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The Impact of Climate Shocks on Homeowners' Insurance: A Legal, Economic, and Public Policy Analysis

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THE IMPACT OF CLIMATE SHOCKS ON HOMEOWNERS' INSURANCE: A LEGAL, ECONOMIC, AND PUBLIC POLICY ANALYSIS

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Abstract: In the past decade, climate shocks have ravaged the United States at unprecedented levels. This paper addresses one of the first victims: homeowners. Given the increasing frequency and severity of these shocks, insurance companies have begun charging sky-high premiums, or in a rising number of cases, completely dropping policies in high-risk states. Consequently, public policy has shifted, leaving homeowners in certain areas to choose between two options: insurers of last resort, such as California's FAIR Plan, or non-admitted insurance. Adding to this problem are the economic implications, with several experts citing concerns that the cascading effects could prove to be worse than the 2007/2008 financial crisis. Further, there is the legal aspect, with legislation, regulation, and litigation all playing a role. Finally, while a variety of solutions have been proposed to address this crisis, none have proven completely effective. Thus, to prevent additional devastation, the paper offers two recommendations on how society should proceed.

Introduction

Today, severe climate shocks, including wildfires, hurricanes, and tornadoes, are ravaging the United States in unprecedented numbers, with states like California, Florida, and Louisiana bearing the brunt of the effects. According to the National Oceanic & Atmospheric Administration, the United States now averages twenty-three weather and climate disasters that each exceed \$1 billion in damages per year.⁵⁸ In 2024 alone, there were twenty-seven such events, just one shy of the record-setting twenty-eight events that took place in 2023 (Exhibit 1).⁵⁸ Examples from 2024 include Hurricane Helene, which struck Florida, Georgia, South

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Carolina, North Carolina, and Tennessee, and caused approximately \$79.6 billion in damages, as well as Hurricane Milton, which made landfall on Florida and resulted in an estimated \$34.3 billion in damages.^{52,58} Earlier this year, the Los Angeles Wildfires, which include the Palisades Fire and the Eaton Fire, devastated California.³² Damages are expected to cost between \$28 billion and \$53.8 billion.³² This can all be compared to the 1980s, where the United States only averaged three climate disasters that exceeded \$1 billion throughout the entire decade.⁵⁸

The Problem

Indeed, one of the most notable effects of these climate shocks can be seen in the market for homeowners' insurance. As of the end of 2024, insured losses from climate-related disasters in the United States hit \$112.7 billion, representing an increase of 36% from the year prior.²¹ Consequently, in disaster-prone areas of the country, specifically coastal states and/or states at high risk of wildfires, traditional insurers have significantly raised premiums or dropped (i.e., not renewed) policies.⁶³ In Florida, between 2020 and 2023, average premiums in the state increased by 40% (adjusted for inflation) to \$3,300.¹² During a similar time frame (2018 to 2023), Florida's non-renewal rate increased by 280%.⁶³ This is not coincidental; according to a report published by the Senate Budget Committee in December 2024, there is a positive correlation between premiums and non-renewal rates (Exhibit 2).⁶³ In other words, areas with higher premiums are more likely to experience higher non-renewal rates.⁶³

It's important to note, however, that such non-renewal rate increases are not limited to Florida. As highlighted in Exhibits 3 and 4, between 2018 and 2023, non-renewal rates skyrocketed in states such as Louisiana, Hawaii, South Carolina, and Oklahoma.⁶³ These states, perhaps not surprisingly, have higher climate risk, another factor that correlates with higher non-renewal rates.⁶² Zooming in on the county level, over 200 saw their non-renewal rate triple

or more between 2018 and 2023, with some experiencing increases larger than 500% (Exhibit 5).^{25,63} To highlight specific examples of non-renewals, one can examine the insurance market in California and Louisiana. In 2024, less than one year after State Farm, California's largest property insurer, stopped accepting new applications for homeowners insurance in the state, the company ceased to renew 30,000 policies.^{8,53} Nationwide, Trans Pacific, and The Hartford, among others, followed suit.¹⁷ Regarding Louisiana, between 2021 and 2023, at least twenty insurance companies exited the state's market.⁶³

All of this taken together highlights a harsh reality: as a result of climate shocks, the market for homeowners' insurance in high-risk areas is breaking down, leaving many in the dust. Unfortunately, however, the effects do not stop here. Instead, they extend more broadly to public policy, the economy, and the legal industry.

History of Homeowners Insurance

Before diving into the effects of premium increases and higher non-renewal rates on public policy, the economy, and the legal industry, it is important to understand the background behind homeowners insurance, including when and why it was created, how it is regulated, and how it has evolved.

Creation

The first homeowners insurance policy was introduced in September of 1950 by the Insurance Company of North America in response to the post-WWII housing boom.^{16,31} This policy, unlike previous ones, offered a package that covered homes against losses caused by fire, smoke, lightning, wind, hail, explosions, theft, and vandalism.³¹ Such a policy was widely celebrated among homeowners, as it provided comprehensive coverage and “cost 20% less than the combined premiums on separate policies that [they] had to buy for similar coverage.”^{16,31}

Regulation

Notably, homeowners' insurance is regulated by the states, not the federal government.²⁴ In fact, even small actions by the Treasury Department, such as attempts to gather data on the market, have received pushback from state regulators.²⁴ Given this structure, the responsibility of approving or rejecting rate increases ultimately lies with the states.²⁴

