# **Company Valuation**

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# Characteristics

Code: JEM132 Level: Master's Credits: 6 Term: Fall (WS)

## Description

The main aim of this course is to develop students' understanding of the general principles of company valuation, guide them through the process of practical implementation of these principles in constructing a discounted free cash flow (DCF) valuation model, and assess company value using comparable valuation multiples. We put special emphasis on highlighting the inter-relations between the valuation concepts and the similarities and differences between the alternative valuation techniques. By the end of the course students should be able to understand the possibilities and limitations of company valuation approaches, analyze a company's historical financial performance and identify its drivers, propose and motivate reasonable valuation assumptions, perform equity valuation from a portfolio investment perspective, read critically equity reports prepared by others, and draw conclusions relevant for business and investment decisions.

The course is primarily intended for four-year and fifth-year students. Bachelor's level students are welcome to take the course after an agreement with the instructor. The course is suitable for students who aim to take the CFA Exams or to participate in the CFA Institute Research Challenge. Before taking this course, we recommend but do not require students to take the following courses: Financial Accounting (JEB044, JEM337), Financial Management (JEB045), and Asset Pricing (JEM092).

## Literature

Students are required to complement their attendance of lectures and seminars by studying selected textbook chapters specified below. These chapters concern topics covered at the lectures and seminars. Students are welcome to use older editions of the textbook, but they should note that the number of individual chapters may differ from the ones specified below (which refer to the 7th edition published in 2020).

Koller, T., M. Goedhart, and D. Wessels (2020) *Valuation: Measuring and Managing the Value of Companies*. 7th edition. John Wiley & Sons.

## Contents

The course covers the following modules. Find below the information on the textbook chapters assigned for each module. The abbreviation "KGW" refers to the Koller, Goedhart, and Wessels textbook. See above for a full reference.

1. Valuation Approaches

### Course introduction. Usefulness of valuation. Overview of valuation techniques. Conditions for value creation.

(KGW: Chapter 1 – Why Value Value?, Chapter 3 – Fundamental Principles of Value Creation, Chapter 5 – The Alchemy of Stock Market Performance.)

### 2. Accounting Reorganization

Operating vs. financing. Debt vs. equity. Off-balance sheet assets. (KGW: Chapter 11 – Reorganizing the Financial Statements.)

## 3. Financial Analysis

ROE. Leverage formula. DuPont analysis. Unit size statements. (KGW: Chapter 12 – Analyzing Performance.)

4. Cost of Capital

## Origin. Cost of debt. Cost of equity. Capital structure.

(KGW: Chapter 4 – Risk and the Cost of Capital. Chapter 15 – Estimating the Cost of Capital.)

5. Comparable Multiples

Construction. Criteria for use. B/M. P/E. EV/EBITA. EV/NS. (KGW: Chapter 18 – Using Multiples.)

### 6. Free Cash Flow

Relation of FCF to SCF sections. Allocation of taxes. Adjustments for invested capital changes. Continuing value. Value per share.

(KGW: Chapter 10 – Frameworks for Valuation, Chapter 14 – Estimating Continuing Value, Chapter 16 – Moving from Enterprise Value to Value per Share.)

## 7. Value Drivers

### Context. Forecasting profitability. Forecasting growth. Sensitivity analysis.

(KGW: Chapter 8 – Return on Invested Capital, Chapter 9 – Growth, Chapter 13 – Forecasting Performance, Chapter 17 – Analyzing the Results.)

## Formats

The course consists of lectures and seminars.

Lectures provide an overview and a broad exposition of key company valuation topics. The lectures also offer in-depth discussions of selected issues that may be considered more complicated. Some of the lectures are offered by guests who have extensive professional experience with valuation practice. Lecture handouts are made available to the students before each lecture. Attendance at the lectures is optional but strongly recommended. Active participation at the lectures is rewarded with bonus points that are considered when deciding about potential improvements of students' grades.

Students are expected to complement their learning at the lectures and seminars by reading the assigned textbook chapters *before* attending the lectures. Furthermore, before the start of every module, students are invited to watch a lecture prelude video and individually respond to corresponding questions using an online form. These lecture preludes are intended to get the student started in their studies of a given topic and help them prepare for the ensuing discussion at the lectures. Students receive feedback on their responses to the lecture prelude questions at the lectures. The quality of students' responses to lecture prelude questions is considered when deciding about potential improvements of students' grades.

Seminars are intended to demonstrate the practical application of the topics covered in the lectures in real-life settings. At the seminars, students gradually jointly build up a valuation model of a real-life company. Students are assisted by experienced seminar instructors who guide them through the construction process and discuss important considerations relevant to completing the individual stages. In addition, at the seminars, students learn about valuation challenges the seminar instructors experienced in their past professional careers and discuss how to best address them. Before attending the seminars, students are assigned practical tasks and asked to prepare their proposed solutions, which are then discussed at the seminars. To avoid giving out the answers too early and to ensure engaging discussions, handouts are typically provided only after seminars. Attendance at the seminars is optional but strongly recommended. Active participation at the seminars is rewarded with bonus points that are considered for potential improvements of students' grades.

# Grading

Students take a written, closed-book, in-class exam. The exam contains open-ended questions that examine the depth of students' understanding of the topics covered in the course. The questions may address issues covered at the lectures, guest lectures, seminars, or assigned textbook chapters. Students may be asked to explain important company valuation concepts, discuss how they are interconnected, motivate choices

of different valuation approaches in specific settings, describe how various valuation techniques are implemented in practical use, perform computations, and provide verbal interpretation of the obtained results. Points are given for relevant, precise, sophisticated, comprehensive, well-explained, and well-structured answers. No communication between students is allowed during the exams. Students are not allowed to use any printed material or electronic devices other than simple pocket calculators.

Students are offered three attempts to take the final exam. To pass the exam, students need to get more than half of the available points. Students who do not meet this condition may retake the exam. Students may *not* retake the exam to improve their grade. The final grade is determined based on the results of the final exam. Students may be upgraded (but not downgraded) based on the quality of their responses to lecture preludes and the value of their contribution to in-class discussions at the lectures and seminars.

The grading follows the scale below:

- 91 pts: A excellent
- 81 pts: B very good
- 71 pts: C good
- 61 pts: D fair
- 51 pts: E satisfactory
- less: F fail

# Conclusion

Students should find this course useful for acquiring a rich understanding of valuation possibilities and challenges, as well as ways of addressing them. The course should also be rewarding for developing an in-depth understanding of alternative valuation techniques and for recognizing their strengths and weaknesses. It should nurture students' professional development in the areas of financial analysis, investment appraisal, and asset valuation. The acquired knowledge should enhance students' competence in finance and strengthen their position when applying for jobs in the financial industry.

## Resources

Approximately one week prior to the start of class, all students registered for the course in the Student Information System (SIS) will be given access to the shared online repository below. Students will be notified of this via email.

- Files (CVL24, JEM132, IES FSV UK, Company Valuation) | Google Disk
  - An online folder that contains all teaching material shared with students, e.g., lecture and seminar handouts, supplementary readings, etc.
- Company Valuation (CVL, JEM132, IES FSV UK) | YouTube Video Playlist
  - A playlist containing lecture prelude videos for all modules. Note that the numbering may not reflect the order in which the topics in the course are covered.
- Valuation 2.11 Class CVL24 Heineken (JN, 2024-09-13) | Google Sheets
  - An online spreadsheet containing a shared valuation model that students jointly develop with instructors at seminars.