How should we measure house prices after a natural disaster? Evidence from Hurricane Ian

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Discussion by

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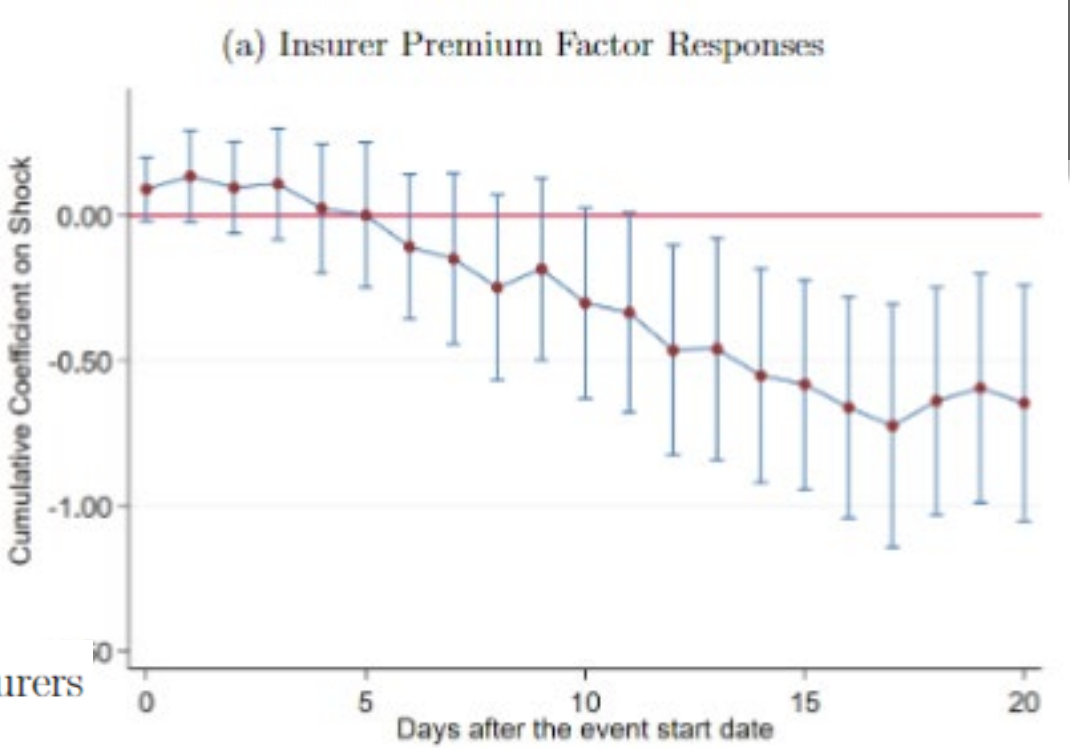
Overview

- Methodology: estimating price effects due to disasters
- Benefits and limitations of using aggregated, public data
- Hurricane Ian as an example
- DiD and synthetic control models
- Hurricane Ian lead to relatively large and lasting positive price effects
- Very thorough! 95 pages!
- Very useful methods! Very interesting results!

