INFORMATION, LEARNING AND EXPECTATIONS IN MACRO
ECON 7335
CORNELL UNIVERSITY
SPRING 2016

Professor: Kristoffer Nimark
Class time and place: MW 1.25-2.40pm URH 488.
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OVERVIEW

Many economic decisions depend on expectations about either inherently unobservable variables or about future realizations of a variable. Different theories of expectations formation will therefore have different implications for economic behavior. This course aims at equipping students with the tools needed to model alternative theories to the full information rational expectations hypothesis. The substantive results from the literature will be discussed along with the specific techniques needed to derive them. Lecture notes will be provided, but reading articles will also be required.

Grades will be based on a take-home report (40%) and a midterm (60%).

COURSE OUTLINE

Lecture 1: Overview and some basics.
(1) Course overview
(2) Bayesian learning: The basics
(3) Linear projections, information sets and conditional expectations

Lecture 2: The Kalman Filter.
(1) The Scalar Filter
(2) Multivariate filter

Lecture 3: Island models of imperfect information.
(1) Confounding of aggregate and idiosyncratic shocks
(2) Noisy information and business cycles

Lecture 4: Private and Public Information.
(1) Coordination and public signals
(2) Higher order expectations

Lecture 5: Heterogenous information in asset markets.

(1) Noisy rational expectations equilibria

Lecture 6: The information revealed by markets.

(1) The impossibility of informationally efficient markets
(2) Invertible information sets

Lecture 7: Social Learning.

(1) Cascades and herds
(2) Learning from the equilibrium action of others

Lecture 8–9: Endogenous information choice.

(1) Basics of information theory
(2) Rational inattention in macro and finance

Lecture 10: Delegated information acquisition.

(1) The information revealed by the availability of information
(2) News media and the business cycle

Lecture 11: Solving dynamic models with private information.

(1) Forecasting the forecasts of others
(2) Dynamic higher order expectations

Lecture 12: Empirical implications of heterogenous information.

(1) Public information, sentiments and speculation
(2) Using survey data in estimation

Lecture 13: Bounded Rationality and Learning.

(1) Least Squares Learning
(2) Convergence to Rational Expectations Equilibria

Lecture 14: Exam.