

The State of Florida's Property Insurance Market 2011

Prepared for the

Florida Legislature

by

The Florida Catastrophic Storm Risk Management Center



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16 - 28 AUG 1992

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Executive Summary

The State of Florida may well be the world's best laboratory for catastrophic risk finance. High insured property values (second only to New York within the U.S.) combined with frequent and intense storms capture the attention of policy makers and financial institutions worldwide. The rest of the world observes as Florida's risk finance system continues to evolve.

Florida provides lessons for states around the nation as policy makers struggle with the task of making financial preparations for the likelihood of catastrophic events. As the only state that requires catastrophe models (simulation-based modeling of hurricanes) be used to price residential property insurance, Florida is ahead of its U.S. peers in developing a financial market for catastrophes based on a forward-looking view of the risk. At the same time, legislative and regulatory interventions in the Florida insurance and reinsurance markets have resulted in suppressed property insurance prices and cost shifting from one policyholder to another (via non-risk-based pricing) and from current to future policyholders (via a system of assessments).

This report examines the present state of the catastrophe risk finance system in Florida, including its quasi-public property insurance entities and the private market for property insurance. Historical context is provided that sets the stage for an appropriate evaluation of these markets. Interventions by Florida lawmakers and regulators are compared with those of other coastal states and are evaluated for their potential future costs to Florida policyholders and citizens. The health of Florida's private property insurance marketplace is analyzed through an overview of both current market statistics and trends over time. We offer recommendations as to how best to stabilize the market and correct the mispricing of the State's catastrophic risks.

Putting it in Context

Florida's market has been in a state of flux since Hurricane Andrew in 1992. The confluence of storm activity, population growth, changing demographics, private insurer exposure management, legislative and regulatory actions, and technological and informational advances has driven market evolution. Three major themes are apparent – residual markets, mitigation, and capital. The future success or failure of the property insurance market in Florida will depend on how they are addressed. In most catastrophe-prone areas these three themes emerge as interrelated, but nowhere is the evidence of their convergence more apparent than in Florida. Both of the State's residual property insurance providers were expanded during the last decade, and in 2007 rate rollbacks required insurers (including Citizens Property Insurance Corporation, or Citizens) to lower its rates to reflect the expansion of the Florida Hurricane Catastrophe Fund (FHCF). Existing state-mandated credits for construction features mitigating wind losses were doubled. Citizens was reoriented to directly compete with the private market, and most eligibility standards based on inability to find private market coverage were eliminated. In 2010,

the State Legislature set Citizens rates on a “glidepath” to become actuarially fair over time and began to reduce the FHCF’s exposure.

Exposures

In the wake of these public policy developments, Homeowners insurance premium volume began to decline steadily but insured values did not. Florida has \$2.0 trillion in insured residential property exposure, based on replacement cost values (RCV) rather than market values since it is RCV that usually determines claims payments made to Florida homeowners. Total insured values (TIVs) increased nearly 33% from \$1.4 trillion at year-end 2005 to more than \$1.8 trillion in early 2008 as the Florida residential construction boom peaked. Since that time, exposure has remained relatively stable. As the personal lines policy count has remained roughly flat since 2008, at about 5.7 million, the rise in exposures is almost entirely based on increases in the insured value (RCV) of existing properties rather than population growth.

Florida’s exposure to windstorms is the major driver of loss costs and insurance claims in the State. One way in which this exposure manifests itself in rates is through the use of catastrophe models. Based on these models, the State has more than \$4 billion in expected average annual losses (AAL) due to windstorms and nearly \$60 billion in “1-in-100 year” probable maximum losses (PML, representing losses with an annual probability of 1%) due to windstorms. To support this type of catastrophic exposure, Florida needs a large, diverse capital base available to pay for losses if and when they occur.

Rates and Premiums

Overall, changes in exposure have had little impact on premiums during recent years in Florida. Changes in rates, however, have had significant impact on insurance premiums. Florida has seen notable volatility in insurance rates over the last decade, including a 15% increase occurring between year-end 2005 and 2007. The 2007 expansion of the FHCF along with increases to the minimum mitigation credit requirements, however, reduced insurance rates. Rates declined below year-end 2005 levels, and still remain more than 12% below that baseline today. Rate levels for domestic companies (those chartered in Florida and primarily writing property insurance) and Citizens are generally even further below that baseline. Rates rose about 15% from 2005 through early 2007, but insured values rose by about twice as much (in percentage terms). Said differently, about two of every three dollars of premium increases seen by consumers in 2006-2007 were due to increased exposure, not increased rates. Despite the private market rate increases announced in 2010 and Citizens’ glidepath rate increases, average rate levels have only recovered by about 5% and remain below year-end 2005 levels in nearly every region.

Citizens is the primary writer of new insurance policies in Florida, with a total number of new policies written greater than the combined total of the other 9 companies in the Top 10. Given

Citizens dominance in issuing new policies, Citizens effectively may be setting the premiums charged in Florida's private residential property insurance market. It may be Citizens' premiums, rather than competitive practices within the private industry, that are the major influence on statewide property insurance premiums in Florida.

Potential Assessments

Due to the magnitude and variability of catastrophic windstorm losses, it is virtually impossible to finance all of the potential losses in any single time period. This leaves two choices when windstorm losses are significant – prefund all potential losses or utilize some form of post-loss funding. Florida has chosen to finance a significant portion of its catastrophic risk exposure through post-loss assessments levied (on most property-casualty insurance policyholders) by state sponsored insurance entities – Citizens, the FHCF and the Florida Insurance Guaranty Association (FIGA).

To date, the FHCF has charged rates for its coverage substantially below the rates charged for comparable coverage by private reinsurance companies. Historically, FHCF debt has been considered high quality by the capital markets because of the FHCF's assessment powers. During two of the last three years, however, it does not appear that the FHCF could have successfully issued bonds sufficient to pay for its full potential liabilities, had it been necessary to do so. Thus, the quantity of debt needed may be a more of an issue than the quality. This is particularly disconcerting in light of the current Florida economy and the likely adverse public reaction to potential large assessments (e.g., movement out of state or other evasion of assessments).

This report shows that in 2011 more than 40% of the probable maximum losses (PML) at the 50-year level and beyond will be financed with post-loss assessments. This value would be higher were it not for two important factors. First, 2010 saw a legislative reduction in the FHCF's exposure, and second, Florida has not suffered a hurricane landfall since 2005, making it possible for both Citizens and the FHCF to build their surplus.

Potential Subsidies in the System

Florida, like many catastrophe-prone states, hosts multiple types of subsidies within its risk financing system. These can be seen both in pre-loss and post-loss financing. Despite the use of catastrophe models by insurers, rate and premium differentials that are still based on wide (zip-code level) territories can result in a failure to capture the precise risk base in the insurance rate. Thus, two homeowners' insurance policies within the same pricing territory can be charged the same insurance rate despite one having a higher risk of loss. Further, the implementation of mitigation premium credits, if actuarially unbalanced such that no risk premiums are increased, may create rate subsidies among houses on the same street.

Post-loss financing can create subsidies depending on the structure of post-loss assessments. If assessments are not purely risk based, it is possible that lower-risk policyholders pay larger post-loss assessments relative to their exposure than do higher-risk policyholders. In particular, assessments levied as a flat percentage of total premiums (such as Florida's FHCF, Citizens, and FIGA assessments) propagate the same relative degree of subsidy that exists in the up-front premiums among risks. Additional assessments are levied on most. Subsidies may not be restricted to differences in hurricane risk. They also may result from timing in the sense that new policyholders, while required to pay assessments for the prior losses of other homeowners, did not receive the benefit of below-market rates prior to the catastrophe. This outcome is dangerous for an economy dependent largely on net migration to the state. Finally, subsidies may exist between the private and state-run entities, since the residual market mechanisms may be able to assess both their policyholders as well as policyholders in the private market.

Insurance Availability

Scrutiny of the private homeowners insurance market in Florida has centered on pricing levels and pricing volatility. Actually, market health is determined by the interplay between prices and availability. If insurers determine they have underestimated the costs of providing coverage, it is imperative they adjust estimates (and prices) upward to avoid potential insolvency. If they cannot raise prices adequately to pay expected losses, they might leave the market. Citizens, originally intended as an insurance market of last resort for homeowners, has grown to become one of the leading carriers of homeowners insurance broadly. As of the end of 2010, Citizens wrote 50% of Florida's dwelling/fire coverage, 85% of Allied Lines coverage (where wind-only policies reside) and 15% of Regular Homeowners coverage. It writes a combined total of 23% of Florida's personal residential marketplace, not including mobile homes. Citizens now insures more than 1.4 million policyholders (a 42% increase since December 2009) and is adding 3,000 to 5,000 new policyholders each week.

Meanwhile, the private portion of the market has shifted from one dominated by large national insurers, whether utilizing Florida subsidiaries (pups) or not, to a fragmented market dominated by smaller Florida-based insurers (domestics). Domestic insurers' premium market share has increased from 30% at year-end 2005 to 46% at year-end 2010, while the national insurers and pups have reduced their exposure from 52% to 30% of the premium base. The current picture of private homeowners insurance availability in Florida illustrates a market with heavy dependence on small, start-up companies generally having limited capitalization and risk diversification capabilities.

Insurance Capacity and Performance

Direct premiums written (DPW) represent the amount of sales volume a company has made, and thus is one way to measure company size. Policyholders' surplus (PHS) represents the amount of "leftover" capital a company has, after paying expected losses and expenses, to retain in the

business for contingencies, such as an unexpected disaster. Comparing these values in Florida's homeowners insurance market with those of other states, the Florida market again appears to operate differently from its neighbors. Florida comprises nearly 10% of the nation's total DPW in homeowners insurance. Selling 56% of the State's DPW in private market homeowners insurance, Florida's domestic insurers are responsible for a substantial portion of homeowners risk in the State.

Despite the high number of insurers and the relatively high total premium amounts sold in Florida, the State's private homeowners insurance market has the worst level of capitalization (as measured by its PHS of just under \$95 billion) of any catastrophe-prone state other than Texas. Given the large number of homeowners insurance companies concentrating most of their business in Florida, the existing level of capitalization is at risk should a major windstorm hit Florida. And despite their 56% market share of private market premiums, domestic companies in Florida contributed only slightly more than 1% of the State's total private PHS.

During the period 1985-2010, Florida insurers, on average, experienced the worst loss ratio of comparable coastal states at 97.3%, meaning they needed 97.31% of the premiums earned simply to pay losses and loss adjustment expenses. That left, on average, less than 3% of premiums available to cover other business expenses, including marketing and underwriting expenses. Worse, this period saw an extremely high level of volatility within this loss ratio. Therefore, within Florida, insurers not only experienced the worst performance of any of these states, but they have a measurable reason to be less confident in the Florida market's stability than in any of the other states.

Reinsurance

Reinsurers are the primary link between Florida property insurance companies and the broader capital markets that may be interested in making capital investments in the catastrophe risk market. A reliance on reinsurance impacts rates and premiums in Florida in two ways: reinsurers can charge rates based on their choice of catastrophe models, and their insurer-customers must build this cost into their rates; reinsurers indicate the cost of capital needed to entice investors to Florida's catastrophe risk market through their "rates on line" (prices per unit of coverage), which fluctuate widely with insured losses, other investment options, and capital market confidence.

The relatively low PHS and high concentration of business within Florida's private market for homeowners insurance effectively requires heavy reinsurance of the risk taken to ensure both claims-paying capacity and future solvency in the event of catastrophic losses. Immediately post-Andrew, Florida homeowners insurers sharply decreased their usage of reinsurance, commensurate with sharp increases in reinsurance prices during that time. Since 2007, however, insurers in Florida have held their reinsurance usage at around 60%, retaining the remainder.

Their ability to do so may be aided by a lack of catastrophic storms during 2007-2010, accompanied by softening reinsurance prices and the increased availability of FHCF reinsurance, after its legislative expansion in 2007. It will never be known whether catastrophic storms, and resultant higher reinsurance prices, might have resulted in company decisions to decrease their usage of reinsurance once again. Nevertheless, given the substantial dependence of Florida primary insurers on reinsurance and the fact that much of this reinsurance is placed with an entity (FHCF) that potentially will run out of funds, Floridians have cause for concern.

Recommendations

The Florida Catastrophic Storm Risk Management Center submits that the State's present system for catastrophe risk finance is sustainable only if the financial pressure on Citizens and the FHCF is substantially reduced and the private insurance market is strengthened. To these ends, we offer recommendations for the Legislature's consideration. Several of these could be implemented without disrupting the marketplace. We acknowledge that others may require careful evaluation of their potential collateral effects and thus warrant a staggered implementation.

- ***Define Guidelines for Determining the Proper Public/Private Mix.*** Since Florida's residual market entities use post-loss financing in the form of policyholder assessments, addressing the roles of these entities also addresses the appropriate mix of pre-loss (insurance premiums) and post-loss (assessment) financing. By explicitly addressing these issues, the State will add to the transparency of risk financing and address the issue of how much subsidization is seen as necessary.
- ***Continue to Reduce the Capacity of the FHCF.*** In the event of a 1-in-50-year storm, the FHCF would face a substantial shortfall. This residual reinsurer was originally designed to stabilize the Florida market for the property insurance industry through stop-gap coverage. It has instead become a provider of mandatory reinsurance at relatively low rates and relatively high coverage limits. Reduction in FHCF coverage limits will directly reduce the exposure of the FHCF and Floridians to the possibility of difficult, or even unaffordable, future assessments and allow the FHCF to improve its ability to help in short-term market challenges (e.g., second storms, storms in consecutive years).
- ***Speed the Rate Glidepath for Citizens.*** The current glidepath in Citizens rates does not produce actuarially-fair rates on average for 5 more years. Without a faster move to risk-based rates, Citizens and Floridian policyholders and taxpayers must hope for no storms in the interim years disastrous enough to result in large assessments. Furthermore, if Citizens continues to be allowed to charge competitive rates and these rates are not adequately risk based, the private insurance industry might continue to exit the market, leaving Citizens and Floridians even more exposed to the risk of large post-loss assessments.

- ***Clarify the Purpose of Rate Regulation.*** The pricing-related focus of private insurance regulation is intended to be on ensuring that rates are adequate, not excessive and not unfairly discriminatory. Actuarially sound rates, as defined by the actuarial profession, are generally a sufficient condition for these criteria. Recent regulatory outcomes in Florida appear to have focused on rate affordability rather than rate adequacy, at the cost of unfair discrimination. Clarity on the intent of rate regulation will help policymakers focus on strategies that enhance the long-term health of the insurance marketplace.
- ***Promote Risk-Based Rating to Induce Mitigation and Adaptation.*** Allowing actuarially fair risk-based rating will increase the incentives to property owners to undertake cost effective mitigation (e.g., impact-resistant windows) and adaptation (e.g., relocation away from coastal areas) efforts.
- ***Revisit Mitigation Options and the Effects of Credits.*** Some mitigation features that warrant a premium credit under the current system are not actionable by the property owner (e.g., roof shape) and should not be presented to the property owner as a potential mitigation credit option but instead be incorporated into an insurer's rating plan. Additionally, the mitigation credits program needs to be revisited to address the fact that it currently promotes the growth of the residual market and reduces incentives to mitigate.
- ***Provide Limited Basic Insurance Coverage and Coverage Options.*** One method to address the volatility of reinsurance costs would be to reduce the Total Insured Value (TIV) in coastal areas of Florida. If Citizens, as the residual property insurer, offered a policy form similar to an HO-8 (a product providing essential dwelling and contents coverage only) as the standard (basic) homeowners policy in Florida, more of Florida's citizens could select coverage they can afford. Further, the competitive appeal of Citizens would be reduced, helping reduce the population of the residual market. Finally, limited coverage would make insurance more affordable and restore the concept of indemnity to property insurance.
- ***Address Insurance Affordability Outside the Insurance Rating System.*** By subsidizing insurance premiums only for those who express a financial need, public financing would support those most in need of financial assistance. An example of this type of program would be insurance premium vouchers. Having affordability addressed in conjunction with means testing may make these programs more socially and politically acceptable than embedding subsidies in rating plans and distributing them regardless of means.
- ***Concentrate on Strategies to Improve the Affordability of Mitigation.*** Several studies have shown the cost effectiveness of mitigation in reducing hurricane loss costs. Other studies have shown that homeowners may opt not to engage in windstorm and storm surge mitigation due to a perceived lack of affordability and/or uncertainty about the cost-benefit outcomes. Policies and programs that improve homeowners' knowledge of the cost effectiveness of mitigation and/or

improve the affordability of mitigation efforts for homeowners are the most direct strategies to reduce Florida's personal residential loss costs.

- ***Mandate the Disclosure of Hazard Insurance Premiums for Properties on the Sales Market.*** Property taxes must be disclosed to prospective buyers when a house is listed on the sales market in Florida. If the property is in a federal flood zone, this information must be provided as well. It is neither required nor common practice, however, for hazard insurance premiums (even the windstorm portion) to be disclosed to prospective buyers. Such a requirement would directly result in better informed property purchases and indirectly may result in changes to purchase criteria among buyers.
- ***Proactively Engage in Strategies to Attract Risk Capital to Florida.*** Several of the recommendations mentioned above can be expected to attract financial capital to Florida's property insurance market. Additionally, direct strategies to bring and retain underwriting capital within the State are worth consideration. One tax strategy is to allow credits towards state premium taxes for companies writing some minimum amount of property insurance in the State. A premium tax credit will help offset the cost of holding catastrophe reserves to pay for losses due to severe storms in Florida's future.

I. Introduction

The Florida Catastrophic Storm Risk Management Center (Center), housed within the College of Business at The Florida State University, was tasked in 2011 to research and prepare this report, guided by the provisions of S. 164, ch. 2004-390, Laws of Florida:

(1)...a detailed analysis of factors affecting costs and potential assessments on consumers, and availability, of personal lines property and casualty insurance in Florida generally and in those areas in which coverage is underwritten by the Citizens Property and Casualty Insurance Company. The analysis shall include an evaluation of such factors and recommendations appropriate to moderate or enhance their impact on premiums, potential assessments, and availability of such insurance. Such factors shall include, but are not limited to:

(a) The factors affecting the level of competition, and premium levels specifically, including the impact of rate regulation and possible rating law reforms, and including reforms that have succeeded or failed in other states.

(b) The cost and benefits of required coverages and of restrictions on optional coverages that could otherwise be made available to consumers.

(c) Such other information as may be useful to the Legislature in determining how to increase availability and, over the short and long term, to moderate costs and potential consumer assessments.

This report addresses each of the provisions in the Legislation, as well as other factors that have become relevant in the property insurance market in Florida since the Legislation was passed. Section 2 places the present property insurance market conditions within historical context and sets the stage for an appropriate evaluation of the market. Section 3 provides a comparison of the high-risk (residual) markets across selected coastal states. Section 4 discusses the potential post-loss costs to Florida policyholders and all Floridians that can result from the current residual market structure. Section 5 contains an analysis of the Florida property insurance marketplace – including recent statistics as well as long term trends. Taking information from the earlier sections, Section 6 offers recommendations for stabilizing and attracting competition to Florida’s property insurance market.

