

## **Corporate Finance and Financial Intermediation (ECONM831)**

Academic Year 2014-2015

Instructor: Prof. Alain de Crombrugghe: alain.decrombrugghe@unamur.be

**Credits:** 5 ECTS

# **Learning Goals:**

Economic Analysis: Articulate the determinants and effects of the components of corporate finance against the benchmark of perfect and efficient markets. Identify the relevant market imperfections, the characteristics of various instruments, the strategic behavior of agents, the role of banks and other intermediaries, the incentive role of contingent contracts. Study the behavior of banks as monitors and as firms, explain the monitoring of the monitors. Explain how finance can separate and redistribute risk.

Critical thinking and application to case studies: Through homeworks on short issues and optionally through a personal presentation in class, discuss critically the relevance of theory to practical paradoxes or in case studies.

Communication skills: In the class discussion of homeworks, theories or example, be able to contribute to the debate, articulate an argument, refer to theories, examples or raise issues. Make sure to conclude and to check the relevance of answers to precise questions of homeworks.

## **Course description:**

The course starts from the Modigliani-Miller theorems of equivalence of sources of finance for the value of the firm and of risk and return effects on equity of debt leverage. It goes on to study market imperfections and their effect on corporate finance and on risk management. The second part of the course is devoted to the role of bank and to their own financial management. Case studies by students of by guest speakers complement the course by the instructor.

In 2014-2015, a guest presentation on "country risk management" is planned by country-riks managers of a bank and of a credit insurance company.

**Reference textbooks** (Selected chapters for specific parts of the course):

BREALEY, R.A. and MYERS, S.C. (2003) Principles of Corporate Finance, 7th Edition, Mc Graw Hill. (or any later edition).



HULL, John (2009) *Risk Management and Financial Institutions*" (2<sup>nd</sup> Ed.) New-York, Pearson, 556pp. (second or later editions to be preferred as data from the 2007-2012 financial crisis are included).

FREIXAS, X. and ROCHET, J.C. (2008), *Microeconomics of Banking*, 2<sup>nd</sup> Edition, MIT Press. (*Theoretical but bright : a reference for research students : surveys a vast theoretical literature on asymmetric information in finance, etc.*)

HUBBARD, Glen R. (2008) *Money, the Financial System & the Economy* Addison Wesley Publishing Company, (6<sup>th</sup> Edition).

### Homeworks:

There will be 1 homework on a different balance sheet for each student, and then 2 or 3 homeworks on short questions for which a precise answer is expected. Homeworks are graded. Answers will be discussed in class.

#### **Course Evaluation:**

Homeworks (25%), Oral Exam (75%): written preparation and oral discussion of 3 questions of issues raised in the course. Structured arguments referring to theory and relevant examples are expected in the discussion.

Possibility to replace one question of the exam by a class presentation of a case study (25% for the presentation, 50% exam).

#### **Tentative schedule Winter 2015:**

## PART 1: CORPORATE FINANCE:

Week 1 : Sources of Finance : MM1 and MM2 benchmarks, Leverage. Syllabus or Brealey & Myers chap 17.

Reminder « Beta » (Hull 2<sup>e</sup> Ed, chap. 1)

Week 2: Imperfect markets (1) Risk and return (Beta, continued)

Fiscalité: Brealey & Myers chap 17-18.

Week 3: Imperfect markets (2)

PREPARATION Assignment 1 : Balance sheet analysis + coverage issue.

Cost of financial stress and of low equity (Brealey & Myers, chap. 18)

**Implicit Options** 

Asymmetric Information:

- costly state verification : Gale & Hellwig (1985) Freixas & Rochet Chap 4, sec. 2.
- Costly effort of borrower: Ray (1999), de Crombrugghe (2013)



Week 4 : Imperfect markets (3) Asymmetric information (continued)

Practical approaches to corporate finance: Brealey & Myers, Mishkin.

Freixas & Rochet, Chap. 2, sec. 5.

Week 5: Collateral, crises and diversification

PREPARATION 2: Projet-lending vs Balance-sheet-lending in Freixas & Rochet, chap 2?

Holding companies, partnerships, market diversification,

Crises, collateral, contagion

Self-fulfilling crises: Calvo (1988), Banking rescues, European sovereign debt crisis.

### PART 2: FINANCIAL INTERMEDIATION AND BANKING:

Week 6: Definition and role of banks

Role of banks in the firm: monitoring and liquidating (Rajan 1992) Evolving banking « Business Model », role of banks in the market.

Week 7: Banking Risk

Diamond - Dybvig (1983): Liquidity and consumption smoothing in banking.

Freixas and Rochet chap 7, sec 1-2.

Managing banks, managing banking risks: Hull. + Freixas Rochet chap 8.

Week 8: Financial Instruments

PREPARATION 3: « Gains from trade »

Economic function of forwards, futures, options and swaps.

Hull, 2<sup>e</sup> Ed. chap. 5 (and 6).

Week 9: Financial instruments

Swaps (end)

Microfinance: contracts

Week 10: Rate risk and volatility PREPARATION 4: Role of « time »

Hull, 2<sup>e</sup> Ed., Chap. 7 and 9.

Week 11 : Value at risk Hull, 2<sup>e</sup> Ed. chap 8 et 12.

Bâle II et III.

Week 12: Credit risk

PREPARATION 5: determinants of « default risk »

Credit risk: Hull 2<sup>e</sup> Ed. Chap 14, 15 et 21



Scoring, Early warning indicators, Logit regression Candelon et al. (2012)

# PART 3: TOPICS or STUDENT PRESENTATIONS

Topic: Country risk management and insurance

- Guest presentations by country risk managers of a bank and of a credit insurance company.

Topic: Industrial organization of the banking sector

- Economies of scale ? Freixas & Rochet, chap. 3.
- Costs and benefits of information?
- Network industries?

Topic: Financial development and growth?

- Real estate booms and banking and sovereign crashes? Freixas & Rochet Chap. 6.