Catastrophes, Cyclicality and the Economy
Property/Casualty Insurance at the Crossroads

Insurance Information Institute
January 20, 2012
Presentation Outline

- Review of Recent Events
  - What in the World is Going On?
- Summary of P/C Financial Performance
- Catastrophe Loss Developments & Trends
  - US, Global
- Will the Market Turn? Four Necessary Criteria:
  - Underwriting Loss Trends
  - Capital/Capacity
  - Reinsurance Markets
  - Pricing Discipline
- Other Contributing Factors to the Underwriting Cycle
  - Investment Environment
  - Tort/Casualty Environment
  - Inflation
- Economic Overview & Outlook
- Q&A
What in the World Is Going On?

Is the World Becoming a Riskier Place?

What Are the Implications for Insurance and Risk Management?
We Are Living in an Age of Elevated Global Economic Uncertainty

ECONOMIC & POLITICAL CONCERNS
- European Sovereign Debt, Bank & Currency Crises
- Global Economic Slowdown
- Echoes of the Financial Crisis & Financial Market Volatility
- Collapse of Major Financial Institutions
- U.S. Debt and Budget Crisis, S&P Downgrade & Tax Uncertainty
- Housing Crisis
- Persistently High Unemployment
- Inflation/Deflation
- Energy & Commodity Prices Volatility
- Political Upheaval in the Middle East (Arab Spring, Iran)
- Regulation & Regulatory Uncertainty
- New World Order: China’s Economic and Military Ascendancy
- 2012 US Elections & Political Brinksmanship

CATASTROPHIC LOSS
- Japan, New Zealand, Chile, Haiti Earthquakes
- Nuclear Fears (Japan, Germany, US)
- Floods (Thailand, US)
- U.S.: Tornadoes, Flooding, Wildfires, Hurricanes, Winter Storms
- Manmade Disasters (e.g., Deepwater Horizon)
- Cyber Attacks
- Resurgent Terrorism Risk (Bin Laden, Gadhafi, Kim Jong Il deaths)

Are “Black Swans” everywhere or does it just seem that way?
What is Going On in the US and Global Financial Markets?

1. Need for a Binding, Comprehensive Solution to Europe’s Debt Problems
   - 15 of 17 Eurozone countries put on negative credit watch by S&P on Dec. 5
   - Current requires construction of a “fiscal union” to save Euro monetary union
   - Requires rewriting EU treaties to mandate strict Debt/GDP ratios (3%) with sanctions to be imposed on violators
   - Short-term Europe needs to build a financial “Firewall” (larger bailout fund) around Italy, Spain, Ireland, Portugal to avoid another “Big, Fat Greek Debt Disaster”
   - Solution: Unified strategy similar to TARP; Monetary easing; Binding fiscal pact
   - **OUTCOME**: Europeans will eventually stumble into a resolution

2. Realization that US Economic Growth Will Remain Lackluster
   - Q1 GDP just 0.4%; Q2 only 1.3%; Q3 still a subpar 1.8%; Acceleration likely
   - Job growth has been anemic for months and unemployment remains high at 8.5%
   - Markets remain extremely volatile and jittery; Housing/Debt hangover
   - **OUTCOME**: Tepid growth in the 2% - 2.5% range in 2012; Unemployment: 8% - 8.5%

3. View that Washington is Dysfunctional and “Rudderless”
   - Lack of coherent, consistent medium and long term plan to deal with basic structural issues in the US economy (debt, taxes, employment, regulation, etc.)
   - No confidence that 2012 political cycle will resolve these problems

4. Economic Slowdown in Emerging Markets
   - China, other economies less able to stimulate global economy than in 2008
Déjà Vu? Lehman II? Is This 2008 All Over Again?

Why Today is Not 2008 All Over Again

- The Situation Today is Very, Very Different from 2008
- Credit Markets Are Not Seizing; Some Contraction in Europe
- Bank Balance Sheets Are in Much Stronger Shape
  - Capital up, charge offs falling
- We Will Not Experience the Mega-Collapses/Near Collapses Like in 2008
  - No repeat of Lehman, AIG, Washington Mutual, Wachovia...
  - MF Global is not a “Systemically Important Financial Institution”
- Some Additional Regulatory Controls Are Now Place

What Would Be Helpful Now?

- Solution to European Bank/Sovereign Debt Problem (Thought We Had One!)
- Long-Term Fiscal and Monetary Policy Direction
- Fed on Aug. 9 stated rates would remain low “at least through mid-2013”
  - This is not only a signal that borrowing costs will remain low over an extended period of time and that inflation will remain muted; Also tells investors that they’ll need to take on risk in order to earn returns in the market.
  - Congress and the Administration need to remove regulatory and tax uncertainty ASAP and drive a pro-growth agenda
Top 10 US Corporate Bankruptcies, by Asset Size

The collapse of MF Global, run by Jon Corzine, a former Goldman Sachs CEO and NJ Governor and Senator, shows that the lessons of the financial crisis have not been learned by even some of Wall Street’s brightest and most experienced people.*

All 10 of the Biggest Bankruptcies in US History Occurred Within the Past 10 Years With Varied Effects on D&O Market. MF Global Was the 8th Largest Bankruptcy in US History

*MF Global filed for bankruptcy on October 31, 2011.

Source: Council of Insurance Agents and Brokers; Insurance Information Institute.
P/C Insurance Industry
Financial Overview

Profit Recovery Was Set Back in 2011 by High Catastrophe Loss & Other Factors
P/C Net Income After Taxes
1991–2011:Q3 ($ Millions)

P-C Industry 2011:Q3 profits were down 71% to $8.0B vs. 2010:Q3, due primarily to high catastrophe losses and as non-cat underwriting results deteriorated.

2005 ROE*= 9.6%
2006 ROE = 12.7%
2007 ROE = 10.9%
2008 ROE = 0.1%
2009 ROE = 5.0%
2010 ROE = 5.6%
2011:Q3 ROAS¹ = 1.9%

* ROE figures are GAAP; ¹Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 3.0% ROAS for 2011:Q3, 7.5% for 2010 and 7.4% for 2009.

Sources: A.M. Best, ISO, Insurance Information Institute
A combined ratio of about 100 generated ~5.5% ROE in 2009/10, 10% in 2005 and 16% in 1979.

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

* 2008 -2011 figures are return on average surplus and exclude mortgage and financial guaranty insurers. 2011:Q3 combined ratio including M&FG insurers is 109.9, ROAS = 1.9%.
Source: Insurance Information Institute from A.M. Best and ISO data.
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2011*

*Profitability = P/C insurer ROEs are I.I.I. estimates. 2011 figure is an estimate based on annualized ROAS through Q3 data. Note: Data for 2008-2011 exclude mortgage and financial guaranty insurers. For 2011:Q3 ROAS = 1.9% including M&FG. Source: Insurance Information Institute; NAIC, ISO, A.M. Best.
P/C Profitability Is Both by Cyclicality and Ordinary Volatility

Sources: ISO, Fortune; Insurance Information Institute.
The P/C Insurance Industry Fell Well Short of Its Cost of Capital Every Year Since 2008

US P/C Insurers Missed Their Cost of Capital by an Average 6.7 Points from 1991 to 2002, but on Target or Better 2003-07, Fell Short in 2008-2010

The Cost of Capital is the Rate of Return Insurers Need to Attract and Retain Capital to the Business

* Return on average surplus used as proxy for ROE in 2008-2011 and excluding mortgage and financial guaranty insurers for these years. Change in model methodology in 2011 increased cost of capital by approximately 90 basis points.

