Graduate Program in Economics

IDEA

Course: Contracts and Incentives, with application to Corporate Finance

Faculty: David Pérez-Castrillo

Term: First

Module: (will be introduced by the program)

E-mail: david.perez@uab.es

Web page: https://www.davidperezcastrillo.com/

Office Hours: upon request

Description: This course provides an overview of the main topics in contract theory and provides students with a set of theoretical ideas and tools essential for analyzing problems related, in particular, to corporate finance. It will start with the baseline models and then look at various extensions, including behavioral elements and competition. Concerning the application to corporate finance, topics that will be covered include the optimal capital structure, optimal financial contracts, the use of the capital structure as a signaling device, control allocation, and venture capital contracts.

Objective: The main objective of this course is to provide students with the tools to enable them to address questions related to the economics of information in many applications. At the same time, it provides a set of theoretical ideas and tools essential for analyzing any problem related to corporate finance.

Outline:

1. Introduction

1.1. Presentation of asymmetric information, contracts, and the meaning of Moral Hazard, Adverse Selection, and Signaling.
1.2. Symmetric information (first-best)

2. Hidden behavior (Moral hazard)

2.1. Basic moral hazard (two efforts and FOA - Likelihood Ratio - Sufficient statistic argument)
2.2. Simple model 1 (CARA utility function)
2.3. Simple model 2 (risk neutrality + limited liability)
2.4. Extensions (several tasks; double moral hazard; moral hazard with several agents)
2.5. Matching and incentive contracts
2.6. Behavioral approach (intrinsic vs. extrinsic motivation, unawareness…)

3. Corporate financing under moral hazard

3.1. The Modigliani-Miller proposition
3.2. Outside financing capacity
  3.2.1. Credit rationing in the fixed investment model
  3.2.2. The continuous investment model and the equity multiplier
  3.2.3. Diversification and cross-pledging
3.3. Group lending

4. Hidden information (Adverse selection)

4.1. Adverse selection in the absence of screening tools. The market for lemons
4.2. Corporate financing under asymmetric information
  4.2.1. Privately-known prospects model
  4.2.2. Market breakdown and cross-subsidization
  4.2.3. Application: The negative stock price reaction to SEOs
4.3. Screening with two types of agents
4.4. Screening with a continuous set of types
4.5. Firms competing for workers

5. **Signaling**

5.1. The Spence signaling model
5.2. Some comments about signaling models
5.3. Dissipative signals in corporate finance
  5.3.1. Payout policy
  5.3.2. Application 3: IPO underpricing

Departament d´Economia i d´Història Econòmica · **UAB** · Edifici B · 08193 Bellaterra · Barcelona (Spain) **Phone** (+34) 93 581 13 59 · **Fax** (+34) 93 581 20 12 · **E-mail** idea@uab.es · **Web** idea.uab.es

6. **Product market interactions with corporate financing decisions**
    6.1. The long purse story
    6.2. Financial contracts as strategic commitments

7. **Control rights and corporate governance**
    7.1. Control rights and pledgeable income
    7.2. Contingent control rights
        7.2.1. Signals and pledgeable income
        7.2.2. Back to contingent control rights

8. **Designing contracts for University Spin-offs**
    8.1. Introduction
    8.2. Initial allocation of shares
    8.3. Some financial instruments
    8.4. Informational advantage of Technology Transfer Offices
    8.5. The commercialization stage
    8.6. The exit stage
    8.7. Allocation of control rights

Main references: The following books will be helpful in several parts of the course

Bolton, P. and M. Dewatripont (2005). *Contract theory*. MIT press.

Macho-Stadler, I. and D. Pérez-Castrillo (2001). *An Introduction to the Economics of Information*, 2nd Edition. Oxford University Press.

Salanié, B. (2005). *The Economics of Contracts: A Primer*. MIT Press Books.

Tirole, J. (2006), "*The Theory of Corporate Finance*," Princeton University Press.

List of papers

The list will be distributed before the course starts.

Grading: Grading will be based on (i) a final exam, (ii) solving problem sets, (iii) the critical reading of relevant articles