Chapter 0

Preliminaries

0.1   My purpose in this course

From my perspective, the purpose of this course is to put you in a position to read and critically analyze journal articles in macroeconomics. Notice that the goal of "teaching you macroeconomics" - by which I mean describing a series of theories and empirical observations about the macroeconomy - is secondary. Unfortunately, the only way to know enough to do research in a particular area of economics is to read a lot of journal articles. Since each of you will pursue a different research agenda, each of you will have to build your own reading list.

To give you an idea of what you need to know to read contemporary journal article, I have a copy of a recent article. I'll pass it around the room, and everyone should take a close look at it. Right now, the majority of you would be at a complete loss to understand what the paper is about. By the end of the semester, I want you to be able to write a referee report on this paper. In fact, doing so will be your final assignment.

Most of the emphasis in this course will be on learning the mathematical tools needed to solve macro models. Models in macroeconomics are usually extremely complex, so their solution is rarely trivial. In some cases, we'll need to use computers. Many times during the first year, you will be overwhelmed and annoyed by the extensive focus on theory and technique, rather than on empirical facts and deep economic insight. I can assure you

that most economists are very much focused on insight, and unimpressed with technique.

0.2   Your purpose in this course

Your purpose in this course is simpler - to get a good grade, and if you're a doctoral student, pass your prelim.

First, the method of evaluation.

- Homework (10 %): you will have weekly homeworks. The homeworks will be graded by the TA on a scale of 0-10. All grades are subjective and include a presentation component. Your answer must be clearly written as if it were part of a journal article.

- Referee report (10 %). This is described in a handout.

- Exams: There will be two exams (40-40). Each exam is comprehensive (meaning anything covered since the beginning of the semester can be asked). The exams will be graded by both the TA and me.

- In addition to the graded work, you are expected to do the problems at the end of each textbook chapter. These will not be turned in, but I may put a problem from the book on the exam to reward those who do this.

Let me warn you that the first year in economics graduate school is difficult. Getting through it requires you to be focused. This doesn't just mean working hard, it also means choosing what to work on wisely.

- Do:

  - Make sure you really understand the book and lecture notes. The standard for "understanding" something is much higher in graduate school.
  - Try to do as many problems as you can.

- Make certain your answers to practice problems are correct. This seems obvious but many don't do this. The TA or I will be happy to go through any answers you find questionable.

- Join/form a study group to go over each other's homework answers. A study group is critical to maintaining both your grade and your sanity.

- Sit in the front row and ask as many questions as you can.

• Don't:

- Waste time with macro textbooks other than the one I've assigned.

- Think that other learning-economics activities (going to seminar, reading Adam Smith, taking math courses) count towards your doing well in this course.

- Be discouraged if you think "everyone else" seems to have a stronger math or economics background than you. Most of them are bluffing.

0.3 Overview of the material

To explain what we are going to talk about in this course, I'm going to write down the world's simplest macroeconomic model.

$$Y_t = A_t L_t \tag{1}$$

where Y_t is output (GDP) at time t, L_t is labor input, and A_t is labor productivity. Notice that this model is stated in terms of *aggregates* and that *time* is an important element. OK, now that I have a model, I can speak clearly about macroeconomics is. It's the study of the determinants of Y_t. Macroeconomists care about things like interest rates, inflation, exchange rates, maybe the stock market, etc., but only to the extent that they affect Y_t.

Now macroeconomics is divided into two main subfields, the study of long-run growth (A_t), and the study of the business cycle (L_t). The basic plan for the semester is to get your feet wet by studying growth (serious analysis of business cycles gets technical). This will last about 2-3 weeks. Then we'll

invest 2 more weeks in developing a general macroeconomic model. This will be the hardest part of the course, and we won't see the intellectual payoff until after the exam.

After the exam we'll get into the meat of the course and the traditional focus of macroeconomics - trying to figure out why recessions happen and what we should do (if anything) to prevent them.