

Asbestos and environmental (A&E) reserve levels

Christopher Diamantoukos, FCAS, MAAA

In Focus: The Underwriting Cycle Seminar Casualty Actuarial Society
October 5-6, 2009



Agenda

- Industry and group totals
- Relationships
- Metric movements
- Net and gross reserves

Industry reserves at year-end 2008

	Reserve	Incurred (\$Millions) —	Paid
A.M. Best Report at 2006 Change 2007 (Note 33) Change 2008 (Note 32) Estimate at 2008	32,810 -600 -2,300 29,910	2,800 1,400	3,400 3,700
2008 Note 32	27,076		

Note:

A.M. Best reserves include companies without Note 32.

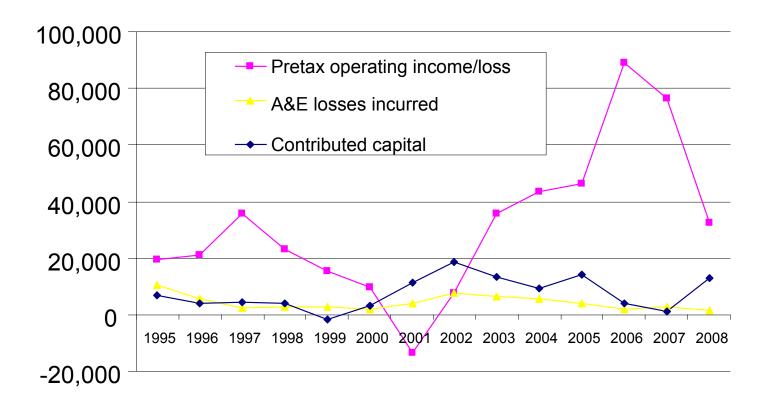
At Dec 2006, this amounted to \$2.8 billion.

Largest group reserve positions 2006

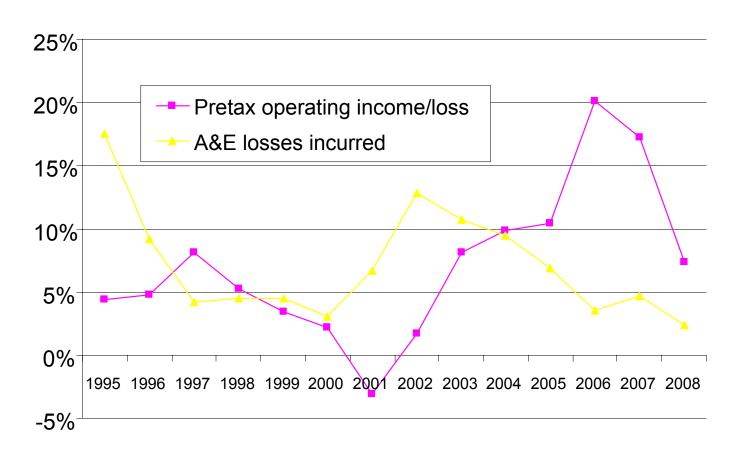
		Net A&E loss
Rank	<u>Group</u>	reserves (\$millions)
1	Travelers	4,467
2	Hartford	2,222
3	Chartis (AIG)	2,048
4	Nationwide	2,034
5	ACE/INA Brandywine	1,888
6	CNA	1,739
7	Berkshire-Hathaway	1,664
8	Allstate	1,559
9	Swiss Re	1,531
10	Allianz (Fireman's Fund)	<u>1,523</u>
	TOTAL	20,675
	Percent of industry	63%

Income, capital and A&E losses incurred

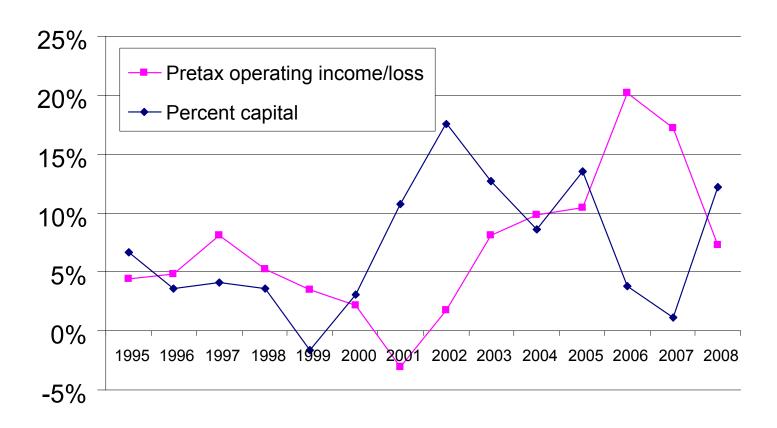
P/C industry (\$millions)



