

Coverage Neglect in Homeowners Insurance

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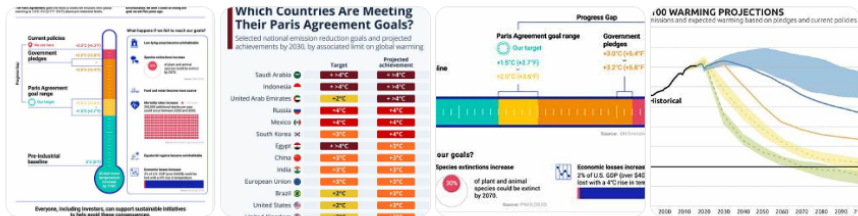
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Climate Change and Adaptation/Mitigation

- The early *climate finance* literature largely focused on the role of finance in helping with climate change.
- So, we studied:
 - Pricing of adverse effects of climate change in financial markets.
 - Premium on CO₂ emissions, investment strategies.
 - CO₂ reduction policies of firms, the role of (institutional) investors.
 - Taxes on emissions.
 - And so on..
- All very important questions, but what has been the progress on climate goals in practice?

Climate Change and Adaptation/Mitigation

Are we on track to meet the goals of the 2016 Paris Agreement?
Answer with one short sentence.



No, the world is not on track to meet the Paris Agreement's goal of limiting warming to 1.5°C.

cf Sources



Climate Change and Adaptation/Mitigation

- Scientists tell us that not meeting the goals of the Paris Agreement, we should expect:
 - Hotter temperatures,
 - more frequent and severe natural disasters,
 - rising sea levels,
 - increased drought,
 - displacement and migration.
- The situation warrants a shift from asking:
 - “How do we meet climate targets?”

Climate Change and Adaptation/Mitigation

- Scientists tell us that not meeting the goals of the Paris Agreement, we should expect:
 - Hotter temperatures,
 - more frequent and severe natural disasters,
 - rising sea levels,
 - increased drought,
 - displacement and migration.
- The situation warrants a shift from asking:
 - ~~“How do we meet climate targets?”~~
 - “How do we adapt to the consequences of *not* meeting climate targets?”

Underinsurance for Natural Disasters

- Quite a few papers on *underinsurance* in *flood insurance*:
 - Take-up rates are very low (Kunreuther et al., 2019; Kousky et al., 2018).
 - Take-up rates go up after disasters, but the effect dies out in a few years (Gallagher, 2014).
 - The **median tenure** of flood insurance policies is **2–4 years** (Michel-Kerjan, Lemoyne de Forges and Kunreuther, 2012).
- Some studies examine why underinsurance persists and how households respond:
 - Low home equity (Liao and Mulder, 2021),
 - informational frictions (Hu, 2022),
 - “self-insurance” (Ilhan, 2024).
- That said, underinsurance in the flood insurance markets remains a puzzle.

This Paper

- This paper documents coverage in homeowners insurance (mandatory)¹ is neglected.
 - That is, insurance payouts do not cover 100% of rebuilding costs.
- Underinsurance is prevalent in policyholders affected by the Marshall Fire (74%).
 - **Insurer fixed effects** and *not* **policyholder characteristics**.
- Underinsured households are less likely to **rebuild** soon, more likely to **sell** their homes.
- Households tend to get lower **headline premium** instead of better **rates**.
 - Focus on lower total spending on insurance, instead of cost per unit of coverage.
- * Very meticulous analysis and an interesting, important research question.
 - So, my comments will mostly be on the discussion and interpretation of the findings.

¹Different to flood insurance, which is *mostly/somewhat* voluntary in the U.S.

Comment #1: Probability Distribution of Disasters

- Many reasons about for underinsurance against *coverage neglect* are considered.
 - Failure to update coverage over time.
 - Shifting risk to mortgage lenders.
 - Adverse selection in coverage limits.
- But insurance selection is a vastly complicated task.
 - Hence, probably why homeowners insurance is mandatory to obtain.
- The paper focuses on rebuilding costs and insurance coverage.
 - However, policyholders likely consider probability of disasters as well.
- Moreover, homeowners insurance covers a myriad of different sources of loss.
 - Fire, theft, riots, floods (but only internal), etc.

