

Syllabus CON5061E Investment Appraisal and Business Valuation Prof. Dr. Bernd Britzelmaier Winter Semester 2023/2024

Credits 6 ECTS Student Contact 60 Workload 180 in total Prerequisites Bachelor's degree in business administration/ economics with a focus on cost accounting, financial reporting, mathematics, statistics, investment and finance Time See LSF Room See LSF Start Date See LSF				
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Virtual OfficeN/AOffice HoursSee LSFPhone+49 7231 28 6077 (secretary)	Lecturer(s)	Name	Prof. Dr. Bernd Britzelmaier	
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Summary

The course Investment Appraisal and Business Valuation consists of a lecture with four weekly contact hours (60 contact hours in total). The lecture is divided into the areas of investment appraisal and business valuation. The students deepen their knowledge in the fields of non-discounting and discounting investment appraisal methods, the determination of the optimum economic life and replacement decisions, dynamic unit costing and dynamic life-cycle costing, consideration of income taxes and price increases, investment program decisions as well as deep dive into investment decisions under uncertainty.

The section on business valuation imparts advanced knowledge regarding the different valuation methods (total value based such as DCF equity and entity approaches, multiples, real options as well as individual value based methods and combined approaches).

The lecture is very practice-oriented and includes many exercises and case studies.

Outline of the Course

- Investment Appraisal
 - Investments as a subject of corporate management (investment planning, investment monitoring, decision models)
 - Non-discounting and discounting methods
 - Models for determining the cost of capital (WACC, CAPM, APT, Discounted Dividend Method, etc.)
 - Optimal useful life of investments
 - Dynamic unit costing and dynamic life-cycle costing
 - Consideration of income taxes
 - Consideration of price increases
 - Investment program decisions (Dean Model, simultaneous investment and financial planning, simultaneous investment and production planning)
 - Methods for considering uncertainties and risk
 - Traditional approaches (Correction method, Scenario Approach, Sensitivity Analysis, Critical Value Analysis)
 - Decision Theory Approaches (Classical Approaches, Bernoulli Principle)
 - Decisions based on probabilities including risk analysis through Monte Carlo Simulation
 - Selection of investment portfolios, portfolio theory, capital market-oriented approaches (CAPM, APT)
- Business Valuation
 - Occasions for business valuation
 - Earnings Value (German income approach) vs. Discounted Cash Flow (Preinreich-Lücke-Theorem)
 - Entity and equity methods (WACC, APV, TCF, and FTE Approaches)
 - Valuation using multiples
 - Individual value methods
 - $\circ \quad \text{Combined methods} \quad$
 - Real options valuation

Course Intended Learning Outcomes and their Contribution to Program Intended Learning Outcomes / Program Goals

Program Intended Learning Outcomes		Course Intended Learning Outcomes	Assessment Method		
			Written Exam		
			100%		
			Individual		
I	Broadening and deepening of knowledge, and shaping an understanding of knowledge considering theoreti- cal concepts and their practical relevance in controlling, finance and accounting.				
l.1	Graduates have significantly deepened and broadened their knowledge and understanding of concepts, models and their possible applica- tions in controlling, finance and accounting be- yond the bachelor's level.	Graduates will have in-depth knowledge of investment appraisal and business valuation.	x		
1.3	The knowledge of graduates forms the basis for the development and application of their inde- pendent ideas in controlling, finance and ac- counting, which they can critically evaluate through their broad and detailed understanding, even in specialised areas.	Based on the acquired knowledge in investment appraisal and business evaluation, graduates can evaluate investment ideas from planning to financial assessment and implementation.	x		
1.4	Graduates are able to solve practical and scien- tific problems in controlling, finance and account- ing on the basis of their scientific and methodo- logical knowledge.	Graduates will be able to evaluate investment alternatives and make decisions considering individual circumstances.	Х		
II	Application of knowledge and the use of pro broader or multidisciplinary contexts with con	blem-solving skills also in unfamiliar situations, as well as in trolling, finance and accounting.			
II.1	Graduates are able to use their knowledge in controlling, finance and accounting also in com- plex contexts and on the basis of limited infor- mation, to make scientifically sound decisions and to critically reflect on possible conse- quences.	Graduates will be familiar with discounted and non-discounted in- vestment appraisal methods, their advantages and disad- vantages. They will be able to evaluate and make investment program deci- sions under certainty and uncertainty. They know the components of business valuation and the relevant key figures.	x		
II.2	Graduates are able to acquire new knowledge and skills independently and to carry out applica- tion-oriented projects in controlling, finance and accounting largely self-directed or autono- mously.	Graduates apply their analytical skills to solve complex issues. They will be able to demonstrate the possibilities and limitations of investment appraisal and business valuation instruments.	x		
III	Communication, social competence and profethird parties of proposed solutions.	essional appearance for objective discussion and convincing			

Teaching and Learning Approach

The lecture integrates case studies and exercises. I aim to present the material in a diverse and highly application-oriented manner using guiding questions, overviews, examples, and tasks. For each topic, there is an initial theoretical introduction. Following the theoretical foundation, students further examine the topic through practice exercises. During this process, students can individually ask specific content-related questions. After each lecture, students review the learning materials provided to memorize the learned content. Active participation, preparation and revision of the topics are therefore integral components of the teaching and learning concept, and they contribute to effective preparation for the final exam!

Literature and Course Materials

In the current edition:

- Brealy, R. et al.: Principles of Corporate Finance. McGraw Hill.
- Damodaran, A.: Investment Valuation. Tools and techniques for determine the value of any asset. Wiley. Hoboken.
- Götze, U. et al.: Investment Appraisal. Methods and Models. Springer. Berlin/Heidelberg.
- Koller, T. et al.: Valuation. Measuring and Managing the value of companies. Wiley. Hoboken.
- Mercer, C. and Harms, T.: Business Valuation: An Integrated Theory.
- Poggensee, K. and Poggensee, J.: Investment Valuation and Appraisal. Spinger. Berlin/Heidelberg.
- Röhrich, M.: Fundamentals of Investment Appraisal. Oldenbourg. München/Wien.

Assessment

The performance assessment consists of a 90-minute written exam at the end of the semester. I use the following grading scheme: 'very good' means outstanding performance that is well above average. good means good performance that is above average. 'satisfactory' means average performance, which has some deficiencies, but basically meets the requirements. 'sufficient' means below average performance with noticeable deficiencies. 'insufficient' means unacceptable performance, which no longer meets the requirements.