Source: The Geneva Association, Insurance Information Institute
P/C Insurance Industry ROE vs. Fortune 500, 1975 – 2011*

For 2011:H1 ROAS.
Source: Insurance Information Institute; NAIC, ISO.
Global Catastrophe Loss Developments and Trends

2011 Will Rewrite Catastrophe Loss and Insurance History

*But Will Losses* *Turn the Market?*
Global Catastrophe Loss Summary: 2011

- 2011 was the *Highest* Loss Year on Record for Economic Losses Globally
  - Extraordinary accumulation of severe natural catastrophe: Earthquakes, tsunami, floods and tornadoes are the primary causes of loss

- $380 Billion in *Economic* Losses Globally (New Record)
  - New record, exceeding the previous record of $270B in 2005

- $105 Billion in *Insured* Losses Globally
  - 2011 losses were 2.5 times 2010 insured losses of $42B
  - Second only to 2005 on an inflation adjusted basis (new record on a unadjusted basis)
  - Over 5 times the 30-year average of $19B

- $72.8 Billion in *Economic* Losses in the US
  - Represents a 129% increase over the $11.8 billion amount through the first half of 2010

- $35.9 Billion in *Insured* Losses in the US Arising from 171 CAT Events
  - Fifth highest year on record
  - Represents 51% increase over the $23.8 billion total in 2010

Source: Munich Re; Insurance Information Institute.
# Natural Catastrophes Worldwide, 2011

## Overview and Comparison with Previous Years

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
<th>Average of the last 10 years 2001-2010</th>
<th>Average of the last 30 years 1981-2010</th>
<th>Top Year 1981-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of events</td>
<td>820</td>
<td>970</td>
<td>790</td>
<td>630</td>
<td>2007 (1,025)</td>
</tr>
<tr>
<td>Overall losses in US$ m (original values)</td>
<td>380,000</td>
<td>152,000</td>
<td>113,000</td>
<td>75,000</td>
<td>2005 (227,000)</td>
</tr>
<tr>
<td>Insured losses in US$ m (original values)</td>
<td>105,000</td>
<td>42,000</td>
<td>35,000</td>
<td>19,000</td>
<td>2005 (101,000)</td>
</tr>
<tr>
<td>Fatalities</td>
<td>27,000</td>
<td>296,000</td>
<td>106,000</td>
<td>69,000</td>
<td>2010 (296,000)</td>
</tr>
</tbody>
</table>

Source: MR NatCatSERVICE

© 2011 Munich Re
<table>
<thead>
<tr>
<th>Date</th>
<th>Region</th>
<th>Event</th>
<th>Fatalities</th>
<th>Overall losses US$ m</th>
<th>Insured losses US$ m</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 11</td>
<td>Japan</td>
<td>Earthquake, tsunami</td>
<td>15,840</td>
<td>210,000</td>
<td>35,000-40,000</td>
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<tr>
<td>Feb. 22</td>
<td>New Zealand</td>
<td>Earthquake</td>
<td>181</td>
<td>16,000</td>
<td>13,000</td>
</tr>
<tr>
<td>Aug. 1 –</td>
<td>Thailand</td>
<td>Floods, landslides</td>
<td>813</td>
<td>40,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Nov. 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr. 22-28</td>
<td>USA</td>
<td>Severe storms/tornadoes</td>
<td>350</td>
<td>15,000</td>
<td>7,300</td>
</tr>
<tr>
<td>Aug. 22 -</td>
<td>USA, Caribbean</td>
<td>Hurricane Irene</td>
<td>55</td>
<td>15,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Sep. 2</td>
<td></td>
<td></td>
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</tbody>
</table>

Source: MR NatCatSERVICE © 2011 Munich Re
In 2011, just 37% of insured natural catastrophe losses were in the Americas, barely half the average of 66% over the prior 30 years (1981-2010).

<table>
<thead>
<tr>
<th>Continent</th>
<th>Insured losses US$ m</th>
</tr>
</thead>
<tbody>
<tr>
<td>America (North and South America)</td>
<td>40,000</td>
</tr>
<tr>
<td>Europe</td>
<td>2,000</td>
</tr>
<tr>
<td>Africa</td>
<td>Minor damages</td>
</tr>
<tr>
<td>Asia</td>
<td>45,000</td>
</tr>
<tr>
<td>Australia/Oceania</td>
<td>18,000</td>
</tr>
</tbody>
</table>

In 2011, 61% of insured natural catastrophe losses were in the Asia/Pacific region, nearly 3.5 times the average of 13% over the prior 30 years (1981-2010).

Source: MR NatCatSERVICE
Natural Catastrophes Worldwide 1980 – 2011

Insured losses US$ 870bn - Percentage distribution per continent

In 2011, 61% of natural catastrophe losses were in the Asia/Pacific region, nearly 3.5 times the average of 13% over the prior 30 years (1981-2010)

<table>
<thead>
<tr>
<th>Continent</th>
<th>Insured losses US$ m</th>
</tr>
</thead>
<tbody>
<tr>
<td>America (North and South America)</td>
<td>566,000</td>
</tr>
<tr>
<td>Europe</td>
<td>146,000</td>
</tr>
<tr>
<td>Africa</td>
<td>2,000</td>
</tr>
<tr>
<td>Asia</td>
<td>115,000</td>
</tr>
<tr>
<td>Australia/Oceania</td>
<td>41,000</td>
</tr>
</tbody>
</table>

Source: MR NatCatSERVICE
2011 set a record for both overall economic losses in Asia ($266B) and insured losses ($45B). The rapid economic development of Asia and increased insurance penetration guarantee that losses will trend higher in the future.
Top 16 Most Costly World Insurance Losses, 1970-2011**

(Insured Losses, 2011 Dollars, $ Billions)

5 of the top 14 most expensive catastrophes in world history have occurred within the past 2 years.

**Figures do not include federally insured flood losses. Sources: Swiss Re sigma 1/2011; Munich Re; Insurance Information Institute research.

*Average of range estimates of $35B - $40B as of 1/4/12; Privately insured losses only.

$47.6

$37.5

$25.0

$24.0

$21.3

$19.1

$13.1

$13.0

$11.9

$10.0

$9.7

$9.3

$8.5

$8.3

$8.1

$7.7

Hugo (1989)

Winter Storm Daria (1991)

Chile Quake (2010)

Ivan (2004)

Typhoon Mirielle (1991)

Charley (2004)

Thailand Floods (2011)

Wilma (2005)

New Zealand Quake (2011)

Ike (2008)

Northridge (1994)

Spring Storms (2011)

WTC Terror Attack (2001)

Andrew (1992)

Japan Quake, Tsunami (2011)*

Katrina (2005)
Worldwide Natural Disasters, 1980 – 2011

Number of Events

There were 820 events in 2011

Source: MR NatCatSERVICE
Worldwide Natural Disasters 1980–2011, Overall and Insured Losses

(Insured Losses, 2011 Dollars, $ Billions)

Overall Losses: $380 Bill
Insured Losses: $105 Bill

Source: MR NatCatSERVICE
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U.S. Insured Catastrophe Loss Update

2011 Was One of the Most Expensive Years on Record
Top 14 Most Costly Disasters in U.S. History

(Insured Losses, 2011 Dollars, $ Billions)

Taken as a single event, the Spring 2011 tornado and storm season are is the 4th costliest event in US insurance history.

Hurricane Irene became the 11th most expensive hurricane in US history.

*Losses will actually be broken down into several “events” as determined by PCS. Includes losses for the period April 1 – June 30.
Sources: PCS; Insurance Information Institute inflation adjustments.
Natural Disasters in the United States, 1980 – 2011

Number of Events (Annual Totals 1980 – 2011)

There were 117 natural disaster events in 2011

Source: MR NatCatSERVICE
Losses Due to Natural Disasters in the US, 1980–2011 (Overall & Insured Losses)

(2011 Dollars, $ Billions)

2011 was the 5th most expensive year on record for insured catastrophe losses in the US.

Approximately 50% of the overall cost of catastrophes in the US was covered by insurance in 2011.

2011
Overall Losses: $72.8 Bill
Insured Losses: $35.9 Bill

Source: MR NatCatSERVICE
© 2011 Munich Re
US Insured Catastrophe Losses

($ Billions)

2000s: A Decade of Disaster
2000s: $193B (up 117%)
1990s: $89B

$100 Billion CAT Year is Coming Eventually

Record Tornado Losses Caused 2011 CAT Losses to Surge

US CAT Losses Already Exceed Losses from All of 2010. Even Modest Hurricane Losses Will Make 2011 Among the Most Expensive Ever for CATs

*PCS estimate through Sept. 30, 2011.

