"Picking Up the PACE: Loans for Residential Climate-Proofing" by Bellon, LaPoint, Mazzola, and Xu

Discussion by Christophe Spaenjers (CU Boulder)

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Big picture

- Potential reasons for energy efficiency gap in housing market:
  - Attitudes towards energy efficiency and climate change
  - Uncertainty about future energy costs, technologies, regulation
  - Lack of information about property's efficiency and/or potential gains
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- Still much to learn both about reasons for energy efficiency gap and, relatedly, about the effectiveness of different policies
- This paper: detailed analysis of costs vs. benefits of a lending program
  - Not only finance projects that increase energy efficiency but also climate-proofing

Main findings

1. PACE loan take-up higher (i) where historically high property damages and (ii) after natural disasters
2. PACE-financed properties experience significant increase in value
3. Tax delinquency rates increase, maybe especially for older homeowners without an escrow account
4. Private mortgage approvals increase in counties that have opted into the program

Warming up with some institutional questions

- Only 71% of permits approved on PACE properties are "green projects": what is other 29%?
- Why are interest rates so high if these loans are low-risk? How are rates set?

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- Maybe worth discussing more which results are robust to both types of investments (e.g., price capitalization results)

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  - Salience vs. need for renovations
  - Historical damages vs. Hurricane Irma
  - Energy efficiency vs. climate resiliency
- Some ideas:
  - Use SHELDUS data to split up disasters with vs. without damage to isolate channel?
  - More energy-efficiency investments if more disasters that can be linked to climate change?

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- DiD strategy: compare prices of treated (PACE properties) to not-yet-treated
  - What if households owning properties that are better on unobservable dimensions apply for PACE loans earlier?
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- Conditional on selling, PACE properties only held for 1.5 years after loan? Sources of selection bias?

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- Does estimated increase in overall approval rates make sense numerically given (expected) take-up % of PACE, (expected) increase in collateral values, etc.?
  - Not obvious to me: for banks to increase overall approval rates, they would have to be convinced that many of their borrowers will take out a PACE loan?

Delinquency results and cost-benefit analysis

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  - If property values go up by much more than loan amount, why such an increase in delinquencies? Shouldn't households be able to get an additional line of financing (e.g., HELOC)?
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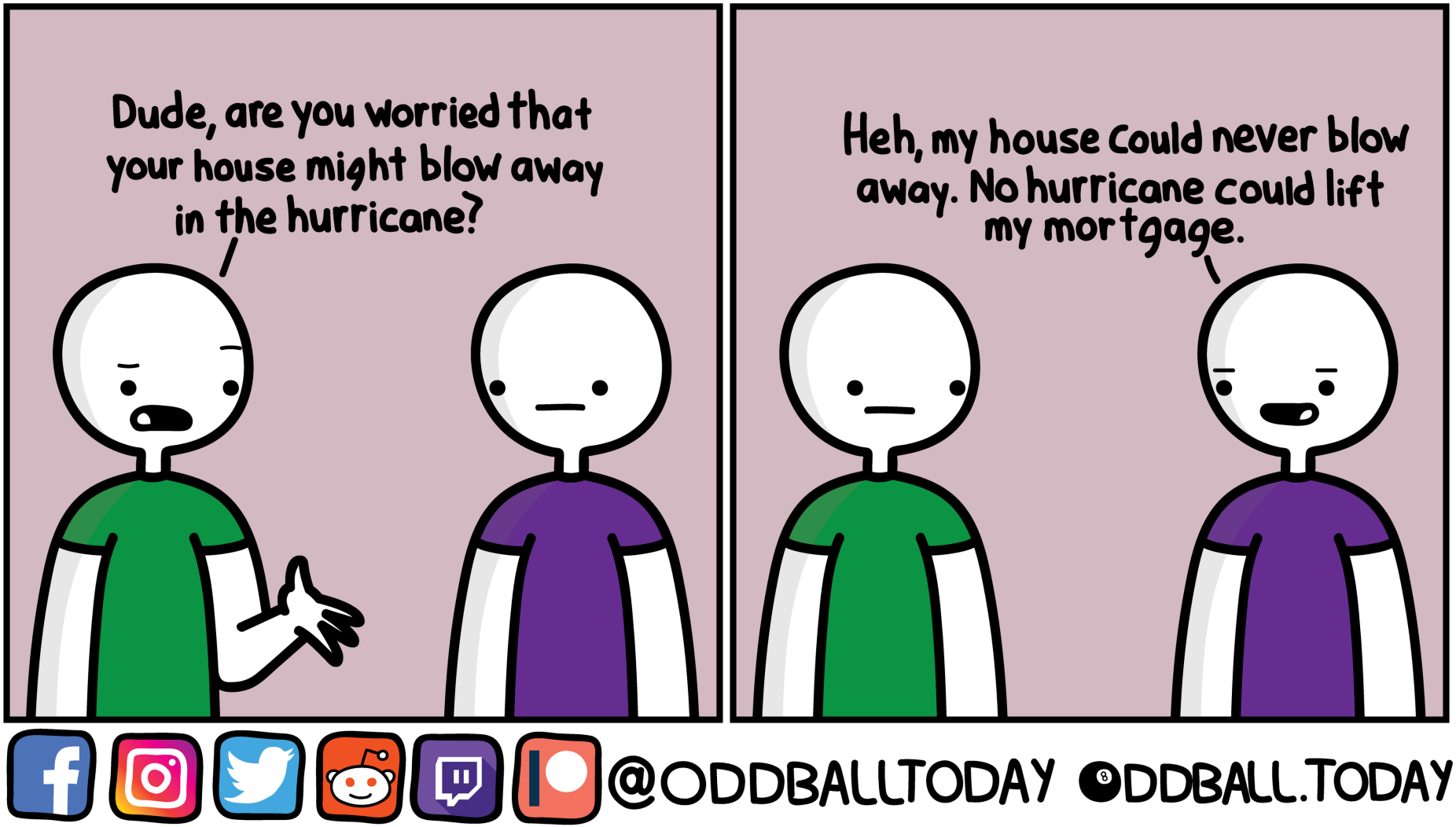
- Cost-benefit analysis:
  - Quite dependent on capitalization estimates?
  - Analysis ignores that people might stay put in places that are very exposed to climate disasters rather than move to less exposed areas?

Minor points

- I didn't find the escrow results mentioned in the intro and conclusion
- Consider clarifying:
  - What exactly is the goal of the analysis of PACE borrowers' permit decisions (section 4.1)?
  - What do we see on the y-axis in Figure 6?
    - Text writes that "dependent variable is the first year the PACE loan is taken out" but seems inconsistent with figure itself
  - I assume that Figure 7 is estimated only using counties in which PACE was available over this time period?

Great work!


Dude, are you worried that your house might blow away in the hurricane?
Heh, my house could never blow away. No hurricane could lift my mortgage.
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