

Volume 60 | Issue 1 Article 2

9-1-2015

Insuring Floods: The Most Common and Devastating Natural Catastrophes in America

Christopher C. French

Follow this and additional works at: https://digitalcommons.law.villanova.edu/vlr



Part of the Insurance Law Commons

Recommended Citation

Christopher C. French, Insuring Floods: The Most Common and Devastating Natural Catastrophes in America, 60 Vill. L. Rev. 53 (2015).

Available at: https://digitalcommons.law.villanova.edu/vlr/vol60/iss1/2

This Article is brought to you for free and open access by the Journals at Villanova University Charles Widger School of Law Digital Repository. It has been accepted for inclusion in Villanova Law Review by an authorized editor of Villanova University Charles Widger School of Law Digital Repository.

INSURING FLOODS: THE MOST COMMON AND DEVASTATING NATURAL CATASTROPHES IN AMERICA

CHRISTOPHER C. FRENCH*

I. Introduction

ALONG with houses and lives, Hurricanes Katrina and Sandy washed away the illusion for yet another generation of Americans that seawalls and levees can keep us safe from flood waters. Although the storm surge damage caused by Hurricanes Katrina and Sandy is indelibly etched upon our minds due to the 24-hour media coverage and haunting images of houses in ruins and people sitting on their roofs waiting to be rescued, smaller-scale flooding disasters that do not get national attention occur throughout the country every day.

Flooding is the most common catastrophe in America and the world, accounting for approximately 90% of all catastrophic losses annually. For the past thirty years in America, floods have on average caused more than \$8 billion in damages annually, and most of the damage is uninsured. Hurricanes Katrina and Sandy alone caused over \$160 billion in damage. Yet, only about 10% of the victims of Hurricane Katrina had flood insurance, and a little over 50% of Hurricane Sandy victims had flood insurance even though the communities devastated by these hurricanes are ones that obviously should be concerned about flooding because they are located on or near rivers and the coast. Even more sadly, much of the losses suffered by even the relatively fortunate few who had flood insur-

^{*} Christopher C. French is a Visiting Assistant Professor at Penn State Law School; J.D., Harvard Law School; B.A., Columbia University. The Author gratefully acknowledges the legal research contributions of Pat Roncevich and Kyle Yeversky to the Essay, as well as the thoughtful comments provided by Ken Abraham, Jay Feinman, David Kaye, Kit Kinports, Leo Martinez, Stephen Ross, and the participants in a workshop held at Penn State Law School on earlier drafts of the Essay.

^{1.} See Shannon Doocy, Amy Daniels, Sarah Murray & Thomas D. Kirsch, The Human Impact of Floods: A Historical Review of Events 1980–2009 and Systematic Literature Review, PLOS Current Disasters (Apr. 16, 2013), http://currents.plos.org/disasters/article/the-human-impact-of-floods-a-historical-review-of-events-1980-2009-and-systematic-literature-review/ (discussing impacts of flooding).

^{2.} See Nat'l Oceanic and Atmospheric Admin.'s Nat'l Weather Serv., Hydrologic Information Center—Flood Loss Data (Sept. 30, 2013) [hereinafter Flood Loss Data], http://www.nws.noaa.gov/hic/.

^{3.} See Christopher C. French, The Aftermath of Catastrophes: Valuing Business Interruption Insurance Losses, 30 Ga. St. U. L. Rev. 461, 463 (2014) (noting estimates that Hurricane Sandy caused over \$60 billion in damage); Christine A. Klein & Sandra B. Zellmer, Mississippi River Stories: Lessons from a Century of Unnatural Disasters, 60 SMU L. Rev. 1471, 1499 (2007) (providing that Hurricane Katrina caused approximately \$100 billion in damage).

ance through the National Flood Insurance Program (NFIP) were not actually covered by such insurance.

Despite dramatic nationwide media coverage of major flooding events in large population centers such as New Orleans and New York, flooding is actually a problem throughout the entire country. Floods impact people in every state. And, floods will likely only become a worse problem, as climate change could increase water levels and create more devastating hurricanes and other storms. Yet, it is estimated that only about 7% of all homeowners in America have insurance for flood losses.⁴

The NFIP is the only significant source of flood insurance available to homeowners in America, and the program has numerous deficiencies. Every time there is a major flooding event, Congress revisits and attempts to address the deficiencies that are exposed by the most recent flood. This pattern has been repeated multiple times over the past forty-six years since the NFIP was created in 1968. And each time, the result is the same: most homeowners remain uninsured for flood losses and the insurance that is available to cover flood losses is inadequate.

If the way flood losses are insured (or uninsured) in America is not working, is there a better way? This Essay maintains that the answer is "yes." The simple, but underappreciated, solution offered in this Essay is the elimination of the flood exclusion that is found in standard form "all risk" homeowners insurance policies.

How is it even possible that the biggest and most common disaster that can impact one's home—flooding—is not already covered under "all risk" homeowners insurance? There are three principal theoretical bases that insurers historically have used to justify excluding coverage for flood damage under homeowners policies: (1) adverse selection, (2) moral hazard, and (3) correlated risks. Adverse selection is the idea that only the people most likely to have losses will purchase insurance. Moral hazard theory posits that a person who has insurance is less likely to take care to avoid losses due to the fact that insurance will cover the losses. Corre-

^{4.} See infra note 69 and accompanying text.

^{5.} Adverse selection is "the disproportionate tendency of those who are more likely to suffer losses to seek insurance against those losses." Kenneth S. Abraham & Lance Liebman, *Private Insurance, Social Insurance, and Tort Reform: Toward a New Vision of Compensation for Illness and Injury,* 93 Colum. L. Rev. 75, 102 n.82 (1993); see also Tom Baker, *Containing the Promise of Insurance: Adverse Selection and Risk Classification,* 9 Conn. Ins. L.J. 371, 373, 375 (2003). Some critics of the concept of adverse selection have argued that insurers' alleged concerns regarding the impact that adverse selection actually has on policyholders' behavior are overblown. *See, e.g.,* Peter Siegelman, *Adverse Selection in Insurance Markets: An Exaggerated Threat,* 113 Yale L.J. 1223 (2004).

^{6.} The concept of moral hazard captures the intuitive idea that a policyholder will have a "tendency to take fewer precautions in the presence of insurance." Adam F. Scales, Book Review, *The Chicken and the Egg: Kenneth S. Abraham's "The Liability Century"*, 94 VA. L. REV. 1259, 1263 (2008) (reviewing Kenneth S. Abraham, The Liability Century: Insurance and Tort Law from the Progressive Era to 9/11 45–48 (2008)). Judge Easterbrook has described the theory underlying

lated risks are risks that may result in numerous losses concentrated in space and time.⁷ Due to the unpredictable nature of when correlated risks will result in losses, insurers historically have claimed that they cannot calculate and charge actuarially sound premiums for such risks.

When a risk simultaneously involves significant concerns related to adverse selection, moral hazard, and correlated risks, insurers historically have concluded the risk is either uninsurable or one they do not want to insure. Flooding is such a risk according to conventional insurance wisdom. First, only the people most likely to suffer flood losses will purchase insurance that covers only floods. Thus, the pool of insureds that would pay premiums to cover flood losses would be relatively small, and the premiums that insurers would need to charge in order to cover the potential losses would need to be extremely high, assuming actuarially-sound premiums could be calculated at all. Second, under moral hazard theory, a homeowner who has insurance against flooding would not bother to avoid or minimize flood losses or, at best, would take fewer measures to avoid or minimize flood losses. Third, flooding is a correlated risk because the losses associated with flooding events tend to occur in concentrated geographic locations at or about the same time.

the concept by stating that "[o]nce a person has insurance, he will take more risks than before because he bears less of the cost of his conduct." W. Cas. & Sur. Co. v. W. World Ins. Co., 769 F.2d 381, 385 (7th Cir. 1985). The term "moral hazard" also generally encompasses situations where "[a] person . . . deliberately causes a loss ... [or] exaggerates the size of a claim to defraud an insurer." MARK S. DORF-MAN, INTRODUCTION TO RISK MANAGEMENT AND INSURANCE 480 (8th ed. 2005). Numerous scholars have written on moral hazard and have offered similar descriptions of the concept. See, e.g., Scott E. Harrington, Prices and Profits in the Liability Insurance Market, in Liability: Perspectives and Policy 47 (Robert E. Litan & Clifford Winston eds., 1988) ("Moral hazard is the tendency for the presence and characteristics of insurance coverage to produce inefficient changes in buyers' loss prevention activities, including carelessness and fraud "); ROBERT H. JERRY, II & Douglas R. Richmond, Understanding Insurance Law 12 (5th ed. 2012) ("[T]he existence of insurance could have the perverse effect of increasing the probability of loss. . . . This phenomenon is called moral hazard."); George L. Priest, The Current Insurance Crisis and Modern Tort Law, 96 Yale L.J. 1521, 1547 (1987) ("Moral hazard refers to the effect of the existence of insurance itself on the level of insurance claims made by the insured. . . . Ex ante moral hazard is the reduction in precautions taken by the insured to prevent the loss, because of the existence of insurance."); Gary T. Schwartz, The Ethics and Economics of Tort Liability Insurance, 75 CORNELL L. REV. 313, 338 n.117 (1990) ("'Moral hazard' is sometimes distinguished from 'morale hazard,' the former referring to deliberate acts like arson, the latter to the mere relaxation of the defendant's discipline of carefulness." (citing C. Arthur Williams, Jr. & Richard M. Heins, Risk Management and Insurance 217 (4th ed. 1981))).

7. See Véronique Bruggeman, Michael Faure & Tobias Heldt, Insurance Against Catastrophe: Government Stimulation of Insurance Markets for Catastrophic Events, 23 Duke Envil. L. & Pol'y F. 185, 187 (2012); J. David Cummins, Should the Government Provide Insurance for Catastrophes?, 88 Fed. Res. Bank of St. Louis Rev. 337, 342–43 (2006); Adam F. Scales, A Nation of Policyholders: Governmental and Market Failure in Flood Insurance, 26 Miss. C. L. Rev. 3, 10–11 (2006).

Although this Essay does not purport, or even attempt, to address the diverse political, environmental, and engineering issues that underlie the problem of how we can or should prevent or minimize flooding in America, it does address the problem of insuring against the risk of flood losses. It does so by questioning the soundness of the three historical justifications—adverse selection, moral hazard, and correlated risks—that have been used to explain why insurers should be allowed to refuse to cover flood losses under homeowners policies. This Essay concludes that, even if they were once sound, the foundations for these justifications are no longer solid. If the theoretical justifications for insurers' refusal to insure flood losses are unsound, then a potential solution to America's flood insurance problem emerges: the elimination of the flood exclusion in homeowners policies.

