CORPORATE VALUATION AND FINANCING

COURSE OUTLINE 2014

GEST-D-408 (INGEST+Sciences)

Brussels, September 15th, 2014

COURSE SUMMARY

Course Objectives

The learning outcome of this course is to provide you with an advanced approach on the assessment of investment and financing decisions to be taken by corporations, bearing in mind their intimate relationship with financial markets and the links with the assessment of their exposures.

This course is intended to students wishing to work in the financial community or aiming at jobs with financial responsibilities within large corporations.

The course is divided in two parts. First, we examine the toolbox of financial evaluation of assets and the structuring of the liability side. Second, we focus on events of the entrepreneurial financial life of the company to apply the elements learned in the first part: IPOs (going public vs. going private), M&As & other restructuring operations, specialized debt financing & credit risk.

Corporate governance, and the lessons learned from the financial crisis are an inherent part of the various developments of the course.

Risk management, whilst an important part of the Treasury operations of multinationals, will be approached more deeply within the elective course “Risk Management and Governance”, taught in the second semester.

Material

The material comprises:

- available immediately on the shared dropbox with the students and
  [http://solvay.ulb.ac.be/cours/pirotte](http://solvay.ulb.ac.be/cours/pirotte) through its final update:
  - The slides: an additional copy of the slides with notes is saved after each course.
  - The Excel complementary teaching notes.
  - The Exercises (Travaux Pratiques – TP) [see the session dates below]
  - Mini-cases.
• The readings: these pdf files are compulsory to read.
• Extra: facultative readings and additional elements of comprehension.

Reference
One of the two following references can be used together with the slides of the course, although you should be self-sufficient with the material distributed through the slides and articles:

• [modern reference in the same style than Brealey and Myers, or Ross, Westerfield and Jaffe]

  If you already own the reference of one of the following groups of authors, keep it!
  • Brealey and Myers (BM)
  • Ross, Westerfield and Jaffe (RWJ).

• [more theoretical but deep and sound]

  For those who would want a concise complement and exercises in French (facultative):

  For those of you willing to deepen even more their background, here are some additional references:

  For those who would like easy but exciting readings on the subjects covered here, I would suggest:
  • Burrough & Helyar, Barbarians at the Gate, Harper & Row, 1990.

Assistant
Teaching assistant:
• Nicolas Degive will be providing support through the exercise sessions and through his availability at confirmed hours. Please be aware that support relates to the comprehension of the material, the principles and philosophy of the course, not to matters of precision in calculations or semantic details.
Pre-Requisites
The previous course of Financial Theory or equivalently, the following topics that I consider you must be familiar with:

1. Present value, the term structure of interest rates, bonds valuation, and basic stock valuation.
2. Financial Statements Analysis
3. Capital budgeting (Net Present Value and Internal Rate of Return) & the Free Cash Flow Model (FCFM)
4. Portfolio theory & the Capital Asset Pricing Model (CAPM)
5. Option valuation (binomial model)

ECTS
The course has 5 ECTS which means that you should devote at least 125 hours to it:
- Classes: 25h.
- Exercise sessions (TPs): 25h.
- Cases to prepare, additional exercises and readings: 50 h
- Preparation exam: 25 h

Exercise Sessions (TPs)
- 5 sessions + 1 review session will be organized.
  Please verify the scheduling on GeHol (ULB) and the update of the present outline.

Simulation Game (contributed by GLG partners)
- Coordinator: Niels Pécriaux (GLG partners)
- Kickoff date: TBD
  - All specifications of the game will be announced on that day, during one hour.
  - All necessary documents and website will be updated accordingly.

Exams and Grading
- Final grade = Final exam (70%) + Simulation Game (30%) + Bonus points (2) for class participation (You MUST bring a nametag with both firstname and LASTNAME on it).
- You will be requested to fill in your registration to this course additionally through the website of the course in the week from Monday September 30th to Monday October 14th included (compulsory).
- For the Solvay-GLG Challenge, you will need to define groups of 4-5 people using the same links provided on the website of the course for your registration.
- The final exam is a closed-book exam, with a personal summary of max. 5 full pages (recto-verso, 10 “faces” in total) handwritten allowed.
- Grades are carried-over to the second session according to the rules set by Solvay Business School.
Contact & Website

Please follow strictly the following convention when sending an email to us: the subject of your email should be composed in the following way: “MA1 > CoValFi > [subject]”.

hugues.pirotte@ulb.ac.be or at +32 2 650 65 21.
Take a frequent look at your dropbox or at for news: http://solvay.ulb.ac.be/cours/pirotte.
All sessions will comply with the following time schedule:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>12h10 – 13h</td>
<td>Theory</td>
</tr>
<tr>
<td>13h00 – 13h10</td>
<td>Break</td>
</tr>
<tr>
<td>13h10 – 14h</td>
<td>Case, applications. Extensions on Theory</td>
</tr>
</tbody>
</table>

THE ASSET SIDE

Theme 1: Introduction 1 session
- Presentation of the outline and the “spirit” of the course
- The firm and its environment

Asset Pricing (review)
- Valuation in certainty vs. uncertainty
- Asset pricing fundamentals: from the general equilibrium to the no-arbitrage pricing principle.
- The 3 layers of financial valuation.
- Evolutions, shortcomings and need for further development.

