Corporate Finance (ECON GU4280)

Meeting time: Tu, Th 4.10 - 5.25
Meeting place: Hamilton 602

Office: IAB 1001B
Office hours: Th 11.30 - 12.45 and other times by appointment

Course Description
The aim of this introductory course in corporate finance is to provide students with the fundamental concepts for understanding firms’ financing decisions and the basic tools for the valuation of a corporation. The course is divided into two parts. Section I discusses valuation frameworks and the theory of corporate finance. The theoretical foundations and concepts developed in this section will be useful for economic decisions making irrespective of whether students intend to specialize in finance or not. Section II is applied and will equip students with the basic techniques to work as a financial analyst at an investment bank or other financial services firms. The following topics will be covered.

I. The theory of corporate finance
   I.1. Valuation concepts
   I.2. Financial structure decisions
   I.3. Taxation and the costs of financial distress
   I.4. Financial decisions and conflict of interests

II. The practice of corporate finance
   II.1. Internal finance, corporate control and merger analysis
   II.2. Private equity finance
   II.3. Business analysis and financial analysis
   II.4. Enterprise valuation
The course content is a mixture of conceptual structures, analytic models, case analyses and discussions. A solid knowledge of conceptual frameworks will prove helpful in practical decisions making. Heavy emphasis is put upon a working understanding of the economic frameworks and theories discussed in class. The learning mode is a combination of lectures and discussion of several real cases plus a Harvard Business School case. The extensive business and financial analysis as well as valuation exercise of Apple Inc. will highlight that valuation is more art and sentiment rather than science. A solid understanding of corporate finance in terms of theory and practice is useful for making critical and informed judgments in discussions about finance topics.

**Course Requirements**

The main course requirements are homework assignments (i.e. five exercise sets), a midterm exam, and final exam. Grades will be determined based on the following weights:

- Exercise sets: 15%
- Midterm exam: 40%
- Final exam: 45%.

It is important to be regular in preparations for this course. The main concepts and theoretical frameworks will be developed through both lectures and homework assignments.

Some of the background material and institutional details are not covered in the lectures but can be found in the recommended textbook and papers.

Working on the homework assignments is a very important part of this course. Students are expected to spend a considerable amount of time working through lecture notes and exercise sets.

It is allowed to work together on exercise sets. However, students must submit their homework individually. In case of collaboration, the names of students in the same group should be stated on the first page of the solution sheet.

Students are expected to participate in class discussions. Please ask questions during the lectures. Critical comments are highly appreciated.

Also, students are welcome to talk to me about career advice if they want to hear my opinion.
Readings

Recommended Textbook (not required)

Lecture notes (Slides)
For each session, comprehensive teaching notes are posted on Courseworks.

Optional readings


Tentative Course Outline

Lecture 1 (Course overview)

Introduction
Financial instruments and financing patterns

Chapters 1, 24
Rajan and Zingales (1995)

Lecture 2 (Valuation concepts)

Valuation and corporate finance
Discounted cash flow (DCF)
Bond pricing, yields, term structure of interests

Chapters 4, 5, 8

Lecture 3 (Valuation concepts)

Bond arbitrage
The No-Arbitrage Theorem

Chapter 3
Ross and Dybvig (2003)

Lecture 4 (Valuation concepts)

Interpretation and applications of NA-Theorem
ETFs and NA principle
Stocks, risks and arbitrage

Chapter 9.1-9.2

Lecture 5 (Valuation concepts)

Options
Put-Call-Parity
Option pricing
Financial engineering

Chapter 20, 21
Lecture 6 (Valuation concepts)

Real options
Risks and returns
Portfolio mechanics
Diversification

Chapter 22, 10, 11

Lecture 7 (Valuation and Financial structure decisions)

CAPM
Empirical test of CAPM and market efficiency
Financial decisions of firms
No arbitrage and the MM Theorem
The MM Theorem and the Put Call Parity

Chapter 13, 14
Modigliani and Miller (1958)

Lecture 8 (Financial structure decisions)

The cost of capital
MM Theorem and the cost of equity and debt
Event studies methodology
Event studies of security issuance and exchange offers announcements

Chapter 12,
Modigliani and Miller (1958), MacKinlay (1997)

Lecture 9 (Taxation and the costs of financial distress)

Debt finance and tax shield
International taxation and offshore cash
Debt finance and financial distress

Chapter 15
Modigliani and Miller (1963)

Lecture 10 (Taxation and the costs of financial distress)

The cost of financial distress
Case 1: Texaco-Pennzoil
Taxes, bankruptcy costs and hybrid securities

Chapter 16.1- 16.4
Cutler and Summers (1985)
Lecture 11 (Taxation and the costs of financial distress)

Securitization
Design of bankruptcy codes
Strategic default
Restructuring and distressed investments

Chapter 16.5-16.9, 17
Gorton and Metrick (2012), Bris, Welch and Zhu (2006)

Lecture 12 (Financial structure and conflict of interests)

A contracting view on financial structure choices
The agency costs of debt finance
The agency costs of equity finance
Equity issuance and stock price reactions

Jensen and Meckling (1976), Myers and Majluf (1984)

Lecture 13 (Internal finance and corporate control, merger analysis)

Corporate cash holdings
The agency costs of free cash flow
The market for corporate control
A framework for merger analysis
Case 2: The Beatrice Co.

Chapter 28

Lecture 14 (Merger analysis)

Case 2: The Beatrice Co.
Case 3: Constellation and MidAmerican
Case 4: AOL and Time Warner

Chapter 29
Baker (1992)

Lecture 15 (Merger analysis)

Case 4: AOL and Time Warner
Structuring M&A transactions

Holmstrom and Kaplan (2001)
Lecture 16 (Private equity finance)

Private equity: Basics
Fundraising
Contracting between GP and LP
Overview of deal structure

Chapter 23.1
Jensen (1989), Gompers and Lerner (2001)

Lecture 17 (Private equity finance)

Venture capital finance: History and investment patterns
Contracting between VC fund and portfolio firm
Economic and empirical analysis of VC contracts
Leverage buyouts: Structure and history

Kaplan and Stroemberg (2003)

Lecture 18 (Business analysis)

What do financial analysts do?
Firm and industry analysis
Apple: Analysis of a business model and business risks

Porter (1980)

Lecture 19 (Financial analysis)

Financial statements: balance sheet, income and cash flow
Apple: Financial analysis

Chapter 2
Apple SEC Filings

Lecture 20 (Financial analysis and enterprise valuation)

Apple: Financial analysis
Financial forecasts

Chapter 7
Lecture 21 (Enterprise valuation)

Enterprise valuation methods
Apple: Enterprise valuation
HBS Case: American Chemical

Chapter 9.3-9.5
HBS Case

Lecture 22 (Enterprise valuation)

HBS Case: American Chemical
Dell: LBO Valuation

HBS Case; Dell SEC Filings,

Lecture 23 (Enterprise valuation)

Dell: Acquisition of EMC and IPO
A fundamental analysis of the Chinese economy

Dell SEC Filings

Lecture 24 (Enterprise valuation)

Market sentiment, bubbles and valuation
Market sentiment, investment and corporate finance

Chapter 19
Dang and Xu (2018)