Present Day

Today, homeowners' insurance policies provide much of the same coverage as the first one did back in 1950. One main difference, however, is the types of policies offered. Currently, there are five to choose from (excluding renters insurance, condo insurance, and mobile home insurance), all with differing amounts of coverage (Exhibit 6).⁴² The HO-1 policy offers the least amount of coverage and has limited availability in most states, as mortgages often require higher levels of protection.⁴² Next is the HO-2 policy, which builds on HO-1.⁴² Nevertheless, it is the HO-3 policy that is most common.⁴² This policy provides coverage for a house and personal belongings, in addition to liability, medical payments to others, and supplemental living expenses.⁴² Additionally, there is the HO-5 policy, which offers the highest level of protection.⁴² In contrast to the HO-3 policy, HO-5 pays out replacement cost value (as opposed to actual cash value).⁴² Replacement cost value involves replacing damaged items with new and similar versions, while actual cash value involves receiving the depreciated cash value of damaged items.⁴² Also, unlike the HO-3 policy, HO-5 covers personal belongings if they are damaged, stolen, lost, or misplaced (as opposed to just damaged or stolen).⁴² Finally, the HO-8 policy applies to historic homes and registered landmarks.⁴² While it offers less protection than the HO-3 and HO-5 policies, coverage for personal belongings, liability, medical payments to others, and supplemental living expenses is still included.⁴²

Public Policy Analysis

Given the rapid rise of both premiums and non-renewal rates, homeowners in disaster-prone areas have flocked, in record numbers, to insurers of last resort and lightly regulated (i.e., non-admitted) home insurance. Both options present their own issues.

Insurers of Last Resort

Insurers of last resort, such as California’s FAIR Plan and Florida’s Citizens Property Insurance Corporation, have become an increasingly popular option among homeowners because of their ability to provide coverage in high-risk areas when traditional insurance companies will not.^{7,46} Unlike private insurance, they are backed by their respective states and meant to function as a temporary safety net until private insurance coverage becomes available.¹ Despite their temporary nature, homeowners have not been deterred from both enrolling and remaining enrolled in these policies, as such plans are often the only option. In fact, between 2018 and 2023, insurers of last resort plans more than doubled their market share, with Florida’s Citizen Plan making its way onto the top ten list of largest homeowner insurers in 2023.^{27,35}

To further analyze the market for insurers of last resort, one can turn to California’s FAIR Plan. Established by statute in 1968, the FAIR Plan provides “basic fire insurance coverage to high-risk properties that traditional insurance carriers refuse to cover.”^{1,39} The FAIR Plan is structured as a “pool” of all licensed property insurers in California, each of which contributes to its profits, losses, and expenses in a manner proportional to their market share in the state.¹ The Plan is not a state agency or a public entity, meaning it does not receive public or taxpayer funding.¹ In regard to its current exposure, the statistics are eye-opening. As of March 2025, “the FAIR Plan’s total exposure is \$599 billion, reflecting a 31% increase since September 2024 and a 259% increase since September 2021” (Exhibit 7).³⁶ The FAIR Plan’s high monetary

exposure highlights the first problem associated with insurers of last resort: they are incredibly risky. In fact, according to a Bloomberg report, “out of 36 [insurers of last resort] that offer coverage for natural catastrophes, 21 don’t explicitly detail how they’d pay deficits.”³⁵ This lack of transparency calls into question whether insurers of last resort can remain solvent in the face of additional climate shocks.

It would be remiss not to consider two additional problems with insurers of last resort, that is, their high premiums and basic coverage.⁴⁷ To illustrate this issue, one can look no further than Colorado’s FAIR Plan, which officially launched in April of 2025 and provides basic property insurance.^{18,50} The Plan pays out actual cash value and does not cover liability, content replacement, or additional living expenses in the event a resident is displaced.^{18,50} Its website reads, “FAIR Plan policies come with substantially higher premiums and offer more limited coverage...The Colorado FAIR Plan is the most expensive way to insure a property...standard insurance remains the most cost-effective option for property insurance in nearly all cases.”¹⁴ As discussed above, however, the “most cost-effective option” remains unavailable for many homeowners. As a result, they are left with higher premiums and insufficient coverage.

Non-Admitted Homeowners Insurance

After accounting for insurers of last resort, there remains one other option for residents in high-risk areas: non-admitted homeowners insurance, also known as lightly regulated insurance.³ While originally designed to provide coverage for “properties that face unique and relatively rare risks” in the commercial real estate industry, such as a fireworks factory or a nuclear waste project, lightly regulated home insurance has expanded its reach.³ For instance, the “number of non-admitted homeowners policies in Florida grew 73%, to more than 92,000, in the 14-year period that ended in 2023.”³ In some counties, however, the number of policies grew upwards of

250%, with Okeechobee County experiencing the highest increase at 1,009% (Exhibit 8).³ Over the same period, California saw transactions in its non-admitted market increase by nearly 200%.³ By and large, this indicates that “regular homes in some parts of the country are now viewed by the insurance industry as the equivalent of a fireworks factory.”³

As with insurers of last resort, lightly regulated home insurance has a host of issues, the main one being its extremely high risk. First, non-admitted insurance is not regulated by the states and, thus, not subject to the same quality monitoring and contract review as traditional insurance or insurers of last resort.³ This gives them “more flexibility to raise prices and tailor coverage.”³ Indeed, this flexibility, if it hasn’t already, will lead them to take advantage of policyholders. If such flexibility is left unchecked, it will only grow larger, causing these companies to inflict even greater harm on those that they were meant to help.

