

Advanced Macroeconomics (Ph.D.)
Prof.s Laura Veldkamp and Venky Venkateswaran
Syllabus

Classroom: KMC 7-191

Class time: Th 1:45-4:15 pm

Office hours: By appointment

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Course Description

The topic of the course is information frictions and international economics. The first half of the course, taught by Laura Veldkamp, is an introduction to information choice with applications to business cycles, monetary economics and finance. We will cover Bayesian learning, coordination games with heterogeneous information and rational inattention. The second half of the class will be taught by Venky Venkateswaran. We will average the grades from the two halves of the course to give you one course grade at the end of the semester.

Prerequisites

You are expected to have already taken the first year PhD sequences in microeconomics and macroeconomics.

Course Materials

Notes, slides, and deliverables (see below) will be posted on the class webpage (<https://sites.google.com/site/advancedmacro2014/>). The course material consists of:

- Textbooks. The required book is [Information Choice in Macroeconomics and Finance](#). The first half of the class will follow the book closely and I'll assign problems from the end of each chapter we cover.

Here are some additional reference books that you might find helpful or interesting.

- Brunnermeier, Markus. Asset Pricing under Asymmetric Information: Bubbles, Crashes, Technical Analysis and Herding, Oxford University Press, 2001.
- Vives, Xavier. Information and Learning in Markets, posted at <http://webprofesores.iese.edu/XVives/books.asp>
- Articles. The course schedule lists articles we'll cover in lecture. The book summarizes these articles. You'll get the most out of the class if you read these some of articles, at least briefly, in advance. There are other articles that you may want to read for background or that you can use for your paper presentation. These articles are listed as recommended reading in the syllabus and in the bibliography of the textbook.

Deliverables and Grades

The grade in this class is based on two components.

1. Weekly problem sets (40%)
2. Paper presentation or research proposal (60%)

Honor Code

We in the NYU community believe that honesty and integrity are necessary for a rewarding educational experience. These qualities form the basis for the strong trust among members of the community (students, faculty, and administrators) that is essential for educational excellence. The Honor Code requires that each student to act with integrity in all academic activities and to hold his or her peers to the same standard. In this course, you may discuss assignments with anyone – in fact, we encourage it — but any written assignments should be your own work.

Outline and Calendar

Session 1 (January 28).

Introduction and overview. Why study information choice? Bayesian updating with normal variables. Measuring Information Flows. Entropy and mutual information. Rational inattention in quadratic loss models with normal variables. Comparing learning technologies.

Read before class: Chapters 1-3 (Veldkamp book)

Recommended Reading: Sims (2003), Brunnermeier Ch. 1.1, Cover and Thomas (1991), ch.s 2,10

Session 2 (February 4).

Information choice in strategic games. Introduction to global games. The role of private and public information in coordination games. Strategic aspects of information choice. Applications to price-setting models. Avoiding multiple equilibria problems in information choice models.

Read before class: Chapters 4-5, and Morris and Shin (1998, 2002).

Recommended Reading: Hellwig and Veldkamp (2007), Vives ch. 6.3, Amador and Weill (2006).

Due at the start of class: Problem set #1

Session 3 (February 11).

Information choice in price-setting. Models of inattentiveness and rational inattention that generate price inertia.

Read before class: Chapter 6.

Recommended Reading: Mackowiack and Wiederholt (2007), Reis (2006), Abel, Eberly and Panageas (2007)

Due at the start of class: Problem set #2

Session 4 (February 18, 25).

Portfolio Choice. Extending the noisy rational expectations model to many assets. Handling correlated risks. Revisiting the choice of learning technologies and role of the timing of uncertainty resolution.

Read before class: Chapter 7.

Recommended Reading: Grossman and Stiglitz (1980), Admati (1985), Van Nieuwerburgh and Veldkamp (2009, home bias), Breon-Drish (2015), Chabakauri, Yuan and Zachariadis (2015)

Due at the start of class: Problem set #3

Session 5 (March 3).

News Shocks and Sentiment Shocks Can information or noise in signals about future productivity explain business cycle fluctuations?

Read before class: Chapters 9-10,

Recommended Reading: Lucas (1972), Lorenzoni (2006), Beaudry and Portier (2004), Jaimovich and Rebelo (2007), Angeletos and La'O (2013).

Session 6 (March 10).

Uncertainty Shocks Can changes in the conditional variance of beliefs about future productivity explain business cycle fluctuations?

Testing Information-Based Theories How to test models of information choice? What data is available? What strategies can we use?

Read before class: Chapter 11

Recommended Reading: Bloom (2009), Bloom, Jaimovich et.al. (2013), Veldkamp (2005), Schaal (2013), Ulbricht (2013), Orlik and Veldkamp (2013).

Spring Break

Session 7 (March 24).

Asymmetric information in financial markets

Recommended Reading: Kyle (1985), Glosten and Milgrom (1985), Vives (2011), Babus and Kondor (2014), Kawakami (2014), Maurin (2015)

Session 8 (March 31).

Asymmetric information and competition

Recommended Reading: Kyle (1989), Attar, Mariotti and Salanie (2011), Biais, Martimort and Rochet (2000)

Session 9 (April 7).

Asymmetric information and frictions

Recommended Reading: Guerrieri, Shimer and Wright (2009), Lester, Shourideh, Venkateswaran and Zetlin-Jones (2015)

Session 10 (April 14).

Asymmetric information and market design

Recommended Reading: Budish, Cramton and Shim (2015)

Session 11 (April 21).

Information frictions and long run outcomes

Recommended Reading: Jovanovic (2014), David, Hopenhayn and Venkateswaran (2015)

Session 12 (April 28).

Measuring information

Recommended Reading: Dickstein and Morales (2015), Kurlat (2015)

Session 13 (May 5).
TBA
