

Empirical Policy Evaluation

Prof. Frank Pisch PhD

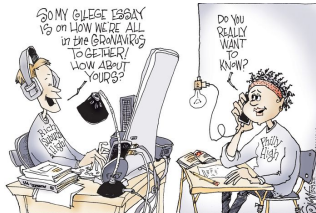
Professor of Microeconomics

Winter 2021/22



TECHNISCHE
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Motivation



Sources: ocregister.com, Philadelphia Inquirer, devpolicy.org

- The COVID-19 Pandemic has put public policy in the spotlight like never before
 - ▶ Public health considerations have led to unprecedented policy measures like lock-downs and stay-at-home-orders
 - ▶ It is of utmost importance to understand the “true” costs and benefits of these measures
 - ▶ But how can we identify these *causal* effects?
- Only one of many issues (climate policy, social policy, economics development etc.)

Seminar Content

- Our main **goal** is to learn about *causal effects* of policies
- Our main **challenge** is that we lack a *counterfactual*
 - ▶ Impossible to know what would have happened in the absence of a policy or treatment
 - ▶ But need to know for causal effect!
- Main **idea**: compare a *treatment* to an untreated, but very similar *control* group

Seminar Content

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 - ▶ But need to know for causal effect!
- Main **idea**: compare a *treatment* to an untreated, but very similar *control* group
- There are 6 widely used techniques to do so
 - ▶ Gold Standard: Experiments
 - ▶ Statistical accounting for differences between groups
 - ▶ Instrumental Variables Estimation
 - ▶ Regression Discontinuity Design
 - ▶ Difference-in-Differences Estimation
 - ▶ (Structural Modelling)
- We will cover all these techniques in our seminar
- Nobel Prize a week ago for these techniques + the **credibility revolution in Econ!**

Pre-requisites and how we work

- Pre-requisites

- ▶ Must be/get comfortable with multivariate linear regression (OLS) and hypothesis testing
- ▶ Basic microeconomics is useful, but not necessary

- Evaluation

- ▶ Individual or group presentations (50%)
- ▶ Individual or group 'referee report' (50%)
 - ★ summary, empirical problem, strategy, main problems, how they are addressed, how convincing
 - ★ max 3 pages in English if by yourself, 5 pages with additional literature review if 2 students

- Book: Joshua D. Angrist & Jörn-Steffen Pischke, 2014.

Mastering 'Metrics: The Path from Cause to Effect

Economics Books, Princeton University Press, edition 1, number 10363.

Structure and Proposed Timeline I

Option I: **original proposal**, c.f. intro slides on moodle

- 12 sessions (90 minutes each), alternating between
 - ▶ 7 input sessions in lecture style
 - ▶ 5 colloquia where we discuss research papers and have presentations

- Timeline in calendar weeks

Week 42: Kick-off/Information Session

Weeks 43 - 50; 2 - 5: Course Sessions

Week 7: Submit reports

- Slots (maybe Thursdays except 4-6pm)?

Structure and Proposed Timeline II

Option II: **new proposal**

- 5 sessions
 - ▶ Fri 19 Nov, 2-5pm: Lecture 1 on problem of causality + selection on observables
 - ▶ Fri 26 Nov, 2-5pm: Lecture 2 on experiments and IV
 - ▶ Fri 10 Dec, 2-4pm: Presentations I
 - ▶ Fri 21 Jan, 2-5pm: Lecture 3 on RDD and DiD
 - ▶ Fri 21 Jan, 2-4pm: Presentations II
- (Fri 18 Feb: Submit reports)
- Timing is somewhat flexible

Presentation Topics/Papers

- Last time I checked, we had 8 students “registered”
 - ▶ presentations of 45 minutes on 4 different papers by max 2 students each
- You can choose between
 - ▶ Miguel, Kremer 2004 QJE – Experiment with de-worming medication; Nobel Prize for Kremer in 2019
 - ▶ Acemoglu, Johnson, Robinson 2001 AER – The role of institutions for development, IV, Nobel Prize imminent
 - ▶ Carpenter, Dopkin 2009 AEJ: Applied – The role of alcohol consumption for mortality, RDD
 - ▶ Card, Krueger 1994 AER – Effect of minimum wage on economy, DiD, Nobel Prize for Card last week

Contact Details and Q&A

- For further questions, please contact Frank Pisch
 - ▶ details at <https://sites.google.com/site/frankpisch/home>
- The floor is yours... Shoot!

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- Two decisions to take
 - ▶ Which option do you prefer for the course format? I or II?
 - ▶ Would you like me to try and get a room for our course?