

# Economics of the Market- Drivers for Change

Professional Indemnity Forum  
Presentation

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## DRIVERS FOR CHANGE

- Recent Catastrophes
- Regulatory Landscape
- Rate Inadequacy – The Math does not work
- Investment Returns
- Prior Year Development
- The Challenges Ahead



## RECENT CATASTROPHES

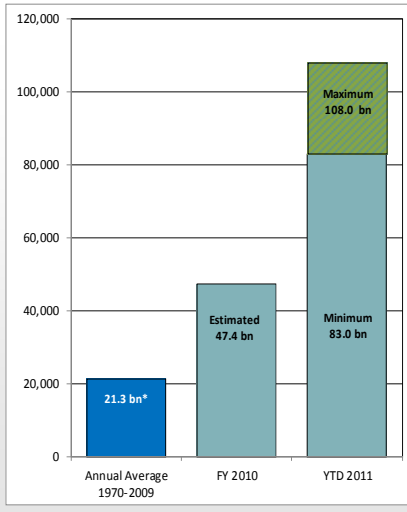
*"In a risk-taking business, it is easy to generate increasingly better results in the short run by taking on excessive risk or by building lower-quality business - but you will pay for that in the long run,"*

Jamie Dimon, CEO – JPMorgan Chase, 2011 Note to Shareholders



## RECENT CATASTROPHES

Major Natural Cat events - from January 1, 2010				
Year	Month	Event Name or Type	Insured loss (bn\$)	
			Min	Max
2010	February	Chile Earthquake		10.0
	February	Windstorm Xynthia		3.7
	March	W. Australia Severe Weather		1.1
	March	Victoria Severe Weather		1.0
	March	Eastern US Flooding		1.0
	April	Southern US Severe Weather		1.5
	May	Central US Severe Weather		2.0
	June	France/Spain Flooding		0.9
	September	New Zealand EQ		5.0
	October	Arizona Severe Weather		0.8
		<b>All other 2010 events</b>		14.6
<b>2010 Full Year</b>				41.4
2011	January	Australia Floods/Cyclone Yasi		4.0
	Jan/Feb	US Winter Storms		1.0
	February	Christchurch (NZ) EQ		15.0
	March	Japan EQ/Tsunami	30.0	40.0
	April/May	US Severe Weather		20.0
	June	New Zealand EQ 3		2.0
	July	Danish Floods		1.0
	August	Hurricane Irene		5.0
	Q3	Thai Floods		15.0
			<b>All other 2011 events</b>	3.0
<b>2011 Full Year</b>			96.0	108.0
<b>Nat Cats: since 1/1/2010</b>			137.4	149.4
<b>Significant Man-Made Cat events</b>				
2010	April	Deepwater Horizon		6.0
<b>Total: Natural + Manmade</b>			143.4	155.4



\*Source: Swiss Re Sigma study 1/2010



## RECENT CATASTROPHES

Historical Annual Cat totals - Top 10 1970-2011E					
Rank	Year	Weather-related Nat Cals	Earthquake/ Tsunami	Man-made disasters	Total (USD 000s)
1	2005	110,882	257	6,039	117,178
2	2011E	51,000	57,000	-	108,000
3	2004	47,829	3,020	3,937	54,786
4	2008	43,365	420	7,897	51,682
5	2010E	26,400	15,000	6,000	47,400
6	1999	34,007	2,790	7,720	44,517
7	2001	12,675	782	30,742	44,200
8	1992	36,699	134	7,185	44,018
9	1994	8,436	20,311	6,881	35,628
10	2007	23,687	504	5,889	30,081

Aftershocks can produce insured losses larger than the initial event – activity can persist for many years

Known Peril - Unknown Concentration

Japan experienced as many Mw 5.0 aftershocks in 10 weeks after Tohoku as in the 10 years before