Homeowners insurance is a classic example of a situation where the pool of insureds across which the risk of loss is spread is so large that adverse selection is of little concern. Ninety-six percent of homeowners buy homeowners insurance because, in addition to risk aversion, the purchase of such insurance is effectively mandatory in America today. One cannot get a mortgage that is federally guaranteed, which most are, without homeowners insurance. Consequently, if flood losses were covered by homeowners insurance, then the pool of insureds across which the risk of loss would be spread would be so enormous that adverse selection regarding the purchase of insurance to cover flood losses would not be an issue.

Similarly, moral hazard concerns regarding flood losses are relatively low because of the enormous disruption and inconvenience that flooding causes a homeowner. Flooded homeowners not only lose irreplaceable items of sentimental value, but they are often rendered homeless while their houses are remediated and repaired. Thus, people already have incentives to avoid flood losses, regardless of whether they have insurance. Consequently, it stands to reason that, instead of putting the impetus on individual homeowners to prevent flood damage to their homes by excluding coverage for floods in homeowners policies, a more efficient means of avoiding or preventing flood losses would be through building codes and land development restrictions.

The potentially disastrous financial consequences associated with the correlated risk of flood losses for insurers also would be reduced, if not entirely eliminated, if homeowners policies covered floods. If coverage for flood losses were bundled together with the other risks of loss covered under homeowners insurance, then the risk of a flooding event causing an enormous drain on insurers' capital reserves, that could result in insolvencies, would be minimal because the capital reserves generated by the premiums of 69 million homeowners with diverse risk profiles would be enormous instead of using just the premiums generated by the 5.5 million homeowners who currently are insured under the NFIP and primarily live

in known flood areas. In addition, through global reinsurance and catastrophe bonds, an insurer's risk of insolvency due to flood events would be further reduced because each individual insurer's risk can be spread to other insurers and investors.

This Essay addresses the problem of insuring flood losses in three parts. Part II provides a brief discussion of the history of flooding in America and the creation of the NFIP in 1968, after private insurers began refusing to cover flood losses. Part II also addresses the theoretical rationales that historically have been used to justify insurers' refusal to cover flood losses. Part III discusses the problems with the NFIP and Congress's ineffective attempts to solve those problems. Part IV discusses the arguments in favor of and against eliminating the flood exclusion that currently is contained in homeowners policies and considers how several European countries have addressed the problem of insuring flood losses. This Essay concludes that the elimination of the flood exclusion from homeowners policies would address the problems with the NFIP while increasing the number of American homeowners that have flood insurance from 5.5 million to 69 million, without causing undue financial hardship to insurers.

II. THE PROBLEM OF FLOODING AND THE ORIGINS OF THE NATIONAL FLOOD INSURANCE PROGRAM

A. The Flood Problem

Flooding is not a new problem in America that just emerged in the last decade with Hurricanes Katrina and Sandy. To the contrary, it is a problem we have been dealing with since the first building was constructed in this country. Every year, there is flooding somewhere. In the past thirty years alone, flooding has caused approximately \$240 billion in damage, for an average of approximately \$8 billion annually.

Flooding only causes "property damage," however, if there is property located in the area of the flooding. Largely due to waterways historically serving as a means of transportation, this country developed along waterways, with the largest cities and population centers located on the coasts or along rivers. With water comes periodic flooding despite mankind's best efforts to prevent it. There are, of course, benefits that flow from Mother Nature's will that rivers and other waterways flood periodically. Flooding enriches the soil by bringing nutrients to the flooded area. Indeed, the plains states are fertile farming lands because flooding from rivers such as the Mississippi River periodically enriches the soil in the surrounding areas. Flooding also replenishes the sediments in downstream areas and wetlands.

^{8.} See Flood Loss Data, supra note 2.

^{9.} See Klein & Zellmer, supra note 3, at 1477; Scales, supra note 7, at 6.

^{10.} See Klein & Zellmer, supra note 3, at 1477.

^{11.} See id. at 1500-01.

Notwithstanding the benefits of flooding, in response to the many flooding events that have occurred since 1927, Congress has systematically passed numerous laws that were designed to prevent or control flooding.¹² These laws in sum were intended to thwart Mother Nature's will that rivers and other waterways flood periodically.

Consider, for example, the Mississippi River's lengthy history of flooding, despite mankind's unsuccessful attempts to control the natural tendency of the river to flood periodically. The Mississippi River is the largest river in North America at 2,300 miles, and America's efforts to tame it have resulted in over 80% of the river's natural floodplain being "protected" by levees. ¹³ Indeed, nearly 1,800 miles of the river are lined with levees. ¹⁴ Nonetheless, the river still has flooded every decade since 1849. ¹⁵

One of the great floods of the Mississippi River that occurred despite miles and miles of levees was the Flood of 1927. From Illinois to Mississippi, 145 breaches in the levees occurred, and over 17 million acres of land were flooded in seven states with an inland sea 100 miles long created just north of Vicksburg, Mississippi. Billions of dollars in damage occurred. In damage occurred.

Another major Mississippi River flooding event was the Flood of 1993. In this event, 40 of 226 federal levees and 1043 of 1345 nonfederal levees were overtopped or breached. Approximately 100,000 buildings were destroyed or severely damaged. Over 500 counties were declared federal disaster areas. The total damages were estimated to be as high as \$20 billion. 121

In 2005, Hurricane Katrina was another major flooding event. With a twenty-one-foot storm surge, at least thirty levees surrounding New Orle-

^{12.} See, e.g., Flood Control Act of 1928, Pub. L. No. 70-391, 45 Stat. 534; Flood Control Act of 1936, Pub. L. No. 74-738, 49 Stat. 1570; Flood Control Act of 1944, Pub. L. No. 78-534, 58 Stat. 887; Flood Control Act of 1965, Pub. L. No. 89-298, 79 Stat. 1073 (codified as amended at 33 U.S.C. §§ 701–709 (2012)); see also John M. Barry, Rising Tide: The Great Mississippi Flood of 1927 and How It Changed America 423 (1997).

^{13.} See Klein & Zellmer, supra note 3, at 1477, 1498.

^{14.} See id. at 1480.

^{15.} See id. at 1477-78.

^{16.} See id. at 1481.

^{17.} See id. at 1481-82.

^{18.} See id. at 1493; see also Lee W. Larson, The Great Flood of 1993 4 (1996), available at http://www.nwrfc.noaa.gov/floods/papers/oh_2/great.htm.

^{19.} See Klein & Zellmer, supra note 3, at 1494; see also Gerald E. Galloway, Jr., Corps of Engineers Responses to the Changing National Approach to Flood Plain Management Since the 1993 Midwest Flood, 130 J. Contemp. Water Res. & Educ. 5, 5 (2005).

^{20.} See Klein & Zellmer, supra note 3, at 1494; see also Susan Saulny, Development Rises on St. Louis Area Floodplains, N.Y. Times (May 15, 2007), http://www.nytimes.com/2007/05/15/us/15flood.html.

^{21.} See Klein & Zellmer, supra note 3, at 1494; see also Galloway, supra note 19, at 5.

ans gave way, and at least 80% of New Orleans was submerged by up to twenty feet of water. ²² Approximately 300,000 homes were destroyed, and the property damage totaled approximately \$100 billion. ²³

Hurricane Sandy, which came ashore in New Jersey just south of New York City on October 29, 2012, was the second largest flooding disaster in America behind only Hurricane Katrina.²⁴ It had a twelve-foot storm surge in the New York City area, and the damage estimate exceeds \$60 billion.²⁵

Given the repeated flooding events that have occurred decade after decade—despite levees, seawalls, and other flood prevention efforts—it is not a question of if levees and seawalls will fail. The question is only when they will fail.²⁶ Ironically, the construction of levees has resulted in greater, not lesser, damage because they have created a false sense of security that has encouraged people to develop land in floodplains.²⁷ Yet, the governmental agencies responsible for building and maintaining the levees that will inevitably fail are immune from liability for the damage that results when their levees fail.²⁸

Levees also have increased flood damage because they have served to funnel water downstream and, when the levees are breached, the escaping water gets trapped in the areas near the levee breaches.²⁹ Further, levees also have caused downstream land erosion because the natural replenishment of downstream areas with sediments dispersed during flood events has been frustrated or prevented by levees.³⁰ Louisiana, for example, has

^{22.} See Klein & Zellmer, supra note 3, at 1501–02; Bob Marshall, City's Fate Sealed in Hours: Timeline Maps Course of Post-Katrina Deluge, New Orleans Times-Picayune (May 14, 2006), http://www.nola.com/katrina/articles/citys_fate_sealed_in_hours.html.

^{23.} See Klein & Zellmer, supra note 3, at 1499.

^{24.} See Andy Newman, Hurricane Sandy vs. Hurricane Katrina, N.Y. Times Blog (Nov. 27, 2012, 4:17 PM), http://cityroom.blogs.nytimes.com/2012/11/27/hurricane-sandy-vs-hurricane-katrina/.

^{25.} See id.; see also French, supra note 3, at 463.

^{26.} See Ass'n of State Floodplain Managers, Levees: The Double-Edged Sword (2007), available at http://www.floods.org/PDF/ASFPM_Levee_Policy_Challenges_White_Paper_021907.pdf; see also Klein & Zellmer, supra note 3, at 1520.

^{27.} See Klein & Zellmer, supra note 3, at 1487, 1489, 1495, 1503, 1507–08, 1520.

^{28.} See 33 U.S.C. § 702c (2012); see, e.g., United States v. James, 478 U.S. 597, 604 (1986) (dismissing claims against United States for deaths of recreational boaters who drowned after being swept through open discharge gates of federal flood control reservoirs).

^{29.} See Klein & Zellmer, supra note 3, at 1501, 1511; Marshall, supra note 22; see also David M. Driesen et al., Ctr. for Progressive Reform Publ'n, An Unnatural Disaster: The Aftermath of Hurricane Katrina 13–14 (2005), available at http://www.progressivereform.org/articles/unnatural_Disaster_512.pdf (describing storm surges moving up Mississippi River–Gulf outlet and Gulf Intracoastal Waterway).

