

## 80 Years of Property Losses: What Will it Take to Survive to Next 80 Years?

Loss Executives Association Annual Meeting Tampa, FL February 3, 2011

Download at www.iii.org/presentations

Robert P. Hartwig, Ph.D., CPCU, President & Economist Insurance Information Institute + 110 William Street + New York, NY 10038 Tel: 212.346.5520 + Cell: 917.453.1885 + bobh@iii.org + www.iii.org

## **Presentation Outline**



#### 80 Years: The Dollars and Cents

#### Paying Claims Over the Long Haul: What Does it Take?

- Claims Paying Capital & Capacity
- Financial Strength
- Profits, Profitability and Claims Paying Ability

#### Claims Paying and Investment Performance & Volatility

The "Great Recession" as a case study

#### External Challenges

Shifting tort environment

#### Claims Paying Capacity and the Economy

Insurers must maintain the ability to pay claims even in deep recessions

#### Catastrophe Loss Trends

- US
- Global
- Importance of reinsurance in claims paying capacity



## **CONGRATULATIONS LEA!!** 80 YEARS: 1931-2011

# QUIZ: What is the significance of this number?

7,215,698,210,618



## <u>ANSWER</u>: This is the dollar value of all claims paid by P/C insurers since 1931.

# \$7,215,698,210,618



## **CONGRATULATIONS LEA!!** 80 YEARS: 1931-2011

# QUIZ: What is the significance of this number?

# 12,539,027,130,890



## <u>ANSWER</u>: This is the dollar value of claims paid by P/C insurers since 1931, *adjusted for inflation\**



\*Adjusted to 2010 dollars by the Insurance Information Institute using BLS CPI-U data.

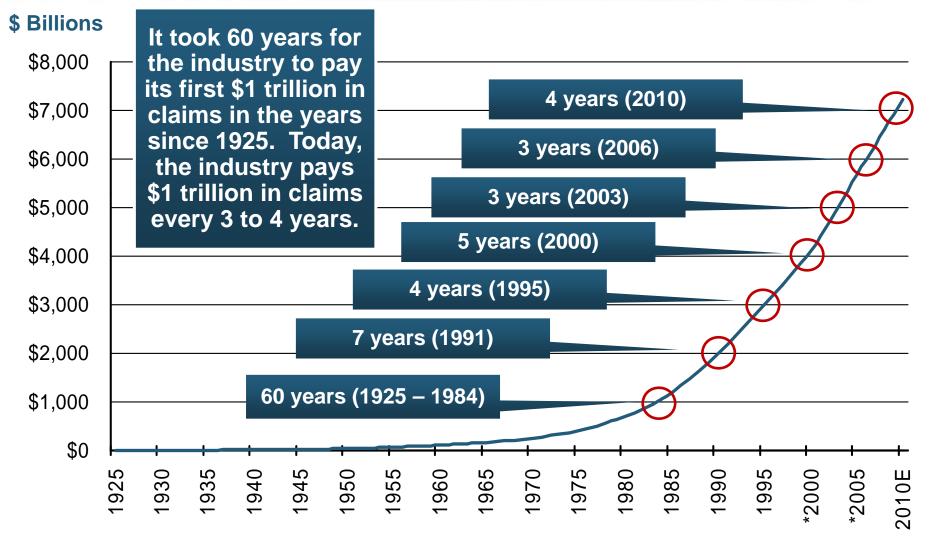
#### **Dollar Value of Claims Paid by P/C** INSURANCE INFORMATION Insurers to Policyholders, 1925–2010E\* **\$** Billions **Claim payouts in recent** years are volatile but have \$400 Since 1925, P/C insurers have reached a jagged plateau paid more than \$7.2 trillion in \$350 claims to policyholders \$300 \$250 \$200 **Claim payouts** \$150 increased Catastrophe losses, underwriting cycle exponentially \$100 contribute to for decades volatility; Prolonged soft market. \$50 recession to plateau \$0 \*2005 25 935 955 975 985 2010E 930 940 945 950 960 965 970 980 066 995 2000 တ

\*1925 – 1934 stock companies only. Includes workers compensation state funds 1998-2006.

Note: Data are not adjusted for inflation.

Sources: Insurance Information Institute research and calculations from A.M. Best data.

## Cumulative Value of Claims Paid by P/C Insurers to Policyholders, 1925–2010E\*

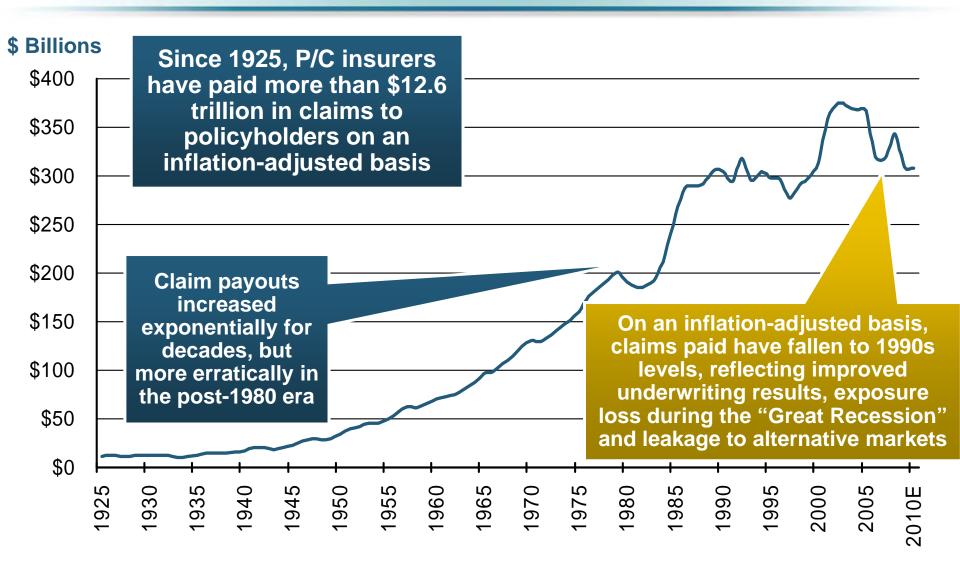


\*1925 – 1934 stock companies only. Includes workers compensation state funds 1998-2006.

Note: Data are not adjusted for inflation.

Sources: Insurance Information Institute research and calculations from A.M. Best data.

### Inflation-Adjusted Dollar Value of Claims Paid by P/C Insurers, 1925–2010E\*

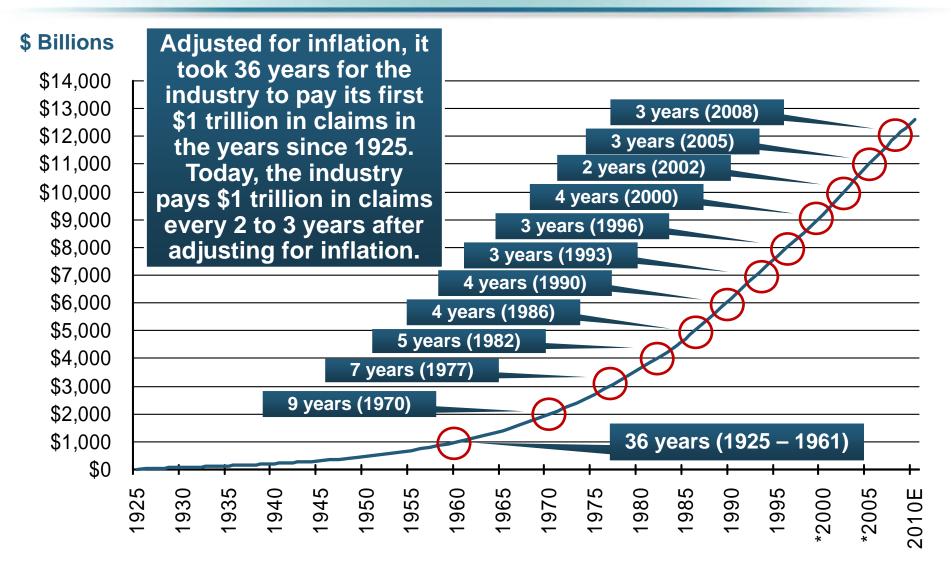


\*1925 – 1934 stock companies only. Includes workers compensation state funds 1998-2006. Sources: Insurance Information Institute research and calculations from A.M. Best data.

INSURANCE

### Cumulative Value of Inflation-Adjusted Claims Paid by P/C Insurers, 1925–2010E\*





\*1925 – 1934 stock companies only. Includes workers compensation state funds 1998-2006. Sources: Insurance Information Institute research and calculations from A.M. Best data.



## What Does it Take to Pay Out \$1 Trillion Every 3-4 Years?

Financial Strength Was the Key to the Past 80 Years— It is the Key to the Next 80 As Well

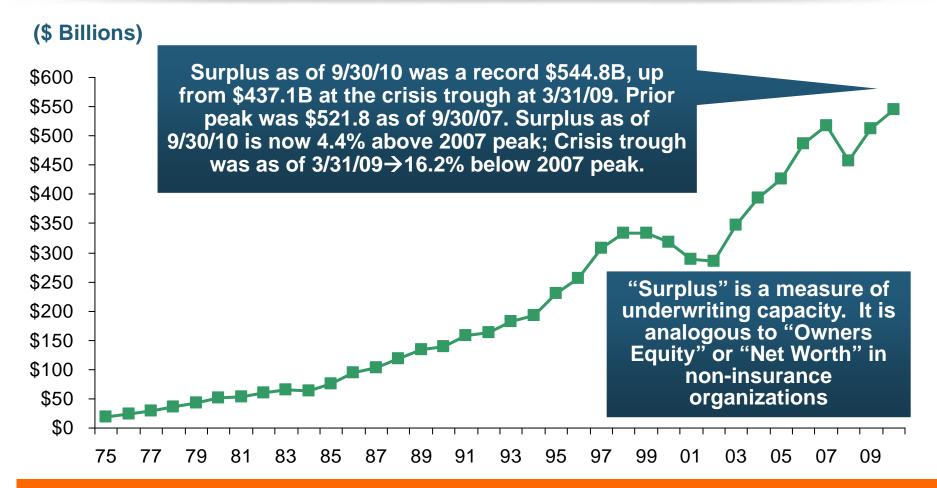


## Capital/Policyholder Surplus (US)

## Total Surplus Exhibits Little Cyclicality, While Surplus Leverage Ratios Influence Cycle

# US Policyholder Surplus: 1975–2010\*



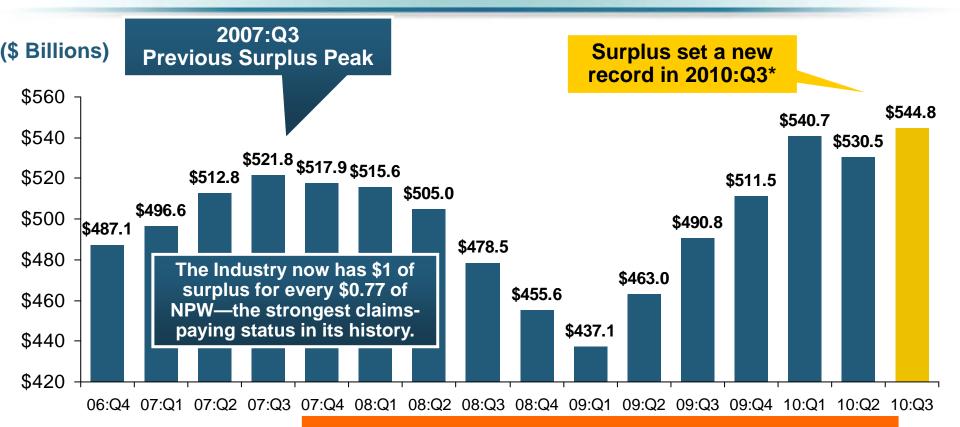


## The Premium-to-Surplus Ratio Stood at \$0.77:\$1 as of 9/30/10, A Record Low (at Least in Recent History)\*\*

\* As of 9/30/10; \*\*Calculated using annualized net premiums written based on 9-month 2010 data. Source: A.M. Best, ISO, Insurance Information Institute.

# Policyholder Surplus, 2006:Q4–2010:Q3





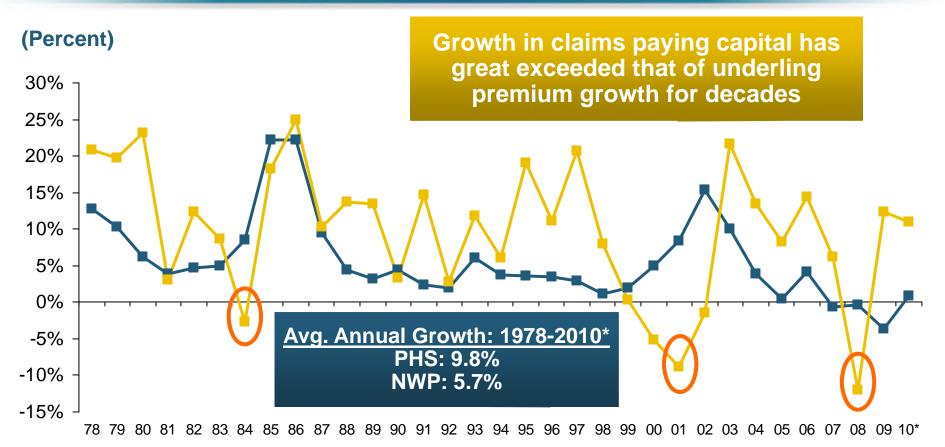
\*Includes \$22.5B of paid-in capital from a holding company parent for one insurer's investment in a non-insurance business in early 2010.

