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SUBSIDIZED INSURANCE INCREASES VULNERABILITY TO CLIMATE CHANGE

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INTRODUCTION

Texas' coastline is a source of economic strength and vitality. From oil-and-gas production to shipping to tourism, the region provides billions in economic value to the state. But it is also a source of vulnerability. In 2008, Hurricane Ike flooded 100,000 homes, causing \$29 billion in property damage alone, with a total estimated impact of \$142 billion.¹

In addition to rare but damaging storms, the Texas coast faces long-term risks from rising sea levels. Sea levels in Galveston have risen 12.6 inches since 1983, more than any other city in the nation during that period.

These vulnerabilities are expected to grow in the coming decades, due to climate change. According to the Risky Business Project, mean sea levels in Galveston will likely rise another 18 to 24 inches by 2050. Overall, nearly \$30 billion in Texas coastal property is likely to be flooded at high tide by 2050.²

Higher tides also extend the impact of storm surge and storm-related flooding, which can result in more damage from storms. Risky Business estimates rising sea levels will result in \$222 million more annually in storm-related losses by 2030, and nearly \$650 million a year in additional losses by 2050. These increases will bring projected storm damage in Texas to nearly \$4 billion a year by midcentury.

These estimates are based solely on the effects of higher sea levels, and do not account for any increase in the intensity or frequency of storms that might result from climate change. Increased sea-surface temperatures are projected to provide fuel for more powerful storms over the next century.

Rising seas and more intense storms have the potential to threaten the nation's oil supply. The Gulf Coast is home to approximately 40 percent of U.S. oil-refining capacity, and 23 percent of it can be found in Texas alone.³ Oil-and-gas production is particularly vulnerable to storm damage. Hurricanes Katrina and Rita together destroyed 113 offshore oil-and-gas platforms and damaged 52 others, as well as 457 oil and gas pipelines.⁴

Texas is not unique in facing increased vulnerability to storms and sea-level rise. Many states along the coast face similar problems. But despite these increased risks, more and more people are moving into the path of the danger. A 2014 investigation by Reuters found that 2.2 million new housing units had been built in coastal areas between 1990 and 2010.⁵ As of 2010, 123.3 million people, almost 40 percent of the U.S. population, lived in coastal counties.⁶

Increased development near the coast means increased damage from storms. While total storm damage has risen in recent decades, a report from the Intergovernmental Panel on Climate Change concluded that "[e]conomic growth, including greater concentrations of people and wealth in periled areas and rising insurance penetration, is the most important driver of increasing losses."⁷

People should, of course, be free to live where they want. However, it cannot be ignored the extent to which government policy at both the state and federal level has encouraged people to live in flood-prone and storm-prone areas. Government subsidies have distorted market signals, leading many into a false sense of security about the risks they face.

Prices convey information, and this is particularly true when it comes to the risk expectations priced into the cost of insurance. All else being equal, higher prices to transfer a given risk through insurance contract indicate expectations that losses will be more frequent and/or more severe. Given economically rational actors, higher prices serve to discourage risky behavior by making it more costly to engage in that behavior.

Government programs to provide insurance at artificially low rates have the opposite effect. Artificially low rates provide signals that living in a specific location involves less risk than it actually does, leading more people to live and move to vulnerable areas.

It should be noted that calling insurance rates artificially “low” does not mean that the rates will appear to be “low” consumers or that they necessarily will be lower than those in other, less disaster-prone areas. Indeed, even given the prevalence of subsidized coverage offered by governmental or quasi-governmental insurance pools and explicit price controls imposed by regulators on private coverage, coastal rates for wind and storm insurance often are quite high, relative to rates paid by inland residents. This situation is one of the chief arguments deployed by advocates of having the government step in to provide “affordable” insurance. However, the reality is that even those relatively high rates often are insufficient to reflect a given coastal property’s expected risk.

While there are multiple examples of government encouraging development in disaster-prone areas, this policy short focuses on just two: 1) the federal National Flood Insurance Program, which provides artificially low rate flood insurance and 2) the state-based Texas Windstorm Insurance Association, which provides artificially low windstorm insurance along the Texas coast.

FLOOD INSURANCE

Since 1968, the National Flood Insurance Program has allowed individuals in designated areas to purchase government-administered flood insurance. Originally billed as an alternative to federal disaster relief, the NFIP currently insures approximately 5.1 million properties, 35 percent of which are in Florida, 12 percent in Texas and 9 percent in Louisiana.⁸ It has about \$1.25 trillion in total coverage outstanding and takes in about \$3.5 billion in premiums per year.

Since the mid-1970s, NFIP rates have been segmented into various zones to reflect levels of risk. However, the Federal Emergency Management Agency’s Flood Insurance Rate Maps lack significant detail and are, in many cases, badly out-of-date; some have not been updated in decades. Moreover, properties that entered the program prior to the introduction of rate maps – accounting for roughly one-fifth of all properties in the program – continue to pay “grandfathered” rates that do not reflect risk whatsoever. In some cases, grandfathered properties may pay as little as 35 to 45 percent of the full risk-based cost of coverage.