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; Insurance Information Institute.
US CAT Losses in 2011 Were the 5th Highest in US History on An Inflation Adjusted Basis

*PCS estimate through Sept. 30, 2011.
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 Disaster Losses in the United States: 2011

As of Jan. 1, 2012

<table>
<thead>
<tr>
<th>As of Jan. 1, 2012</th>
<th>Number of Events</th>
<th>Fatalities</th>
<th>Estimated Overall Losses (US $m)</th>
<th>Estimated Insured Losses (US $m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe Thunderstorm</td>
<td>69</td>
<td>617</td>
<td>46,548</td>
<td>25,813</td>
</tr>
<tr>
<td>Winter Storm</td>
<td>9</td>
<td>67</td>
<td>2,708</td>
<td>2,017</td>
</tr>
<tr>
<td>Flood</td>
<td>14</td>
<td>20</td>
<td>2,705</td>
<td>535</td>
</tr>
<tr>
<td>Earthquake</td>
<td>5</td>
<td>1</td>
<td>257</td>
<td>50</td>
</tr>
<tr>
<td>Tropical Cyclone</td>
<td>3</td>
<td>0</td>
<td>10,700</td>
<td>5,510</td>
</tr>
<tr>
<td>Wildfire</td>
<td>58</td>
<td>15</td>
<td>1,922</td>
<td>855</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>33</td>
<td>8,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Source: MR NatCatSERVICE
2011’s Most Expensive Catastrophes, Insured Losses

Thunderstorms, Apr. 22-26: $7,300
Thunderstorms, May 20-27: $6,900
Hurricane Irene, Aug. 26-28**: $5,000
Thunderstorms, Apr. 3-5: $2,000
Thunderstorms, Apr. 8-11: $1,510
Thunderstorms, Apr. 14-16: $1,400
Thunderstorms, Jun. 16-22: $1,200
Texas Drought, 2011*: $1,000
Thunderstorms, Jul. 10-14: $980
Winter Storm, Jan. 31-Feb. 3: $975
Thunderstorms, Aug. 18-19: $840
Thunderstorms, Apr. 19-20: $830
Wildfire, Sep. 4-19: $530
Flooding, April*: $500

**Includes $700 million in flood losses insured through the National Flood Insurance Program.
Source: PCS except as noted by “**” which are sourced to Munich Re; Insurance Information Institute.

Includes $1.65B in AL, mostly in the Tuscaloosa and Birmingham areas
Includes approximately $2B in losses for May 22 Joplin tornado
Combined Ratio Points Associated with Catastrophe Losses: 1960 – 2011*

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

*Insurance Information Institute estimates for 2010 and 2011 based on A.M. Best data.

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.
Thunderstorm losses in 2011 totaled a record $25.8 billion. Hurricanes get all the headlines, but thunderstorms are consistent producers of large scale loss. 2008-2011 are the most expensive years on record. Average thunderstorm losses are up more than 5 fold since the early 1980s.
Insured winter storm losses in 2011 totaled $2.0 billion. Average winter storm losses have nearly doubled since the early 1980s.

Source: Property Claims Service, MR NatCatSERVICE
8.3 millions acres were burned by wildfires in 2011, one of the worst years on record, causing $855 in insured losses.
Notable Wildfires in 2011

- Worst wildfire year on record in Texas due to persistent drought.
  - **Spring**: Over 3 million acres burned in west Texas from 12 major seats of fire. Over 200 homes and businesses destroyed, $50 million insured loss.
  - **September**: Bastrop County Complex Fire near San Antonio destroys over 1,600 homes, insured loss of $530 million.

Source: FEMA
U.S. Insured Catastrophe Losses by Cause of Loss, 2011 ($ Millions)

- Hurricanes & Tropical Storms, $5,510 (15.4%)
- Thunderstorms (Incl. Tornadoes), $25,813 (72.1%)
- Other, $1,000 (2.8%)
- Flood, $535, (1.5%)
- Wildfires, $855 (5.6%)
- Geological Events, $50, (0.1%)
- Winter Storms, $2,017 (1.5%)

Thunderstorm/Tornado losses were 2.5 times above the 30-year average.

2011's insured loss distribution was unusual with tornado and thunderstorm accounting for the vast majority of loss.

Source: ISO's Property Claim Services Unit, Munich Re; Insurance Information Institute.
Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1990–2011:H1

1. Catastrophes are defined as events causing direct insured losses to property of $25 million or more in 2009 dollars.
2. Excludes snow.
3. Does not include NFIP flood losses
4. Includes wildland fires
5. Includes civil disorders, water damage, utility disruptions and non-property losses such as those covered by workers compensation.

Source: ISO’s Property Claim Services Unit.
2011: Nowhere to Run, Nowhere to Hide

Most of the Country East of the Rockies Suffered Severe Weather in 2011, Impacting Most Insurers
There have been 2,049 federal disaster declarations since 1953. The average number of declarations per year is 34 from 1953-2010, though that few haven’t been recorded since 1995.

The number of federal disaster declarations set a new record in 2011, with 99, shattering 2010’s record 81 declarations.

The Number of Federal Disaster Declarations Is Rising and Set a New Record in 2011

Over the past nearly 60 years, Texas has had the highest number of Federal Disaster Declarations.

Federal Disasters Declarations by State, 1953 – 2011: Lowest 25 States*

Over the past nearly 60 years, Wyoming, Utah and Rhode Island had the fewest number of Federal Disaster Declarations


SPRING 2011 TORNADO & SEVERE STORM OUTBREAK

2011 Losses Are Putting Pressure on US P/C Insurance and Reinsurance Markets
Number of Tornadoes and Related Deaths, 1990 – 2011

Tornadoes claimed more than 550 lives in 2011, the most since 1925.

There were 1,884 tornadoes recorded in the US in 2011.

Insurers Expect to Pay at Least $2 Billion Each for the April 2011 Tornadoes in Alabama and a Similar Amount for the May Storms in Joplin.

There were 1,893 tornadoes in the US in 2011 far above average, but well below 2008’s record. Deadly and costly April/May spike.

Source: http://www.spc.noaa.gov/wcm/
Insurers Making a Difference in Impacted Communities

Destroyed home in Tuscaloosa. Insurers will pay some $165,000 claims totaling $2 billion in the Tuscaloosa/Birmingham areas alone.

Presentation of a check to Tuscaloosa Mayor Walt Maddox to the Tuscaloosa Storm Recovery Fund

Source: Insurance Information Institute
1,894 tornadoes killed 552 people in 2011, including at least 340 on April 26 mostly in the Tuscaloosa area, and 130 in Joplin on May 22.
Location of Large Hail Reports in the US, 2011

There were 9,417 “Large Hail” reports in 2011, causing extensive damage to homes, businesses and vehicles.

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2011_annual_summary.html#
There were 18,685 “Wind Damage” reports through Dec. 27, causing extensive damage to homes and businesses.
Severe Weather Reports, 2011

There were 29,996 severe weather reports in 2011; including 1,894 tornadoes; 9,417 “Large Hail” reports and 18,685 high wind events.

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2011_annual_summary.html#
Number of Severe Weather Reports in US, by Type, 2011

- **Tornadoes**: 1,894, 6%
- **Large Hail**: 9,417, 31%
- **Wind Damage**: 18,685, 63%

Tornadoes accounted for just 6% of all Severe Weather Reports but more than 550 deaths in 2011, the most in 75 years.

The BIG Question:
When Will the Market Turn?

