

### Calamities Natural and Political: Implications for P/C Insurance

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### **Calamities Natural**

SuperStorm Sandy Raises New Questions as it Becomes one of the Most Expensive Storms in US History

### **US Insured Catastrophe Losses**



US CAT Privately-insured losses in 2012 will likely become the 2<sup>nd</sup> or 3<sup>rd</sup> highest in US history (on an inflation-adjusted basis). 2011 losses were the 5<sup>th</sup> highest. Record Tornado Losses Caused 2011 CAT Losses to Surge

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\*As of 1/2/13. Includes \$20B gross loss estimate for Hurricane Sandy.

Note: 2001 figure includes \$20.3B for 9/11 losses reported through 12/31/01 (\$25.9B 2011 dollars). Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = \$12.2B (\$15.6B in 2011 dollars.) Sources: Property Claims Service/ISO; Insurance Information Institute.

### Natural Disasters in the United States, 1980 – 2012 Number of Events (Annual Totals 1980 – 2012)



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## 10 of the 12 most costly hurricanes in insurance history occurred in the past 9 years (2004–2012)

\*Estimate as of 12/09/12 based on estimates of catastrophe modeling firms and reported losses as of 1/12/13. Estimates range up to \$25B. Sources: PCS; Insurance Information Institute inflation adjustments to 2012 dollars using the CPI.

### If They Hit Today, the Dozen Costliest (to Insurers) Hurricanes in U.S. History



## When you adjust for the damage prior storms could have done if they occurred today, Hurricane Katrina slips to a tie for 6<sup>th</sup> among the most devastating storms.

\*Estimate as of 12/09/12 based on estimates of catastrophe modeling firms and reported losses as of 1/12/13. Estimates range up to \$25B. Sources: Karen Clark & Company, *Historical Hurricanes that Would Cause \$10 Billion or More of Insured LossesToday*, August 2012; I.I.I.

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### Homeowners Insurance Combined Ratio: 1990–2014F



Homeowners Performance Deteriorated in 2011/12 Due to Large Cat Losses. Extreme Regional Variation Can Be Expected Due to Local Catastrophe Loss Activity

Sources: A.M. Best (1990-2013F); Conning (2014F); Insurance Information Institute.

# Combined Ratio Points Associated with Catastrophe Losses: 1960 – 2012\*



#### The Catastrophe Loss Component of Private Insurer Losses Has Increased Sharply in Recent Decades

Notes: Private carrier losses only. Excludes loss adjustment expenses and reinsurance reinstatement premiums. Figures are adjusted for losses ultimately paid by foreign insurers and reinsurers.

Source: ISO (1960-2011); A.M. Best (2012E) Insurance Information Institute.

## P/C Industry Homeowners Claim Frequency, CATs vs. non-CATs, 1997-2011



Sources: Insurance Research Council, "Trends in Homeowners Insurance Claims," p.29; Insurance Information Institute

### P/C Industry Homeowners CAT Claim Severity, 1997-2011



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Sources: Insurance Research Council, "Trends in Homeowners Insurance Claims," p. 29, BLS inflation calculator, and Insurance Information Institute

### Superstorm Sandy: Number of Claims by Type\*

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#### Total Claims = 1.52 Million\*



Hurricane Sandy resulted in an estimated 1.52 million privately insured claims resulting in an estimated \$18.75 to \$25 billion in insured losses. Hurricane Katrina produced 1.74 million claims and \$48.7B in losses (in 2012 \$)

\*PCS claim count estimate s as of 1/18/13. Loss estimate represents PCS total (\$18.75B) and upper end of range estimates by risk modelers RMS, Eqecat and AIR. All figures exclude losses paid by the NFIP. Source: PCS; AIR, Eqecat, AIR Worldwide; Insurance Information Institute.

### SuperStorm Sandy: Amount of Insured Loss by Claim Type\* (\$ Millions)



#### **Total Claim Value = \$18.75 Billion\***



Although Commercial Lines accounted for only 13% of total claims, they account for 48% of all claim dollars paid. In most hurricanes, Commercial Lines accounts for about 1/3 of insured losses.

\*PCS insured loss estimates as of 1/18/13. Catastrophe modeler estimates range up to \$25 billion. All figures exclude losses paid by the NFIP. Source: PCS; Insurance Information Institute.

## Hurricane Sandy: Average Claim Payment



Commercial (Business) Claims Were Nearly Seven Times More Expensive than Homeowners Claims; Vehicle Claims Were Unusually Expensive Due to Extensive Flooding

\*Includes rental and condo policies (excludes NFIP flood). \*\*As of Feb. 20, 2013.

Sources: Catastrophe loss data is for Catastrophe Serial No. 90 (Oct. 28 – 31, 2012) from PCS as of Jan. 18, 2013; Insurance Information Institute .