Sources: ISO, A.M .Best.

**Quarterly Surplus Changes Since 2007:Q3 Peak** 

09:Q1: -\$84.7B (-16.2%) 09:Q2: -\$58.8B (-11.2%) 09:Q3: -\$31.0B (-5.9%) 09:Q4: -\$10.3B (-2.0%) 10:Q1: +\$18.9B (+3.6%) 10:Q2: +\$8.7B (+1.7%) 10:Q3: +\$23.0B (+4.4%)

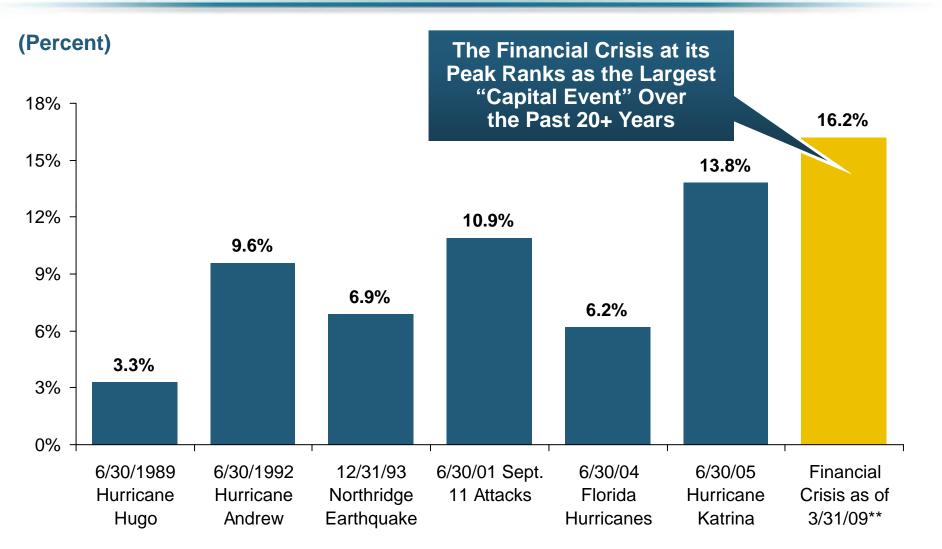
### Historically, Hard Markets Follow When Surplus "Growth" is Negative\*



The Relatively Fast Growth of Claims Paying Capital (Surplus) Has Increased the Financial Strength of the Industry Over Time, Enabling it to Better Withstand Cyclical, Financial, Economic and Catastrophe Shocks

\* 2010 NWP and Surplus figures are % changes as of Q3:10 vs Q3:09. Sources: A.M. Best, ISO, Insurance Information Institute

## Ratio of Insured Loss to Surplus for Largest Capital Events Since 1989\*



\* Ratio is for end-of-quarter surplus immediately prior to event. Date shown is end of quarter prior to event

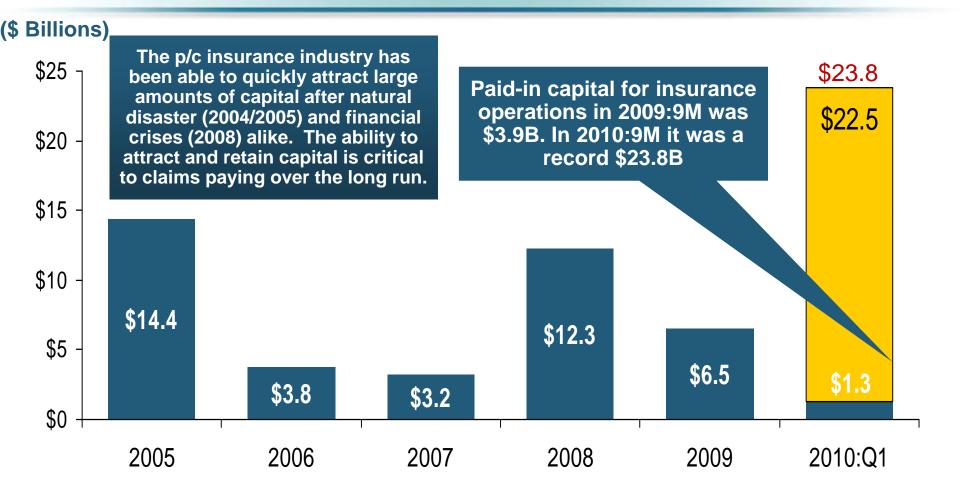
\*\* Date of maximum capital erosion; As of 9/30/09 (latest available) ratio = 5.9%

Source: PCS; Insurance Information Institute

NSURANCE

## Paid-in Capital, 2005–2010:9M

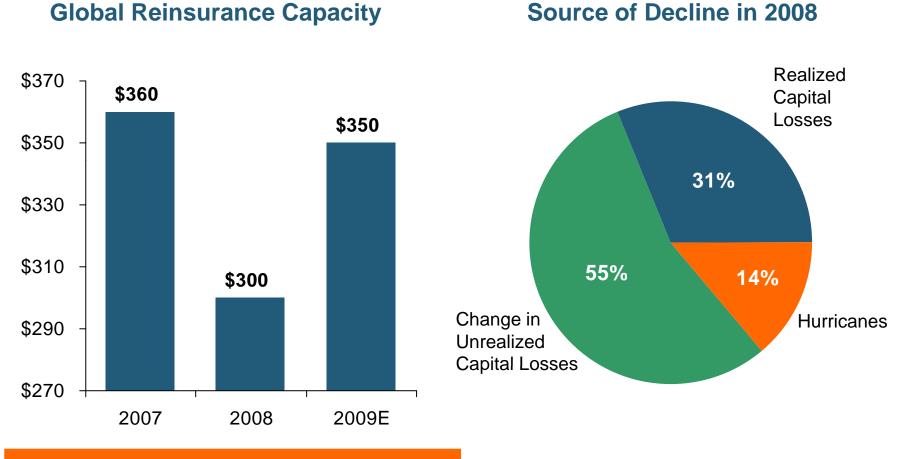




## In 2010:H1 One Insurer's Paid-in Capital Rose by \$22.5B as Part of an Investment in a Non-insurance Business

Source: ISO.

## **Global Reinsurance Capacity Shrank** in 2008, Mostly Due to Investments



#### Global Reinsurance Capacity Fell by an Estimated 17% in 2008

Source: AonBenfield Reinsurance Market Outlook 2009; Insurance Information Institute estimate for 2009.

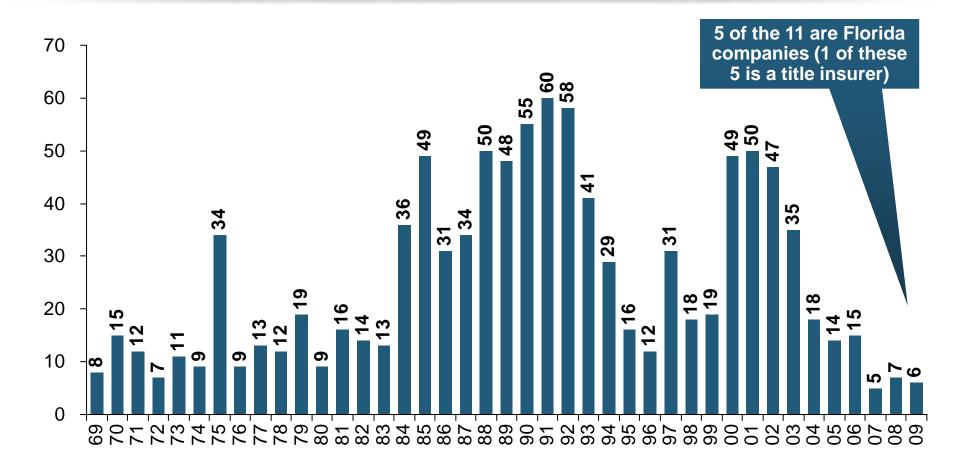
NSURANCI



## Financial Strength is Synonymous With Claims Paying Ability

Industry is Resilient but Cyclical Pattern in P-C Impairment History is Directly Tied to Underwriting, Reserving & Pricing

### P/C Insurer Impairments, 1969–2009



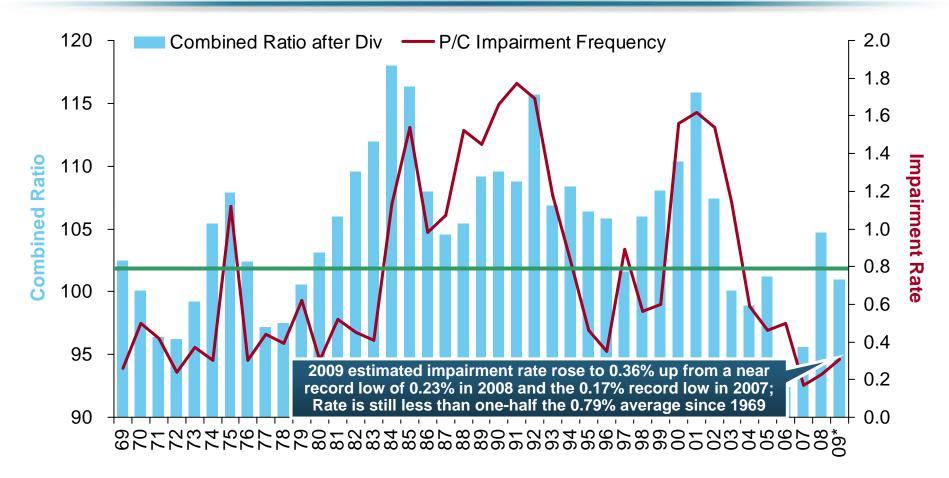
ISUDANC

The Number of Impairments Varies Significantly Over the P/C Insurance Cycle, With Peaks Occurring Well into Hard Markets

Source: A.M. Best; Insurance Information Institute.

### P/C Insurer Impairment Frequency vs. Combined Ratio, 1969-2009

INSURANCE INFORMATION INSTITUTE

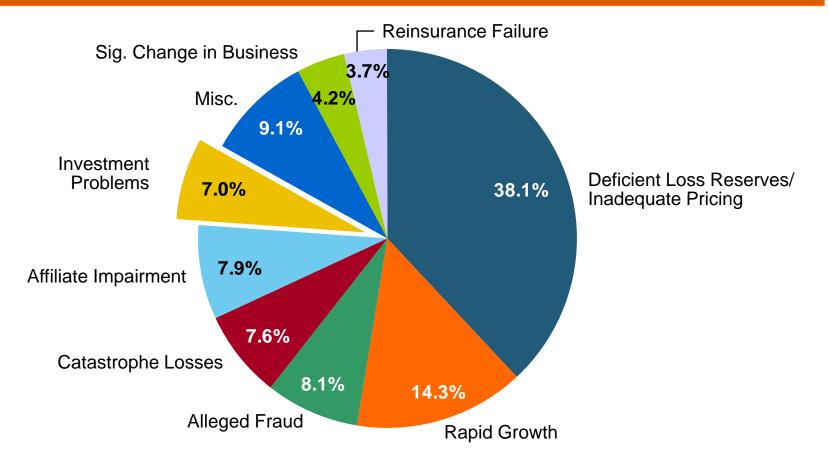


Impairment Rates Are Highly Correlated With Underwriting Performance and Reached Record Lows in 2007/08

### Reasons for US P/C Insurer Impairments, 1969–2008



Deficient Loss Reserves and Inadequate Pricing Are the Leading Cause of Insurer Impairments, Underscoring the Importance of Discipline. Investment Catastrophe Losses Play a Much Smaller Role