Are Catastrophes and Other Factors Pressuring Insurance Markets?
Criteria Necessary for a “Market Turn”:
All Four Criteria Must Be Met

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustained Period of Large Underwriting Losses</td>
<td>Early Stage, Inevitable</td>
<td>• Apart from 2011 CAT losses, overall p/c underwriting losses remain modest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Combined ratios (ex-CATs) still in low 100s (vs. 110+ at onset of last hard market)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prior-year reserve releases continue to reduce u/w losses, boost ROEs, though more modestly</td>
</tr>
<tr>
<td>Material Decline in Surplus/Capacity</td>
<td>Entered 2011 At Record High; Since Fallen</td>
<td>• Surplus hit a record $565B as of 3/31/11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fell by 4.6% through 9/30/11 (latest available)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Little excess capacity remains in reinsurance markets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Weak growth in demand for insurance is insufficient to absorb much excess capacity</td>
</tr>
<tr>
<td>Tight Reinsurance Market</td>
<td>Somewhat in Place</td>
<td>• Much of the global “excess capacity” was eroded by cats</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Higher prices in Asia/Pacific</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Modestly higher pricing for US risks</td>
</tr>
<tr>
<td>Renewed Underwriting &amp; Pricing Discipline</td>
<td>Some Firming esp. in Property, WC</td>
<td>• Commercial lines pricing trends have turned from negative to flat or up in some lines (property, WC); Casualty is flat.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Competition remains intense as many seek to maintain market share</td>
</tr>
</tbody>
</table>

Sources: Barclays Capital; Insurance Information Institute.
Do the Property Catastrophe Events of 2011 Impact Casualty Markets?

- Unlikely that Record 2011 Property CAT Loss Will Impact Casualty Markets in Any Material Way, Including Professional Liability Lines

- Global P/C & Reinsurance Industries Entered 2011 w/ Record Capital
  - Events so far in 2011 are earnings events, rather than capital events

- Natural Catastrophe and Casualty Risks Are Largely Uncorrelated
  - Risks are different
  - Geographically, mostly distinct primary carriers: Japan-Australia-NZ-US
  - Casualty markets generally don’t influence property markets

- Property and Casualty Risks Are Largely Siloed


- Casualty Markets Have Their Own Issues
  - Tort environment
  - Inflation
  - Public policy
Have Underwriting Losses Been Large Enough for Long Enough to Turn the Market?
As Recently as 2001, Insurers Paid Out Nearly $1.16 for Every $1 in Earned Premiums

Heavy Use of Reinsurance Lowered Net Losses

Relatively Low CAT Losses, Reserve Releases

Relatively Low CAT Losses, Reserve Releases

Higher CAT Losses, Shrinking Reserve Releases, Toll of Soft Market

Best Combined Ratio Since 1949 (87.6)

Cyclical Deterioration

Avg. CAT Losses, More Reserve Releases


Sources: A.M. Best, ISO.
Cumulative underwriting deficit from 1975 through 2010 is $455B

Large Underwriting Losses Are NOT Sustainable in Current Investment Environment

* Includes mortgage and financial guaranty insurers in all years

Sources: A.M. Best, ISO; Insurance Information Institute.
Number of Years with Underwriting Profits by Decade, 1920s–2010s

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

* 2009 combined ratio excl. mort. and finl. guar. anty insurers was 99.3, which would bring the 2000s total to 4 years with an u/w profit.
**Data for the 2010s includes 2010 and 2011.
Note: Data for 1920–1934 based on stock companies only.
Sources: Insurance Information Institute research from A.M. Best Data.
Prior year reserve releases totaled $8.8 billion in the first half of 2010, up from $7.1 billion in the first half of 2009.

Reserve Releases Are Remained Strong in 2010 But Should Begin to Taper Off in 2011

Note: 2005 reserve development excludes a $6 billion loss portfolio transfer between American Re and Munich Re. Including this transaction, total prior year adverse development in 2005 was $7 billion. The data from 2000 and subsequent years excludes development from financial guaranty and mortgage insurance.

Sources: Barclay’s Capital; A.M. Best.
Financial Strength & Underwriting

Cyclical Pattern is P-C Impairment
History is Directly Tied to Underwriting, Reserving & Pricing
3 small insurers in Missouri did encounter problems in 2011 following the May tornado in Joplin. They were absorbed by a larger insurer and all claims were paid.

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

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

2010 impairment rate was 0.35%, down from 0.65% in 2009 and near the record low of 0.17% in 2007; Rate is still less than one-half the 0.81% average since 1969.

Source: A.M. Best; Insurance Information Institute
Historically, Deficient Loss Reserves and Inadequate Pricing Are By Far the Leading Cause of P-C Insurer Impairments. Investment and Catastrophe Losses Play a Much Smaller Role

- Deficient Loss Reserves/Inadequate Pricing: 40.3%
- Reinsurance Failure: 3.6%
- Significant Change in Business: 7.3%
- Investment Problems (Overstatement of Assets): 8.6%
- Affiliate Impairment: 7.8%
- Catastrophe Losses: 7.1%
- Alleged Fraud: 7.8%
- Rapid Growth: 13.6%

Workers Comp and Pvt. Passenger Auto Account for Nearly Half of the Premium Volume of Impaired Insurers Over the Past Decade

Number of Recessions Endured by P/C Insurers, by Number of Years in Operation

Number of Years in Operation

<table>
<thead>
<tr>
<th>Number of Years in Operation</th>
<th>Number of Recessions Since 1860</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-50</td>
<td>8</td>
</tr>
<tr>
<td>51-75</td>
<td>13</td>
</tr>
<tr>
<td>76-100</td>
<td>20</td>
</tr>
<tr>
<td>101-125</td>
<td>27</td>
</tr>
<tr>
<td>126-150</td>
<td>32</td>
</tr>
</tbody>
</table>

Insurers are true survivors—not just of natural catastrophes but also economic ones.

Many US Insurers Are Close to a Century Old or Older

Sources: Insurance Information Institute research from National Bureau of Economic Research data.
Performance by Segment: Personal & Commercial Lines
Homeowners Insurance Combined Ratio: 1990–2011P

Homeowners Line Could Deteriorate in 2011 Due to Large Cat Losses. Extreme Regional Variation Can Be Expected Due to Local Catastrophe Loss Activity.

Sources: A.M. Best (1990-2010); Insurance Information Institute (2011P).
Private Passenger Auto Accounts for 34% of Industry Premiums and Remains the Profit Juggernaut of the P/C Insurance Industry

Sources: A.M. Best (1990-2010); Insurance Information Institute (2011P).
Commercial Lines Combined Ratio, 1990-2012F

Commercial lines underwriting performance in 2011 was the worst since 2002

Source: A.M. Best; Insurance Information Institute
Workers Compensation Combined Ratio: 1994–2011P

Workers Comp Underwriting Results Are Deteriorating Markedly and the Worst They Have Been in a Decade

Sources: A.M. Best (1994-2010); Insurance Information Institute (2011P).
2. SURPLUS/CAPITAL/CAPACITY

Have Large Global Losses Reduced Capacity in the Industry, Setting the Stage for a Market Turn?
US Policyholder Surplus: 1975–2011*

Surplus as of 9/30/11 was $538.6 down 4.6% from the record $564.7B as of 3/31/11, but still up 23.2% ($101.5B) from the crisis trough of $437.1B at 3/31/09. Prior peak was $521.8 as of 9/30/07. Surplus as of 9/30/11 was 3.2% above 2007 peak.

“Surplus” is a measure of underwriting capacity. It is analogous to “Owners Equity” or “Net Worth” in non-insurance organizations.

The Premium-to-Surplus Ratio Stood at $0.83:$1 as of 9/30/11, a Near Record Low (at Least in Recent History)*

* As of 9/30/11.

($ Billions)

2007:Q3 Previous Surplus Peak

Quarterly Surplus Changes Since 2011:Q1 Peak

11:Q2: -$5.6B (-1.0%)  11:Q3: -$26.1B (-4.6%)

Surplus as of 9/30/11 was down 4.6% below its all time record high of $564.7B set as of 3/31/11. Further declines are possible.

*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.

Note: The assumption of a 0.9:1 P/S ratio is derived from a Feb. 2011 announcement by Advisen, Ltd., that the US P/C insurance industry has $74 billion in excess capital. The implied P/S ratio (calculated by III) is 0.88:1, which was rounded to 0.9:1.

