Course outline:
Empirical Methods for Macroeconomics

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Objectives

- Provide students with applied interests with the most sophisticated and up to date techniques used in empirical time series analysis

- Introduce students with more theoretical inclinations to the tools that are used to derive some of the more interesting results

Structure

- Each lecture contains
  - overview of the most important theoretical aspects
  - several empirical examples to clarify the theory
  - Some practical exercises to get a feel for reality

Material

- Slides, Code and References can all be found on

  www.geertmesters.com

- Please bring a laptop that has R installed to the lectures

Grading

- 40% class participation
- 60% written essay

Topics list

1. Time series regression: focus robust standard errors
2. Time series IV regression: focus on weak instruments
3. Forecasting: focus univariate models
4. Frequency domain: focus on cycle detection
5. VAR I: focus on estimation measurement and forecasting
6. VAR II: focus on different identification schemes
7. State space I: focus on formulation and state estimation
8. State space II: focus on parameter estimation and forecasting
9. Dynamic factor models I: focus on principal components
10. Dynamic Factor Models II: focus on forecasting

Empirical studies in lectures

- Forecasting industrial production (f)
- Effects of monetary policy (s)
- Does anything outperform ARMA(2,1)? (f)
- Spectrum of macroeconomic variables (m)
- Levels & volatility (f)
- Effects of fiscal policy (s)
- Measuring trend in output (m)
- Inflation forecasting (f)
- Business cycle measurement (m)
- FAVAR (s)

(m) measurement, (f) forecasting, (s) structural

Final comments

- All else will (hopefully) become clear
- I hope you enjoy the course !!!