Insight

Reauthorizing the National Flood Insurance Program: An Update

THOMAS KINGSLEY | JULY 20, 2018

Followers of the National Flood Insurance Program (NFIP) will be familiar with long-standing concerns with the program, both policy and financial. As yet another deadline (July 31) for reauthorization of the NFIP looms, all eyes are on Congress. Despite the well-documented problems, 38 of the previous 41 reauthorizations have been clean extensions and not involved any reform. Given the short timeframe before authorization once again expires, real reform seems unlikely.

This particular effort at reauthorization, however, could be unusually troubling. Indications suggest that the House cannot pass a bill with any reform and the Senate will not support a bill without it. This being the case, there is a real chance that NFIP authorization will expire. The implications for this are tremendous, as the NFIP will not be able to write any new policies, renew expired policies, or amend current policies. Realtors estimate that the last month where authorization lapsed, June 2011, an estimated 40,000 real estate transactions were blocked. Could there be a better call to arms for a robust private flood insurance market, if government solutions are unworkable?

In this light I have taken the liberty of refreshing the work of my predecessor Meghan Milloy. From a financial perspective I have updated some of the figures she cites; the policy concerns remain unfortunately valid. For Meghan's original analysis please see here.

Executive Summary

- The National Flood Insurance Program (NFIP) is $20 billion in debt to American taxpayers. Most of that debt is a result of Hurricanes Harvey, Katrina and Rita and Superstorm Sandy. Hurricane Harvey alone is estimated to have cost $125 billion.
- The NFIP's authorization expires at the end of July, and a successful path for reauthorization – let alone reform – through House and Senate looks less likely than ever.
- Areas affected by Harvey are home to over 700 Repetitive Loss (RL) properties as defined by the Federal Emergency Management Agency . The higher level of repetitively flooded properties, Severe Repetitive Loss Properties (SRLs) comprise only one percent of currently insured properties but account for 30 percent of flood claims.

Introduction

The National Flood Insurance Program (NFIP), administered by the Federal Emergency Management Agency (FEMA), was created to offer affordable flood insurance to communities provided they meet minimum flood mitigation requirements. However, while the NFIP has been relatively successful in encouraging mitigation and reducing required outright disaster aid, it is structurally unable to minimize taxpayer subsidies and moral hazards. As a result, its premiums charged do not reflect the risks covered, and inland taxpayers end up subsidizing coastal homes in environmentally sensitive areas.

Current Status of the NFIP

Before Hurricane Harvey struck the coast of Texas, the NFIP was $24.6 billion in debt, and the Congressional Budget Office (CBO) estimates that, even without Harvey relief factored in, the program maintains an annual shortfall of $1.4 billion.

As the Government Accountability Office (GAO) explains in its 2017 report, "FEMA, which administers NFIP, owed $24.6 billion as of March 2017 to the Department of the Treasury (Treasury) for money borrowed to pay claims and other expenses, including $1.6 billion borrowed following a series of floods in 2016. Eliminating the debt could reduce the need to raise rates to pay interest and principal on existing debt. However, additional premiums still would be needed to reduce the likelihood of future borrowing in the long term. Raising premium rates could create affordability issues for some property owners and discourage them from purchasing flood insurance, and would require other potential actions to help mitigate these challenges."

These debts are largely due to massive disasters that have raided the program's coffers year after year. However, the NFIP's ongoing shortfalls and inability to become solvent are a direct result of premiums that are not actuarily sound, a lack of participation among flood-prone property owners, and federal subsidies that attempt to balance affordability with program stability. CBO pins the annual shortfall on two main factors: 1) FEMA's underestimation of expected claims, which is used to determine the premiums for those policies; and 2) the cost of charging discounted rates for certain policies and the lack of receipts from a surcharge aimed at covering those discounts.

CBO goes on to explain that the underestimation of claims is due in large part to the uncertainty of predicting flood damage. Specifically, the sporadic nature of storms and the widely disparate impact of storms and their flooding, even in similar areas, make predictions extremely difficult. Adding to the difficulty of predicting claims and setting accurate premiums is the aging technology used to create Flood Insurance Rate Maps (FIRMs). GAO found that NFIP's own managerial malpractice has led to the use of inaccurate data to price payments and a lack of adequate procedures for managing insurance policy and claims data – despite a $40 million investment in a new IT management system.

