## ECON 747 - Instructions for Final Project

Thomas Drechsel, University of Maryland Spring 2023

# Key dates (minor adjustments tbd)

- Week of April 10: idea presentation, around 20 minutes per student
- May 21: send me a progress update via e-mail; I will provide some guidance for the remaining time; we can set up a skype/zoom chat in the following week
- June 11: project submission

## Idea of the final project

The transition between taking courses and actually carrying out research is the number one challenge at your stage of the PhD. The final project is my best attempt to help you with this transition. The goal of the project is for you to kick-start a research project. It should be "more" than a research proposal, but can be much "less" than a full blown paper. The difference with a proposal is that I want you to start getting your hands dirty with some actual steps in the research process: for example playing with a simple model or running some first data analysis (or both). I do not expect you to have conclusive results, but I want you to aim to get a feasible and interesting idea on the way.

### How to get started?

The project should be broadly related to the content of the course. It is a good idea to browse through the papers in the syllabus, but do not feel obliged to be closely tied to one particular paper. The course hopefully teaches you some useful ways of thinking through economic mechanisms related to financial frictions, how to empirical facts, and how to set up and solve models.

Here are three examples of potential entry points to a project:

- 1. Start from an interesting empirical fact and conjecture an economic mechanism that follows from the fact. For example, you may have read in the news that more US consumers have access to credit cards today as opposed to twenty years ago. You can document some numbers around increasing credit card use over the past decades, and then hypothesize a consequence: since consumers are more able to smooth their consumption using credit, they may be less sensitive to employment shocks. So this may change how consumption behaves in recessions. It is totally fine to flesh this mechanism out in words. You can then try to build a simple model that formalizes your hypothesis.
- 2. Start from an interesting empirical fact and see how it changes an existing mechanism. For example, the fact may be that firms have loan covenants that link debt access to earnings. You document this fact descriptively. You then take the Kiyotaki-Moore model and simply replace collateral by earnings. You show how the results change by putting it into Dynare. You then think about how could test which constraint makes more sense.

3. Start from an existing mechanism and see how it changes/generalizes when you modify it. For example, paper X has suggested that firms do Y because of Z. But what if firms are credit constrained? You take a simplified version of paper X's model and add a borrowing constraint. You show that things change in meaningful ways theoretically. You can then think about an empirical strategy to show in the data that your modification is relevant.

(Number 1. and 2. are actual papers, maybe you will soon know which ones)

You may of course start in a different way – there are many (sometimes chaotic) ways in which research projects come about. But thinking either about a real-world fact you want to explain with an economic mechanism or about something that is missing from an existing model is never a bad starting point, especially when you do not have much experience with research.

### Format and evaluation

I do not want to put restrictions on how exactly you present what you come up with. Just explain to me in writing what you have done. This can be a document with intro, literature review, model and results sections, but it does not have to have a particular structure. There is no page minimum or maximum. You can also share with me your codes for data analysis or your Dynare (or other) codes in case you solved a model on the computer.

I will evaluate based on originality and feasibility of the idea. The more potential there is that what you have done will turn into an actual paper, the better. It is totally okay if you get stuck somewhere. As long as the idea has potential, there will be ways around it. The initial idea presentation and the progress update will give us a chance to put you and keep you on track.

Previous students of the course have turned their ECON747 ideas into actual papers. What you are doing for the final project is not primarily a "course requirement", but it is what you will be doing for the next few years. You might as well start now. I will be here to help you.