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Course Syllabus

WS 2024/25

Quantitatives Risikomanagement

Course Outline

The course illustrates the use of various quantitative methods, e.g. value-at-risk and expected shortfall, in the modeling and management of financial risks. Among the major issues to be discussed are the underlying risk models and assumptions, common statistical and econometric methods. In addition, the course bridges the gap between portfolio theory and practical portfolio construction.

Prerequisites

Prerequisites are fundamental skills in statistics and probability (random variables and their distributions, statistical methods, testing and inference) as well as contents of an introductory course in corporate finance.

Rules for Course Participation

This course is open for students in the Master-Program specializing in subject area of Accounting, Finance and Taxation. Several parts of the course material and references are in English. However, the lecture language is German. Hence, for course participation, basic knowledge of the German language is required. There will be a written final exam in German with the possibility to answer the questions in German or English at the end of the semester. The course comprises 2 SWS.

If you have any questions, please refer to PD Dr. Harald Kinateder via email (harald.kinateder@uni-passau.de).

Timetable

The course material and additional information on course organization are available in Stud.IP (course number 31814). The schedule for the lecture is as follows.

Day	Time	Topic	References
15.10.2024	14:00-16:00	Introduction, Course Overview, Literature	
22.10.2024	14:00-16:00	Sensitivities and P/L Analysis I	[H]
29.10.2024	14:00-16:00	Sensitivities and P/L Analysis II	[H]
05.11.2024	14:00-16:00	Risk Measures and Basic Issues in Measuring Market Risk I	[ADE], [DJS], [EKT], [G], [K], [MFE], [R]
12.11.2024	14:00-16:00	Risk Measures and Basic Issues in Measuring Market Risk II	[ADE], [DJS], [EKT], [G], [K], [MFE], [R]
19.11.2024	14:00-16:00	Risk Measures and Basic Issues in Measuring Market Risk III	[ADE], [DJS], [EKT], [G], [K], [MFE], [R]
26.11.2024	14:00-16:00	Value-at-Risk Prediction I	[BGV], [C], [GJ], [MFE], [T]
03.12.2024	14:00-16:00	Value-at-Risk Prediction II	[BGV], [C], [GJ], [MFE], [T]
10.12.2024	14:00-16:00	Systemic Risk I	[APP], [AB], [BE], [BHT], [KW], [WBN]
17.12.2024	14:00-16:00	Systemic Risk II	[APP], [AB], [BE], [BHT], [KW], [WBN]
07.01.2025	14:00-16:00	Market Liquidity	[A], [BPW], [CS], [HPW], [KS], [PS], [W]
14.01.2025	14:00-16:00	Decision Making Under Uncertainty	[HL]
21.01.2025	14:00-16:00	Decision Making Under Uncertainty II	[HL]
28.01.2025	14:00-16:00	Standard Portfolio Optimization Techniques I	[HL], [Ma]
04.02.2025	14:00-16:00	Standard Portfolio Optimization Techniques II	[HL], [Ma]
t.b.a.	t.b.a.	Final Examination (5 ECTS): one hour written in-class exam (60 Points).	

References

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