Empirical Industrial Organization
[562210]
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Department: Economic Policy and World Economic Structure
Course 2013-2014 (4th term)

Outline

INTRODUCTION

Lecture 1.- Introduction to Empirical IO

Lecture 2.- Structural econometrics for Empirical IO

2.1. Properties of OLS for estimating demand and supply systems
2.2. IV and 2SLS estimation of demand and supply systems
2.3. Using Generalized Method of Moments in Empirical IO

Lecture 3.- Static models of equilibrium

3.1. Estimating Cournot models
3.2. Estimating Bertrand models
3.3. Conduct Parameters: identifying collusion

DEMAND SYSTEMS

Lecture 4.- Estimating demand systems

4.1. Continuous models of the representative consumer in the product space
4.2. Models in the space of characteristics
4.3. Discrete choice models of heterogeneous consumers
4.4. Multinomial logit demand
4.5. BLP Algorithm

Lecture 5.- Price indices

5.1. From cost of living to price indices
5.2. Problems: old and new goods
5.2. Hedonic pricing
COST FUNCTIONS
Lecture 6.- Cost and production functions
  6.1. Estimation problems
  6.2. Simultaneity bias
  6.3. Selection bias
  6.4. Olley-Pakes estimator

ENTRY MODELS
Lecture 7.- Entry Models
  7.1. Entry in isolated markets: Bresnahan and Reiss approach
  7.2. Static games of strategic interaction
  7.3. Dynamic games of strategic interaction

Textbook

Assessment
Students have to solve two full problems sets focused in conducting estimations and simulations in empirical IO (accounting 33% of the mark each). Using numerical software such as Matlab, GAUSS, R or C++ is highly recommended, although most tasks can be solved using standard econometric software such as Eviews or Stata.

Students have to present and discuss a published paper that uses empirical techniques in IO in class, and then have to write an essay discussing such paper (accounting another 33% of the final mark).

Students that fail the problem sets and essay assessments have to pass a final exam.
Guidelines for the Empirical OI Essay

1. Extension: around 1500 to 1800 words

2. Style: write in double space using Garamond 12.5, with 2.5cm at each margin. Do not include a cover sheet

3. An essay is not a summary of the analyzed paper. You should explain in your own words what it is your view on the paper motivation, its contributions, and the methods, results and discussion it offers.

4. It is useful to use a writing structure such the following:

   a. Hook: What is the motivation and the objective of your essay. Why the paper is interesting within the topic in which it fits. Say something that surprises the reader and makes him intrigued on what are you going to explain

   b. Plot: Develop the reasoning lines you have announced in the hook. Do it in a sharp, clear and direct language. Highlight your main points.

   c. Flourish: Offer some general conclusion about the paper and your discussion. Go from the very specific to general statements. Surprise again the reader with a nice link between the initial hook and the final reflections.

5. Remember the way we cite other author works. In the text we quote saying Bel (2002) and Vickers and Yarrow (1988), and then in the reference list we give the details of the cited works:

   Papers:


   Books:


   Book chapters:

Reading List

1. IO Textbooks


2. Empirical IO Textbook


3. Other reference books


4. Papers

4.1. Introduction


4.2. Estimating Static Games of Strategic Interaction


**4.3. Estimating Dynamic Games of Strategic Interaction**


Bayer, P. and Timmins, C. A Note on the Equilibrium Properties of Locational Sorting Models,” mimeo, Yale University.


Davis, P. Spatial Competition in Retail Markets: Movie Theatres, *RAND Journal of Economics*.


4.4. Market Dynamics


