

Syllabus

TAX 620: Applied Empirical Research: Methods and Practical Implementation

Fall 2019

Lecturers: Philipp Doerrenberg and Johannes Voget

ECTS: 6

Regular Class Times:

Monday: 12.00-13.30;

Tuesday: 15.30-17.00

All practical Stata sessions (see time schedule below) take place at the computer lab: 257 Pool-Raum, L7, 3-5

All other classes (lectures and student presentations) on Mondays take place at: 131 Wilhelm Müller Hörsaal, Schloss Ostflügel

All other classes (lectures and student presentations) on Tuesdays usually take place at: 001 Hörsaal, L 9, 1-2.

Please refer to “portal2”, Ilias and announcements in class for updates regarding lecture halls.

The first meeting of the class is on Tuesday, Sept 3, at 15.30 in room “001 Hörsaal, L 9, 1-2”. (no class on Monday, Sept 02, because we hold a meeting during that time slot - Sept 02 at 12.00 - where we give an overview of the Master’s curriculum in Accounting and Taxation).

Guest Lecture:

Oct 21., 01.45-03.15

Mark Dinko Orlic, Partner at PWC: “Evolution of the Tax Advisor and Analytics in Practice”

Mark will talk about tax planning and tax consultancy in a big-4 accounting company. The lecture provides insights on the latest developments in tax advisory work in practice. Mark will particularly focus on the role of empirical methods, analytics and data for tax consultancy. Please note that the guest lecture does not replace the regular class on Oct. 21 at 12.00.

Contents:

Students are provided an overview of the most important methods and approaches for applied empirical research and gain practical experience in conducting an empirical analysis.

One part of the course teaches the concept of causality and the most important methods to estimate causal effects. These include randomized experiments, linear regression and fixed effects estimators, difference(s)-in-difference(s), instrumental variables, regression discontinuity design and bunching. The focus is on understanding the advantages and disadvantages of the available econometric

methods and less on a highly technical presentation. Illustrative examples will always be from the field of taxation.

The other part of the course focuses on hands-on empirical applications and students learn how to conduct their own empirical analysis. For this purpose, students are introduced to the usage of a statistical software package (Stata) and to the access and analysis of large data sets (in particular firm databases sets such as Amadeus or Compustat). This part of the lecture will take place in a PC Pool classroom where all students can follow and track the lecture at their own computer booth.

Overall, this course will equip students with a basic skill set required for both academic research and jobs in the industry and consulting (such as data/business analytics and data mining). The course is a highly suitable preparation for an empirical Master's thesis.

Grading:

To receive a grade, students conduct an empirical analysis using a statistical software package and 'real-world' archival data. This empirical project will comprise either the replication of an existing research paper or the analysis of an independently developed research question. Students are asked to present the results of their empirical project in class (20-30 minutes presentation) and write a short report about the project (4-5 pages, excluding Tables, Figures, References).

In addition, all students are required to give a presentation in class in which they provide an overview of a particular data base or data set (20 minutes presentation).

Depending on the size of the class, empirical project and presentations will be prepared in groups or individually.

The weighting for the final grade is as follows: Presentation of Data Set: 20%, Presentation of Empirical Project: 40%, Report about Empirical Project: 40%.

Bonus points: we encourage all students to attend the "Research Seminar in Accounting and Taxation" in order to gain an idea of applied research in practice. The seminar takes place on Tuesdays, 01.45pm-03.15pm. The overview of the program is here:

<https://www.bwl.uni-mannheim.de/accounting-taxation/forschung/research-seminar/> .

Students who volunteer to write a 2-page report about one of the seminar talks will receive a top-up of their final grade by one sub-grade (e.g., from 1.7 to 1.3).

Literature:

Joshua D. Angrist and Jörn-Steffen Pischke, Mastering Metrics: The Path from Cause to Effect. Princeton University Press

Ulrich Kohler and Frauke Kreuter, Data Analysis Using Stata, Stata Press

Michelle Hanlon and Shane Heitzman, A Review of Tax Research, Journal of Accounting and Economics, 50(2-3), 2010, pages 127-178.

Class Materials:

Slides and other class materials will be uploaded on Ilias. Please join the Ilias group for this class if you take the class.

Time Schedule:

Week 1

03. Sept.: Introduction, Organization, Causality (pd)

Week 2

09. Sept.: Randomized Experiments (pd)

10. Sept.: Regression and Fixed Effects (pd)

Week 3

16. Sept.: Differences in Differences (pd)

17. Sept.: Regression Discontinuity Design (pd)

Week 4

23. Sept.: - Current Topics in Taxation Research and Overview of Available Data.

- Assignment of Data Presentations and Research Projects. (jv/pd)

24. Sept.: Stata I: Introduction and Do-File (jv)

Week 5

30. Sept.: Stata II: Read Data, Examine Data (jv)

01. Oct.: Stata III: Create Sample for Analysis (jv)

Week 6

07. Oct.: Instrumental Variables (pd)

08. Oct.: Stata IV: Simple Regression Analysis and Tests (jv)

Week 7

14. Oct.: Stata V: Graphs and Visualizing (jv)

15. Oct.: Stata VI: Programming (locals/globals/loops) (jv)

Week 8

21. Oct.: Bunching (pd)

22. Oct.: - Possibility to Receive Individual Feedback and Advice on Project/Presentation. (jv/pd)

- PC Pool open to students.

Week 9

28. Oct.: Student Presentations: Overview of Data

29. Oct.: Student Presentations: Overview of Data

Week 10

04. Nov.: Student Presentations: Overview of Data

05. Nov.: Student Presentations: Overview of Data

Week 11

11. Nov.: How to Set up a Research Project (jv oder pd)

12. Nov.: - Individual Meetings to Discuss Empirical Project. (jv/pd)

- PC Pool open to students.

Week 12

18. Nov.: Individual Meetings to Discuss Empirical Project. (jv/pd)

19. Nov.: - Possibility to Receive Individual Feedback and Advice on Project/Presentation. (jv/pd)

- PC Pool open to students.

Week 13

25. Nov.: Student Presentations: Empirical Project

26. Nov.: Student Presentations: Empirical Project

Week 14

02. Dec.: Student Presentations: Empirical Project

03. Dec.: Student Presentations: Empirical Project