II. Historical Context

The current condition of the Florida property insurance market has developed from a confluence of natural and man-made events that have taken place over the last three decades. Hurricane Andrew in 1992 and the combined effects of the 2004/2005 storm seasons, population growth and changing demographics, the evolution of the catastrophe modeling industry, management of catastrophe exposure by insurers/reinsurers, and legislative/regulatory actions in Florida have all contributed to the current market conditions. An analysis of the state of the property insurance market in Florida requires a significant examination of three crucial developments in Florida: the growth of the property insurance residual markets, the implementation of mitigation credits, and the availability of capital to support catastrophic exposure. Additionally, regulatory and legislative directives that followed the severe weather events in Florida warrant discussion. Figure 1 shows major legislative and regulatory activities since 1970 impacting Florida's residential property insurance market.

Figure 1: Timeline of Legislative and Regulatory Changes Impacting Florida Residential Property Insurance

	1970	1992	1993	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Significant Weather Events		Hurricane Andrew				Hurricanes Charley, Frances, Ivan, Jeanne	Hurricanes Dennis, Katrina, Rita, Wilma						
Legislative Activity	Florida Insurance Guaranty Association Formed Florida Windstorm Underwriting Association Formed	Joint Underwriting Association Formed	Florida Hurricane Catastrophe Fund Formed	Citizens Property Insurance Corporation Formed (merger of JUA & FWJUA)			CS/SB 1486 signed: Created S. 627.711 F.S.; Required insurers to notify policyholders of construction options and cost impact	CS/CS/SB 1980 signed: Required OIR to Reevaluate Mitigation Credits; Panhandle Exemption to SBC removed	Special Session, FL Legislature: signed; froze Citizens rates; created optional coverage for FHCF CS/HB7057: creates My Safe Florida Home (MSFH) Windstorm Mitigation Study Commission created		MSFH program expires HB1495 passed: sets Citizens glidepath for rate increases	Citizens glidepath begins	SB 408 signed: Citizens sinkhole rates not subject to glidepath
Regulatory Activity				ARA Mitigation Credit Study Statewide Building Code Adopted First legislated mitigation premium credits implemented	Informational Memorandum 03-001M issued: Rescaled ARA tables to make weakest home the base	Southern Building Code (SBC) updated	Informational Memorandum OIR-05-22M issued: Form explains actions needed to obtain discounts	Property & Casualty Insurance Reform Committee: Requires notice to insureds detailing credits and savings; Mitigation credits doubled	OIR disapproves ISO Advisory Rate System Informational Memorandum 07-03M issued: Insurers cannot adjust base rates	ARA conducts second mitigation credit study			

Quasi-Governmental Insurance Mechanisms

Florida has developed several quasi-governmental property insurance mechanisms.¹ In 1970 the Florida Windstorm Underwriting Association (FWUA) was enacted by the Florida Legislature to offer “wind only” coverage in Monroe County and the Florida Keys. The FWUA was gradually expanded to provide wind coverage in 29 of Florida’s 35 coastal counties. Since this initial attempt to provide a public policy response to catastrophic windstorm risk, three entities have evolved with expressly different purposes: Citizens Property Insurance Corporation, the Florida Hurricane Catastrophe Fund and the Florida Insurance Guaranty Association. Each is briefly introduced here.²

Citizens Property Insurance Corporation

After Hurricane Andrew in 1992, the Florida Legislature met in a special session to address problems in the residential insurance market. Several insurers had become insolvent, and others were concerned about increased insolvency risks. The Legislature addressed the need for homeowners insurance policies that provided “full” (multi-peril) coverage rather than wind-only policies offered by the FWUA. The Florida Residential Property and Casualty Joint Underwriting Association (FRPCJUA) or (JUA) was created in 1992, and later combined with the residual market mechanism that insured commercial residential or condominium and apartment buildings (the Florida Property Casualty Joint Underwriting Association).

The Florida Legislature merged the FWUA with the FRPCJUA, creating Citizens Property Insurance Corporation (Citizens) effective August 1, 2002. Citizens has three distinct accounts; the Personal Lines Account, the Commercial Lines Account, and the Coastal (formerly High-Risk) Account. The Coastal Account consists of policies from the FWUA territories.

When any of these three accounts has a deficit, Citizens may levy assessments. These assessments are not only against its policyholders but also against the policyholders of private insurers in almost all lines of property casualty insurance. A more detailed discussion of the assessments is found *infra* in Section 4 of this report.

The Florida Hurricane Catastrophe Fund

The Florida Hurricane Catastrophe Fund (FHCF) was created by the Florida Legislature in 1993 to provide additional insurance capacity and help stabilize the property insurance market in Florida (Fla. Stat. s. 215.555(1)). The FHCF provides reimbursement for a portion of a property insurer’s hurricane losses above the amount retained by the insurers. Insurers enter into contracts with the FHCF and pay a premium. The FHCF is able to accumulate premium payments on a tax-free basis as it is exempt from federal income taxation.

¹ For a complete discussion of residual market mechanisms and their development in Florida see Appendices D-1 (Newman, 2010) and D-2 (Newman, 2009).

² See Appendix D-3 (Cole et. al., 2009).

In the event that the FHCF's losses exceed its surplus, the FHCF is authorized to collect assessments on policyholders in almost all lines of property casualty insurance. The amount of coverage available from the FHCF, the cost of the coverage, and the potential assessments are significant factors in the state of the insurance market. A more detailed description is found *infra* in Section 4.

Florida Insurance Guaranty Association

The Florida Insurance Guaranty Association (FIGA) was created by the Florida Legislature in 1970 to address concerns about the adverse effects of insolvent insurers. Its specific purpose is to “provide a mechanism for the payment of covered claims under certain insurance policies to avoid excessive delay in payment and to avoid financial loss to claimants or policyholders because of the insolvency of an insurer.” (Section 631.51(1), F.S.)

FIGA does not accumulate funds in advance of an insurer's insolvency, but similar to Citizens and the FHCF obtains funds through pro-rata assessments levied by the Office of Insurance Regulation on companies subject to assessment. A more complete discussion of FIGA is found *infra* in Section 4.

Mitigation Credits

One of the methods of reducing Florida's current exposure to windstorm damage is to mitigate the existing building stock. The reduction in average annual losses and probable maximum losses due to windstorms can be reflected in insurance premiums through mitigation credits applied to the property insurance premiums on deserving properties. The use of mitigation credits can serve as an incentive to property owners to undertake cost effective mitigation activities such as installing storm shutters or other types of opening protection. However, an improperly structured mitigation credit program can reduce a property owner's mitigation incentives.

In 1993, the Florida Legislature enacted section 627.0629 of the Florida Statutes. This statute required rate filings for residential property insurance to include appropriate discounts, credits, or other rate differentials (or appropriate reductions in deductibles) for properties on which fixtures have been installed that are actuarially demonstrated to reduce the amount of loss in a windstorm (s.13, ch.93-410, Laws of Florida). In 1997, the Department of Insurance issued rule 690-170.017 F.A.C. The rule required shutter discounts to be at least equal to the Insurance Services Office (ISO) discounts.³

In 2000, section 627.0629 of the Florida Statutes was amended to provide that rate filings for residential property insurance must include “actuarially reasonable” discounts, credits, or other

³ See Appendix D-4: Mitigation Credit Study, 2010.

rate differentials, or appropriate reductions in deductibles, for properties on which fixtures “or construction techniques” demonstrated to reduce the amount of loss in a windstorm have been installed or “implemented.” New language added to the statute stated that:

“The fixtures or construction techniques shall include, but not be limited to, fixtures or construction techniques which enhance roof strength, roof covering performance, roof-to-wall strength, wall-to-floor-to-foundation strength, opening protection, and window, door, and skylight strength. Credits, discounts, or other rate differentials for fixtures and construction techniques which meet the minimum requirements of the Florida Building Code must be included in the rate filing. All insurance companies must make a rate filing which includes the credits, discounts, or other rate differentials by June 1, 2002” (s.99, ch.2000-141, Laws of Florida).

The Legislature subsequently amended the law and changed the filing date to December 31, 2002, and then to February 28, 2003.

In 2002, Applied Research Associates (ARA) conducted two studies to quantify wind loss reduction for wind mitigation construction features. “Development of Loss Relativities for Wind Resistive Features of Residential Structures” focused on single-family homes (Appendix D-5). “Development of Loss Relativities for Wind Resistive Features for Residential Buildings with Five or More Units” addressed condominium and renter occupancies in buildings with five or more units.

The Florida Office of Insurance Regulation (OIR) issued Informational Memorandum OIR-03-001M (Appendix D-6) on January 23, 2003. In essence, the Memorandum states that only premium credits should be offered. Thus, the results of implementation would be premium neutral or result in premium decreases, not premium increases. The Memorandum goes on to state, “Credits were then determined and tempered by 50%. This tempering was applied in view of the large rate changes which might otherwise be induced, the approximations needed to produce practical results (such as the specifications of the houses used for modeling and the number of rating factors used), and the potential for differences in results using different hurricane models.”

Rule 69O-170.017 F.A.C. was amended effective December 16, 2006, to require insurers to make new rate filings by March 1, 2007, to double the credits to 100% of the study’s indicated value or provide actuarial justification for an alternative system. Informational Memorandum OIR-07-03M (Appendix D-7) issued February 27, 2007, stated that the “windstorm mitigation discount filing shall not include any modification of the rating factors or base rates for any purpose, including the offset of revenue impact on current business.”

ARA updated the study of mitigation credits in 2008 (Appendix D-8), but the results of that study have not been implemented. The Uniform Home Grading System was to be implemented

in 2011 to replace the current mitigation discount system. It would require discounts to be based on a numerical score of the Uniform Home Grading System. The system has not been implemented.

Available Capital

The state of Florida has nearly \$2 trillion in insured residential property exposure (2010, OIR QUASRng). The state has more than \$4 billion in expected average annual losses (AAL) due to windstorms (\$4.17 billion according to RMS v11.0, \$4.35 billion according to AIR 12.0.1) and nearly \$60 billion in 1-in-100 probable maximum losses (PML) due to windstorms (\$52.6 billion RMS v11.0, \$61 billion AIR 12.0.1).⁴ To support this type of catastrophic exposure, Florida needs a large diverse capital base available to pay for losses if and when they occur. Table 1 shows the probable maximum losses (PML) per occurrence faced by residential policyholders in Florida.

Table 1: Probable Maximum Windstorm Loss Amounts for Florida by Return Period

Return Time (Years)	Gross PML
50	\$40 B
100	\$60 B
250	\$90 B

Source: 2011 Annual report of aggregate net probable maximum losses, financing options, and potential assessments

Per-occurrence PML amounts represent large loss amounts that are estimated to be exceeded only once during a return period. For instance, a PML of \$40 billion with a 50-year return period can be interpreted to mean that loss costs from a single storm are estimated to exceed \$40 billion only once every 50 years, over the long run on average. Another way to interpret the value is to restate the return period as a probability: There is a 2% (1/50) probability that the loss costs from a single storm will exceed \$40 billion.

When large losses occur, capital is needed to pay for the losses. Potential capital sources include residential property owners, the private insurance market, the State and its affiliated entities, the Federal Government, and tax payers (within Florida and nationally). Property owners in Florida are the first tier source of capital, as they will need to be able to pay for any uninsured damage as well as any deductibles on insured losses to their property.

The second tier of capital is Florida’s primary insurance market, the current structure of which includes both the private insurance market and the State’s residual market. The private market for primary insurance includes insurers admitted by the OIR to compete in Florida for standard business as well as non-admitted insurers selling only in the surplus lines. We do not have any

⁴The AALs and PMLs are for residential and commercial residential properties only. Commercial residential includes condominiums, apartment complexes, etc., including the common elements in those complexes.

data on the premiums collected or the amount of exposure currently being insured in the surplus lines market. This report focuses on the admitted insurers and Citizens and partitions the Florida property insurance market into four segments of primary insurers:

1. *Citizens*. Florida's state-sponsored property insurer. While developed as a residual market entity, Citizens now accepts nearly all insurable applicants. Legislative changes in 2007 (based on House Bill 1A, or HB1A) removed eligibility restrictions on Citizens as a competitor with private insurers. Prior to HB1A a policyholder had to be rejected in the private market or show that admitted insurers were charging 25% more or higher than Citizens to be eligible for Citizens coverage. HB1A removed the requirement that a policyholder must be rejected by the private admitted insurance market to be eligible for Citizens coverage. After the passage of HB1A, the minimum premium difference requirement for Citizens eligibility was reduced from 25% to 15%. Citizens now has more than 1.4 million policyholders.
2. *Florida domestic insurers ("domestics")*. Florida-domiciled insurers who write primarily Florida property insurance. Many of these domestics incepted operations since Hurricane Andrew. The Insurance Capital Build-Up Incentive Program provided start-up surplus loans to 13 new property insurers in 2006-2007.
3. *National company subsidiaries ("pups")*. Florida-domiciled subsidiaries of national insurers. These pups are focused solely on property insurance in Florida while still members of the parent's insurance group. The subsidiary structure allows national insurers to isolate the parent's assets from Florida's catastrophic property exposure.
4. *National insurers and others*. These insurers are not Florida-based and do not fall in any of the above categories. Most are traditional national insurers with a multi-line focus.

A list of company names and National Association of Insurance Commissioners (NAIC) codes utilized in this report, along with assignments to these Florida segments, is included as Appendix B.

Excluding Citizens and non-admitted (surplus lines) insurers, Florida's primary insurance market collected approximately \$6.2 billion in homeowners insurance premiums in 2010. Citizens collected nearly \$2 billion in residential property premiums in 2010.

Through reinsurance transactions, the FHCF and the global reinsurance market are also suppliers of capital to support Florida's catastrophic risk.⁵ Citizens, the FHCF, and FIGA all utilize post-loss assessments to supply capital, which means that almost all property casualty policyholders in Florida ultimately supply a portion of their capital. The final supplier of capital may be the

⁵Both insurers and reinsurers have a variety of capital market products that may be used to draw investors and capital to support catastrophic risk. These products can include: catastrophe bonds, catastrophe swaps, industry loss warranties (ILWs) and other insurance-linked securities. These markets, while growing, do not supply a significant portion of the capital in Florida or anywhere.

Federal Government and ultimately all taxpayers if federal aid is necessary (and available) to pay for losses.

The total homeowners insurance premiums collected in 2010 were approximately \$8.3 billion. While this is enough to cover the AAL (\$4-\$4.5 billion), it does not approach the amount needed to cover the PMLs. Recall that total losses from the 2004-2005 storms were more than \$35 billion and the 1-in-100-year PML is nearly \$60 billion. Capital is needed to support the deviation from expected loss amounts that can occur.

The sources and cost of the capital available to support Florida's catastrophic exposure has evolved over the last 25 years. Figure 2 shows the major changes that have occurred in Florida's private residential insurance market since Hurricane Andrew in 1992. Formation of the pups and domestics occurred almost entirely during this period. Since 2006, several of the domestics have become insolvent. While some of these insolvencies can be traced directly to the 2004-05 storm seasons, the most recent insolvencies (in 2010-11) are not necessarily traceable to specific catastrophic losses.

Citizens, the FHCF and FIGA are relying on debt as a significant source of capital in the event of a major loss. As will be discussed in more detail in Section 4, more than 40% of 50- or 100-year return time losses will be financed through assessments from Citizens and the FHCF. This does not include any assessments that may be necessary from FIGA for insolvent insurers. In Section 5, we discuss how the amount of capital available from the private, admitted insurers market has been decreasing while exposure has increased. Reinsurers provide a significant source of capital and diversification to the Florida insurance marketplace. As the private primary market has become one of smaller and less diversified companies, more reinsurance is being utilized (see Section 5). For now, we turn our attention in Section 3 to other Southern and Mid-Atlantic coastal states, with emphasis on their policies for managing catastrophic windstorm risk.

Figure 2: Timeline of Major Changes in Florida's Private Market for Residential Property Insurance

	1992	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Weather Events	Hurricane Andrew									Hurricanes Charley, Frances, Ivan, Jeanne	Hurricanes Dennis, Katrina, Rita, Wilma						
Pup Formation		Travelers of Florida established (First Floridian Auto & Home) Allstate Floridian established (Castle Key Insurance)			State Farm Florida established Nationwide Insurance Company of Florida established					Encompass Floridian established (Allstate)							
Capital Incentive Programs												Insurance Capital Build-Up Incentive Program					
Domestic Insurer Entries		3	3	8	5	2		1	1	4	8	6	9	4	1		
Domestic Insurer Insolvencies												Atlantic Preferred Ins. Co. (Poe Group) Florida Preferred Property Ins. Co. Southern Family Ins. Co.	Vanguard Fire & Casualty			Coral Ins. Co. Magnolia Ins. Co. Northern Capital Ins. Co.	Homewise Preferred Ins. Co. (receivership)

III. Comparative Residual Property Market Analysis: Other Coastal States⁶

Residual markets exist to address government concerns about insurance availability. They are, in concept, intended to offer basic insurance coverage for substandard risks at rates higher than those available for coverage of standard and preferred risks in the private insurance market but lower than the private market rates may indicate for the substandard risks. States create residual markets for a variety of purposes depending on the risks prevalent in the geographic area and the demographics of their constituency. In property insurance, residual markets tend to have one of two purposes:

- FAIR plans (Fair Access to Insurance Requirements): provide insurance coverage in typically urban areas underserved by private insurers; and
- Catastrophe-focused programs, such as wind plans, coastal plans, beach plans, earthquake funds and Citizens Insurance Corporations: provide property coverage (single or multi-peril) in catastrophe-prone areas.

Since 1992, hurricanes have caused a great deal of damage across several states. Thus, it is not surprising that several states have developed mechanisms to provide coverage specifically to property owners who reside on or near the coast. Every coastal exposed state from Texas to Virginia has some type of beach or windstorm plan. The coverage provided by and the operation of the various state residual programs varies as widely as the programs themselves. This section provides background information on the residual market plans in states that have been most impacted by recent hurricanes: Alabama, Florida, Louisiana, Mississippi, North Carolina, South Carolina and Texas.

Coverages Provided through the Residual Markets

There are no federal or state laws that require property owners to carry property insurance on their homes. However, The Federal National Mortgage Association (Fannie Mae) requires minimum hazard insurance coverage as part of a conforming mortgage. Therefore, mortgage lenders typically require property insurance as part of the lending requirements to ensure that the mortgagor will have the funds available to rebuild or pay the mortgage in the event of damage to the property and the mortgagee will have the option of reselling the mortgage in the secondary mortgage market. Fannie Mae allows up to a 5% deductible and requires a limit equal to the minimum of the unpaid principal balance of the mortgage or the insurable value of the improvements.⁷ Fannie Mae also requires that claims must be settled on a replacement cost basis and the perils covered include fire, wind, civil commotion, smoke, hail, and damages caused by aircraft, vehicle, or explosion. Finally, Fannie Mae requires that the insurer has a minimum

⁶ This section is based on Cole et al, 2009 in Appendix D-3.