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

* Net Premiums Written
M&A Activity in the US P/C Insurance Industry, 1997-2011*

*2011 data are through December 1.
Source: SNL Securities; Insurance Information Institute.
M&A Activity Globally Among P/C Insurers Remains Subdued: Little Capacity Leaving

Sources: Conning Research; Insurance Information Institute.
Paid-in Capital, 2005–2010

Paid-in capital for insurance operations rose by $27.4B in 2010, the largest on record dating back to 1959.

In 2010 One Insurer’s Paid-in Capital Rose by $22.5B as Part of an Investment in a Non-insurance Business

Source: ISO; Insurance Information Institute.
Ratio of Insured Loss to Surplus for Largest Capital Events Since 1989*

<table>
<thead>
<tr>
<th>Event</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hurricane Hugo 6/30/89</td>
<td>3.3%</td>
</tr>
<tr>
<td>Hurricane Andrew 6/30/92</td>
<td>9.6%</td>
</tr>
<tr>
<td>Northridge Earthquake 12/31/93</td>
<td>6.9%</td>
</tr>
<tr>
<td>Sept. 11 Attacks 6/30/01</td>
<td>10.9%</td>
</tr>
<tr>
<td>Florida Hurricanes 6/30/04</td>
<td>6.2%</td>
</tr>
<tr>
<td>Hurricane Katrina 6/30/05</td>
<td>13.8%</td>
</tr>
<tr>
<td>Financial Crisis as of 3/31/09**</td>
<td>16.2%</td>
</tr>
</tbody>
</table>

* 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
Historically, Hard Markets Follow When Surplus “Growth” is Negative*

Surplus growth was positive until Q1:2011 but is now down slightly

Sharp Decline in Capacity is a Necessary but Not Sufficient Condition for a True Hard Market

* 2011 NWP and Surplus figures are % changes as of Q3:11 vs. Q3:10.
Sources: A.M. Best, ISO, Insurance Information Institute
The premium-to-surplus ratio (a measure of leverage) hit a record low at just 0.76:1 in 2010. It has decreased as PHS grows more quickly than NPW, with the effect of holding down profitability.

Record High P-S Ratio was 2.7:1 in 1974

Record Low P-S Ratio was 0.76:1 as of 12/31/10, rising slightly to 0.83:1 as of 9/30/11

The Premium-to-Surplus Ratio in 2011:Q3 Implies that P/C Insurers Held $1 in Surplus Against Each $0.83 Written in Premiums. In 1974, Each $1 of Surplus Backed $2.70 in Premium.

*2011 data are as of 9/30/11.
Sources: Insurance Information Institute calculations from A.M. Best data.
3. REINSURANCE MARKET CONDITIONS

Record Global Catastrophes Activity is Pressuring Pricing
Significant Market Losses, 1985-2011*

Reinsurers’ share of major market losses was exceptionally high in 2010 and early 2011.

**REINSURANCE PRICING TRENDS**
- Property/CAT reinsurance prices are up substantially in Asia/Pacific markets
- US pricing is up 10-15%, but ex-Florida closer to flat

Source: Holborn; RAA.

* 2011 events are as of March 31 and are preliminary and may change as loss estimates are refined further.
Reinsurer Share of Recent Significant Market Losses

Billions of 2011 Dollars

- **Japan Earthquake/Tsunami (Mar 2011)**: $37.5
  - Reinsurer Share: $15.0
  - Primary Insurer Share: $22.5
- **New Zealand Earthquake (Feb 2011)**: $13.0
  - Reinsurer Share: $9.5
  - Primary Insurer Share: $3.5
- **Thailand Floods (Aug - Nov 2011)**: $10.0
  - Reinsurer Share: $6.0
  - Primary Insurer Share: $4.0
- **Chile Earthquake (Feb. 2010)**: $8.3
  - Reinsurer Share: $7.9
  - Primary Insurer Share: $0.4
- **Australia Cyclone/Floods (Jan-Feb 2011)**: $5.0
  - Reinsurer Share: $2.8
  - Primary Insurer Share: $2.2

Reinsurers Paid a High Proportion of Insured Losses Arising from Major Catastrophic Events Around the World in Recent Years

Source: Insurance Information Institute from reinsurance share percentages provided in RAA, ABIR and CEA press release, Jan. 13, 2011.
Significant Market Losses by Event, 1985-2011*

Reinsurers are bearing a very high share of recent catastrophe losses. Losses are putting pressure on property cat reinsurance prices in affected regions. The impact for US property catastrophe pricing is uncertain.

Source: Holborn, RAA. *2011 events as of March 31 are preliminary and may change as loss estimates are refined further.
Global reinsurance market capacity is down in mid-2011 due to large catastrophe losses.

High Global Catastrophe Losses Have Had a Modest Adverse Impact on Global Reinsurance Market Capacity

Source: Aon Reinsurance Market Outlook, September 2011 from Individual Company and AonBenfield Analytics; Insurance Information Institute.
A modest increase in global property catastrophe reinsurance pricing was evident in June 1 renewals in the wake of record global catastrophe losses.

Jan. 1, 2012 renewals were up modestly or flat in the US but higher in CAT-impacted areas.

Source: Guy Carpenter, GC Capital Ideas.com, September 26, 2011.
Most excess reinsurance capacity was removed from the market in 2011, but there does not appear to be a shortage, leading relatively flat 2012 reinsurance renewals except in areas hit hard by CATs.

4. RENEWED PRICING DISCIPLINE

Is There Evidence of a Broad and Sustained Shift in Pricing?
Soft Market Persisted in 2010 but Growth Returned: More in 2011?

Net Written Premiums Fell 0.7% in 2007 (First Decline Since 1943) by 2.0% in 2008, and 4.2% in 2009, the First 3-Year Decline Since 1930-33.

NWP was up 4.1% (est.) in 2011. 2012 expected growth is 4.2%.

*2011 and 2012 figures are A.M. Best Estimates

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

Through 2011:Q3, growth in personal lines predominating cos. (+3.1%) and commercial lines predominating cos. (+3.9%), diversified (+2.3%)

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

Sources: ISO, Insurance Information Institute.
Monthly Change* in Auto Insurance Prices, 1991–2011*

Cyclical peaks in PP Auto tend to occur approximately every 10 years (early 1990s, early 2000s and likely the early 2010s)

Pricing peak occurred in 2010

“Hard” markets tend to occur during recessionary periods

*Percentage change from same month in prior year; through November 2011; seasonally adjusted

Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institutes.
Average Commercial Rate Change, All Lines, (1Q:2004–4Q:2011E*)

(Percents)

Pricing as of Q3:2011 is positive for the first time since 2003. Slightly stronger gains in Q4.

Q2 2011 marked the 30th consecutive quarter of price declines.

Source: Council of Insurance Agents & Brokers (1Q04-4Q11); Marsh (Q411E); Insurance Information Institute
Change in Commercial Rate Renewals, by Account Size: 1999:Q4 to 2011:Q3

Percentage Change (%)

Peak = 2001:Q4 +28.5%

Pricing turned positive (+0.9%) in Q3:2011, the first increase in nearly 7 years (Q4:2003)

Pricing Turned Negative in Early 2004 and Has Been Negative Ever Since

KRW Effect: No Lasting Impact

Trough = 2007:Q3 -13.6%

Source: Council of Insurance Agents and Brokers; Insurance Information Institute.
Despite Q3:2011 gain of 0.9%, pricing today is where it was in late 2000 (pre-9/11)

Downward pricing pressure still evident for large accounts, down 0.6% in Q3:2011

Source: Council of Insurance Agents and Brokers; Insurance Information Institute.
Change in Commercial Rate Renewals, by Line: 2011:Q3

Property lines are showing larger increases than casualty lines, with the exception of workers compensation.

Major Commercial Lines Renewed Uniformly Upward in Q3:2011 for the First Time Since 2003; Property Lines & Workers Comp Leading the Way

Source: Council of Insurance Agents and Brokers; Insurance Information Institute.
Workers Comp Rate Changes, 2008:Q4 – 2011:Q3

The Q3 2011 WC rate change was the largest among all major commercial lines.

