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REFORMING THE TEXAS WINDSTORM INSURANCE ASSOCIATION

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Mister Chairman and Members of the Committee,

In December 2005, the Mercatus Center at George Mason University began a five-year study in the Gulf Coast region to learn more about how communities prepare for, respond to, and rebuild after disasters. Through intensive fieldwork and qualitative and quantitative analysis, we hope to understand better the comparative strengths and weaknesses of the private sector, the public sector, and civil society in promoting community rebound after disasters. This is an ongoing study for us that we plan to continue through 2010. My

testimony does not represent an official position of the Mercatus Center, of George Mason University, or of the University of Texas – Pan American.[1]

My focus within this project is the economics of disaster mitigation, including insurance. I have studied and written on the economics of weather for over ten years, including on issues related to insurance economics and regulation.

Insurance is a critical part of our economic system, although few people spend much time considering how it functions and why it is important. At its heart, the purpose of insurance is to allow individuals, firms, and governments to spread risks across times and locations. That is, insurance is a hedge against specified contingent losses that would be devastating to a policy holder. The prices of insurance policies conveys to policy holders information about the potential risks of different activities, where risk is defined as the probability of an event happening multiplied by its cost. After disasters, insurance acts as a voluntary, contractual means of disaster relief that is critical to rebuilding homes and businesses.[2]

Texas is one of seven states, all located on the Gulf of Mexico or Atlantic coasts, to have a state wind pool to provide insurance for high-risk properties at below-market rates. As of 2007, there were over 1.8 million policies with a total liability of more than $500 billion in effect across these wind pools.[3] The hurricanes that struck Texas in 2008 cost the Texas

[1] More information about this research is available at http://www.mercatus.org.
[2] See Daniel Sutter, "Ensuring Disaster: State Insurance Regulation, Coastal Development, and Hurricanes," *Mercatus Policy Series*, Policy Comment no. 14, September 2007, available at http://www.mercatus.org/PublicationDetails.aspx?id=16176.
[3] Nine other Atlantic coast states have Fair Access to Insurance Requirements (FAIR) residual market mechanisms which provide insurance in coastal areas in addition to other coverage.

Windstorm Insurance Association (TWIA), Texas' wind pool, an estimated $2.7 billion, and have revealed the association's unsound financial basis and need for reform.

In practice, all state wind pools shift the cost of coastal living to state residents who live inland. This is both inefficient and unfair: inefficient because it induces people to live in areas at highest risk of being hit by hurricanes, and unfair because pool members do not share the benefits of coastal living with inland residents who, as is now the case in the aftermath of Hurricane Ike, have to pay many of the costs associated with living in a hurricane-prone area. For these reasons, Texas needs to consider how to reform TWIA in a way that is both economical and fair.

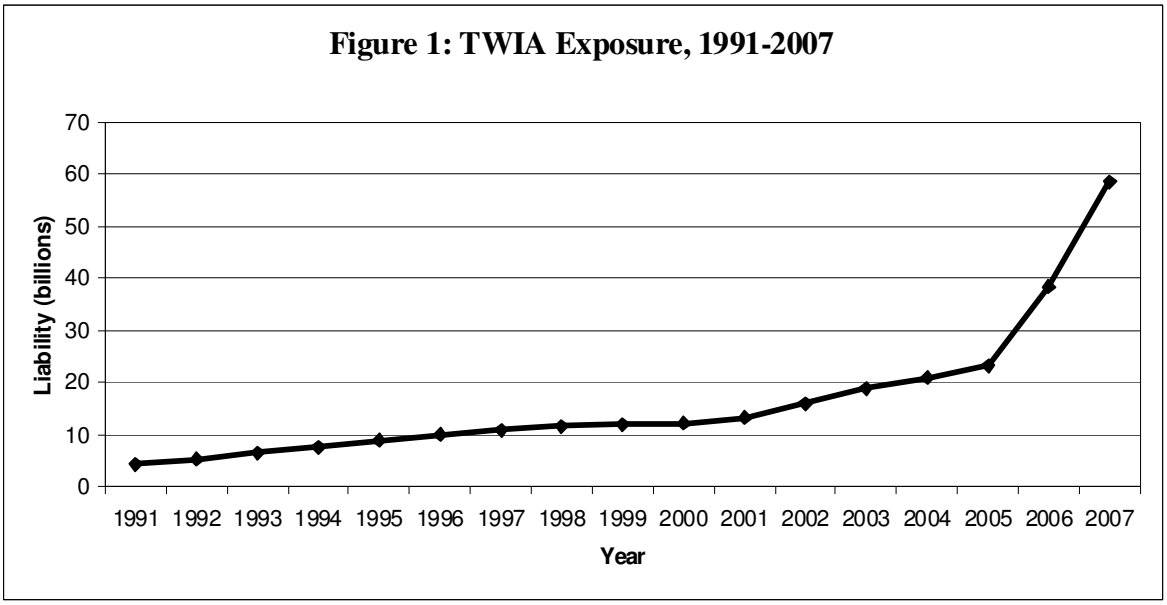
TWIA was established in 1971 after Hurricane Celia struck the state the previous year, when property holders along the coast had difficulty finding insurance, to "provide 'basic' coverage unavailable in traditional markets for consumers who might otherwise be left uninsured."[4] Yet TWIA has expanded well past this limited mission and has become a high-risk pool serving over 200,000 customers in Texas at rates below those available in the market. Rather than serving just as an insurer of last resort, it has become an insurer of first resort for many people who prefer its subsidized rates to those offered by the market.