⁷ Insurers typically have their own insurance-to-value requirements as part of the underwriting process that requires the property owner to insure the property to a certain percentage (e.g. 80%) of the replacement cost.

rating from A.M. Best, Demotech, or Standard & Poor's. If the insured is unable to obtain coverage in the private insurance market, Fannie Mae will accept coverage from state residual markets, including FAIR plans and beach/windstorm plans. For more detail on Fannie Mae's hazard insurance requirements see the Fannie Mae Selling Guide, Chapter B7-3, Hazard and Flood Insurance (Appendix D-9).

Currently Alabama, Florida, Louisiana, Mississippi, North Carolina, South Carolina, and Texas all have some type of a beach plan that offers insurance coverage. All offer wind and hail only policies. Florida, Louisiana, and North Carolina offer HO-3 policies in addition to wind and hail only policies, while Alabama, Mississippi, South Carolina and Texas only offer the wind/hail policies. Each state offers more basic coverage through the FAIR plan.

A Comparison of Residual Market Operations⁸

Historically, residual market entities were developed to provide property insurance coverage to property owners who had difficulty in obtaining coverage from private insurance companies. Designed to be markets of last resort, these entities differ in their structure and have different requirements for eligibility. The coverages available and assessment procedures vary from state to state as well. The purpose of this section is to discuss the similarities and differences among the residual market insurers focusing on issues related to residential risks. Specifically, we discuss how these states' residual market mechanisms operate, including eligibility requirements, pricing and assessment structures. For a comparison of premiums written and premiums earned as well as exposure in coastal states, see Table 2.

Table 2: Premiums and Exposure of Residual Markets

State	Premiums Written (000's)	Premiums Earned (000's)	Exposure (000,000's)	PW to Exposure	PE to Exposure
Alabama	\$37,769	\$15,006	\$3,335	11.325	4.500
Florida	\$2,604,265	\$1,971,649	\$508,520	5.121	3.877
Louisiana	\$209,946	\$154,738	\$26,675	7.871	5.801
Mississippi	\$79,082		\$7,024	11.26	
North Carolina	\$ 303,258	\$302,197	\$68,000	4.460	4.444
South Carolina	\$97,127	\$12,099	\$14,493	6.702	0.838
Texas	\$304,393		\$76,971	3.955	

Alabama, Mississippi, South Carolina, and Texas wind-only.

Alabama as of November, 2010; Louisiana Exposure as of March, 2010; Texas as of September, 2011; Others as of December, 2010.

Both Florida and Louisiana have merged their FAIR and wind plans into single entities, and both are known as Citizens Property Insurance Corporation – FL Citizens and LA Citizens. Of the residual markets selected for comparison, all can levy assessments on private insurers in the

⁸ Much of the information for this section is taken from Cole et. al., 2009b in Appendix D-10.

event of a deficit, but only Florida and Louisiana allow assessed insurers to recoup their assessments directly from their policyholders, as opposed to recoupment through increased premiums and/or tax credits. Beyond this similarity, even these two states operate their residual markets quite differently from one another. Of the states examined, only Florida Citizens is allowed to file rates competitive with the private industry, and only Florida has a state catastrophe fund, the FHCF. A more thorough analysis of each of the residual markets – Alabama, Louisiana, Mississippi, North Carolina, South Carolina and Texas – is provided below.⁹

Alabama¹⁰

Alabama does not have a separate beach plan distinct from its statewide residual insurer, the Alabama Insurance Underwriting Association (AIUA); the AIUA is popularly referred to as the “Beach Pool” within the state. Formed in the early 1970s by insurance industry leaders in cooperation with the Alabama Department of Insurance, the AIUA now (since 2001) officially provides coverage in the “Seacoast Territories”, comprising Baldwin and Mobile counties. The total insured value of the AIUA has increased substantially in recent years, especially since Hurricane Katrina, to approximately \$3.4 billion by year-end 2010.

Alabama formed a 20-member Hurricane Insurance Issues Task Force following Hurricane Ivan in 2004 that released a report in August 2005. Recommendations included further study of a catastrophe fund, modification of the Beach Pool and provision of “wrap around” policies (private policies excluding wind coverage offered in tandem with AIUA policies covering wind), and stopped short of recommending any of these changes be made at that time. The 2008 State Legislature codified the Beach Pool, which previously had been referred to as a voluntary plan. The AIUA does not offer competitive rates.

The AIUA is a general assessment plan, authorized to assess member insurers whenever there is a deficit. The assessment is based on each insurer’s proportion of premiums at the time of the deficit. If these regular assessments are insufficient to cover the deficit, necessitating borrowing for additional funds, the AIUA does not have statutory authority to levy emergency assessments, nor does its plan of operation contain provisions for emergency assessments. Alabama allows assessed insurers to indirectly recoup the assessments they are charged through increased rates going forward instead of making provision for direct recovery from policyholders.

⁹ For more detail on how each of these state’s residual markets operate see Appendix D-11 Hartwig and Wilkinson, 2010.

¹⁰ The information regarding Alabama’s residual insurance entity came from the websites for the Alabama Department of Insurance and the Alabama Insurance Underwriting Association. Further details of the work of the Hurricane Insurance Issues Task Force is found specifically at https://aiua.org/pages/task_force, and the 2005 report is found in Appendix D-12.

Louisiana

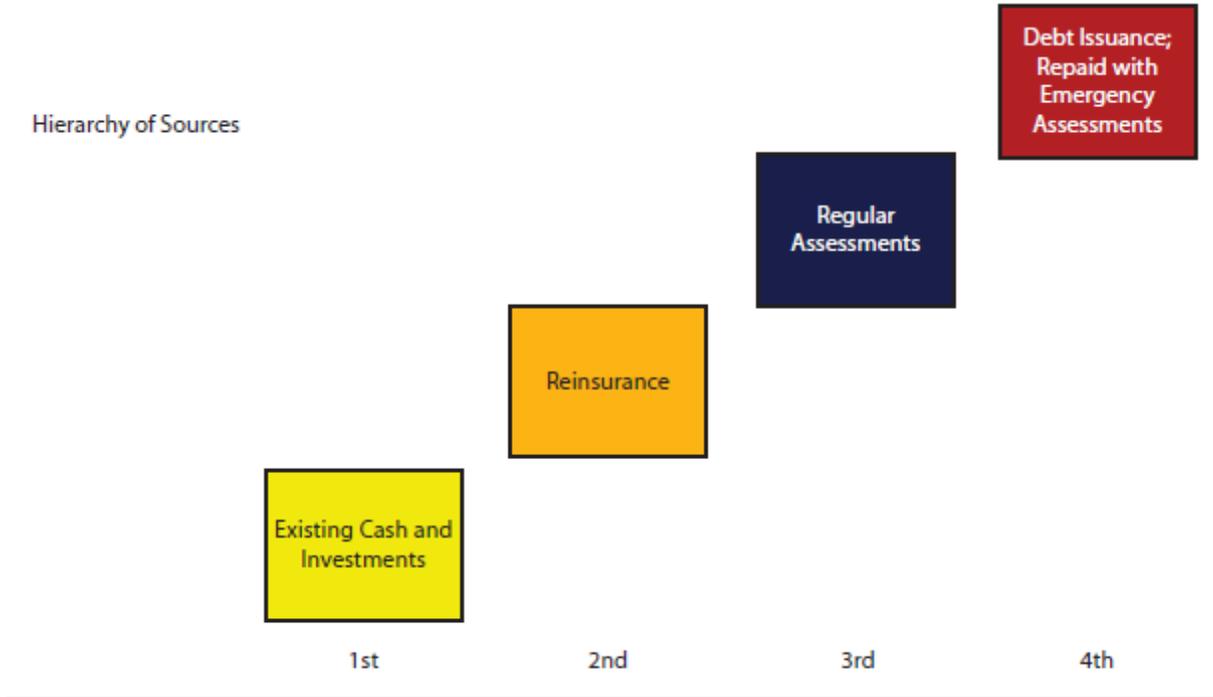
The insurer of last resort in Louisiana, the Louisiana Citizens Property Insurance Corporation (LA Citizens), was created in 2003, shortly after FL Citizens. LA Citizens operates two insurance programs, the Louisiana Insurance Underwriting Plan (Coastal Plan) and the Louisiana Joint Reinsurance Plan (FAIR Plan). The Coastal Plan provides coverage in the area of the state most subject to hurricanes, the area south of the Intercoastal Waterway, while the FAIR Plan offers coverage in the remainder of the state. Unlike FL Citizens, LA Citizens is not designed to offer competitive rates.

LA Citizens has the ability to assess companies. Specifically, the statute states that “assessable insurers shall participate in assessments of the Coastal Plan in the proportion that the net direct premium of such participant written in this state during the preceding calendar year bears to the aggregate net direct premiums written in this state by all assessable insurers during the preceding calendar year” (LA RS 22:2299 and 22:2300). Similar language exists for the FAIR Plan. LA Citizens has the ability to levy two types of assessments on insurers, Regular Assessments and Emergency Assessments. The Regular Assessments can be immediately levied to a maximum of 10 percent of the premiums written in the assessable lines (fire and allied lines, homeowners lines, and the property portion of the commercial multi-peril policy). If these assessments are not adequate to cover the deficit amount, LA Citizens can issue revenue bonds and then utilize the Emergency Assessments to cover the repayment until the bonds are retired. Insurers are allowed to recover these assessments from policyholders through a surcharge. As shown in Figure 3, before assessments can be levied, the plans must first deplete their existing cash and investments and exhaust all reinsurance available.¹¹

¹¹ This information was taken from “Louisiana Property Insurance Corporation – Comparisons to Similar Entities,” a report issued June 2007 by Louisiana’s Office of Legislative Auditor, and contained in Appendix D-13.

Figure 3: LA Citizens Catastrophe Funding Sources and Assessments

Funding Sources in the Event of a Catastrophe
(Not to Scale)



Mississippi

Mississippi has two residual market insurance providers. The Mississippi Windstorm Underwriting Association (MWUA) was created in 1987 to provide coverage for windstorm in coastal areas of the state. The Mississippi Residential Property Insurance Underwriting Association (MRPIUA) expanded the Mississippi Rural Risk Underwriting Association in 2003 to provide coverage across the state. In the state’s lower coastal counties, wind-only coverage is provided by the MWUA. The rates for the wind-only coverage are those approved by the Insurance Commissioner and vary depending on building construction type, location of the property, and deductible level selected.

The MWUA has the ability to levy Regular Assessments in an amount not to exceed “the greater of” 10 percent of the aggregate statewide property premiums for property insurance or 10 percent of the deficit on assessable insurers. All insurers licensed in the state are considered assessable

insurers.¹² MWUA can then request that the Insurance Commissioner place a surcharge on total policy premiums for all property and casualty insurance policies in the state with the money collected being distributed to insurers that paid the Regular Assessments. The surcharge amount is set at a level such that the full amount of the Regular Assessments is reimbursed to the insurers within one year. Also, if the surcharge is not adequate to reimburse the full amount of the Regular Assessments paid by insurers, the surcharge can be increased. However, if the money collected exceeds the full amount of the Regular Assessments paid by insurers, the MWUA keeps the balance (MS 83-34-9).

Non-assessable insurers, or non-admitted insurers, are required to pay a non-admitted policy fee. This fee may be changed at any time by the Commissioner but is set at a minimum of five percent of total policy premium. Finally, the MWUA has the ability to “issue bonds, and the power and authority to enter into loans, letters of credit, lines of credit, and other forms of indebtedness” as needed (MS 83-34-31). As with the Regular Assessments, the MWUA can request that the Commissioner apply an “excess hurricane loss surcharge” on all property and casualty insurance policies (MS 83-34-33). If the amount collected is not sufficient to cover the costs of the bonds, loans or other financial instruments, the MWUA can ask the Commissioner to adjust the surcharge amount.

North Carolina

The insurer of last resort in North Carolina also operates two programs, the FAIR Plan through the North Carolina Joint Underwriting Association (NCJUA) and the Coastal Property Insurance Pool (formerly the Beach Plan) through the North Carolina Insurance Underwriting Association (NCIUA). Both were created in 1969; all insurers writing property/casualty insurance in the state participate in both plans. The FAIR Plan provides insurance to property owners that are not able to secure coverage in the private market. Alternatively, the Coastal Pool is only available to property owners in a specific geographic area. Originally, this was only the barrier islands known as the Outer Banks. However, coverage was expanded in 1998 such that wind-only coverage was available in 18 coastal counties.¹³ Beginning in 2003, broader coverage was made available to property owners in these counties. The total insurance value of the Coastal Pool has increased substantially over the past ten years to close to \$68 billion in 2010.

House Bill 1305 was signed into law in August 2009. The bill renamed the Beach Plan to the Coastal Property Insurance Pool and reduced the maximum policy limit for a Pool policy to \$750,000 from \$1.5 million. The bill also capped the amount of the Pool’s deficit that insurers

¹² As identified in the statute, the current assessable property lines of business are: fire, allied lines, farm owners, 75% of homeowners, property portion of commercial multi-peril, inland marine, earthquake, and creditor-laced insurance on real property and/or contents.

¹³ As defined in G. S. 58-45, coastal counties are “Beaufort, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Hyde, Jones, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell and Washington.

would have to cover at \$1 billion. When the Pool exhausts its funds and the insurer's limit is reached, then residential and commercial property insurance premiums could rise by up to 10 percent to pay the Pool's claims. Thus, surcharges on policyholders could begin when the pool exhausts its surplus, reinsurance, and \$1 billion in private insurance that is not recoupable. The bill included a rate differential provision, which required rates to be five percent higher than those of the private market for wind-only coverage and 15% higher for full homeowners insurance coverage.

South Carolina¹⁴

Legislation enacted in 1971 created the South Carolina Wind and Hail Underwriting Association (SCWHUA), also called the Beach Plan. As with the original North Carolina Beach Plan, it provides wind-only coverage to coastal areas, and all insurers providing property/casualty insurance in the state are required to participate. The total insured value of the Beach Plan is much less than that of the NC Beach Plan at slightly more than \$14 billion in 2010.

As defined in SC ST SEC 38-75-310, eligible coastal areas include Beaufort, Colleton and Horry Counties and parts of Georgetown County. Residential coverage of up to \$1.3 million can be purchased, at noncompetitive rates. As with most of the other state-run insurers, the statute specifically states, "As a residual market mechanism, the association is not intended to offer rates competitive with the admitted market. Rates for policies issued by the association must be adequate and established at a level that permits the association to operate as a self-sustaining mechanism" (SC ST SEC 38-75-400). In regards to the assessment of insurers, the SCWHUA is structured so that, "All members of the association shall participate in its writings, expenses, profits, and losses in the proportion that the net direct premium of the member written in this State during the calendar year two years before the current year bears to the aggregate net direct premiums written in this State by all members of the association" (SC ST SEC 38-75-370). Both regular and emergency assessments are authorized, and like Alabama, South Carolina allows insurers to recoup their assessments through increased rates rather than as direct line items.

The 2007 Omnibus Coastal Property Insurance Reform Act was designed to entice insurers to enter the state's market and write policies along the coast. Among its provisions are:

- Implementation of a two-tiered rating system based on proximity to the coast;
- "Overall" rate increase of 35%, to vary by territory;
- Increased minimum deductibles to 3% in tier one and 2% in tier two;
- Availability of higher deductibles for lower premiums;
- All townhouses rated as "dwelling" regardless of the number of units in a structure;
- Condominium associations consisting of only one or two units rated as "dwelling" not

¹⁴ Most of the detail for this section is found within the South Carolina Department of Insurance web site and in the South Carolina Department of Insurance Bulletin 2007-05, found in Appendix D-14.

- “commercial;” and
- Requiring a National Flood Insurance Policy for those insureds choosing replacement cost coverage (effective January 1, 2008).

Texas

The Texas Windstorm Insurance Association (TWIA) was created in 1971, following Hurricane Celia, in response to the reduction in the availability of coverage as insurers stopped writing business in the area. The TWIA began providing wind and hail coverage to property owners in the coastal areas. This includes Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Jefferson, Kennedy, Kleberg, Matagorda, Nueces, Refugio, San Patricio, Willacy and certain areas of Harris Counties, also called the first tier coastal counties.

After Hurricanes Katrina and Rita in 2005, private insurers began pulling out of coastal areas in Texas. As such, for property owners in these areas, the TWIA is the only available source for wind-only coverage. In 2008, Hurricane Ike resulted in close to 100,000 claims against the TWIA. Insurers had to pay more than \$430 million in assessments. They were allowed to recoup \$230 million in credits against the premium tax. The Catastrophe Reserve Trust Fund transferred \$370 million to the TWIA and its reinsurance brought the total amount of funds to \$2.1 billion. Losses above this amount may be covered by another assessment against the insurers.

House Bill 4409 (passed in May 2009) is a House-Senate compromise for the TWIA, which restructures the state’s windstorm fund. The restructuring relies in large part on bonding to replenish its account after a major hurricane. TWIA policyholders, as well as other policyholders, will participate with insurers sharing the costs of claims after a large hurricane event. Policyholder surcharges and assessments against insurers will be used to repay the post event bonds mentioned above. The structure allows for the state fund to buy reinsurance, and insurance companies can buy it to cover their payments into the system in the event of a big storm. This legislation provides for funding losses up to \$2.5 billion. Premiums collected by the TWIA in excess of those used to pay losses and expenses are to be placed in the Catastrophe Reserve Trust Fund (CRTF).

In the event of a large storm, the claims would first be paid from available TWIA premium and other revenue. Next, available funds in the CRTW would be used. Then, public securities not to exceed \$1 billion with repayment not to exceed 10 years by payment from TWIA available revenues would be used. The next layer would be Class 2 Public Securities not to exceed \$1 billion with repayment not to exceed 10 years. Thirty percent or \$300 million of the public securities will be repaid by insurers’ assessment and seventy percent or \$700 million will be repaid by surcharges on coastal property and casualty policies. The surcharges on coastal property and casualty policyholders will not exceed 2.8 percent a year for 10 years unless multiple storms occur over multiple years. The last layer would consist of Class 3 Public

Securities not to exceed \$500 million. Repayment would be up to ten years paid by assessments on insurers or via the purchase of reinsurance by insurers to cover the assessment. Insurers will no longer be able to claim a premium tax credit for the payment of assessments under HB4409.

IV. Potential Assessments¹⁵

As discussed in the last section, due to the magnitude and variability of catastrophic windstorm losses, it is virtually impossible to finance all of the potential losses in any single time period. This leaves two choices – prefund all potential losses or utilize some form of post-loss funding – when windstorm losses are significant. Florida, like other catastrophe prone states, has chosen to finance a significant portion of its catastrophic risk exposure through post-loss assessments. In Florida, these assessments are levied on most property-casualty insurance policyholders by state sponsored insurance entities such as Citizens, the FHCF and the FIGA.

