

Climate Change and the Geography of the U.S. Economy (Leduc & Wilson 2023)

Allan Hsiao
Princeton University

October 6, 2023

Summary

- Effects of long-run, county-level weather variation (1951-2020)
 - On spatial distribution of people, jobs, wages, house prices
- Document mobility responses that facilitate adaptation
 - In distributed lag model with long lags for weather
- And climate effects on amenities and productivity
 - In spatial equilibrium model with migration and housing supply

Spatial equilibrium model

- To get effects on model-derived amenities and productivities
 - Are there proxies for these mechanisms that don't require the model?
- Static model
 - But emphasize that DL analysis captures both ex-post + ex-ante adaptation
- Not used for projections
 - Partial vs. general equilibrium?

Separating amenities and productivities

the key to separately identifying productivity from amenities is the level of worker population relative to non-worker population and house prices

- Workers and retirees
 - Both consider the same amenities (but amenities may differ by group)
 - Only workers consider productivities (but some retirees may work)
- Don't typically need this separation?
 - Amenities are productivities both destination-specific
 - So populations depend on both together
 - But wages pin down productivities