Next, perhaps the largest weakness for the non-admitted insurance market, and what distinguishes it from all other options, is its lack of a guaranty fund.³ This means that if a non-admitted insurance company were to go bankrupt, policyholders would never have their claims paid, ultimately leaving them “on their own to replace everything.”³ Such a possibility becomes even more scary when considering the financial vulnerability of non-admitted insurance companies, which can be analyzed using a metric known as the risk-based capital ratio.³ This ratio, which is used by regulators to evaluate an insurer’s financial health, “demonstrates whether a company has enough money to meet potential financial obligations, like claims after a big storm.”³ A low ratio, which is common among non-admitted insurers, indicates that “the company might not have enough capital on hand considering the risk they’ve absorbed.”³ Kin, Topa, and Orion180, three non-admitted insurers that were part of an analysis conducted by

Bloomberg in 2023, had risk-based capital ratios of 3.3, 3.1, and 1.5, respectively.³ For reference, the median risk-based capital ratio of insurance companies in 2023 was 10.97.³

Moreover, a handful of companies that issue non-admitted policies have not obtained ratings from the insurance industry's largest and most respected rating agency, AM Best.³ Instead, these companies rely on ratings from Demotech, an agency whose ratings "are viewed much more skeptically by brokers and insurance experts because they rarely hand out anything other than an A."³ An A, according to Demotech's website, indicates that the insurer has "exceptional financial stability."²² As explained above, however, this is not often the case. For example, Kin and Orion180, two non-admitted insurers discussed previously, received an A from Demotech.³ This came despite their low risk-based capital ratio of 3.3 and 1.5, respectively. Last but not least is a statistic that pertains to Florida. In 2021 and 2022, "seven companies that had A ratings from Demotech went insolvent," a fact which further decreases the rating agency's credibility.³

Economic Analysis

Further complicating this matter are its economic implications. According to the Senate Budget Committee report from December 2024, many experts are comparing the "climate-driven insurance crisis" to the 2007/2008 financial crisis, even citing concerns that it may be worse.⁶³ This is primarily due to its potential effects on the real estate market, household wealth, tax revenues, and ultimately, communities. Add this to its current effects on insurance companies.

As previously discussed, the upsurge in climate shocks has led many insurers to drop homeowner policies. Without homeowners insurance, however, one cannot obtain a mortgage, ordinarily a prerequisite for purchasing and retaining a home.⁴⁶ As a result, there will likely be fewer home buyers in the market, causing property values to fall.⁴⁶ In fact, one estimate puts the

“potential reduction in unadjusted real estate values over the next 30 years due to climate-related risks” at \$1.47 trillion.¹⁹ The resulting ripple effects could be catastrophic.

According to Sean Beckett, the former Chief Economist of Freddie Mac, “A large share of homeowners’ wealth is locked up in the equity in their homes.”⁵ Thus, “if homes become uninsurable and unmarketable, [their values] will plummet,” as will household wealth.⁵ Beckett previously warned that, “the economic losses and social disruption may happen gradually, but they are likely to be greater in total than those experienced in the [2007/2008 financial crisis].”⁶³ This is because the current outlook makes an asset value recovery similar to that experienced post-2008 quite unlikely, as a “home too endangered to insure will only become more endangered,” causing its value to fall even further.⁶³

Indeed, falling property values can also result in smaller property tax revenues.²⁵ This leaves towns with less money to fund critical resources such as schools, libraries, police and fire departments, and road construction and repairs.³⁴ Thus, it is only a matter of time before communities begin to feel strained.

Lastly comes the effects on insurance companies. While dropping homeowners insurance coverage in areas susceptible to climate shocks may seem grossly unfair and wrong to some, others argue it is necessary if private insurers want to remain solvent. The impending solvency crisis can be illustrated using State Farm as an example. In February 2025 alone, State Farm had to pay out approximately \$1.75 billion to claims related to the Los Angeles wildfires.⁴⁷ This came after the company’s 2023 warning to California officials that they were struggling financially, evidenced by their rating downgrade the same year.⁴⁷ As a result of the wildfires, State Farm estimates its direct losses to be \$7.6 billion, \$612 million of which will be retained (after accounting for reinsurance and FAIR Plan contribution).⁶² The company’s surplus, “which

stood at \$1.04 billion at the end of 2024,” is forecasted to decrease by \$400 million.⁶² Looking back on the past decade, its surplus has declined by roughly \$5 billion.⁴⁷ Needless to say, this surplus, given the current outlook, will not last much longer. Consequently, State Farm, in addition to many other insurance companies, is going to be scrambling for funds, with some likely falling into bankruptcy.

Legal Analysis

Adding even more complexity to this issue is the legal perspective, including legislation, regulation, and litigation.

Legislation

The effects of legislation on the insurance industry are significant. Continuing with California as a case for analysis highlights this point. In 1988, California voters passed Proposition 103, also known as the Insurance Rate Reduction and Reform Act.⁴¹ Its purpose was to “protect consumers from arbitrary insurance rates and practices, to encourage a competitive marketplace, and to ensure that insurance is fair, available, and affordable for all Californians.”⁵¹

Although supporters of Proposition 103 call attention to the estimated \$150 billion in premiums it has saved Californians over the last 25 years, opponents emphasize the myriad of problems it has created, the first one being the mass exodus of insurers from California’s market.³⁵ Opponents argue that this exodus is due to the limitations that Proposition 103 places on insurers’ ability to price their homeowners insurance policies in a way that “appropriately [accounts] for the risks [they] are protecting against.”³⁵ The data speaks for itself: An analysis conducted by the California governor’s office in 2024 found that “the average policy for a \$300,000 home in California cost \$1,405 a year, compared with \$3,851 in Texas and \$4,419 in Florida” (two states that also face high climate-related risks).⁵⁷ It also sits below the national

average of \$2,601.²⁹ Further, when considering the massive losses experienced by insurers, due in large part to the restrictions imposed by Proposition 103, the reason for their exodus becomes even more clear: “In 2017 and 2018 alone, California homeowners insurers posted a combined underwriting loss of \$20 billion, more than double the total combined underwriting profit of \$10 billion that the state’s homeowners insurers had generated from 1991 to 2016.”⁴¹

Undoubtedly, the limits imposed by Proposition 103 also send the wrong signal to both homebuyers and contractors. As a spokesperson for the American Property Casualty Insurance Corporation put it, “Years of restrictions on rate-making created an artificially suppressed market that incentivized continued population growth in areas at high risk for wildfire and then reduced consumer options for insurance.”⁵⁷ Certainly, without a mechanism to change its course of direction, the market will maintain its troublesome path and continue to mislead its constituents along the way.