Citizens is the state’s residual market property insurer. Homeowners have the choice of purchasing homeowners insurance coverage from a private insurer or from Citizens, which in effect now competes with private insurers on price. Citizens, on its current glidepath to actuarially sound rates, cannot increase rates by more than 10% for any policyholder in a given year.¹⁶ Given the current rate restrictions and deficiencies, it will be many years before all Citizens policyholders are priced at actuarially fair rates (see Appendix D-16: Maroney, Nyce, and Newman, 2009). According to Maroney, Nyce, and Newman, policyholders in Miami-Dade County will still be underpriced in 2020, given the present glidepath.

The FHCF is the state run entity created to provide stability to insurers participating in Florida’s residential property insurance market. Both Citizens and private insurers may purchase reimbursement coverage from the FHCF.¹⁷ The FHCF is mandated by statute to charge “actuarially indicated” rates. The FHCF rates are substantially lower today than private market reinsurance rates.

FIGA is the state entity that pays the claims of insolvent insurers and has the ability to assess in the event of insolvencies related to catastrophic storms. Its use is limited primarily to protecting the State’s policyholders against potential insolvencies of private insurers since the public insurers – Citizens and FHCF have their own respective assessment capabilities in the event of large losses. The assessment structure for each of the three entities is discussed in detail in the next section. Currently, both Citizens and the FHCF have assessments (emergency assessments) in place (ending 2017 and 2016 respectively) to pay for post-event debt service stemming from the 2004-2005 hurricane seasons. The current assessments are shown in Table 3.

¹⁵ Some of this section was taken from Cole et al (2011), included in Appendix D-15.

¹⁶ Sinkhole premiums are not part of Citizens’ glidepath.

¹⁷ The FHCF sells mandatory and optional reimbursement coverage. All insurers selling homeowners insurance in Florida are required to purchase the mandatory reimbursement coverage.

Table 3: Current Assessments

	Annual Assessment	Thru	Total Outstanding Principal
FHCF	1.30%	2016	\$1,880,375,000
Citizens	1.4% (reduced to 1.0%)	2017	\$824,800,000
FIGA*	0%		

*-FIGA's last assessment in the all other account was in 2009 for .8%

Source: Citizens, FHCF, FIGA annual reports and websites.

Assessment Structures and Processes

This section contains a review of the three primary insurance entities in Florida with the power to levy post-loss assessments: Citizens, the FHCF, and FIGA.¹⁸ The primary focus relates to the overall organization, assessment base, and assessment structure of each entity.

Citizens

Citizens has three distinct accounts, the Personal Lines Account (PLA), Commercial Lines Account (CLA), and the Coastal Account (formerly the High-Risk Account or HRA).¹⁹ Each account has a separate financial identity, and the calculation of deficits and resulting assessments are determined separately for each of the accounts. The current assessment base definition for Citizens includes all property and casualty lines of insurance except medical malpractice, accident and health, and workers' compensation. When Citizens has a financial deficit in any of its three accounts, it has statutory authority (Section 627.351(6)(b)2.a, Florida Statutes) to levy up to three different types of assessments. The first assessment is the Citizens Policyholders Surcharge, levied on Citizens' policyholders for each of Citizens' three accounts. The amount of this surcharge reduces the amount of the deficit before Citizens Regular Assessments and Emergency Assessments are considered.

The second Citizens assessment is Citizens Regular Assessment. The principal purposes of Regular Assessments are to cover smaller deficits quickly and to generate an early flow of funds to Citizens when larger deficits occur. Regular Assessments are imposed on private insurance companies and collected from policyholders that purchase relevant types of insurance policies from surplus lines insurers.²⁰ The admitted insurers have the authority to recoup the amount of the Regular Assessments they paid to Citizens by adding a surcharge to the premiums they charge their policyholders (Section 627.3512, Florida Statutes). The payment of these assessments could be detrimental to thinly capitalized insurers that more than likely have significant losses in their own books of business.

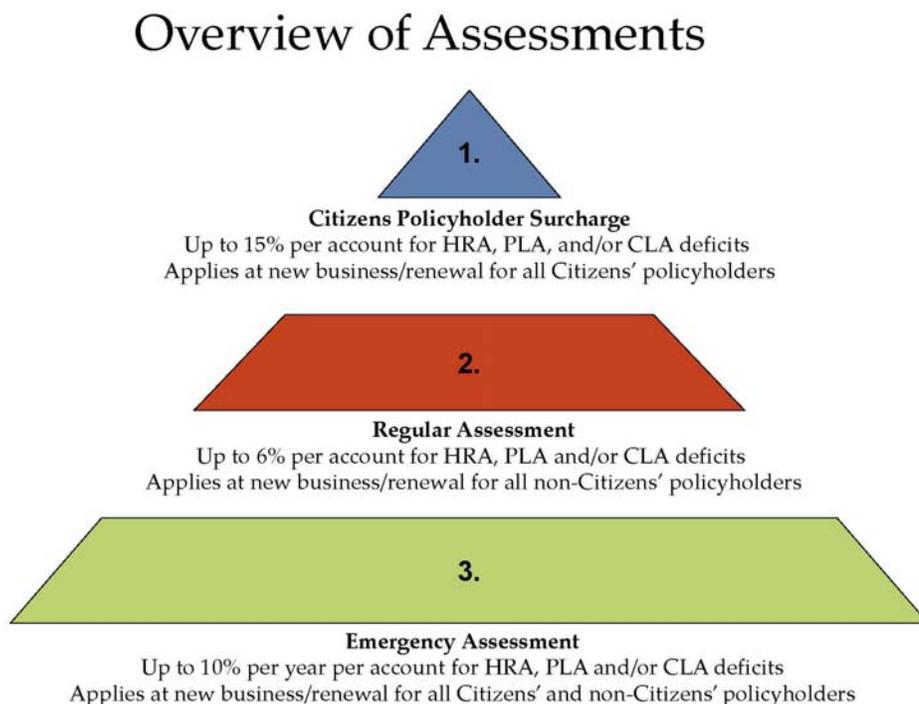
¹⁸ For a more detailed explanation of these entities as well as major changes to the structure of these entities, see Appendices D-1 and D-2.

¹⁹ The accounts are defined in Section 627.351(6)(b)2, Florida Statutes.

²⁰ For a definition of surplus lines see Part VIII of Ch. 626, Florida Statutes.

The third Citizens assessment is Citizens Emergency Assessment. The principal purpose of Emergency Assessments is to allow Citizens to make principal and interest payments on debt it issues to pay the claims associated with large hurricane losses when needed. Citizens levies Emergency Assessments on the policyholders of private and surplus lines insurance companies, subject to assessment, as well as on its own policyholders. Citizens cannot levy Emergency Assessments unless the maximum Policyholders Surcharge and Regular Assessments are not enough to cover the deficit. The Emergency Assessments are collected when the policies subject to assessment are renewed or when new policies are issued.

Figure 4: Citizens Assessment Structure



Source: Citizens Property Insurance Corporation website. The HRA account has been renamed the Coastal Account.

Figure 4 illustrates the assessment structure within Citizens. Citizens' maximum attainable assessments in one year, based on the assessment structure and the 2010 insurance premiums assessment base,²¹ are approximately \$16.93 billion.

- The Citizens Policyholders Surcharge (\$1.17 billion): Citizens can assess its policyholders up to 15 percent of their premium for each of Citizens' three accounts that face a deficit. Citizens policyholders face a maximum of 45 percent Policyholder

²¹ The Citizens premiums written in 2010 (Citizens Policyholder Surcharge Base) were \$2.6B. All P&C lines except medical malpractice, workers' compensation, and accident & health (Regular & Emergency Assessment Bases) premiums written were \$33.8B which includes the \$2.6B written by Citizens.

Surcharge (15% for each account). The \$1.17 billion that can be collected through the Citizens Policyholder Surcharge is 45% of the \$2.6B Citizens premium collected from its three accounts (Coastal Account, PLA, and CLA)).

- The Citizens Regular Assessments (\$5.62 billion): Citizens can assess admitted insurers and surplus lines policyholders up to the greater of 6% of premium or 6% of the deficit for each Citizens account. Therefore the maximum Regular Assessment is 18% (6% for each account) of the \$31.2B (or \$5.62 billion) in 2010 premiums in the assessment base lines of insurance.
- The Citizens Emergency Assessments (\$10.14 billion): Citizens can assess their policyholders, admitted insurers' policyholders, and surplus lines policyholders up to the greater of 10% of premium or 10% of the deficit for each Citizens account plus an additional amount to cover interest, fees, and other charges related to debt issued to cover hurricane losses. Citizens' ability to borrow is a function of its assessment rates, the size of the Assessment Base, and conditions in national and international credit markets. The maximum Emergency Assessment is 30% (10% for each account) of the \$33.8B (or \$10.14 billion) in 2010 premiums in the assessment base lines of insurance).²²

FHCF²³

While the FHCF charges premiums for the coverage it provides, much of its capacity to meet its obligations to insurance companies is based on the post-loss assessments it is authorized to levy on insurance companies. To date, the FHCF has charged actuarially indicated rates for its coverage that are substantially below the rates charged by private reinsurance companies.²⁴

²² It is highly unlikely that Citizens would assess the full 30% in Emergency Assessments in the first year; rather they would likely spread the assessments out over a long period, such as 30 years to match the duration of the debt issued. Also, there is no set dollar limit to the total amount Citizens may assess since Citizens must estimate its losses to determine the proper assessment amount (e.g. a \$100 billion event based on models and initial survey), then charge 10% of that amount to all policies affected by the assessment.

²³ FHCF was created by the Florida Legislature in 1993 as a mandatory reimbursement mechanism for property insurance companies in Florida (Chapter 93-409, Laws of Florida). It provides reimbursement for a portion of an insurance company's hurricane losses above the company's required FHCF retention. Insurance companies that write covered policies must enter into a contract with the FHCF and pay an annual premium for the coverage. Since 1995, covered policies have been limited to those providing coverage for personal and commercial residential properties (Chapter 95-276, Laws of Florida). The FHCF is exempt from federal income taxation. Therefore, the FHCF can accumulate premium payments from year to year on a tax-free basis to pay catastrophe losses when they occur. By charging actuarially indicated rates (below those in the private reinsurance market), the FHCF has helped hold Florida residential property insurance rates lower than they would have been otherwise. While the Florida Legislature's principal purposes in establishing the FHCF were to provide additional insurance capacity and help stabilize Florida's property insurance market (Section 215.555(1), Florida Statutes), the beneficial effect of the FHCF charging below private reinsurer rates became apparent over time (Committee on Banking and Insurance, 2007).

²⁴ The FHCF is required by statute to charge an "actuarially indicated" premium to insurance companies purchasing FHCF coverage. The FHCF's traditional approach to developing actuarially indicated rates was to add an administrative cost factor to the average annual hurricane loss estimates developed from a weighted average of several hurricane models. The reasons why the FHCF can comply with the statutory standard and still have rates as much as one third to one fourth of the rates charged by private reinsurance companies are as follows: (1) the FHCF

The FHCF's assessment base is very similar to Citizens' current assessment base. Specifically, included are all lines of property and casualty insurance written by authorized insurance companies in Florida, except for workers compensation insurance, medical malpractice insurance, and accident and health insurance.

The FHCF's ability to borrow is a function of its assessment rates, the size of the FHCF Assessment Base, and conditions in national and international credit markets. The assessments levied by the FHCF are called Emergency Assessments (FHCF Emergency Assessments), but they are not the same as the Citizens' Emergency Assessments. The Florida Legislature increased the FHCF's assessment authority during the 2004 Regular Session by allowing assessments of up to 6% for hurricane losses in one season and up to an aggregate of 10% for hurricane losses in multiple years (Chapter 2004-27, Laws of Florida).

Historically, FHCF debt has been considered high quality by markets because of the FHCF's assessment powers. During two of the last three years, however, it does not appear that the FHCF would have been able to bond enough to pay for its full potential liabilities if it had become necessary. While this has been a function of conditions in the credit markets, the quantity of debt needed may be a more of an issue than the quality. This structure may be even more concerning in light of the current Florida economy and the likely adverse public reaction to potential large assessments (e.g., movement out of state or other evasion of assessments).

FIGA²⁵

FIGA does not accumulate funds in advance of an insurance company's insolvency. Therefore, when a company insolvency occurs, FIGA must obtain the funds it needs through pro-rata assessments levied by the Office of Insurance Regulation on insurance companies subject to assessment.²⁶ These insurers must then recoup the cost through their policyholders. Depending on the number and size of property insurance companies that become insolvent following future hurricane strikes in Florida, FIGA may need to levy its own FIGA Regular Assessments and FIGA Emergency Assessments to meet its hurricane claims payment obligations under Florida law.²⁷

is exempt from federal income taxation; (2) the FHCF has very low administrative expenses; (3) the FHCF has no underwriting or marketing expenses because it is a mandatory insurance program; and (4) the FHCF does not include a profit load or contingency factor in its rates (a cash buildup factor is included). Finally, the FHCF's emergency assessments are a broad based tax on most property casualty policyholders and therefore are not part of the FHCF's rating structure.

²⁵ The Florida Legislature joined many other states in 1970 to address concerns about the adverse effects of insolvent insurance companies by creating the Florida Insurance Guaranty Association (Chapter 70-20, Laws of Florida). The purpose of FIGA was to "provide a mechanism for the payment of covered claims under certain insurance policies to avoid excessive delay in payment and to avoid financial loss to claimants or policyholders because of the insolvency of an insurer" (Section 631.51(1), Florida Statutes).

²⁶ Insurance companies may be required to pay these assessments in as little as 30 days.

²⁷ FIGA has the ability to levy two assessments. The first two percent assessment is now called Regular Assessments (FIGA Regular Assessments), while the second two percent assessment is called Emergency

FIGA has three separate accounts (Section 631.55(2), Florida Statutes): (1) the automobile liability account; (2) the automobile physical damage account; and (3) the account for all other insurance required to be part of FIGA.²⁸ Only insurers writing business in the lines of insurance included in the account in which the insolvent company was writing business can be assessed. For the purposes of this study, only the ‘all other’ account is relevant since it includes the property insurance lines of business.

Table 4 summarizes the maximum assessments to which two sample households are subject. Due to the fact that an insured in Citizens is assessed differently than an insured in the private market, the table shows the potential assessment levels for a Florida household with homeowners insurance coverage through Citizens and one that is insured by a private insurer. Typical households in Florida have both homeowners insurance policies and auto insurance policies. They may also have a personal umbrella liability policy. Each of these policies are included in the assessment base for Citizens and the FHCF. Since FIGA has a separate account for auto, it is not assessable in the event of a property insurer insolvency but the homeowners policy and personal umbrella policy are. If a significant storm (or series of storms) hits Florida resulting in losses to Citizens and the FHCF that exceed surplus and some insurer insolvencies, Table 4 shows the maximum assessment to which a typical Florida household is exposed. As shown in the table, a Citizens policyholder could be required to pay 85 percent of their homeowners insurance premium and 54 percent of their auto premium in the form of assessments in the year following a major hurricane striking Florida. Those assessments are in addition to the ordinary premiums paid.

Assessments (FIGA Emergency Assessments). The FIGA Regular Assessments “levied against any one insurer shall not exceed in any one year more than 2 percent of that insurer’s net direct written premiums in this state for the kinds of insurance included within such account during the calendar year next preceding the date of such assessments” (Section 631.57(3)(a), Florida Statutes). The FIGA Emergency Assessments can be used to pay hurricane claims directly or be assigned to the governmental unit issuing bonds to assist FIGA so that the governmental unit can “provide for the payment of the principal of, redemption premium, if any, and interest on such bonds, the cost of issuance of such bonds, and the funding of any reserves and other payments required under the bond resolution or trust indenture pursuant to which the bonds have been issued” (Section 631.57(3)(e)1.b, Florida Statutes).

²⁸ The “all other” account does not include workers’ compensation.

Table 4: Summary of Maximum Assessments

Panel A: Household #1 - Citizens

Policies Held:	Citizens' Homeowners Policy	Personal Auto Policies	Personal Umbrella Liability Policy
Potential Assessments	Citizens Policyholder Surcharge Citizens Emergency Assessment FHCF Emergency Assessment FIGA Regular Assessment FIGA Emergency Assessment	Citizens Regular Assessment Citizens Emergency Assessment FHCF Emergency Assessment	Citizens Regular Assessment Citizens Emergency Assessment FHCF Emergency Assessment FIGA Regular Assessment FIGA Emergency Assessment
Likely Maximum Assessment (as a percentage of premium on the policy)			
Year 1	85% (Citizens - 75%, FHCF- 6%, FIGA - 4%)	54% (Citizens - 48%, FHCF - 6%)	58% (Citizens - 48%, FHCF - 6%, FIGA - 4%)
Year 2+	40% (Citizens - 30%, FHCF - 6%, FIGA - 4%)	36% (Citizens - 30%, FHCF - 6%)	40% (Citizens - 30%, FHCF - 6%, FIGA - 4%)

Panel B: Household #2 - Private Homeowners Policy

Policies Held:	Private Insurer's Homeowners Policy	Personal Auto Policies	Personal Umbrella Liability Policy
Potential Assessments	Citizens Regular Assessment Citizens Emergency Assessment FHCF Emergency Assessment FIGA Regular Assessment FIGA Emergency Assessment	Citizens Regular Assessment Citizens Emergency Assessment FHCF Emergency Assessment	Citizens Regular Assessment Citizens Emergency Assessment FHCF Emergency Assessment FIGA Regular Assessment FIGA Emergency Assessment
Likely Maximum Assessment (as a percentage of premium on the policy)			
Year 1	58% (Citizens - 48%, FHCF- 6%, FIGA - 4%)	54% (Citizens - 48%, FHCF - 6%)	58% (Citizens - 48%, FHCF - 6%, FIGA - 4%)
Year 2+	40% (Citizens - 30%, FHCF - 6%, FIGA - 4%)	36% (Citizens - 30%, FHCF - 6%)	40% (Citizens - 30%, FHCF - 6%, FIGA - 4%)

To get a better idea of how much windstorm risk is being financed through post-loss assessments, an analysis of potential losses is necessary. Each year the Financial Services Commission generates the “Annual report of aggregate net probable maximum losses, financing options, and potential assessments”.²⁹ This report provides estimates of both Citizens’ and the FHCF’s probable maximum losses (PMLs) for three alternative return periods (50, 100, and 250 years) and capital amounts they have available on a pre-loss basis to pay those claims. The deficits would need to be funded by post-loss assessments. Table 5 contains this information for the 50 and 100 year return times. Additionally, the table shows the percentage of losses that will be funded by post-loss assessments. These amounts would increase in the event FIGA would need to issue assessments to fund any private insurers unable to meet their financial obligations.³⁰

²⁹ See Appendices D-17 through D-20.

³⁰ Citizen numbers in 2010 reflected the assumption that Citizens would purchase optional coverage from the FHCF, which did not actually occur. The result would be that Citizens' assessments would have been higher and FHCF's lower.

