

Information in Financial Markets (Ph.D.)
Prof. Laura Veldkamp
Syllabus

Classroom: Uris 329

Class time: Tues 9am-12:15pm

Office hours: by appointment

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TA: Yifeng Guo

TA's office hour: TBA

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Course Description

The topic of the course is information frictions in financial economics. This half-semester course is an introduction to information choice with applications to game theory, monetary economics and finance. We will cover Bayesian learning, coordination games with heterogeneous information and rational inattention.

Prerequisites

You are expected to have already taken a first year PhD sequence in microeconomics and/or asset pricing.

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, by me. The book is my teaching notes, in published form. 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. Problem sets (40%)
2. Paper presentation or research proposal (60%)

Outline and Calendar

Session 1 (January 29).

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 5).

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 12).

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 19, 26).

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 5).

Asymmetric information and competition

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

Session 6 (March 12).

Uncertainty Shocks Can changes in the conditional variance of beliefs explain 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).