^{30.} See Klein & Zellmer, supra note 3, at 1500-01, 1509; John McQuaid & Mark Schleifstein, In Harm's Way: Surging Water Is the Biggest Threat to New Orleans,

lost 1.2 million acres of wetlands since the 1930s.³¹ As a result of the land erosion due to levees, it has been estimated that at the time of Hurricane Katrina, the Gulf of Mexico was, "in effect, probably 20 miles closer to [New Orleans] than it was in 1965 when Hurricane Betsy hit."³² Consequently, research suggests that most of the flooding caused by Hurricane Katrina could have been avoided if the coastal wetlands downstream of New Orleans had still existed.³³

B. The Theoretical Concerns that Led to Private Insurers' Refusal to Cover the Risk of Flooding

Unlike "named peril" policies, most homeowners insurance policies purport to cover "all risks" of loss, except for specific risks that are expressly excluded.³⁴ Historically, named peril policies only covered one specified peril. The first non-marine named peril policy was a fire insurance policy, which originated in London following the Great Fire of 1666.³⁵ In the 1940s and 1950s, insurers began to bundle coverages for multiple named perils together under one policy. These policies became known as "multi-peril" policies. Under both "named peril" and "multiperil" policies, any perils that were not expressly listed as covered were excluded.³⁶

"All risk" policies were then developed from "multi-peril" policies.³⁷ Unlike "multi-peril" and "named peril" policies, however, "all risk" policies cover all perils except for the perils that are specifically excluded.³⁸ Historically, coverage for the risk of loss due to flooding could be purchased

- 31. See Klein & Zellmer, supra note 3, at 1510.
- 32. See McQuaid & Schleifstein, supra note 30 (quoting Curole) (internal quotation marks omitted).
- 33. See Klein & Zellmer, supra note 3, at 1510; America's Wetland in a Nutshell—FAQs, Am.'s Wetland Found, http://www.americaswetlandresources.com/back-ground_facts/basicfacts/FAQs.html (last visited Nov. 14, 2014).
- 34. See Jeff Katofsky, Subsiding Away: Can California Homeowners Recover from Their Insurer for Subsidence Damages to Their Homes?, 20 PAC. L.J. 783, 785 (1989) ("In an 'all-risk' policy, all losses except those specifically excluded are covered. This is the broadest form of coverage and has been so interpreted by the courts." (footnote omitted)).
- 35. See Peter J. Kalis, Thomas M. Reiter & James R. Segerdahl, Policy-holder's Guide to the Law of Insurance Coverage § 13.02[A][1] (1st ed. 1997 & Supp. 2013) (citing Randolph Fields, Finding Lost Treasure—Historical Review of First Party Property Policies 3 (1991)).
 - 36. See id. § 13.02[A].
 - 37. See id. § 13.02[B].
- 38. See 5 John Alan Appleman & Jean Appleman, Insurance Law and Practice with Forms § 3092 (4th prtg., rev. vol. 1987); 3 New Appleman Insurance Law Practice Guide § 31.06[2][d] (Jeffrey E. Thomas et al. eds., 2011); 10A Lee R. Russ & Thomas F. Segulla, Couch on Insurance § 148:50 (3d ed. 1996).

New Orleans Times-Picayune (June 23, 2002), http://msuweb.montclair.edu/~furrg/essays/tpnoseries02.html (quoting Windell Curole, General Manager of South Lafourche Levee District).

as an add-on coverage under named peril or multi-peril policies, and all risk policies covered flood losses unless flooding was expressly excluded.³⁹

Since the Flood of 1927, the losses caused by flooding have been staggering, with the total in the hundreds of billions of dollars. Indeed, flooding is the most common type of disaster in the world, with nine out of ten catastrophes each year related to flooding.

Consequently, by the 1960s, insurers had seen enough of flood losses, and they decided that insuring losses due to flooding generally was not a risk they wanted to accept. Almost uniformly, they have refused to insure flood losses for non-commercial entities despite selling "all risk" homeowners property policies.⁴² Thus, they have inserted a flood exclusion in all homeowners policies that is worded the same as or similarly to the following:

We do not insure for loss caused directly or indirectly by . . . Water Damage[, which] means: Flood, surface water, waves, tidal water, overflow of a body of water, or spray from any of these, whether or not driven by wind 43

The three primary reasons given for private insurers' refusal to cover the risk of losses due to flooding are: (1) the propensity of entities most likely to suffer from flooding losses to purchase coverage for flooding, while those unlikely to suffer such losses decline to purchase such coverage; (2) the near "certainty of losses in some areas;" and (3) "the ruinous, widespread nature of flooding events." These concerns associated with insuring the risk of flooding generally fall under the theoretical headings of adverse selection, moral hazard, and correlated risks.

1. Adverse Selection

Adverse selection is the tendency of people who are most likely to suffer losses to purchase insurance to protect against such losses, while the

^{39.} See Scales, supra note 7, at 7.

^{40.} See Oliver A. Houck, Rising Water: The National Flood Insurance Program and Louisiana, 60 Tul. L. Rev. 61, 62–63, 65–66 (1985); Scales, supra note 7, at 6; Flood Loss Data, supra note 2.

^{41.} See Houck, supra note 40, at 62.

^{42.} See Warren Kriesel & Craig Landry, Participation in the National Flood Insurance Program: An Empirical Analysis for Coastal Properties, 71 J. OF RISK & INS. 405, 405 (2004). Contrary to the conventional wisdom that no private insurers will provide coverage for flood losses, for the right price and for the right policyholders, there are some insurers that are still willing to provide limited coverage under commercial property policies for floods. See, e.g., Penford Corp. v. Nat'l Union Fire Ins. Co. of Pittsburgh, Pa., 662 F.3d 497 (8th Cir. 2011) (litigating whether policyholder, whose manufacturing facility was located on banks of Cedar River, had \$50 million or \$20 million in coverage for flood losses under "all risk" commercial property policy issued by AIG and ACE).

^{43.} Sample Homeowners Policy, Section I—Exclusions, § A.3, reprinted in Kenneth S. Abraham, Insurance Law and Regulation 206 (5th ed. 2010).

^{44.} Kriesel & Landry, supra note 42, at 405; see also Scales, supra note 7, at 8-9.

people who are the least likely to suffer losses decline to purchase insurance.⁴⁵ The foundational premise of the theory of adverse selection is that policyholders have an informational advantage over insurers about their risks and that people who know they are high risk buy more insurance than people who are low risk.⁴⁶

If insurance is sold on a peril-by-peril basis, the idea of adverse selection makes some sense. It stands to reason that a person who thinks his house may be flooded because he lives along a riverbank is more likely to want to purchase flood insurance than someone who lives on top of a mountain.

The concept of adverse selection begins to break down, however, if all of the most common types of risk of loss are bundled together and are covered under the same insurance policy being sold. So, for example, if the homeowners policies available for purchase cover all risks of loss—including flood, wind, fire, vandalism, etc.—then a person who lives along a riverbank that is concerned about flooding will not have a greater incentive to purchase the policy than a person who lives on a mountain top and is more concerned about wind damage than flooding. If the policyholder wants or is required to have homeowners insurance to cover any of the types of risk of loss he may suffer that are covered under all risk policies, then he will buy the policy regardless of whether he is concerned about all of the types of risks of loss covered by the policy.

2. Moral Hazard

The concept of moral hazard captures the intuitive idea that people who have insurance are less likely to take steps to avoid or minimize losses because the losses will be paid by someone else—the insurer.⁴⁷ As previously noted, Judge Easterbrook has described the theory underlying the concept by stating that, "[o]nce a person has insurance, he will take more risks than before because he bears less of the cost of his conduct."⁴⁸ Another commentator has described moral hazard as follows: "What moral hazard means is that, if you cushion the consequences of bad behavior, then you encourage that bad behavior. The lesson of moral hazard is that less is more."⁴⁹

Although the concept of moral hazard has a lot of intuitive appeal, the pervasiveness of the moral hazard problem in connection with natural disasters such as flooding is tenuous. The idea that someone will not bother to take steps to prevent his house from being flooded simply because he has insurance ignores the lack of control people have over

^{45.} See supra note 5.

^{46.} See Siegelman, supra note 5, at 1247.

^{47.} See supra note 6.

^{48.} W. Cas. & Sur. Co. v. W. World Ins. Co., 769 F.2d 381, 385 (7th Cir. 1985).

^{49.} James K. Glassman, Editorial, *Drop Budget Fight, Shift to Welfare*, St. Louis Post–Dispatch, Feb. 11, 1996, at B3.

floods, the real and significant inconvenience of being flooded out of one's home, and the significant deductibles contained in many homeowners policies. For most people, the fact that their house may be repaired in the future with insurance monies does not mean they would not mind being homeless for weeks or months while they wait for the insurance check to arrive and for their house to be repaired. Most people also do not relish the prospect of having to call contractors and arrange for the removal of mud-caked drywall, carpeting, furniture, and personal belongings from their homes. Similarly, most people also would prefer that their personal belongings and irreplaceable items of sentimental value, such as family heirlooms and photos, not be ruined by muddy flood waters. So, the idea underlying the concept of moral hazard—that people simply would not bother to take preventative measures to avoid being flooded if they have insurance—may have some theoretical appeal, but it overlooks the reality of actually living through a flood.⁵⁰

3. Correlated Risks

Correlated risks are risks of loss that happen to numerous people in concentrated areas at approximately the same time. ⁵¹ Insurers do not want to insure correlated risks of loss because they do not believe they can accurately predict the frequency or severity of such losses or collect enough premiums to adequately spread the risk of loss across a large enough pool of policyholders to cover the losses when they occur. ⁵²

Although flood events do present correlated risks of loss, it does not necessarily mean flood losses are uninsurable today. Correlated risk concerns are most legitimate when an insurer only sells insurance in a limited geographic area, because the pool of policyholders is limited and all of the policyholders are likely to face the same types of natural hazards that occur at the same time (e.g., people who live in the same area share the

^{50.} A better way to address moral hazard concerns is for the insurance policy to cover, and require the policyholder to take, preventative measures intended to avoid or minimize a loss. This coverage is already provided under homeowners policies, the "sue and labor" provisions of commercial property policies, and even NFIP policies to a limited extent. See, e.g., John S. Clark Co. v. United Nat'l. Ins. Co., 304 F. Supp. 2d 758, 767 (M.D.N.C. 2004) ("[T]o be covered as reimbursable sue and labor expenses [under a commercial property policy], those expenditures must be made for the benefit of the insurer in mitigating or preventing a covered loss." (first alteration in original) (quoting Swire Pac. Holdings, Inc. v. Zurich Ins. Co., 139 F. Supp. 2d 1374, 1385 (S.D. Fla. 2001))); Sample Homeowners Policy §§ E.2.a (Additional Coverages), I.B.4 (Conditions) (requiring homeowner to protect damaged property against further damage with insurer agreeing to pay costs incurred to do so), reprinted in Abraham, supra note 43, at 199, 207; FEMA, Stan-DARD FLOOD INSURANCE POLICY § III.C.2 [hereinafter FEMA, STANDARD POLICY], available at http://www.fema.gov/media-library-data/1398950546439-c78022cefaa4 10c9f902076846a0a5a5/F-122_NFIP_DwellingForm_June2014.pdf (covering up to \$1,000 of policyholder's costs incurred to avoid or minimize losses).