Source: A.M. Best: 1969-2008 Impairment Review, Special Report, Apr. 6, 2009

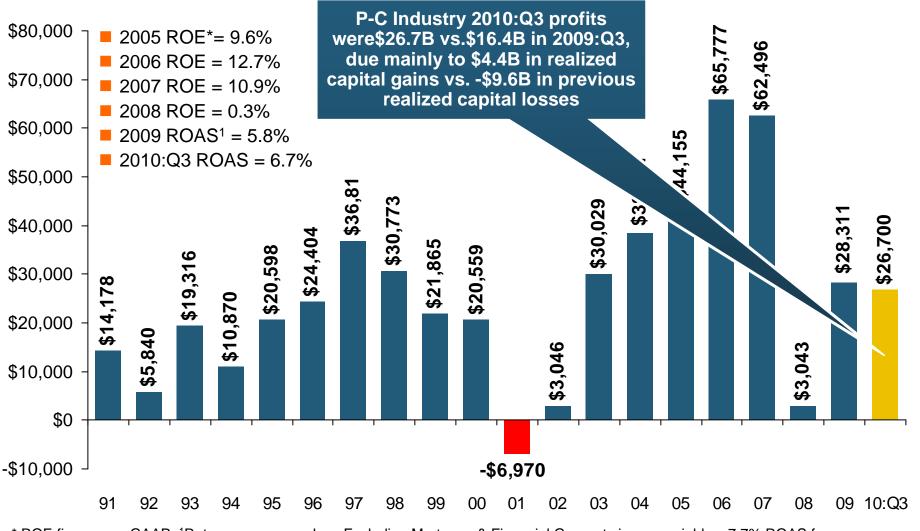


## The Ability to Pay Claims Begins With Sustained Profitability

## Profits Are Volatile but Resilient in the P/C Insurance Industry

## P/C Net Income After Taxes 1991-2010:Q3 (\$ Millions)

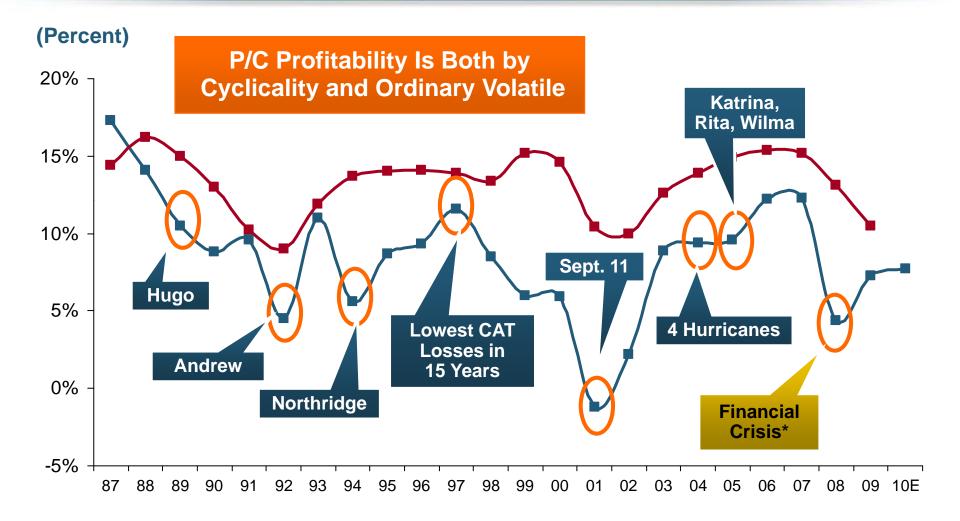




\* ROE figures are GAAP; <sup>1</sup>Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 7.7% ROAS for 2010:Q3 and 4.6% for 2009. 2009:Q3 net income was \$29.8 billion excluding M&FG.

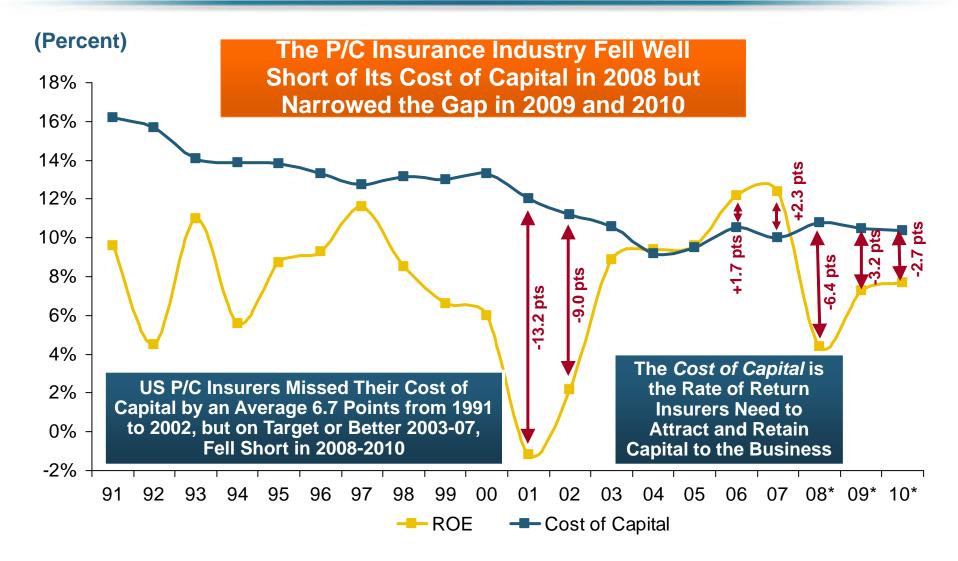
Sources: A.M. Best, ISO, Insurance Information Institute

# ROE: Property/Casualty Insurance, 1987–2010E\*



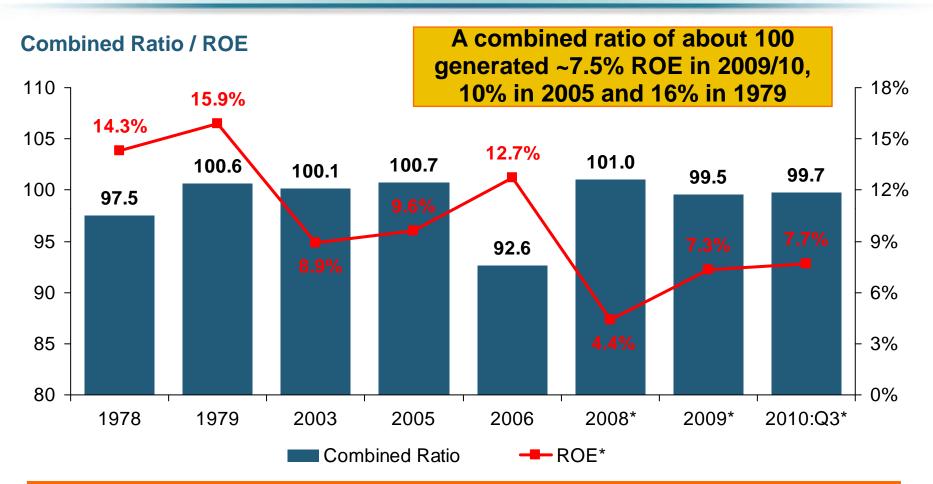
\* Excludes Mortgage & Financial Guarantee in 2008 - 2010. Sources: ISO, *Fortune*; Insurance Information Institute figure for 2010 is actual through 2010:Q3. INSURANCE

## ROE vs. Equity Cost of Capital: U.S. P/C Insurance:1991-2010:9-Months\*



\* Return on average surplus in 2008-2010 excluding mortgage and financial guaranty insurers. Source: The Geneva Association. Insurance Information Institute

## A 100 Combined Ratio Isn't What It Once Was: Investment Impact on ROEs



INSURANCE

#### Combined Ratios Must Be Lower in Today's Depressed Investment Environment to Generate Risk Appropriate ROEs

\* 2009 and 2010:Q3 figures are return on average statutory surplus. 2008, 2009 and 2010:H1figures exclude mortgage and financial guaranty insurers

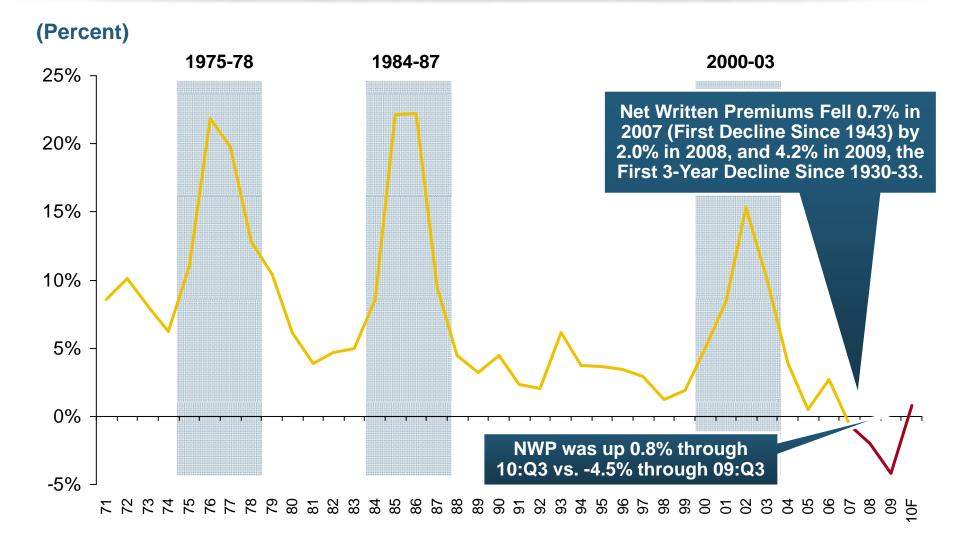
Source: Insurance Information Institute from A.M. Best and ISO data.



## Claims Paying Ability Must Be Maintained Over the Cycle

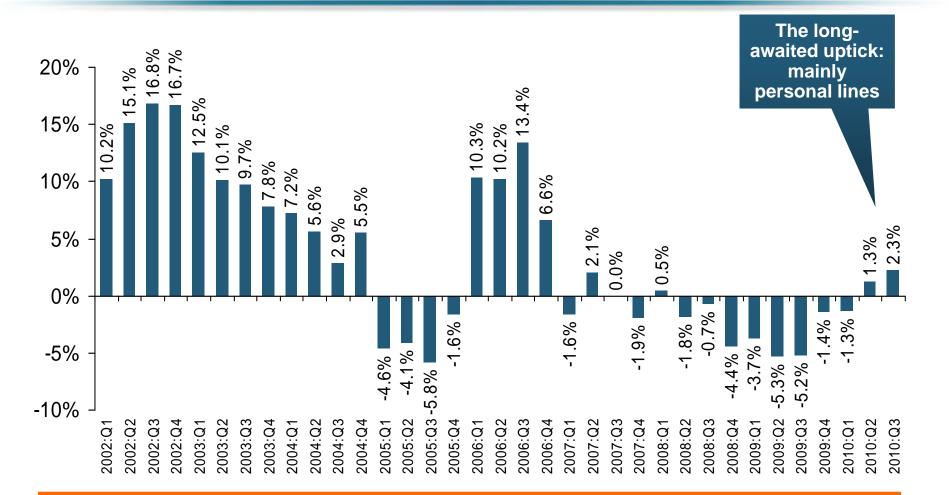
Industry's Ability to Pay Claims Was Unimpaired by Protracted Period of Weak/Negative Growth

### Soft Market Persisted in 2010 but May Be Easing: Relief in 2011?



Shaded areas denote "hard market" periods Sources: A.M. Best (historical and forecast), ISO, Insurance Information Institute.

### P/C Net Premiums Written: % Change, Quarter vs. Year-Prior Quarter



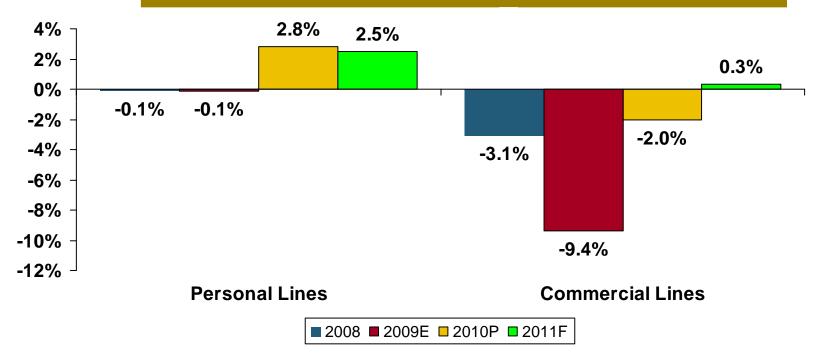
## Finally! Back-to-back quarters of net written premium growth (vs. the same quarter, prior year)

Sources: ISO, Insurance Information Institute.

### Net Written Premium Growth by Segment: 2008-2011F



Personal lines growth resumed in 2010 and will continue in 2011, while commercial lines contracted again in 2010 and but will stabilize in 2011



Rate and exposure are more favorable in personal lines, whereas a prolonged soft market and sluggish recovery from the recession weigh on commercial lines.

Sources: A.M. Best; Insurance Information Institute.



## Claims Paying Ability Must Be Maintained Irrespective of Investment Climate

## Investment Volatility Shouldn't Matter to Policyholders

### Property/Casualty Insurance Industry Investment Gain: 1994–2010:Q3<sup>1</sup>



INSURANCE

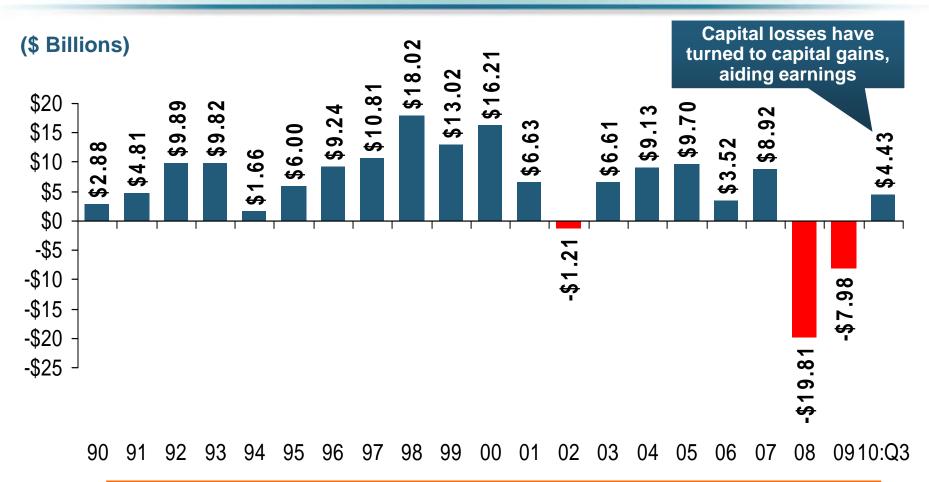
<sup>1</sup> Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.

