



**Università Commerciale
Luigi Bocconi**

**MSc. Finance/CLEFIN
2015/2016 Edition**

Theory of Finance

Bocconi University

1st semester, Academic Year 2015-2016

20135 – Theory of finance Second Part: Asset Pricing Theory

Instructors

First Part (16 Hours) Prof. Massimo Guidolin

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Second Part (32 Hours) Prof. Claudio Tebaldi

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Office Hours: Tuesday 3-4 6-7PM

Teaching Assistants:

Daniele Imperiale (Class group 15,16)

Zornitsa Todorova (Class groups 16,17)

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Course Description

The course presents an introduction to quantitative financial economics, with the goal of building a common basis for all the first-year students in view of the specialized courses that will be taken in the following semesters. Part 1 of the course specializes in the theory and practice of optimal portfolio choice. Part 2 is devoted to asset pricing theory and its applications to risky projects and investment performance evaluation.

Help Outside of Class

You are welcome to stop by our offices if you have any questions. If it is not convenient for you to come during our office hours, feel free to e-mail or call to set up an appointment.

Course Organization

There will be no intermediate exam. Classes will focus on applications of optimal allocation and asset valuation theory. Teaching activities are organized on a learning-by-doing basis and students are involved in active problem solving activities. Two lectures will be held by professional asset managers working for leading financial institutions. The final exam is written and based on the teaching material posted on the you@B

Course Material

The program is covered by Lecture Notes, Slides and Excel Files including Past Exams and Class Exercises prepared by the instructors. The Lecture Notes are written in English. All the teaching material, will be available from standard electronic channels (you@B).

The basic reference book:

Danthine, J.P. and J. Donaldson, 2005, *Intermediate Financial Theory*, Second Edition, Elsevier Academic Press.

does not cover all the topics treated in the Second Part.

Research papers will be posted and are supposed to be useful as a further reading, not strictly required to prepare the exam.

Course Outline

Introduction to Valuation

Unit 2: CAPM Equilibrium Valuation

Class/Topics

- 9: CAPM Equilibrium assumptions, capital market line, security market line, systematic risk, leverage
- 10: Empirical evidence on CAPM: The Cross-Section of Expected Stock Returns (time series and cross-sectional tests),
- 11: Black CAPM and Roll's critique
- 12: Application: Capital Budgeting and Valuation of Risky Projects
- 13: Application: CAPM with Leverage Constraints. Betting Against Beta factor
- 14: Class Exercises

Unit 3: Arbitrage Pricing Theory

Class/Topics

- 15: Linear (algebra) Factor Models with Excel
- 16: Arbitrage Pricing Theory
- 17: Fama-French Anomalies
- 18: Behavioral Anomalies
- 19: Application: Fund Performance Evaluation
- 20: Application: Intermediaries Leverage and Asset Prices
- 21: Class Exercises

Unit 4: Asset Pricing beyond linear factor models

Class/Topics

- 21: The Pricing Kernel approach: Subjective valuation vs Equilibrium valuation
- 22: Empirical Tests based on the Pricing Kernel approach
- 23: Application: The impact of (il)liquidity on asset valuation: the global financial crises
- 24: Class Exercises