Table 5 Panel A: 1-in-50 Year PML

	Year	Return Time	Gross PML	Net Loss to Org.	Assessable Shortfall	% of PML financed through assessments
FHCF	2011	50	\$39,406,852,548	\$18,775,874,488	\$12,862,353,937	41.60%
Citizens (combined accounts)	2011	50		\$13,353,124,757	\$3,530,050,756	
Total	2011	50			\$16,392,404,693	
FHCF	2010	50	\$38,388,320,250	\$23,173,000,000	\$18,675,000,000	48.65%
Citizens (combined accounts)	2010	50		\$10,934,073,000	\$0	
Total	2010	50			\$18,675,000,000	
FHCF	2009	50	\$34,408,230,204	\$24,407,038,551	\$21,620,766,551	68.20%
Citizens (combined accounts)	2009	50		\$15,632,000,000	\$1,847,000,000	
Total	2009	50			\$23,467,766,551	
FHCF	2008	50	\$32,158,701,033	\$23,452,830,930	\$21,375,230,930	80.67%
Citizens (combined accounts)	2008	50		\$16,998,636,176	\$4,567,054,607	
Total	2008	50			\$25,942,285,537	

Table 5 Panel B: 1-in-100 Year PML

	Year	Return Time	Gross PML	Net Loss to Org.	Assessable Shortfall	% of PML financed through assessments
FHCF	2011	100	\$59,333,954,511	\$18,775,874,488	\$12,862,353,937	40.60%
Citizens (combined accounts)	2011	100		\$21,391,124,224	\$11,228,533,224	
Total	2011	100			\$24,090,887,161	
FHCF	2010	100	\$58,099,025,250	\$23,173,000,000	\$18,675,000,000	39.62%
Citizens (combined accounts)	2010	100		\$17,302,316,000	\$4,344,316,000	
Total	2010	100			\$23,019,316,000	
FHCF	2009	100	\$52,946,547,707	\$27,670,000,000	\$24,883,728,000	67.03%
Citizens (combined accounts)	2009	100		\$24,393,000,000	\$10,608,000,000	
Total	2009	100			\$35,491,728,000	
FHCF	2008	100	\$49,846,761,596	\$27,830,000,000	\$25,752,400,000	73.29%
Citizens (combined accounts)	2008	100		\$26,649,951,778	\$10,777,951,778	
Total	2008	100			\$36,530,351,778	

Table 5 shows that in 2011 more than 40% of the probable maximum losses (PML) will be financed with post-loss assessments (50 or 100 year return time). This number has been falling recently for two reasons. The main driver of the reduction in the percentage of PML financed with post-loss assessments is the reduction in the FHCF's exposure within its Temporary Increase in Coverage Layer (TICL). The FHCF's maximum net loss number has dropped from over \$27 billion in 2009 to under \$19 billion in 2011. In addition to the reduction in the FHCF's TICL exposure, both the FHCF and Citizens have benefitted from the fact that Florida has not suffered windstorms making landfall since 2005, making it possible to increase their surplus.

Subsidies in the Assessments

Post-loss financing can create inherent subsidies due to the assessment structures present in states. For example, if assessments are not purely risk based, it is possible that lower-risk insureds pay larger post-loss assessments compared to their exposure than do higher-risk insureds, thus creating a subsidy. Subsidies may not be restricted to differences in hurricane risk. They also may result from a timing issue. For example, if those paying the subsidies are new insureds in the state, it is possible that they did not receive the benefit of below-market rates prior to the catastrophe. Finally, subsidies may exist between the private and state-run markets since the residual market mechanisms may be able to assess both their policyholders as well as policyholders in the private market. Appendix D-15 contains a copy of "The Use of Postloss Financing of Catastrophic Risk," Cole et al. (2011), which provides a more detailed discussion of the subsidies that may be created by using these assessment structures.

V. Market Analysis

The market for residential property insurance in Florida has been scrutinized extensively since 1993, in the wake of Hurricane Andrew. The scrutiny has centered on pricing levels and pricing volatility. Ultimately, market health is determined largely by the interplay between prices and availability. A unique complexity of the insurance marketplace is that prices (premiums) must be set by suppliers before they know with certainty the cost of their "product." If insurers determine they have underestimated the costs of providing coverage, it is imperative they adjust estimates (and prices) upward going forward to avoid potential insolvency (i.e., the inability to keep the insuring promise made to policyholders). If they cannot raise prices adequately to pay expected losses, they might leave the market. Conversely, if insurers determine they have overestimated the costs of providing coverage, it is imperative they adjust estimates (and prices) downward going forward before they begin to lose market share to the competition, which is likely growing given the short-term possibility of excess profits.

Given the importance of pricing and availability to understanding the market, this analysis of the residential property insurance market in Florida necessarily begins with discussions of factors impacting losses and premiums, respectively. Following these discussions is an examination of the availability of private insurance.

Factors affecting Loss Costs

The foundation of insurance pricing is the expected cost of losses. Insurance prices are set based on expected loss costs, and additional premium amounts are built onto this base to cover expenses, profits and contingencies. Drivers of loss costs within the Florida market for residential property insurance are related to windstorm and non-windstorm losses and are discussed here.

Windstorm Losses: Demand Surge

The frequency and severity of windstorms making landfall have a significant impact on the volatility of loss costs for Florida property insurers. Separate from these factors, however, demand surge can increase loss costs once a windstorm occurs. Demand surge is defined by the Actuarial Standards Board as “a sudden and usually temporary increase in the cost of materials, services, and labor due to the increased demand for them following a catastrophe.” However, Olsen and Porter (2011) note that there is “no consensus on what specific material and labor costs contribute to demand surge.” (See Appendix D-21) The most common way of quantifying demand surge is through catastrophe models that increase the calculated first-dollar losses by some demand surge multiplier. Olsen and Porter (2011) note that the multiplier is typically between 1.0 and 1.6, which is a significant range. In other words, losses could be up to 60% greater than what was modeled solely based on demand surge. There has been some research attempting to quantify demand surge in recent disasters. Hallegatte (2008) found a 13% cost of demand surge following Katrina in Louisiana (See Appendix D-22).

Non-windstorm Losses: Sinkholes

In 2010, Citizens earned approximately \$32 million in sinkhole premium and is expecting to pay out approximately \$245 million in losses and loss related expenses (\$19.6 million and \$84 million respectively in 2009). Citizen’s 2012 rate filing had a nearly 450% sinkhole rate change indication. In December 2010, The Florida Senate Interim Report, Committee on Banking and Insurance (see Appendix D-23), provided a discussion on the sinkhole issue. This followed the November 2010 Florida Office of Insurance Regulation Report on Review of the 2010 Sinkhole Data Call (see Appendix D-24). The Florida Senate Interim Report does an excellent job of addressing the issues surrounding sinkholes. The relevant points discussed in the Senate Interim Report include:

- Citizens’ rate change indication is driven by sinkhole claims in Hernando, Pasco, and Hillsborough counties, where claims have increased by 375%, 187% and 384% respectively between 2006 and 2009;
- Private insurers have also seen their sinkhole claims and costs rise by double and triple-digit percentages over the past several years. According to the OIR Data Call report, the total reported sinkhole claims increased from 2,360 in 2006 to 6,694 in 2010. Over that time period, there were 24,671 total sinkhole claims for approximately \$1.4 billion. Of those claims, 66% were in Hernando, Pasco, and Hillsborough counties;

- Based upon the opinions of licensed geologists in Florida, there is no geological explanation for such a significant increase in the number of claims; and
- Representatives from OIR, as well as insurers, believe that a major driving force for the significant increase in sinkhole claims is the fact that many policyholders are incentivized to file such claims because they can keep the cash proceeds from the claim instead of effectuating repairs to their home or remediating the land.

The failure of sinkhole claimants to make repairs or stabilize land has concerned property appraisers in several counties, particularly in Hernando and Pasco counties. They believe that this dilemma has had a damaging effect on the market values of affected homes which could lead to financial instability of local governments. The Hernando County property appraiser has estimated that since 2005, the county has lost \$173 million in total market value as a result of value adjustments to sinkhole homes.

During the 2011 Florida Legislative Session, legislation specifically designed to address sinkhole insurance issues passed. It is too early to quantify the effects of SB408 on sinkhole loss trends. While it is likely safe to assume that the changes effected by SB408 will reduce sinkhole claims, the magnitude of the reduction is difficult to quantify. This issue was at the forefront of Citizens' 2012 rate hearing and subsequent rate setting by OIR. In the press release outlining the Citizens 2012 rates, the OIR states:³¹

“In Senate Bill 408, the Legislature eliminated the 10% statutory cap on sinkhole rates, but at the same time it enacted fundamental changes to reduce sinkhole losses. The rates established by this order contemplate cost-savings of Senate Bill 408, but do not fully quantify the cost-saving effects due to the lack of data at this time.”

There were a number of components to SB408 that were designed to address these trends. These components include (but are not limited to):

- Limits on public adjuster solicitations and compensation;
- Limiting sinkhole coverage to the principal residence;
- Stricter definitions on what constitutes sinkhole damage;
- Two-year limit on claims notification; and
- Requiring repairs to sinkhole damaged property.³²

SB408 may actually increase sinkhole claims in the short run as policyholders may file claims under existing insurance contracts before the more restrictive policies issued following SB408 are implemented. This may take a few years since current policies are occurrence policies. This means that sinkhole damage that occurs this year, regardless of when the claim is reported, is

³¹ The OIR press release is included in Appendix D-25.

³² SB408 is included in Appendix D-26.

covered by this year's policy. Therefore, policyholders may still file claims in future years that will be covered under policies issued prior to SB408 (often referred to as the "tail problem"). In addition, there is a time lag from the time that SB408 was passed until its components are incorporated into every policy issued. For example, it will be nearly a year before a policy that was issued just prior to SB408 is renewed with the new SB408 rules included. It will take a minimum of 3 to 4 years for credible data to emerge regarding the impact of SB408 on sinkhole claims.

Non-windstorm Losses: Lengthening of the Property Claims Tail³³

Property insurance claims have traditionally been considered short-tailed. In other words, property claims have generally been opened and closed within relatively short time periods. Property claims associated with catastrophes have generally had longer tails than have ordinary property claims. It takes more time to settle catastrophe claims because of the overwhelming nature of the catastrophe and the strain it puts on the claims process. Even with catastrophes, the amount of time it takes to settle property claims has been relatively short. In Florida, the tail on property claims, especially catastrophe claims, has significantly increased in the last 5 years. Following the 2004-2005 storm seasons, most claims were closed by the middle of 2007. Citizens experienced 303,000 total claims stemming from those two storm seasons, only 3,500 (approximately 1.1%) of which were still open in June 2007. Similarly, State Farm had 320,000 total claims with only 1,820 (approximately .6%) still open in June 2007.³⁴ In other words, even with two storm seasons that placed substantial strain on the claims paying process, more than 99% of claims were closed by the middle of 2007.

These numbers changed substantially in 2008 and 2009. Between March 2008 and June 2009, Citizens opened or re-opened 14,997 catastrophe claims (7,299 new claims and 7,698 re-opened claims) related to the 2004-2005 storms.³⁵ This represents approximately 5% of all Citizens claims related to those storms. This type of claims activity significantly lengthens the tail of the claims distribution and substantially impacts the loss costs associated with property insurance. The trend of new and reopened insurance claims related to the 2004-2005 storms was not isolated to Citizens policyholders. The FHCF was required to issue bonds in the amount of \$675.92 million, in 2010, to cover the additional reinsurance claims private insurers faced due to new and reopened 2004-2005 storm claims.³⁶

Of the reopened Citizens catastrophe claims, 57% of the claimants were represented by public adjusters, this means 43% of the reopened claims were filed by claimants not utilizing public

³³ SB 408 addressed issues that may result in a shortening of the property insurance claims tail. The results of the Legislation will be evident over time.

³⁴ See Diamond (2007) in Appendix D-27.

³⁵ See OPPAGA (2010) in Appendix D-28.

³⁶ See <http://www.sbafla.com/fhcf/Home/FHCFEmergencyAssessment/tabid/333/Default.aspx>, accessed 8/25/11 in Appendix D-29.

adjusters. Furthermore, only 19% of the newly opened Citizens catastrophe claims were represented by public adjusters.³⁷ The role of public adjusters is not limited to catastrophe claims. Of the 61,324 non-catastrophe claims, 26% of the new claimants were represented by public adjusters and 40% of the claimants with reopened claims utilized public adjusters. In all cases, the use of a public adjuster lengthened the claims process. For example, the median time to close non-catastrophe claims was 41 days without a public adjuster compared with 115 days with a public adjuster.

The lengthening of the claims tail for property claims greatly affects the loss costs of insurers. The additional time adds uncertainty to the settlement dates, reserve amounts, and ultimate paid amounts driving up insurers' loss costs and ultimately premiums, as discussed below.

Factors Affecting Premiums

There are a variety of factors that affect property insurance premiums in Florida including but not limited to loss costs, competition, regulation, exposure, rates and windstorms. The premium volume in Florida has fluctuated significantly over the last decade. The premium base increased from approximately \$7 billion at year-end 2005 to just over \$10 billion at mid-year 2007. Premiums fell below the \$8 billion mark by late 2009. The premium volume has increased slightly over the last two years (approx. \$500 million increase). These changes have been due to a variety of factors discussed below.

Loss Costs

The previous section outlined the factors that are driving increases in loss costs in the Florida property insurance market. Loss costs drivers are vital since loss costs are the foundation of premium calculations. Controlling loss costs involves a multidisciplinary approach to understanding both windstorm and non-windstorm loss cost drivers and managing these drivers.

The traditional rating methodology of using historical loss costs aggregated to territorial levels has proven unreliable with regard to catastrophic perils such as hurricanes (Appendix D-30: Nyce and Maroney, 2010). Because of the nature of these perils (i.e., the frequency, severity and correlation of exposures), traditional rating methods have been replaced by catastrophe models. These models are forward-looking computer simulations incorporating a variety of sciences (e.g., engineering, geography, geology, meteorology, oceanography and statistics) that can be used for a variety of purposes. For insurance purposes, they are most commonly used to predict average annual loss costs (AALs) and probable maximum losses (PMLs) and can produce the estimates at a high level of geographic granularity (e.g., for an individual house). These models do not rely on homogeneity of exposures to develop historic loss costs, but instead on expert estimates of event frequency and intensity, engineering estimates of structural damage and the actuarial implications to determine loss estimates.

³⁷ See OPPAGA (2010).

Although catastrophe models can generate AALs at the property level, rating plans filed by insurers (in Florida and other states) still rely on territorial rating for homeowners and wind-only property coverage. The potential for switching to property-level rate making exists, but consideration of such a granular approach raises a number of questions as to the role of the catastrophe models in setting wind rates:

- 1) Are they appropriate replacements for traditional actuarial and historical loss methods?
- 2) How accurate can the models be?
- 3) How sensitive are the models to changes in assumptions?
- 4) Should the loss costs generated by catastrophe models be used as the sole determinant of wind rates?

The role of model verification (such as performed by the Florida Commission on Hurricane Loss Projection Methodology) and data credibility/reliability become critical as these and other questions about predictive analytics and exposure granularity are increasingly asked. It is important to note, for instance, that even seemingly small differences in model input parameters and their values (many of which are assumptions largely based on differences in expert opinion) can result in widely different model outputs. Thus, the models can be quite sensitive. Indeed, the variation across models (Appendix D-31: Cole and McCullough, 2010) and the volatility found from one version to the next is problematic. For example, a recent study indicates significant differences in predicted average loss costs per \$1,000 value depending on whether using:

- 1) AIR 12.0.1 or AIR 11.0;
- 2) RMS 11.0a or RMS 8.0a; and
- 3) AIR 12.0.1 and RMS 11.0a.³⁸

Competition

Competition plays an important role in pricing in any market, including insurance markets. Florida property insurance markets have three types of competitors: licensed primary insurers, surplus lines insurers and Citizens. For competition to affect premiums, an insured must have the ability to shop for products from competitors to determine who is offering the best product/service for the best price. To shop for property insurance in Florida, an insured must find insurers who are selling new policies.

Table 6, taken from the OIR's Quarterly Supplemental Reporting System (QUASRng) reports, shows that Citizens is the primary writer of new insurance policies in Florida. Citizens' total number of new policies is greater than the combined total of the other 9 companies in the Top 10.

³⁸ Rollins Analytics, Inc., in March, 2011, completed a comparative analysis of loss costs generated by recent models from AIR and RMS. The analysis compared predicted average loss costs for each wood frame, masonry and mobile home structure on a county-by-county basis.

Table 6: Top 25 - New Policies Written (First 6 months 2011)
Personal & Commercial Residential

Rank	Insurer Name	# of New Policies	Type of Insurer
1	Citizens Property Insurance Corporation	139,532	State Run Residual Market
2	Universal Property & Casualty Insurance Company	41,724	Florida Domestic
3	American Bankers Insurance Company of Florida	17,273	Other
4	Security First Insurance Company	17,046	Florida Domestic
5	Castle Key Indemnity Company	12,320	Florida Pup
6	St. Johns Insurance Company, Inc.	11,106	Florida Domestic
7	United Property & Casualty Insurance Company	10,266	Florida Domestic
8	Ark Royal Insurance Company	10,244	Florida Domestic
9	American Integrity Insurance Company of Florida	9,652	Florida Domestic
10	Tower Hill Prime Insurance Company	9,466	Florida Domestic
11	Florida Peninsula Insurance Company	9,018	Florida Domestic
12	American Modern Insurance Company of Florida	8,676	Florida Domestic
13	ASI Preferred Insurance Corporation	8,364	Florida Domestic
14	Safe Harbor Insurance Company	6,678	Florida Domestic
15	Cypress Property & Casualty Insurance Company	6,590	Florida Domestic
16	Olympus Insurance Company	6,014	Florida Domestic
17	Federated National Insurance Company	5,966	Florida Domestic
18	Tower Hill Select Insurance Company	5,296	Florida Domestic
19	Florida Family Insurance Company	5,013	Florida Domestic
20	Gulfstream Property and Casualty Insurance	4,835	Florida Domestic
21	Tower Hill Preferred Insurance Company	4,693	Florida Domestic
22	First Protective Insurance Company	4,433	Florida Domestic
23	Auto Club Insurance Company of Florida	4,245	Other
24	Modern USA Insurance Company	3,789	Florida Domestic
25	Prepared Insurance Company	3,622	Florida Domestic
	Top 25 Total	365,861	

Given Citizens dominance in issuing new policies, Citizens may be setting the premiums charged in Florida's private residential property insurance market. In other words, it may be Citizens' premiums, rather than competitive practices within the private industry, that are impacting statewide property insurance premiums in Florida.

Citizens' market share continues to grow, as discussed in the Trends section later in this report. As of year-end 2010, the residual entity wrote 50% of the Dwelling/Fire, 85% of the Allied Lines and 15% of the Regular Homeowners markets, respectively.