\* 2005 figure includes special one-time dividend of \$3.2B.

Sources: ISO; Insurance Information Institute.

### P/C Insurer Net Realized Capital Gains, 1990-2010:Q3

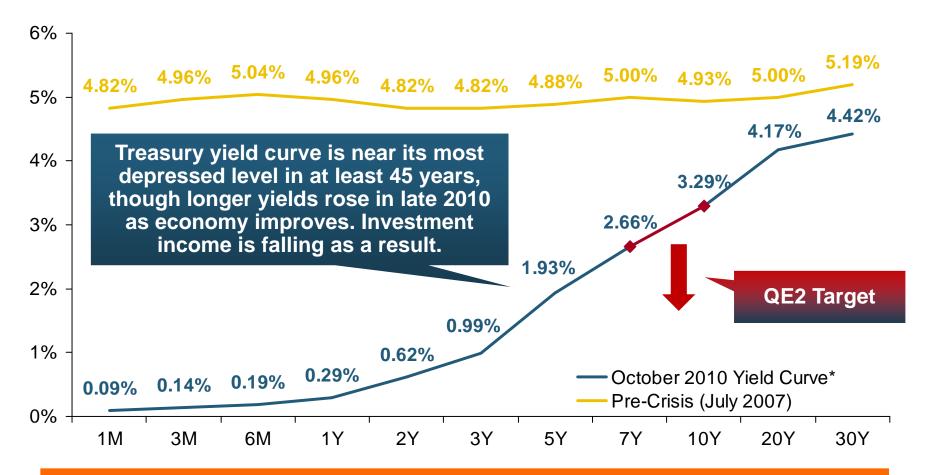




#### Realized Capital Losses Were the Primary Cause of 2008/2009's Large Drop in Profits and ROE and Were a Major Driver of Its Recovery in 2010

Sources: A.M. Best, ISO, Insurance Information Institute.

### Treasury Yield Curves: Pre-Crisis (July 2007) vs. December 2010

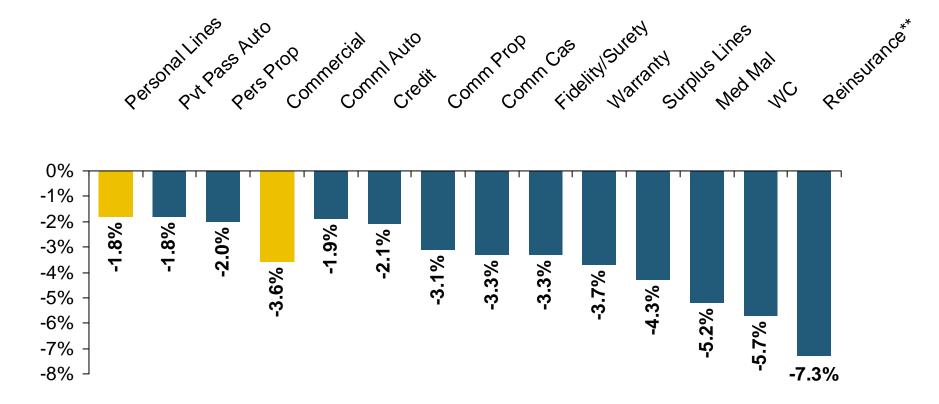


#### The Fed's Announced Intention to Pursue Additional Quantitative Easing Could Further Depress Rates in the 7 to 10-Year Maturity Range

Sources: Board of Governors of the United States Federal Reserve Bank; Insurance Information Institute.

#### Reduction in Combined Ratio Necessary to Offset 1% Decline in Investment Yield to Maintain Constant ROE, by Line\*





#### Lower Investment Earnings Place a Greater Burden on Underwriting and Pricing Discipline

\*Based on 2008 Invested Assets and Earned Premiums

\*\*US domestic reinsurance only

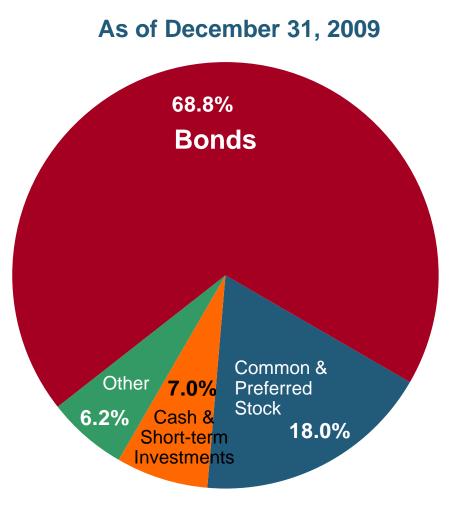
Source: A.M. Best; Insurance Information Institute.

## Distribution of P/C Insurance Industry's Investment Portfolio



## Portfolio Facts as of 12/31/2009

- Invested assets totaled \$1.26 trillion
- Generally, insurers invest conservatively, with over 2/3 of invested assets in bonds
- Only 18% of invested assets were in common or preferred stock



\*Net admitted assets. Sources: NAIC; Insurance Information Institute research.

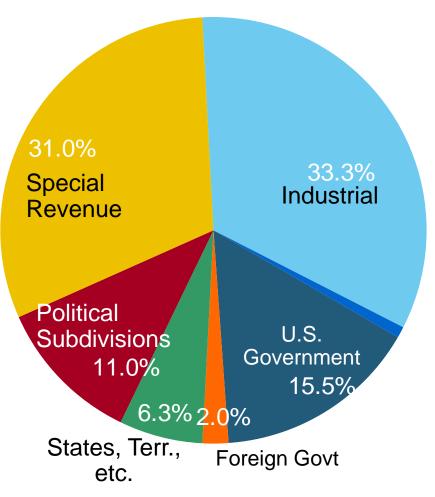
#### 2011 Financial Overview About Half of the P/C Insurance Industry's Bond Investments Are in Municipal Bonds



Bond Investment Facts as of 12/31/09

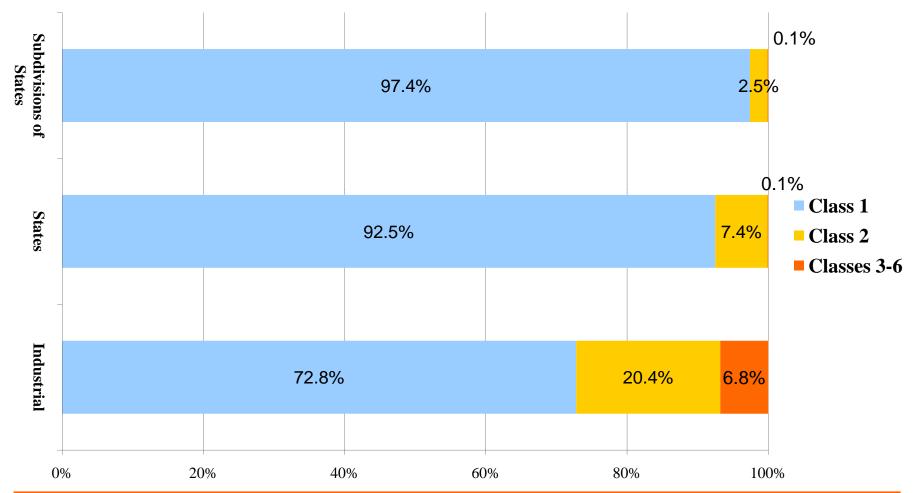
- Investments in "Political Subdivision [of states]" bonds were \$102.5 billion
- Investments in "States, Territories, & Possessions" bonds were \$58.9 billion
- Investments in "Special Revenue" bonds were \$288.2 billion
- All state, local, and special revenue bonds totaled 48.2% of bonds, about 35.7% of total invested assets

As of December 31, 2009



Sources: NAIC, via SNL Financial; Insurance Information Institute research.

#### **2011 Financial Overview** When P/C Insurers Invest in Higher Risk Bonds, It's Corporates, Not Munis



INSURANCE

#### The NAIC's Securities Valuation Office puts bonds into one of 6 classes: class 1 has the lowest expected impairments; successively higher numbered classes imply increasing impairment likelihood.

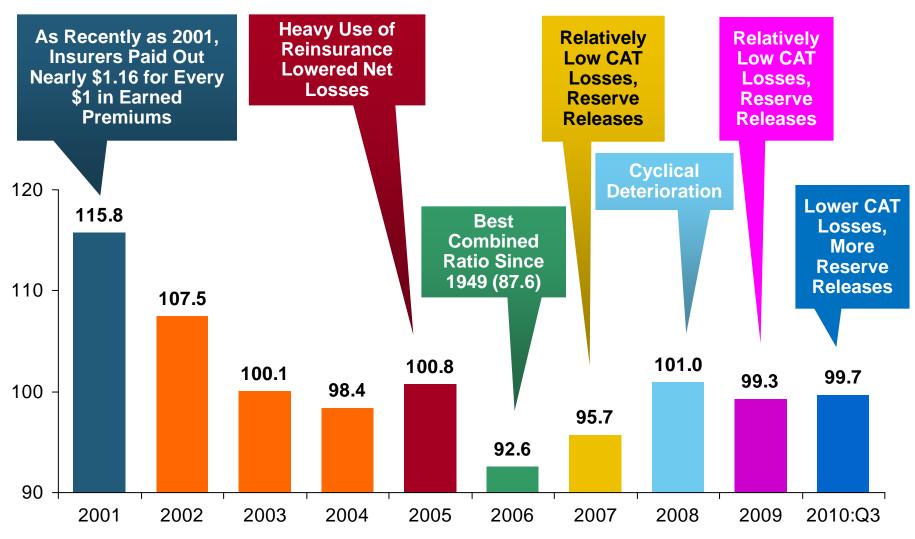
Data are as of year-end 2009.

Sources: SNL Financial; Insurance Information Institute.



Strength Through Underwriting: Underwriting Profits Support Claims Paying Capability When Investments Can't

#### P/C Insurance Industry Combined Ratio, 2001–2010:Q3\*

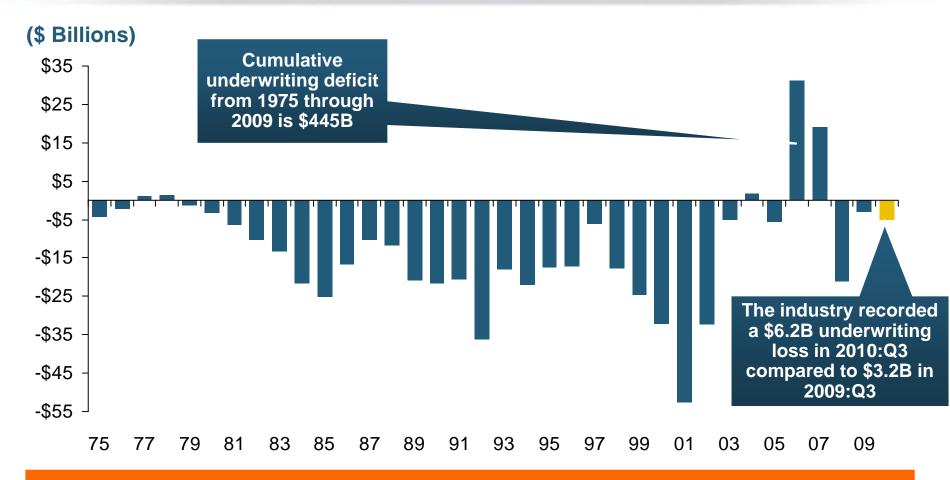


\* Excludes Mortgage & Financial Guaranty insurers in 2008, 2009 and 2010. Including M&FG, 2008=105.1, 2009=100.7, 2010:Q3=101.2 Sources: A.M. Best, ISO.

INSURANCE

### Underwriting Gain (Loss) 1975–2010:Q3\*



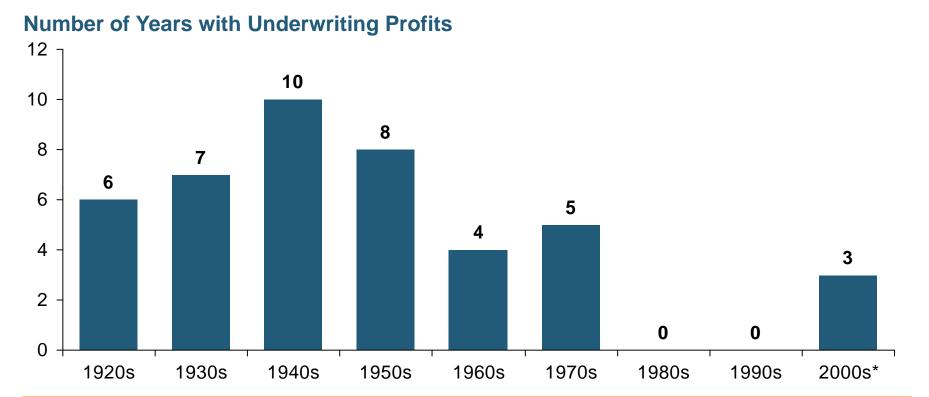


#### Large Underwriting Losses Are *NOT* Sustainable in Current Investment Environment

\* Includes mortgage and financial guarantee insurers.

Sources: A.M. Best, ISO; Insurance Information Institute.