Difficult Question



Measuring the Climate Risk Exposure of Insurers

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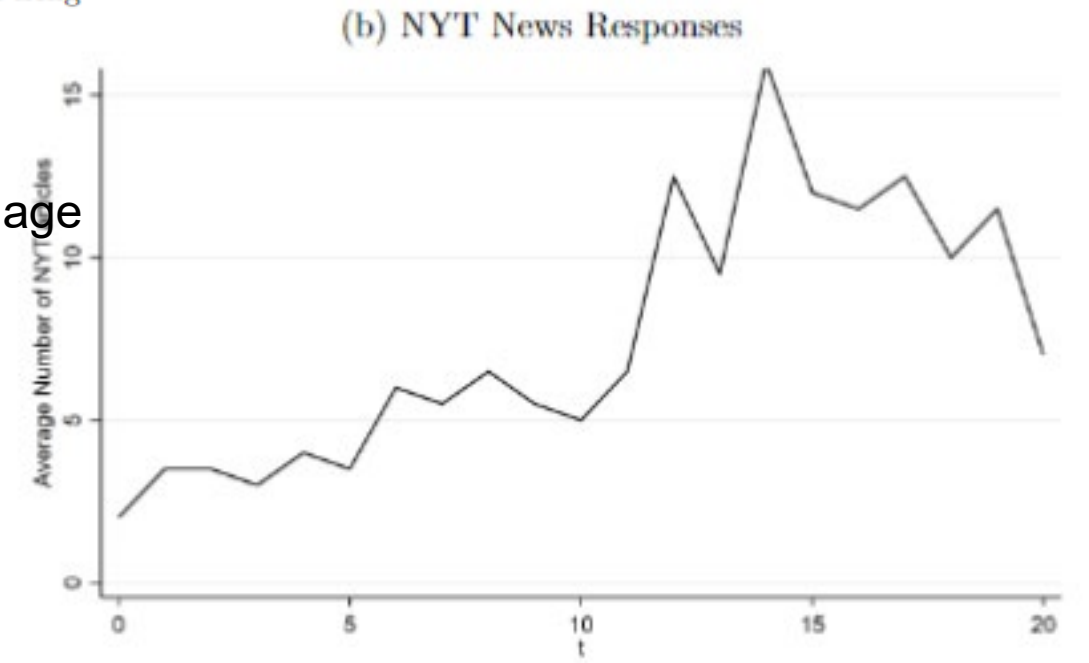

hurricane Katrina:

Day 1: “A Blast of Rain but Little Damage as Hurricane Hits South Florida.”

Day 6: “Markets Assess Hurricane Damage, and Shares Fall.”

Why & Who

- Why do we need to estimate the house price effects of disasters?
- Who needs it?
- The answers are relevant for figuring out what data are available; how quickly an estimate is needed
- If FEMA/gov needs to know, they have individual data
- If insurers need to know, they have claim data/appraisers

What happens after disasters

- Homes damaged
- People seek assistance, need temporary shelters
- Some may sell homes immediately
- Some rebuild/repair, move back or sell

Why would home prices increase in the short run?

- Immediately after disaster, which homes are sold?
  - Intact & damaged homes
  - We care about the damaged homes
- Which homes experience price increase?
  - Unlikely the damaged homes
    - Amenities did not improve
    - Supply is limited, but only temporarily (why buy now? can't move in immediately)
    - Sellers need cash quickly (fire sales)
  - Likely intact homes
    - People needing shelter can quickly move in

Why would home prices increase in the long run?

- Long after disaster, which homes are sold?
  - Intact homes
  - Damaged, unrepaired homes
  - Repaired/rebuilt homes
  - Which homes do we care about? Damaged, unrepaired homes
- Which homes experience price increase?
  - Unlikely the damaged, unrepaired homes
    - Amenities did not improve
    - Supply should not be limited
  - Likely intact homes & repaired/rebuilt homes

What can we learn from the results?

- The average home sold immediately after disasters is not damaged
- The average home sold long after disasters is either not damaged or repaired/rebuilt (likely to a better standard)

Treatment

- Underinsured or uninsured
- Very wealthy neighborhoods? (Flood insurance limit $250k; mortgages require insurance)
- Very liquidity-constrained neighborhoods?
- Few vacation home neighborhoods?
- How would the effect on home prices be different for other neighborhoods?

Property damage in the FEMA data

- 85% of claims are not associated with any real or personal property damages, but for temporary housing, etc.
- Authors define treatment using property damage claims
- People who need temporary housing probably have their properties somewhat damaged
- They may not have had time to assess the cost of repairing and rebuilding

Conclusion

- Difficult question
- Very useful methods! Very interesting results!
- I learned a lot!

- Clarify the purpose of the exercise
- Elaborate on the economic mechanism
- Consider the selection in houses sold & treatment