Citizens now underwrites a combined total of 23% of the personal residential insurance policies sold in Florida, excluding mobile homes.³⁹

Legislation and Regulation

Regulation and legislation have both played important roles in premium setting during the last decade. The most influential legislative activities were:

- House Bill 1A, passed in 2007, rolled back Citizens rates, froze rates going forward, allowed policyholders to purchase Citizens policies without first being rejected by the admitted market, and expanded the capacity of the FHCF; and
- The Citizens glidepath legislation, passed in 2009 (effective 2010), limited premium increases on any individual Citizens policy to 10% per year.

Regulation plays an important role in premium setting. Within Florida's residential property insurance market, the OIR impacts premium setting in two primary ways. First, by setting Citizens rates, the OIR implicitly sets market rates, as explained earlier. Second, and more directly, the OIR is charged with rate approval for private insurers.

Recent regulatory activity that had significant impact on premiums (in addition to Citizens rate setting and disapproval of rate increases) involved mitigation credits. These activities included:

- Creation of the mitigation discount tables in 2003 by rescaling the ARA mitigation credit study from the average structure being the base house to the weakest structure being the base house, thus ensuring that most inspected homes can be eligible for a mitigation credit and being a worse than average risk results in no surcharges; and
- Full implementation of the mitigation credit structure in 2006-2007 without allowing insurers to adjust their base rates to reflect the fact that the weakest structure is the base house. (Insurers used the average house as their base structure to compute their base rates.)

Following the implementation of the mitigation credits in 2007, the claims-paying ability (policyholders' surplus) of Florida's homeowners insurers declined. The implementation also

³⁹ From OIR QUASRng market share reports.

reduced the incentives of many policyholders to undertake mitigation activities. This may best be illustrated through an example.

Suppose Bob owns a home that has a hip roof and hurricane straps (both of which qualify for mitigation credits). Bob's insurance company is not aware of these mitigation features and charges him the premium for an average property. (This was the common practice in the industry as the base rates charged by insurers were based on the average property they insured.) As the property owner, Bob chooses to get a mitigation inspection, which reveals these features to his insurer. According to the loss relativities from the 2002 ARA mitigation study, these features should result in a premium credit as follows: The ARA loss relativity for the average house is 1.0 (the average loss amount), but the loss relativity for a house with a hip roof and hurricane straps is 0.91 (i.e., losses are expected to be 9% lower because of these features). Therefore, Bob should receive a 9% premium credit for mitigation features.

Informational Memorandum OIR-03-001M issued by the OIR in 2003 created a mitigation discount table based on ARA's loss relativities table, but made the weakest structure rather than the average structure the base. In the ARA table the weakest structure represents a relativity of 2.37, meaning losses at the structure are expected to be 2.37 times as bad as losses to the average structure (with its loss relativity equal to 1.0). The OIR's mitigation discount table divides every relativity by 2.37, such that the weakest structure's loss relativity becomes 1.0, and Bob's house with the hip roof and hurricane straps warrants a relativity of 0.384 rather than 0.91. This indicates the losses at Bob's house are expected to be 62% (1-.384) lower than they would be at the weakest house. The OIR's mitigation table shows this 62% credit. Therefore, by having a mitigation inspection, Bob now receive a 62% discount on his wind premium.

This would not be a problem if the base rates charged by the insurer were based on the weakest structure. Informational Memorandum OIR-07-03M issued by the OIR in 2007, however, has prevented insurers from adjusting their base rates (set at the average structure) to the weakest structure. In practice, the following occurs. Suppose that the base wind premium being charged by the insurer is \$1,000. The hip roof and straps should reduce that premium to \$910, a 9% premium credit. By resetting the mitigation credit table to the weakest structure and not allowing a change in the base rate, OIR-07-03M effectively changes the premium credit to 62% and the wind premium for the house to \$380, well below what is actuarially indicated by the ARA loss relativities.

These types of legislative and regulatory interventions into the marketplace create significant uncertainty to private insurers and add to the cost of doing business in Florida. While there have been no studies that examine how significant these events have been in the decision-making process of insurers deciding to sell homeowners insurance in the state of Florida, there is substantial anecdotal evidence that it is important. Even within Florida's existing market of

private insurers, those interested in “taking out” policies from Citizens (and thus contributing to depopulation of the residual insurer) may prefer uninspected policies-properties over inspected policies-properties if they determine that pricing within the category of inspected and credit eligible homes is inadequate due to the abovementioned distortions in the current mitigation credit program.

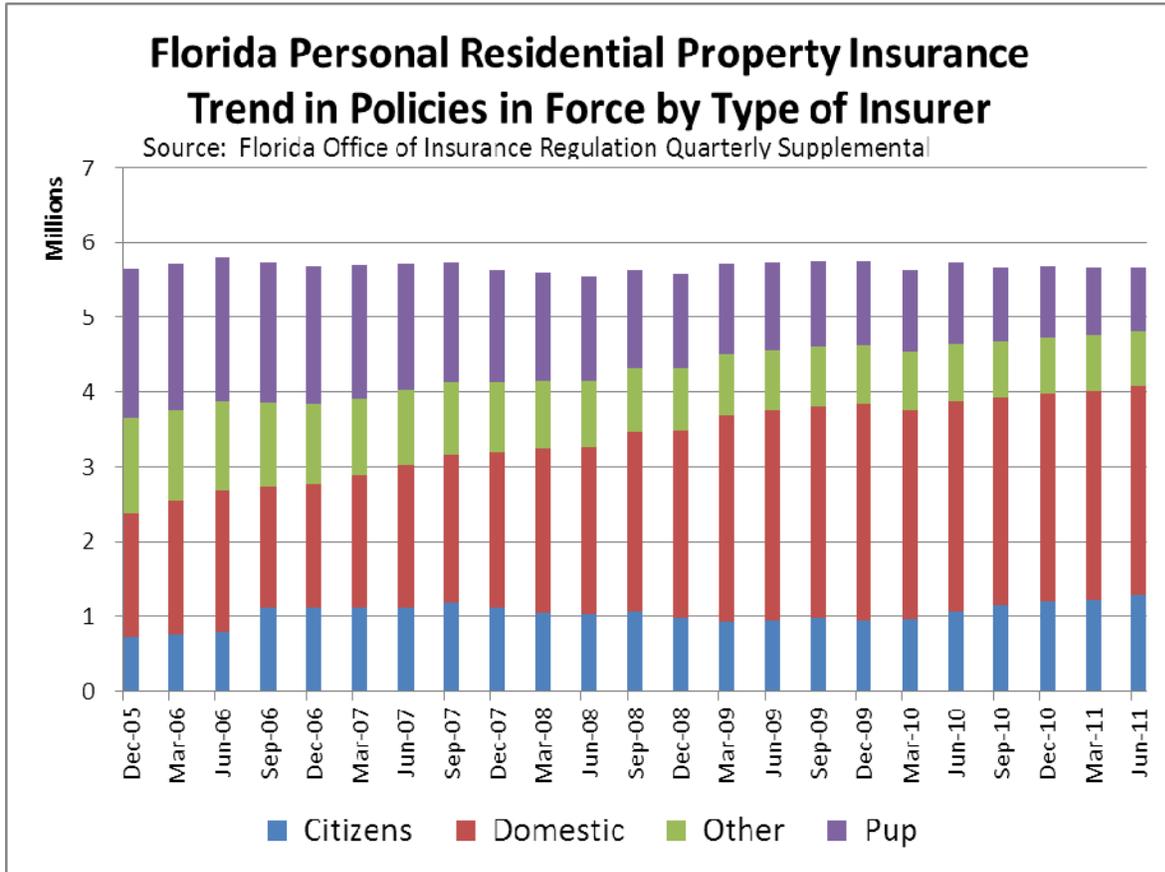
Exposure

Since premiums are the rate per \$1,000 of coverage multiplied by the exposure (in thousands), any drastic changes in exposure will result in total premium changes. The exposure levels in Florida’s property insurance market have remained relatively stagnant in recent years. As shown in Chart 1, the total number of residential policies demanded by Florida’s market remained highly consistent at about 5.7 million between 2005Q4 and 2011Q2. Insured exposure values decreased slightly over the last two years, from \$2.1 trillion in 2009Q2 to \$2.0 trillion in 2011Q2⁴⁰, and population growth has slowed significantly over the last few years coinciding with the drastic changes in the Florida housing markets.⁴¹ It is important to remember that insurance provides replacement cost coverage on structures, so market value of property is not a good measure of exposure. While construction costs (and therefore replacement costs) vary, they do not necessarily move with housing market prices. Table 7 shows that construction costs since 2008 have increased only slightly. This, combined with slow construction, implies exposure, as measured by replacement costs, has remained relatively stagnant during this time period.

⁴⁰ From OIR QUASRng reports 2009Q2 and 2011Q2.

⁴¹ See Appendix D-32 University of Florida Study on Florida Population.

Chart 1: Residential Property Insurance Policies in Force



**Table 7: Historical Construction Cost Index
R.S. Means 2011**

Year	Index Value	% Change
2011*	185	0.82%
2010	183.5	1.89%
2009	180.1	-0.17%
2008	180.4	6.49%
2007	169.4	4.57%
2006	162	6.86%
2005	151.6	5.50%
2004	143.7	
* Jan. 2011 Estimate		

Property insurers measure exposure to risk by units of insured value, which ultimately represent the sizes of the promises they have made in contracts. The trends in insured value will be discussed in more detail in the Private Insurer Trends section.

Insured values are based on the principle of indemnity in the insurance contract and should reflect replacement costs of construction, not market real estate values. In addition, the insurance industry has generally become more sophisticated about monitoring insured values in accordance with the requirement for full insurance to replacement value in most personal residential programs. Technology (e.g., the ability to quickly re-value homes on the underwriter’s desktop) and the data available (e.g., granular component-based construction cost indices) have both improved dramatically. For instance, the fact that Florida’s insured property value has risen, on net, since 2007Q2 to just under \$1.9 trillion despite the slack economy seems to reflect these insurance-to-value efforts. Overall, changes in exposure have had little impact on premiums during recent years in Florida.

Rates

Rate is the amount charged per \$1,000 of insured value. Similar to exposure, changes in rates inherently have significant impact on insurance premiums. Florida has seen notable volatility in insurance rates over the last decade, including a relatively high 15% increase occurring between year-end 2005 and 2007. House Bill 1A, which took effect in early 2007, included the expansion of the FHCF along with increases to the minimum mitigation credit requirements and changes to Citizens rate structure and thereby reduced insurance rates. Rates declined below year-end 2005 levels, and still remain more than 12% below that baseline on a statewide average basis. Rate levels for domestic companies and Citizens are generally even farther below the 2007 baseline.

Windstorm

Florida's exposure to windstorms is the major driver of insurance rates and premium levels in the state. The two major ways in which this exposure manifests itself in rates is through analysis of the exposure using catastrophe models and the sharing of this risk in the global reinsurance market.

Catastrophe models are forward looking computer simulations of potential windstorms and the loss costs that may be caused by them. These models represent the current best practices in prediction of windstorm losses and are vital to appropriate pricing of property insurance in Florida and other windstorm prone states. The catastrophe models are reviewed and approved for use for setting rates in Florida by the Florida Commission on Hurricane Loss Projection Methodology (Commission). Catastrophe models are updated as technological advances and new information become available. These updates can have a significant impact on predicted loss costs and, therefore, on indicated rates and premiums. This is a relatively new and developing field. As with any new field there will be mistakes and significant changes or developments that have substantial impact. These changes can take place in any of the fields of science (meteorology, oceanography, etc.), engineering, technology, information or market evolution and will be continuing for the foreseeable future.

The evolution of the Florida property insurance market, from being a market dominated by large, diverse national insurers with significant surplus to becoming a market dominated by smaller, monoline (or virtually monoline) and geographically focused insurers has made the market increasingly reliant on the global reinsurance market as its primary source of diversification and risk capital. Reinsurers are the primary link between Florida property insurance companies and the broader capital markets that may be interested in making capital investments in the catastrophe risk market. The reliance on reinsurance impacts rates and premiums in Florida in two ways. First, reinsurers can set risk-based rates using their choice of catastrophe models that may or may not have been approved by the Commission. The models used by reinsurers may result in significantly different rate indications than those used by Florida property insurers. Second, as the link between Florida windstorm risk and the capital markets, reinsurers are the best indicator of the cost of capital needed to entice investors to Florida's catastrophe risk market. Because this cost of capital is dependent on market conditions and other investment opportunities to which investors have access, it can fluctuate widely and have significant impact on rates, premiums, and private market insurance stability in Florida.

Private Insurance Availability

The availability of insurance in the marketplace is a good indicator of the attractiveness the marketplace holds for potential competitors and as such also indicates the extent to which the residual markets are serving their purpose – increase insurance availability. While current

insurance availability explains only one element of the market's health, it does lay the groundwork for discussions of the important elements.

The availability of insurance is typically measured in multiple ways that, together, outline the sources and supply of capital that can be used to support risk. The number of carriers that choose to do business in the state, the structure of these participants, their premium sales volume and their surplus in the market are all important elements of availability. This section explores the availability of private homeowners insurance in Florida according to these four aspects of the market, and benchmarks Florida against the availability of homeowners insurance nationally as well as in other Atlantic and Gulf Coastal states. Specifically, states selected for comparison include Alabama, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas and Virginia. Keep in mind information regarding the activity and performance of surplus lines insurers is not available so the discussion focuses on admitted insurers in these states.

For purposes of benchmarking, Florida's private homeowners insurance supply is segmented by company structure type in two distinct ways:

- 1) whether an insurance "decision center" behaves in the market as an independent company or as a group interest; and
- 2) whether an insurer is a national carrier, a pup company (established by a national carrier separate from its other non-Florida or non-Florida-property business), or a domestic Florida company.

First, a common distinction in insurance is between independent or stand-alone companies and those insurance companies that are members of a group of insurers. In the analysis presented in this report, all insurance companies that are members of a group (for example, State Farm, Allstate, Progressive, etc.) are considered to be a single entity or "decision center." This is an attempt to recognize that these companies may work in conjunction with one another to achieve the group's goal, rather than competing as individual entities. Each independent company is considered its own decision center. This allows for an apples-to-apples comparison across states since the definition of independent and group companies will remain consistent across all states.

The second distinction between national carriers, pup companies and domestics is unique to Florida. Most states have not had the same type of domestic insurer development as Florida nor have they seen the same type of pup formation. These are important distinctions to Florida but do not translate well for interstate comparisons. Appendix B contains a list of all insurance companies used in the analysis in Florida along with their segments.

The importance of these categorizations is related to the ability of a company to 1) raise capital and 2) diversify its business, and thus also its risks. These categorizations are similar although

not identical ways of segmenting company structure type. Most group companies are considered national in scope, so the parallel between these two categories is close. Most domestics are set up as independent companies although, again, the parallel is imperfect.

For purposes of comparison to other states, the statistics and analysis here focus on statewide figures and conclusions. Statistics and brief descriptions for the Florida market by region, are included in Appendix C.

Number of Companies and Their Structure

As of year-end 2010, there were 79 total private (i.e., other than Citizens) “decision centers” writing homeowners insurance in Florida, more than in any of the other coastal states used for comparison. As indicated by Table 8, no other coastal state boasted more than 69 total insurers writing homeowners insurance (Texas). Compared to the national total of 403, the amount of competitive interest in the Florida market appeared relatively high.

Segmenting the private marketplace into independent companies and group interests, Table 8 reveals that the comparatively large supply of homeowners insurers doing business in Florida is largely due to the contribution of independent companies to the overall Florida total. Relative to the states compared, supply in Florida is significantly more dependent on independent insurers. The 23 independent insurers writing homeowners insurance business in Florida represent not only a higher absolute number than in any of the other states but also a higher portion of the total number of decision centers in the state.⁴²

Table 8: Number of Homeowners Insurance Decision Centers by State in 2010

<u>Type State</u>	<u>Nat'l</u>	<u>AL</u>	<u>FL</u>	<u>GA</u>	<u>LA</u>	<u>MS</u>	<u>NC</u>	<u>SC</u>	<u>TX</u>	<u>VA</u>
Group	200	48	56	58	35	40	47	58	54	56
Independent	203	4	23	9	9	4	15	10	15	8
Total	403	52	79	67	44	44	62	68	69	64

The high number of independent companies is an important statistic regarding the nature of available homeowners insurance in Florida relative to other states and the nation. Generally, group companies are larger and have a larger geographic reach than independents and, therefore, tend not only to produce higher premium sales volume than their independent counterparts but also achieve greater geographic diversity of their business risks. The importance of these advantages cannot be underestimated, particularly if doing business in a state subject to catastrophic risk, such as Florida.

Table 9 shows the number of insurers in each state whose business, as measured by direct premiums written (DPW), is 90% or higher concentrated within that state. DPW represent the

⁴²As additional information, Florida’s 23 independent companies represent more than 10% of the entire nation’s 203 independents.

insurance sales volume. Forty-seven companies doing business in Florida had concentrated at least 90% of that business in Florida as of year-end 2010. It is notable that all 23 of the independent companies operating in the Florida homeowners insurance market concentrated at least 90% of their business in the 1) homeowners insurance line and 2) in Florida.

Table 9: Number of Companies with 90% or More of Total DPW in the State in 2010

	AL	FL	GA	LA	MS	NC	SC	TX	VA
# of companies	2	47	8	7	2	11	1	24	3

This concentration of business effectively requires an insurer to heavily reinsure the risk taken to ensure solvency in the event of catastrophic losses. It is fair to say that each of the 23 insurers conducting homeowners business independently in Florida are either highly sensitive to reinsurance rate volatility, highly sensitive to one large loss event (or several smaller loss events occurring within the same year), or both. This raises the additional concern of a domino effect of primary insurers being unable to meet their obligations if the FHCF is unable to its obligations to them.

Premiums and Surplus

Two additional, and interrelated, indicators of insurance supply are premiums and surplus. Direct premiums written (DPW) represent the amount of sales volume a company has made and thus is also one way to measure company size. Policyholders’ surplus (PHS) represents the amount of “leftover” capital a company has (i.e., assets minus liabilities), after paying expected losses and expenses, to retain in the business for contingencies, such as an unexpected disaster. Comparing these values in Florida’s homeowners insurance market with those of other states, the Florida market again appears to operate differently from its neighbors.

Table 10 displays the year-end 2010 DPW by company type for each state. Florida comprises nearly 10% of the nation’s total DPW in homeowners insurance. Clearly, the Florida market is large. Just as when looking at the number and type of companies, the table also indicates that Florida premiums are more heavily dependent on independent insurer business than are the other states examined. Selling a quarter of the State’s DPW in homeowners insurance, Florida’s independent insurers are responsible for a substantial portion of homeowners risk in the State.