Hurricane Harvey's Impact on the NFIP

With an estimated cost of $125 billion, Hurricane Harvey is the second most costly natural disaster in U.S. history after Hurricane Katrina with $161 billion. The White House obtained from Congress a $14.5 billion relief package, but the large majority of that went to direct aid and not to the NFIP or other insurance programs. Instead, the NFIP likely took on as much or more debt as it did in 2005 with Katrina and Rita and continued its downward financial spiral.

Matters did indeed get worse. In October last year Congress forgave $16 billion of the NFIP's debt as it reached its borrowing cap of $30 billion. The two pillars of Congress' argument have proven to

be dangerously unsound: the reforms proposed accompanying the forgiveness have not materialized; and recent figures indicate that there were less than $10 billion in claims, 40% less than the assumption worked on by Congress. The NFIP borrowed a further $6 billion in November 2017. All told, the NFIP has borrowed a total of $39.4 billion, had $16 billion forgiven, owes the US taxpayer $20 billion, and has returned only $2.82 billion of the original principle.

Repetitive Loss Properties

Based on FEMA data, areas most directly affected by Hurricane Harvey (Harris and Galveston counties) are home to over 700 Repetitive Loss properties; Harris County alone is home to 370 Severe Repetitive Loss properties. There are many others not yet accounted for along the coast and in the Houston suburbs.

A Repetitive Loss (RL) property is any insurable building that has receive two or more claims payments, each greater than $1000, over any ten-year period; whereas, a Severe Repetitive Loss (SRL) property is one that: 1) has at least four NFIP claim payments over $5,000 each, with any two claims occurring within a ten-year period, and the cumulative amount of claims payments exceeds $20,000; or 2) has received two separate claims payments in which the cumulative value of the building portion exceeds the value of the property, and two such claims have occurred within a ten-year period.

At a bare minimum, considering only Harris County's SRL properties, the NFIP has paid out $7.4 million to homes in Houston that are known to repeatedly flood, be rebuilt, and flood again. Harris County is home to the greatest number of properties in the SRL grant program, which seeks to mitigate flooding on SRL properties. But that mitigation is dependent on grants from FEMA and a seemingly never-ending process of applications and pending approvals.

Even before Hurricane Harvey, Houston and Harris County withstood another "500 year flood" by way of Hurricane Allison, which resulted in $5 billion of damage and a nearly $2 billion payout from the NFIP. Natural disasters cannot be perfectly predicted and prepared for, but residents in disaster-prone areas need an effective flood insurance program that will not also leave them — and other taxpayers — on the hook for billions in debt.

How to Fix the NFIP

Harvey will be expensive for all programs involved – there's no choice there. But the NFIP's pattern of shortfall, debt, and taxpayer bailouts doesn't have to be set in stone. Instead, there are a number of relatively simple reforms that can be made to the program to help ensure it is available and stable for future disasters.

Increase the size of the coverage pool

Of the 1.5 million properties in designation Special Flood Hazard Areas (SFHAs) that are required to have flood insurance, only about 53 percent are insured. Uninsured properties means an increased need for direct aid from FEMA in the wake of a disaster. On the flip side, the fewer properties that have flood insurance means the fewer premium payments coming in to the NFIP each month to cover the costs of claims payouts.

As such, the number of NFIP policyholders should be increased, not only to raise the level of compliance among structures situated in SFHAs, but to raise the amount of premium revenue coming into the program. FEMA should increase its oversight of the insurance purchase requirements for individuals with federally insured mortgages located in designated flood zones. Driving growth in sectors like the mortgage industry that fall short of compliance requirements will not only help spread risk among more stakeholders, but will also increase program income, ultimately helping to reduce the NFIP's debt to taxpayers.

Charge premiums that accurately reflect the risk

Current NFIP premiums have four fatal flaws, due in large part to the most recent legislative attempts at reforming the program: 1) The premiums do not reflect the risk; 2) Full-risk premiums are too low; 3) Caps on premium increases are too low; and 4) Premium rates rely on inaccurate data.

