Applied Time Series Econometrics: Aims, Scope and Requirements

- Application-oriented introduction to modern time series econometrics
- Basics in statistics and econometrics required
- Empirical examples use Eviews
- Grading based on mid-term and empirical seminar paper
- Literature:
    - Hill/Griffiths/Lim
      Principles of Econometrics Chap. 9, 12, 14
    - Kirchgässner/Wolters
      Introduction to Modern Time Series Analysis
    - Enders
      Applied Econometric Time Series

Part 1: Lecture and Tutorials

Part 1 — until end of May/ early June lectures and tutorials:
Wednesday, 10.00 - 12:00 (Start: April 10, HS 108a)
Friday, 10:00 - 12:00 (Start: April 12, HS 108a)
Special: Data stream course on April 17 in PcPool 1
Available on Blackboard in early April:

- Tentative schedule
- Lecture slides and exercises

**Early June: Mid-term that determines 50% of the final grade.
Passing mid-term is required for part 2 of the course!**

Topics covered in Part 1

1. Introduction
   - Time series and dynamic effects of economic actions
   - Stationarity and autocorrelation

2. Autoregressive Models
   - Estimation and specification procedures
   - Dynamics of AR models: inflation persistence
   - Granger causality: short- and long-term interest rates
   - Forecasting and forecast evaluation

3. Modeling Volatility: ARCH models

4. Non-stationary time series: Unit-roots and cointegration

Part 2: The empirical project

After the mid-term:

- Presentation and allocation of empirical projects
- Teams of two students preferred
- Topics are online until May (including a reference paper)/ own suggestions possible
- Seminar thesis (ca 6 pages) makes 50% of the final grade.
- Submission of thesis until mid July or end of August