

Discussion of: “Economic Inequality and Stratification after a Natural Disaster”

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Summary

Research question

- What is the effect of a natural disaster on economic inequality and stratification?

Identification strategy

- This paper exploits the exogenous variation to a natural disaster generated across metropolitan areas of Missouri
- Difference-in-Differences approach

Results

- Individuals living in affected areas are less likely to be poor
- Why? Change in the composition of the population
 - Economically disadvantaged residents are more forcibly mobile
 - More advantaged (White) population rebuilds as opposed to being relocated

Discussion: identifying assumption

- Event-study specification
 - Pre-trends
 - Year specific effects of the tornado
- Placebo test
 - Pre-tornado periods
- PTA may be implausible if pre-treatment characteristics that are thought to be associated with the dynamics of the outcome variable are unbalanced between the treated and the untreated (Abadie, 2005)
 - Doubly robust difference-in-differences estimator (Sant'Anna and Zhao, 2020)
 - Metropolitan area by year FEs

Discussion: heterogeneity, SEs, and outcome

- Significant heterogeneity by race?
 - Triple interaction specification

$$\begin{aligned}y_{imt} = & \alpha + \beta_1(Treat_m \times After_t \times White_{imt}) \\& + \beta_2(Treat_m \times White_{imt}) \\& + \beta_3(After_t \times White_{imt}) + \beta_4 White_{imt} \\& + \beta_5(Treat_m \times After_t) + \mu_m + \tau_t + \varepsilon_{imt}\end{aligned}$$

- Cluster of SEs at the sampling unit
 - Housing unit in ACS or smallest geographical unit
 - Abadie et al. (2023)
- Inequality outcome