Finally, opponents of Proposition 103 cite the problems associated with its “rate-intervenor system.”⁴¹ Put simply, this system kicks in for public hearings, which Proposition 103 makes mandatory when insurance companies propose a rate hike of more than 6.9%.⁴¹ Ultimately, it allows public intervenors to “file objections on behalf of consumers, with fees to be paid by the applicant insurance company.”⁴¹ As evidenced by the data, the results of this system are far from efficient.⁴¹ Aside from the fact that insurance companies pass on public intervenor fees to policyholders, the intervenor process has a “five-year average filing delay of 236 days for homeowners insurance.”⁴¹ Thus, insurers must endure inadequate pricing structures for at least six months, causing losses to grow and making an exit from the state’s market all the more favorable.

Regulation

As previously mentioned, traditional homeowners insurance is regulated by a state's insurance commissioner, a figure whose decisions carry lots of weight for policyholders and insurance companies alike. Given the ongoing media coverage of California's insurance market, this state will remain the subject of analysis.

Starting with last year (2024), the California Department of Insurance approved Allstate's request to raise its average home insurance premiums by 34%, a change that affected approximately 350,000 policyholders.^{38,48} Currently, State Farm is awaiting approval on its emergency request to raise premiums by 17%, a move they argue is required for them to stay afloat in the wake of the Los Angeles wildfires.⁵³ Indeed, state officials seem supportive of this move, as remarks from Nikki Kennedy, an attorney for the California Department of Insurance, highlight.⁵³ In a recent hearing, Kennedy ardently advocated for State Farm, warning the judge presiding over the case that "[California is] on the Titanic, and [sees] the iceberg. Now is not the time to argue about where to put the deck chairs. There is still time, your honor, to turn this ship around. If we don't, over three million Californians are going in the water. And there are not enough lifeboats."⁵³ While rate hikes do not bode well for the finances of policyholders, they are necessary to keep insurers solvent, as State Farm's case demonstrates.

It must be noted, however, that state regulators must consider the interests of policyholders as well. Raising rates to exorbitant levels, while beneficial for insurance companies, has an adverse impact on policyholders. With this in mind, it is important to gather context on State Farm's current proposed rate increase of 17%. In June 2023, State Farm requested a premium rate hike of 30% for its home insurance policies in California.⁵³ Nonetheless, after the Los Angeles wildfires, an event that certainly made the company's financial situation worse, State Farm lowered its request to a 22% increase.⁵³ Then, after state

regulators required the company to justify why such a rate increase was necessary, State Farm lowered its request to 17%.^{28,53} Surely, after taking context into account, it appears that state regulators are handling the opposing interests of insurance companies and policyholders in a responsible and equitable manner.

Litigation

Many California policyholders, however, do not support this view. Instead, a vast majority see state regulators in a negative light, an issue that has led to a host of lawsuits. For example, in February, California's insurance commissioner, Ricardo Lara, "approved the FAIR Plan's request to levy an assessment of \$1 billion on all its member insurers" so they could continue paying insurance claims related to the Los Angeles wildfires.⁵⁵ Yet, two months later, Consumer Watchdog (a nonprofit serving on behalf of the public's interest) sued Ricardo Lara and the California Department of Insurance, alleging their approval of such a request violated the Administrative Procedure Act (APA) and the state's insurance code.⁴⁴ The suit alleges that the violation of the APA stems from the absence of public input on Lara's decision.³⁷ The violation of the state's insurance code, Consumer Watchdog argues, stems from the decision by insurance companies to pass assessment costs onto policyholders.³⁷ To support their argument, Consumer Watchdog points to the section of the California FAIR Plan that reads, "...all member insurers must participate in the [plan's] expenses, profits, and losses..." in a manner proportional to their market share in the state.^{37,40}

By all means, policyholders have not limited their target to state regulators. Rather, they have also begun to go after insurers themselves. For instance, last month (April 2025), California homeowners affected by the Los Angeles wildfires accused over 300 insurance companies, including State Farm, Travelers, and Liberty Mutual, of violating the antitrust

provisions of California's Cartwright Act and Unfair Competition Law.⁴⁹ Regarding evidence, property owners point to how insurers "[conspired] to eliminate competition in the marketplace" by "restricting business in certain areas of the state."⁴⁹ This conspiracy, the plaintiffs argue, allowed insurers to reduce their risk of losses and "forced [homeowners] to obtain more expensive policies with less coverage through the California [FAIR] Plan."⁴⁹ As a remedy, homeowners are seeking "compensatory and treble damages, as well as an injunction preventing the insurers from engaging in anticompetitive behavior."⁴⁹

All in all, while the above examples are constrained to California, they beg the question of how this type of litigation will extend to other states. After all, it is not just California experiencing a homeowners insurance crisis from climate shocks (as previously noted). Thus, it is not a matter of if, but when, litigation in other parts of the country will start to pop up.

Potential Solutions & Their Shortfalls

To address the homeowners' insurance crisis as it relates to climate shocks, several states have tried their hand at different solutions.

First, one of the solutions, which has since been adopted by Louisiana, is to subsidize private insurance companies.²⁶ Although this keeps insurers from ceasing their operations in high-risk areas, it has a perverse effect on the real estate market. This is because such subsidies "dampen the price signal that potential homebuyers should receive about the true costs of living in harm's way."²⁷ Thus, without knowing the real price of their investment, people will continue to settle in the most susceptible parts of the country, an aspect that constitutes one of this issue's most pressing problems.