Even for those properties that do pay a “risk-based” premium, the NFIP has been slow to charge a sufficient risk load to account for catastrophic “tail risks,” such as the claims seen from Hurricane Katrina in 2005 and Superstorm Sandy

in 2012. Rather than use reinsurance, as private companies would, to lay off the risk of outsized events on investors in the global markets, the NFIP has instead relied on its statutory authority to borrow from the U.S. Treasury. For most of its history, that authority was just \$1 billion, but record claims from the 2005 storms forced Congress to raise that level to \$20.8 billion.⁹ In early 2013, it was raised further to \$30.5 billion to fund Sandy claims; four years later, the program remains roughly \$23 billion in debt to the Treasury. In an August 2015 report to Congress, FEMA noted that it has “determined that reinsuring a portion of the NFIP’s insurance risk would be a logical step toward privatization and could provide an additional lever in the financial management of the NFIP.”¹⁰ However, the agency has yet to implement such plans.

Moreover, also unlike many private insurers, NFIP provides coverage for such “severe repetitive loss” properties, regardless how many times a home or business has been destroyed. Though such properties – defined as those for which policyholders have made two or more claims of more than \$1,000 – constitute only 1 percent of all properties insured by the NFIP, they have historically accounted for nearly 40 percent of the program’s claim costs.

The artificially low rates provided by the NFIP have had a series of predictable effects. First, they have suppressed the creation of a truly private flood insurance market, as private insurers do not have the backing of federal taxpayers and thus have been unable to compete. Recent reforms at both the federal level have helped to incubate a nascent private market, particularly in Florida, but it remains a long way off from being truly competitive.

Salvaging the NFIP is possible. According to the Brookings Institution, the NFIP could save the federal government roughly \$40 billion over the next decade by enacting needed reforms.¹¹ Breaking this cycle has not proved easy. In 2012, Congress passed the Biggert-Waters Flood Insurance Reform Act, which would have updated the rate maps, given FEMA authority to purchase reinsurance and, most controversially, phased out nearly all subsidized rates. Some – such as business properties, vacation homes and severe-repetitive-loss properties – were set to be phased out relatively quickly, while others would see rates rise more gradually or when a property changed hands.

However, the rate increases quickly led to political backlash and Congress rolled back many of the Biggert-Waters reforms just one year later. Rate increases were slowed or canceled altogether, as was funding for the rate map updates, and NFIP’s fiscal solvency was instead propped up by adding surcharges to participating properties across the board. The final result was to shift costs from riskier properties to those less at risk.¹² While the surcharges allowed the 2013

legislation to avoid a negative budget score, they did nothing to patch the NFIP's dire fiscal situation, including its unsustainable debt. The 2013 law also exacerbated the extent to which the program encourages development in flood-prone areas by divorcing rates from the risk individual properties face. As such, it is only a matter of time before the NFIP faces yet another crisis.

WINDSTORM INSURANCE

Created in 1971, the Texas Windstorm Insurance Association (TWIA) is a state-created pool that provides windstorm insurance in 14 Texas coastal counties plus, part of Harris County. TWIA is a hybrid organization, with aspects of a private organization mixed with special government privileges and requirements to serve a public purpose. Organizationally, TWIA is similar in some respects to any other nonprofit insurance company. The TWIA Board of Directors is made up of representatives from insurance companies, coastal residents and other stakeholders. It is meant to run without taxpayer funds and is not required to follow regulations on hiring and other rules mandated for state-government employees.

At the same time, TWIA was created by the Legislature and its mission is set forth in Chapter 2210 of the Texas Insurance Code. Unlike a typical insurance company, TWIA does not aim to increase its market share, but rather has the goal of moving TWIA policyholders back into the private market where practicable.

Despite this goal, TWIA has grown enormously over recent decades. Originally intended to be an insurer of last resort for those who could not obtain windstorm insurance through the private market, TWIA has expanded rapidly. It has grown from approximately 50,000 policies in 2000 to about 275,000 policies today.¹³

As with federal flood insurance, TWIA's growth has come through the fact that it offers policies at below-market rates. TWIA's premiums are substantially below the levels that would be necessary for it to remain solvent over the long term. Should TWIA be unable to pay out claims (due to a large storm or a series of storms), state law allows it to charge assessments to private insurance companies, which ultimately are passed on to consumers in the private sector throughout the state. Effectively, policyholders far from the coast are asked to subsidize lower insurance rates for those who live along the coast. In addition, while the state has no statutory obligation to bail out TWIA under any circumstances, it is likely that it would do so if TWIA ever found itself unable to balance its own budget or pay its expenses.

TWIA has improved its financial position in recent years. This partly has been due to a lack of storm activity, which

has reduced claims – no hurricane has struck the Texas coast since Ike and only four hurricanes have made landfall anywhere in the United States in that period. Equally important, though, have been a series of small but steady annual rate increases that has moved TWIA toward rate adequacy. TWIA also has launched several voluntary depopulation programs that seek to match current policyholders with private insurers willing to take over their policies on similar terms. Despite these improvements, TWIA's rates remain below actuarially sound levels.

CONCLUSION

Programs like NFIP and TWIA are in need of reform. By offering artificially low rates, these programs drive out private insurers and require periodic bailouts from taxpayers or from holders of non-subsidized insurance policies.

Aside from these fiscal problems, subsidized flood and windstorm insurance programs raise serious environmental concerns. Subsidizing people to live in disaster-prone areas is wrong in fiscal, environmental and moral terms. To the extent lawmakers recognize climate change and sea-level rise as real problems, they need to stop government action that exacerbates these risks and leads more people to put themselves in harm's way.

ABOUT THE AUTHOR

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