2011 CAS Spring Meeting

Underwriting Cycle for P&C Insurers

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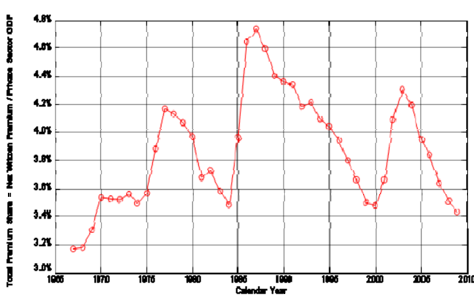
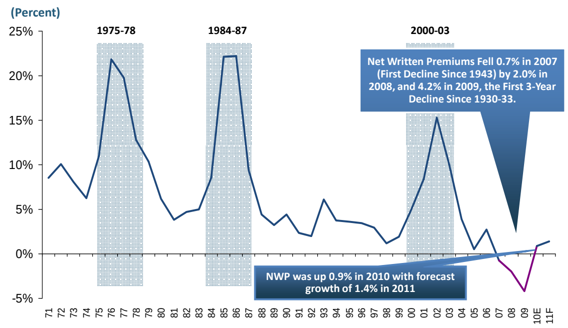
Dynamics of Underwriting Cycles

- Premium Rate Levels
  - ✓ Total Written Premium over private sector GDP
  - ✓ Annual Growth Rate in NWP
- Loss Levels
  - ✓ Underwriting Loss (Development) Shocks
  - ✓ Unexpected Investment Losses
- Level of Capital and Surplus
- Market Structural Changes
  - ✓ California WC open rating legislation in 1995
  - ✓ St Paul Ins Co left Medical Prof Liability market at the end of 2001

Total Written Premium to Private Sector GDP Ratio (1967-2009)



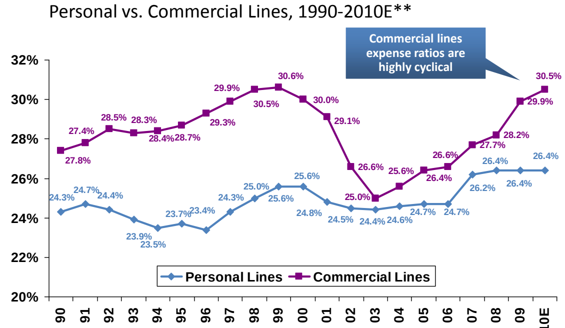
Net Written Premium Growth Rate



Shaded areas denote “hard market” periods
Sources: This slide is taken from iii.org, with credits to A.M. Best, ISO, Insurance Information Institute. 4

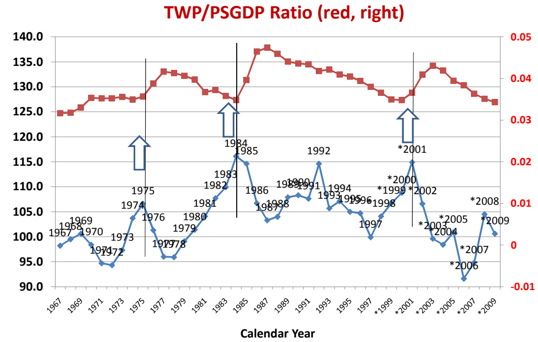
Underwriting Expense Ratio*:

Personal vs. Commercial Lines, 1990-2010E**



*Ratio of expenses incurred to net premiums written.
**2010 figures are estimates.
Source: This slide is taken from iii.org, with credits to A.M. Best; Insurance Information Institute.

U.S. P&C Insurance
Industry Combined Loss Ratio (blue, left) vs.
TWP/PSGDP Ratio (red, right)



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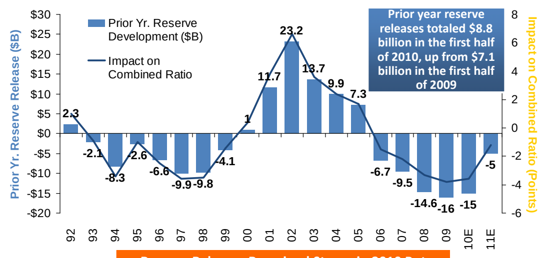
P/C Reserve Dev, 1992–2011E



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

Sources: This slide is taken from iii.org, with credits to Barclay's Capital; A.M. Best.