Figure 1 shows TWIA's tremendous growth in coverage: 221,000 policies in effect with a total liability of $59 billion as of June 2008, up from $19 billion in 2003. To put this in perspective, in 2007 the Census Bureau estimated that there were nearly 740,000 housing units in the 14 counties eligible for TWIA coverage; thus, TWIA insures about 30 percent

[4] http://www.twia.org/news.html.

of households in the eligible counties.

Figure 1: TWIA Exposure, 1991-2007



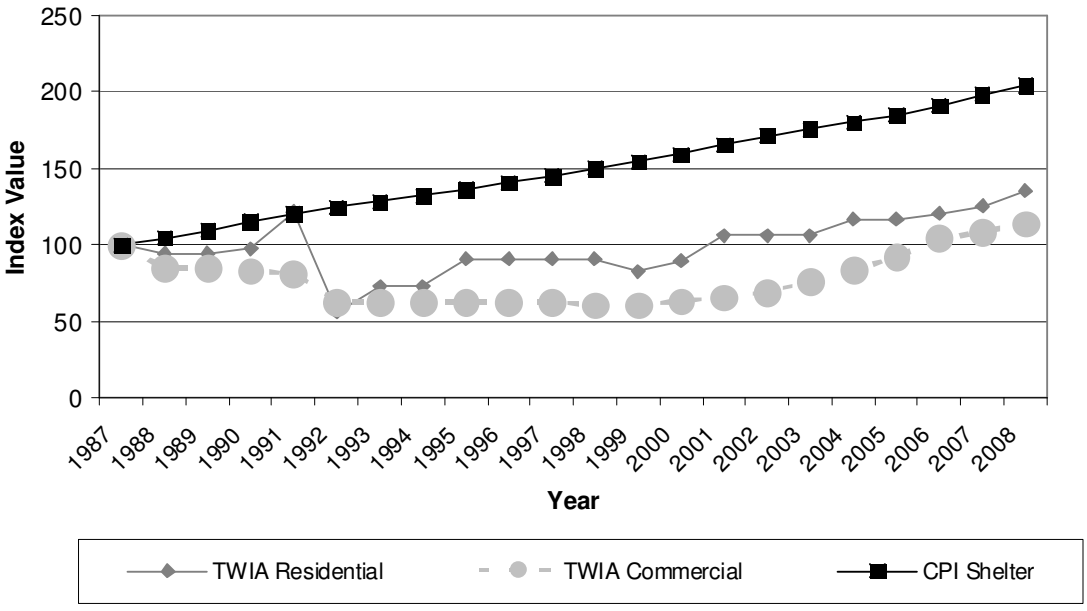
Source: Texas Department of Insurance, "Report on the Texas Windstorm Insurance Association," January 2008.

The association's growth is due largely to its below-market rates for wind insurance. Figure 2 displays an index of TWIA residential rates since 1987 with the initial value set at 100. Over two decades, residential rates have increased by 36 percent and commercial rates by 14 percent. Figure 2 also shows that by comparison housing construction inflation has doubled over this period, so TWIA rates have failed to keep up.

