LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Empirisk finansiell ekonomi
Economics, Empirical Finance

EXTQ30, 7,5 credits, A (Second Cycle)

Valid for: 2023/24
Faculty: Faculty of Engineering, LTH
Decided by: PLED I
Date of Decision: 2023-04-14

General Information

Elective for: F5, I4-fir, Pi4-fm
Language of instruction: The course will be given in English

Aim

The goal of the course is to develop the students' understanding of empirical models in finance and their ability to apply the econometrical methods to test the models.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

Students shall have developed a knowledge and understanding of empirical models in finance. More specifically, students shall have:

- a thorough understanding of the most important models in finance,
- a thorough understanding of econometric techniques applied in finance,
- an ability to understand and evaluate existing empirical work in finance.

Competences and skills
For a passing grade the student must

Students shall have the ability to independently:

- apply econometric methods to test financial models,
- employ the methods and theories they have learnt to new problems and to carry out their own empirical analyses,

- analytically handle quantitative empirical material and to use scientific methods to analyse such material,
- identify interesting finance related problems in the real-world and to utilise adequate methods and theories to analyse these problems,
- present a clear and pedagogical report of their own and others' empirical analyses,
- sufficient competence to independently write an empirical paper at the master level.

Judgement and approach
For a passing grade the student must

Students shall have:

- the ability to pursue further studies in finance and economics,
- the ability to independently search for and evaluate information from literature within finance.

Contents

The course begins with a brief discussion of estimation methods that can be used to analyse financial models. This is followed by a description of the time series properties of various financial data. The most important theoretical models in finance are then presented, accompanied by an explanation of the methods that are available for testing theoretical hypotheses. The course concentrates on the following issues: tests for information efficiency, market microstructure, event study, portfolio valuation, testing asset pricing models and fixed incomes. There are a number of computer exercises which give the students the practical skills necessary for solving econometric problems.

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)
Assessment: Examination consists of a number of compulsory computer exercises, a home exam in the form of a short essay and a written exam that takes place at the end of the course. The final grade will be based on the written exam and the home exam. Other forms of examination may be used to a limited extent.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

Admission requirements:

- FMS012 Mathematical Statistics, Basic Course or FMSF45 Mathematical Statistics, Basic Course or FMSF80 Mathematical Statistics, Basic Course
- EXTF45 Financial Management

The number of participants is limited to: 60
Selection: Completed university credits within the programme. Priority is given to students enrolled on programmes that include the course in their curriculum.
The course overlaps following course/s: NEK722, NEKM26, NEKN82, TEK110

Reading list

- Campbell, J.Y., A.W. Lo and A.C. Macinlay: The Econometrics of Financial Markets. Princeton University Press, 1997.
- Supplementary material.

Contact and other information

Course coordinator: Professor Hossein Asgharian, hossein.asgharian@nek.lu.se
Course homepage: http://www.nek.lu.se
Further information: Corresponds to NEKM26.