Constructing Generalizable Geographic Natural Experiments*

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March 7, 2022

Abstract

A natural experiment is a real-world situation that generates as-if random or haphazard assignment to treatment. Geographic or administrative boundaries can be exploited as natural experiments to construct treated and control groups. Previous research has demonstrated that matching can help enhance these designs by reducing imbalances on observed covariates. An important limitation of this empirical approach, however, is that the results are inherently local. While the treated and control groups may be quite similar to each other, they could be substantially different from the target population of interest (e.g., the country). We propose a simple design inspired by the idea of template matching to construct generalizable geographic natural experiments. By matching our treated and control groups to a template (i.e., the target population), we obtain groups that are similar to the target population of interest and to each other, which can increase both the internal and external validity of the study.

Keywords: Generalizability, Geographic Natural Experiments, Matching.

*We thank Tom Leavitt, Jay McCann, Tara Slough, Logan Strother, and José Zubizarreta for valuable comments and discussions. All errors are our own. Authors are listed in alphabetical order.

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