

# Corporate Finance

## David Pérez-Castrillo

**Description:** This course covers the theory of corporate finance. Topics that will be analyzed include the optimal capital structure, financial distress, optimal financial contracts, the use of capital structure as a signaling device, control allocation, corporate governance, and venture capital contracts, amongst others.

### Outline:

#### 1. Corporate finance: An introduction and the Modigliani-Miller propositions

- 1.1. Brief introduction to Corporate Finance
- 1.2. The Modigliani-Miller proposition

#### 2. Corporate financing under Moral Hazard

- 2.1. Outside financing capacity
  - 2.1.1. Credit rationing in the fixed investment model
  - 2.1.2. The continuous investment model and the equity multiplier
- 2.2. Determinants of borrowing capacity
  - 2.2.1. Diversification and cross-pledging
  - 2.2.2. Collateral and the redeployability of assets
  - 2.2.3. Group lending

#### 3. Corporate financing under Asymmetric Information

- 3.1. The lemons problem and the market breakdown
  - 3.1.1. Privately-known prospects model
  - 3.1.2. Market breakdown and cross-subsidization
  - 3.1.3. Application: The negative stock price reaction to SEO's
- 3.2. Dissipative signals
  - 3.2.1. Application 1: Payout policy
  - 3.2.2. Application 2: IPO underpricing

#### 4. Product market interactions with corporate financing decisions

- 4.1. Interaction of financing and real decisions
- 4.2. M&M for competition and finance
- 4.3. Impact of competition on financial choices
  - 4.3.1. Profit destruction
  - 4.3.2. Benchmarking
- 4.4. The long purse story
- 4.5. Strategic security design
- 4.6. Financial contracts as strategic commitments

## 5. Control rights and corporate governance

5.1. Control rights and pledgeable income

5.2. Contingent control rights

5.2.1. Signals and pledgeable income

5.2.2. Back to contingent control rights

## 6. Designing contracts for University Spin-offs

6.1. Introduction

6.2. Initial allocation of shares

6.3. Some financial instruments

6.4. Informational advantage of Technology Transfer Offices

6.5. The commercialization stage

6.6. The exit stage

6.7. Allocation of control rights

**Main reference:** It will be useful for several parts of the course

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

### Usefull papers

Aghion, P. and Bolton, P. (1992), "An Incomplete Contracts Approach to Financial Contracting," *Review of Economic Studies* 59: 473-494.

Akerlof, G. (1970), "The Market for Lemmons, Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics* 84: 488-500.

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- Kaplan, S. and Strömberg, P. (2003), "Financial Contracting Meets the Real World: An Empirical Study of Venture Capital Contracts," *Review of Economic Studies* 70: 281-315.
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- Macho-Stadler, I. and Pérez-Castrillo, D. (2010), "Incentives in University Technology Transfers", *International Journal of Industrial Organization* 28 : 362-367.
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