## Number of Years with Underwriting Profits by Decade, 1920s–2000s



Underwriting Profits Were Common Before the 1980s (40 of the 60 Years Before 1980 Had Combined Ratios Below 100) – But Then They Vanished. Not a Single Underwriting Profit Was Recorded in the 25 Years from 1979 Through 2003

\* 2000 through 2009. 2009 combined ratio excluding mortgage and financial guaranty insurers was 99.3, which would bring the 2000s total to 4 years with an underwriting profit.

Note: Data for 1920–1934 based on stock companies only.

Sources: Insurance Information Institute research from A.M. Best Data.

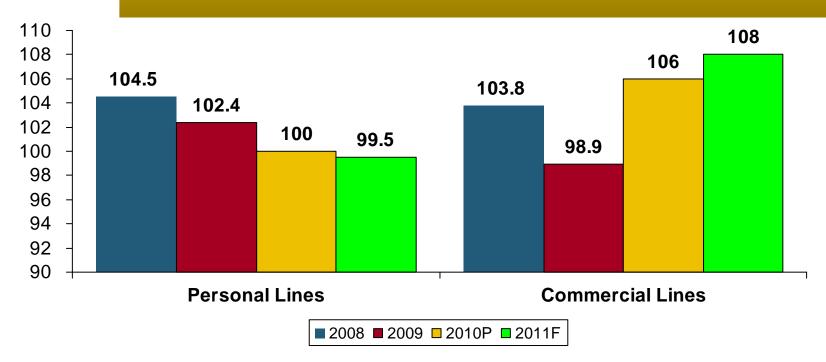


## **Performance by Segment: Commercial/Personal Lines**

## Calendar Year Combined Ratios by Segment: 2008-2011F



Personal lines combined ratio is expected to remain stable in 2010 while commercial lines and reinsurance deteriorate



Overall deterioration in 2011 underwriting performance is due to expected return to normal catastrophe activity along with deteriorating underwriting performance related to the prolonged commercial soft market

Sources: A.M. Best . Insurance Information Institute.

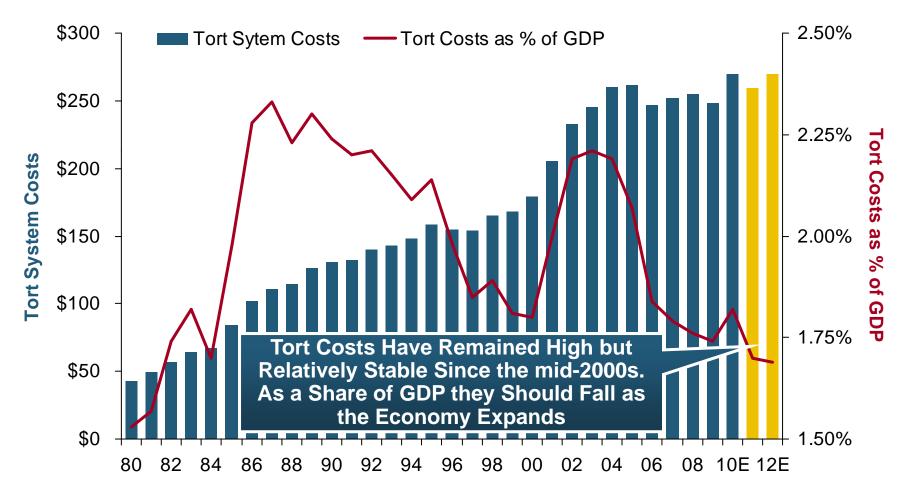


## Legal Liability & Tort Environment Can Stress Claims Paying Ability

# Tort Trends Have a Major Impact on the Price/Availability of Insurance

# **Over the Last Three Decades, Total Tort Costs as a % of GDP Appear Somewhat Cyclical**

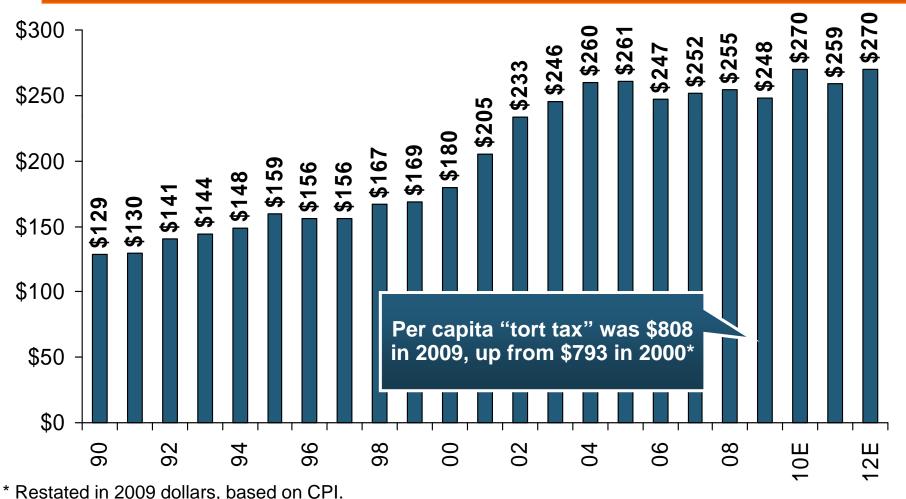
(\$ Billions)



### **Cost of US Tort System (\$ Billions)**

#### Tort costs consumed 1.74% of GDP in 2009, down from 2.21% in 2003

NSURANCE



Source: Towers Watson, 2010 Update on US Tort Cost Trends.

#### **Business Leaders Ranking of Liability** Systems in 2010

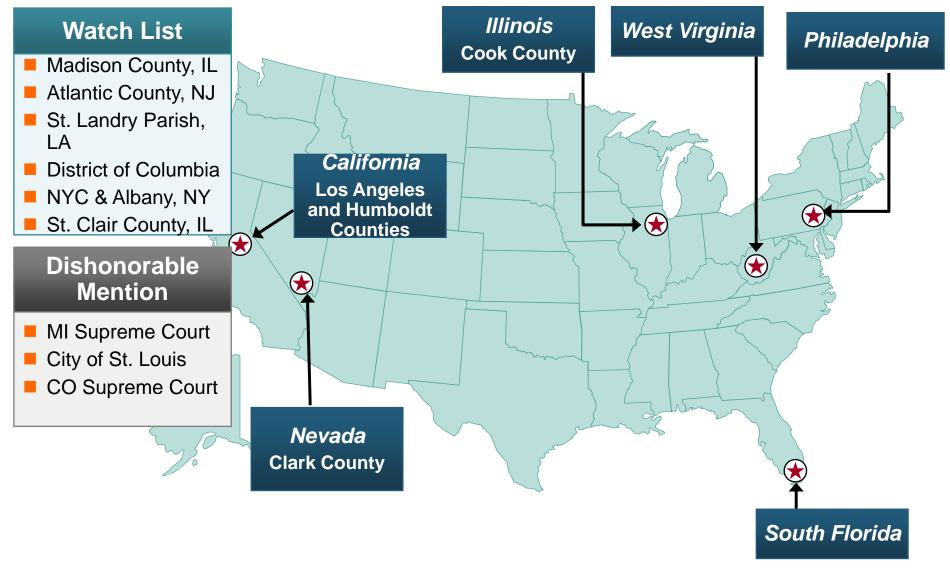


	<b>Best States</b>			Worst Sta	tes
-	Dest Otates	New in 2010		<u> </u>	<u></u>
1.	Delaware	North Dakota	41.	New Mexico	Newly Notorious
2.	North Dakota	<ul> <li>Massachusetts</li> <li>South Dakota</li> </ul>	42.	Florida	New Mexico
3.	Nebraska		43.	Montana	<ul><li>Montana</li><li>Arkansas</li></ul>
4.	Indiana		44.	Arkansas	
5.	Iowa	Drop-offs	45.	Illinois	Rising Above
6.	Virginia	Maine	46.	California	Texas
7.	Utah	<ul><li>Vermont</li><li>Kansas</li></ul>	47.	Alabama	<ul><li>South Carolina</li><li>Hawaii</li></ul>
8.	Colorado		48.	Mississippi	
9.	Massachusetts	Midwest/West has mix		Louisiana	
10.	South Dakota	good and bad states	50.	West Virginia	

Source: US Chamber of Commerce 2010 State Liability Systems Ranking Study; Insurance Info. Institute.

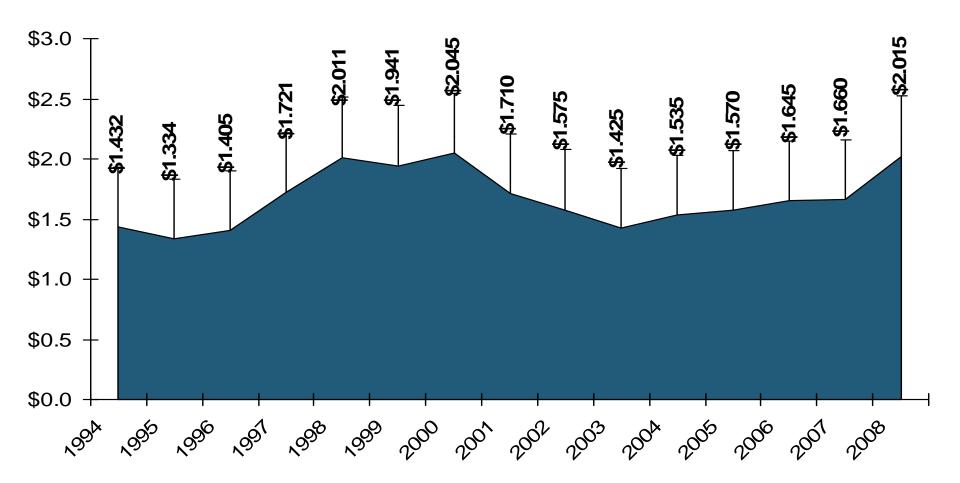
## The Nation's Judicial Hellholes: 2010

INSURANCE INFORMATION INSTITUTE



Source: American Tort Reform Association; Insurance Information Institute

#### Excess Liability Market Capacity North America (\$ Billions)



INSURANCE

Source: Marsh, 2008 Limits of Liability Report

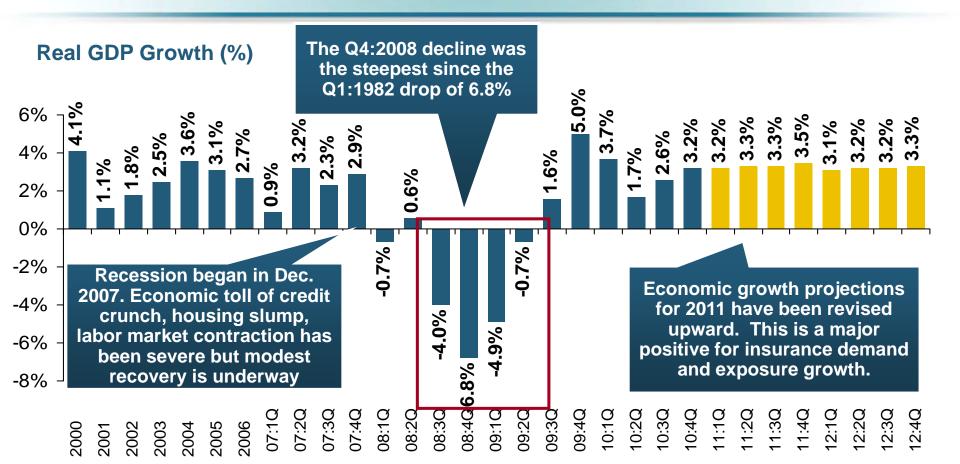


# Claims Paying Ability and the Economy

Insurers Must Have the Ability to Pay Claims Even in Times of Economic Turmoil and Panic

### **US Real GDP Growth\***



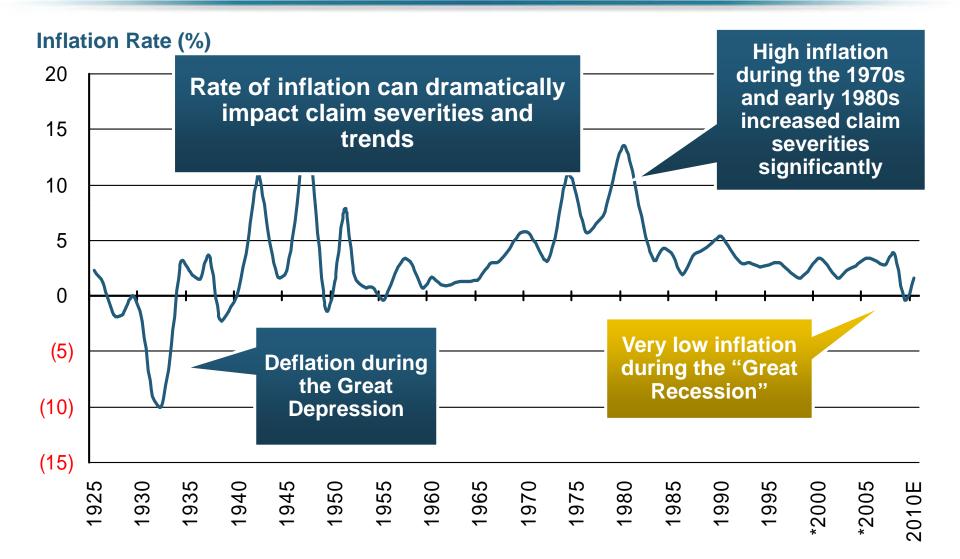


Demand for Insurance Continues To Be Impacted by Sluggish Economic Conditions, but the Benefits of Even Slow Growth Will Compound and Gradually Benefit the Economy Broadly

\* Estimates/Forecasts from Blue Chip Economic Indicators.