^{51.} See supra note 7.

^{52.} See Bruggeman, Faure & Heldt, supra note 7, at 187; Cummins, supra note 7, at 342-43.

common risks of flooding, earthquakes, and tornadoes). Consequently, when insurance companies only sold policies locally or regionally, correlated risk concerns regarding flooding were understandable.

The negative financial consequences for insurers associated with the correlated risk of flooding have substantially diminished since the NFIP originally was created, however, due to the emergence of multinational insurance companies that sell insurance to policyholders across America and throughout the world.⁵³ Similarly, the financial impact of correlated risks also has been diminished by reinsurance, which is now a worldwide business in which global reinsurers insure all of or portions of another insurer's portfolio of business (known as "treaty" reinsurance).⁵⁴

Insurers today also can further spread the risk of loss associated with catastrophic events through the sale of catastrophe bonds, pursuant to which insurers sell bonds for specific types of catastrophes, such as earth-quakes and hurricanes, to investors who receive interest payments on the bonds and the return of their principal at the end of the bond term unless the specified catastrophe occurs, in which case, the insurer keeps the principal and ceases to make interest payments on the bonds.⁵⁵ Since 1996, insurers have spread their risks through the issuance of \$51 billion in catastrophe bonds while incurring only \$682 million in losses for the catastrophes covered by the bonds (only 1.3% of the total amount issued).⁵⁶

Thus, the development of multinational insurance companies, global reinsurance, and catastrophe bonds means that the pool of insureds and investors across which the risk of a flood loss in Long Island, for example, can now be spread are located not only on Long Island, but also across the entire state of New York and in more distant places throughout America, Australia, and Europe.

In addition, as is the case with adverse selection, the correlated risk problem is much greater when perils are insured separately, as opposed to when coverage for numerous perils is bundled together under the same policy. If insurance for flooding is covered only under named peril policies and sold only regionally, then people who live in the same geographic flood areas would have a correlated risk of suffering flood losses at the same time. If the policies being sold, however, cover floods along with the other most common perils such as wind, fire, and vandalism, then the

^{53.} American International Group., Inc. (AIG), for example, sells insurance in 130 countries around the world, had \$68.7 billion in revenue in 2013, and has a market capitalization of approximately \$70–80 billion. See Am. Int'l Group, Annual Report (Form 10-K), at 212 (Feb. 21, 2013), available at http://www.aig.com/Chartis/internet/US/en/AIG_2013_AR%20with%2010-K_tcm3171-590454.pdf; American International Market Cap, YCharts.com, http://ycharts.com/companies/AIG/market_cap (last visited Oct. 13, 2014).

^{54.} See Cummins, supra note 7, at 343.

^{55.} See Scales, supra note 7, at 46; Al Yoon & Leslie Scism, Investors Embrace 'Catastrophe Bonds', Wall St. J. (April 23, 2014, 6:44 PM), http://online.wsj.com/news/articles/SB10001424052702304049904579517710350913016.

^{56.} See Yoon & Scism, supra note 55.

pool of policyholders who would choose to purchase such insurance would be much more diverse, both geographically and from a risk profile perspective. Consider again the example of two policyholders, one who lives along a river with flooding concerns and the other who lives on a mountain top with wind damage concerns. Because the perils of wind and flooding would be bundled together and sold under the same policy form, the risks of a flood loss for the two policyholders would not be correlated. Nor would the risks of wind damage for the two policyholders be correlated. Thus, bundling coverage for multiple perils together in a single policy decreases: (1) correlated risk concerns because the pool of policyholders likely will have more diverse risk profiles and (2) adverse selection concerns because more policyholders with diverse risk profiles are likely to purchase the insurance.

C. The Creation of the National Flood Insurance Program

As a result of insurers' refusal to cover flood losses due to adverse selection, moral hazard, and correlated risk concerns, the National Flood Insurance Program was created through the National Flood Insurance Act of 1968 to fill the void.⁵⁷ The NFIP also was created as an attempt to recoup some of the monies the federal government was spending on post-disaster relief efforts by getting the people who were most likely to be victims of flooding to pay premiums to offset some of the post-disaster relief costs the government was incurring.⁵⁸

Although purchasing flood insurance under the NFIP is considered voluntary, a property owner must have flood insurance if the property is located in a high risk flood area (i.e., the 100-year flood plain) and the loan used to purchase the property is secured by a federally insured lender, which currently encompasses the vast majority of loans.⁵⁹

As deficiencies in the NFIP have been revealed by various flood disasters since 1968, the NFIP has been amended reactively in attempts to address the deficiencies. For example, in 1994, following the Midwest Flood of 1993, which resulted in the NFIP becoming insolvent due to the combination of low participation rates and high loss rates, the program was amended to increase the number of properties that are required to purchase flood insurance.⁶⁰ In 2004, when it was realized that many

^{57.} See National Flood Insurance Act of 1968, Pub. L. No. 90-448, 82 Stat. 572 (codified as amended at 42 U.S.C. §§ 4001–4127 (2012)).

^{58.} See U.S. Gov't Accountability Office, Overview of GAO's Past Work on the National Flood Insurance Program 3 (2014) [hereinafter GAO Overview of Past Work], available at http://www.gao.gov/products/GAO-14-297R; Klein & Zellmer, supra note 3, at 1490 (citing Rutherford H. Platt, Review of Sharing the Challenge: Floodplain Management into the 21st Century, Env't, Jan.—Feb. 1995, at 25) ("[The NFIP] was also intended to defray the after-the-fact expense of federal disaster relief by encouraging floodplain occupants to pay premiums before disaster struck.").

^{59.} See 42 U.S.C. § 4012a.

^{60.} See id. § 4012a(b)(4)(B).

properties repeatedly are flooded and repaired using NFIP funds, the program was amended to attempt to "disincentivize property owners from living in areas repeatedly flooded" by providing these property owners assistance in either elevating the properties or moving. In 2012, the program, again insolvent in the amount of approximately \$17 billion due to Hurricane Katrina, was amended to address the fact that: (1) about 28% of the policies are sold at substantially subsidized premium rates, and (2) the flood maps are outdated and inaccurate. It remains to be seen whether actuarially-sound premium rates will ever be charged, because several coastal states successfully lobbied against the new premium rates that would be charged to their residents such that Congress recently passed the Homeowner Flood Insurance Affordability Act of 2014, which delays the full implementation of actuarially sound premium rates.

The NFIP currently is administered by the Federal Emergency Management Agency (FEMA), which uses private insurance companies to: (1) sell the NFIP policies on behalf of FEMA⁶⁵ in exchange for a 30% sales commission and (2) handle flood claims when they arise for additional claims handling fees.⁶⁶ In 2012, the private insurers that sell NFIP policies and handle NFIP claims for FEMA, without actually insuring any of the policyholders' risks of flood losses, were paid a total of 43.6% of the premiums collected.⁶⁷

For a property owner to qualify for flood insurance under the NFIP, the property owner's community must agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce or minimize the risk of flooding.⁶⁸ Currently, only 5.5 million of the approximately 72

^{61.} See Aparna Kirknel Majmudar, The National Flood Insurance Program: Maintaining Its Head Above Water, 16 U. MIAMI INT'L & COMP. L. REV. 183, 198 (2009). In fact, about 1% of the insured properties account for approximately 25% to 30% of the losses. See Scales, supra note 7, at 13; Rachel Lisotta, Comment, In over Our Heads: The Inefficiencies of the National Flood Insurance Program and the Institution of Federal Tax Incentives, 10 Loy. Mar. L.J. 511, 519 (2012).

^{62.} See Ernest B. Abbott, Floods, Flood Insurance, Litigation, Politics—And Catastrophe: The National Flood Insurance Program, 1 Sea Grant L. & Pol'y J. 129, 129–30 (2008).

^{63.} See Biggert-Waters Flood Insurance Reform Act of 2012, Pub. L. No. 112-141, §§ 100205, 100207, 100216, 126 Stat. 405, 917–19, 927–30 (amending 42 U.S.C. §§ 4001–4127); see also Scales, supra note 7, at 16.

^{64.} See Homeowner Flood Insurance Affordability Act of 2014, Pub. L. No. 113-89, $\S\S$ 3–4, 128 Stat. 1020, 1021–22 (2014) (amending 42 U.S.C. $\S\S$ 4001–4127).

^{65.} See Scales, supra note 7, at 14.

^{66.} See 42 U.S.C. § 4012a; see also Scales, supra note 7, at 14.

^{67.} See GAO OVERVIEW OF PAST WORK, supra note 58, at 12.

^{68.} See Scales, supra note 7, at 12; Wayne D. Taylor, Arthur J. Park & Sean O'Brien, Unique Coverage Issues in Flood Losses, 48 TORT TRIAL & INS. PRAC. L.J. 619, 622 (2013).

million homeowners in America purchase flood insurance from the NFIP.⁶⁹

1. The Coverage Provided Under NFIP Policies

The maximum amount of NFIP coverage that can be purchased for a residential property is \$250,000 for the building itself and \$100,000 for personal property. Coverage for basements, which includes any spaces below ground level, is limited to only a few items including fuel tanks, furnaces, and water heaters, which means many things commonly found or stored in basements—such as drywall, ceilings, carpeting, clothing, electronic equipment, furniture, and other types of personal property—are not covered. NFIP policies also do not cover property and belongings that are located outside of the insured building, such as trees, plants, wells, septic systems, decks, patios, fences, hot tubs, and swimming pools. 2

In valuing losses, unlike "guaranteed replacement cost" policies that pay the cost needed to rebuild the home regardless of the limit of liability or "valued" policies that pay the full limit of the policy in the event of a total loss, the policyholder receives the *lesser* of the replacement cost or actual cash value (i.e., the depreciated value) of damaged items under NFIP policies.⁷³ In addition, NFIP policies do not cover the cost of temporary housing.⁷⁴

To recover any amount of a loss under an NFIP policy, the policy-holder must prepare and submit a "proof of loss" form within sixty days that includes, among other things, bills, receipts, and related documents even if the claims adjuster assigned by the NFIP program to investigate the loss does not furnish a proof of loss form or help the policyholder com-

^{69.} See U.S. Gov't Accountability Office, Report to Congressional Committees, Flood Insurance: Strategies for Increasing Private Sector Involvement 2 (2014), available at http://www.gao.gov/assets/670/660309.pdf (stating there are currently 5.5 million NFIP policyholders); Lisotta, supra note 61, at 518 ("[A] study in 2005 indicated '84 percent of residents in flood-prone areas had not purchased flood insurance '"); Quynh T. Pham, Note, The Future of the National Flood Insurance Program in the Aftermath of Hurricane Katrina, 12 Conn. Ins. L.J. 629, 652 (2006) (stating, as of 2006, "of the estimated 72 million owner-occupied structures, only 4.7 million property-owners purchased flood insurance through the NFIP" (footnote omitted)); Susan Stellin, Reconsidering Flood Insurance, N.Y. Times (Nov. 8, 2012), http://www.nytimes.com/2012/11/11/realestate/reconsidering-flood-insurance-after-hurrican-sandy.html?_r=0&adxnnl=1&pagewanted=all&adxn nlx=1413210226-iFUn8c4a2XgRJhRRJJ48Wg (estimating that approximately 18% of Americans have flood insurance).

