

Discussion: Facing Wildfire Insurance Challenges: Five Lessons from the National Flood Insurance Program

Mallick Hossain

Federal Reserve Bank of Philadelphia

Disclaimer

The views expressed are solely those of the author and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

Summary

- Insuring natural disasters is hard because they are correlated risks
 - Climate change makes this even harder
- 50 years of National Flood Insurance Program history can provide lessons on how insurance should be structured
 1. People won't buy insurance if they don't have to
 2. Actuarially fair insurance will be expensive in high-risk areas
 3. Catastrophe models can help improve insurance pricing
 4. Households pay attention to risk information
 5. An ounce of prevention is worth a pound of cure (but even with a 16x return, we often underinvest)

Comments Overview

- Lessons 1 and 3 are quite reasonable and offer clear policy prescriptions
 - Mandate insurance coverage to ensure risk pooling and no uninsurance
 - Let insurers use catastrophe models (including forward-looking climate change) in pricing (CA recently allowed [this](#))
- Lesson 5 is important, but more a political challenge
 - How/When should we incentivize individual adaptation?
 - How to make community investments in prevention more popular?
- Lessons 2 and 4 should be expanded upon

Affordable or Accurate Premiums? (1/2)

- Recognizing the stock/flow nature of housing relaxes the tension between insurance affordability and accuracy
- The existing *stock* of homeowners made location choices based on old/inaccurate/missing climate risk information
 - Prioritize affordability over accuracy for existing homeowners in the spirit of fairness
- Incoming *flows* of homeowners should have relevant information and insurers can provide price signals
 - Prioritize accuracy over affordability because prospective homebuyers can choose a different location relatively costlessly

Affordable or Accurate Premiums? (2/2)

- Failing to distinguish between the stock and flow of homeowners means “affordability” often prevails and hence society subsidizes homeowners to live in risky places
- Important general equilibrium concerns about home price collapse perpetuating unfairness for existing homeowners
 - Buyout programs?

Providing Risk Information to Households

- Disclosure is better at affecting home search and home values, not insurance takeup
- Give households detailed information relevant to what they care about
 - Households care about what happens *while they live there*
 - Probability my SFHA home floods this year: 1%
 - Probability my SFHA home floods over 30 years: 26%

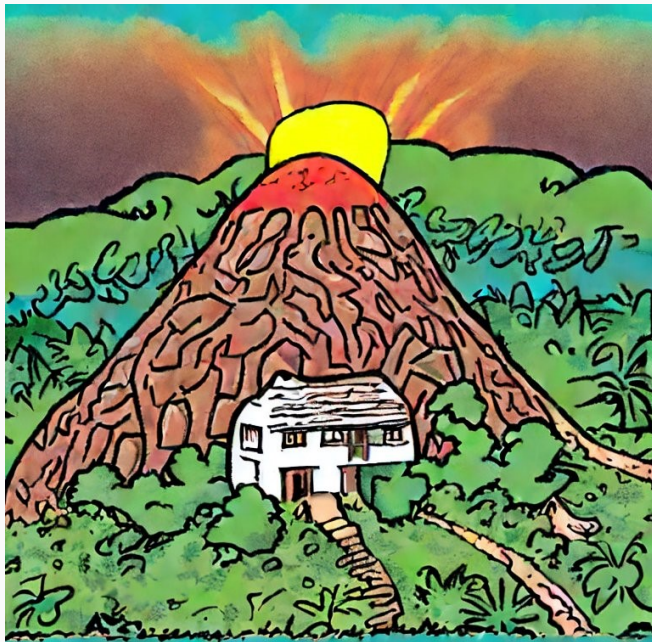
Providing Risk Information to Households

- Disclosure is better at affecting home search and home values, not insurance takeup
- Give households detailed information relevant to what they care about
 - Households care about what happens *while they live there*
 - Probability my SFHA home floods this year: 1%
 - Probability my SFHA home floods over 30 years: 26%
- For wildfires
 - Not helpful: What's the chance my home burns down *this year?*
 - Critically important: What's the chance my home burns down *while I am in it?*