Source: US Department of Commerce, Blue Economic Indicators 1/11; Insurance Information Institute.

## Inflation Rate (CPI-U), 1925–2010\*



Sources: US Bureau of Labor Statistics; Insurance Information Institute

INSURANCE



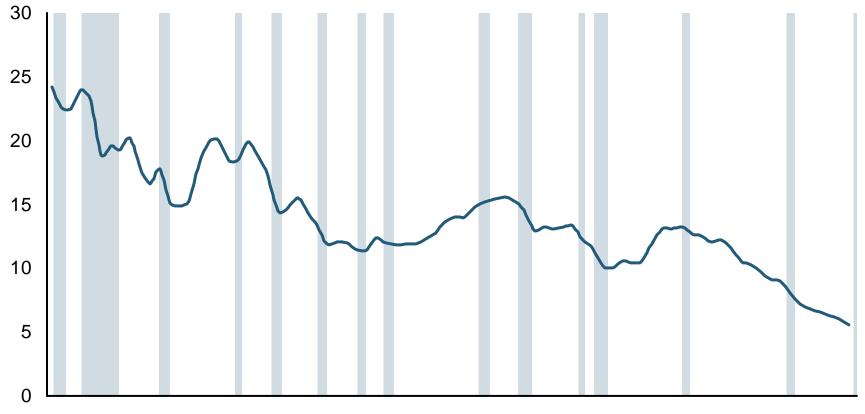
## Capital/Capacity Are Not Enough

## **Risk Management Matters**

#### Frequency: 1926–2008 A Long-Term Drift Downward



#### Manufacturing – Total Recordable Cases Rate of Injury and Illness Cases per 100 Full-Time Workers



'26 '29 '32 '35 '39 '42 '45 '48 '52 '55 '58 '61 '65 '68 '71 '74 '78 '81 '84 '87 '91 '94 '97 '00 '04 '07

Note: Recessions indicated by gray bars. Sources: NCCI from US Bureau of Labor Statistics; National Bureau of Economic Research

## Examples Where Attention Risk Management Reduces Claims



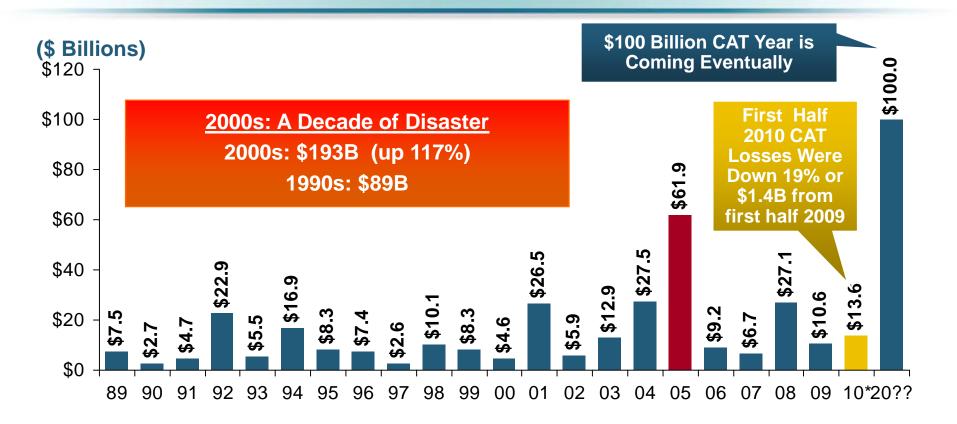
- Workplace Safety
- Automobile and Highway Safety
- Aviation
- Marine
- Health & Environmental Safety
- Food Safety
- Medicine
- Energy
- Corporate Governance (D&O)



# Catastrophic Loss – Catastrophe Losses Trends Are Trending Adversely

## **US Insured Catastrophe Losses**



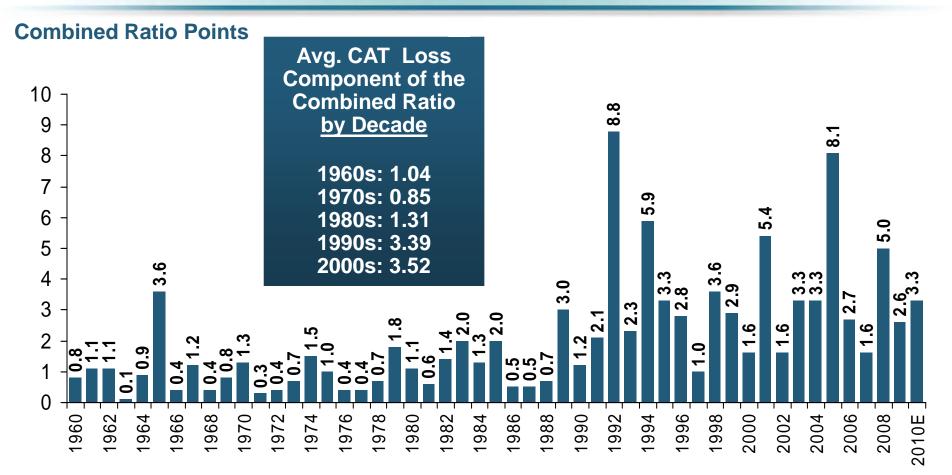


#### 2010 CAT Losses Were Close to "Average" Figures Do Not Include an Estimate of Deepwater Horizon Loss

\*Estimate from Munich Re.

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

# Combined Ratio Points Associated with Catastrophe Losses: 1960 – 2010E

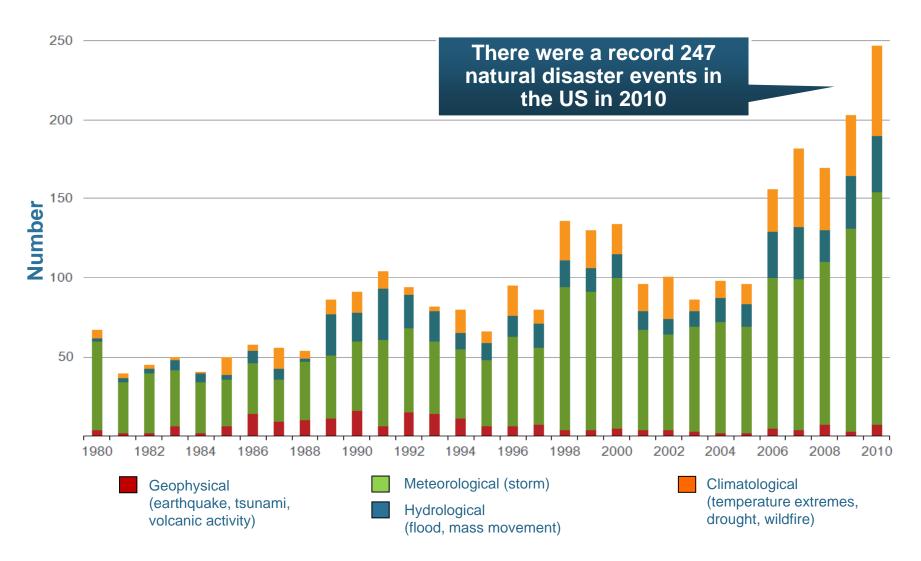


#### The Catastrophe Loss Component of Private Insurer Losses Has Increased Sharply in Recent Decades

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; Insurance Information Institute estimate for 2010.

#### Natural Disasters in the United States, 1980 – 2010 Number of Events (Annual Totals 1980 – 2010)



INSURANCE

INFORMATION

# Insured Losses Due to Weather Perils in the U.S.: 1980 – 2010



#### (Tropical Cyclone, Thunderstorm, and Winter Storm only) 100 For the second year in a row, nnual Insurance Loss insured losses due to 90 -Year Running Mean Insured Loss (\$ billion, 2010 dollars) weather perils in the U.S. in 80 2010 were the highest on record for a year without a 70 hurricane landfall. 60 50 40 30 20 10 0 2004 1984 1988 1992 1996 2000 2008 1980 Year

Sources: MR NatCat SERVICE, Property Claims Services

© 2011 Munich Re



#### (\$1 Billion + Economic Loss and/or 50 Fatalities)

Date (As of January 1, 2011)	Event	Estimated Economic Losses (US \$m)	Estimated Insured Losses (US \$m)
March 13 - 15	Winter Storm	1,700	1,225
April 30 – May 3	Thunderstorms	2,700	800
May 12 – 1	Thunderstorms	2,700	2,000†
July 20 – 25	Thunderstorms	1,050	785†
October 4 – 6	Thunderstorms	2,000	1,450 <sup>†</sup>

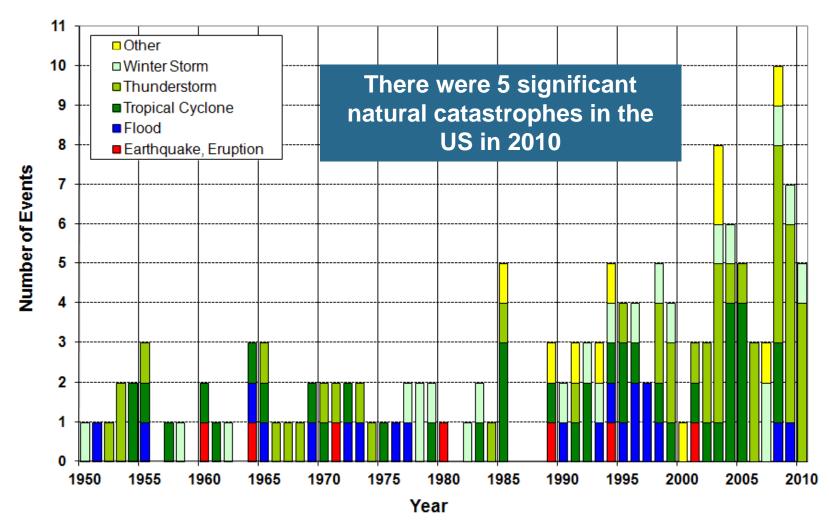
# Natural Disasters in the United States, 2010 (Insured Losses)



As of December 31, 2010	Fatalities	Estimated Overall Losses (US \$m)	Estimated Insured Losses (US \$m)
Severe Thunderstorms	56	13,185	9,503
Winter Storm	64	3,734	2,625
Flood	68	2,933	1,059
Wildfire	1	314	210
Earthquake	0	200	128
Tropical Cyclone	8	200	120

## Significant Natural Catastrophes, 1950 – 2010

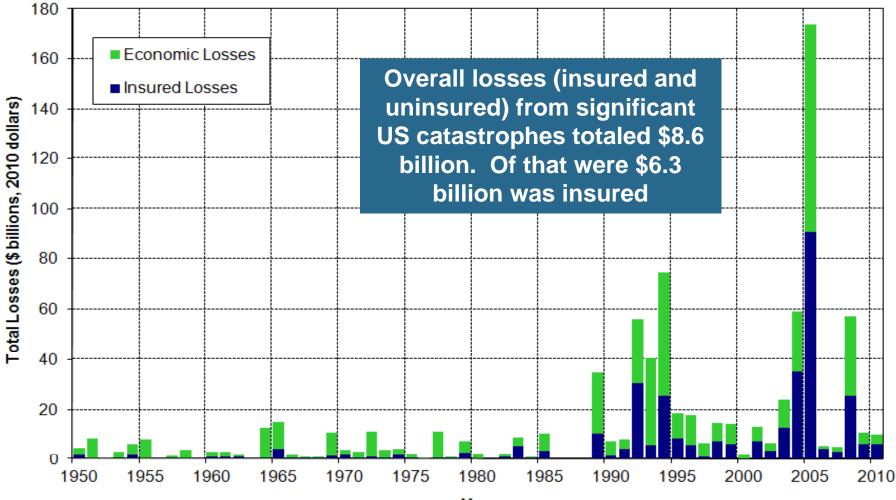
#### Number of Events (\$1 billion economic loss and/or 50 fatalities)



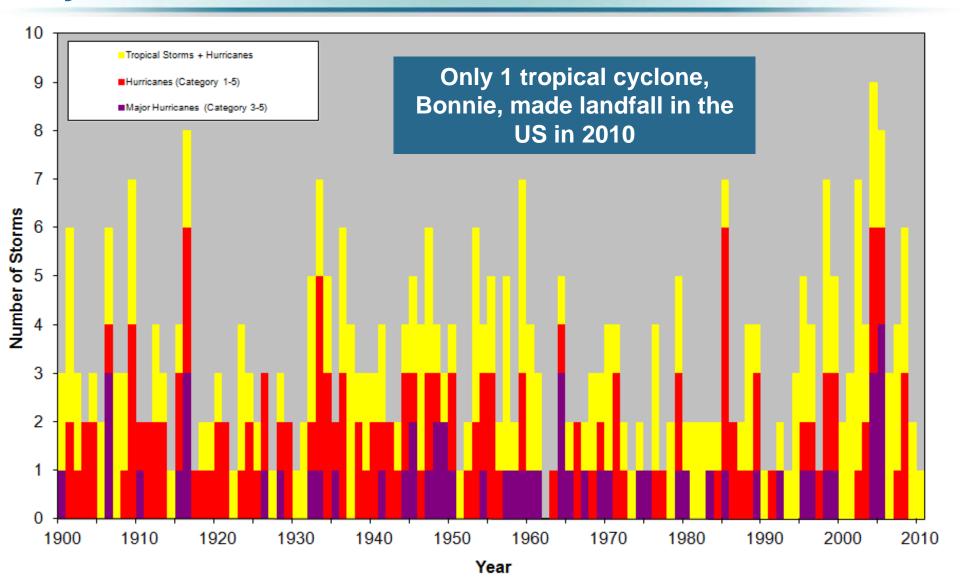
#### Significant Natural Catastrophes, 1950 – 2010



