VALUATION

GYÖNGYI LORANTH

WINTER SEMESTER 2016/2017

COURSE GOALS AND CONTENTS

This course focuses on methods to value firms and/or individual projects. We will cover three alternative approaches to valuation: discounted cash flow valuation, relative valuation and contingent claim (real options) valuation.

We start with an in-depth analysis of the discounted cash flow method and its practical implementation. More specifically we will discuss various versions of discounted cash flow models, including the discounted free cash flow model, discounted capital cash flow model, and adjusted present value model. We will also discuss how various inputs required by those valuation models can be obtained from historical data. In particular we will discuss how to forecast future cash flows, calculate residual values and derive appropriate discount rates.

The relative valuation approach estimates the value of a firm by looking at the pricing of "comparable" firms relative to a common variable such as earnings, cash flows or book equities. We will discuss *pros and cons* of this popular valuation method.

The contingent claim valuation approach is a more sophisticated method that tries to quantify the impact of managerial flexibility on firm/project valuation. We will cover applications of the Black-Scholes formula, binomial option pricing model and Monte Carlo simulations to evaluate firms or investment projects that have option characteristics.

A guest lecture on valuation of insurance companies (they cannot be valued as non-financials given the different nature of their business) will be delivered by Rene Knapp who is Group Chief Actuary at UNIQA. A case study focused on the insurance industry will form an essential part of the course requirement.

The course provides you with a hands-on experience in valuation. Collaboration with the UNIQA might give you future access to internship and other appointments.

COURSE METHODOLOGY

The course will be a mixture of lectures and case studies.

COURSE REQUIREMENTS

- This course emphasizes both theoretical analysis and practical applications.
- Working language is English.
- Students are required to come to classes, read all cases and actively participate in the discussions.
- There will be 3 case preparations. Cases must be handed in on time. No credit will be given for late cases.

- You are encouraged to meet in groups to discuss and analyze the cases. In the past, students have found that these groups complement the class discussion well.

ASSESSMENT

The evaluation will be based on the following items: in-class participation (10%); case studies (50%) and exam (40%). The case delivered by UNIQA is also part of the assessment. Attendance is COMPULSORY, including the presentation at UNIQA.

The pass grade is 50 %, but you should get at least 50% in each part in order to successfully complete the course.

READING

- Lecture Notes. A learning area will be available in the Intranet (Moodle). There, you would find instructions for the sessions, communications, bibliography, etc. Slides of the sessions will also be posted here, always BEFORE the class.
- *Investment Valuation*, 2nd edition, Aswath Damodaran, 2002 (book, manuscript,lecturenote).
- *Valuation*, 4th edition, Chapters 5-12, McKinsey & Company, Tim Koller, Marc Goedhart and David Wessels, 2005.
- *Valuation: The Art and Science of Corporate Investment Decisions*, Sheridan Titman and John Martin, Addison Wesley, 2007.

CASES

Case Studies:

(1) Harvard Business School	**Debt Policy at UST Inc.**	N.9-200-069
(2) Harvard Business School	**American Chemical Corporation**	N. 9-280-102
(3) UNIQA Case Study	**TBA**	N. 9-292-140

COURSE SCHEDULE

06.10.2016	15:00-19.00 Ort: SR 6	Topic: Absolute Valuation Methods (Calculating Free Cash Flows; The Use of the WACC)
20.10.2016	15:00-19.00 Ort: SR 6	Topic: Valuation by the APV Method; Relative Valuation Methods Case Study: UST Case Study (non-graded)
17.11.2016	15:00-19.00 Ort: SR 6	Case Study: American Chemical (graded) Topic: Real Options
01.12.2016	15:00-19.00 Ort: SR 6	Presentation of UNIQA (Methods to value insurance companies (Case Study presentation)
15.12.2016	15.00-19.00 Ort: SR 6	Topic: LBOs Topic: Embedded Value (Valuation of Insurance Companies)
12.01.2017	15.00-19.00 Ort: SR 6	UNIQA presentation at the UNIQA Tower
26.01.2017	09.00-10.30 Ort: SR 6	Exam

Remark: The course has 7 3-hour sessions with a half an hour break in the middle. The course starts right in time and is aimed at finishing in time.