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ECON 43340-01
Microdata for Macro Models
Fall 2017
Department of Economics
University of Notre Dame

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Course Web Page

All course materials (readings, handouts, etc....) will be posted on Sakai <http://sakai.nd.edu/>

Office Hours

Mondays 12:30 pm to 1:30 pm in 3029 Nanovic and by appointment

Coffee Chats

I want to get to know everyone. I buy you coffee and pastry (or close substitutes), and we talk informally about class or economics in general. It's like office hours, but with food, and no more than two students. If you would like to come, I ask that you sign up via email in advance. I'll keep a sign-up sheet on Sakai.

- Friday, September 8
- Friday, September 29
- Friday, November 3
- Friday, November 17

Course description

This is a course about empirical macroeconomic research using "micro" data. We will cover a wide variety of topics ranging from labor markets to fiscal policy. For each topic, rather than a comprehensive review, we will focus in depth on one or two interesting papers that discuss a macroeconomic theory or question and then consider how it may be evaluated using (predominately cross-sectional) data on individuals, households or firms. My lectures will help fill in details that may be less familiar. In addition to learning about each topic, my goal is to introduce you to datasets and methods you may use to answer macroeconomic questions and develop your intuition as empiricists. By the end of the course, I want you to have the confidence and expertise to conduct your own original (and hopefully macro!) research. Although academic research will be my primary emphasis, these skills have diverse applications. I will connect many of the topics to actual policy debates.

Prerequisites: ECON 30010, ECON30020, ECON30330 (or similar)

Requirements and Grading

Final project 50%: Your final project will consist of either (i) a "virtual paper" on an original research idea or (ii) a replication and extension of a published or nearly published paper. A proposal is due November 1, and **must be approved** by me. You will also arrange to meet with me individually (at least) twice during the semester to discuss the assignment and your proposed research. The first meeting will be before fall break and the second meeting will be before Thanksgiving break.

The final project is due by 11 am on Wednesday, December 13, but you will have to present your results (see below) in the last two weeks of class.

Presentation 15%: You will make a 20-minute presentation on the results of your final project to the class. You will motivate and teach your results to the class and respond to critical questions. These presentations will start the week after Thanksgiving.

Throughout the semester, for extra credit, I will also provide opportunities for you to discuss a paper you choose from a set of papers I select. Discussions will be a 20-minute presentation that both summarizes and comments on the work. **These extra credit presentations cannot hurt your grade** and will only boost your presentation and participation scores.

I will provide some guidelines for both discussions and your research presentations to maximize their effectiveness.

Problem sets 25%: There will be 5 problem sets throughout the semester, and I will drop the lowest score. The problem sets are similar to a lab, and you will be asked to complete and summarize a series of empirical exercises. Sometimes this will mean finding and cleaning a dataset for the analysis. Part of doing high-quality research is replicability, so it is important to save all of the code (e.g., Stata or MATLAB) used to produce the results. I will show you how to use software called Git to keep track of the versions of files you use for your analysis (more below). You will submit the dataset and code with your write-ups.

I encourage you to work in **groups of no more than 3 students** on the problem sets, and you **may submit each assignment as a group**.

Problem sets are due at the beginning of class on the due dates. **I will not accept late problem sets.** I will return graded problem sets as well as post suggested solutions.

Participation 10%: For each topic, we will discuss several papers in depth. I expect you to be able to participate in class discussion of these papers, and I will distribute required and supplemental reading for each topic in advance. This is a small and demanding class, and it will be more fun if everyone participates and participates respectfully. A necessary part of participation is attendance. Please let me know in advance if you will be absent.

Software

Stata: For the problem sets as well as for your final project you will need to use some form of statistical software. In the profession, Stata is the most frequently used for this sort of empirical work, and there are many example Stata programs you can download. But there are alternatives, e.g., R is more frequently used by statisticians and in data science fields, and it is arguably the better language. The benefit of Stata is that it is installed on all university computers, it is common in economics and that I have used it for many years so that I can help with your code. R is open source and freely available, but it will be harder for me to help.

Notre Dame participates in the Stata GradPlan, and you may purchase a copy of Stata IC for your personal use from <https://www.stata.com/order/new/edu/gradplans/campus-gradplan/>

GitHub Classroom: Part of high-quality research is reproducibility and “version control” software is a huge step forward to help researchers maintain code and data for reproducible results. Software developers (I used to be one) have used version control for many years to keep track of all source code and its changes. With the introduction of the Git version control system, its use has exploded well outside of the software industry. Many scientists, engineers, and even writers (among academics and in industry) use Git to track changes in their files. I encourage you to learn the basics, and I will post instructions for you to submit your assignments to me on GitHub, although it is not required.

Course topics and schedule

This is an ambitious list of topics, and we will not be able to cover everything in class. But you are free to choose any of these (or others) for your final project.

Weeks 1-7: Labor Markets and Firm Dynamics

1. What drives unemployment fluctuations?
2. Long run trends in male labor supply
3. Labor market polarization
4. Effects of import competition
5. Declining business dynamism?
6. Investment and financial frictions
7. Misallocation and productivity

REMINDER First meeting completed by fall break

Weeks 8-12: Income, Consumption and Wealth Inequality

1. Household debt and deleveraging
2. Trends in income and consumption inequality
3. Lifecycle consumption and the permanent income hypothesis

REMINDER Second meeting completed before Thanksgiving

Weeks 13-14: Monetary and Fiscal policy

1. How sticky are prices?
2. Fiscal multipliers in general equilibrium

Weeks 14-15: Final project presentations

FINAL EXAM WEEK: Final project due December 13