Table 10: Direct Premiums Written (DPW) in \$ Millions for Homeowners Insurance by Structure Type and State in 2010

Type	Nat'l	AL	FL	GA	LA	MS	NC	SC	TX	VA
Group	58348	1185	4508	1732	1113	650	1708	1031	3862	1409
Independent	3467	3	1507	18.47	142.09	0.9	36.45	34.95	167.17	17.89
Total	61815	1188	6015	1750.47	1255.09	650.9	1744.45	1065.95	4029.17	1426.89

Although it is necessary to categorize by whether a company is independently operated or part of a group in order to make state-by-state comparisons, this categorization can be misleading when looking at Florida. It is more reflective of the true Florida homeowners insurance market to evaluate segment size by sorting according to the national, domestic and pup categories. Other states simply do not have a sufficient number and size of domestic and pup companies to make such categorization possible. It is notable that approximately 56% of Florida’s \$6 billion in 2010 DPW for private market homeowners insurance is attributable to Florida domestic companies (\$3.37 billion in DPW), with pups and national companies each representing approximately 22% of the market (at \$1.31 billion and 1.33 billion in DPW, respectively).

The surplus picture in Table 11 reflects the most disconcerting difference between Florida and other states. Despite its relatively large market size, Florida’s year-end 2010 PHS, at just under \$95 billion, was lower than any of the other hurricane-exposed states. And despite their one-quarter market share of premiums, independent companies in Florida contributed only slightly more than one-tenth of the State’s total PHS, at slightly over \$985 million.⁴³

Table 11: Policyholders’ Surplus (PHS) in \$ Billions by Structure Type and State in 2010

Type	Nat'l	AL	FL	GA	LA	MS	NC	SC	TX	VA
Group	299.3	137.5	94	172.2	123.7	131.1	183.3	129.1	88	156
Independent	7.59	0.948	0.985	1.04	0.722	0.948	1.02	1.14	1.03	1.19
Total	306.89	138.448	94.985	173.24	124.422	132.048	184.32	130.24	89.03	157.19

If a more Florida-centric picture of PHS is drawn, segmenting companies by national, domestic and pup types, the reason for concern regarding the capacity of the Florida market to pay claims is more easily evident. Florida’s PHS of almost \$95 billion in 2010 is largely attributable to large, national insurers, representing more than \$91.5 billion of the total PHS available. Unfortunately, these national insurers are not heavily exposed in Florida relative to their domestic and pup peers, who account for less than \$1.5 billion and \$2 billion in PHS, respectively.

The current picture of private homeowners insurance availability in Florida describes a market with heavy dependence on small companies with limited capitalization and risk diversification capabilities. Although Florida attracts a high number of insurers relative to other coastal states, many of these insurers (more than in any other state) are independent, mostly small domestic Florida companies. These independents make up one-fourth of Florida’s private homeowners premium volume, and domestics (based on OIR’s QUASR data that includes both the independent and group-based domestics) represent more than half the private insurance premium at 56%.

⁴³ Policyholder surplus is used to support all operations, not just homeowners insurance in the state of Florida.

Despite the high number of insurers and the relatively high total premium amounts sold in Florida, the State's private homeowners insurance market has the worst level of capitalization (as measured by PHS) of any catastrophe-prone state other than Texas. Given the large number of homeowners insurance companies concentrating most of their business in Florida and the large Florida homeowners insurance premium base attributable to domestics having relatively small stores of PHS, the existing level of capitalization may be insufficient should a major storm hit Florida.

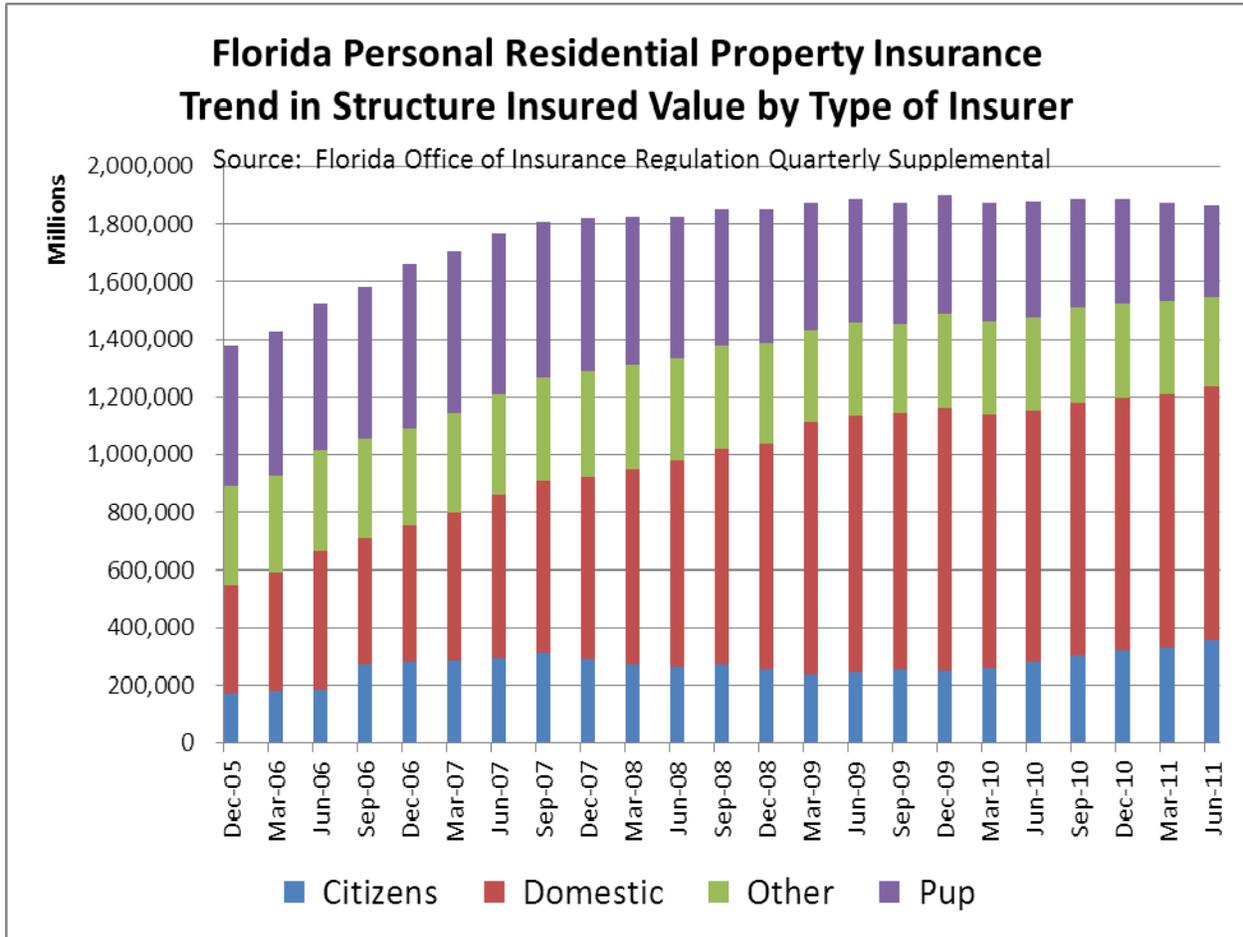
Private Insurer Trends

As stated previously, a snapshot does not tell the entire story. The private homeowners insurance market in Florida has evolved to where it is today due to storms and public policy responses. A view of the trends in insurer activity over an extended period is crucial to understanding the state of the market today. Trends in exposures, rates, market performance, market concentration and reinsurance usage are all important and interrelated indicators of the health of the marketplace. Each is discussed below.

Exposure and Rate Level Trends

Property insurers measure exposure to risk by units of insured value, which ultimately represents the size of the promises they have made in contracts. Insured values are based on principle of indemnity in the insurance contract, and should reflect replacement costs of construction, not market real estate values. Real estate values and construction costs, however, often increase in tandem when labor and materials are scarce. The housing depression in Florida has resulted in slack markets and only very slow inflation in replacement costs since 2007Q2, but not deflation of such costs. The path of statewide insured values is shown in Chart 2.

Chart 2: Trend in Florida Personal Residential Property Insured Values (2005-2011)

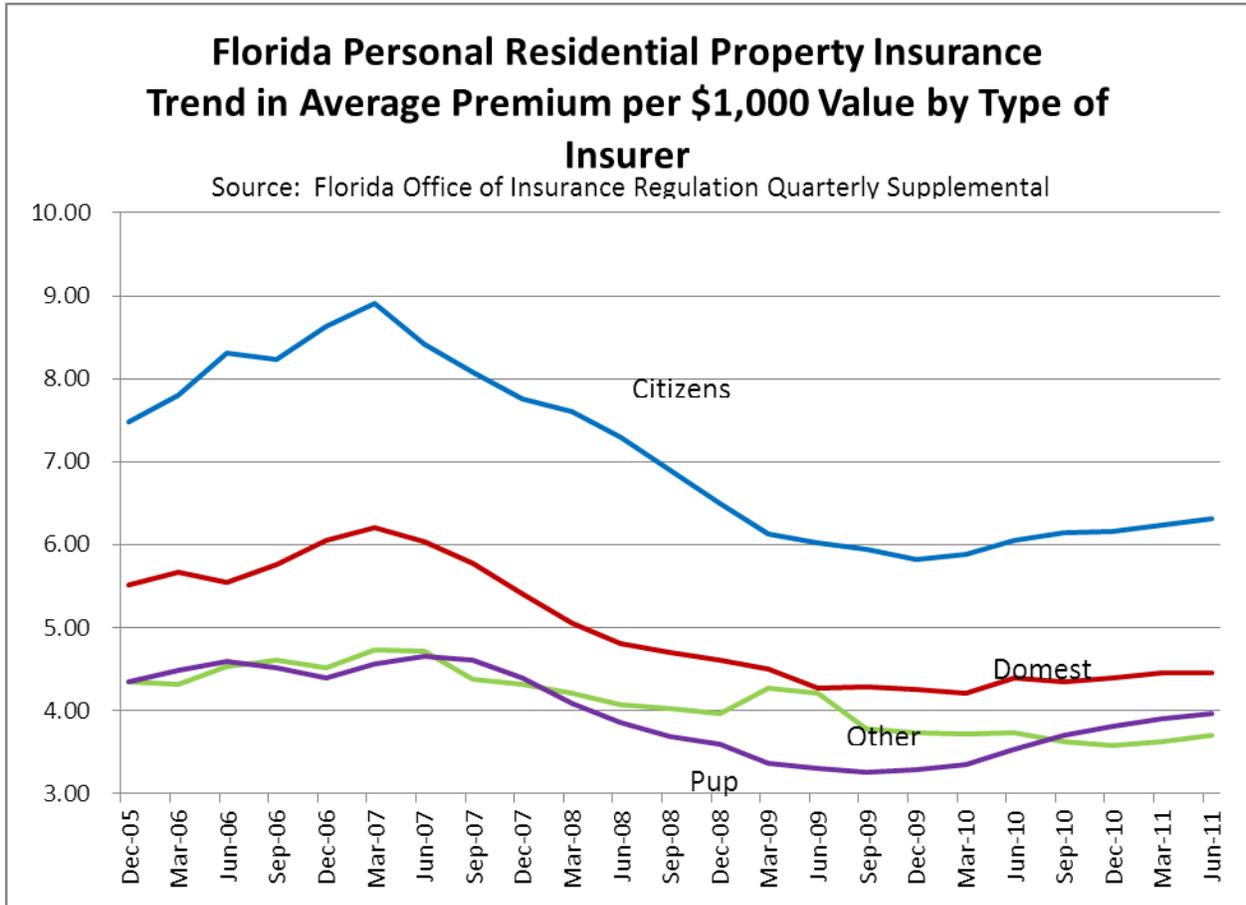


The insurance industry has generally become more sophisticated about monitoring insured values in accordance with the requirement for full insurance to replacement value in most personal residential programs. Both technology and the available data (e.g., the ability to quickly re-value homes on the underwriter’s desktop, granular component-based construction cost indices) have improved dramatically. The net rise since 2007Q2 to just under \$1.9 trillion in insured value, despite the slack economy, also reflects insurance-to-value efforts.

As the personal lines policy count has remained roughly flat during the analysis window, at 5.7 million (plus or minus 100,000), the increase in exposures is almost entirely based on increases in the insured value of existing properties rather than population growth.

Rate levels actually earned by insurers are best measured by the ratio of premium to insured value – premiums per unit of risk. Premium base erosion combined with growing or even stagnant insured values implies significant erosion in the statewide average rate level, as shown in Chart 3.

Chart 3: Trend in Florida Personal Residential Property Insurance Rate Levels (2005-2011)



The legislative and regulatory factors contributing to the decline are discussed above, but it is worth noting the volatility of the rate level – which is the key factor determining financial profitability for insurers.

Rates rose about 15% statewide during the run-up of 2006, but insured values rose by about twice as much (in percentage terms). Said differently, about two of every three dollars of premium increases seen by consumers in 2006-2007 were due to increased exposure, not increased rates. Rates declined rapidly, bottoming out well below year-end 2005 levels in every region except Tampa Bay, and most severely in the Keys and Southeast regions (see Appendix C). Despite the rate increases announced in 2010, average rate levels have only recovered by about 5% and remain below year-end 2005 levels in nearly every region.

Profitability

Table 12 below displays the average loss ratio and the variability of these ratios for the private insurance industry in each of the nine states across 1985-2010. Both the average loss ratio for Florida, as well as its standard deviation, is the highest of the nine states.

Table 12: Average Loss Ratio, Standard Deviation and Coefficient of Variation by State (1985-2010)

	AL	FL	GA	LA	MS	NC	SC	TX	VA
Average Loss Ratio	74.55	97.31	71.25	92.50	90.73	69.79	75.69	71.94	64.99
Standard Deviation	20.17	193.37	19.41	160.36	119.77	37.00	100.04	27.75	24.36
Coefficient of Variation	0.2706	1.9871	0.2725	1.7336	1.3201	0.5301	1.3217	0.3858	0.3748

The 97.31% loss ratio indicates that Florida insurers needed 97.31% of the premiums earned simply to pay losses and loss adjustment expenses, leaving less than 3% of premiums available to cover all other business expenses.⁴⁴ The 193.37% standard deviation indicates an extremely high level of volatility within Florida’s loss ratio over the time period examined. Effectively, the higher the standard deviation, the less confidence with which the industry can view the average loss ratio as a “typical” value. In other words, the loss ratio has proved less stable. Therefore, within Florida, insurers not only experienced the worst performance of any of these states but they have a measurable reason to have less confidence in the Florida market to perform in a stable manner than any of the other states.

Market Size and Capitalization

In the previous evaluation of private insurance availability, we looked at the 2010 marketplace only. Three vital elements of the market’s health we reviewed were the number of companies active in the marketplace, their DPW and PHS. Chart 4 and Table 13 below show how these statistics have changed from 1985 to 2010, as compared with other select coastal states.

⁴⁴ The 97% loss ratio is the average of the annual loss ratios from 1985 through 2010. In non-storm years in Florida, loss ratios vary significantly from this average. For example, the loss ratio in 2010 was approximately 37%. It would be improper however, to “ignore” the storm years in the analysis.

Chart 4: 1985-2010 Trend in Number of Insurers Writing Homeowners Insurance, by State

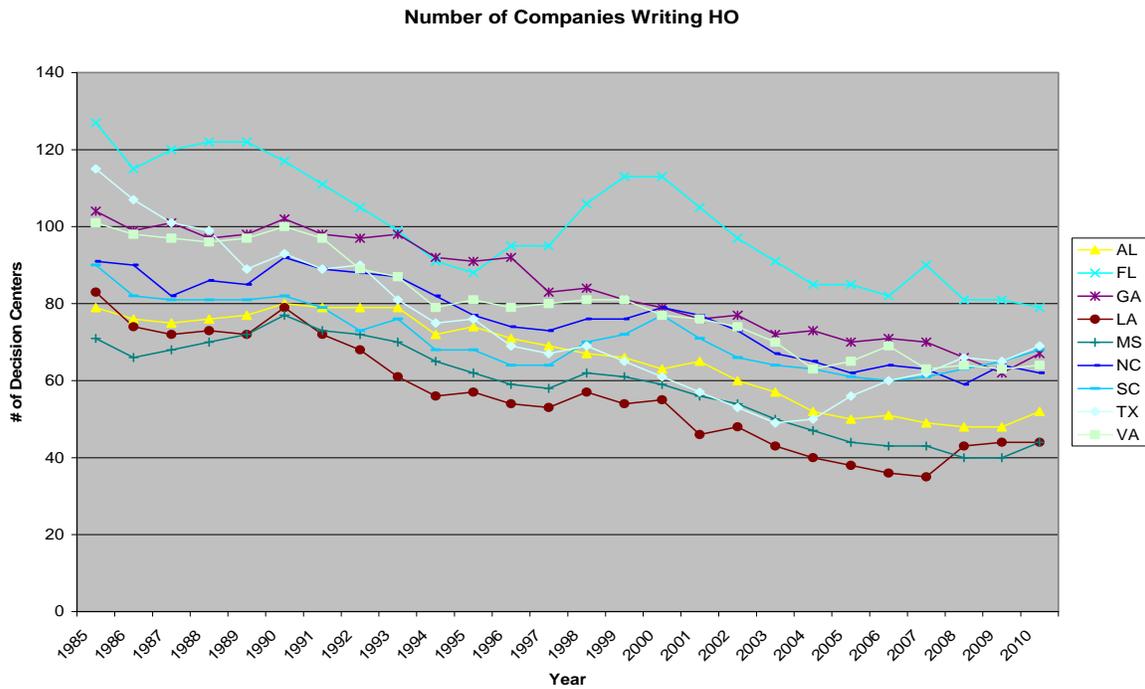


Table 13: Percentage Changes in Number of Companies, PHS and DPW by State and Company Structure in the Florida Homeowners Insurance Market (1985-2010)

1985-2010	Total Decision Centers	Groups	Ind. Cos.	Total PHS	Group PHS	Ind. Cos. PHS	Total DPW	Group DPW	Ind. Cos. DPW
Nat'l	-19.40%	-27.27%	-9.78%	431.80%	429.60%	536.14%	364.74%	354.95%	628.60%
AL	-34.18%	-34.25%	-33.33%	300.75%	298.65%	1613.27%	420.60%	421.38%	227.04%
FL	-37.80%	-46.15%	0.00%	145.54%	144.41%	338.60%	849.12%	638.04%	6462.47%
GA	-35.58%	-37.63%	-18.18%	364.18%	362.45%	1110.49%	473.17%	486.44%	83.60%
LA	-46.99%	-53.33%	12.50%	283.14%	281.53%	1282.99%	357.19%	323.81%	1092.75%
MS	-38.03%	-39.39%	-20.00%	306.98%	304.58%	2160.90%	405.20%	430.07%	-86.12%
NC	-31.87%	-41.98%	50.00%	425.35%	424.64%	591.78%	500.20%	502.51%	408.59%
SC	-24.44%	-29.27%	25.00%	275.23%	272.95%	1125.98%	509.62%	503.54%	767.25%
TX	-40.00%	-44.90%	-11.76%	154.61%	152.11%	1579.91%	381.37%	369.22%	1097.66%
VA	-36.63%	-39.13%	-11.11%	331.74%	329.85%	927.39%	500.24%	493.79%	4081.72%

All catastrophe prone states have seen insurers leaving the homeowners market at a rate greater than the national average during the period 1985-2010. The national average can be due to mergers and acquisitions rather than pure exodus from the marketplace. The presence of fewer companies does not necessarily indicate a problem so long as the capacity has increased or is at appropriate levels. What is notable is that Florida holds the highest insured value exposure and still has the most companies of the nine states being compared, yet it has the lowest PHS besides Texas (see Table 8). Table 13 describes how this is occurring. While Florida has seen a 37.8%

decrease in the number of insurers writing homeowners business in the state, it has experienced a 46.15% loss of group (mostly large, national) insurers while, on net, experiencing no loss of independent (mostly domestic) insurers. During the same 1985-2010 period, independent companies writing homeowners insurance in Florida have increased their DPW by 6,462.47% – the greatest increase seen by any of these states by either structure type – yet the PHS of these independent companies writing in Florida only increased 338.6%.

