Finanzökonometrisches Seminar

Seminar für Finanzökonometrie

16. Oktober 2019

Learning targets

Concerning Statistics

- To become aquainted with a specific research topic
- The handling of literature
- To recreate complex methods (e.g. programming, data analysis in Matlab/R)
- ...

Learning targets

Concerning working techniques

- Seminar Paper
  - To structure a report of a complex topic
  - The correct reproduction of a topic in own words
  - To write a scientific text
  - ...
- Slides
  - To extract the main results of a seminar paper
  - To structure and visualize a complex topic
  - ...
- The Presentation
  - To speak in front of a group of people
  - To practice oral presentation skills
  - ...
- Other skills
  - To work independently
  - Time management

Tasks

What you have to do:

- Writing a seminar paper
- Preparing slides
- Giving a presentation
- Attendance

The Requirements

The Seminar Paper

- About 40.000/50.000 characters for BA-/MA-students ($\sim$ 15-30 pages)
- It should include: Title page, table of contents, main part, summary, appendix, list of used literature
- Labeling of all plots and tables
- If you use software, explain which packages and functions you used
- ...

The Requirements

The Slides

- Consistent with the seminar paper concerning structure, content, examples, etc.
- Do not overfill
- Summarize main results in key points
- ...

The Presentation

- Duration: about 30 minutes + 10 minutes discussion
- Plan to need about 2-3 minutes per slide
- Give an overview in the beginning
- Summarize main results in the end
- ...

Modus Operandi

- **Kick-off meeting:** The topics and additional organizational matters will be addressed in the preparatory meeting at **9 pm s.t. on October 16th** at Alte Bibliothek (Ludwigstr. 33/I).
- Every student must pick three topics, list them in a preferential ordering (highest to lowest), and send this list no later than **noon of October 23rd** to **christoph.berninger@stat.uni-muenchen.de**
- The organizers will assign topics according to (highest) preferences (if possible) or by lottery. Students will be informed about the outcome of this assignment process on **October 24th**.
- Every student is required to meet with the responsible advisor within the first two weeks after the assignment process is completed.
- Seminar paper submission no later than **noon January 17th**. No exceptions granted!
- **Presentation:** January 24th

Compulsory attendance times

- preparatory meeting
- two additional meetings, tba
- final meeting with presentations (January 24th)

Master Topics

Nr.	Topic	Supervisor
M1	The smooth transition model with application to financial data	Berninger
M2	Testing the randomness of pseudo random numbers	Berninger
M3	ANNs to predict interest rates	Berninger
M4	Long short-term memory networks for interest rate forecasts	Berninger
M5	Support Vector Machines applied to financial data	Berninger
M6	State Space Models and the Kalmann Filter	Berninger