Another potential solution concerns insurance companies offering premium discounts or states offering tax breaks to homeowners who implement protection measures.¹⁵ These measures

could include, but are not limited to, fire-resistant siding, sprinkler systems, wind-resistant roofing, and hail-resistant shingles.^{15,27} One example of this solution in action can be seen in Florida. Here, some private insurance companies “are offering discounts to policyholders that fortify their homes against hurricane-force winds by strengthening and securing roofs and shutters and reinforcing garage doors.”¹⁵ In terms of tax breaks, the state offers “sales tax exemptions for impact-resistant windows, doors, and garage doors.”¹⁵ As for California, the state provides tax credits to “homeowners who make their homes more resistant to fires, wind, rain, and hail.”¹⁵

Undoubtedly, this solution appears to be a win-win: Policyholders get discounts and tax breaks for making their homes more resilient, and insurers reduce their risk of losses. This, however, does not capture the full picture. Importantly, one must consider the expenses associated with such measures. These expenses “may place additional financial burdens on policyholders over and above increasing insurance costs.”⁵⁵ Therefore, this solution could turn out to be a net negative for homeowners. Adding to this downside is the possibility that a policyholder could receive no benefits in return for protecting their home. For example, take Richard Zimmel, a homeowner in Silver City, New Mexico (an area at risk of wildfires).²⁵ Despite taking measures to curb his home’s forest fire risk, including trimming trees away from his house, covering his yard in gravel to stop flames from rushing onto his property, sheathing his house in fire-resistant stucco, and renovating his roof with noncombustible steel, Zimmel’s insurance company, Homesite, dropped coverage of his property in December of 2024.²⁵ As a result, Zimmel was forced to join the many others across the country searching for homeowners insurance.

A third solution might entail federal government intervention akin to that which took place in the 1960s. In 1968, Congress created the National Flood Insurance Program (NFIP) with the goal of addressing the lack of flood insurance availability in vulnerable areas.⁴⁶ This issue arose following the 1927 Mississippi flood, an event that resulted in major insurance companies withdrawing coverage from areas “exposed to frequent and correlated flood risk.”⁴⁶ Not long after its creation, the NFIP became “the nation’s primary, and effectively only, provider of residential flood insurance.”⁴⁶

Although the NFIP fills the coverage void for homeowners in flood-prone areas, it has various flaws. First, critics cite the NFIP’s role in creating moral hazard.⁴⁶ In this case, moral hazard “refers to the risks that someone becomes more inclined to take because they have reason to believe that an insurer will cover the costs of any damages.”⁴⁶ Put differently, the NFIP improperly incentivizes “development and growth in flood-exposed areas” by protecting in the event of serious water damage.⁴⁶ Further, critics highlight the NFIP’s financial instability, which can be attributed to its pricing structure.⁴⁶ In particular, NFIP’s policies charge substantially lower rates than they should, given their risk exposure.⁴⁶ Its pricing model even depends on periodic infusions of congressional funding to remain operational.⁴⁶ Surely, when these flaws are taken into account, proposals by lawmakers to create an analogous program for homeowners’ insurance appear unsuitable.³⁵

An additional solution, one which is controlled by the states, involves updating building codes.²⁷ For example, California has adopted wildfire codes while Florida has implemented hurricane wind codes.²⁷ Specifically, California’s wildfire codes require new homes constructed within a “State Responsibility Area” to be built with fire-resistant materials, such as specific roofing, windows, and eaves.²³ As for Florida, its building codes specify four wind zones

(categorized by speed).¹⁰ The wind zone surrounding a new home determines how it must be designed.¹⁰ While updated building codes reduce the risk of damage, it is important to note that they are only effective when it comes to new construction. Indeed, if society would like to put an end to the homeowners' insurance crisis, new construction in high-risk areas is not the answer.

The final solution to address is catastrophe bonds, a market that has grown to a record \$50 billion (as of December 2024).⁴⁵ A catastrophe bond, or cat bond, is defined as a “high-yield debt instrument designed to raise money for insurance companies in the event of a natural disaster.”³⁰ Ultimately, cat bonds allow insurers to share the risk of catastrophic weather events, such as earthquakes, hurricanes, and floods, with investors.³⁰ If a disaster occurs, insurance companies tap into the collateral to help pay out their claims.³⁰ On the flip side, investors suffer heavy losses.⁴⁵ If a disaster does not occur, however, investors can earn double-digit returns.⁴⁵ It is this possibility, combined with the portfolio diversification benefits, that attracts investors to catastrophe bonds.³⁰

It should be noted that these bonds do not come without risks, most of which fall upon investors. For example, if a predefined disaster occurs before a catastrophe bond matures, investors can lose their principal, and coupon payments could be reduced or ceased.^{30,59} Given the increasing frequency of climate shocks (as discussed previously), as well as the growing market for catastrophe bonds, this result is likely to become increasingly common, causing investor losses to multiply.

Conclusion & Recommendations

In light of this information, it is imperative to propose recommendations on how society should move forward.

Education

One of the first steps in addressing this issue is to educate homeowners on climate-related risks associated with their dwellings.¹⁵ This education can be provided by insurance companies and/or state regulators, and may include scientific data that outlines the growing dangers posed by past and future disasters. It may also include ways to mitigate or eliminate a home's vulnerabilities.¹⁵ In terms of gathering education material, state regulators and insurance companies can leverage artificial intelligence. For example, Chubb Climate+, a business unit within Chubb Insurance that supports companies contributing to the transition to a low-carbon economy, "uses artificial intelligence and advanced data analytics to identify vulnerable households and the likely damage."^{13,15} Certainly, conveying this information to both current and prospective homeowners can encourage them to act – or, in some cases, consider relocating.

An additional benefit of education is the demand for it. According to a 2024 Deloitte survey of homeowners in U.S. states at high risk of climate-related disasters, 84% of respondents said they want insurance companies to educate them on weather-related risks.¹⁵ Indeed, this shows that homeowners are receptive to education and unlikely to ignore warnings.

Alternatively, there are downsides to education. For instance, education does not address the root cause of this issue, that is, the frequency and intensity of billion-dollar weather and climate disasters. It has the potential, however, to better prepare homeowners for such disasters and influence their settlement decisions (as noted above).

