# Requirements and remarks

Please note that you may take only take only ONE seminar in "VWL (Economics)" and one in "BWL (Business Administration)".

**Seminar Population Economics (379003)** 

Topic assignment: online via Stud-IP starting from September 1st, 2023

Begin: October 2nd, 2023

Registration: until October 2nd, 2023

Submission of work: until November 13th, 2023 (any time during that day) via e-mail to your supervisor Supervisor: Prof. Dr. Patrick Puhani, Dr. Anna Katharina Pikos, M.Sc. Vangjel Bita, for questions

regarding formalities please contact seminare@aoek.uni-hannover.de

Colloquium for presentation: Monday/Tuesday, November 20th/21st, 2023

## Learning objective of the course

Based on the main paper and own literature research the students should be able to discuss an economically relevant issue. As part of the assignment the students should demonstrate their ability to work scientifically. Furthermore, they need to show a profound understanding of the given study and to relate it to the current literature in the field. In particular, students need to be able to explain regression analyses from their study. The executive summary as well as the presentation should be well-structured and logically organized. Every described aspect should be conducive to readers and listeners understanding. In the context of a critical evaluation the students should demonstrate their analytic thinking and their ability to identify potential methodological weaknesses of a scientific paper. A good and a very good piece of work is characterized by the students ability to develop and communicate own plausible reasoning.

# Composition of the examination

- 1. Written Part:
  - Executive summary: digital version in PDF-format (not needed for Research Seminar as part of studium generale)
  - Slides: digital version in PDF-format
- 2. Presentation in colloquium:
  - 15 minutes presentation
  - about 5 minutes discussion, in which the students should be able to show that they are well informed concerning different facets of the topic (includes the ability to give appropriate information in case of questions)

# Framework for Analyzing Empirical Work

In order to approach empirical work in a (seminar) thesis it is necessary to consider and answer the following questions. The following framework aims to break down the parts of empirical research and aid students to structure their thesis. In your seminar thesis/executive summaries you must, where fitting, include answers to the following questions. Moreover, this guide should be used to understand scientific papers by looking for the answers to the following questions.

### • A. Main Research Question and Motivation

- 1. What is the main research question being asked in this paper?
- 2. Why should we care? What are the main contributions of the paper to the literature?
- 3. How do the findings resonate with theories discussed in your class?

### • B. How do the authors identify the causal effect of X on Y?

- 1. What is the main causal question being asked in the paper? (This should be of the form: "What is the effect of X on Y?")
- 2. What type of data is used in the paper?
- 3. Why is it difficult to estimate the causal effect of X on Y? (Which explanatory variable(s) are typically unobservable?)
- 4. What is the main estimation method used? What is the key identifying assumption in order to obtain an unbiased estimate of X? Under what circumstances will it be violated? (IV: exclusion restriction, Diff-in-Diff: parallel-trend assumption)
- 5. Which is the identification strategy employed by the authors? Is it a natural experiment, an experiment or a quasi experimental method? (Think about this in terms of treatment and control groups.)
- 6. In case of theoretical models, think about which are the models assumptions and the priors that support them.

#### · C. Findings, Internal and External Validity

- 1. What are the key findings of the paper? How do we interpret the coefficient estimates of the main variables of interest? Are these effects economically and statistically significant?
- 2. What additional results do the authors present? Can we say anything about the underlying mechanism?

#### • D. Literature Review

- 1. Which are the (2 or 3) most closely related and complementary papers to your main paper? In what way do they differ or complement it? Do they share data or methods or do they answer the same research question but with different techniques?
- 2. How do the results of your paper fit with those of the relevant literature?

# Criteria for the executive summary

- a. Essential components of the Executive summary (4-5 pages)
  - Cover page
  - 2 pages of text
  - References
  - 2 (main) figures or tables from the study

### b. Formal aspects

- Text font and size: Times New Roman 12 point, Arial or Calibri or LaTeX 11 point
- 1.5- line spacing

- Alignment 'justify'
- Margins: upper, lower, and right 2.5cm; left 3cm
- page numbers
- Citation: Harvard citation style, i.e. in the text as 'surname (year)' respectively 'surname (year, p. xy)' for direct quotes
- References: Should contain every reference that is quoted in the text and nothing else
- Language: German or English
- c. Structure of the executive summary
  - Introduction to the topic; presentation of the general relevance of the analyzed question;
  - Presentation of the main paper; useful prioritization of comprehensive articles; discussion of the paper's key results
  - Embedding in related literature; compare relevant aspects and results of related literature;
  - Conclusion

# Criteria for the presentation

- a. Formal aspects
  - Keep your time limit; key rule: about 1.5 to 2 minutes per slide; you may prepare slides with additional content as an appendix (if you expect certain questions)
  - Concise and precise phrasing on the slides
  - Readability of tables and diagrams
  - References at the end of the presentation

#### b. Structure

- Brief introduction to the topic
- Presentation of the main paper's key aspects (estimation methods and regression outputs or theoretical methodology) and a brief critical evaluation. Other literature, such as econometrics textbooks, might help in understanding and explaining the methodology applied in a research article.
- Presentation of the main results of related articles within the related field of literature
- Presentation of your personal judgement.
- Conclusion

**Note:** Many of the papers on which the seminar topics are based use one of the following estimation methods: "fixed effects regression", "instrumental variables regression", "regression discontinuity design", "difference in differences". Information on these methods can be found in the following book: Joshua D. Angrist and Jörn-Steffen Pischke (2009): Mostly Harmless Econometrics: An Empiricist's Companion, Princeton University Press.

### Literature research

Besides the presentation of the original paper, embedding related literature is important so that an appropriate literature research is mandatory.

The following options are conceivable:

• libraries (e.g. TIB): The network of the university provides access to all electronically available resources (journals etc.), for which Leibniz Universität Hannover acquired the rights of access.

Google-Scholar / EconLit / ScienceDirect: By use of the advanced search. If the research is conducted on a
PC outside of the university network, many articles are not free of charge. A free usage of the articles offered
within the university's network however is also possible from outside the university network by using the
VPN-client.

To better understand the estimation methods used in your main paper, we recommend the books

- Angrist, J. D., & Pischke, J. S. (2009). Mostly harmless econometrics: An empiricist's companion. Princeton University Press.
- Angrist, J. D., & Pischke, J. S. (2015). Mastering 'Metrics: The path from cause to effect. Princeton University Press.

The books are available at the library (TIB).

**Note:** Not only external literature sources, but also the use of computer-generated texts, e.g. by ChatGPT, have to be be cited if they are adopted or translated into German. However, since your work must be a significant written contribution of your own, it is strongly discouraged to have longer texts translated and/or generated by a computer.