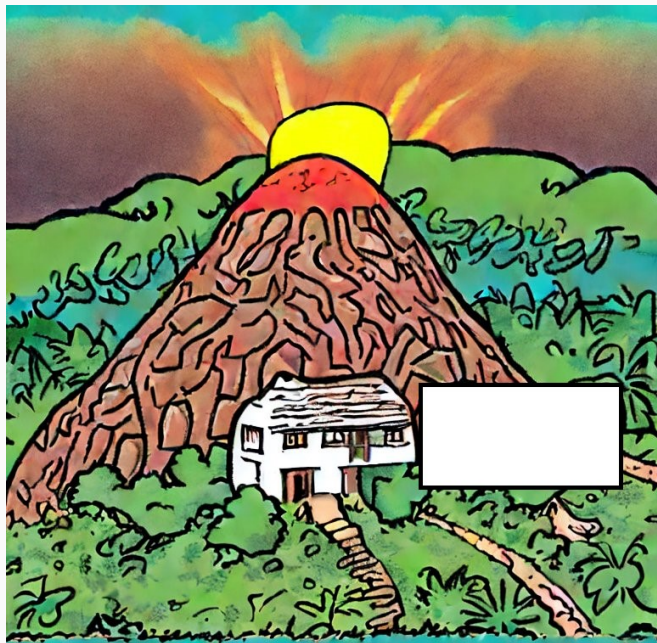
Smaller Comments

- Flood insurance is required on any properties with a mortgage from a *federally-regulated lender*
 - Even if a bank doesn't sell a mortgage to Fannie or Freddie (e.g., jumbo mortgages), it has to have flood insurance if it is in an SFHA
- Living in a coastal *county* doesn't mean you're automatically at a high risk of flood because counties are large
 - Only 20% of LA county is “moderate” flood risk according to First Street Foundation
- Cite Nitzan Tzur-Ilan's work on the effects of smoke
- Update discussion of California rules around catastrophe models (new rules issued in late Sept 2023)