^{70.} See 42 U.S.C. § 4013(b)(2), (3); GAO OVERVIEW OF PAST WORK, supra note 58, at 3.

^{71.} See FEMA, U.S. Dep't Homeland Sec., FEMA F-679, National Flood Insurance Program: Summary of Coverage 3 (2012) [hereinafter FEMA Summary of Coverage].

^{72.} See id. at 2.

^{73.} See id. at 4.

^{74.} See id. at 2.

plete it.⁷⁵ Generally, the requirement to submit a proof of loss form in accordance with the terms of NFIP policy is strictly enforced by courts.⁷⁶

In addition, unlike insurance sold by private insurers, the claims adjuster assigned to handle the policyholder's loss under an NFIP policy does not have authority to approve or disapprove the claim or to even tell the policyholder whether his claim has been approved or disapproved.⁷⁷

2. Litigating Claims Under NFIP Policies

One of the unpleasant surprises policyholders who were unfamiliar with the terms of NFIP policies discovered in the wake of Hurricane Katrina was that the NFIP flood policies did not actually cover much of their damages such as landscaping and personal property located in their yards and basements. Another unpleasant surprise for policyholders was that suing the NFIP or the NFIP's claims handlers for poor or improper handling of flood claims was generally fruitless. Unlike insurance policies issued by private insurers, FEMA and the private insurers who sell NFIP policies and then adjust the claims on FEMA's behalf are not subject to liability for underpaying claims, handling claims poorly, or even acting in bad faith, because the NFIP does not allow for recovery for such misconduct and preempts state laws that do provide such relief.

If it becomes necessary to sue under an NFIP policy in order to collect, the policyholder can only file a lawsuit in federal court and must do so within one year.⁸¹ Failure to file the lawsuit within a year results in the forfeiture of the claim.⁸²

III. THE PROBLEMS WITH THE NATIONAL FLOOD INSURANCE PROGRAM

Poor coverage, low participation rates, and insolvency are three of the biggest problems with the NFIP. Hurricane Katrina caused over \$100 bil-

^{75.} See FEMA, STANDARD POLICY, supra note 50, § VII.J.3-4.

^{76.} See, e.g., Shuford v. Fidelity Nat'l Prop. & Cas. Ins. Co., 508 F.3d 1337, 1342 (11th Cir. 2007).

^{77.} See FEMA, STANDARD POLICY, supra note 50, § VII.J.7-8.

^{78.} See Abbott, supra note 62, at 141, 148, 150; Lloyd Dixon et al., Rand Ctr. for Catastrophic Risk Mgmt. & Compensation, Flood Insurance in New York City Following Hurricane Sandy 23–25 (2013), available at http://www.rand.org/content/dam/rand/pubs/research_reports/RR300/RR328/RAND_RR328.pdf.

^{79.} See, e.g., Wright v. Allstate Ins. Co., 500 F.3d 390, 393 (5th Cir. 2007) (holding NFIP does not allow for recovery of extra-contractual damages); Gallup v. Omaha Prop. & Cas. Ins. Co., 434 F.3d 341, 344–45 (5th Cir. 2005) (holding extra-contractual state-law claims are preempted by federal law); Howell v. State Farm Ins. Cos., 540 F. Supp. 2d 621 (D. Md. 2008) (dismissing extra-contractual claims); Abbott, supra note 62, at 144–45, 147–50; Scales, supra note 7, at 33–34, 38.

^{80.} See supra note 79 and accompanying text.

^{81.} See FEMA, STANDARD POLICY, supra note 50, § VII.R; see also Abbott, supra note 62, at 144–45, 148.

^{82.} See, e.g., Shuford v. Fidelity Nat'l Prop. & Cas. Ins. Co., 508 F.3d 1337, 1342 (11th Cir. 2007).

lion in losses.⁸³ Hurricane Sandy caused over \$60 billion in losses.⁸⁴ These figures account for only \$160 billion of the \$274 billion in flood damage caused since 1978.⁸⁵ So, how much of the \$274 billion has been paid by the NFIP? As a percentage of the total amount, the NFIP has not paid much. As discussed above, very few homeowners actually have flood insurance.⁸⁶ And, even for the few people who buy it, NFIP policies often only cover a portion of a person's flood losses.⁸⁷ Consequently, through March 31, 2014, of the approximately \$274 billion of flood losses caused since 1978, the NFIP has paid a total of \$50.6 billion, or about 18%.⁸⁸ Yet, despite only paying a small fraction of the total damages related to floods, the NFIP was insolvent with a deficit of \$24 billion as of December 2013.⁸⁹

A. Poor Coverage and Unfavorable Laws Regarding Claims Handling

The insurance coverage provided by NFIP policies is inadequate. The maximum coverage available for a house is \$250,000 and \$100,000 is the maximum amount available for a home's contents, 90 which account for only a fraction of the actual value of many properties that are located in large population centers such as Boston, New York, and California. There also is no coverage under NFIP policies for the vast majority of things commonly found in basements and yards. 91 Thus, it is not unusual for significant portions of a policyholder's loss to simply not be covered under NFIP policies.

Even those portions of a policyholder's loss that are covered, however, are paid only on an actual cash value basis (i.e., depreciated value), which means the policyholder is paid pennies on the dollar for his ruined personal property. And, in order to recover those pennies on the dollar, one must submit a proof of loss form with supporting documentation within sixty days and then sue within one year if the policyholder disagrees with the amount paid. 93

- 83. See Klein & Zellmer, supra note 3, at 1499.
- 84. See French, supra note 3, at 463.
- 85. See Flood Loss Data, supra note 2.
- 86. See supra note 69 and accompanying text.
- 87. See supra notes 70–77 and accompanying text.
- 88. See FEMA, Loss Statistics Country-Wide as of 3/31/2014, http://bsa.nfipstat.fema.gov/reports/1040.htm (last visited Nov. 15, 2014) (reporting statistics beginning January 1, 1978).
- 89. See Extreme Weather Events: Limiting Federal Fiscal Exposure and Increasing the Nation's Resilience. Testimony before the S. Comm. on Homeland Sec. & Governmental Affairs, 113th Cong. (Feb. 12, 2014) (statement of Mark Gaffigan, Managing Dir. Natural Res. and Env't) [hereinafter Extreme Weather Events], available at http://www.gao.gov/assets/670/660860.pdf.
- 90. See 42 U.S.C. § 4013(b)(2), (3) (2012); see also supra note 70 and accompanying text.
 - 91. See supra notes 71-72 and accompanying text.
 - 92. See supra note 73 and accompanying text.
 - 93. See supra notes 75, 81 and accompanying text.

Unlike many states' laws regarding compliance with provisions in policies sold by private insurers, a policyholder's failure to strictly comply with the NFIP policy's proof of loss and suit limitation provisions results in a forfeiture of coverage. Also unlike a policyholder's common law and statutory rights against private insurers regarding poor claims handling practices or bad faith conduct, the federal government and its agents that administer the NFIP are immune from liability for such misconduct under the NFIP.

In sum, the insurance coverage provided by NFIP policies is limited, a lot of flood-damaged property is not covered by it, there are numerous procedural hurdles that the policyholder must clear in order to avoid the forfeiture of a claim such as filing a proof of loss with supporting documentation within sixty days, and the NFIP administrators and claims handlers are immune from liability for poor or improper claims handling conduct.

B. Low Participation Rates and Insolvency

In addition to the problems discussed above, the actual administration of the NFIP could be used as the poster-child to support the argument that the federal government should not be in the insurance business. The NFIP historically has used outdated floodplain maps due to a lack of funds to create accurate ones, so in many instances the wrong homes were insured or uninsured. For example, the flood map for the New York City area that was being used at the time of Hurricane Sandy was based on data and modeling that were over thirty years old. The new draft of the map for the New York City area that was released in June 2013 essentially doubled the number of houses that are located in the high-risk flood zones (i.e., the 100-year flood plain).

The NFIP also is actuarially unsound by design because it intentionally has been charging subsidized premium rates for old homes grandfathered into the program for decades, which has led to frequent periods of insolvency. The NFIP currently owes the U.S. Treasury more than \$24 billion. The substitution of the program of

^{94.} See supra notes 76, 82 and accompanying text.

^{95.} See supra notes 79-80 and accompanying text.

^{96.} See Cummins, supra note 7, at 358; Beth A. Dickhaus & Darrin N. Sacks, Recent Developments in Insurance Regulation, 42 Tort Trial & Ins. Prac. L.J. 571, 582 (2007); GAO OVERVIEW OF PAST WORK, supra note 58, at 37; Kriesel & Landry, supra note 42, at 406–07.

^{97.} See DIXON ET AL., supra note 78, at 1.

^{98.} See id. at 2.

^{99.} See GAO OVERVIEW OF PAST WORK, supra note 58, at 4.