TWIA rates have not kept up with the cost of rebuilding, a fact demonstrated by the modest $470 million in reserves accumulated prior to the 2008 hurricane season. The association's 2008 losses are estimated at $3 billion, completely exhausting its reserve as well as $1.5 billion in reinsurance. Assessments in excess of $500 million have been imposed on insurance companies in the state, with about half of this amount being credited

against state insurance taxes.[5]

Figure 2: TWIA Rates vs. Inflation, 1987-2008



Source: Texas Department of Insurance, "Report on the Texas Windstorm Insurance Association," January 2008; Consumer Price Index – All Urban Consumers – Shelter

Assessments and subsidized premiums shift the cost of hurricane damage to Texas taxpayers and insurance policy holders, creating fairness and efficiency concerns.[6] The benefits of living on the Gulf Coast entail the responsibility of bearing the cost. It is unfair for Texans who do not share the benefits of coastal life to share the costs. Further, cost shifting creates inefficiency by distorting prices which impacts choices to build along the coast rather than inland. Costs are worth incurring if a coastal location produces benefits that outweigh the costs, in the case of port facilities, for example. When hurricane costs

[5] See Texas Department of Insurance, "Hurricane Ike Fact Sheet: TWIA," available at http://www.tdi.state.tx.us/CONSUMER/storms/documents/windfactsheet.pdf.
[6] See Sutter, "Ensuring Disaster."

can be shifted, development choices are made which would otherwise be unjustified.

Reforming TWIA requires making it self-funding without further cost shifting. This can be accomplished via three different means: (1) building up reserves, (2) purchasing reinsurance, or (3) making self-assessments.

The first option is for TWIA to build up reserves over time, and invest funds collected as premiums. A drawback is that when the state does not suffer a hurricane landfall for a number of consecutive years, policy holders will apply political pressure to lower rates. Additionally, building up a sufficient reserve requires a period of low-claim years, during which time TWIA will be unable to cover potential losses.

Reinsurance is a second alternative. TWIA would pay premiums annually to reinsurance companies, who would then pay for TWIA's losses in the event of a hurricane. Reinsurance can be purchased in layers, with higher layers covering losses from less likely yet more catastrophic hurricanes. TWIA did in fact have about $1.5 billion in reinsurance coverage which helped to pay for losses associated with Hurricane Ike. Reinsurance is sold on a global market at rates which reflect risk and has the effect of drawing capital from around the world to help pay for losses in Texas. If TWIA buys sufficient reinsurance to cover potential losses and charges rates to its policy holders sufficient to purchase this reinsurance, the shifting of hurricane costs to other Texans will be halted.[7]

[7] Capital to pay for losses can also be raised via the capital market through instruments known as catastrophe bonds, which could substitute for reinsurance.

A third option is to limit assessments to TWIA policy holders only, rather than policy holders throughout the state.[8] Under a self-assessment system, policy holders would be members of the association for the period of their policy, likely based on the hurricane season. All members in a year would share any assessment for losses. Post-event self-assessment is attractive if TWIA policy holders are skeptical about the potential for extreme hurricane losses and concerned about purchasing too much reinsurance.

Each of these approaches has advantages and disadvantages. Reserves and reinsurance are close substitutes, with reinsurance providing access to capital from around the globe when needed. A reserve could be built up quickly by issuing bonds, and reinsurance could be purchased immediately. Choosing between the two depends on the availability and rates for reinsurance. Both also require that TWIA takes into account future growth in coverage and rising construction costs.[9] One advantage of reinsurance is that payments are an explicit, verifiable cost, and they can be used to determine that policy holders are charged adequate rates.

A disadvantage of self-assessment is the potential for very large assessments. TWIA's potential loss from a major hurricane hitting the Galveston area has been estimated at $10 billion.[10] If $5 billion in losses had to be covered through self-assessments on the current 220,000 policyholders, assessments would be over $22,000 per policy. If policy holders

[8] For more on self-assessments as well as other options for reform, see Eli Lehrer, "Restoring Florida's Insurance Market," *James Madison Institute Backgrounder* no. 55, February 2008.
[9] TWIA did in fact have a reserve and had purchased reinsurance prior to 2008, but the amounts did not cover the losses. As Bill Peacock, Drew Thornley, and Machir Stull point out, the current system for financing losses was adequate when adopted in the 1990s when TWIA had total liability of $6 billion ("Texas' Windstorm Challenge: Unprepared for the Worst," *Texas Public Policy Foundation Policy Perspective*, December 2007).
[10] See Peacock, Thornley, and Stull.

are allowed to avoid these assessments, costs will still be shifted to state taxpayers. Unless coastal residents are willing to share their homes with the rest of Texas, it seems unfair to make residents of Dallas or Amarillo defray their costs.

