*(This post is part of a series on the issue of climate change and insurance that my colleague Ted Lamm and I are writing, inspired by a symposium that the law schools co-organized with the California Department of Insurance earlier this year. You can find more information on the symposium* ***here****. Ted's prior related post is* ***here***, and my prior post—an overview of the interplay between climate change and insurance underwriting—is **here**.)

Californians in high-risk areas are increasingly aware of climate-related risks like sea-level rise and increasingly catastrophic wildfire. This awareness is generating understandable concern, some relating to insurance availability and affordability. I've read many social media posts and other discussions where people express worry that insurance may become unaffordable or unavailable in high-risk areas, making it impossible for homeowners to obtain mortgages. I'm going to briefly explain some of the ways to look at that question here—but only in the context of wildfire risks, since flood risks are covered in a very different way.

There are many reasons for homeowners to worry about living in areas at high risk of wildfire—especially in the wildland-urban interface, which is an ill-defined and expanding area of the state. The combination of climate change, land and vegetation management practices, and our housing and building patterns and practices is increasing both the human losses associated with wildfires and the uncertainties surrounding future risk from those fires. Increasingly, we are understanding that fire will be part of our future and we have to live with its impacts. Insurance costs have been rising in some places as a result of the increased risk and uncertanty. But insurance underwriting isn't perfect, and can unduly incentivize building in risky places, and fail to take into account important individual and community-wide planning that reduces risk.

Some context: insurance is highly regulated in every state. Regulators' goals include both insurance affordability and the solvency of insurers. In California, homeowners' insurance is regulated by the California Department of Insurance, overseen by our elected Insurance Commissioner (currently Ricardo Lara). And insurance rates are constrained by a ballot initiative, Proposition 103, that passed in 1988. Under Proposition 103, rates must be approved by the Department of Insurance before they are set, and private parties and public interest organizations may intervene in the rate-setting proceedings.

Ultimately, the Insurance Commissioner must evaluate whether any requested change in rates is "excessive, inadequate or unfairly discriminatory" based on

prescribed factors, which include assessment of risk by insurers through modeling. Proposition 103 provides a check against price-gouging by insurers by limiting their rates and allowing public engagement. At the same time, the current system—including the particular ways insurers model risk, as well as other factors—may yield rates that do not reflect the risks well. And at the same time, as I noted in my prior post, a single high-magnitude event with multiple correlated losses can be devastating to the ability of insurers to pay claims, creating challenges to insurability at any rate level.

A report issued by the Department of Insurance last year found that:

- Individual homeowners' efforts to include defensible space (brush clearance) and other home fortification and construction measures are not considered in the current models.
- Community mitigation efforts are not considered in the models. The adherence to more stringent building codes in wildfire-prone areas, the use of firebreaks, and fire-watch efforts are all factors that can reduce individual exposure to wildfire loss.
- Certain issues with regard to access are not considered in the models. No consideration is given to road width, shoulders, and availability of multiple access routes.

So while some homeowners may be paying premiums too low to reflect actual risks, others are facing significant rate increases that may not reflect, and thus not incentivize, community and individual mitigation measures.

Insurers also generally have the option to withdraw from insurance markets, and this has happened in California as a result of wildfire risk. This is a common strategy in the face of major, unanticipated losses, though it is not a long-term fix for the insurance sector since insuring risk is a key part of their business model. As I noted in my prior post, withdrawal has happened after major disasters like Hurricane Andrew in Florida. Insurers also may decline to write policies covering specific risks (like flood risks, not covered in standard homeowners' insurance policies nationally for many decades, and earthquake risks, not covered in standard policies in California after the 1994 Northridge earthquake). This is potentially of great concern to homeowners living in high-risk areas, where failure to insure could, in theory, make it impossible to purchase a house (since having homeowners' insurance is a requirement to obtain a federally-backed mortgage). A new law, AB 1816, requires insurers to provide notice before declining to renew policies in these situations,

among other modest reforms.

It's also important to understand that insurers offload much of their risk to reinsurers, who provide "insurance for insurance companies." They effectively insure the "first-line" insurance companies against catastrophic risks. So it's usually the reinsurers that bear the bulk of insured catastrophe losses, and it is reinsurers' decisions about the availability and terms of reinsurance that ultimately drive the availability of insurance to policyholders.

But that's not the end of the story, at all. Each state where insurance limitations affect homeowners' markets has a state risk pool, or residual plan, that acts as an insurer of last resort. Here in California, it's the FairPlan, which will insure households—with less robust insurance policies—where multiple insurers decline coverage. This means that no one will go without insurance, and no one is truly at risk of having lack of insurance prevent them from obtaining a mortgage. At the same time, those risk pools may suffer from some of the same difficult dynamics as traditional insurance, meaning that a major catastrophe can make the risk pool insolvent, requiring government subsidies to insure the risks.

Insurance may also be available outside the regulated insurance market. Insurance carriers regulated by the Department of Insurance, or "admitted" carriers, make up most of the private insurance market. But non-admitted or "surplus" carriers, insurers that operate outside the state-regulated market, may also write insurance policies in California. These carriers' policies come with disclaimers and, often, higher prices and less advantageous terms to policyholders. But they enable individuals and businesses to purchase insurance, for a price, where it might not otherwise be available.

Rates in both private and public insurance markets often don't properly reflect catastrophe risk, in the end. This is because of a combination of factors, including the potential for massive correlated catastrophe claims all at once in one location; lack of data reflecting future conditions under a changing climate; and the understandable priority that insurance be available, affordable, and equitably priced, in an industry with a checkered history dealing with policyholders and in the context of a lack of affordable housing.

Insurers have made clear that more robust information and analysis about emerging risks, and evidence of community-scale risk mitigation planning, are crucial. The value of taking specific community-wide measures to make

communities more resilient to fire risk, or maintaining defensible space around developments or on individual properties in the wildland-urban interface, can be quantified and considered. Over time, insurance may eventually serve as a tool to change where we build and maintain housing as well—a step that should be paired with more equitable housing policies that ensure we don’t exacerbate social problems as we address physical risks. But we’re not nearly there yet.