#### Losses (\$1 billion economic loss and/or 50 fatalities)

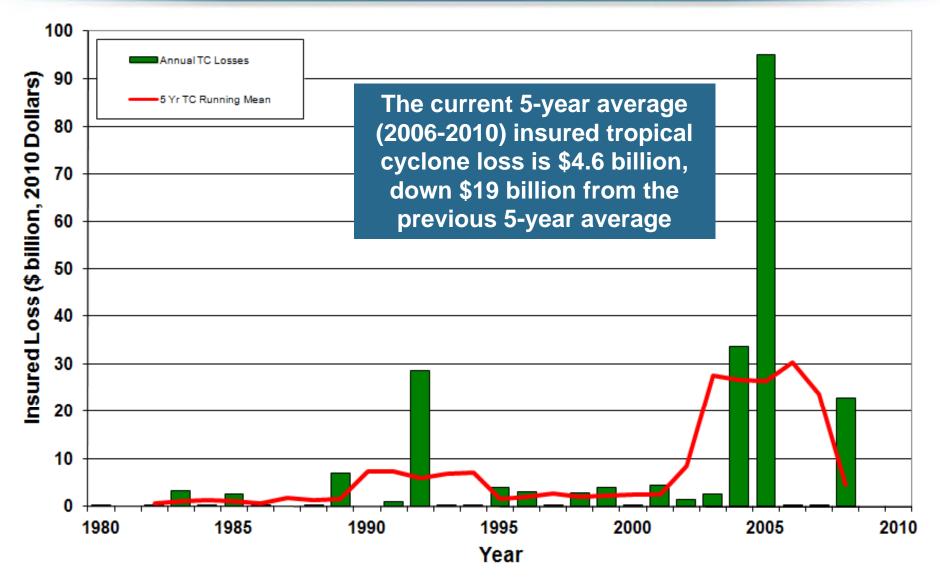


# Number of U.S. Landfalling Tropical Cyclones, 1900 – 2010



INSURANCE

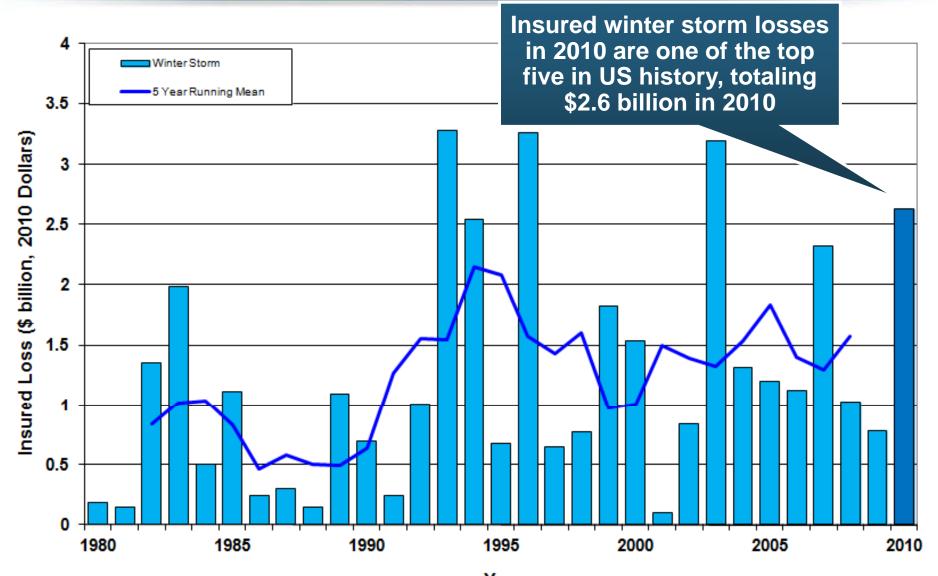
#### Insured U.S. Tropical Cyclone Losses, 1980 – 2010



NSURANCE

#### U.S. Winter Storm Loss Trends, 1980 – 2010 (Annual Totals)

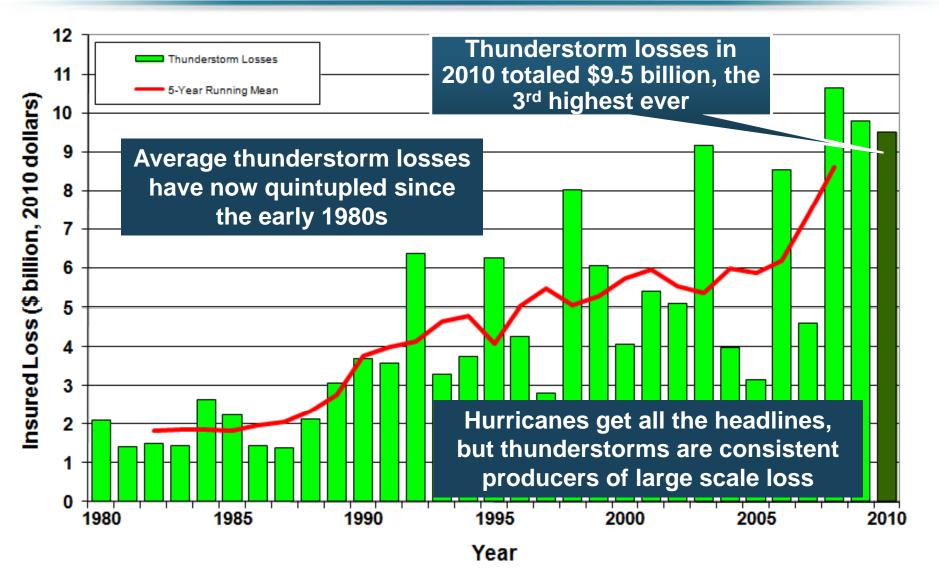




Source: Property Claims Service, MR NatCatSERVICE

Year

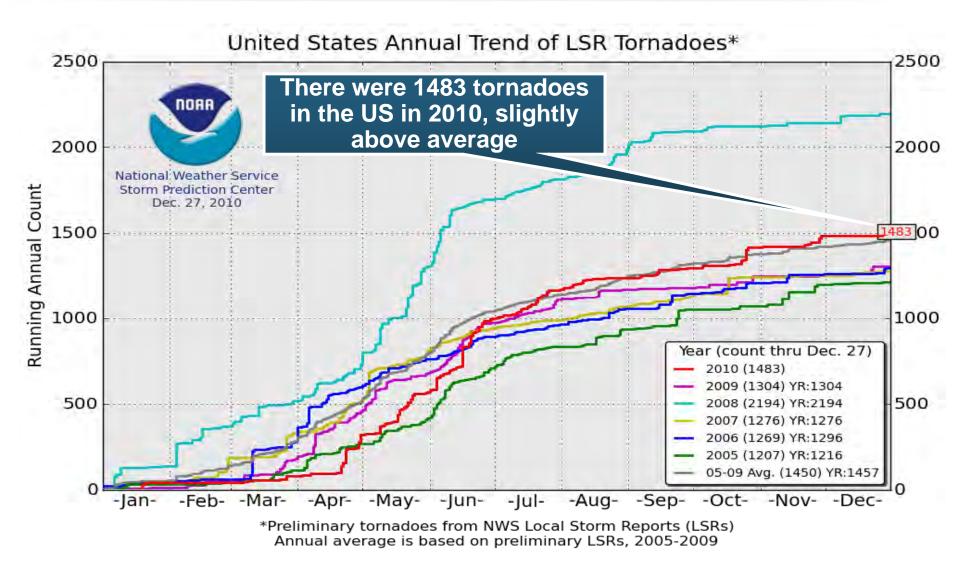
### U.S. Thunderstorm Loss Trends, 1980 – 2010 (Annual Totals)



NSUDANCE

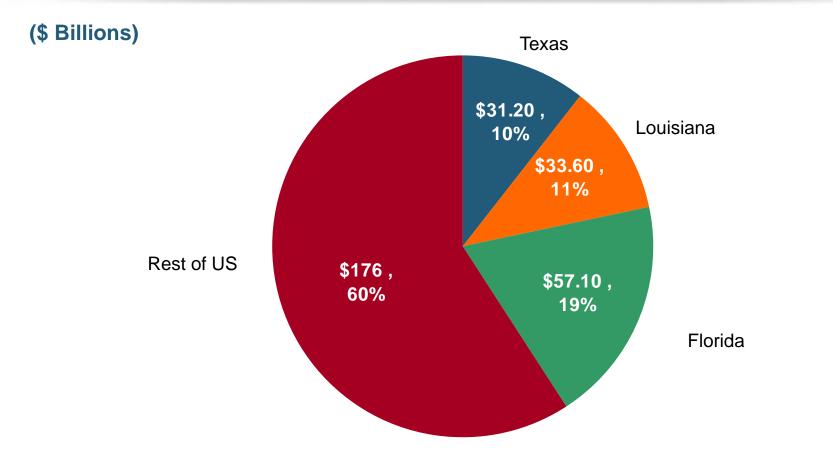
## U.S. Tornado Count, 2010





## Distribution of US Insured CAT Losses: TX, FL, LA vs. US, 1980-2008\*





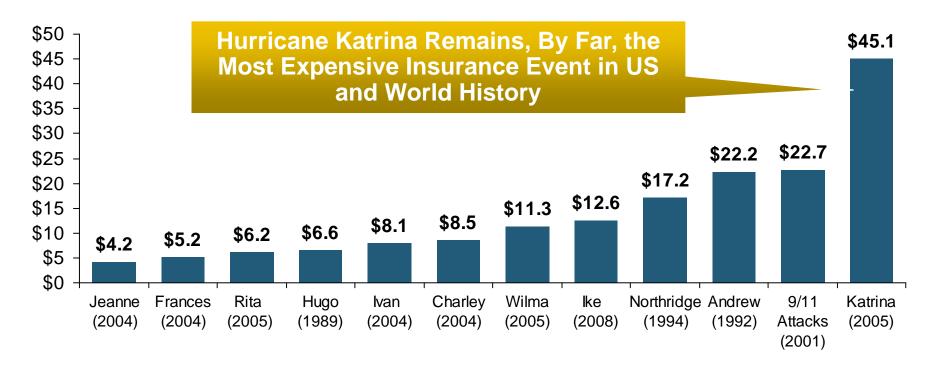
#### Texas Accounted for 10% of All US Insured CAT Losses from 1980-2008: \$57.1B out of \$297.9B

\* All figures (except 2006-2008 loss) have been adjusted to 2005 dollars. Source: PCS division of ISO.

### Top 12 Most Costly Disasters in US History

INSURANCE INFORMATION INSTITUTE

(Insured Losses, 2009, \$ Billions)

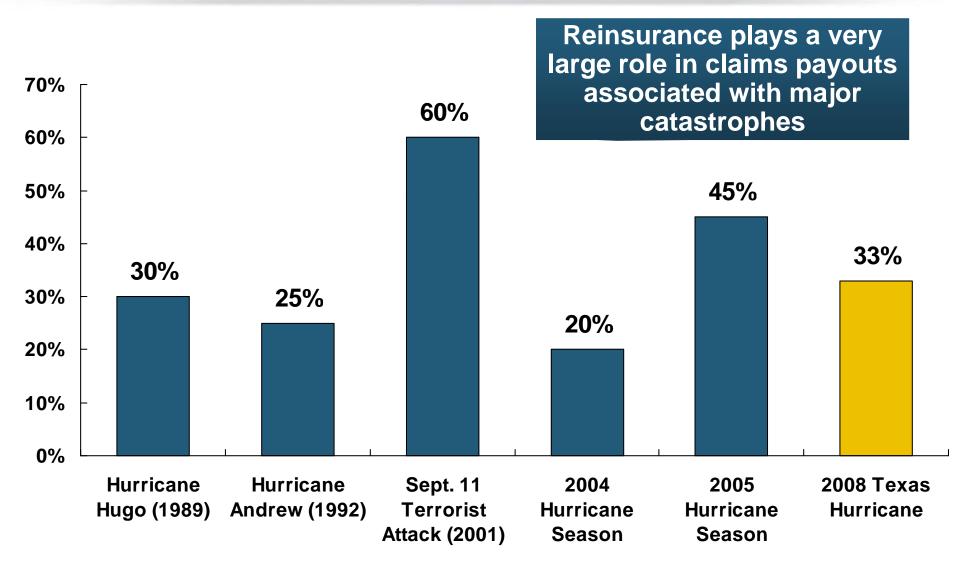


8 of the 12 Most Expensive Disasters in US History Have Occurred Since 2004; 8 of the Top 12 Disasters Affected FL

Sources: PCS; Insurance Information Institute inflation adjustments.