### Sandy and Flood Insurance

### Years in Which Flood Loss Paid by the National Flood Insurance Program Exceeded \$1 Billion



\*Estimate as of 11/25/12.

Sources: Department of Homeland Security, Federal Emergency Management Agency, NFIP; Insurance Information Institute.

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### Residential NFIP Flood Take-Up Rates in NJ (2010) & Sandy Storm Surge





Source: Wharton Center for Risk Management and Decision Processes, Issue Brief, Nov. 2012; Insurance Information Institute.

### Residential NFIP Flood Take-Up Rates in NY, CT (2010) & Sandy Storm Surge





### Flood Damaged Structures with/without Flood Insurance: Long Island NY



#### The Maximum FEMA Grant is \$31,900. The Average Grant Award to Homeowners and Renters on Long Island is About \$7,300

Source: Newsday, 1/14/13 from FEMA and Small Business Administration.



### Insurance Education Needed for Home & Business Owners

### Many Insurance Buyers Remain Confused About, or Make Poor Decisions, Regarding Insurance Coverage

### I.I.I. Poll: Do HO Policies Cover Hurricane-Related Flood Damage?





The proportion of homeowners who believe their homeowners policy covers damage from flooding during a hurricane stands at 17%. This proportion rises ten percentage points in the South, to 27%.

<sup>1</sup>Asked of those who have homeowners insurance and who responded "yes" to being a homeowner. Source: Insurance Information Institute Annual *Pulse* Survey.

### I.I.I. Poll: Uninsured Flood Victims Didn't Drive People to Buy Flood Insurance



Q. Have recent flooding events such as Hurricane Sandy or Hurricane Irene motivated you to buy flood coverage?<sup>1</sup>



## Surprisingly few people were motivated to buy flood coverage despite recent catastrophic flooding events and the media's attention on the people who had no flood insurance.

<sup>1</sup>Asked of those who have homeowners insurance but not flood insurance. Source: Insurance Information Institute Annual *Pulse* Survey.

### Q. Will the government pay for damage to your home that is not covered in your homeowners policy?<sup>1</sup>



Consumer education seems to be working: a growing percentage of HO insureds say flood damage isn't covered by HO, but one-third of HO insureds still haven't learned this

<sup>1</sup>Asked of those who have homeowners insurance and who responded "yes". Source: Insurance Information Institute Annual *Pulse* Survey. INSURANCE



# Flood Insurance Program: 2012 Reforms

### 2012 Reforms Were a Step in the Right Direction—But Too Late to Help With Sandy Shortfall

### Key Provisions, Flood Insurance Reform & Modernization Act of 2012



- Reauthorized NFIP and its financing through 9/30/17
- Raises Average Annual Limit on Premium Increase
  - Annual increases now capped at 20% (was 10%)
- Phase-in of Actuarial Rates for:
  - non-primary residences,
  - severe repetitive loss properties,
  - properties where flood losses have exceed property value,
  - business property,
  - property that has sustained damage > 50% of fair market value

Source: Independent Insurance Agents and Brokers Association at http://www.iiaba.net/webfolder/na/jeff/big%20i%20firm%20summary.pdf; Insurance Information Institute.

Flood Insurance Reform & Modernization Act of 2012: Key Provisions (cont'd)



### Actuarially Sound Rates for Certain Severe Repetitive Loss Properties

 Charge actuarially sound rates to any prospective or repetitive loss properties that refused to accept offers of mitigation assistance after a major disaster

### Prohibits Subsidized Premium Rates on New or Lapsed Policies

### Other Changes, Net Impacts & Outstanding Questions



- Remapping Initiative (Flood maps out of date)
  - Already resulting in expansion of high hazard flood zones
  - Will also increase costs to many
- Post-Sandy Changes in Building Codes
- Use of State and Federal Funds to Purchase Vulnerable Property from Current Owners Who Had Homes Damaged or Destroyed in Sandy
  - Most seem willing to sell since they are being offered 100%+ or pre-Sandy value and many were not insured for flood damage
- Given only 1/2 to 1/3 of Coastal Dwellers Maintain Flood Coverage, What Will Be the Impact of Higher Price?
  - What is elasticity of demand for flood insurance?
- Will Private Insurers Have a Greater Incentive to Participate in the Flood Insurance Market?



- 1. Is it covered under my policy?
- 2. How much will it cost the industry?
- 3. Can you afford to pay for it?
- 4. Will the price of (re)insurance go up?
- 5. Will coverage still be available?
- Sandy Addition: How do I get govt. aid?

## Much of the I.I.I.'s time with media interested in CAT issues involves these questions



### Are You Safe Here in the Midwest?

### Location of Tornadoes in the US, 2012\*





\*Through Dec. 31, 2012.

