Workshop  
  
“Impact evaluation using secondary data”

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| Lecturers: | Dr. Tobias Rüttenauer |  |
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Date: 15.11.2023  
Time: 11:00 – 13:00  
Location: online

Course Description

This workshop will discuss techniques for impact evaluation using secondary data. After a description of the randomised controlled trials, the workshop will give an overview of regression discontinuity designs, instrumental variables, and difference-in-difference methods. Particular attention will be paid to the recent developments in difference-in-difference methods that account for heterogeneous effects of policies that roll-out at different times.

Course Outline

**Causal Treatment Effect**

* Counterfactual Framework
* Randomised Control Trials

**Regression Discontinuity Designs (RDD)**

* What is an RDD?
* How RDD works in impact evaluation

**Instrumental Variables (IV)**

* Understanding IV and its purpose
* Conditions for a valid instrument

**Difference-in-Difference (DiD) Methods**

* Basic 2x2 DiD design and assumptions
* Multi-period Fixed Effects (FE)
* Impact functions (and their problems)

**Accounting for Heterogeneous Effects**

* Challenges in evaluating policies with varying effects
* Recent developments in DiD and FE
* Methods for addressing heterogeneity in DiD and FE
* Practical examples of heterogeneous impact evaluation

Recommended literature

Callaway, B., & Sant’Anna, P. H. C. (2020). Difference-in-Differences with multiple time periods. Journal of Econometrics, 72(5), 1. <https://doi.org/10.1016/j.jeconom.2020.12.001>

Goodman-Bacon, A. (2021). Difference-in-differences with variation in treatment timing. Journal of Econometrics, 225(2), 254–277. <https://doi.org/10.1016/j.jeconom.2021.03.014>

Huntington-Klein, N. (2021). The Effect: An Introduction to Research Design and Causality. Chapman & Hall/CRC. [Free online version available](https://theeffectbook.net/)