Becoming self-funding also requires that TWIA increasing premiums to subsidy-free levels, or what economists call actuarially fair rates. First, subsidized coverage should be eliminated for future construction to prevent further inefficient development. Rates for current policyholders could be raised over several years to facilitate adjustment. Low-income households can be provided with financial assistance for the higher rates through the form of insurance vouchers

Two additional reforms could help Texas reduce hurricane risk and contribute to TWIA's viability. The first is incentives for mitigation and strengthened construction in coastal areas. A well-designed building code can potentially reduce hurricane damage by 40 to 50 percent. To this end, Texas has adopted the 2006 International Residential and Commercial Codes. Incentives to invest in mitigation, however, depend on whether policy holders can lower their premium or costs in the event of a hurricane.[11]

Texas compares poorly with other states on incentives for mitigation, as illustrated by building code enforcement. Unenforced building code is not effective: 25 percent of damage in Hurricane Andrew was due to poor enforcement of Florida's building code.[12]

[11] For more on the role of incentives for mitigation, see Daniel Sutter, "Building a Safe Port in the Storm: Private vs. Public Choices in Hurricane Mitigation," *Mercatus Policy Series*, Policy Comment no. 21, July 2008, available at http://www.mercatus.org/PublicationDetails.aspx?id=16380.
[12] See Dennis Mileti, *Disasters by Design*, Washington DC: Joseph Henry Press, 1999.

The Insurance Services Office has rated 98 percent of communities in coastal Florida counties for their enforcement of building codes, with 42 percent having a top rating (1, 2, or 3 on a scale of 1 to 10). In contrast, only 57 percent of coastal Texas communities are rated, none with a top rating. A potential guide for Texas is the Institute for Business and Home Safety's program to encourage construction beyond that required by building codes. Currently state wind pools in South Carolina, Alabama, and Mississippi offer premium discounts for homes built to the program requirements.[13]

A second policy measure is deregulation of the private market for wind coverage. Market forces, rather than regulation, should set insurance rates and conditions. Given TWIA's subsidized premiums, we would not expect customers to immediately switch to the private market. Nonetheless, it could become more attractive for two reasons, especially as TWIA subsidies are phased out. First, some homeowners will pay extra for better or faster claims service. Second, TWIA's cross-subsidized rates may mean that low-risk homes within coastal counties could be charged too much in order keep rates low for the highest-risk properties. Again, equity issues can be addressed through vouchers or credits to help low-income residents buy insurance in the private market. However, these perks should not be made available to new residents, who should instead have to pay the full cost of their decision to move to coastal areas as reflected by market insurance rates.

TWIA's liability has quadrupled since 2003, with over 220,000 policies in effect as of mid-2008. Hurricanes Dolly and Ike resulted in an estimated $3 billion in losses to the

[13] For more on this program, see Institute for Business and Home Safety, *Fortified ... for Safer Living Builder's Guide*, Version 2.2, available at http://www.disastersafety.org/resource/resmgr/PDFs/builders_guide.pdf.

association in 2008, revealing TWIA's precarious financial state. Even though TWIA now ensures about $60 billion in property, the Insurance Information Institute estimates that Texas has about $900 billion in hurricane-vulnerable coastal property.

TWIA must stop shifting hurricane losses to non-coastal insurance policy holders and taxpayers. This can be accomplished by amassing an adequate reserve, purchasing sufficient reinsurance, or making assessments only on current TWIA policy holders. The first priority in reform should be to eliminate subsidized wind coverage for new construction; subsidies for existing policy holders should be phased out over several years. Improved incentives for mitigation and deregulation of the private market for wind coverage in areas eligible for TWIA coverage would complement a self-funding wind pool.

About the Mercatus Center

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