Looking at Florida alone, we can segment DPW by national, pup, domestic and Citizens categories to more accurately reflect Florida’s homeowners insurance marketplace. Chart 5 displays the DPW in FL for homeowners insurance policies, categorized by insurer type, for the years 1985-2010.

Chart 5: Florida Homeowners Insurance Direct Premiums Written by Insurer Type, 1985-2010

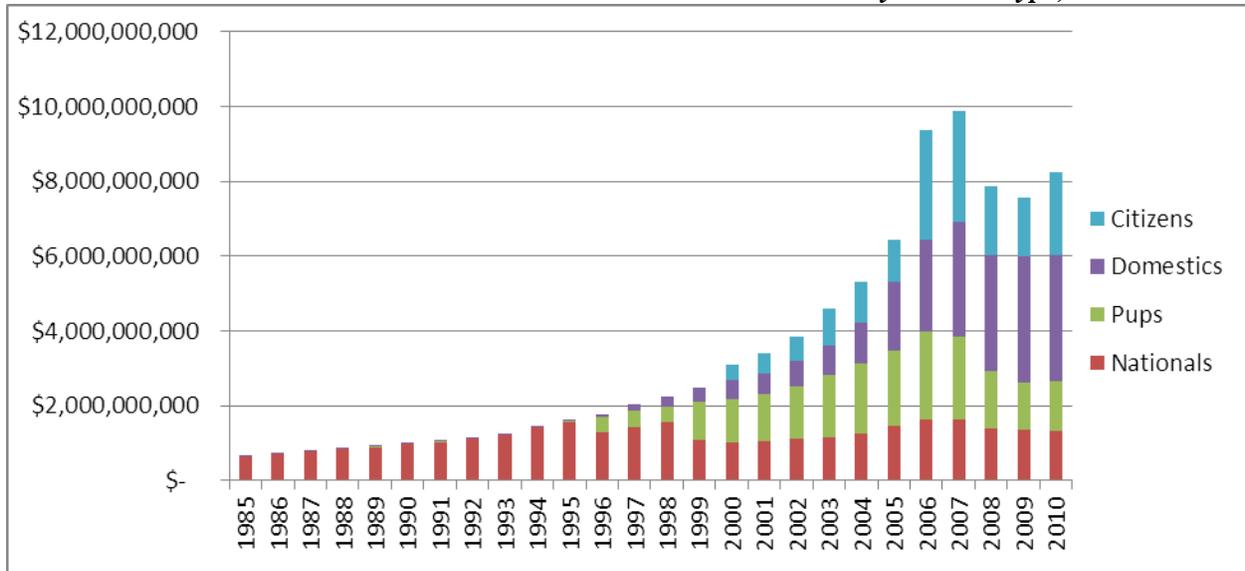


Chart 5 illustrates the substantial growth in Citizens, the domestics and the pups in recent years as the premium size of the nationals in the Florida homeowners insurance market has remained flat. This change in the composition of the marketplace is a matter of concern since national companies typically have more capacity available to pay claims and write additional business than do the other types. Despite their large capacity, the large, national insurers have chosen to limit their exposure to the Florida homeowners insurance market.

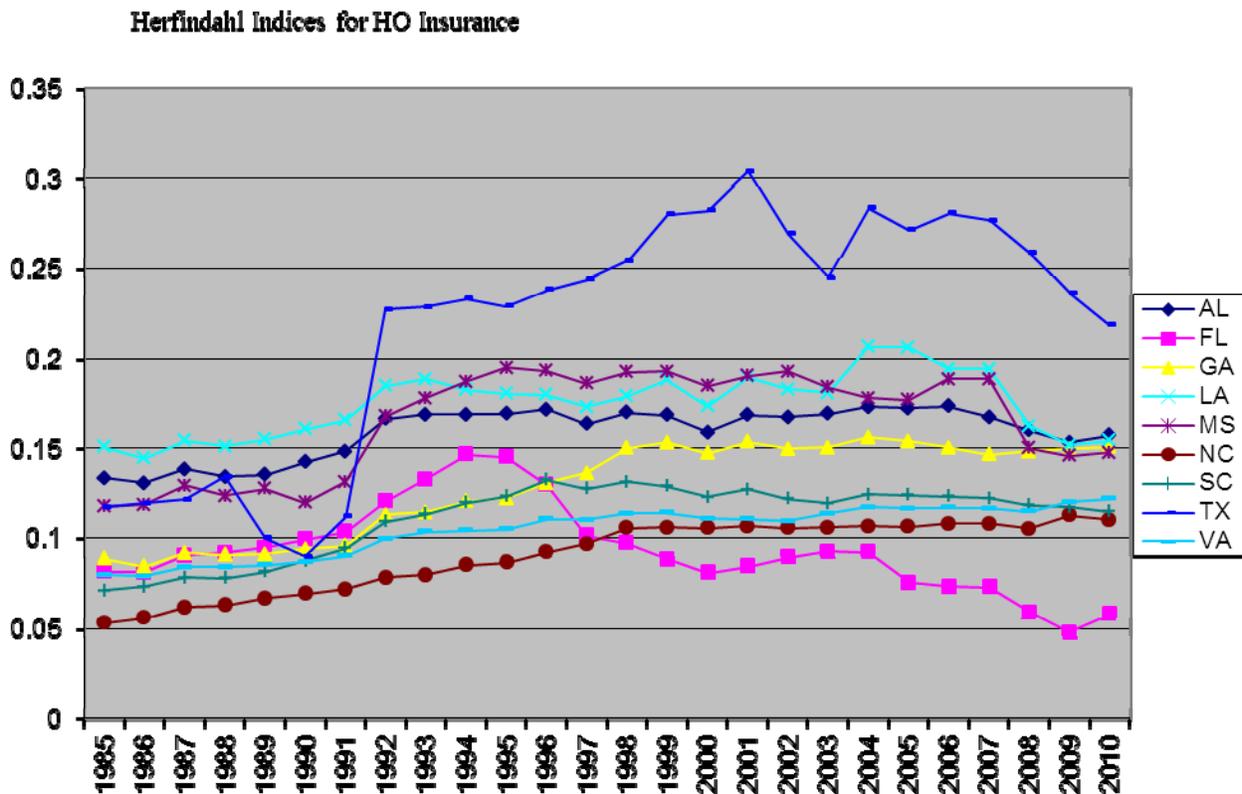
Market Concentration

Chart 4 in the last section revealed the changing composition of the Florida homeowners insurance marketplace during the past 25 years. The graph indicates changing market share but does not specifically provide information about market concentration. This section looks specifically at the Herfindahl index. The Herfindahl index is a measure of how concentrated an industry is. Any marketplace where a few competitors hold most of the market share will have a

high Herfindahl index (high level of concentration), while a market with many competitors, or relatively equal market share among competitors, will have a low Herfindahl index (low concentration).⁴⁵

Chart 6 shows the Herfindahl indices plotted over time for each state in the sample. As a general rule, a Herfindahl index below 0.1 signals low concentration, while a Herfindahl index above 0.18 signals high concentration. Between 0.1 and 0.18 the industry is moderately concentrated.

Chart 6: Homeowners Insurance Market Concentration Levels by State, 1985-2010



At first glance, the Florida market appears to have a low market concentration relative to other coastal states, hovering around 0.15 for the most recent years. Bear in mind that the data being measured include only the private market. Since Citizens insures nearly 25% of the 5.7 million residential insurance policies in Florida, the true market has been more highly concentrated since at least 2007 when Citizens was encouraged to compete with the private marketplace for standard risk policies. Table 14 shows the growth in Citizens policy count from end-of-year 2003 to September, 2011.

⁴⁵ The Herfindahl index measures concentration as the sum of the squared market share of each firm in the industry. For example, consider an industry with six competitors, with respective market share of 30%, 20%, 20%, 10%, 10% and 10% the Herfindahl index will be $(0.3*0.3) + (0.2*0.2) + (0.2*0.2) + (0.1*0.1) + (0.1*0.1) + (0.1*0.1) = 0.09 + 0.04 + 0.04 + 0.01+0.01 + 0.01 = 0.2$.

Table 14: Citizens Property Insurance Corporation Personal Residential Policy Counts

	PLA (Multi-peril)	Coastal (Wind Only)	Coastal (Multi-peril)	Total Personal Residential Policy Count
Sep. 2011	992,002	246,832	172,651	1,411,485
Dec. 2010	829,406	248,328	154,663	1,232,397
Dec. 2009	609,652	251,287	114,561	975,500
Dec. 2008	629,467	328,775	67,672	1,025,914
Dec. 2007	845,857	421,505	24,676	1,292,038
Dec. 2006	743,592	403,509		1,147,101
Dec. 2005	407,387	399,418		806,805
Dec. 2004	416,529	453,765		870,294
Dec. 2003	383,280	433,056		816,336

As of September 2011, Citizens insured in excess of 1.4 million Florida personal residential policies. Nearly 1 million of these policies were in the multi-peril PLA category, meaning they covered non-coastal properties and were not limited to windstorm coverage only.

Reinsurance Usage

Chart 7 indicates the percentage of risk retained by Florida homeowners insurers over the time period 1985-2010.

Chart 7: Percentage of Direct Premiums Written Retained by Florida Homeowners Insurers (1985-2010)

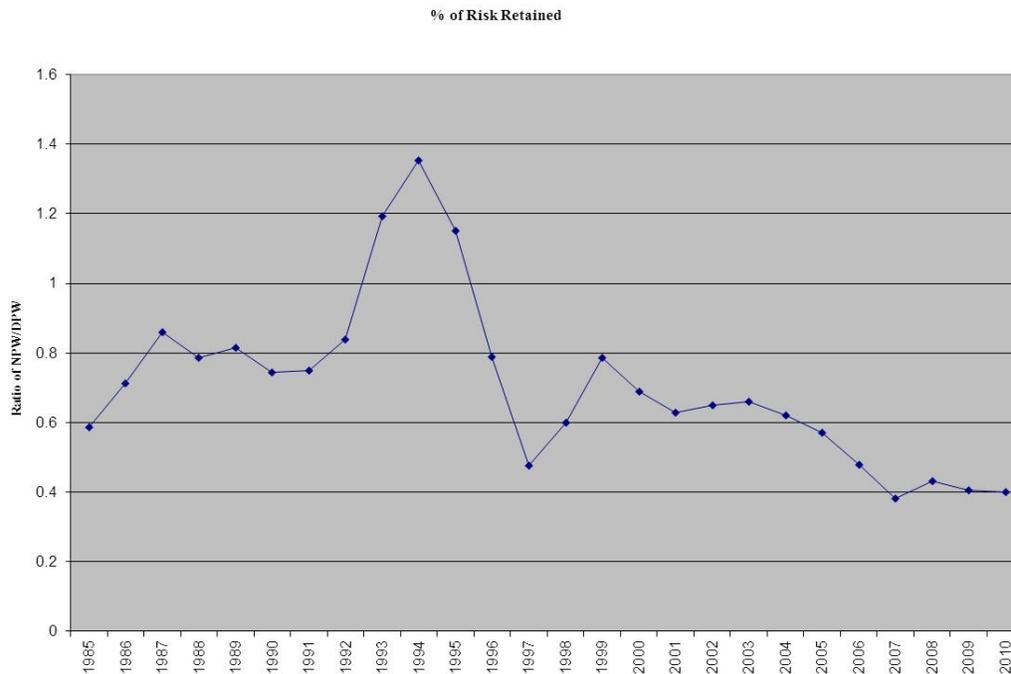


Chart 7 clearly indicates that immediately post-Andrew Florida homeowners insurers decreased their usage of reinsurance, commensurate with sharp increases in reinsurance rates-on-line (prices) during that time. Since 2007, however, insurers in Florida have held their risk retentions

at around 40%, reinsuring the remainder. Their ability to do so may, in large part, be aided by a lack of catastrophic storms during 2007-2010, accompanied by softening reinsurance prices and the availability of FCHF reinsurance. It will never be known whether catastrophic storms, and resultant higher reinsurance prices, might have resulted in company decisions to increase their retentions once again.

VI. Recommendations

The Florida Catastrophic Storm Risk Management Center submits that the State's present system for catastrophe risk finance is sustainable only if the financial pressure on Citizens and the FHCF is substantially reduced and the private insurance market is strengthened. To these ends, we offer recommendations for the Legislature's consideration. Several of these could be implemented without disrupting the marketplace. We acknowledge that others may require careful evaluation of their potential collateral effects and thus warrant a staggered implementation.

- ***Define Guidelines for Determining the Proper Public/Private Mix.*** Since Florida's residual market entities use post-loss financing in the form of policyholder assessments, addressing the roles of these entities also addresses the appropriate mix of pre-loss (insurance premiums) and post-loss (assessment) financing. By explicitly addressing these issues, the State will add to the transparency of risk financing and address the issue of how much subsidization is seen as necessary.
- ***Continue to Reduce the Capacity of the FHCF.*** In the event of a 1-in-50-year storm, the FHCF would face a substantial shortfall. This residual reinsurer was originally designed to stabilize the Florida market for the property insurance industry through stop-gap coverage. It has instead become a provider of mandatory reinsurance at relatively low rates and relatively high coverage limits. Reduction in FHCF coverage limits will directly reduce the exposure of the FHCF and Floridians to the possibility of difficult, or even unaffordable, future assessments and allow the FHCF to improve its ability to help in short-term market challenges (e.g., second storms, storms in consecutive years).
- ***Speed the Rate Glidepath for Citizens.*** The current glidepath in Citizens rates does not produce actuarially-fair rates on average for 5 more years. Without a faster move to risk-based rates, Citizens and Floridian policyholders and taxpayers must hope for no storms in the interim years disastrous enough to result in large assessments. Furthermore, if Citizens continues to be allowed to charge competitive rates and these rates are not adequately risk based, the private insurance industry might continue to exit the market, leaving Citizens and Floridians even more exposed to the risk of large post-loss assessments.
- ***Clarify the Purpose of Rate Regulation.*** The pricing-related focus of private insurance regulation is intended to be on ensuring that rates are adequate, not excessive and not unfairly

discriminatory. Actuarially sound rates, as defined by the actuarial profession, are generally a sufficient condition for these criteria. Recent regulatory outcomes in Florida appear to have focused on rate affordability rather than rate adequacy, at the cost of unfair discrimination. Clarity on the intent of rate regulation will help policymakers focus on strategies that enhance the long-term health of the insurance marketplace.

- ***Promote Risk-Based Rating to Induce Mitigation and Adaptation.*** Allowing actuarially fair risk-based rating will increase the incentives to property owners to undertake cost effective mitigation (e.g., impact-resistant windows) and adaption (e.g., relocation away from coastal areas) efforts.
- ***Revisit Mitigation Options and the Effects of Credits.*** Some mitigation features that warrant a premium credit under the current system are not actionable by the property owner (e.g., roof shape) and should not be presented to the property owner as a potential mitigation credit option but instead be incorporated into an insurer's rating plan. Additionally, the mitigation credits program needs to be revisited to address the fact that it currently promotes the growth of the residual market and reduces incentives to mitigate.
- ***Provide Limited Basic Insurance Coverage and Coverage Options.*** One method to address the volatility of reinsurance costs would be to reduce the Total Insured Value (TIV) in coastal areas of Florida. If Citizens, as the residual property insurer, offered a policy form similar to an HO-8 (a product providing essential dwelling and contents coverage only) as the standard (basic) homeowners policy in Florida, more of Florida's citizens could select coverage they can afford. Further, the competitive appeal of Citizens would be reduced, helping reduce the population of the residual market. Finally, limited coverage would make insurance more affordable and restore the concept of indemnity to property insurance.
- ***Address Insurance Affordability Outside the Insurance Rating System.*** By subsidizing insurance premiums only for those who express a financial need, public financing would support those most in need of financial assistance. An example of this type of program would be insurance premium vouchers. Having affordability addressed in conjunction with means testing may make these programs more socially and politically acceptable than embedding subsidies in rating plans and distributing them regardless of means.
- ***Concentrate on Strategies to Improve the Affordability of Mitigation.*** Several studies have shown the cost effectiveness of mitigation in reducing hurricane loss costs. Other studies have shown that homeowners may opt not to engage in windstorm and storm surge mitigation due to a perceived lack of affordability and/or uncertainty about the cost-benefit outcomes. Policies and programs that improve homeowners' knowledge of the cost effectiveness of mitigation and/or improve the affordability of mitigation efforts for homeowners are the most direct strategies to reduce Florida's personal residential loss costs.

- ***Mandate the Disclosure of Hazard Insurance Premiums for Properties on the Sales Market.*** Property taxes must be disclosed to prospective buyers when a house is listed on the sales market in Florida. If the property is in a federal flood zone, this information must be provided as well. It is neither required nor common practice, however, for hazard insurance premiums (even the windstorm portion) to be disclosed to prospective buyers. Such a requirement would directly result in better informed property purchases and indirectly may result in changes to purchase criteria among buyers.
- ***Proactively Engage in Strategies to Attract Risk Capital to Florida.*** Several of the recommendations mentioned above can be expected to attract financial capital to Florida's property insurance market. Additionally, direct strategies to bring and retain underwriting capital within the State are worth consideration. One tax strategy is to allow credits towards state premium taxes for companies writing some minimum amount of property insurance in the State. A premium tax credit will help offset the cost of holding catastrophe reserves to pay for losses due to severe storms in Florida's future.

About The Florida Catastrophic Storm Risk Management Center

Launched in 2008, The Florida Catastrophic Storm Risk Management Center has an interdisciplinary team of experts working on issues related to catastrophic storm risk. The Center has two-dozen research publications to date and just released its first *State of Florida's Property Insurance Market* report to the Florida Legislature. Center faculty focuses on risk management, risk modeling, insurance, finance, and economics. Also, the Center partners with leading researchers at The Florida State University and other institutions to study tropical storm forecasting, prediction, and meteorology; storm formation and intensity modeling; structural wind engineering; pre- and post-disaster planning; and evacuation of coastal communities. Learn more at www.stormrisk.org.



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