Eberhard Karls Universität Tübingen
Faculty of Economics and Social Sciences

S316 Policy Analysis and Evaluation, Winter 2022-23

Syllabus

Instructor

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Course objectives

Questions of causal effects belong to the most important and yet most difficult questions in the social sciences. Causal questions are not only interesting from an academic point of view. In many different areas, politics needs information about causal effects for designing appropriate policy interventions. The objective of this course is to introduce students to different approaches to identifying and estimating causal effects using quantitative (econometric) methods. Students will understand different concepts of causality, study quantitative methods for identification and estimation of treatment effects and obtain knowledge about economic data and other practical aspects. In the tutorial, different estimators will be implemented using STATA.

Contents

1. Introduction
2. Randomised experiments
        2.1 The evaluation problem
        2.2 Principles of randomised experiments
        2.3 Randomisation and causality
3. Regression analysis and statistical matching
        3.1 Non-experimental vs. experimental estimators
        3.2 Principles of multiple regression
        3.3 Regression and causality
        3.4 Longitudinal data
        3.5 Statistical matching
4. Instrumental variables
        4.1 Instrumental variables: definition
        4.2 The 2SLS estimator
        4.3 Examples
        4.4 Estimation of local average treatment effects (LATE)
5. Regression discontinuity design
        5.1 Regression discontinuity design (RDD): definition
        5.2 Sharp and fuzzy RDD
        5.3 Applications

6. Difference-in-differences

    6.1 Cross-section and longitudinal data

    6.2 The before-after estimator

    6.3 Difference-in-differences

    6.4 Applications

7. Cost-benefit analysis

    7.1 Effectiveness and efficiency

    7.2 Calculating benefits

    7.3 Calculating costs

    7.4 Application

8. An evaluation project

    8.1 An evaluation project

    8.2 Relevance of policy evaluation

Readings

Angrist, Joshua D.; Pischke, Jörn-Steffen (2015): Mastering 'Metrics, Princeton University Press.

Angrist, Joshua D.; Pischke, Jörn-Steffen (2008): Mostly Harmless Econometrics, An Empiricist's Companion, Princeton UP.

Stock, James H; Watson, Mark W. (2019): Introduction to Econometrics, 4th ed., Pearson.

Cameron, A.C.; Trivedi, P.K. (2010): Microeconometrics Using Stata, Revised Edition, Stata Press, College Station.

Wooldridge, Jeffrey M. (2020): Introductory Econometrics, 7th ed.

Profiles	B.Sc. in Economics and Business Administration
	B.Sc. in International Economics
	B.Sc. in International Business Administration
Prerequisites	Quantitative Methods in Economics and Business Administration
Language	English
Time	Wed 8-10 a.m. (lecture), Wed 4-6 p.m. (PC Lab tutorial)
Exam	Written Exam (60 Min)
Credits Points	6 ECTS