

QUANTITATIVE METHODS IN ECONOMIC HISTORY

SYLLABUS

University of Bayreuth

Summer Term 2019

Lecturer: Richard Franke

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1 Topic

The objective of this course is to introduce and practice the most important methods that are used in “quantitative” economic history (“cliometrics”). Students will be introduced to all relevant steps alongside the value chain of research in quantitative economic history: Identifying historical datasources, processing data and constructing datasets, data analysis, and interpretation of results.

The course will introduce participants to the basic toolkits employed in recent research in quantitative economic history and long-run growth. In a hands-on approach, most of the teaching will be conducted in computer based classes. Lectures will give brief introduction into the relevant methodology and provide the econometric foundations. Tutorials will provide the necessary applied knowledge to gather data, produce datasets and conduct data analysis. To this end, the course will replicate the empirical analyses of existing scholarly research as well as run empirical analysis on novel datasets created from scratch. The core parts of the class will allow students to build own datasets and run econometric analysis based on cross-sectional data as well as panel data. Students will learn to acquire data from historical sources, such as historical statistics and maps, and supplementary information from geographical data. To this end, students will get acquainted with basic statistical software such as Stata, as well as basic Geographic Information Systems (GIS) software such as ArcGIS.

2 Organization

Instructor: Richard Franke

Email: richard.franke@uni-bayreuth.de

Office location: Room 1.73 (RW II)

Office hours: by appointment (other good times to talk: after classes)

3 E-learning

Lectures notes, datasets and tutorial videos to the lectures will be available through the E-learning platform.

To receive the password for the course on E-learning, students need to register with Richard Franke (richard.franke@uni-bayreuth.de). Please indicate in the application:

- your name,
- your study program,
- your student ID (“Matrikelnummer”).

4 Target Group

The course “Quantitative Methods in Economic History” addresses master students from the following degree courses:

- **History and Economics (MA)** mandatory
- **Economics (MA)** eligible as “Individueller Schwerpunkt,” or “Advanced Empirical Economics II (EWF für Fortgeschrittene II)”
- **Philosophy and Economics (MA)** eligible as “Economics Elective,” or “Advanced Empirical Economics II (EWF für Fortgeschrittene II).”
- **Internationale Wirtschaft und Governance (MA)** eligible as “Individuelle Spezialisierung” or “Advanced Empirical Economics II (EWF für Fortgeschrittene II).”

For further questions regarding the eligibility of the course please contact the corresponding lecturer of the respective courses and/or your study program manager.

5 Course Requirements

Your grade will give you 6 ECTS points (3 SWS) and is based on the following:

- A term paper (8 pages) that is based on an empirical analysis of a dataset constructed on your own.
- A presentation (20 minutes, including 5–10 minutes discussion). The students should use the presentation to discuss their preliminary thoughts on their term paper: research idea, the empirical strategy as well as the data they are planing to use in the analysis.

To summarize, your raw final grade is composed of the following:

- Presentation: 20 %
- Term paper: 80%

Term paper: The term paper should be handed in no later than, September 30, 2019.

Language: The language of the course is English, hence your term paper and your presentation should be in English.

6 Prerequisites

Students should be familiar with

- Econometrics: OLS, Panel data, 2SLS, Diff-in-Diff
- Economics Basics: Economic growth, Macroeconomics
- Software: MS Office Excel, some knowledge about Stata

To refresh their knowledge, students might want to reread some of the topics covered in:

- Stock and Watson's *Introduction to Econometrics* part 1-3 (econometrics).
- David Weil's *Economic Growth* (economic basics).
- "How to read a regression table" in Meier and Rauch's *Leading Issues in Economic Development*.
- Stata manual by Mario Larch http://www.ewf.uni-bayreuth.de/pool/dokumente/Lehre_teaching/Stata_Manual_20161214.pdf (software).

A more exhaustive literature list can be found on the E-learning platform.

7 (Tentative) Course Outline

Lecture and tutorials will take place Fridays 10 am (sharp or s.t.) to 12.15 am, S 56, PC-Pool ITS (RW I EG 1.0.00.117)

- Block 1 - Repetition Econometrics:

1. Fri, April 26
2. Fri, May 3

Goals: Students are able to read and interpret regression tables as well as to critically reflect on the underlying identification assumptions of the empirical analysis

- Block 2 - The Basics:

1. Fri, May 10: How to measure economic prosperity
2. Fri, May 17: Economic prosperity across space and time

Goals: Student learn about the standard datasets in Quantitative Economic History, students are able to relate economic concepts in long-run development to existing datasets, Software covered: Stata, Econometrics applied: correlations and OLS, Data sources: Standard datasets

- Block 3 - Advanced Topics:

1. Fri, May 24: Rivers, historical population and night lights
2. Fri, May 31: Rivers, historical population and night lights
3. Fri, June 7: Rivers, historical population and night lights
4. Fri, June 14: Coal and Growth
5. Fri, June 21: Coal and Growth

Goals: Students are able to construct their own spatial dataset. Software covered: Stata and ArcGIS, Econometrics applied: 2SLS and Diff-in-Diff, Data sources: Spatial data created with ArcGIS.

- Block 4 - Presentations:

1. Fri, June 28: Supervised work on the dataset for the term paper
2. Fri, July 5: Student presentations
3. Fri, July 12: Student presentations
4. Fri, July 19: Student presentations
5. Fri, July 26: Student presentations or supervised work

8 Term Paper

The term paper should be the result of an empirical research project. The **research project** should include:

1. A research idea (research question) that is related to economic history (events taking place more than 30 years ago).
2. An econometric strategy (basically an econometric model captured by a regression equation).
3. An unique dataset prepared on your own that allows you to address your research question. You can use datasets prepared during the course and add some additional variable.
4. A Stata do-file that includes your final regression equations that you present in the term paper.

The **term paper** should...

1. ... generally meet the requirements for seminar papers at the chair of VWL VI http://www.ewf.uni-bayreuth.de/pool/dokumente/Lehre_teaching/stylesheet_english20170718.pdf
2. ... be in length about 8 pure text pages (20,000 words)
3. ... include an introduction that motivates your research question and links it to existing literature (1 $\frac{1}{2}$ page).
4. ... include a historical background section (1 page)
5. ... include a data section (1 $\frac{1}{2}$ page)
6. ... include a section about the econometric specification and a discussion about identification (1 page)
7. ... include a section with your results (the tables and figures) as well as the discussion of the results (3 pages)
8. ... include a conclusion ($\frac{1}{2}$ page)

The final paper that you hand in should be accompanied by your dataset and the Stata do-file to replicate the tables in your term paper.

9 Student Presentation

During their presentations the students have the opportunity to discuss their planned research project with fellow students and the supervisor. The presentation should include the research idea, discuss the data that is necessary to address the research question, the econometric strategy as well as a discussion of potential obstacles related to the planned project. The presentations should be about 20 minutes long and should include time (5–10 minutes) for discussions.

The students have the opportunity to address final issue regarding the data and the research project in the last lecture. Students are asked to sign up via email to richard.franke@uni-bayreuth.de. **Applications will be accepted until June 23st, 2019.** Please indicate in the application:

- your name,
- your study program,
- your student ID (“Matrikelnummer”),
- the topic of your planned research project.