

12F010

3 ECTS

Applied Corporate Finance

Overview and Objectives

The main objective of this course is to give students the capacity to apply, in real world situations, the theoretical models and practical techniques to estimate the value of a corporation.

Course Outline

Estimating the value of an asset is a key element in finance and is both at the centre of asset pricing and corporate finance. In this course we will illustrate the main techniques employed for the valuation of corporations. We will lay out the principles that underlie the valuation decisions, and spell out the details of how these principles are put in practice every day by investment analysts around the world.

The course will comprise lectures, which illustrate the existing theories of investment valuation, and a series of case studies based on real or quasi-real companies. The emphasis will be on the practical aspects of valuation, with a focus on data handling and model utilization.

Contents

Session	Content
1-2	<p>Title: Discounted Cash Flow Models</p> <p>Content: Introduce the different valuation models based on discounted cash flows assuming different leverage policies</p> <p>Case/ Lecture: Lecture</p> <p>Issues:</p> <ul style="list-style-type: none"> • Cash flow statements and identities • FCF definitions: FCF, FCFE • Three equivalent models: Weighted Average Cost of Capital, Adjusted Present Value, Cash Flow to Equity • Choosing the correct discount factors for tax shields for different assumptions about leverage and growth • Valuation of a project with finite life and constant leverage using different models • Valuation of an acquisition with constant growth and constant leverage • Valuation with other leverage policies <p>Reading</p> <ul style="list-style-type: none"> • Chapter 18 Berk-DeMarzo

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3	Exercises on DCF valuation The exercises can be solved individually or in a group. In either case, students are expected to discuss the exercises individually in class.
4	Title: Valuation of an LBO Content: Provide an extended example of firm valuation for the purpose of a leveraged acquisition Case/ Lecture: Lecture Reading <ul style="list-style-type: none"> • Chapter 19 Berk-DeMarzo
5	Exercises on LBO valuation The exercises can be solved individually or in a group. In either case, students are expected to discuss the exercises individually in class.
6	Title: Multiples Valuation Content: Teuer Furniture is a privately owned, moderately sized chain of upscale home furnishing showrooms in the United States. By the end of 2012, it had regained its financial footing and a number of long-term investors, including several of Teuer's original non-management investors, now want to sell their shares. At the request of the board, Jennifer Jerabek, the chief financial officer of the company, and her team put together an extensive valuation of Teuer based on a discounted cash flow analysis. When the model was presented to investors, a number of them disagreed with the results. Some investors considered the value too high; others considered it too low. Not surprisingly, some of the differences of opinion were correlated with whether or not the investors wanted to sell their shares of Teuer. Jerabek was instructed to build a valuation of Teuer using a multiples approach instead. Case/ Lecture: Case of Teuer Furniture Issues: <ul style="list-style-type: none"> • Estimate the value of a firm using a multiples approach Reading <ul style="list-style-type: none"> • Teuer Furniture (B), Kellogg KEL789
7	Title: The Valuation of Real Options Content: Applications of the Black and Scholes model for pricing real options for the valuation of firms Case/ Lecture: Lecture Issues: <ul style="list-style-type: none"> • Black and Scholes model

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	<ul style="list-style-type: none"> Valuation of the option to delay: patents, oil reserves Valuation of an expansion option Valuation of an abandonment option <p>Reading</p> <ul style="list-style-type: none"> Chapter 20-22 of Berk-DeMarzo Chapters 17-18 of Damodaran Introduction to Real Options, Ivey, 905N15
8	<p>Title: Valuation of a firm at IPO</p> <p>Content: Case on the use of options in the valuation of start-ups for the decision of whether to take the firm public via an initial public offering in the London AIM</p> <p>Case/ Lecture: Case of Aqua Bounty</p> <p>Issues</p> <ul style="list-style-type: none"> Valuation of a young start-up with big opportunities but no revenues Initial Public Offering process <p>Reading</p> <ul style="list-style-type: none"> Aqua Bounty, HBS 9-213-047
9	<p>Title: The combination of DCF and Options to Value Different Parts of a Target in an Acquisition</p> <p>Content: Amoco Corp. is negotiating to sell a wholly-owned subsidiary, MW Petroleum, to Apache Corp. MW owns large reserves of oil and gas comprising many properties at different stages of engineering, development, and production. The proposed acquisition is a large one for Apache and poses several important financing and valuation problems.</p> <p>Case/ Lecture: Case of MW Petroleum Corporation</p> <p>Issues</p> <ul style="list-style-type: none"> Comprehensive valuation exercise in which students apply DCF techniques and option pricing to value the different parts of a proposed acquisition target <p>Reading</p> <ul style="list-style-type: none"> MW Petroleum Corp. (A), HBS 5-295-029
10	<p>Revision</p>

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Exercises and required activities

At different points during the course the class will focus on the discussion of a specific issue in valuation or on a case. Students are expected to actively contribute to the discussion in class.

Evaluation

Weight of Final Exam: 70%. Weight of participation: 30%

Materials

- Aswath Damodaran (2002), Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, John Wiley & Sons Inc; 2nd Ed
- Jonathan Berk and Peter DeMarzo, Corporate Finance, Second Edition, 2011, published by Pearson Prentice Hall.
- Case of Teuer Furniture (B), Kellogg KEL789
- Introduction to Real Options, Ivey, 905N15
- MW Petroleum Corp. (A), HBS 5-295-029
- Aqua Bounty, HBS 9-213-047