^{100.} See Extreme Weather Events, supra note 89. The NFIP program also insures a lot of recidivist policyholders. See id. Many homes covered under the program get flooded over and over again because policyholders were not required to take preventative measures to avoid flooding under the NFIP unless the repair costs exceeded 50% of the value of the home. See id.; see also Klein & Zellmer, supra note

In addition, participation in the NFIP has been poor because the NFIP is a voluntary program and people often do not understand the risk of flooding for their homes due, at least in part, to: (1) poor communication of such risks by the NFIP and (2) the outdated and inaccurate flood maps. ¹⁰¹ Many people do not seem to appreciate that a 1% annual chance of being flooded (i.e., the property is located in a 100-year flood plain) actually means you have a 26% chance of being flooded during the course of a 30-year mortgage. ¹⁰² In the New Orleans area, for example, only 10% of the homes flooded by Hurricane Katrina had flood insurance even though the city sits below sea level and is surrounded by water. ¹⁰³ In the New York City area, a little more than 50% of the homes flooded had flood insurance even though Manhattan and Staten Island are islands. ¹⁰⁴

In short, when given a choice, very few people actually purchase NFIP policies. Indeed, most homeowners who have flood insurance purchase it only because they are required to do so in order to get a mortgage if their home shows up on the 100-year flood plain map.¹⁰⁵ At the time of Hurricane Sandy, only about 20% of the homeowners located in areas considered at high risk for flooding who were not required to have flood insurance actually had flood coverage, and only approximately 1% of homeowners located outside of areas designated at high risk for floods nationwide purchase NFIP policies.¹⁰⁶ Consequently, as of the end of 2012, only 5.5 million of the 72 million homeowners in America had a NFIP policy, which means the vast majority of homes in America do not have flood coverage.¹⁰⁷

^{3,} at 1527; Christine M. McMillan, Comment, Federal Flood Insurance Policy: Making Matters Worse, 44 Hous. L. Rev. 471, 502 (2007). Indeed, 1% of the homes covered in the program account for 30% of the loss payouts due to repeated flooding. See Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, Pub. L. No. 108-264, § 2(6), 118 Stat. 712, 713 ("[R]epetitive-loss properties comprise approximately 1 percent of currently insured properties but are expected to account for 25 to 30 percent of claims losses"); Klein & Zellmer, supra note 3, at 1527; Scales, supra note 7, at 13; Lisotta, supra note 61, at 13.

^{101.} See supra notes 96–98 and accompanying text.

^{102.} See GAO OVERVIEW OF PAST WORK, supra note 58, at 6, 25; Scales, supra note 7, at 18; Pham, supra note 69, at 652.

^{103.} See Klein & Zellmer, supra note 3, at 1502; Scales, supra note 7, at 15; Pham, supra note 69, at 639.

^{104.} See DIXON ET AL., supra note 78, at xvii.

^{105.} See id.

^{106.} See id.; GAO OVERVIEW OF PAST WORK, supra note 58, at 22 (stating that 2006 Rand study estimated that only 1% of homes not located in areas designated high flood risk areas purchased flood insurance).

^{107.} See supra note 69 and accompanying text.

IV. THE ELIMINATION OF THE FLOOD EXCLUSION IN HOMEOWNERS POLICIES AS ONE PART OF THE SOLUTION TO THE FLOOD PROBLEM

If the NFIP is inadequate despite Congress's continuing efforts over the past fifty-six years to make it work, is there a better way to insure flood losses? Yes, homeowners insurance. This part shows that, despite impediments to doing so, the flood exclusion should be eliminated from homeowners insurance policies.

A. Homeowners Insurance as a Social Necessity

Insurance plays a critical role in society today. Insurance is a "social instrument" because it protects the limited assets of individuals by spreading and transferring, through an insurer intermediary, the risk of losses due to natural and unnatural disasters from the individual to a larger population. When this country was founded in the mid-eighteenth century, people and businesses recognized the importance of insurance as a social safety net by contributing premiums to a "mutual" company or group to create a pool of money from which losses caused by the biggest recognized risk at the time—fire—were paid. 109 Essentially, the insurance company acted as a third-party administrator that collected the premiums to create the pool of money from which losses would be paid and then paid such losses as they arose. 110

Insurance is even more important now than it was when America was first founded. Homeownership is not even possible for most people today without insurance because anyone who wants to purchase a house using a bank to finance the purchase is required to have homeowners insurance in an amount adequate to cover the mortgage.¹¹¹

Yet, despite the importance of insurance, over the past fifty years, insurers have undermined the purpose that insurance serves by hollowing

^{108.} See Jeffrey W. Stempel, The Insurance Policy as Social Instrument and Social Institution, 51 Wm. & Mary L. Rev. 1489, 1489 (2010); see also Deborah A. Stone, Beyond Moral Hazard: Insurance as Moral Opportunity, 6 Conn. Ins. L.J. 11, 26–29 (1999) ("Because virtually every adult citizen participates in various forms of mandatory insurance, from automobile liability insurance to unemployment insurance, old-age pensions and disability insurance, everyone is exposed to two of the moral assumptions of these programs: collective responsibility for the well-being of individuals and individual responsibility for the well-being of others.").

^{109.} See Jerry & Richmond, supra note 6, at 18; see also Jay M. Feinman, Delay, Deny, Defend: Why Insurance Companies Don't Pay Claims and What You Can Do About It 21 (2010); Christopher C. French, The Role of the Profit Imperative in Risk Management, 17 U. Pa. J. Bus. L. (forthcoming) (manuscript at 1–2) (on file with author) (arguing that social purpose of insurance is being marginalized by private insurers' pursuit of profits).

^{110.} See French, supra note 109, at 1-2.

^{111.} See Martin F. Grace et al., Catastrophe Insurance: Consumer Demand, Markets and Regulation 83 (2003) (discussing demand for homeowners insurance, stating that "homeowners insurance . . . is essentially mandatory"); French, *supra* note 109, at 11; Stempel, *supra* note 108, at 1497.

out the coverages that are provided under numerous lines of insurance, including homeowners insurance, through the addition of exclusions for some of the most common catastrophic risks such as floods. The trend toward less and less coverage under "all risk" policies accelerated when publicly traded stock companies began replacing mutual companies as the dominant providers of insurance during the past two decades. 113

The trend of insurers hollowing out the coverage provided under "all risk" policies should be reversed, starting with the exclusion for flood losses. Homeowners insurance, as a social necessity today, should be required to cover losses caused by floods. Indeed, catastrophic risks such as floods are exactly the types of risk of loss that should be covered under "all risk" homeowners insurance. "Removing coverage for the very types of losses that are most common and have the most devastating impact on people, businesses and communities is antithetical to the risk transferring" and social safety net purposes of insurance. ¹¹⁴

Although not being done in a coordinated or comprehensive way, in recent years, we have seen some legislatures moving in the direction of requiring the insurance industry to actually fulfill the purpose of insurance by requiring that it provide products that serve insurance's purpose as a social safety net. For example, with respect to health insurance, the Affordable Care Act has: (1) removed insurers' ability to refuse to insure certain people, (2) removed insurers' ability to cancel insurance for people who become sick, and (3) reduced insurers' ability to use reverse adverse selection to charge certain risk classifications prohibitively expensive premiums.¹¹⁵

Other examples of legislatures enacting statutes to override policy exclusions or to require insurers to cover risks that they would otherwise refuse to cover can be found in the auto insurance context, where drivers who insurers refuse to insure because the insurers do not consider the drivers adequately profitable generally can still get a minimum amount of liability coverage through state residual risk insurance pools. Another example is states' passage of statutes that nullify the "innocent co-insured" exclusion. Insurers add that exclusion to property policies in an attempt to prevent innocent co-insureds from recovering under policies for losses that were expected or intended by another insured such as when an estranged spouse who is no longer living in the couple's house destroys the

^{112.} See French, supra note 109, at 4.

^{113.} Id. at 1–3; see also Otgontsetseg Erhemjamts & J. Tyler Leverty, The Demise of the Mutual Organizational Form: An Investigation of the Life Insurance Industry, 42 J. Money, Credit & Banking 1011 (2010).

^{114.} French, *supra* note 109, at 39.

^{115.} See Kenneth S. Abraham & Daniel Schwarcz, Healthcare Supplement to Abraham's Insurance Law & Regulation 20 (5th ed. 2010).

^{116.} See ABRAHAM, supra note 43, at 771.

house to prevent the spouse from having it. 117 Yet another example is the state of California's refusal to enforce exclusions that purport to eliminate coverage for losses that are concurrently caused by both an excluded peril and a covered peril if the efficient proximate cause of the loss is a covered peril. 118

In short, when an issue has been deemed sufficiently important, there are numerous examples of states exercising their regulatory power to require insurers to cover perils that insurers otherwise would not agree to cover.

B. Insuring Flood Losses Under Homeowners Policies Would Address the Problems with the NFIP

All of the problems with the NFIP—poor coverage, lack of accountability for poor claims payment practices, low participation rates that leave millions of homeowners uninsured, and the periodic insolvency of the program—would be addressed if the flood exclusion were eliminated from homeowners policies. Indeed, the NFIP as it currently exists would no longer even be necessary.

First, standard homeowners insurance policies provide much more favorable coverage terms than NFIP policies. ¹²⁰ For example, coverage is not limited to \$250,000 for the house itself and \$100,000 for the contents of the house. In addition, homeowners insurance policies typically pay losses at replacement cost instead of actual cash value. ¹²¹

Second, unlike under the NFIP, ¹²² insurers' claims handling practices under homeowners policies are governed by state law, not federal law, and most states provide a remedy for an insurer's improper handling of a policyholder's claim. ¹²³ Similarly, unlike the federal law governing the NFIP, inadvertent claims submission errors by the policyholder such as failing to

^{117.} See French, supra note 109, at 40 n.174; see also Jerry & Richmond, supra note 6, at 425-26.

^{118.} See Cal. Ins. Code § 530 (West 2013); Garvey v. State Farm Fire & Cas. Co., 770 P.2d 704, 704–05 (Cal. 1989) (in bank).

^{119.} See Scales, supra note 7, at 43–44. Due to many of the problems with the NFIP discussed in this Essay, Professor Scales also proposes in his article regarding flood insurance that flood losses be covered under homeowners insurance. See id.

^{120.} See, e.g., Sample Homeowners Policy § I.C.2 (Conditions), reprinted in Abraham, supra note 43, at 207 (covering cost to repair or replace damaged property without deduction for depreciation, unlike NFIP policies that only pay lesser of replacement cost or actual cash value which includes depreciation); see also Abbott, supra note 62, at 134–35.

^{121.} See supra note 120.

^{122. 44} C.F.R. pt. 61, app. A(1), art. IX ("This [flood] policy and all disputes arising from the handling of any claim under the policy are governed exclusively by the flood insurance regulations issued by FEMA, the National Flood Insurance Act of 1968, as amended, and Federal common law." (citation omitted)); see also Abbott, supra note 62, at 144–47; Scales, supra note 7, at 32.