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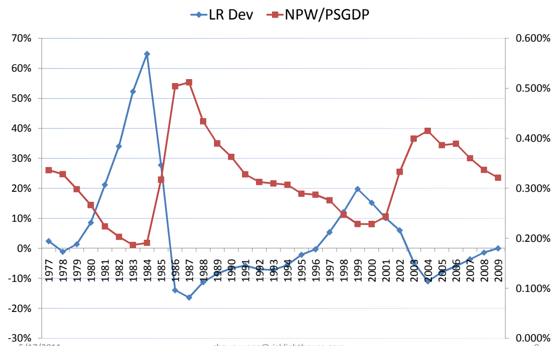
General Liability (Other Liability + Product Liability): Loss Ratio Development versus NWP/PSGDP



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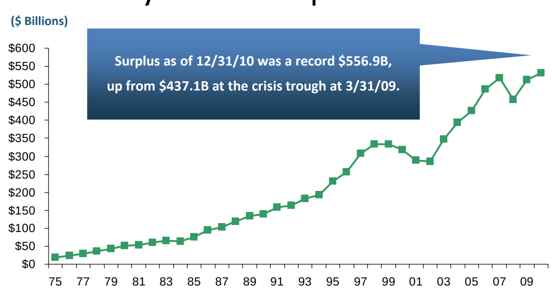
US Policyholder Surplus:1975–2010

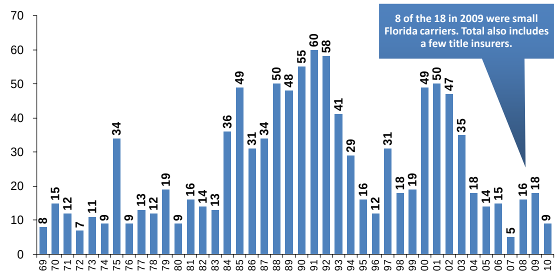
($ Billions)



The Premium-to-Surplus Ratio = $0.76:$1 as of 12/31/10, A Record Low

Source: This slide is directly taken from iii.org, with credit to A.M. Best, ISO, Insurance Information Institute.

P/C Insurer Impairments, 1969–2010



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

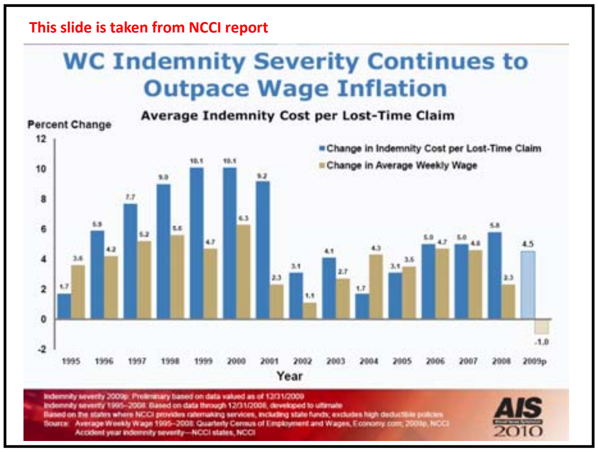
Source: This slide is taken from iii.org, with credit to A.M. Best Special Report "1969-2009 Impairment Review," June 21, 2010; Insurance Information Institute.

