

Philipps



Universität  
Marburg

# Macroeconomic Seminar WS 24/25

## Empirical Economics

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# Introduction

- Empirical research has become an indispensable tool of economists working in research or practice.
- In business administration, empirical research is also gaining in importance, in particular in finance, marketing, and human resource management.
- Many graduating students are unable to undertake even simple empirical projects.
- This seminar course gives students the opportunity to apply their theoretical knowledge about data analysis to practical problems and real world data under experienced supervision and to acquire skills that may lead to comparative advantages on the job market and a solid base for writing an empirical Master's thesis.

# Organisation

- Participants: Master students (MSc, MA Poliwig).
- Requirements: None, but I strongly recommend successful participation in at least one course on statistics or quantitative empirical methods.
- Structure: The seminar consists of writing and presenting a seminar paper containing a self-conducted empirical analysis as well as the discussion of someone else's seminar paper.

- Course language: English.
- Topics: The general topics are given below. Please note that you can put forward topics that you would like to work on. Specific research questions will be arranged between me and the respective students.
- Marking: The overall marks for this seminar are based on:
  - Essay and presentation: 80%
  - Discussion of another essay: 20%
- The seminar is limited to a maximum of 20 participants.
- The didactic approach of a seminar implies that *participants must attend all of the sessions*.
- **Please note:** Official registration for the seminar is via MARVIN.

## Time and place

- Allocation of topics: Topics will be allocated on **Thursday, 17 October 2023, 14:15 online**. The link is:

<https://webconf.hrz.uni-marburg.de/n/rooms/u0r-djj-whe-uic/join>

- Preference will be given to those students who log in on that day. If you cannot make it, please contact me as early as possible to receive a topic.
- Time and place of presentation: **Thursday 14-16 in room AA011**. The **presentation period commences on 16 January 2025**.
- In every weekly session, we will discuss two seminar papers until we are finished.

## Submission dates

- Essays must be submitted until **13 January 2025** before midnight. Please send in the essay via email as **one** pdf-file (Please make sure that you get an acknowledgement from me).
- Ilias: Seminar papers and other information will be circulated via the learning platform. So please register (password: macroseminar),

# Guidelines for essay, discussion and exam

- Essay length: There is an upper limit of 15 pages for the essays (including references and possibly an appendix).
- Note: The aim is not to write as much as possible in a given period of time but rather to refine your economic and statistical arguments.
- Scientific writing: Please check the document on writing seminar papers on the Macroeconomics website.
- Discussion of another essay: As a discussant, you should prepare a *critical* examination of the work under review, outlining its strengths, weaknesses, and areas of possible improvement.
- *Presentation guideline*: Presentations should be around 20 min, discussions about 5 min. Take these times seriously.

## Guidelines on general discussion

- Please prepare yourself for participation in the general discussion taking place in the aftermath of the presentations. I will likely ask you to comment on certain aspects of the presentations.
- To ensure a high quality of the general discussion, I expect all participants to read the essays *prior* to the session when they are presented.

## Software

- In the university computing rooms, you have access to Stata, SPSS, and other programs for statistical analysis.
- You can also use free statistics software, such as R or Gretl.
- Some analyses can even be done using Excel.



## Basic econometrics books:

Asteriou, D. and S. G. Hall (2007), *Applied Econometrics: A Modern Approach*, rev. ed., Palgrave-McMillan.

- Practice-oriented introduction with Eviews and Microfit applications.

Kennedy, P. (200), *A Guide to Econometrics*, 6<sup>th</sup> ed., MIT Press.

- Good in explaining core concepts using intuition rather than maths.

Maddala, G.S. and K. Lahiri (2009), *Introduction to Econometrics*, 4<sup>th</sup> ed., Wiley.

- Lucid introduction to many important econometric issues.

Stock, J.H. und M. Watson (2011), *Introduction to Econometrics*, 3<sup>rd</sup> ed., Pearson.

- Perhaps not always outstanding but I like some sections, e.g. referring to instrumental variable estimation.

Studenmund, A.H. (2010), *Using Econometrics: A Practical Guide*, 6<sup>th</sup> ed., Addison Wesley/Pearson.

- Basic econometric theory and applications using Eviews.

## More advanced general econometrics books:

Baltagi, B. (2008), *Econometrics*, Springer.

- Bridges the gap between introductory and more advanced books.

Davidson, R. and J.G. Mackinnon (2004), *Econometric Theory & Methods*, Oxford University Press.

- More advanced but well-written with helpful geometric interpretations.

Greene, W.H. (2011), *Econometric Analysis*, 7<sup>th</sup> ed., Prentice Hall.

- Broad coverage, wide use of matrix algebra, and rather rigorous presentation. The writing style is somewhat dry, though.

Hayashi, F. (2001), *Econometrics*, Princeton University Press.

- Rigorously develops standard estimators, such as OLS or ML, as special cases of GMM estimators.

Hendry, D. F. (1995), *Dynamic Econometrics*, Oxford University Press.