Reference: CWS 1, 2, 3, 4
BdM 3, 4

Readings:
- Farber (2002), “Binomial Option Pricing”, Teaching Note
- Others might include:

Theme 2: Valuation: from DCF to Real Options 2 sessions
- Very quick review of valuation techniques
  - Free cash flows, DCF valuation and IRR
  - Limits?
- Using option pricing theory for corporate valuation.
  - Examples of uses
  - From the binomial model to the Black & Scholes model
  - Simulations and cash flows at risk

Reference: CWS 2 Investment Decisions: The Certainty Case
CWS 7 Pricing Contingent Claims
CWS 9 Multiperiod Capital Budgeting under Uncertainty
BdM 20 Financial options
BdM 21 Option valuation
BdM 22 Real options
BM 20 Spotting and Valuing Options
BM 21 Real options
RWJ 22 Options and Corporate Finance: Basic concepts
RWJ 23 Options and Corporate Finance: Extensions

Readings:
- Luehrman (1998), “Investment Opportunities as Real Options Getting
THE IMPACT OF THE LIABILITY SIDE

Theme 3: Principles of Investment Decision-Making (quick review) 2 sessions

- Criteria
- The FCF model: the DCF method applied.

The Cost of Capital: a generalised approach

- ALM and the cost of capital: an introduction
- The various versions of WACC
  - Miles-Ezzel (ME)
  - Harris-Pringle (HP)

References:
- CWS 15 Capital Structure and the Cost of Capital
- BdM 14 Capital Structure in a Perfect Market
- BdM 15 Debt and Taxes
- BdM 18 Capital Budgeting and Valuation with Leverage
- BM 14 An Overview of Corporate Financing
- RWJ 14 Long-Term Financing: An introduction
- RWJ 15 Capital Structure: Basic concepts
- RWJ 12 Risk, Cost of Capital and Capital Budgeting
- RWJ 17 Valuation and Capital Budgeting for the Levered Firm

Readings:
Theme 4: Optimal capital structure: theories and empirical studies

- Agency theory
- Asymmetric information & the pecking order hypothesis
- Signalling
- Review of recent studies on the optimisation of the capital structure by corporate firms.

References:
Previous+
BdM 16 Financial Distress, Managerial Incentives and Information
BM 17 Does Debt Policy Matter?
BM 18 How Much Should a Firm Borrow? (18.1-18.4)
RWJ 16 Capital Structure: Limits to the use of debt
BM 19 Interactions of Investment and Financing Decisions
BM 25 Leasing

Readings:
- Others might include:

THE FIRM AND ITS (FINANCIAL) MARKET

Theme 5: Risky debt

- Financial distress and bankruptcy
- Merton’s model vs. binomial model and the implementation by KMV
- Risky debt and the optimal capital structure paradigm, Leland’s approach

Reference:
CWS 15 D The Cost of Capital with Risky Debt
BdM 24 Debt Financing
BM 23 Valuing Debt
BM 24 The Many Different Kinds of Debts
RWJ 22.9+22.10 Options and Corporate Finance
RWJ 20 Long-Term Debt

Readings:
- Others might include:
Theme 6: **Convertible bonds and warrants**

- Issuing hybrid forms of securities to the market. Why?
- Understanding convertibles and warrants

**Reference:**
- BM 22 Warrants and Convertibles
- RWJ 24 Warrants and Convertibles

**Readings:**

If time permits...

Theme 7: **Raising Capital, Going Public and IPOs**

- From seed capital to going public
- The IPO process
- The undervaluation of IPOs
- IPOs and long run performance

**Reference:**
- CWS 11 F Semi-strong form anomalies
- BdM 23 The Mechanics of Raising Equity Capital
- BM 15 How Corporations Issue Securities
- RWJ 13 Corporate-Financing Decisions and Eff. Cap’l Markets
- RWJ 19 Issuing Securities to the Public

**Readings:**

Theme 8: **Mergers and Acquisitions**

- Ownership, control and restructuring
- Forms
- Theoretical explanations
- Special cases
- Protection & Shareholder value

**Reference:**
- CWS 18 Acquisitions, Divestitures and Corporate Governance
- BdM 28 Mergers and Acquisitions
- BM 33 Mergers
- RWJ 29 Mergers and Acquisitions

**Readings:**

**Cases:**
- RJR Nabisco