Renewable Energy

The second, more long-term oriented recommendation is to encourage investments in renewable energy, such as solar, wind, geothermal, and hydropower, and 'nudge' society toward reducing its use of fossil fuels.^{60,64} This is because fossil fuels, such as coal, oil, and natural gas,

contribute to greenhouse gas emissions.⁹ Research has shown that these emissions have “increased the frequency and intensity of extreme weather events.”²⁰

The strengths of this recommendation are threefold. First, according to a recent report from the International Renewable Energy Agency, 81% of renewables offer cheaper energy than fossil fuels, meaning companies have the potential to experience significant cost savings.⁴³ Regarding homeowners, they too can save money. For example, the Residential Clean Energy Credit offers to reimburse 30% of the costs associated with clean energy improvements to new or existing homes, such as solar panels and solar water heaters.⁵⁶ Second, investments in renewable energy are coming off a blockbuster year. For example, “wind and solar generation [reached] a record 17% of U.S. electricity generation” in 2024 and surpassed coal generation for the first time in history.² More recently, March 2025 marked an unprecedented month, as “fossil fuels supplied less than half the United States’ electricity generation.”⁵⁴ Without a doubt, this suggests that there are numerous investment opportunities involving renewable energy. As a result, companies and individuals do not have to spend time searching for options and risk investing money in an industry that is not yet established. Third, and possibly the most important, is that investing in renewable energy targets the root cause of this issue (the frequency and intensity of weather and climate disasters) and looks to prevent it from growing even further.

This recommendation, as with most, also has some weaknesses. First, the current administration has endorsed the use of fossil fuels and indicated a desire to step back from renewable energy.⁶ For example, in January of 2025, an executive order was issued calling for a temporary withdrawal of new wind projects in federal territory.⁶¹ Also in January of 2025, funding for the 2022 Inflation Reduction Act (the IRA) was frozen.² One of the IRA’s goals is to “accelerate the deployment of clean energy” using tax incentives, among other things.³³ These

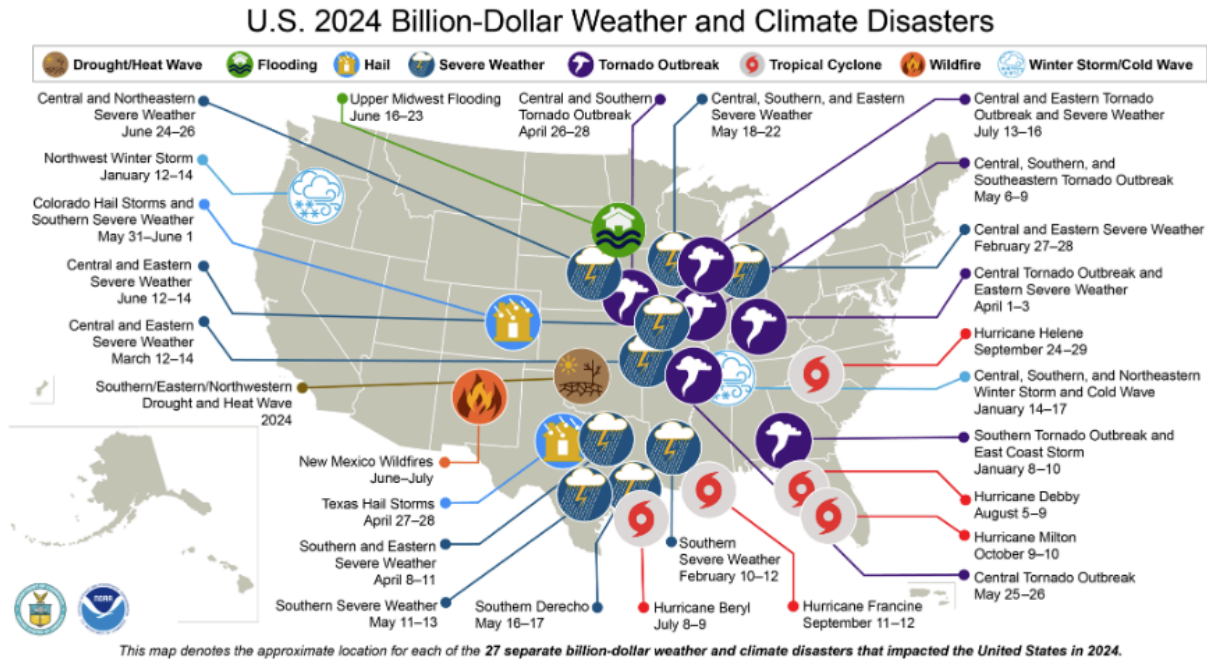
tax incentives, which have since been paused, apply to the production and purchase of domestic clean energy technology.² In addition, the newly proposed – but recently delayed – tariffs could pose a headwind for the industry.² This is because “the United States has become increasingly reliant on imported components for key clean energy technologies like solar panels, wind turbines, and batteries.”² As a result, the deployment of renewable energy could become significantly more expensive.²

All that said, there are still signs that this recommendation has merit. These orders are temporary. This means that as time passes, the administration’s investigation into such matters, which is likely to include discussions with industry experts, may cause them to recognize the effects of certain actions. Consequently, they may alter their course. Finally, the current political environment can overshadow the optimism that remains for the future. As Hortense Bioy, global head of sustainability research at Morningstar, put it, “Despite the short-term uncertainty in the US, the long-term drivers for clean energy remain intact and the outlook for the sector remains positive. History has shown that the energy transition will continue regardless of [the administration].”⁴

To conclude, climate shocks have made a lasting mark on the homeowners' insurance industry. From increasing premiums and non-renewal rates to the rising number of non-admitted and insurer of last resort policies, the consequences have been serious. Expanding on these consequences reveals their economic and legal implications, both of which suggest a grim outlook for the future of the United States. This outlook, however, can be improved by educating the public on climate-related risks and committing to renewable energy. Otherwise, it is only a matter of time before the entirety of America begins to feel the effects.

