

Under Water: An Economic and Policy Evaluation of the U.S. Flood Insurance Market

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Abstract

This brief highlights many of the most pressing issues facing the U.S. flood insurance market, as well as several available solutions to address them. It will begin this overview from an economic perspective, framed from a supply-side and demand-side, in which topics including population migration, the reinsurance industry, and federal interest rates will be discussed. Following this, the article will approach the topic from a policy viewpoint, exploring recent regulatory changes involving risk-rating methodologies, building code enforcement, and premium growth rate caps. It will conclude by reiterating the importance of tackling these issues proactively to achieve the resilience the federal government has established as a goal.

Introduction

From flash floods to atmospheric rivers, the unusually high level of rainfall experienced throughout the Southern Pacific U.S. in 2024 (Poroy et al, 2024) reflects the broader pattern of nationwide flooding now common across large swaths of the western and southeastern United States. Over the last three decades, the increased frequency and severity of flood-related disasters have led to an increase in the salience of discussions on flood insurance policy at the federal, state, and local levels. However, the complex dynamics impacting the effectiveness of such regulations are still under-discussed in the public discourse relative to their importance.

Helping to fill this gap then, this paper will diolate on the primary factors impacting the flood insurance market. It will suggest that a successful approach to strengthening the industry must respond to economic realities, addressing both supply and demand-side factors, as well as leveraging the myriad of potential policy levers available to regulators and agency officials.

Economic Lens

From an economic standpoint, it is easiest to characterize the factors that have impacted the flood insurance market by categorizing them into two buckets: demand-side factors, which affect the number of homeowners who desire coverage; and supply-side factors, which impact the quality and quantity of insurance available. As will be suggested in this section, the cause of the economic distress experienced in the flood insurance market can be explained fundamentally by an increase in demand and a decrease in supply. This has resulted in a rise in prices, which must be passed on to the insurers, insurees, or government.

On the demand side, a multitude of elements have contributed to rapid growth in the number of homeowners seeking flood insurance coverage. Among these has been a significant population increase in areas more vulnerable to natural disasters. This has been driven by population migrations to more flood-prone climates in the southeast over the last few decades (Flavelle, 2024; Flavelle et al, 2023), as well as the increased rate of flooding and disaster throughout the entire country (Bateman, 2024; NOAA National Centers for Environmental Information, 2024) due to global climate change. This has resulted in more homes requiring coverage in exactly the locations where insurance premiums have risen the most recently (Kamin, 2023). In response to these demand-driven factors, federal agencies such as the Federal Emergency Management Agency (FEMA) and the U.S. Army Corps of Engineers (Davenport & Flavelle, 2021) have had to increase spending on construction projects to reduce the potential flood risk of these areas, in addition to ramping up their purchase of homes in flood-prone regions to reduce the number of properties requiring intensive coverage.

In terms of supply, several factors have converged to reduce the number of insurers able to offer coverage to meet the rising demand for flood protection. This is evidenced most glaringly by the decisions of numerous national insurance companies to substantially raise rates, restrict coverage, or pull out of states entirely (Flavelle et al, 2023), as State Farm recently did in California (Sarkissian, 2023). What's more, such price hikes and pull-outs have been found to disproportionately affect communities of existing socio-economic disadvantage. This has led to

the further perpetuation of economic inequalities stemming from the discriminatory practices of financial institutions (Flavelle, 2021, FEMA Disaster Aid; Howel and Elliot, 2019).

Driving many of these decisions, but far less discussed in the national media, is the rising cost of premiums, passed on to primary insurers by reinsurance companies (Demos, 2024). Such corporations often require premiums to be prepaid (Buffett, 1995), resulting in underwriting losses if the revenue from the premiums doesn't cover the damages. As costs have continued to rise due to the growing frequency and intensity of storms (Vanderford, 2024), reinsurance companies have turned to "catastrophe bonds". These pay higher interest, "Than comparable corporate bonds due to the risk, but unlike mortgage-backed bonds and the like, have no assets behind them" (Treater, 1997). However, since 2022, the Federal Reserve has continued to sustain high interest rates. This has provided investors with less risky alternatives to catastrophe bonds and decreased demand for them. Bond prices in such a high-interest environment, which historically move in inverse proportion to interest rates (Demos, 2023), have left reinsurance companies with little choice but to pass off costs to primary insurers (Eaglesham, 2024).

