

Corporate Finance Theory

Teacher: Bruno Biais

Duration: 24 hours

Number of ECTS credits: 4

Education Level	Period	Language of instruction	Max. Staffing	Teaching Mode
Master	S1	English	25	in-person

Deanship Department: Finance

Domain: Finance and Economics

Track: Financial Economics

Keywords: Economics, Finance

SYNOPSIS

We study how informational frictions generate deviations from the Modigliani & Miller financial structure irrelevance theorem. We will study the incentive properties of different financing tools, such as debt or equity, and how and whether firms can use them to overcome credit rationing and financial constraints.

DETAILED DESCRIPTION

Prerequisites:

Microeconomics, Game Theory

Course overview:

We will focus on moral hazard (hidden action) and adverse selection (hidden information) and study how to optimally design financial contracts to mitigate these frictions. We will start from the simplest possible model (one period, two outcomes), and progressively move to richer models (first two period, then fully dynamic). We will rely on a combination of games played in class, lectures, and students' presentations of recent research papers. We will emphasize the intuitions, especially thanks to the games played in class. We will also relate the theoretical analyses to empirical investigations, ranging from descriptive, to diff in diff, and structural estimations.

Pedagogical Objectives:

At the end of the course, the students will understand the consequences of information asymmetries for corporate financing and investment and the characteristics of financial contracts mitigating these imperfections.

Course organization:

- I. Static financial contracting
 - I.A Basic moral hazard
 - I.B Adverse selection
- II. Dynamic financial contracting

The two-period model:

II.A The infinite horizon, discrete time model

II.B The infinite horizon, continuous time model

TEACHING MATERIALS

Slides and papers

TEACHING METHODS

Lectures, games, student presentations of theoretical and empirical research papers

WORK AND EVALUATIONS

Work requested:

Paper presentation in class and final exam

Assessment of achievement:

Tool/method of evaluation	Duration	Weight in the final grading
Class participation and paper presentations		50%
Final exam	2 hours	50%

BIOGRAPHY

Bruno Biais holds a PhD in finance from HEC, received the Paris Bourse dissertation award and the CNRS bronze medal. He taught at Toulouse, Carnegie Mellon, Oxford, LSE, and now HEC.

His research on finance, contract theory, experimental economics and blockchain is published in *Econometrica*, *Journal of Political Economy*, *American Economic Review*, *Review of Economic Studies*, *Journal of Finance*, *Review of Financial Studies* and *Journal of Financial Economics*.

He was editor of the *Review of Economic Studies* and of the *Journal of Finance*.

He is a fellow of the *Econometric Society* and the *Finance Theory group*.

He has been scientific adviser to the NYSE, Euronext, European Central Bank and Bank of England and is a member of the *European Systemic Risk Board*.

WAIVER POLICY

None