The impact of 2019 changes to Texas' flood disclosure requirements on house prices

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Overview

- Texas law change requiring seller to inform buyers if they're in a 500 hundred-year flood zone. Previously only 100-year zones had to disclose (and had to purchase flood insurance)
- Newly disclosed 500-year zone experience a 4.3% relative price decline
- Home in 100-year zone actually appreciate faster?
- Many more homes in the 500-year zone purchase flood insurance

Data

- 2 million home sales with flood zone identified at time of transaction
- 2017-2022 (omitting 2012-2016)
- Number of insurance policies active
- FEMA Flood maps

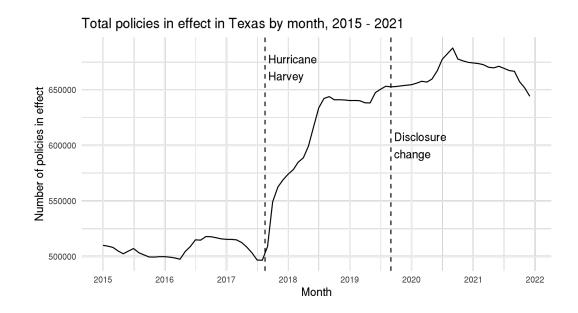
Specification:

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Y_i = \alpha_1 \ Post_i + \gamma \ Treatment_i + \theta \ Post_i * Treatment_i + \beta X_i + \mu + \delta + \epsilon_i, In(Sales price) and weeks on market 500\text{-year zone} \quad \text{treatment effect} \quad \text{or } 100\text{-year or} \quad \text{claim status}
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- Maybe run separate regressions 500 vs 100, 500 vs negligible, negligible with claims vs not with claims?
- 2M observations... perhaps house fixed effects?
- Can we do better than zip-code level treatment assignment?
 - Here is an application where buffered control groups might be appropriate?
 Relatively small topographical variation and/or elevation changes could have a big effect on flood risk, no?

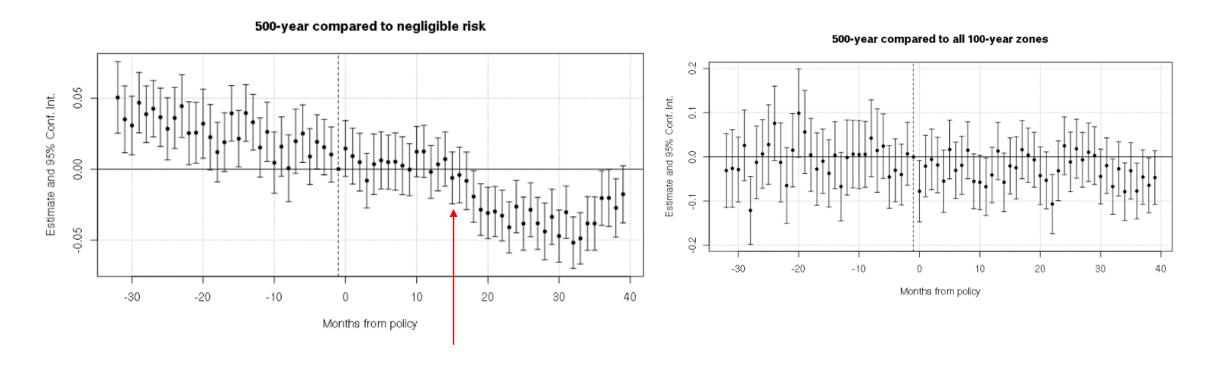
Possible confounders?

- Changing FEMA maps? Does excluding changed zones resolve the problem?
- Can we isolate the disclosure effect (2019) from the shock of Hurricane Harvey (2017)
- What about the price of insurance?
 - Is FEMA modeling climate risk?



Why might 100-year zones appreciate faster?

Larger and less-risky risk pool may lower 100 year premiums?



Redfin disclosures?