Source: Council of Insurance Agents and Brokers; Information Institute.
The cost of risk cannot continue to fall as actual results deteriorate.

*Insurance Information Institute estimates for 2011.
Source: 2011 RIMS Benchmark Survey; A.M. Best; Insurance Information Institute
How the Risk Dollar is Spent (2011)

Management & Professional Liability Costs Account for 9% - 13% of the Risk Dollar

Firms w/Revenues < $1 Billion

- Liability Premiums, 21%
- Liability Retained Losses, 13%
- Property Premiums, 21%
- Total Prof. Liability Costs, 8%
- WC Retained Losses, 9%
- Property Premiums, 13%
- WC Premiums, 8%
- Total Mgmt. Liab., 5%

Firms w/Revenues > $1 Billion

- Liability Premiums, 10%
- Liability Retained Losses, 12%
- Retained Property Losses, 8%
- Property Premiums, 13%
- Total Prof. Liability Costs, 3%
- Total Mgmt. Liab., 6%
- WC Premium 6%
- WC Retained Losses, 21%

Source: 2011 RIMS Benchmark Survey, Advisen; Insurance Information Institute
Top 25 States

North Dakota is the growth juggernaut of the P/C insurance industry—too bad nobody lives there...

Sources: SNL Financial LC.; Insurance Information Institute.
States with the poorest performing economies also produced the most negative net change in premiums of the past 5 years.
Other Cycle-Influencing Factors

Could Other Factors Act as a Catalyst to Turn the Market?
INVESTMENTS: THE NEW REALITY

Investment Performance is a Key Driver of Profitability

Does It Influence Underwriting or Cyclicality?

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment Gain ($ billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>$35.4</td>
</tr>
<tr>
<td>95</td>
<td>$42.8</td>
</tr>
<tr>
<td>96</td>
<td>$47.2</td>
</tr>
<tr>
<td>97</td>
<td>$52.3</td>
</tr>
<tr>
<td>98</td>
<td>$58.0</td>
</tr>
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<td>99</td>
<td>$51.9</td>
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<td>09</td>
<td>$39.2</td>
</tr>
<tr>
<td>10</td>
<td>$52.9</td>
</tr>
<tr>
<td>11:Q3</td>
<td>$42.0</td>
</tr>
</tbody>
</table>

Investment gains through Q3:2011 were $2.1B above the same period in 2010—a surprise given falling rates and flat stock markets.

Investment Gains through Q3:2011 Were Surprisingly Robust. Investment Gains Recovered Significantly in 2010 Due to Realized Investment Gains; The Financial Crisis Caused Investment Gains to Fall by 50% in 2008.

1 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.

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

Yields on 10-Year U.S. Treasury Notes have been essentially below 5% for nearly a decade.

Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, through November 2011

Note: Recessions indicated by gray shaded columns.

National Bureau of Economic Research (recession dates); Insurance Information Institutes.
Daily Yields, 10-Year U.S. T-Notes vs. Moody’s Seasoned AAAs, 2010-2011*

We saw a slump like this in March - August 2010

The spread between the two yields reflects confidence (or lack of it) in the economy’s prospects. A wider spread indicates worry; narrower = confidence.

*through 11/30/2011
Treasury Yield Curves: Pre-Crisis (July 2007) vs. Dec. 2011

Treasury yield curve remains near its most depressed level in at least 45 years. Investment income is falling as a result. Fed is unlikely to hike rates until well into 2014.

The Fed Is Actively Signaling that it Is Determined to Keep Rates Low Through 2013 and Possibly into 2014

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.
Shifting Legal Liability & Tort Environment

Is the Tort Pendulum Swinging Against Insurers?
Over the Last Three Decades, Total Tort Costs as a % of GDP Appear Somewhat Cyclical

Tort Costs as % of GDP

$0 $50 $100 $150 $200 $250 $300

80 82 84 86 88 90 92 94 96 98 00 02 04 06 08 10 E 12 E

Tort Costs Have Remained High but Relatively Stable Since the mid-2000s. As a Share of GDP they Should Fall as the Economy Expands

Sources: Towers Watson, 2010 Update on US Tort Cost Trends, Appendix 1A
Business Leaders Ranking of Liability Systems in 2010

**Best States**
1. Delaware
2. North Dakota
3. Nebraska
4. Indiana
5. Iowa
6. Virginia
7. Utah
8. Colorado
9. Massachusetts
10. South Dakota

**Worst States**
41. New Mexico
42. Florida
43. Montana
44. Arkansas
45. Illinois
46. California
47. Alabama
48. Mississippi
49. Louisiana
50. West Virginia

**New in 2010**
- North Dakota
- Massachusetts
- South Dakota

**Newly Notorious**
- New Mexico
- Montana
- Arkansas

**Drop-offs**
- Maine
- Vermont
- Kansas

**Midwest/West has mix of good and bad states.**


*Award trends in wrongful deaths of adult males.
Source: Jury Verdict Research; Insurance Information Institute.
Sum of Top 10 Jury Awards 2004-2010

Inflation

Is it a Threat to Claim Cost Severities
Inflation peaked at 5.6% in August 2008 on high energy and commodity crisis. The recession and the collapse of the commodity bubble reduced inflationary pressures in 2009/10.

Higher energy, commodity and food prices pushed up inflation in 2011, but not longer turn inflationary expectations.

The slack in the U.S. economy suggests that inflationary pressures should remain subdued for an extended period of times. Energy, health care and commodity prices, plus U.S. debt burden, remain longer-run concerns.

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators, 10/11 and 1/12 (forecasts).
Medical Cost Inflation Has Outpaced Overall Inflation Over 50 Years

A claim that cost $1,000 in 1961 would cost nearly $16,000 based on medical cost inflation trends over the past 50 years.

*Based on change from Feb. 2011 to Feb. 2010 (latest available)
Source: Department of Labor (Bureau of Labor Statistics)
P/C Personal Insurance Claim Cost Drivers Grow Faster Than the Core CPI Suggests

Price Changes in 2011*

- Overall CPI: 3.4%
- "Core" CPI: 2.2%
- Inpatient Hospital Services: 6.8%
- Outpatient Hospital Services: 5.1%
- Prescription Drugs: 4.0%
- Medical Care Commodities: 3.1%
- Legal Services: 3.1%
- Motor Vehicle Parts & Equipment: 2.8%
- Residential Maint. & Repair: 6.4%

Healthcare costs are a major liability, med pay, and PIP claim cost driver. They are likely to grow faster than the CPI for the next few years, at least 120

P/C Commercial Property Insurance Claim Cost
Drivers Grow Faster than the Overall CPI Suggests

Price Changes in 2011*

- Overall CPI: 3.4%
- "Core" CPI: 2.2%
- Steel Mill Products: 13.0%
- Nonferrous pipe, Roofing Materials: 11.0%
- Asphalt Paving: 6.5%
- Builders hardware: 6.2%
- Plumbing Fixtures: 2.8%

Excludes Food and Energy

Copper prices spiked and retreated in 2011. In July its price was 33% higher than a year earlier; by November it cost 8% less than in November 2010.

*November 2011 vs. November 2010
The average annual increase in WC medical severity from 1995 through 2009 was nearly twice the medical CPI (7.6% vs. 3.9%). Will healthcare reform affect this gap?

Regulatory Environment & Financial Services Reform

Insurers Not as Impacted as Banks, But Dodd-Frank Implementation Has Been a Concern for Insurers
Pennsylvania’s regulatory environment got a grade of “C” in 2010.