^{123.} See supra notes 94-95 and accompanying text.

file a proof of loss timely often do not result in the forfeiture of coverage under state law. 124

Third, including coverage for floods under homeowners policies would eliminate the participation problem that plagues the NFIP. Currently, in contrast to the only 5.5 million homeowners who have NFIP policies, 96% of the 72 million homeowners in the United States have homeowners insurance (69 million). A related benefit of covering floods under homeowners policies is that the accuracy of flood maps would be much less important because a person's decision whether to purchase flood insurance would not depend upon whether the person's house is included within the 100-year floodplain on a map.

Fourth, because the risk of flooding would be bundled together under homeowners insurance with all of the other types of coverages such as fire, wind, and vandalism, the cost of insuring against floods would be spread across 69 million policyholders instead of 5.5 million. Consequently, the total amount of premiums generated to cover flood losses would be much greater than it is under the NFIP. Thus, the capital reserves generated by premiums available to pay flood losses would be much greater, and the risk of insurer insolvency would be much lower. Nonetheless, if insurer insolvency were still a concern despite: (1) the much larger pool of insureds paying premiums, (2) the availability of private global reinsurance, and (3) the availability of catastrophe bonds, then the federal government could act as a reinsurer for losses that exceed a certain stated amount as it currently does for the risk of losses due to terrorism.

Finally, as discussed above in part III.B, in situations where the various types of perils that are being insured are bundled together under the same policies—as they are under homeowners policies—the arguments regarding adverse selection, moral hazard, and correlated risks that have been used to justify private insurers' historical refusal to cover flood losses do not carry much weight today. Because nearly all homeowners carry homeowners insurance, adverse selection concerns would be negligible. Moral hazard concerns regarding flooding are also overstated. Regardless of whether they have flood coverage, homeowners cannot control the weather that causes flooding and homeowners generally are highly motivated to protect their homes due, among other reasons, to the risk of loss of irreplaceable items of sentimental value and the inconvenience of be-

^{124.} See Abbott, supra note 62, at 144-47; Scales, supra note 7, at 34-35.

^{125.} See Scales, supra note 7, at 18; Homeowners and Renters Insurance—Facts and Statistics, Ins. Info. Inst., http://www.iii.org/facts_statistics/homeowners-and-rent ers-insurance.html (last visited Nov. 15, 2014).

^{126.} See supra note 69 and accompanying text.

^{127.} See Terrorism Risk Insurance Act of 2002, Pub. L. No. 107-297, 116 Stat. 2322 (2002) (codified as amended in scattered sections of 15 U.S.C.); Michelle E. Boardman, Known Unknowns: The Illusion of Terrorism Insurance, 93 Geo. L.J. 783, 788–89 (2005); Bruggeman, Faure & Heldt, supra note 7, at 230.

ing homeless. And, unlike in the years prior to 1968, when the NFIP was created, because the pool of insureds across which the risk of loss is spread today is worldwide, the risk of flood losses by the entire pool of insureds is not correlated. Thus, due to the creation of multinational insurance companies, the development of the global reinsurance market, and the emergence of catastrophe bonds, the risk of insuring against flood losses in, for example, Cedar Rapids, would now be spread across the world to policyholders and investors in places such as Maine, Switzerland, and New Zealand. 128

C. Insuring Flood Losses Under Homeowners Policies Would Eliminate Wind Versus Water Damage Litigation

If homeowners insurance covered flood damage, then another added benefit would be much less litigation following water-related catastrophes such as hurricanes. As things currently stand, "policyholders and their insurers spend millions of dollars engaged in endless litigation whenever catastrophes hit. For example, whenever a hurricane comes ashore and brings flooding with it, litigation ensues regarding whether the damage to homes was caused by flooding (an excluded peril) versus wind (a covered peril)." More than 6,600 lawsuits were filed in federal court in New

128. The impact of correlated risks on large, multinational insurers has diminished, as insurers have become more global and implemented additional risk transferring mechanisms, such as reinsurance and catastrophe bonds. There still are, however, a substantial number of smaller insurers that sell homeowners insurance on a statewide or regional level. These smaller, regional insurers would still have legitimate correlated risk concerns if they were to sell homeowners insurance that is required to cover correlated catastrophic risks such as floods. To address the risk of insurer insolvency for these smaller insurers in the event of a catastrophic flooding event, it may need to be mandatory that such insurers purchase reinsurance or sell catastrophe bonds. Indeed, it is possible that smaller insurers could no longer sell homeowners insurance because they may not be able to do so at competitive rates due to the additional costs they would need to incur to ensure solvency as a result of the fact they have smaller pools of capital available to cover the losses associated with catastrophic flooding events.

129. French, *supra* note 109, at 50; *see also* Christopher C. French, *The "Ensuing Loss" Clause in Insurance Policies: The Forgotten and Misunderstood Antidote to Anti-Concurrent Causation Exclusions*, 13 Nev. L.J. 215, 243 (2012) (discussing "ensuing loss" clause's potential impact on wind versus water disputes for hurricane claims); Erik S. Knutsen, *Confusion About Causation in Insurance: Solutions for Catastrophic Losses*, 61 Ala. L. Rev. 957 (2010) (discussing concurrent causation with respect to, among other issues, wind versus water damage caused by hurricanes); *see, e.g.*, Leonard v. Nationwide Mut. Ins. Co., 499 F.3d 419, 429–36 (5th Cir. 2007) (analyzing anti-concurrent causation exclusion in wind versus water dispute following Hurricane Katrina); Corban v. United Servs. Auto. Ass'n, 20 So.3d 601, 611–18 (Miss. 2009) (same).

Notably, because private insurers handle claims under the NFIP on behalf of the federal government, many insurers that issued homeowners policies were responsible for estimating the repair costs for both the federal flood policies under the NFIP program and the insurers' homeowners policies. *See* Feinman, *supra* note 109, at 163. When estimating the cost to remove and replace drywall, for example, because the insurer was paying the claim with NFIP money instead of its own

Orleans in connection with Hurricane Katrina. ¹³⁰ In Mississippi, due to insurers' position that most policyholders' claims should be denied due to the flood exclusion, one insurer filed a motion to transfer the lawsuits out of Mississippi on the basis of a survey that showed that 49% of the people in southern Mississippi "believe that insurance executives are on the same level as child molesters." ¹³¹ The Louisiana Department of Insurance received 20,000 complaints per month during the six-month period following the storm. ¹³² Thus, it is an understatement to say there is a high degree of dissatisfaction with the current state of affairs regarding the payment of claims following hurricanes in America, largely due to the presence of the flood exclusion in homeowners policies, and a significant amount of litigation could be avoided if homeowners policies covered both wind and water damage.

D. European Countries' Handling of Insurance for Flood Losses

In considering whether it would be viable for floods to be covered under homeowners policies in America, one can look to Europe for an answer. The United Kingdom, France, and Belgium are three examples to consider.

In the United Kingdom, insurance for flood losses is mandatory, and it is covered by private insurers. As opposed to selling insurance that covers just the risk of flooding, the risk of loss due to flooding is bundled together with multiple types of risk of loss that are covered under the policies. The insurance is available to all property owners and the premium cannot exceed one-half percent of the amount insured regardless of where the house is located. Despite the fact that insurers' ability to refuse to sell insurance to properties located in flood areas is quite limited, private insurers in the United Kingdom continue to be financially viable even though the United Kingdom is located on an island that is known for its rainy weather.

France is another country where the risk of flood losses is covered by private insurers and, again, the risk is bundled together with other hazards instead of being sold as standalone insurance.¹³⁷ Coverage for floods is

money, one insurer calculated the cost at \$.76 per square foot when the costs would be charged to its homeowners policy, and at \$3.31 per square foot when it would be charged to the federal flood program. *See id.* at 165. Presumably, such practices would cease if insurers were responsible for paying the entire loss.

- 130. Feinman, *supra* note 109, at 147.
- 131. Id. at 145 (quoting Eugene Benick, The Flood After the Storm: The Hurricane Katrina Homeowners' Insurance Litigation, 4 Bus. L. Brief 49, 51 (2007)).
 - 132. Id. at 147.
 - 133. See Majmudar, supra note 61, at 199.
 - 134. See id.
 - 135. See id.
 - 136. See id. at 200-01.
- 137. See id. at 201–02; see also Olivier Moréteau, Policing the Compensation of Victims of Catastrophes: Combining Solidarity and Self-Responsibility, 54 Loy. L. Rev. 65,

mandatory, and there is no differentiation in the amount of the premium charged based upon the policyholder's risk of flood losses.¹³⁸ To incentivize loss prevention measures, there is a premium discount if the municipality in which the property is located has adopted a "prevention of risk plan."¹³⁹ A state-sponsored program, known as the Caisse Centrale de Reassurance (CCR), provides reinsurance to the insurers, receives 50% of the premiums collected by the insurers, and likewise pays 50% of any losses.¹⁴⁰ France provides an unlimited guarantee of the CCR.¹⁴¹

In Belgium, it also is mandatory that homeowners insurance cover natural catastrophes, including floods. ¹⁴² Unlike the French system, the insurer can adjust the premium based upon the risk of loss presented by individual policyholders. ¹⁴³ Approximately 50% of the insurers nonetheless charge the same premium for all of their policyholders. ¹⁴⁴ Each individual insurer's risk of losses has a limit, and a state-sponsored "Disaster Fund" covers any losses above the insurer's limit. ¹⁴⁵

In short, the United Kingdom, France, and Belgium are just three examples of countries that are successfully insuring the risk of flooding in a way similar to the proposal in this Essay.

E. Impediments to Change

To avoid insuring flood losses under homeowners policies when faced with the elimination of the flood exclusion, insurers likely will point to: (1) the concept of freedom of contract and the notion that they should be free to cover whatever risks they choose, ¹⁴⁶ and (2) the purported unprof-

- 138. See Majmudar, supra note 61, at 202.
- 139. See Michael Faure & Véronique Bruggeman, Catastrophic Risks and First-Party Insurance, 15 Conn. Ins. L.J. 1, 44 (2008).
 - 140. See id. at 45; Moréteau, supra note 137, at 89.
- 141. Faure & Bruggeman, *supra* note 139, at 45; Moréteau, *supra* note 137, at 90.
 - 142. See Faure & Bruggeman, supra note 139, at 45-46.
 - 143. See id. at 46.
 - 144. See id.
 - 145. See id.