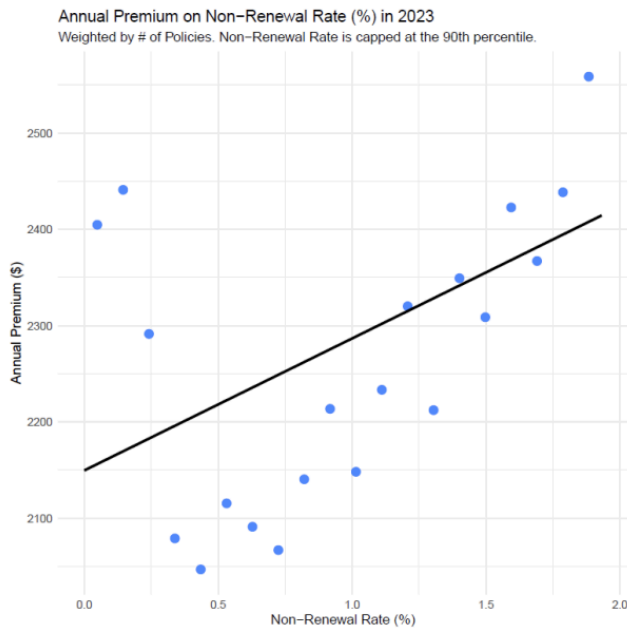
Appendix

Exhibit 1



Source: NOAA

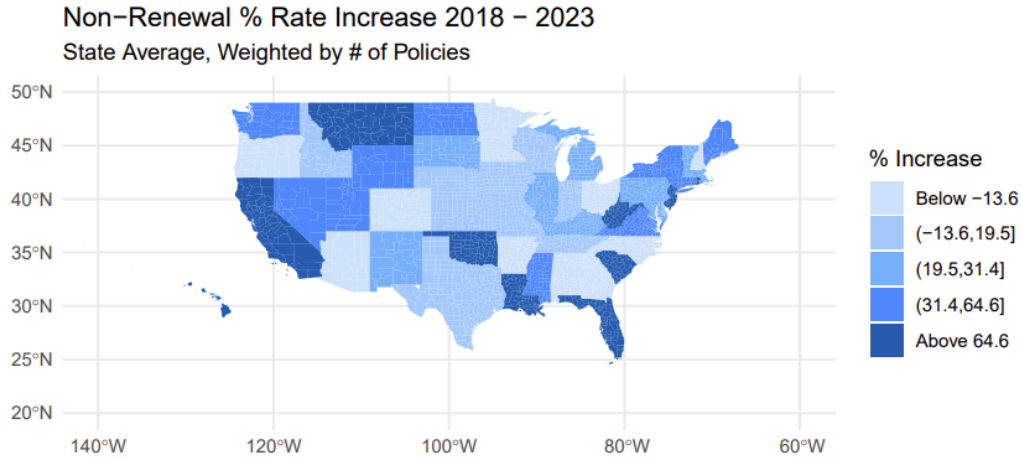
Exhibit 2



Graph 2. Annual Premium on Non-Renewal Rate (%) in 2023

Source: Senate Budget Committee

Exhibit 3



Source: *Senate Budget Committee*

Exhibit 4

Table 7: States by Non-Renewal Rate Percent Change 2018 - 2023

	State	Non-Renewal % 2018	Non-Renewal % 2023	Non-Renewal Percent Change 2018 - 2023
1	FL	0.79	2.99	279.97
2	LA	0.49	1.8	267.17
3	HI	0.42	1.32	215.83
4	SC	0.52	1.24	136
5	OK	0.72	1.45	102.82
6	RI	0.69	1.37	99.79
7	CA	0.94	1.72	81.99
8	NJ	0.47	0.8	69.54
9	MT	0.61	1.02	67.42
10	WY	0.51	0.84	66.67
11	WV	0.45	0.74	65.06
12	WA	0.42	0.69	64.56
13	CT	0.86	1.34	55.67
14	MS	0.96	1.49	55.63
15	ME	0.4	0.61	51.05
16	UT	0.72	1.06	46.87
17	NY	0.39	0.57	46.84
18	VA	0.7	0.95	35.81
19	ND	0.64	0.86	34.16
20	NV	0.63	0.85	33.77
21	NM	0.97	1.27	31.38
22	PA	0.29	0.37	29.77
23	MD	0.5	0.65	29.7
24	KY	0.6	0.77	29.26
25	MA	1.18	1.51	28.73
26	SD	0.88	1.12	26.74
27	DC	0.98	1.24	26.45
28	MI	0.46	0.58	26.25
29	IL	0.54	0.66	22.91
30	VT	0.7	0.85	20.59
31	NE	0.88	1.05	19.51
32	DE	0.62	0.74	18.13
33	ID	0.77	0.87	13.22
34	IA	0.96	1.06	10.24
35	KS	0.81	0.85	5.42
36	TX	0.81	0.83	1.96
37	IN	1	0.98	-1.81
38	TN	0.98	0.96	-2.48
39	WI	0.81	0.77	-5.13
40	MO	0.99	0.94	-5.76
41	NC	2.07	1.79	-13.6
42	OH	1.03	0.89	-13.77
43	OR	0.83	0.68	-18.13
44	AL	1.01	0.82	-18.98
45	CO	1.1	0.86	-21.5
46	AR	0.94	0.73	-21.86
47	GA	1.16	0.86	-25.5
48	AZ	1.16	0.8	-31.06
49	MN	0.58	0.32	-44.1
50	NH	1.25	0.63	-49.56
51	AK	0.95	0.42	-55.76

Source: *Senate Budget Committee*

Exhibit 5

Table 2: 100 counties with the highest non-renewal rate change 2018 - 2023 and > 10,000 policies

