

23.04.2025

Seminar in Empirical Finance Summer Semester 2025

1. Goal

The goal of this seminar is to acquaint master students with modern econometric methods and their applications to research questions related to financial econometrics, quantitative risk management, high-dimensional and high-frequency finance as well as machine learning in empirical finance.

During the work on the seminar the students learn a new quantitative methodology and apply it to solve theoretical or empirical problems in finance. In particular, besides acquiring deep theoretical knowledge on modern econometric and machine learning methods, the students undergo complex empirical analyses on real (usually big) financial data by means of standard and advanced econometric tools as well as by means of self-developed programming codes.

The topics can be individually adapted to allow for being pursued further in a subsequent master thesis.

2. Seminar Website

<https://www.econometrics.uni-freiburg.de/en/teaching/summer-term-2025/seminar-in-empirical-finance>

3. Basic requirements

- Successful completion of the classes Intermediate Econometrics
- Good knowledge in a programming language (R, Python, Matlab, etc.)

4. Recommended requirements

Parallel enrollment or the successful completion of “Financial Time Series Analysis” or any other econometrics related class is highly recommended. On demand, we also could provide the videos of the lectures “Financial Econometrics”, “Time Series Analysis” and “Advanced Topics in Econometrics” from the COVID time period.

5. Organizational Issues

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- It is highly desired that you work on a topic jointly with another colleague.
- Students will have time until **2 May 2025** to find a partner and choose a topic or to withdraw from the seminar. If you withdraw from the seminar after this deadline, you will receive the grade 5.0.
- Please write an email to Ms Conny Hupfer (conny.hupfer@vwl.uni-freiburg.de) **after the first meeting on 30 April 2025** until **6 May 2025** with the first two topics you choose (in preference order) and with the name of your co-worker.
- You will receive an email from Ms Hupfer with the topic you received. If you are not satisfied, please contact the supervisor.
- Please contact the supervisor of the topic immediately after being assigned the topic in order to discuss how you should further proceed.
- Please keep contact with the supervisor during working on the topic in order to get feedback on your progress.
- Please notice that the supervisor is not supposed to verify your codes during working on the topic or to read drafts of your seminar paper, but to answer your questions and direct your research progress!
- Office hours:
 - **Roxana Halbleib:** Wednesday, 09:00-10:00 a.m.
To book a slot, please write to conny.hupfer@vwl.uni-freiburg.de until Tuesday 4 p.m. (before the desired appointment) and specify if you prefer online via BigBlueButton or in presence.
 - **Lukas Bauer:** upon appointment via email
 - **Carlo Alberto Boari:** upon appointment via email
 - **Jasper Rennspies:** 01:30-03:00 p.m. (prior registration via email)
- The joint seminar papers should not exceed 25 pages.
- The stand-alone seminar papers should not exceed 15 pages.
- The joint seminar paper in pdf format together with the accompanying programs and data you worked with have to be uploaded in ILIAS one week before the presentations.
- The presentations will take place in September 2025. Exact days will be announced soon.
- In due time, you will receive instructions on how to upload your files in ILIAS.
- The seminar paper should have an introduction (with references to the literature and integrating the own contribution in the literature), a short but understandable presentation of the method and an empirical part as well as a conclusion. You can use appendixes for tables and graphs.
- Very special attention should be paid to correctly citing and writing the references. Include the list of bibliography at the end of the seminar paper.
- The presentations will consist of 25 minutes of paper presentation plus 10 minutes of open discussion.
- ECTS: 6 credits