

# Bans on rebuilding in disaster-prone areas ignore homeowners preferences—raising costs works better

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As <u>California's wildfire season intensifies</u>, a growing number of residents in the state <u>want to ban people</u> from building in areas at



greatest risk.

That's because taxpayers bear the burden of protecting homes in dangerous areas when fire breaks out—and <u>they often help foot the bill</u> when it's time to rebuild. A recent assessment showed that <u>1 in 4</u> <u>Californians</u> live in an area at "high risk" of wildfire. And people tend to want to rebuild in the same spot that was hit by a disaster.

As a <u>behavioral economist who studies the psychology of decision-</u> <u>making</u>, I try to understand people's motivations before taking a position in a policy debate. I believe there's a better way for policymakers to achieve the same goal of getting people to avoid building in disasterprone areas without forcing people from their homes.

# A bird in the hand

In <u>behavioral economics</u>, there's something known as the endowment effect.

The endowment effect is basically the idea that people overvalue things they already own. And it helps explain the common and seemingly irrational desire of many homeowners to rebuild in places at great risk of wildfire, hurricanes or other <u>natural disasters</u>.

Behavioral economists Daniel Kahneman, Jack Knetsch and Richard Thaler were the first to explain this effect in 1990. They conducted an experiment in which half their subjects were given a coffee mug. They asked those subjects to name the lowest price at which they'd be willing to sell their mug. They then asked those without mugs how much they would be willing to pay buy one.

Since the subjects who received a mug were randomly chosen, there should have been little difference between the selling and buying prices,



which represent how each group valued the mug.

Instead, the researchers discovered a significant gap between two groups. The median selling price, representing the people who already had mugs, was US\$5.79, more than double the \$2.25 people were willing to pay. The conclusion is that someone with an item values it a lot more than someone who does not have it regardless of their actual preferences.

### **Pigouvian taxes**

In the context of California wildfires or other natural <u>disasters</u>, the endowment effect says that someone who owns a damaged or destroyed home will have a strong preference for rebuilding over moving somewhere else.

To ignore this preference by putting an outright ban on rebuilding disregards the wishes of these people. It also squanders the potential impact of increased <u>economic activity</u> as a result of the new construction. Areas recovering from disaster are in great need of this kind of stimulus.

At the same time, I don't think we should stand idly by and watch people continue to build homes in disaster zones. Such an approach creates an unfair burden for the state, which spends a significant amount of money providing disaster relief to affected areas.

Rather, my view—which is <u>common among economists</u> – is that the best policy when an activity imposes costs on society is to create a pricing system that pushes those costs back onto the individuals responsible.

With fuel for gas-guzzling vehicles, for example, the best policy is a tax equal to the cost that the pollution causes for society—this is how carbon pricing works. Such taxes are called <u>Pigouvian taxes</u> after economist



Arthur Pigou, who developed the concept of "externalities"—or the unrelated side effects of some economic activity.

In the case of disaster zones, municipal property taxes need to reflect the additional costs of public services like disaster relief that are often provided by state and federal authorities. Governments can then use the extra revenue to finance disaster mitigation efforts or other initiatives in the public interest.

The key thing is that the tax creates a disincentive to engage in the undesirable activity short of an outright ban. And <u>research shows</u> these kinds of taxes are effective.

# A softer approach

A challenge with the implementation of such a policy is that it is hard to assess the costs of relief in advance.

However, the <u>insurance industry is very good</u> at risk and cost assessment, and governments can use their methods to achieve the right pricing mechanism. The additional property taxes that would result would make living in disaster-prone areas more costly—and some people would certainly be willing to bear this burden—but this is what society needs in order to reduce the activity.

This softer approach, which could achieve the same ends as a heavyhanded ban, is a much better way to create a financial incentive for people to avoid rebuilding in dangerous parts of the country—saving taxpayer dollars and avoiding the inconvenience of preemptive blackouts like <u>we've seen recently in California</u>.

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