Comment #1: Probability Distribution of Disasters

- Policyholders' probability distributions are *unobserved*, but I think the paper should not be silent on this issue.
- Policyholders may not be as underinsured if these events are very rare.
- Or at the very least, the reason for underinsurance may not be coverage neglect.
 - But simply inaccurate/different expectations about disasters.

Comment #1: Probability Distribution of Disasters

- On the flipside, policyholders may be more underinsured that the paper documents as climate change worsens.
- * **Suggestion:** The model should include some aspect of disaster expectations.
 - Estimate “*implied*” probability distributions of disasters, given the insurance policies observed.
- These implied probabilities can then be compared against:
 - Observed statistics of past disasters.
 - Future projections/probabilities of such disasters.
- Policy recommendations should be based on the root cause of coverage neglect.

Comment #1: Probability Distribution of Disasters

- Similarly, you may underinsure if the benefits of insurance won't accrue over your tenure (Hovekamp and Wagner, 2023).
- There is a small section on adverse selection in the paper:
 - Homes with wood frames were much more likely to burn, but didn't have more coverage.
 - Really makes you think that owners may not have priced in wildfires.
- Homeowners insurance covers many other events than fires.
 - Unclear whether fires are the main determinant in coverage selection for these households.
- The interplay between expected probabilities of disasters and expected tenure may be more important.

Comment #2: Unobserved Costs of Insurance

- The nature of the setting necessitates measuring/approximating many variables.
- In fairness, the paper does an exceedingly good job for many of these variables.
- However, unobserved costs of insurance can lead to underinsurance.
 - If *deductibles* are higher when coverage increases, households may choose lower coverage.
 - If *payout claims* are *difficult to issue* or take a *long time to finalize*, insurance may be seen as *inefficient*.
- Some of such costs are acknowledged in the paper, but it would be nice to see anecdotal evidence to put how they important they may be into perspective.

Comment #3: Opportunity Costs of “Full” Insurance

- What is the opportunity cost of full insurance?
- Seems not so important at first glance (average annual premium $\approx$ \$3,000).
 - If these events are indeed rare, then households may find paying the minimum amount possible to be the optimal choice.
- In other types of insurance, households choose to not get insurance if voluntary (e.g., flood insurance) or get plans with low premiums and high deductibles.
- **Suggestion:** Fleshing out the disaster history of the houses that were destroyed in Marshall Fire may provide some insight.
 - Has it been *historically* the rational choice to be “underinsured”?
 - How much does a sale alleviate low coverage ratio after this Fire?²

²Since you have data on sales, I reckon you could have a discussion on this.

Comment #4: Identification

- The instrument assumes that recovery outcomes are uncorrelated with the choice of insurer, except through differences in their average coverage ratios.
 - This is a *strong* assumption.
- Table 3 shows us that Avg. Coverage Ratio (LOO) is *strongly positively* associated with the number of policyholders by that insurer.
- The number of policyholders by an insurer may be proxying “insurer quality”.
- **Suggestion:** Since the number of insurers in the data is low, you could use this to your advantage and collect additional insurer-level data.
 - This can help eliminate at least some alternative stories about the instrument.
 - If coverage *is* determined by insurer quality, perhaps regulation on insurers is required.

Other Comments

- Table 9, column 3 shows buyers are less likely to choose insurers with cheaper rates per unit of coverage. Seems bizarre and some discussion on this would be nice.
- Table A1 shows the determinants of *Coverage Ratio* and one of the independent variables is *Replacement Cost*. Isn't *Replacement Cost* in the denominator of *Coverage Ratio*?
 - Premiums being unrelated to coverage ratio is also somewhat puzzling, but I suppose this is rather taken to be a finding.
- In table 3, should you use the LOO average coverage ratio as the outcome variable? Unlike table 2, table 3 has an independent variable at the insurer level.
- I think OLS version of table 4 would also be nice to see in the Appendix.

Conclusion

- The paper is an impressive data collection exercise with careful analysis.
- I tried to make suggestions to make the paper be richer by being bolder and getting after the root causes of documented patterns.
 - I do not doubt there is coverage neglect, but *why* is there coverage neglect?
- The paper has potential to make genuinely impactful policy recommendations.
- I hope to see it clear that bar in its next iteration, but I'm sure it will find a nice place in top journals even as it is.

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