

Lecture:

Asset Management (Taught in English)

Winter Term 2023 / 2024

General Information

Lecturer:	Prof. Dr. Christoph Kaserer Chair of Financial Management and Capital Markets, TUM www.fm.wi.tum.de
	Minghui Chen Chair of Financial Management and Capital Markets, TUM www.fm.wi.tum.de
Hours/LP/ECTS:	4/4/6
Registration:	not requested
Venue:	HS 0606
Time:	weekly, Tuesday, 09:45 to 13:00
Exam:	90 minutes written exam
Additional information:	The course is split up into a 1.5-hour lecture and a 1.5-hour exercise. In principle, the lecture will take place from 9:45 to 11:15, and the exercise from 11:30 to 13:00. However, the lecturer will adjust this format if appropriate.
	The course will be taught by Prof. Dr. Kaserer (lecture) and Minghui Chen (exercise).
	Additional information including course materials can be found on the TUM e-learning platform https://www.moodle.tum.de/ .

Syllabus

Portfolio Theory and Asset Pricing

Lecture 1: Introduction / Overviews of portfolio management (17.10.2023)

- Role of the financial system
- Overviews of financial securities (types, return characteristics)
- Overview of financial markets (trading mechanics, markets, margins)
- Basics in portfolio management

Lecture 2: Decision making under uncertainty (24.10./31.10.2023)

- Introduction to utility theory
 - Lotteries
 - Expected utility
 - Risk aversion
 - Parameter preference approach
- Non-standard forms of utility theory

Lecture 3+4: Markowitz model of portfolio theory (07.11./14.11./21.11.2023);

- Mean variance optimization
 - Risk and return / trade-off
 - How to calculate risk and return for a portfolio, covariance
 - Opportunity set without risk-less asset: 2 asset case, many assets case, diversification
 - Opportunity set with risk-less asset
 - Optimal portfolio selection (how to select a portfolio, indifference curves)
 - Efficient set without risk-less asset / with risk-less asset: mathematical derivation

Lecture 5: Weaknesses of Markowitz Model (21.11./28.11.2023)

- Alternative models of portfolio selection
 - Information aggregation
 - Extreme values in portfolio allocation, often impossible to follow
 - Artificially high sensitivity of allocation against parameter changes
 - Estimation errors for input values
 - Black-Litterman as an alternative model

Lecture 6: Asset pricing: CAPM (05.12.2023/19.12.2023)

- CAPM
 - Idea and assumptions of CAPM
 - Capital market line
 - Derivation of CAPM
 - Non-standard forms of CAPM
 - Basic model of CAPM, use for capital costs
 - Extensions (not necessary)

Lecture 7: Asset pricing: Empirical Tests (09.01.2024/23.01.2024)

- Empirical Tests
 - Empirical behaviours of stock prices
 - Empirical tests of CAPM
 - Fama/Macbeth test
 - Fama/French test
 - Fama/French Factor models
 - Anomalies

Lecture 8: Performance Measurement (23.01.2024)

- Performance Measurement
 - Performance measures
 - Persistence of performance
 - Active vs. passive funds
 - Special issues with alternative assets

Guest Lecture by Katja Lammert, CIO Alternative Assets, and Dominik Damaschke, Head of Infrastructure Equity, MEAG (16.01.2024)

Guest Lecture by Patrick Busch, KENFO, Head of Asset Allocation (30.01.2024)