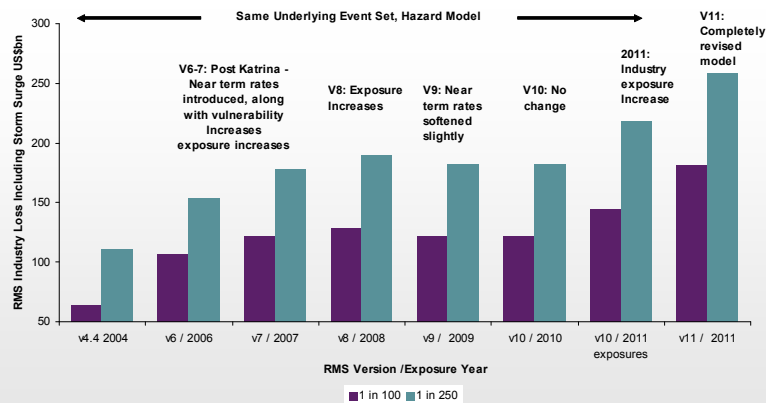
AHL: NYSE

Source: Swiss Re Sigma  
Annual totals for years prior to 2010 are indexed to 2008 USD.  
2010-2011 figures are based on loss estimates from AIR, EQECAT, IBNR Weekly and the broker community

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## RECENT CATASTROPHES – MODELLING CHANGES – CAPITAL STRAIN



V11 primary motivation was to fully revise hazard model with new observations → hurricane model development.

AHL: NYSE

Note: Progression in loss includes the impact of indexation and exposure growth by RMS as well as the pure model change

Source: RMS, Aspen Analysis

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## REGULATORY LANDSCAPE

- Increased regulatory burden globally, particularly in Europe, in part due to:
  - onset of the credit crisis in Q32008 and resulting banking sector turmoil
  - slow or no economic growth
  - Solvency II
- Varying approaches to Solvency II being adopted across Europe
  - UK and Swiss regulators arguably taking a more painstaking and rapid interpretation of the Directive than other countries
  - Over-arching objective of Solvency II is improving policy holder protection; share holder protection is not within its remit – key is finding right balance
  - Where is the industry going to find the returns to pay for the ultimate costs in capital, implementation and maintenance of Solvency II?



## RATE INADEQUACY

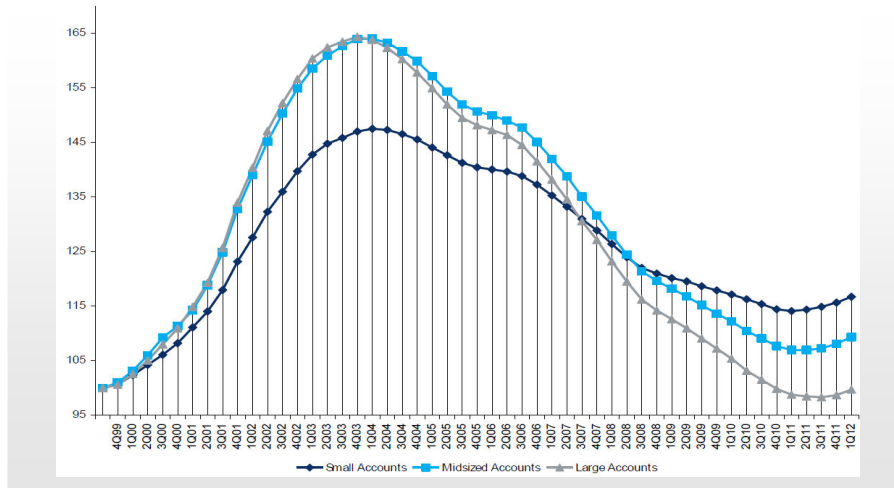
*“Not knowing your costs will cause problems in any business. In long-tail reinsurance, where years of unawareness will promote and prolong severe underpricing, ignorance of true costs is dynamite.”*