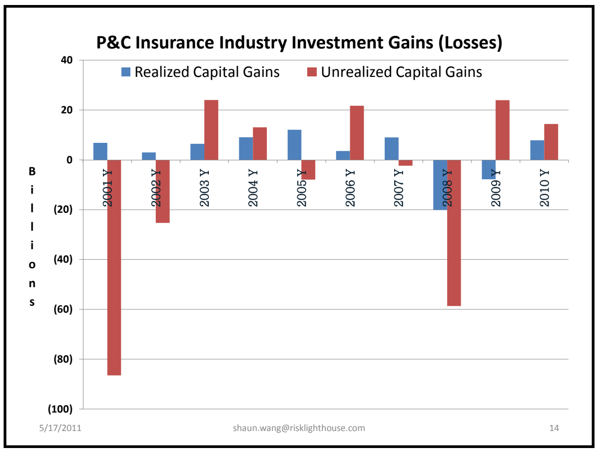
Shocks and Reactions: It requires a perfect storm to turn the market

- 1983-87 Liability crisis created a bust-and-boom of casualty insurance business
- 1992 Hurricane Andrew changed the way companies managed catastrophe accumulations, but did not turn the cycle
- 1994 California Northridge Earthquake had negligible impact on the cycle

The 2001-2003 Perfect Storm

- ✓ After a prolonged softening market (1987-2000), industry did not have adequate cushion for major losses
- ✓ Catastrophe event (9/11/2001)
- ✓ Bear stock market caused investment losses
- ✓ Waves of reserve increases prompted S&P report 19-Nov-2003 *Insurance Actuaries – A Crisis of Credibility:* "Actuaries are signing off on reserves that turn out to be wildly inaccurate"





Katrina Didn't Turn the P&C market

- The 2004 and 2005 major catastrophes did not turn the P&C market cycle
- The industry enjoyed strong hard market during 2003-2005 and had redundant reserves
- Investment income/gain on the rise

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Increased Catastrophe Activities (iii.org)

- Insured property losses from the 3/11 Japan earthquake (9.0 magnitude) could range from $20 billion to $30 billion. *This estimate does not include the devastation brought about by the tsunami, damage to automobiles, damage to infrastructure and the impact of a demand surge on the cost of labor and materials for rebuilding.*
- From March 2010 to March 2011, reinsurers were hit by a major earthquake in Chile and two quakes in New Zealand, massive floods in Australia, two damaging windstorms and the Deepwater Horizon oil rig explosion.

How stubborn can a soft market be?

- The recent market softening slide has lasted five years (2005-2010)
- The 2008-2009 Financial Crisis brought heavy investment losses for P&C insurers, but it did not turn the market. Or should it have?
- The 3/11/2011 Japan earthquake has not turned the market yet
- So what will?
- A perfect storm seems to gather clouds

A Perfect Storm in the Making?

- A mega earthquake in the U.S. may trigger economic collapse and market meltdown
- Unlike the 2008-2009 crisis, this time federal bailout is no longer available
- Insurers may suffer asset losses due to defaults of municipal bond and corporate bonds

Muni Bond Exposures
As of 9/30/2010

SNL top-tier entity	Total municipal bonds* ($M)	Surplus ($M)	Invested assets ($M)	Total municipal bonds/ surplus (%)	Total municipal bonds/ invested assets (%)
American International Group	45,520	28,876	84,219	157.6	54.0
Travelers Cos (TRV)	40,253	20,347	63,521	197.8	63.4
Auto Club Exchange Group	3,293	3,997	5,896	82.4	55.8
Mercury General Corp. (MCY)	2,474	1,559	3,277	158.7	75.5
COUNTRY Financial	1,893	1,807	3,446	104.8	54.9
Texas Farm Bureau	809	731	1,079	110.6	74.9
P&C Industry	**363,291**	**547,042**	**1,303,796**	**66.4**	**27.9**

Source: SNL Financial

Other Economic Factors

- Rising oil prices may cause a double dip recession; on the other hand, an economic downturn may crash oil prices (Gail Tverberg)
- QE2 will end by end of June 2011
- Volatility in exchange rates will impact inflation in some areas and deflation in other areas
- Housing Price volatility (divergence of replacement cost and housing market value)

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