Applied Microeconomics I

RoME, Fall 2024

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Course program

This is a class on techniques and issues in the study of *firm heterogeneity*. The emphasis will be on empirical methods, but always well grounded in economic theory.

Since the nineties, there has been an exponential increase in the data sources that can be used to study firms at a very micro level. The process is still ongoing and more and more data sources become available and can be linked to existing ones to address old and new questions. Micro data have shown that the amount of heterogeneity in any economic process is substantial, and this insight has now been embraced also by macroeconomics, where representative agent models have given way to models with heterogeneity in households and firms, as well as in IO, corporate finance etcetera.

The class will focus on industry dynamics and productivity. In the first part of the class we will learn to estimate production functions. We will then cover some applications of the techniques learned: productivity in imperfectly competitive markets, misallocation, measuring markups with production data, IT and productivity, matched employer-employee data, corporate governance.

The main goal of the course is to endow students with both state-of-the art tools and expose them to the current debates in the study of firms. The course can be useful both to continue for a PhD and to pursue a professional careers in private or public research centers dealing with firm analysis and regulation.

We will cover the following topics:

1. Introduction. Basic facts about industry dynamics and productivity
    - Main references: Dunne, Roberts & Samuelson (1988, 1989), Bartelsmann & Doms (2000), Bartelsman, Scarpetta & Schivardi (2005).
    - Additional references: Syverson (2011), De Loecker & Syverson (2021).
2. A basic framework to study industry dynamics:
    - Main references:Hopenhayn (1992*a*).
    - Additional references: Lucas (1978), Hopenhayn (1992*b*), Jovanovic (1982), Ericson & Pakes (1995), Sterk, Sedláček & Pugsley (2021).
3. Production function estimation: the control function approach:
    - Main references: Olley & Pakes (1996), Levinsohn & Petrin (2003), Ackerberg, Caves & Frazer (2015).

- Additional references: Wooldridge (2009), Doraszelski & Jaumandreu (2013), Gandhi, Navarro & Rivers (2020), Doraszelski & Jaumandreu (2018).

4. Measuring productivity and markups in imperfectly competitive markets:
   - Main references:Foster, Haltiwanger & Syverson (2008), Pozzi & Schivardi (2016), De Loecker & Warzynski (2012), De Ridder, Grassi, Morzenti et al. (2024).
   - Additional references: Klette & Griliches (1996), Hottman, Redding & Weinstein (2016), De Ridder et al. (2024), Eslava & Haltiwanger (2021).
5. Measuring misallocation:
   - Main references: Hsieh & Klenow (2009), Calligaris, Del Gatto, Hassan, Ottaviano & Schivardi (2018).
   - Additional references: Asker, Collard-Wexler & De Loecker (2014), Hsieh & Klenow (2014), Asker, Collard-Wexler & De Loecker (2019).
6. Dynamism, market power, and the productivity slowdown:
   - Main references: Decker, Haltiwanger, Jarmin & Miranda (2017).
   - Additional references: De Loecker, Eeckhout & Unger (2020), De Ridder (2020).
7. Management, ICT and productivity:
   - Main references: Bresnahan, Brynjolfsson & Hitt (2002), Caroli & Van Reenen (2001), Bloom, Sadun & Van Reenen (2012), Schivardi & Schmitz (2020).
   - Additional references: Bloom & Van Reenen (2007), Bloom, Brynjolfsson, Foster, Jarmin, Patnaik, Saporta-Eksten & Van Reenen (2019), Bandiera, Prat, Hansen & Sadun (2020).
8. Corporate control and performance:
   - Main references: Burkart, Panunzi & Shleifer (2003), Bennedsen, Nielsen, Pérez-González & Wolfenzon (2007).
   - Additional references: Caselli & Gennaioli (2013), (1994), Pérez-González (2006), Lemos & Scur (2019), Bandiera, Lemos, Prat & Sadun (2017), Bandiera, Guiso, Prat & Sadun (2015).

I will post the slides of the class on the web in advance.

Evaluation method

The grade will be based on class participation (including the presentation of a paper) and a final exam. I will also assign two problem sets during the class.

Class schedule

We meet on Monday 9-10.30, Tuesday 14.45-16.15 and Thursday 9-10.30 at EIEF. Classes start on Monday, September 2nd and end on Thursday, October 10th.

References

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