Warren Buffet, 2001 Letter to Shareholders



## RATE INADEQUACY

### Cumulative quarterly rate changes by account size



AHL: NYSE

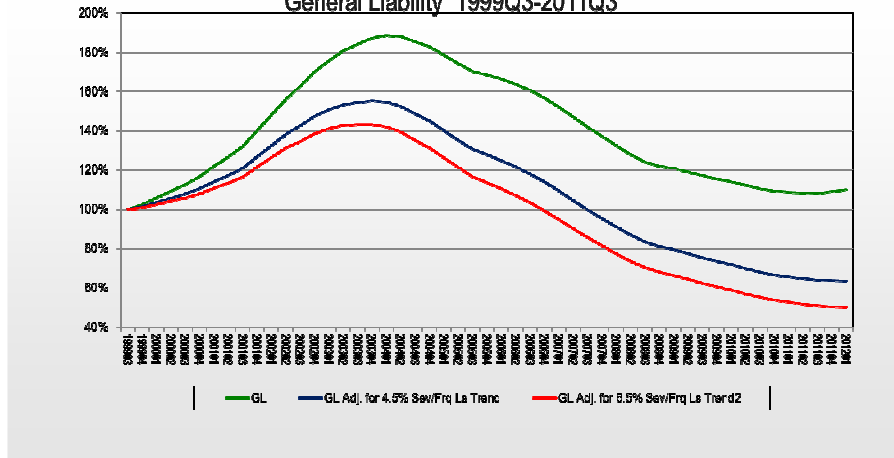
Source: CIAB. Chart prepared by Barclays Capital Equity Research 9



## RATE INADEQUACY

### Cumulative quarterly rate index

#### General Liability\* 1999Q3-2011Q3



AHL: NYSE

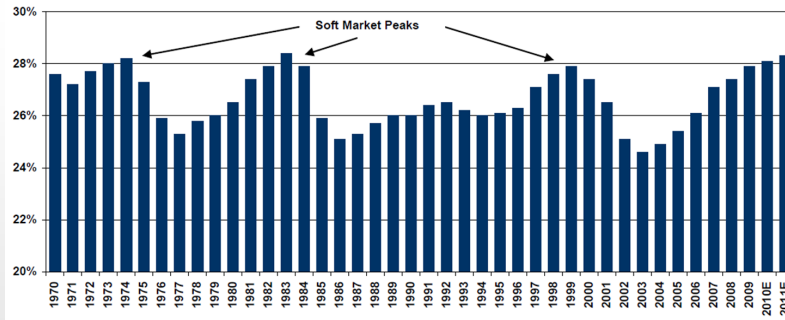
\*General Liability excludes Med Mal. Source: Council of Insurance Agents & Brokers

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## RATE INADEQUACY

### P&C Industry Underwriting Expense Ratio



Underwriting expense ratios are up significantly as premiums fall faster than expenses during soft market conditions



## INVESTMENT RETURNS

### Investment returns no longer sufficient to support high CR

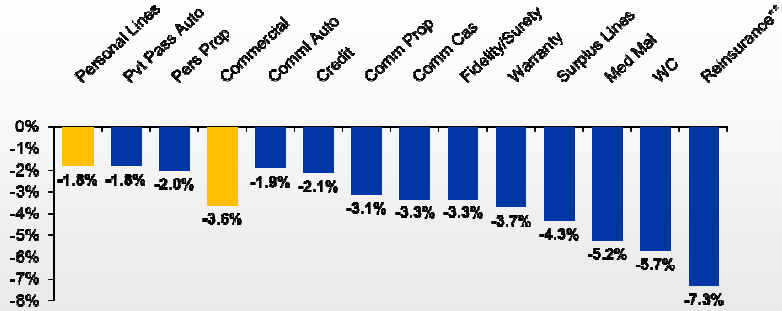


US Treasury 10-year bond yields are at historically low levels.



## INVESTMENT RETURNS

Reduction in CR 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

■ AHL: NYSE

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\*Based on 2008 Invested Assets and Earned Premiums

\*\*US Domestic reinsurance only

Source: A.M. Best, via Hertzog, iil.org, March 3, 2011



## PRIOR YEAR DEVELOPMENT

*"You never know who's swimming naked until the tide goes out"*

-Warren Buffet

■ AHL: NYSE

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## PRIOR YEAR DEVELOPMENT

**Reinsurers' reported results remain adequate, but many question sustainability as reserve redundancies are exhausted**

Recent calendar-year underwriting performance has been improved by prior-year loss reserve releases

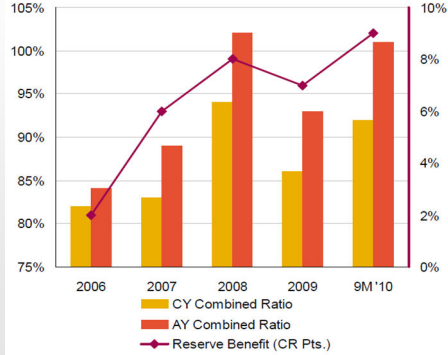
Of 15 Global Reinsurers in 2010 – 72.8% of U/wing Profit of USD 4.4B = Prior Years.