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2012 annual summary.html#

### Location of Tornadoes in the US, 2011



Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2011\_annual\_summary.html#

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# Location of Large Hail Reports in the US, 2012\*





\*Through Dec. 31, 2012.

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2012 annual summary.html#

# Location of Large Hail Reports in the US, 2011





Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2011\_annual\_summary.html#

# Location of Wind Damage Reports in the US, 2012\*

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\*Through Dec. 31, 2012.

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2012 annual summary.html#

# Location of Wind Damage Reports in the US, 2011



Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2011\_annual\_summary.html#

### Severe Weather Reports, 2012\*





\*Through Dec. 31, 2012.

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2012 annual summary.html#

### **Severe Weather Reports, 2011**





NOAA/Storm Prediction Center Norman, Oklahoma

Updated: Tuesday December 27, 2011 16:35 CT



### Calamities Natural: Key Take-aways

### Takeaways: Lessons from, and a "New Normal" for Catastrophes



### A CAT 1 or Even Weaker Storm Can Cause Enormous Losses

- Sandy's winds were barely hurricane strength with she hit the Jersey Shore, yet she might have been the second most destructive storm in U.S. history
  - Large storm surge (storm hit at high tide) caused extensive flooding
  - Natural protection (e.g., beach dunes) works well
  - Despite lower average severity, relatively higher claim frequency and long-lasting power outages slowed recovery

### Takeaways: Lessons from, and a "New Normal" for Catastrophes



### Flood Insurance Coverage Will Grow Slowly, Thanks to

- Steep Premium Increases,
- New Flood Zone Maps,
- Ending Actuarial Subsidies
- Persistent belief that
  - No need for flood insurance--FEMA will pay
  - Homeowners policy covers flood
  - Risk of another flood is low because
    - Just had a flood
    - Haven't had a flood in a long time



### **Calamities Political**

### The Strength of the Economy Will Influence P/C Insurer Growth Opportunities, but...

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### **Three Potential "Calamities Political"**

- Budget Battles and Other Political Obstacles to Economic Growth, including
  - the Sequester, the Debt Ceiling, the Continuing Resolution,
  - Fallout from Europe
  - a Middle-East Crisis
- Will TRIA be reauthorized?
- How Will the new HUD Ruling Affect Property Insurance?



### **Budget Battles, etc.**

### The Fiscal Cliff Was Just the Beginning: Budget Battles for Next Five Years?



Poll: 94% of P/C insurance executives think looming budget battles In Washington will hurt the economy.\*



There are 10+ "Fiscal Speed Bumps" over the next five years => a potentially extended period of fiscal uncertainty

Creates long-term uncertainty around federal spending, tax policy, entitlements

"The tax extenders officially expire at the end of 2013, but can be restored retroactively up until this point.

\*P/C Insurance Joint Industry Forum press release (<u>www.iii.org/press\_releases</u>), January 15, 2013. Chart Source: Fix the Debt Coalition, January 18, 2013; Insurance Information Institute

### Federal Spending as Percent of State GDP: Vulnerability to the Sequester Varies





Sources: Pew Center on the States (2012) Impact of the Fiscal Cliff on the States; Wells Fargo; Insurance Information Institute.

### Defense and Non-Defense Federal Spending as a Share of State GDP: Top 10 States\*



#### Sequestration Could Adversely Impact Commercial Insurance Exposures Directly at Defense Contractors and Indirectly in Impacted Communities

\*As of 2010.

Sources: Pew Center on the States (2012) Impact of the Fiscal Cliff on the States; Wells Fargo Securities; Insurance Information Institute.



### **TERRORISM RISK**

### **The Countdown to TRIA Expiration Begins**

### Reauthorization Faces an Uphill Battle in Congress

### I.I.I. Congressional Testimony on the Future of the Terrorism Risk Insurance Program



TRIA at Ten Years: The Future of the Terrorism Risk Insurance Program

House Financial Services Subcommittee on Insurance, Housing and Community Opportunity

> Testimony of Robert P. Hartwig, Ph.D., CPCU President & Economist Insurance Information Institute New York, NY

> > September 11, 2012 Washington, DC



**Issue:** Act expires 12/31/14. Insurers still generally regard large-scale terror attacks as fundamentally uninsurable

I.I.I. Input: Testimony at first hearing on the issue in DC (on 9/11/12) on trends in terrorist activity in the US and abroad, difficulties in underwriting terror risk; Noted that bin Laden may be dead but war on terror is far from over

Status: New House FS Committee Chair Jeb Hensarling has opposed TRIA in the past; Obama Administration does not seem to support extension; Little institutional memory on insurance subcommittee

### Loss Distribution by Type of Insurance from Sept. 11 Terrorist Attack (\$ 2011)



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### Total Insured Losses Estimate: \$40.0B\*\*

\*Loss total does not include March 2010 New York City settlement of up to \$657.5 million to compensate approximately 10,000 Ground Zero workers or any subsequent settlements.

