



Comments on “Adapting to Natural Disasters through Better Information: Evidence from the Home Seller Disclosure Requirement” by Seunghoon Lee

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FHFA Econ Summit

OCTOBER 3, 2023

The focus of the paper

- How does disclosure of flood risk affect
 - Population at risk (exposure)
 - Uptake of flood insurance
 - Flood damages
- Backdrop and motivation...
 - Homebuyers receive different information about flood risks depending on state disclosure requirements
 - In recent years, has been an increased push to improve information and disclosure
 - Is it possible that improving disclosure would lead to better outcomes?
 - Less exposure of people and property, better ability to recover if/when flood occurs, reduced damages



Contributions

- National analysis
- Looking at outcomes other than home sale prices (Hino & Burke 2021; Gourevitch et al. 2023)
- Identification strategy
 - Different timing of disclosure requirements across states
 - Different geography of disclosure requirements – i.e., in/out of SFHA
 - Spatial discontinuity design – difference in spatial discontinuity estimates before/after the disclosure policy is adopted
- Stream gauge records used to construct measure of community flood damage



Population Exposure

- Population at Census block level is an outcome variable
 - Results: Disclosure policy reduces population in SFHA blocks by 7%
- But population change = births – deaths + in-migration – out-migration
- “Self protection” implies results are seen as out-migration but...
 - Average annual migration rates in US = 10% at tract level (DeWaard et al. 2019)
 - 10-15% of households in ACS report change of residence in a given year
 - Households who experience a disaster in past 4 years are 1.6 percentage points more likely to move (Sheldon & Zhan 2022)
- Could disclosure of flood risks really cause a 7% net drop in population?



Insurance Uptake

- Results: disclosure reduces insurance coverage in SFHAs
- Why?
 - “non-insurable cost is large” (\$250K cap) is offered as a reason
 - But \$250K is better than zero so... hmm
- Other possible explanations?
 - All disclosure requirements considered together but different requirements may have different effects
 - For SFHA map disclosure, maybe people already knew



Flood damages

- Uses annual peak flows from USGS/NOAA water gauge data to construct a flood size (i.e., return period) distribution
- Match communities to nearest three gauges (fills in a lot of missing values)
- Only 5 flood size bins; max 40-50-year return period
 - below the return period conveyed by SFHA (100-year)
- Results: disclosure reduces flood damage
 - But how? What is the mechanism?



Disclosure... a few minor questions

- Do laws take effect on Jan. 1?
- Is there advance notice (so maybe an announcement effect)?
- Do states that adopt later in the sample have voluntary disclosure in the earlier years? How would this affect results?
- What does enforcement look like?
 - No variation across communities within a state?
- Different kinds of disclosure (SFHA maps vs ever flooded vs have a flood insurance policy) deserves attention



Bigger picture policy questions

- The SFHA maps provide misinformation, indicating risks are zero outside the line of the map
- Even with better maps, i.e. continuous risk information... how people understand and use information and what really works is an open question
 - Decisions from experience vs description (Hertwig et al. 2004)
 - Overoptimism (Royal and Walls 2019)
 - Myopia, inertia, other behavioral biases (Meyer and Kunreuther 2017)
 - Misunderstanding “100-year floodplain”, annual probabilities
 - Would it be better to provide information in financial terms?



Bigger picture policy questions (cont.)

- What are we trying to accomplish with disclosure?
 - For existing homeowners... it will reduce their property values; then what?
 - Re-sorting of households is likely in long-run... poor move where prices are cheap and risks are high (Bakkensen & Ma 2020)
 - Equity concerns loom large
 - Will it shift new development to lower risk areas?
 - We need research on this question





Thank you for the opportunity to read this important paper!

Comments, questions...
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