County	State	Non-Renewal Change 2018 - 2023	Non-Renewal % 2018	Non-Renewal % 2023	Prem. Change 2018 - 2023
1 LAKE	CA	6.32	1.24	7.56	1041
2 JACKSON	MS	5.23	0.32	5.55	1395
3 HARRISON	MS	4.77	0.35	5.11	911
4 COLLIER	FL	4.39	0.53	4.92	2047
5 NEVADA	CA	4.22	2.3	6.51	1888
6 BEAUFORT	SC	3.89	0.22	4.11	752
7 SHASTA	CA	3.88	1.05	4.92	984
8 BREVARD	FL	3.84	0.64	4.48	1482
9 POLK	FL	3.74	0.58	4.32	NA
10 FLAGLER	FL	3.57	0.55	4.12	1342
11 CHARLESTON	SC	3.52	0.45	3.97	938
12 ORLEANS	LA	3.34	0.44	3.78	1883
13 PINELLAS	FL	3.3	0.4	3.7	1461
14 MENDOCINO	CA	3.25	0.87	4.12	974
15 JEFFERSON	LA	3.23	0.38	3.61	1724
16 TERREBONNE	LA	3.11	0.28	3.39	1522
17 SARASOTA	FL	3.1	0.4	3.5	1372
18 OSCEOLA	FL	2.93	1.03	3.96	1250
19 NEWYORK	NY	2.87	1.25	4.11	6052
20 MANATEE	FL	2.77	0.4	3.16	NA
21 EL DORADO	CA	2.73	2.28	5.01	NA
22 MIAMI-DADE	FL	2.69	1.6	4.29	1976
23 PALM BEACH	FL	2.64	0.8	3.44	2750
24 HERNANDO	FL	2.36	0.58	2.94	1010
25 PITT	NC	2.26	1.94	4.2	434

Source: Senate Budget Committee

Exhibit 6

Types of Homeowners Insurance

HO-1	HO-2	HO-3	HO-5	HO-8
<p>Only covers costs for the following types of damage:</p> <ul style="list-style-type: none"> • Fire • Lightning • Windstorm • Hail • Explosion • Riot or civil commotion • Damage caused by aircraft • Damage caused by vehicles • Smoke damage • Vandalism or malicious mischief • Theft • Volcanic eruptions 	<p>HO-1 +:</p> <ul style="list-style-type: none"> • Weight of snow and ice • Accidental overflow or discharge of water or steam • Freezing of plumbing, air conditioning • Bulging or cracking caused by an accidental event • Falling objects • Accidental damage due to short-circuiting of an electrical current <p>-----</p> <p>Coverage for:</p> <ul style="list-style-type: none"> • Personal belongings (ACV)* • Personal liability • Medical payments to others • Additional living expenses 	<p>Covers all costs as long as damage is not due to these typical exclusions:</p> <ul style="list-style-type: none"> • Power failure • Industrial pollution or smoke • Earthquake • Flooding • Intentional damage • War/nuclear accidents • Pets and insects • Settling, wear and tear • Negligence • Government actions and legal action due to lack of permits, faulty construction, design, or maintenance actions taken by the government and other associations • Damage or theft in unoccupied homes or those under construction • Deterioration due to weather conditions, that aggravate other excluded causes <p>-----</p> <p>Coverage for:</p> <ul style="list-style-type: none"> • Personal belongings (ACV)* • Personal liability • Medical payments to others • Additional living expenses 	<p>HO-3 but pays out replacement cost value instead of ACV*</p> <p>Not offered by all home insurance companies</p>	<p>HO-1 +:</p> <p>Coverage for:</p> <ul style="list-style-type: none"> • Personal belongings (ACV)* • Personal liability • Medical payments to others • Additional living expenses

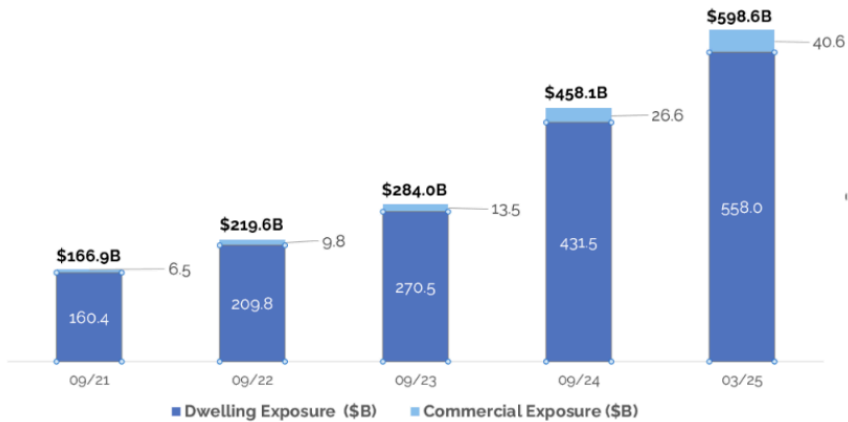
*ACV: actual cash value

Source: Forbes

Exhibit 7

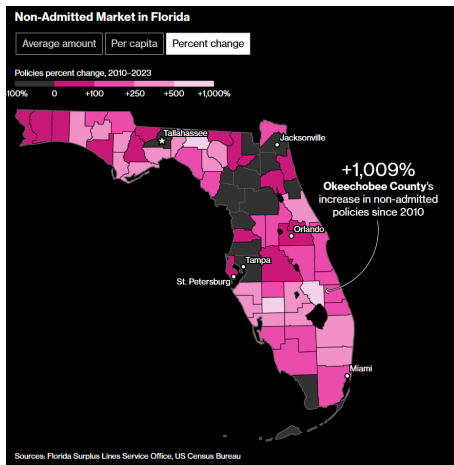
THE FAIR PLAN FACES INCREASED EXPOSURE

As of March 2025, the FAIR Plan's total exposure is \$599 billion, reflecting a 31% increase since September 2024 (prior fiscal year-end) and a 259% increase since September 2021 (Fiscal Year End 2021).



Source: *California FAIR Plan*

Exhibit 8



Source: *Bloomberg*

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