Economics 696Q – Empirical Methods in Industrial Organization

University of Arizona, Spring 2008
Thursday, 12:45-3:15pm, McClelland 401KK

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Office hours: by appointment, or just stop by

Class web page: http://www.u.arizona.edu/~mxiao/teach/e696q/index.htm

COURSE SUMMARY

This course focuses on research methods in empirical industrial organization. Every 1-2 weeks, we will review 4-5 recent empirical papers centered on a particular topic. We will discuss in detail the research question, related theories, data, sources of identification, estimation techniques and policy implications. There is no textbook.

Necessary Background: With a focus on teaching empirical research skills, we assume you are familiar with the theory behind the economic models we will be studying. You should obtain a copy of the text by Tirole, The Theory of Industrial Organization, and use that to update your knowledge on models we cover.

COURSE ASSESSMENT

• Class assessment is a combination of
  – In-class presentation 20%

  The in-class presentation is 30 minutes, and should be done during the class session where we discuss the topic that you are presenting. Please sign up for the in-class presentation by e-mailing the teaching assistant your preferred date and paper. Any paper marked with a # is open to student presentation.

  – Two (computational) problem sets 30%

  Details of the computational problem sets will be provided in class.

  – One referee report 20%

  We will provide a list of papers on which you may base your report.

  – Final exam: 30%

  We will give you an oral exam based on a paper we provide you two weeks in advance.
COURSE REQUIREMENTS

We will discuss papers with * in the reading list in detail in class. You are expected to read these papers before coming to class and participate in classroom discussion. The following questions can serve as guidelines in your reading:

1. What is the question the author(s) claim to answer (or be motivated by)?
2. What are the main findings of the paper? What questions remain open?
3. What is the theoretical/empirical methodology used in the paper? What is the source of identification?
4. Where does (do) the author(s) get the data? What are the pros and cons of the data in this research?

A more detailed list of questions is provided at the end of the syllabus.

LECTURE OUTLINE (subject to change)

Note: You must read papers with *. Papers with # are open to student presentation. Other papers are useful to read depending on your interests.

**Topic 1: Introduction (Gowrisankaran, Xiao), one class**


**Topic 2: Production Function Estimation (Xiao), two classes**


**Topic 3: Market Power in Homogeneous Goods Markets (Xiao), two classes**


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**Topic 4:** Estimating Static Differentiated Products Demand (Gowrisankaran, Xiao), three classes


**Topic 5:** Models of Entry and Exit (Xiao), two classes


**Topic 6: Single Agent Dynamic Models (Gowrisankaran), three classes**


**Topic 7: Dynamic Oligopoly Models (Gowrisankaran), two classes**


# Collard-Wexler, A. (2005), Demand Fluctuations and Plant Turnover in Ready-Mix Concrete, mimeo, NYU.
A Detailed List of Questions to Keep in Mind

Please keep the following questions in your mind while reading each paper. Ideally you should prepare an answer to each question before the class meets for that paper.

- What is the research question?
- Why is it interesting to study the research question?
- What theory is closely related to the empirical study? What is the testable implication from the theory?
- What industry does the author choose to address the research question? Why the industry is appropriate for the study? Do answers found in this industry applicable to other industries? If so, what are these industries and what modification are you expecting to make in order to apply the results from this study to these industries?
- How does the author get the data?
- What is the dependent variable? What is the unit of observation? What are the key explanatory variables? What is the key empirical relationship between the dependent variable and the key explanatory variables?
- What is the identification strategy? What are the other possible identification strategies and why does the author choose this one?
- What is the key empirical finding? (e.g. what is the key coefficient?)
- What economic explanation does the author offer for the empirical finding? What is the most likely alternative explanation? How does the author distinguish between these two explanations?
- Does the key empirical finding suggest any policy implications?
- What economics do we learn from this paper? Try to state it in one sentence and in your own language.