Source: Heartland Institute, May 2011
Dodd-Frank & Insurance One Year: Status Report

Expectations vs. Reality
Dodd-Frank Implementation
Status Report for Insurers: Slow Start

The Dodd-Frank Wall Street Reform and Consumer Protection Act

Financial Stability Oversight Council—Slow to Consider Insurer Concerns

- FSOC deliberates largely behind closed doors
- Criteria and process for designation of Systemically Important Financial Institutions (SIFIs) were not announced until October 12, 2011
  - Possible that small number of US insurers will be designated as SIFIs
- Operated/deliberated until late September 2011 without a voting member representing the insurance industry
  - Roy Woodall, approved by Senate in Sept. 27, 2011, is the sole voting representative for the entire p/c and life insurance industry (was Kentucky Ins. Comm. 1966-1967; Worked in other insurance trade posts, Treasury)
- Two non-voting FSOC members represent insurance interests:
  - FIO Director Michael McGraith (started June 1, 2011)
  - Missouri Insurance Director John Huff (started in Sept. 2010)
    - Not allowed to brief fellow regulators on FSOC discussions

Source: Insurance Information Institute (I.I.I.) updates and research
Dodd-Frank Implementation: SYSTEMIC RISK CRITERIA

The Dodd-Frank Act and Systemic Importance

- All Banks with Assets > $50B Considered Systemically Important
- Non-Bank Financial Groups with Global Consolidated Assets > $50B Will Be Examined for Systemic Riskiness, But Not Automatically Labeled as a Systemically Important Financial Institution (SIFI)
  - Foreign firms with assets in the US exceeding $50 billion will also fall under review
- If Firm Exceeds the $50B Threshold, a 3-Stage Test Applies
  - **STAGE 1**: Non-Banks Financial Groups with $50B+ Assets Will Be Evaluated on Five “Uniform Quantitative Thresholds,” at Least One of Which Will Have to Be Met to Trigger a Further (Stage 2) Review Potentially Leading to a SIFI Designation
    - Leverage: Would have to be leveraged more than 15:1 (insurers unlikely to trigger)
    - ST Debt-to-Assets: Would have to a ratio of ST debt (less than 12 months to maturity) to consolidate assets exceeding 10%
    - Debt: Have total debt exceeding $20 billion (i.e., loans borrowed and bond issues)
    - Derivative Liabilities: Have derivative liabilities exceeding $3.5 billion
    - Credit Default Swaps: Have more than $30 billion CDS outstanding for which the nonbank financial firm is the reference entity (i.e., CDS written against firm’s failure)
  - **Thresholds Considered to Be Guideposts**
    - Not all companies that breach a barrier will be deemed systemically important
    - Regulators retain right to include firms that do meet any of the criteria

Dodd-Frank Implementation: SYSTEMIC RISK CRITERIA (continued)

The Dodd-Frank Act and Systemic Importance

- **STAGE 2: Analysis of Firms Triggering Uniform Quantitative Thresholds**
  - Firms triggering one or more of the quantitative thresholds in Stage 1 will be analyzed using publicly available information in order to conduct a more thorough review.
  - No data call will be required at this stage.
  - Firms viewed as potentially systemically important (candidate SIFIs) will subject to a Stage 3 analysis.

- **STAGE 3: Analysis of Candidate Systemically Important Financial Institutions**
  - Firms deemed in Stage 2 to be potentially systemically important will be subjected to more detailed analysis including data not available during the Stage 2 analysis.
  - Stage 3 firms will be notified by the FSOC that they are under consideration and will have the opportunity to contest their consideration.

- **SIFI DESIGNATION PROCEDURE: 2-Stage Voting Procedure by FSOC is Required Before a Final SIFI Designation is Made**
  - At the conclusion of the Stage 3, FSOC has the authority to propose a firm be designated as a SIFI.
  - Requires 2/3 majority vote of FSOC members, including affirmation of the Chair (Treasury Secretary).
  - Potential SIFI firm will be given written explanation for the determination.
  - Firm can request a hearing to contest the determination.
  - Final determination requires another 2/3 majority of FSOC members and affirmation of the Chair.

Dodd-Frank Implementation: FSOC MEMBERS

The Dodd-Frank Act and Systemic Importance

Members of the Financial Stability Oversight Council

- There are 10 voting members of the FSCO

- **Treasury Secretary and FSOC Chair:** Timothy Geithner
- **Federal Reserve Chairman:** Ben Bernanke
- **Securities & Exchange Commission Chairman:** Mary Shapiro
- **Commodities Futures Trading Commission Chairman:** Gary Gensler
- **National Credit Union Administration Chairman:** Debbie Matz
- **(Acting) Comptroller of the Currency:** John Walsh
- **Federal Housing Finance Agency (Acting) Director:** Edward DeMarco
- **Consumer Financial Protection Bureau Director:** Position is Currently Vacant
- **Independent Insurance Expert:** Roy Woodall
  - There are 2 nonvoting members of the FSOC representing insurance interests
    - Federal Insurance Office Director Mike McGraith
    - John Huff, Director of the Missouri Insurance Department

Members of the Federal Advisory Committee on Insurance

Members Announced on November 2, 2011:

- David Birnbaum, Economist and Executive Director, Center for Economic Justice
- Michael Con sedine, Commissioner, Commonwealth of the Pennsylvania Department of Insurance
- Jacqueline Cunningham, Commissioner, State of Virginia Bureau of Insurance
- John Degnan, Senior Advisor to the CEO of the Chubb Corporation
- Brian Duperreault, President and Chief Executive Officer, Marsh & McLennan Companies
- Loretta Fuller, Chief Executive Officer, Insurance Solutions Associates
- Scott E. Harrington, Alan B. Miller Professor in the Health Care Management and Insurance and Risk Management departments at the Wharton School, University of Pennsylvania
- Benjamin Lawsky, Superintendent of Financial Services, State of New York
- Thomas Leonardi, Commissioner of the Connecticut Department of Insurance
- Monica Lindeen, State of Montana Commissioner of Securities and Insurance and State Auditor
- Christopher Mansfield, Senior Vice President and General Counsel, Liberty Mutual Group
- Sean McGovern, Director and General Counsel, Lloyd’s North America
- Theresa Miller, Administrator, State of Oregon Insurance Division
- Michael E. Sproule, Executive VP and Chief Financial Officer, New York Life Insurance Co.
- Bill White, Commissioner, District of Columbia Department of Insurance

Dodd-Frank Implementation:
Federal Insurance Office: Very Quiet

Federal Insurance Office Update: Activity Update

- FIO’s First Director Did Not Assume Office Until June 1, 2011
  - Former Illinois Insurance Director Michael McGraith
  - Small staff (10-12) and modest budget
  - McGraith has made few appearances or public comments

- Study on State of Insurance Regulation Due Jan. 21, 2012
  - Report will likely review previously identified inefficiencies and strengths of current regulatory system with an eye toward modernization.

- Treasury Will Likely Exert Heavy Influence on the Report

"The states remain the functional regulators, [but] the federal government will work toward modernizing and improving our system of insurance regulation."

Neal Wolin, Deputy Secretary
Treasury Department

Source: Insurance Information Institute (I.I.I.) updates and research
The Strength of the Economy Will Influence P/C Insurer Growth Opportunities

Growth Would Also Help Absorb Excess Capital
US Real GDP Growth*

The Q4:2008 decline was the steepest since the Q1:1982 drop of 6.8%.

Recession began in Dec. 2007. Economic toll of credit crunch, housing slump, labor market contraction has been severe but modest recovery is underway.

2011 got off to a sluggish start, but growth is expected to proceed at a modest pace in 2012-2013.

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 1/12; Insurance Information Institute.
2011 Financial Overview  
State Economic Growth Varied in 2010

Hard hit Midwest and Northeast states finally entering recovery in 2010

Texas had one of the stronger economies in 2010 and has generally outperformed during the economic downturn
New Private Housing Starts, 1990-2022F

(Millions of Units)

1.19 1.01 1.20 1.29 1.46 1.35 1.48 1.47 1.62 1.64 1.57 1.60 1.71 1.85 1.96 2.07 1.80 1.36 0.91 0.60 0.71 0.87 1.34 1.23 1.32 1.38 1.42

New home starts plunged 72% from 2005-2009; A net annual decline of 1.49 million units, lowest since records began in 1959.