146. This argument ignores, of course, the fact that insurance policies are contracts of adhesion sold on a take it or leave it basis in which the policyholder has no input regarding the language contained in the policy. See Jeffrey W. Stempel, Law of Insurance Contract Disputes § 4.06[b], at 4–37 (2d ed. 1999) ("In a sense, the typical insurance contract is one of 'super-adhesion' in that the contract is completely standardized and not even reviewed prior to contract formation."); Michelle Boardman, Insuring Understanding: The Tested Language Defense, 95 Iowa L. Rev. 1075, 1091 (2010) (describing "hyperstandardization" of insurance policies); James M. Fischer, Why Are Insurance Contracts Subject to Special Rules of Interpretation?: Text Versus Context, 24 Ariz. St. L.J. 995, 996 (1992) ("The only part of the standard policy that is generally customized to the consumer-insured is the Declaration

^{86 (2008).} Germany is another country where flood insurance is covered by policies sold by private insurers, and the risk of loss due to flooding is bundled together with coverage for other natural disasters such as earthquakes. *See* Majmudar, *supra* note 61, at 203.

itability of insuring flood losses due to adverse selection, moral hazard, and correlated risk concerns. Such arguments have carried the day for the past sixty years, which is why we still have the NFIP program. As discussed in part III.B, although such arguments have much less force today than they did in the past, the insurance industry's lobby is strong—as evidenced by the fact that insurance regulators have repeatedly approved policy forms that contain the flood, and other, exclusions for decades. Indeed, private insurers have great financial incentive to avoid covering floods because they currently are being paid more than 40% of the premiums collected by the NFIP in some years without assuming any of the risk to pay for flood losses.¹⁴⁷

Insurers also likely will argue that they would not be permitted to charge actuarially sound premiums if policies are required to cover flood losses. Insurers made such arguments in recent years when they were forced to continue selling homeowners policies that covered wind damage caused by hurricanes in coastal states. The correct response to such arguments is, of course, to allow insurers to charge a higher premium to reflect the fact that the policies are now insuring an additional risk. However, in light of the fact that the additional risk assumed by insurers would be spread across approximately 69 million policyholders with a wide range of risk profiles, instead of just the 5.5 million homeowners who currently are covered by the NFIP and live almost exclusively in areas known to be at a high risk for flooding, ¹⁴⁹ the average additional premium that should be charged to each individual policyholder when the risk pool is viewed as a whole should be quite limited. ¹⁵⁰

Sheet [T]here is little, if any, freedom to negotiate the standardized language of the insurance contract that determines the scope of coverage."); Susan Randall, Freedom of Contract in Insurance, 14 Conn. Ins. L.J. 107, 125 (2007) ("[I]n some lines of insurance, all insurance companies provide identical coverage on the same take-it-or-leave-it basis."); Kent D. Syverud, The Duty to Settle, 76 Va. L. Rev. 1113, 1153 (1990) ("[P]roperty owner's liability insurance contracts are standardized across insurers in a form few insureds have the power or experience to bargain around.").

^{147.} See GAO OVERVIEW OF PAST WORK, supra note 58, at 12.

^{148.} See French, supra note 109, at 29–30; Donald T. Hornstein, Natural Disasters and the Financing of Fat Tails: Lessons from the Economics and Political Economy of Weather-Related Insurance 4, 6 (2013) (UNC Legal Studies Research Paper No. 2249904), available at http:\srn.com\abstract=2249904 (describing Allstate's, Farmers Insurance's, and Farm Bureau's withdrawal from insurance markets in Florida and North Carolina when they did not obtain regulatory approval for their requested premium rate increases, despite fact that premium rates already had been increased by 77% in Florida between 2001 and 2006); Elisabeth A. Ondera, Testing the Waters: The South Carolina Coastal Captive Insurance Act as Part of a Multifaceted Approach to the Coastal Insurance Conundrum, 59 S.C. L. Rev. 599, 600 (2008).

^{149.} See supra note 69 and accompanying text.

^{150.} Ideally, to accomplish the broadest spreading of the risk of flood losses, nationwide premium rates would be charged with only modestly higher, but not actuarially based, premium rates being charged to high risk properties, similar to the way the Affordable Care Act allows only limited premium variation based upon

Requiring private insurers that sell homeowners insurance to cover flood losses also likely would meet strong political opposition in this politically polarized country. To some people, requiring homeowners policies to cover flood losses, in combination with the existing laws that require homeowners to purchase homeowners insurance, would be viewed as a form of socialism. The reality, however, is that insurance already is a highly regulated industry where public policy and social concerns such as the compensation of innocent victims play a large role. States already regulate insurers by, among other things, approving policy language, approving premium rates, and establishing capital surplus requirements. 151 States also already manage guaranty associations to cover claims submitted to insolvent insurers, and states already have insurance programs for auto drivers that insurers refuse to accept as policyholders. ¹⁵² Consequently, eliminating the flood exclusion from homeowners policies would simply be another example, in a long list of examples, of states exercising their regulatory power over the insurance industry.

Other people will object to including flood coverage in homeowners insurance policies because it would result in premium subsidization. Unless there were numerous risk classifications based upon where a person's home is located and the flood prevention measures in place—which would in some respects defeat the purpose of bundling flood coverage together with other perils in a single policy form—then people who live in areas with a low risk of flooding would to some extent be subsidizing the premiums of the people in higher risk areas. That already occurs, however, under homeowners policies because coverage for all risks is provided under such policies regardless of whether the policyholder actually needs or wants coverage for all of the risks. So, policyholders are already paying for some coverages they do not need but other people do. 153 Indeed, that

factors such as the insured's age and smoking history. See ABRAHAM & SCHWARCZ, supra note 115, at 13. Although many global insurers sell homeowners insurance across the country, homeowners insurance is currently sold, priced, and regulated on a state-by-state basis. Consequently, unless that were to change, greater premium subsidization would occur by lower risk residents located in states with higher risks of flooding, such as coastal states, because the risk of flood losses would be spread directly only to the other homeowners in the state. Insurers, however, would still be able to indirectly spread the risk of loss to entities outside of such states through the insurers' corporate relationships with other insurers, reinsurance, and catastrophe bonds. See supra notes 51–56 and accompanying text.

151. See Abraham, supra note 43, at 119, 122–24, 133–37; Jerry & Richmond, supra note 6, at 90–94.

152. See ABRAHAM, supra note 43, at 124, 771–73. See generally Spencer L. Kimball & Noreen J. Parrett, Creation of the Guaranty Association System, 19 J. Ins. Reg. 259 (2000).

153. The reality, of course, is that subsidization already occurs under all lines of insurance and, ironically, taxpayers currently are subsidizing the NFIP in the approximate amount of \$24 billion, even though many people are uninsured for flood losses and many people who are insured for flood losses are not paid in full for such losses when they occur. See Kristen Uhlenbrock, Despite Hazard of Sea Level Rise, Senate Halts Flood Insurance Reforms, THINKPROGRESS.ORG (Jan. 31, 2014, 10:37)

is one of the very reasons why flood coverage should be included in homeowners policies. It would make flood coverage more affordable and dramatically increase the participation rates. Yet, in a country that highly values individual rights, many people likely will object to being required to subsidize their fellow Americans' insurance rates even if: (1) the cost of doing so is only a nominal amount, and (2) they already are subsidizing the premium rates of other policyholders without realizing it.¹⁵⁴

To crystallize the difficulties associated with changing the flood insurance landscape in America in significant ways, one need only consider what has happened with the Affordable Care Act. It was passed only when Democrats held the majority in both houses of Congress, and it has been subject to more than fifty attempts to repeal or change it since Republicans obtained a majority in the House of Representatives. ¹⁵⁵ If something as important as ensuring that everyone in this country is able to obtain health care has met so much political resistance, then it is doubtful that the political will currently exists to pass legislation that would result in everyone being covered for something undoubtedly of less importance—flood losses.

V. Conclusion

Despite accounting for 90% of all natural disasters and annually causing billions of dollars in damages, only about 7% of homeowners in America have insurance coverage for flood losses. And the insurance coverage that the 7% does have from the NFIP, effectively the sole provider of

AM), http://thinkprogress.org/climate/2014/01/31/3230141/senate-flood-insurance/. Thus, the current system requires mandatory subsidization by all taxpayers for a flood insurance program that provides only poor coverage to the small percentage of homeowners who actually participate in the program.

154. One example of a state in which inland homeowners currently subsidize the homeowners insurance premium rates of coastal homeowners, due to the greater risks the coastal homeowners face, is Florida. See Cassandra R. Cole et al., The Use of Postloss Financing of Catastrophic Risk, 14 RISK MGMT. & INS. REV. 265, 267-71 (2011). The dominant homeowners insurance provider in Florida is Citizens Property Insurance Corporation, a state-sponsored program. See id. at 269. It offers property insurance to homeowners in Florida at premium rates, significantly lower than private insurers, because: (1) it does not need "to provide adequate returns to investors;" (2) it is tax exempt; (3) it does not need to raise excessive amounts of capital to pre-fund losses because it has the ability to do post-loss assessments; and (4) it is reinsured by a state-sponsored reinsurer, the Florida Hurricane Catastrophe Fund. See id. at 267–71. The premium rates charged to coastal residents are also subsidized by inland residents in varying amounts depending upon the location of the insured property. See id. at 280–85. Despite problems with the program in the past, and the fact that the state of Florida is periodically pounded by hurricanes, the program has successfully provided affordable property insurance to the state's residents where private insurers generally have refused or failed to do so. See id. at 269.

155. See Ed O'Keefe, The House Has Voted 54 Times in Four Years on Obamacare. Here's the Full List., Wash. Post (Mar. 21, 2014), http://www.washingtonpost.com/blogs/the-fix/wp/2014/03/21/the-house-has-voted-54-times-in-four-years-on-obamacare-heres-the-full-list/.

flood insurance for homeowners in America, is not very good. It does not cover a significant amount of the losses that a typical flood victim incurs and the administrators of the NFIP, as well as their private claims handlers, are immune from liability no matter how poorly they handle claims or treat policyholders. The NFIP is also insolvent without a current path toward solvency.

Homeowners insurance, instead of the NFIP, would be a better vehicle through which to insure against the risk of flood losses. Far more Americans would have flood coverage at reasonable rates if coverage for flood losses were included in homeowners insurance and the coverage itself would be much better.

The justifications historically used to allow insurers to refuse to cover the risk of flood losses—adverse selection, moral hazard, and correlated risks—have much less force today than they did in 1968 when the NFIP was created. Insurance is now a global business by which the risk of loss of any individual policyholder or group of policyholders in any given geographic area is spread across a worldwide pool of premium-paying insureds and investors. Consequently, the time is ripe for the federal government to get out of the flood insurance business and for insurers to get back in the business.