General information on the course „Time Series Econometrics“

April 19, 2020

Dear Students,

due to the corona-crisis, this lecture will be online, just as many other courses. We will use the „Moodle“ platform. I will give some general information here on how the course will be done:

1. **For whom is this course?**
   This is course is intended for students of economics, usually taking their master, but I suppose even bachelor students in economics can take this course if they talk to the „Prüfungsamt“.
   This course is **not for students of finance, mathematics or „Wirtschaftsmathematik“.**You can of course participate in this course, but you cannot take the exam! This should be kept in mind.
2. **What will the exam be like?**
   The module description says that it should be a written exam. However, usually there is only a small number of students that takes the exam. Also, due to the corona crisis, we are now allowed to change the way we do exams. We take advantage of this and hence the **exam to this course will be an oral exam (20 minutes).** Please do not be afraid of that, most people perform better in oral exams than in written ones. At the moment we cannot take exams. I am not in favour of online-exams, but I am of good hope that by the end of July we will be able to take oral exams again, e.g. by just going into a lecture room, then we can keep sufficient distance between us.
3. **Are there prerequisites for taking the exam?**
   There are no prerequisites. We have problem sheets that can be solved, but you do not have to hand them in. You can simply register for the oral exam.
4. **How will the course be given and what material will there be?**
   Due to capacity restrictions of the internet, we cannot simply make a live lecture, or even record it and then you download it when you want. Files should be restricted to small sizes. Hence for the lecture we will have the following materials:
   a) A set of notes, where I try to describe the phenomena. These will be handed out per chapter. We have 7 chapters, so on average you will get every 14th day new notes. It will be written for which week the notes are intended (altogether the semester has 14 weeks, but there is a public holiday on an Whit Monday, so we have lectures only for 13 weeks altogether).
   b) A long version of slides for each chapter. These are basically the slides I used 2 years ago. There, I explained on the blackboard along with them, which now I cannot do. The written notes should now be the corresponding substitute. The slides will be uploaded chapterwise, the same applies as for the notes.
   c) A very short version of the slides. This is a short summary and simply summarises the most important things. This will be without audio-comment.
   d) I will try to give an audio-comment on the short version of the slides, but these may come sometimes a bit later (to be found under „open cast videos“)
   All these files will be uploaded on moodle, and a file will be called like „notes-weeks1-2-chapter1.pdf“ for example, or „long-slides-weeks1-2.chapter1.pdf“ etc. Then you can see what is the intended time frame for each set of notes/slides.

5. **How can questions be asked?**
   Please write an email to me and pose them. If I think they are of sufficient interest to everybody, I will write an answer through moodle to everybody, otherwise I will simply reply with the answer. Please allow for about 24 hours for the answer. If necessary, we can also make an appointment through Skype.
6. **How will the exercises be done?**
   I will upload problem sheets for each chapter, so this means that about every 14 days a new problem sheet appears. You should try to solve these, but you are not obliged to do (but they belong to the course, so in principle I could also ask something in the exam that has been used in the exercises). A week after the problem sheets have been uploaded I will upload solutions. If you want your solutions to be corrected, please send them to me by email before the solutions are uploaded (do so by either writing Latex/Word, or hand written and scanned/photographed) and you will get a corrected version back. You can of course also ask questions by emails.
7. **What are the contents of this course?**
   Chapter 1: Examples of time series and decomposition of time series. (Weeks 1 and 2)
   Chapter 2: Stationay stochastic processes (Weeks 3 and 4)
   Chapter 3: ARMA processes (Weeks 5 and 6)
   Chapter 4: Forecasting time series (Weeks 7 and 8)
   Chapter 5: Statistics for ARMA processes (Weeks 9 and 10)
   Chapter 6: GARCH processes and related processes (Weeks 11 and 12)
   Chapter 7: State space models (Week 13)
8. **Further information.**
   This is a new situation for both you as students as well as us lectures. We are in a learning process and still can change various things. In case, please let us know how things can be improved.

All the best and stay healthy,

Alex Lindner