University College London
Department of Economics

MSc in Economics 2005/2006

Topics in Finance (MB6)
"Asset Pricing under Symmetric and Asymmetric Information"

Tuesday, 10:00-12:00

Syllabus

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Office: Room 307, Drayton House, 30 Gordon Street
Office hours: Wednesday 10:00-12:00 or by appointment.

Course objectives

The aim of the course is to provide students with a thorough understanding of core concepts and methods of financial economics. In particular, the course will focus on asset pricing and portfolio theory. The course is divided into two parts. The first part discusses models in which market participants have the same information. The second focuses on models where market participants have different information. It also briefly discusses models of behavioural finance.

In the first part, we will cover topics such as Arrow-Debreu securities, complete and incomplete markets, mean-variance analysis, capital asset pricing model (CAPM), arbitrage pricing theory (APT). In the second part, we will offer an introductory study of market microstructure, asymmetric information, rational expectations models, sequential trade models, market efficiency, no trade theorems, learning in markets and behavioural finance. We will discuss how these models can help us understand herd behavior, financial crises, booms and crashes.

Course structure

Part I

A simple consumption-based model of asset pricing
Existence of a discount factor
Mean-variance frontier and beta representation
Existence and Equivalence theorems
Factor pricing models
CAPM
APT

Part II

Market Microstructure
Rational Expectations Equilibrium and Bayesian Nash Equilibrium
Common Knowledge and No-Trade Theorems
Insider Trading Models and Sequential Trade Models
Allocative and Informational Efficiency
Herd Behavior, Financial Crises, Crashes and Bubbles
Behavioral Finance

Textbooks

The textbook for the first part of the course is:
John Cochrane, *Asset Pricing*, Princeton University Press, Revised Edition, 2005.

The second part will be mainly based on class notes. You will find the following references particularly useful:
Markus Brunnermeier, *Asset Pricing Under Asymmetric Information. Bubble, Crises, Technical Analysis and Herding.* Oxford University Press, Oxford, 2001.
Richard Lyons, *The Microstructure Approach to Exchange Rates*, MIT Press, 2001.
Maureen O'Hara, *Market Microstructure Theory*, Blackwell Publisher, Oxford, 1997.

Organizational Issues

Every week I will assign a problem set. You can solve it in groups of three people. Solving problem sets is an important part of your learning process. I recommend that you solve them working in groups, since this is an excellent way to learn from one another. Problem sets are due at the beginning of the next lecture.
All information on the course, notes, problem sets, solutions, etc. will be posted on my web page.

Further References

For Part I:
Chi-fu Huang and Robert Litzenberger, *Foundations of Financial Economics*, North Holland 1988.
Danthine Jean-Pierre and Donaldson John, *Intermediate Financial Theory*, 2005 (second edition), Prentice Hall.
Darrell Duffy, *Dynamic Asset Pricing Theory*, Princeton University Press 1992.
Michael Magill and Martine Quinzii, *Theory of Incomplete Markets*, MIT Press 1996.
John Campbell, Archie Mackinley, and Andrew Lo, *The Econometrics of Financial Markets*, Princeton University Press, 1997.

For Part II:
Andrei Schleifer, *Inefficient Markets*, Cambridge University Press, 1998.
Richard H. Thaler, *The Winner's Curse*, Princeton University Press, 1994.

I will circulate a list of other recommended readings during the course.