course cover a mix of economics and strategy related topics. For the empirically minded student a large part of your future research will involve applying these methods to your substantive field of research.

The first part led you through the basics of identification, experiments, matching etc. In this part, we will cover instrumental variables, difference in differences, panel data, and limited dependent variable models.

#### **Course Format:**

In this course we will emphasize intuition and (mostly) eschew proofs. Compared to many other courses the reading for this course is light. For most of our meetings there will be a brief textbook reading and one or more articles related to the technique being discussed. Students are expected to read the textbook and articles before coming to class. Read the articles in the order that they are listed. It will make your life easier.

It is our goal to conduct most of the class with Stata on the screen. One problem with this is that the lessons will not be strictly linear. However we hope that the additional hands on experience you gain from this will more than make up for this.

**Grading:**

There is no weekly assignment/homework to be turned in. Since you should have (by now) acquired some experience with replication techniques, the objective of this part of the course is to help you get going with research.

At the end of the course, you will be asked to submit a written research proposal. This document will describe in detail how you plan to implement an empirical study. For this assignment, I strongly recommend that you choose a question you are actually working on or would like to work on in the near future. This document is expected to be around 6-8 pages in length. The first 1-2 pages of this document should contain a summary of the theory/hypotheses and the rest should contain a discussion of your research design. Your research design should read like the “Data and Methods” section of a high-quality empirical paper. Please include a description of the data and important variables (that you have or would like to have), a specification for the regressions you will perform, and discussion and justification of the assumptions that your reader must maintain in order to believe that your analysis constitutes a test of the proposed hypotheses.

**Prerequisites:**

This course is designed for students at the UCLA Anderson School of Management enrolled in the Ph.D. program. All other students should contact the instructor before enrolling. We are very welcoming of people if there is room and your background is such that you would benefit from this class.

**Main Texts:**

Angrist, J. and J. Pischke (2009) Mostly Harmless Econometrics: An Empiricists Guide  
Stata Corporation (2009) Getting Started With Stata For Windows

**Suggested Reading:**

Manski, C. (1999), Identification Problems in the Social Sciences  
Wooldridge, J. (2001), Econometric Analysis of Cross Section and Panel Data  
Andrew Gelman’s blog: <http://www.stat.columbia.edu/~gelman/blog/>  
NBER Econometrics Minicourse: <http://www.nber.org/minicourse3.html>

## **Course Outline and Readings:**

### **Week 1 (Apr 7<sup>th</sup>): Data Management; Introduction to Endogeneity**

**Note:** We will spend most of the session going over the essentials of data management. Do a quick read of the paper below for the discussion in the latter half.

**Article:** Hamilton, B. and J. Nickerson (2003) “Correcting for Endogeneity in Strategic Management Research” *Strategic Organization*, 1, 51-78

### **Week 2 (Apr 14<sup>th</sup>): Instrumental Variables - I**

**Text:** Mostly Harmless Econometrics: 113 – 138, 188 - 197

**Articles:** Levitt, S. (1997) “Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime”, *American Economic Review*, 87 (3), 270-290

McCrary, J. (2002) “Do Electoral Cycles in Police Hiring Really Help us Estimate the Effect of Police on Crime? Comment”, *American Economic Review*, 92(4), 1236-1243

Levitt, S. (2002) “Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime: Reply”, *American Economic Review*, 92(4), 1244-1250

### **Week 3 (Apr 21<sup>st</sup>): Instrumental Variables - II**

**Note:** We will discuss the first article in detail. Also do a quick read of the second for another example of the above technique

**Articles:** Dafny, L. M. Duggan and S. Ramanarayanan (2010) “Paying a Premium on your Premium? Consolidation in the U.S. Health Insurance Industry”, Working Paper

Acemoglu, D., S. Johnson and J. Robinson (2001) “The Colonial Origins of Comparative Development: An Empirical Investigation” *American Economic Review*, 5, 1369-1401.

### **Week 4 (Apr 28<sup>th</sup>): Fixed Effects and Differences-in-Differences Estimation**

**Text:** Mostly Harmless Econometrics: 221-246

**Note:** We will discuss the first article in detail. Also do a quick read of the second article for another example of the above technique.

**Articles:** Agrawal, A. and A. Goldfarb (2008) “Restructuring Research: Communication Costs and the Democratization of University Innovation”, *American Economic Review*, 98(4), 1578-1590

Murray, F. and S. Stern (2007) “Do Formal Intellectual Property Rights Hinder the Free Flow of Scientific Knowledge? An Empirical Test of the Anti-Commons Hypothesis”, *Journal of Economic Behavior and Organization*, 63, 648-687

**Week 5 (May 5<sup>th</sup>): Limited Dependent Variable Models**

**Text:** Mostly Harmless Econometrics: Pages 94 – 107, 197 – 205

**Article:** Lederman, M. and Forbes, S.J. (2004) “Adaptation and Vertical Integration in the Airline Industry”, *American Economic Review*, 99(5): 1831-49