### Share of Losses Paid by Reinsurers for Major Catastrophic Events

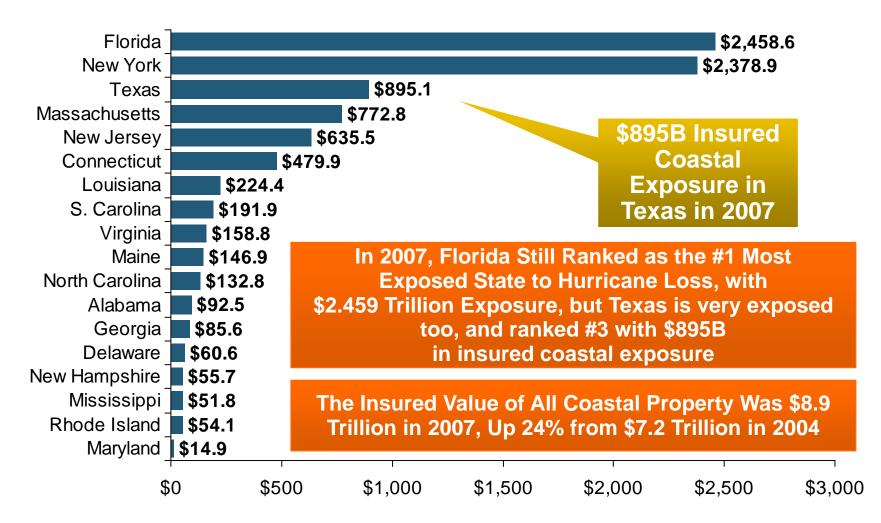




Source: Wharton Risk Center, Disaster Insurance Project, Renaissance Re, Insurance Information Institute.

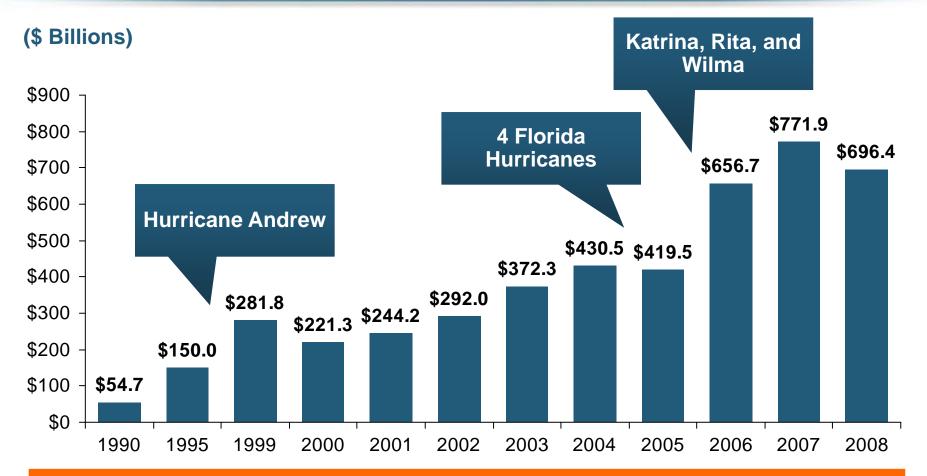
## Total Value of Insured Coastal Exposure

#### (2007, \$ Billions)



# US Residual Market Exposure to Loss





In the 19-year Period Between 1990 and 2008, Total Exposure to Loss in the Residual Market (FAIR & Beach/Windstorm) Plans Has Surged from \$54.7B in 1990 to \$696.4B in 2008

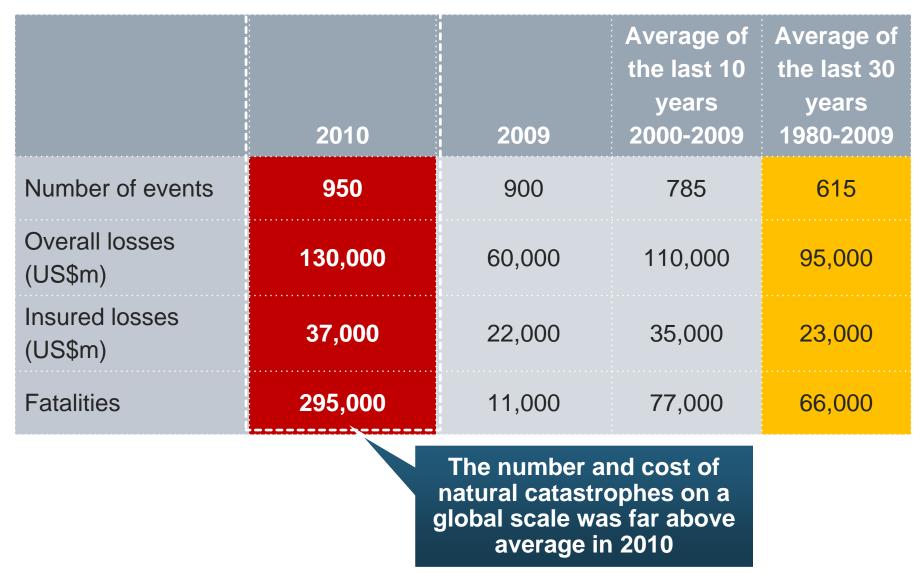


# **Global Catastrophe Loss Trends**

# Claims Paying Capacity Will Need to Increase in the Future if Current Disaster Trends Continue

# Natural Catastrophes, 2010

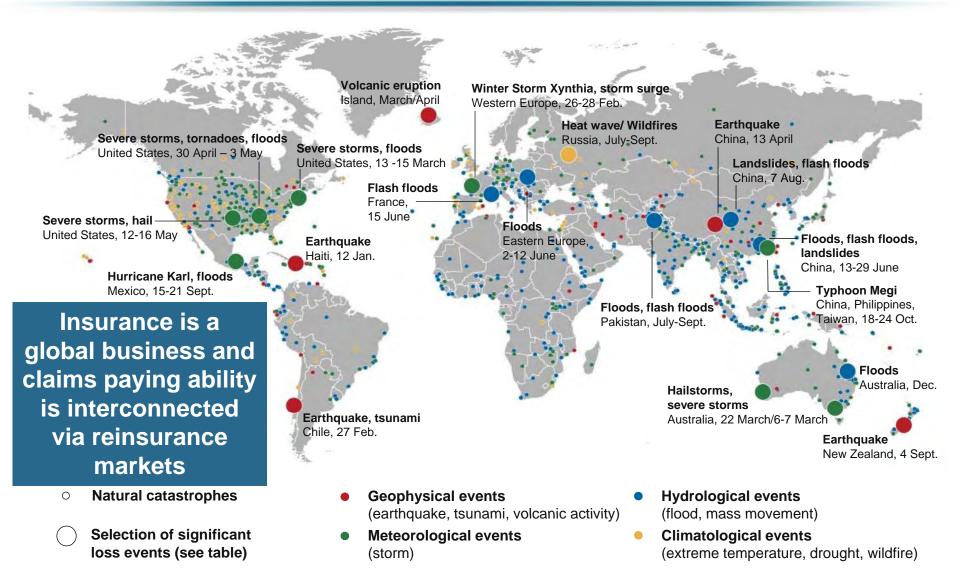
Overview and comparison with previous years





#### Natural Catastrophes, 2010 950 loss events

#### INSURANCE INFORMATION INSTITUTE



# Natural Catastrophes, 2010

The five costliest natural catastrophes for the insurance industry



Date	Region	Event	Fatalities	Overall Iosses US\$m	Insured Iosses US\$m
27.2.2010	Chile	Earthquake, tsunami	520	30,000	8,000
3.9.2010	New Zealand	Earthquake (Preliminary estimation October 2010)		3,700*	3,300*
26-28.2.2010	Europe	Winter Storm Xynthia	65	6,100	3,100
12-16.5.2010	USA	Severe storm, hail	3	2,700	2,000
4-6.10.2010	USA	Severe storm, tornadoes		2,000	1,450

\*Loss estimation in progress

Source: Geo Risks Research, NatCatSERVICE

#### Natural Catastrophes, 2010 Insured losses US\$ 37bn - % distribution by continent

US accounts for the greatest share of losses over the past 30 years, but more losses in the future will originate in developing countries

41%

296.	(15%) 0 < 19	6	20%
			39.7
	Africa	-	
	America	23,000	
	Asia	750	
	Australia/Oceania	7,500	
	Europe	5,500	

## Natural Catastrophes, 1980 - 2009

03%



US accounts for the greatest share of losses over the past 30 years, but more losses in the future will originate in developing countries

66%

Continent	Insured losses [US\$ m – in 2010 values		
Africa	2,000		
America	475,000		
Asia	66,000		
Australia/Oceania	15,000		
Europe	142,000		

20%

• <1%

Source: Geo Risks Research, NatCatSERVICE

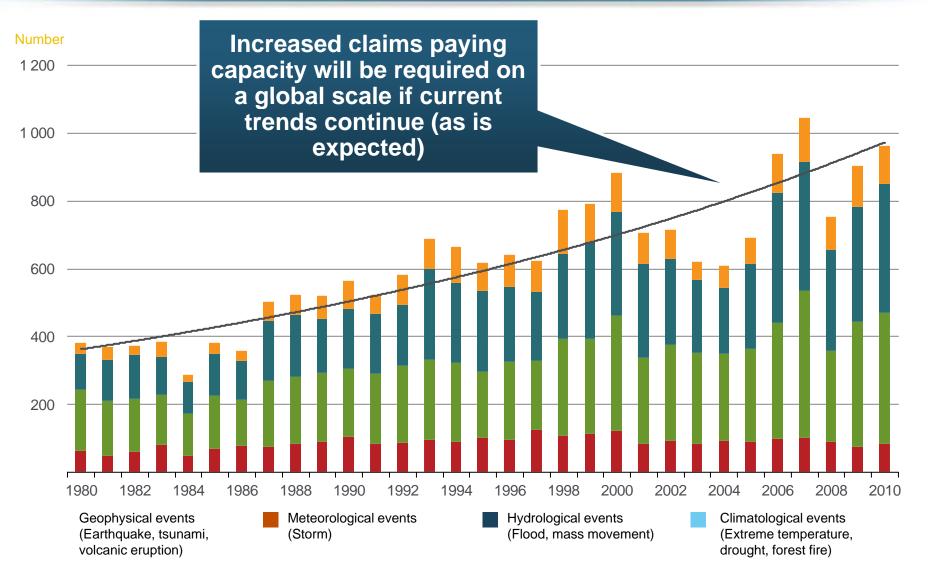
2%

 $\bigcirc$ 

# Costliest Natural Catastrophes Since 1950

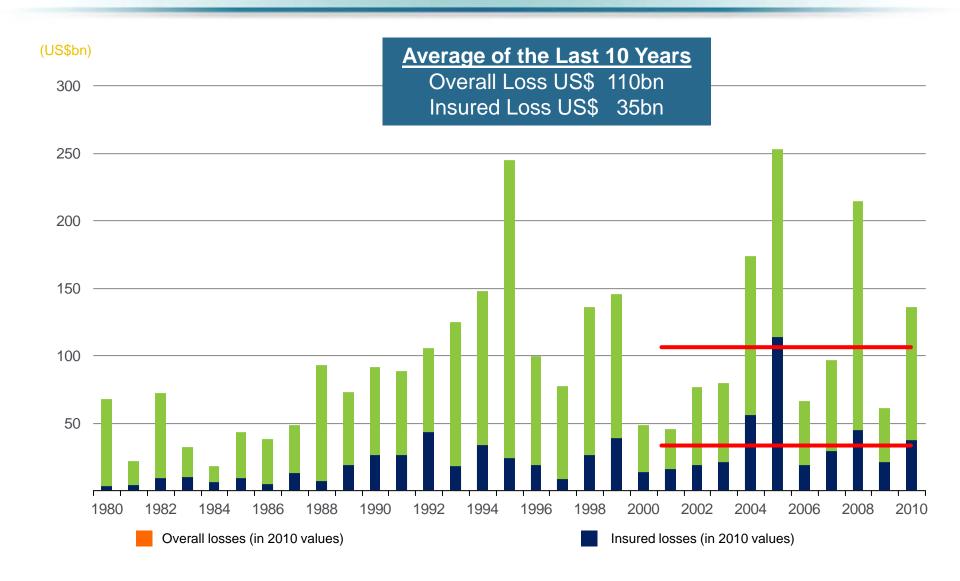
Year	Event	Region	Insured loss US\$m, 2010 values
2005	Hurricane Katrina	USA	69,900
1992	Hurricane Andrew	USA	26,500
1994	EQ Northridge	USA	22,500
2008	Hurricane Ike	USA, Caribbean	18,700
2004	Hurricane Ivan	USA, Caribbean	16,000
2005	Hurricane Wilma	USA, Mexico	14,000
2005	Hurricane Rita	USA	13,500
1991	Typhoon Mireille	Japan	11,200
2004	Hurricane Charley	USA, Caribbean	9,250
1989	Hurricane Hugo	USA, Caribeean	9,000
1990	Winter Storm Daria	Europe	8,500
2010	Earthquake	Chile	8,000

#### Natural Catastrophes Worldwide, 1980 – 2010 (Number of events with trend)



INSURANCE

# Natural Catastrophes Worldwide, 1980 – 2010





#### **Insurance Information Institute Online:**

# www.iii.org

# Thank you for your time and your attention! Twitter: twitter.com/bob\_hartwig Download: www.iii.org/presentations