The problem with flood insurance is that, unlike other property or health insurance, claims on flood insurance policies usually happen all at once. Losses are low in some years but extremely high in others. As a result, the NFIP has consistently struggled to find the right premium that would be appropriate for average, small-flood events, but that would also cover the catastrophic ones. Further confounding matters is the need to subsidize premiums for low-income areas to make flood insurance affordable for all at-risk properties. Congress has attempted to keep premiums affordable by setting caps on premium increases, but the caps remain too low to keep the program afloat.

On the flip side of subsidized premiums are "full-risk" premiums, which are supposed to be high enough to cover the cost of any given flood event for a particular property. For comparison's sake, private flood insurers charge premiums that include a margin to cover both profit and a portion for loss reserves. The NFIP, on the other hand, charges full-risk premiums which account only for the amount of a loss relative to the historical average loss per year – a number which doesn't take into account the rare, catastrophic flood losses like those in 2005, 2012, and August 2017.

NFIP policyholders should be charged premiums that reflect the actual amount of risk of loss to their properties, and therefore the actual amount that NFIP could foreseeably have to pay out for a claim. As a first step, NFIP should update its FIRMs to more accurately inform buyers and builders of the risk to their property and base its pricing decisions accordingly. Further, NFIP should phase out the most antiquated of the grandfathered premium rates that came from previous, politically charged flood risk zone reclassifications.

Rate shock caused by an immediate increase in premiums could be avoided by grandfathering in the most actuarily sound rates for current NFIP policy holders, and, for new buyers of existing properties and for new construction, the new, reformed, risk-based rates would apply. When buyers realize the higher flood insurance premiums, fewer potential buyers will bid on risky properties, which sends a signal to the market that less value should be exposed to the most severe flood risk.

On the other hand, existing policyholders could still be subject to premium increases, but these would be reasonably capped at 10 or 20 percent per year. Combined, the policies of unsubsidized rates for new buyers and builders and a gradual, phased-in rate increase for existing policyholders will help reverse the program's chronic shortfalls.

Share risk with the private insurance market

Not unlike proposals that have been circulated to share the risk of subprime mortgages with the private mortgages insurers, the NFIP could reduce its exposure to flood risk through increased participation of private flood insurers. Not only does this reduce the NFIP's risk exposure, but it allows FEMA to focus on emergency relief work and flood risk mitigation and lets the market focus on underwriting flood insurance policies.

The correlated nature of flood risk makes the development of a totally private flood insurance market highly unlikely. However, there are options that would allow for efficient sharing of risk. For example, some combination of scenarios in which private insurers either provide primary coverage to a majority of policyholders, or they acquire the transferred risk from the NFIP by way of reinsurance, or private insurers and the NFIP jointly underwrite primary flood risk and pool any reinsurance would all be feasible. In any of those cases, the NFIP could act as a reinsurer of last resort or could provide primary insurance that is focused solely on residual market risks left over from what private flood insurers could not or would not underwrite.

Update program technology

Last, and perhaps most simple, the NFIP should update its program technology. It is currently using technologies and processes dating back to the 1960s when the program began. For example, homebuyers in SFHAs are required to purchase a new elevation certification that must be completed by a surveyor each time a property is bought and sold because there is no central database of the flood elevation data. By simply creating a central repository for flood zone data or allowing homebuyers to rely on GPS data instead of requiring a (pricey) physical surveyor, the dissuasive costs of buying into the NFIP could be significantly reduced. Further, the NFIP should implement a secure platform for processing claims, business analytics, and customer care. Private insurers already have these real-time systems that are faster and more accurate than those used by the NFIP and FEMA which often provide data and reports that are dated by several months.

Conclusion

The NFIP is in dire need of reform. That Congress may not even be able to reauthorize, let alone reform, the NFIP indicates that a government solution to this problem may not be possible or indeed desirable. The participation of private insurers in the market would cauterize the NFIP, lest it, as Meghan put it so elegantly, continue to hemorrhage billions of additional taxpayer dollars in future bailouts.