The plunge and lack of recovery in homebuilding and in construction in general is holding back payroll exposure growth.

Little Exposure Growth Likely for Homeowners Insurers Until at least 2014. Also Affects Commercial Insurers with Construction Risk Exposure, Surety.

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (10/11 and 1/12); Insurance Information Institute.
New auto/light truck sales fell to the lowest level since the late 1960s. Forecast for 2012-13 is still far below 1999-2007 average of 17 million units, but a recovery is underway.

Job growth and improved credit market conditions will boost auto sales in 2012 and beyond.

Car/Light Truck Sales Will Continue to Recover from the 2009 Low Point, Bolstering the Auto Insurer Growth and the Manufacturing Sector.

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (10/11 and 1/12); Insurance Information Institute.
Recovery in Capacity Utilization is a Positive Sign for Commercial Exposures

The US operated at 77.8% of industrial capacity in Nov. 2011, above the June 2009 low of 68.3% and a post-crisis high. The closer the economy is to operating at “full capacity,” the greater the inflationary pressure.

The value of Manufacturing Shipments in Nov. 2011 is up 27.8% to $455B from its May 2009 trough. Nov. figure is only 6.2% below its previous record high.

Monthly shipments are nearly back to peak (in July 2008, 6 months into the recession). Trough in May 2009. Growth from trough to November 2011 was 27.8%

*seasonally adjusted
The manufacturing sector has been expanding and adding jobs. The question is whether this will continue.

Source: Institute for Supply Management; Insurance Information Institute
ISM Non-Manufacturing Index (Values > 50 Indicate Expansion)

January 2010 through December 2011

Non-manufacturing industries have been expanding and adding jobs. The question is whether this will continue.

Source: Institute for Supply Management; Insurance Information Institute
Optimism among consumers is recovering, in part due to an improving jobs outlook, after plunging amid the debt debate debacle and S&P downgrade.

Consumer confidence has been low for years amid high unemployment, falling home prices and other factors adversely impact consumers, but improved substantially in late 2011.

Source: University of Michigan; Insurance Information Institute
Value* of Construction Put In Place, Monthly, Nov ‘08-Nov ‘11

Since the recession started, private residential and nonresidential construction together are down $302 billion (annual rate), a drop of 27%. Public construction has hardly moved.

*Seasonally adjusted annual rate

Source: [http://www.census.gov/const/C30/release.pdf](http://www.census.gov/const/C30/release.pdf)
Outlays for energy exploration (mining, and exploration for petroleum and natural gas) and new power plants (including wind and solar) have accounted for 56% of the growth in private nonresidential construction in the past year.

* seasonally adjusted annual rate

Sources: U.S. Census Bureau; Wells Fargo Securities, Economics Group, Dec. 5, 2011 report; Insurance Information Institute
In 2009:Q1 a net of 165,000 businesses disappeared. By 2010:Q3 73,000 new ones appeared, returning us to the level first attained three years before, in 2007:Q3.

Sources: U.S. Bureau of Labor Statistics; Insurance Information Institute
Significant Exposure Implications for All Commercial Lines as Business Bankruptcies Begin to Decline

Sources: American Bankruptcy Institute at http://www.abiworld.org/AM/AMTemplate.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=61633; Insurance Information Institute
722,000 new business starts were recorded in 2010, up 3.6% from 697,000 in 2009, which was the slowest year for new business starts since 1993. Business starts remained weak in early 2011.

Business Starts Were Down Nearly 20% in the Recession, Holding Back Most Types of Commercial Insurance Exposure

* Data through March 31, 2011 are the latest available as of January 16, 2012; Seasonally adjusted
### 11 Industries for the Next 10 Years: Insurance Solutions Needed

<table>
<thead>
<tr>
<th>Industry</th>
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<tbody>
<tr>
<td>Health Care</td>
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<tr>
<td>Health Sciences</td>
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<tr>
<td>Energy (Traditional)</td>
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<tr>
<td>Alternative Energy</td>
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<td>Agriculture</td>
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<td>Natural Resources</td>
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<td>Environmental</td>
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<td>Technology (incl. Biotechnology)</td>
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<td>Light Manufacturing</td>
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<tr>
<td>Export-Oriented Industries</td>
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<tr>
<td>Shipping (Rail, Marine, Trucking)</td>
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</tbody>
</table>

Many industries are poised for growth, but many insurers do not write in these economic segments.
Massive Job Losses Sapped the Economy and Commercial/Personal Lines Exposure, But Trend is Improving
Unemployment and Underemployment Rates: Stubbornly High in 2011, But Falling

January 2000 through December 2011, Seasonally Adjusted (%)

- Traditional Unemployment Rate U-3
- Unemployment + Underemployment Rate U-6

**Recession ended in November 2001**

**Unemployment kept rising for 19 more months**

**Recession began in December 2007**


Stubbornly high unemployment and underemployment constrain overall economic growth, but the job market might finally be improving.
Monthly Change in Private Employment

January 2008 through November 2011* (Thousands)

Monthly Losses in Dec. 08–Mar. 09 Were the Largest in the Post-WW II Period


Change in Number Employed in Select Industries, June 2011 vs. June 2010

Thousands

Professional Business Services, Health Care, and Trade, Transportation & Utilities) were the job growth leaders in the past year.

There is a great deal of variation in employment growth by industry, indicating a very uneven and slow recovery.

Monthly Change Employment*

January 2008 through December 2011* (Thousands)

The job gain and loss figures in 2010 were severely distorted by the hiring and termination of temporary Census workers. In 2010, 1.178 million nonfarm jobs were created.

Monthly Losses in Dec. 08–Mar. 09 Were the Largest in the Post-WW II Period

200,000 nonfarm jobs were created in November

Job Losses Since the Recession Began in Dec. 2007 Peaked at 8.4 Mill in Dec. 09; 13.3 Million People are Now Defined as Unemployed

In 2011 employment by government at all levels dropped every month except August. Total (net) jobs lost in last twelve months: 280,000.

Unemployment Rates by State, November 2011: Highest 25 States*

In November, 43 states and the District of Columbia reported over-the-month unemployment rate decreases, 3 had increases, and 4 had no change.

*Provisional figures for November 2011, seasonally adjusted.
Unemployment Rates By State, November 2011: Lowest 25 States*

In November, 43 states and the District of Columbia reported over-the-month unemployment rate decreases, 3 had increases, and 4 had no change.

*Provisional figures for November 2011, seasonally adjusted.
US Unemployment Rate

2007:Q1 to 2013:Q4F*

Rising unemployment eroded payrolls and workers comp’s exposure base. Unemployment peaked at 10% in late 2009.

Unemployment forecasts remain stubbornly high through 2012, but still imply millions of new jobs will be created.

* = actual; ** = forecasts

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (1/12); Insurance Information Institute

Peak was 2008:Q1 at $6.60 trillion.

Recent trough (2009:Q3) was $6.25 trillion, down 5% from prior peak.

Latest (2011:Q3) was $6.64 trillion, a new peak.

Growth rates in 2011:
Q2 over Q1: 0.6%
Q3 over Q2: 0.4%

Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.
Sources: http://research.stlouisfed.org/fred2/series/WASCUR; National Bureau of Economic Research (recession dates); Insurance Information Institutes.
Payroll vs. Workers Comp Net Written Premiums, 1990-2011

Payroll Base*  
$Billions

WC NWP  
$Billions

Wage & Salary Disbursements  
WC NPW

7/90-3/91  
3/01-11/01  
12/07-6/09

WC premium volume dropped two years before the recession began

WC net premiums written were down $14B or 29.3% to $33.8B in 2010 after peaking at $47.8B in 2005

Resumption of payroll growth and rate increases suggests WC NWP will grow again in 2012

*Private employment; Shaded areas indicate recessions. Payroll and WC premiums for 2011 is I.I.I. estimate
Sources: NBER (recessions); Federal Reserve Bank of St. Louis at http://research.stlouisfed.org/fred2/series/WASCUR; NCCI; I.I.I.
Thank you for your time and your attention!

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