On an accident-year basis, three of the last four years have produced underwriting losses

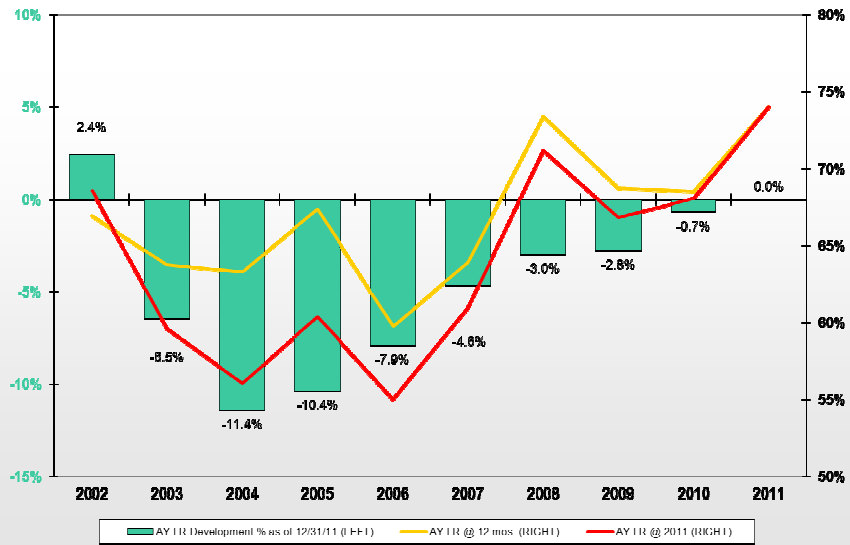
2011 was the fifth straight year of favorable reserve development = - 6.8 CR pts.

Prior-year reserve releases are unsustainable over the next few years

**Global Reinsurers: Calendar Year Combined Ratio Trends and Reserve Development Impacts**



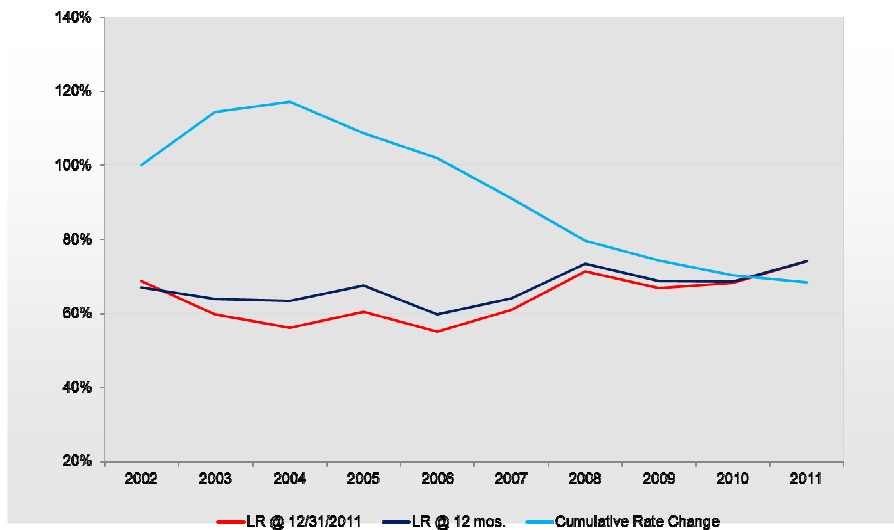
## US P/C SECTOR AGGREGATE AY RESERVE DEVELOPMENT







## INITIAL VS. CURRENT AY LOSS RATIO, US GL OCCURRENCE AS COMPARED TO CUMULATIVE RATE CHANGE (BASE YEAR 2002)



■ AHL: NYSE

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Source: SNL



## THE CHALLENGES AHEAD

- Recession/Interest Rates
- Aggregation in all its forms
- LJ Civil Litigation Review
- PPOs
- Eurozone - Demise or partial break-up of the Eurozone raises considerable challenges for insurers and reinsurers
- Are our existing models "fit for purpose"?

*"Golf is a game whose aim is to hit a very small ball into an even smaller hole, with weapons singularly ill – designed for the purpose."*

**Winston Churchill**

■ AHL: NYSE

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