

Empirical Seminar in Productivity Measurement

Empirisches Seminar zur Produktivitätsmessung

Module Number | 88-021-MFM-01-H-0507

Degree | Master

Semester | Winter

Course Type | Seminar

Participation Limit | 15

Creditable for | Compulsory elective (ENTRE; BA&OR)

Contact Hours | Introductory lectures & blocked course

Number of Credits | 5 ECTS

Language | English

Chair | Economics, esp. Public Finance

Lecturer | Dr. Dominik Schober (Stand-in professor at the Chair of Prof. Dr. Dominika Langenmayr)

Learning Outcomes

- Students learn the application of new statistical methods and optimization techniques exceeding the knowledge of a Bachelor's econometric and statistical education.
- In particular, students learn the implementation and (optionally) the extension of existing methods. They learn to understand strengths and weaknesses of those methods.
- Application to real-world cases enables students to understand practical implications in business and economic environments. This helps to quantitatively evaluate firm strategies as well as policy options.
- This includes knowledge in the application of typical statistical software and specific programs (Stata, R, GAMS).
- Acquired knowledge can be directly applied as instruments of decision support as well in companies as for policy consulting. Students can therefore directly profit from the course by learning to assess and evaluate societal, scientific and ethical issues.
- Students present their results in order to acquire skills in the communication in front of a small group of people. This deepens their capabilities in switching perspectives and convey their own (complex) research results to a heterogeneous audience knowing much less or more about their specific topic.
- The discussion of each others' papers enables students to identify weaknesses and value strengths of others' work. This is a first training in scientific communication.
- Seminar papers can also be written in teams of up to three students. This supports the development of social competences.
- Furthermore, seminar papers are written and presentations held in English language.

Module Content

- The course provides an introduction to Stata and/or R and the basics of efficiency and productivity measurement as well as cost function estimation.
- This will take place in a short introductory course at the beginning of the semester.
- In addition, topics and papers to discuss will be presented.
- The goal is to replicate and apply the cost function and productivity measurement methods to data of other case studies or to simulated data and to demonstrate strength and weaknesses of the methods.

Teaching Methods

- Introductory lectures
- Term paper
- Presentations
- Discussion of other presentation & general discussion

Grading

- Term paper (60%)
- Presentations (40%)

Assessment criteria in detail

- Each student writes a term paper
- Each student gives two presentations on the same topic, one intermediate presentation (research question & data presentation, sketch of planned method & analysis) and one final presentation (presentation of research question, data, analysis and results)

- The combination of a written term paper and presentations is necessary because of the competency orientation of the course

Average Workload

- 30 h = Time of attendance introductory lecture
- 10 h = Preparation and postprocessing introductory lecture
- 30 h = Time of attendance seminar
- 20 h = Preparation and postprocessing seminar
- 60 h = Preparation of term paper
- 150 h = Total workload

Previous Knowledge/Prerequisites

- Introductory Econometrics, Statistics or Operations Research is recommended
- Microeconomics is helpful

Readings

- Readings will be announced in the introductory lecture/meeting