Compounding the issue are state laws, such as in California, which restrict primary insurers from passing on reinsurance costs to consumers (Greenhut, 2024). The result is that primary insurers have had little choice but to leave states entirely. This has led to the creation of "insurance deserts", where homeowners no longer have access to adequate coverage from the private market. As a result, residents must turn to "insurers of last resort" which often offer only bare-bone minimums, such as the California state-created Fair Access to Insurance Requirements Plan (Greenhut, 2023) or the Citizens Property Insurance Corporation in Florida (Citizens Property Insurance Corporation, 2023). Filling some of this void are "non-admitted" insurers, which are not subjected to the same rules as traditional insurance companies and often charge more than primary insurers for less coverage (Mims, 2023). The combination of this shrinking of the supply of insurers with growth in the demand for coverage has thus ultimately led to the policy debates and changes discussed in the section to follow.

Governmental Lens

As a result of the numerous economic factors distressing the flood insurance market, several policies have been examined and enacted by agencies at all levels of government.

One such change has been within the National Flood Insurance Program (NFIP), a branch of FEMA. They have begun to offer federal assistance of up to \$42,500 towards damages that private insurance does not cover (Dennis & Sacks, 2024). This revised the previous guidelines, that made residents with private insurance over a certain amount ineligible for federal assistance, even if such coverage didn't cover the full extent of damages. This reform followed an ambitious legislative proposal by NFIP requesting a multi-year reauthorization of their strategic priorities, which included improving affordability for low-and-moderate income policyholders, enhancing the communication of flood risks and mitigation tools to safeguard against damage, and instituting a more transparent financial framework (National Flood Insurance Program, 2024).

While these policy changes and legislative proposals have been welcome news, opportunities for further changes still abound. These include addressing the coverage limit of

\$250,000 for residential buildings and \$100,000 for their contents (Siegel Bernard, 2023), which limits the amount of money homeowners can recoup from loss. Another possibility for reform exists in the 18% annual rate cap on the amount that insurance premiums can rise if home ownership remains consistent (Carrns, 2021). This policy, while beneficial in the short run for homeowners, hinders insurers' abilities to align premiums more accurately with risk (Flavelle, 2021, Climate Threats; Eaglesham & Ferek, 2023), ultimately causing long-term harm.

Driving this need to adjust rates to reflect flood risk more accurately has been a highly constructive change to NFIP's risk rating methodology policy. Previously following rough guidelines (Kousky, 2017) established in the 1970s to calculate risk (Horn, 2022), NFIP's "Risk Rating 2.0" methodology considers a wider range of variables, with increased emphasis placed on the specifics of individual structures rather than their geographic location (Horn, 2022).

This enhanced significance placed on strengthening properties' structural components mirrors yet another beneficial policy reform within FEMA to strengthen the adoption and enforcement of building codes in flood-prone areas, which often have weak standards (Siegel Bernard, 2021). One such highly successful regulation enacted to encourage this is the Community Rating System, a voluntary incentive program with over 1,500 participants across the country, designed to reward communities that adopt floodplain management practices that exceed the minimum requirements of NFIP (Community Rating System, 2021). Following the example of localities that have already heeded the recommendations of federal agencies to strengthen standards (Campo-Flores, 2023), more state and local governments could reduce the risk of flood damage within their communities while simultaneously encouraging insurance companies to continue providing coverage at reasonable rates.

Conclusion

The U.S. flood insurance market has been substantially impacted by the rise in the severity and frequency of floods due to global climate change. As explored in the sections above, this has manifested itself in economic terms, through a marked rise in the demand for flood insurance. This has been driven primarily by population migration to more flood-prone regions, as well as a significant decline in the supply of insurers, impacted by rising costs and higher premiums passed off from the reinsurance industry. From a policy lens, issues have arisen from numerous regulations, such as low coverage limits and caps on premium growth rates.

While there has been substantial progress made reforming several of these policies, such as the improved risk rating methodology and encouragement by FEMA for state and local governments to strengthen building code standards, significant further advances are needed from a regulatory and market standpoint to build upon the progress already made. As the rate of natural disasters continues to rise, making these changes proactively will become even more critical across all levels of government to achieve the resilience agencies and programs have so laudably set out to reach.

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