



LISBON
SCHOOL OF
ECONOMICS &
MANAGEMENT
UNIVERSIDADE DE LISBOA

CORPORATE INVESTMENT APPRAISAL

Syllabus

Masters in Finance

2017-2018 (Fall Semester)

FACULTY: Clara Raposo - clararaposo@iseg.ulisboa.pt

OFFICE HOURS: Mondays, 12:30-13:30, Room 616 (Floor 6, Rua Miguel Lupi, 20)

COURSE OBJECTIVES: This course aims to describe the main framework of investment, financing, and payout decisions in corporations. Students should understand the main techniques and methods used to evaluate an investment, as well the financing choices involved, and the optimal capital structure. The payout decision is also analyzed. The course offers a sound theoretical background and also a practical applied approach, involving numerous problem sets and a group work assignment for students to deal with.

COURSE DESCRIPTION: The course starts with some preliminary notions of game theory and financial option pricing, which allow students to later develop in more depth the topics of corporate investment and financing usually covered as undergraduates. The course then focuses on capital budgeting and the traditional financial performance measures such as the NPV or the IRR, revising the concept of Free cash flow, as well as robustness checks, such as scenario analysis. This is followed by a careful discussion of the basic financing choices and the theory of capital structure, starting from the Modigliani-Miller framework, discussing the trade-off theory, and also dynamic concerns. The main valuation methods used in real life situations, such as WACC, APV or FTE, are also applied. Hybrid financing choices, such as warrants and convertible bonds, are also presented. The course then focuses on risky debt according to Merton's model, as well as the possibility of strategic debt service. The final section of the course offers a discussion of fundamental CFA curriculum topics such as business risk and financial risk, and payout policy.

COURSE OUTLINE:

- o. Preliminaries
 - 01 Game Theory – fundamental concepts
 - 02 Financial Options – basic concepts and pricing
- 1. Capital Budgeting
 - 11 Free Cash Flow
 - 12 Criteria: Payback Period, NPV, IRR, Modified IRR, Profitability Index
 - 13 Special Cases: Inflation, Different Lives

- 14 **Robustness: Sensitivity Analysis, Scenario Analysis, Break-even Analysis**
- 2. **Capital Structure**
 - 21 **Debt and its cost**
 - 22 **Equity and its cost**
 - 23 **Modigliani-Miller (1958)**
 - 24 **Corporate taxes**
 - 25 **Personal taxes**
 - 26 **Costs of Financial Distress**
 - 27 **Agency Costs and benefits of debt**
 - 28 **Trade-off theory**
 - 29 **Pecking order theory**
- 3. **Valuation**
 - 31 **WACC method**
 - 32 **APV method**
 - 33 **FTE method**
 - 34 **Special Financing policies**
- 4. **Warrants and Convertibles**
 - 41 **Warrants and Rights Issues**
 - 42 **Convertible Bonds Issues**
- 5. **Risky Debt**
 - 51 **Merton's model**
 - 52 **Anderson and Sundaresan's strategic debt service**
- 6. **Extra Topics**
 - 61 **Business Risk and Financial Risk**
 - 62 **Payout Policy**

BIBLIOGRAPHY:

Any widely accepted Corporate Finance textbook is accepted and covers reasonably well the course content. A sample would be:

Berk and DeMarzo, *Corporate Finance*, 3rd ed., Pearson, 2013.

Brealey, Myers, and Allen, *Principles of Corporate Finance*, 8th ed., McGraw-Hill

Damodaran, *Corporate Finance*, 2nd ed., Wiley

Hillier, Ross, Westerfield, Jaffe & Jordan, *Corporate Finance*, european ed., McGraw-Hill

Ross, Westerfield, Jaffe and Jordan, *Corporate Finance*, 8th edition, Mc-Graw Hill

Grinblat and Titman, *Financial Markets and Corporate Strategy*, McGraw-Hill

Additionally, for different sections of the course, students will receive with copies of articles, or notes from other textbooks that may be relevant, such as Varian's *Microeconomics*, or Hull's *Options, Futures, and other Derivatives*.

GRADING SYSTEM:

- In the **Continuous Evaluation System** the grading elements are:
 - **Problem Sets** (15% of final grade).
 - **Group Work Assignments** (20% of final grade), consisting of analysing, solving and presenting a case study. Students must organize themselves in groups of five students (max). Students must prepare a written report (hard copy), together with an Excel spreadsheet (when appropriate) and a powerpoint presentation (all

- in a CD-rom or USB pen).
 - Final Exam (65% of final grade), with a minimum grade of 8.0/20.
 - The Final Grade will be the maximum of: (i) the average of the 3 elements (mid-term test, group work assignments and final exam) or (ii) the final exam grade.
- In the **Final Evaluation System:**
 - The only grading element is the final exam.
- Students with a final grade higher than 17 may be required to defend their grades in an oral exam.

EXAM DATES:

Época Normal (First Sit): January 11th 2018

09:00,

Rooms: Library Exam/Study Room (Floor 0, Library Building) &
Room 101 (Floor 1, Building Francesinhas 1).

Época Recurso (Second Sit): January 31st 2018

09:00,

Room 214 (Floor 2, Building Francesinhas 1)

CLASSES:

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|-----------|--|
| Group S12 | Mondays 08:30-10:00 & Wednesdays 08:30-10:00,
Room Anf 21 (Floor 2, Building Francesinhas 1); |
| Group S42 | Mondays 10:00-11:30 & Wednesdays 10:00-11:30,
Room Anf 22 (Floor 2, Building Francesinhas 1). |