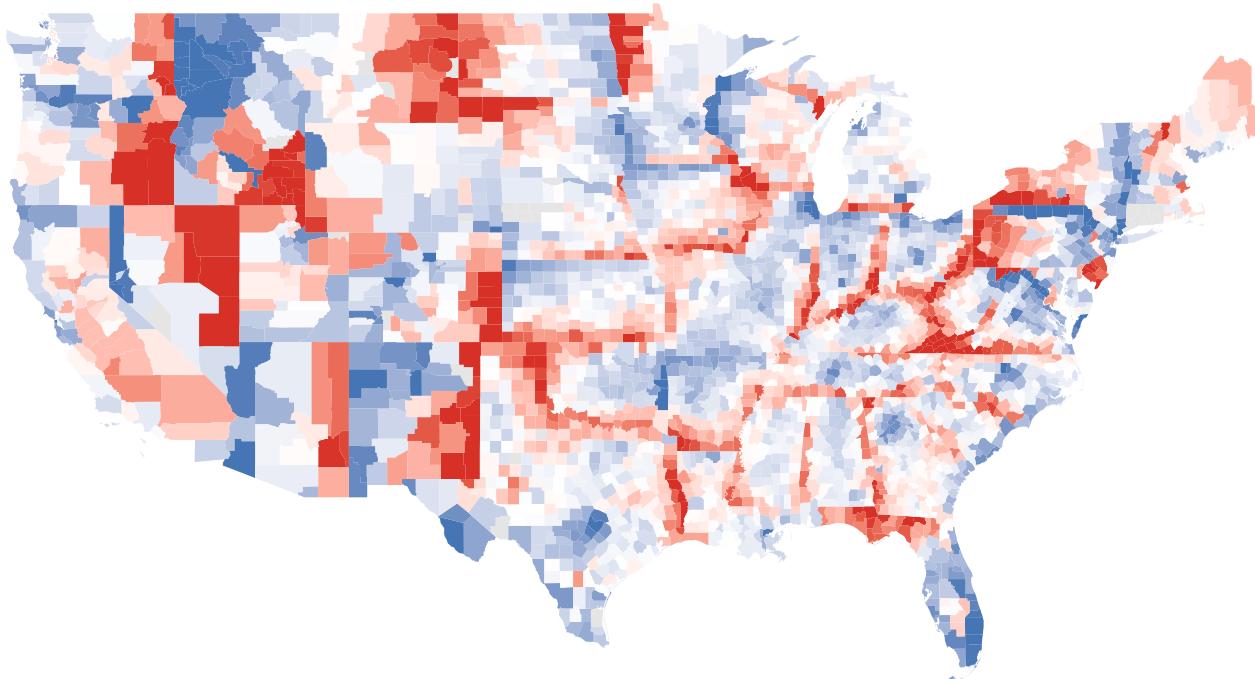


## Within-State Residual Variation in the Instrumental Variable

Residuals from state fixed effects. Blue = above-state-average IV exposure; Red = below. N = 3,108 counties.

Panel A: Unconstrained Out-of-State Instrument



Panel B: Distance-Constrained Instrument ( $\geq 500$  km)

