LMEC – CAUSAL INFERENCE AND PROGRAM EVALUATION

Academic Year 2022-2023

TEAM INFORMATION

This is a one-person group.

REPLICATON STUDY: INFORMATION ON THE ORIGINAL PAPER

"Border Fencing, Migrant Flows, and Crossing Deaths" by Cynthia Bansak, Abigail Hall Blanco, and Michael Coon (AEA PAPERS AND PROCEEDINGS VOL. 112, MAY 2022 (pp. 381-85))

Summary: A study that uses DID to study the effect of the Secure Fence Act (SFA) (i.e., a bill authorizing spending on building fences in the US-Mexico border) on migrant deaths and apprehension in the border. Uses a panel from 1992 to 2019 on 9 border sectors (the units).

Link to paper: https://www.aeaweb.org/articles?id=10.1257/pandp.20221023 (paper)

Link to data and code: https://www.openicpsr.org/openicpsr/project/160201/version/V1/view

Data availability

Data is available for replicating the study, However, for the extension, a more granular dataset needs to be obtained (see Extension below).

Code availability

Code is available for the replication study.

Identification strategy/strategies used in the original paper.

For the DID the authors define treated and untreated units according to where "most new construction took place" (Incredibly arbitrary, potential for extension here).

Falsification checks/Internal validity tests used in the original paper.

No tests on the common trend assumption. No falsification tests.

Discussion on external validity in the original paper.

No discussion on external validity. In principle, the results could be extended to any countries with border fences (Greece – Turkey, Argentina – Paraguay, Hungary – Serbia). However inter country socio-economic dynamics and country characteristics surely differ rendering external validity null.

REPLICATON STUDY: INFORMATION ON THE PLANNED EXTENSION

Planned extension of the replication study.

Staggered Policy Adoption: In principle, the construction of the fences occurs at different times for each of the sectors. This requires obtaining/constructing a more granular dataset containing how much fence was constructed, the timing of this construction, foreach of the border sectors.

REPLICATON STUDY: POTENTIAL CHALLENGES AND HOW THE TEAM PLANS TO ADDRESS THEM

Potential challenges of the replication and how we plan to address them.

Replication does not seem overly complicated.

Potential challenges of the extension and how we plan to address them.

- Obtain/construct the dataset.
- Apply a heterogeneity robust DID estimator that allows for staggered treatments.
- Perform common tests on common trend assumptions and placebo tests.
- Replicate both in STATA and R.

REPLICATON STUDY: SOFTWARE

Software used for the original paper.

STATA

Software used for replication.

STATA and R

Packages used for replication.

Nothing special

REPLICATON STUDY: TIMELINE

Please report below how you plan to organize the work for you replication study. Please mention the number of meetings between group members as well.

Week 1 (March 20 to March 26): Replicate original paper results (tables, figures). Prepare fact checking report. Obtain/construct dataset.

Week 2 (March 27 to April 02): Apply a heterogeneity robust DID estimator that allows for staggered treatments. Perform common tests on common trend assumptions and placebo tests. Replicate both in STATA and R. Prepare slides.