\*\*\$32.5 billion in 2001 dollars.

Source: Insurance Information Institute.

### **Terrorism Violates Traditional Requirements for Insurability**



Requirement	Definition	Violation
Estimable Frequency	•Insurance requires large number of observations to develop predictive rate- making models (an actuarial concept known as credibility)	<ul> <li>Very few data points</li> <li>Terror modeling still in infancy, untested.</li> <li>Inconsistent assessment of threat</li> </ul>
Estimable Severity	•Maximum possible/ probable loss must be at least estimable in order to minimize "risk of ruin" (insurer cannot run an unreasonable risk of insolvency though assumption of the risk)	<ul> <li>Potential loss is virtually unbounded.</li> <li>Losses can easily exceed insurer capital resources for paying claims.</li> <li>Extreme risk in workers compensation and statute forbids exclusions.</li> </ul>

### **Terrorism Violates Traditional Requirements for Insurability (cont'd)**



Requirement	Definition	Violation
Diversifiable Risk	<ul> <li>Must be able to spread/distribute risk across large number of risks</li> <li>"Law of Large Numbers" helps makes losses manageable and less volatile</li> </ul>	<ul> <li>Losses likely highly concentrated geographically or by industry (e.g., WTC, power plants)</li> </ul>
Random Loss Distribution/ Fortuity	<ul> <li>Probability of loss occurring must be purely random and fortuitous</li> <li>Events are individually unpredictable in terms of time, location and magnitude</li> </ul>	<ul> <li>Terrorism attacks are planned, coordinated and deliberate acts of destruction</li> <li>Dynamic target shifting from "hardened targets" to "soft targets"</li> <li>Terrorist adjust tactics to circumvent new security measures</li> <li>Actions of US and foreign govts. may affect likelihood, nature and timing of attack</li> </ul>



### **The New HUD Ruling**

### **HO Underwriting vs. Disparate Impact**



- The Fair Housing Act prohibits discrimination in the sale, rental, or financing of dwellings on the basis of race, color, religion, sex, disability, familial status, or national origin.
- HUD's rule says Plaintiffs may use statistical analysis to show that certain insurer/lender/municipality behavior had a disproportionately adverse effect on the sale, rental, or financing of housing for minorities
  - Under the rule, this showing violates the federal Fair Housing Act even if the insurer/lender/municipality did not intend to discriminate
  - Defendant can prevail if it shows the practice was needed to achieve one or more substantial, legitimate, nondiscriminatory interests
  - But plaintiff may win by showing that another practice with a less discriminatory effect could achieve this interest



Why does this affect property insurance?

- Insurers don't use race, religion, sex, etc. to underwrite property insurance
- But they do use credit-based insurance scores, neighborhood, and other factors that could be the basis of a "disparate impact" conclusion
- Isn't this a federal government agency's intrusion into state regulation, against McCarran-Ferguson?
  - HUD says M-F says federal laws/regulations that "specifically relate to the business of insurance" supercede state law
- But how can insurers defend themselves if they don't have data on race (which they're prohibited from collecting)?
  - HUD says plaintiff have the same problem, so it's fair

### Potential Impact on Property Insurance Underwriting (cont'd)



- Higher Rates for Homeowners Insurance?
  - Might result if carriers can't use credit-based insurance scores in underwriting
    - This might worsen conditions for lower-income people with good scores, some of whom are minorities
    - Insurance pricing becomes less accurate => better risks subsidize worse risks
  - Could also increase costs to monitor compliance and defend suits alleging discrimination
- Potentially Changes State/Federal Regulatory Balance
  - Not necessarily by itself, but in the trail of
    - Federal Insurance Office
    - FSOC
    - CFPB



### Other "Calamities Political" That We Could Mention

Designating Some Insurers as Systemically Important?

- Creating a two-tiered, "unlevel playing field"
- Extending the "Reach" of the Consumer Financial Protection Bureau?
  - The CFPB is now proposing regulations for mortgage servicers regarding property insurance on homes with mortgages
  - Will it deal with insurance offered with credit cards?
  - Bank marketing of insurance products?



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# www.iii.org

### Thank you for your time and your attention!

## U.S. Residual Market: Total Policies In-Force (1990-2011) (000)



## U.S. Residual Market Exposure to Loss (\$ Billions)



In the 22-year period between 1990 and 2011, total exposure to loss in the residual market (FAIR & Beach/Windstorm) Plans has surged from \$54.7 billion in 1990 to a record high of \$884.7 billion in 2011.

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