- Comprehensive treatment of the topic, with useful applications.

## Some hints on conducting your own empirical research

- Identify a research question, either through introspection or a literature review.
- Read the extant literature to understand the research approaches people have taken when studying similar research questions. Be critical and identify problems with other people's work.
- Choose an empirical methodology that can potentially help answer your research question. Again, you can do that using introspection or a literature review.
- If there is relevant literature, make sure that you think about how it has analysed the question.
- Sometimes, however, you may be able to identify problems with existing approaches, allowing you to propose a methodological improvement.

- Choose an empirical methodology that can potentially help answer your research question. Again, you can do that using introspection or by referencing the literature.
- Make sure that you have access to data that allow you to apply the chosen methodology.
  - Note: Via the university library (or VPN) database webpage, you have special access to 'Allthatstats.com', which collects macroeconomic data from many sources.
- Conduct your analysis with an open mind and be critical with regard to your results. Do **NOT** think you must get statistically significant results or results that are in line with the literature.
- Interpret your results thoroughly, do not simply focus on statistical significance but also on the magnitude of your estimates, i.e. the actual economic effects. Compare your results to those found in the extant literature.

## Some suggested topics

- **Note:** Additional topics put forward by participants can be accommodated!

### 1. The Time Series Behaviour of Macroeconomic Variables

Introduction: Chapter 12 in Stock and Watson (2003).

- Unit roots
- Cointegration
- ARCH models

### 2. Fiscal Policy

Introduction: Ramey, V.A. (2011), Can Government Purchases Stimulate the Economy? *Journal of Economic Literature* 49, 673–685.

- Measuring the effects of fiscal policy
- Aggregate fiscal expenditure multipliers
- Aggregate tax multipliers
- Comparing disaggregate effects of expenditures or taxes

### 3. Monetary Policy

Introduction: von Hagen, J., B. Hayo, and I. Fender (2002), Monetary Theory, Monetary Policy, and Financial Markets, in: K.F. Zimmermann (Ed.), *Frontiers in Economics*, Heidelberg: Springer, 1-36.

- Causality of Money and output
- Monetary policy transmission
- Long-run effects of monetary policy
- Monetary policy reaction functions
- Monetary Policy Communication

### 4. Empirical Finance

Introduction: Chapter 2 in Berndt (1991).

Comprehensive: Campbell, J., A.W. Lo and A.C. MacKinlay (1997), *The Econometrics of Financial Markets*, Princeton: Princeton University Press.

- Characteristics of financial time series
- Market efficiency
- Usefulness of CAPM model

## 5. International Financial Markets

Introduction: Chapter 12 in: Copeland, L. (2005), Exchange Rates and International Finance, Prentice Hall.

- Characteristics of financial time series
- Market efficiency
- Testing uncovered interest rate condition
- Explaining exchange rate movements

## 6. Purchasing Power Parity

Introduction: Chapter 2 in: Copeland, L. (2005), Exchange Rates and International Finance, Prentice Hall.

- Validity of PPP
- International comparison of PPP
- Transport costs and PPP

## 7. Exchange Rates

Introduction: Sarno, L. and M. Taylor (2002), *The Economics of Exchange Rates*, Cambridge: Cambridge University Press.

- Modelling exchange rates
- Predicting exchange rate crisis
- Nominal vs real exchange rates

## 8. Empirical Growth Analysis

Introduction: Barro, R. and X. Sala-i-Martin (2003), *Economic Growth*, 2<sup>nd</sup> Edition, MIT Press.

- Forms of growth paths
- Causes of growth
- International convergence



## 9. Business Cycles

Introduction: Chapter 19 in: Mankiw, G. (2003), *Macroeconomics*, New York: Worth Publishers.

- Nominal versus real factors of the business cycle
- Business cycle construction and forecasting
- Effects of stabilisation policy

## 10. Consumption, Saving, and Investment

Introduction: Chapters 16 and 17 in: Mankiw, G. (2003), *Macroeconomics*, New York: Worth Publishers.

- Evaluating theories of the consumption function
  - Using macro data
  - Using micro data
- Macroeconomic determinants of investment decisions
- Intertemporal aspects of saving decisions

## 11. Law and Economics

Effect of constitutions: Persson, T. and G. Tabellini (2003), *The Economic Effects of Constitutions: What do the data say?*, Cambridge: MIT Press.

- Legal institutions and economic growth
- Judicial system and inflation
- Regulation and economic performance

## 12. Political Economy

Advanced introduction to political economy issues: Drazen, A. (2000), *Political Economy in Macroeconomics*, Princeton: Princeton University Press.

- Political business cycles
- Attitudes towards economic reform
- Political economy of international organisations
- Voting

## 13. Socio-Economics

Introduction: Frey, B. and A. Stutzer (2001), *Happiness and Economics* How the Economy and Institutions Affect Human Well-being, Princeton: Princeton University Press.

- Determinants of happiness
- Attitudes towards macroeconomic issues
- Macroeconomic influences on attitude formation