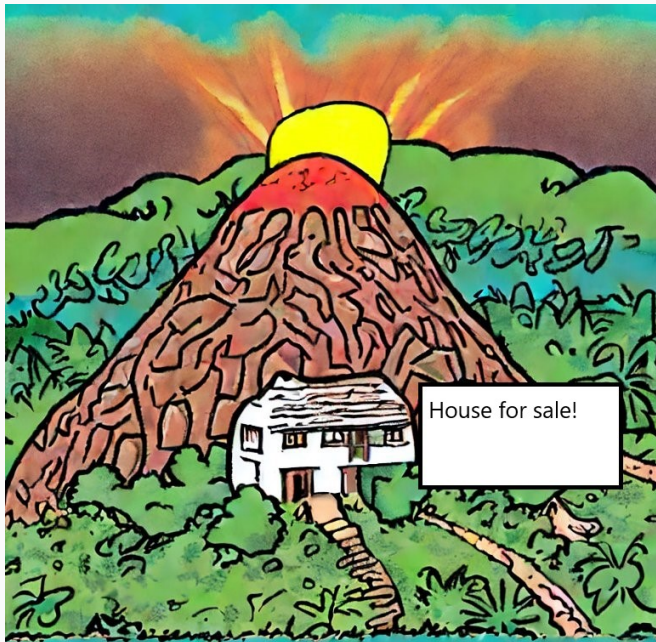
Climate Risk: An Animated Film



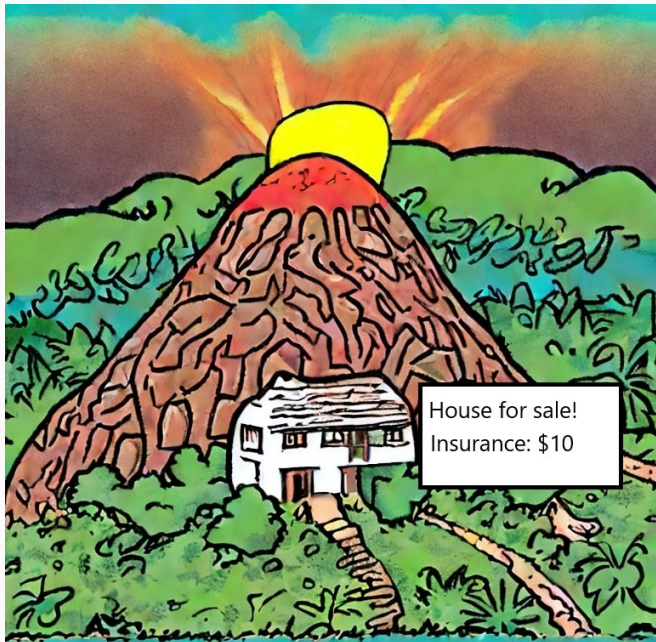
Climate Risk: An Animated Film



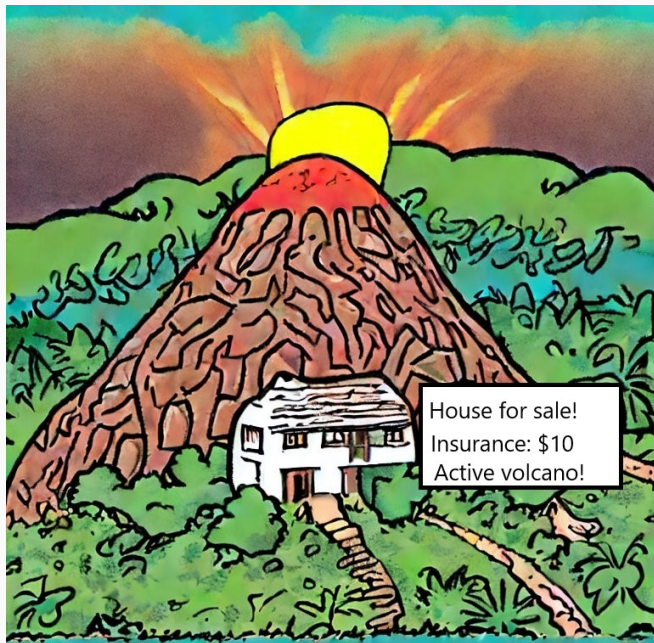
Climate Risk: An Animated Film



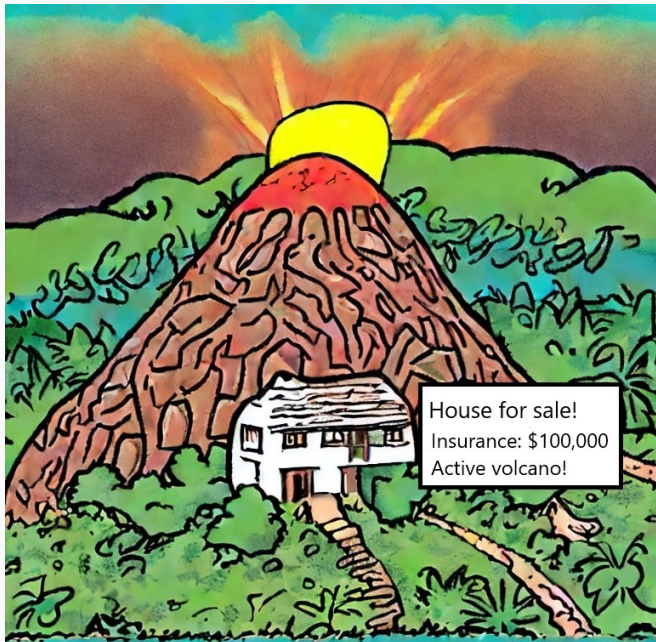
Climate Risk: An Animated Film



Climate Risk: An Animated Film



Climate Risk: An Animated Film



Climate Risk: An Animated Film