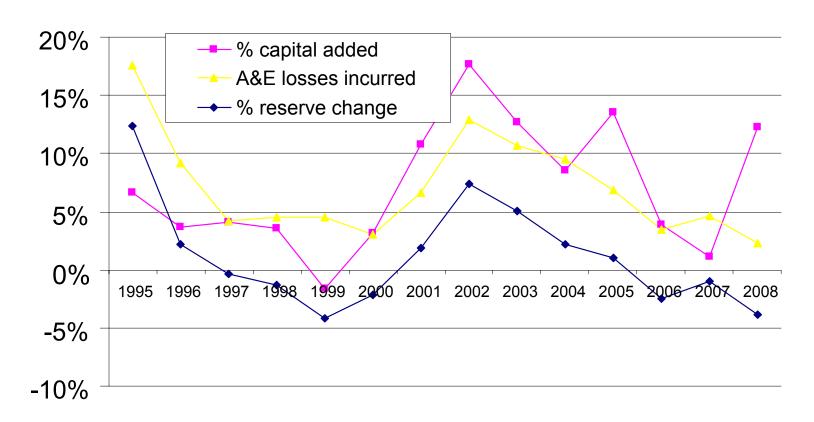
Relative operating income and A&E losses incurred



Operating income and capital contributions



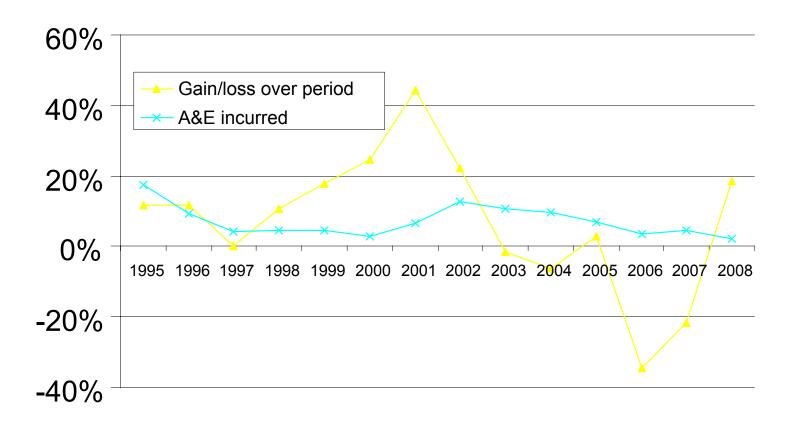
Capital and A&E losses incurred



Causes leading to capital infusion for future capacity

- ► 2001 World Trade Center
- > 2005 Hurricanes Katrina, Rita, Wilma

Combined ratios and A&E losses incurred



Industry net asbestos IBNR to case

Year	IBNR to case	Net case	Net IBNR	Net incurred	Net paid	Reserve change	Total reserve
				\$mil	lions ———		
1999	5.26	8,000	42,116	2,200	3,200	(1,000)	8,301
2000	4.99	8,000	39,916	1,500	1,400	100	7,301
2001	4.80	8,000	38,416	3,800	1,400	2,400	7,401
2002	4.33	8,000	34,616	7,700	2,000	5,700	9,801
2003	3.36	8,000	26,916	6,000	2,200	3,800	15,501
2004	2.61	8,000	20,916	4,200	3,300	900	19,301
2005	2.09	8,000	16,716	3,500	2,300	1,200	20,201
2006	1.61	8,185	13,216				21,401
2007	1.93	7,947	15,317				23,264
2008	1.88	7,396	13,881				21,277

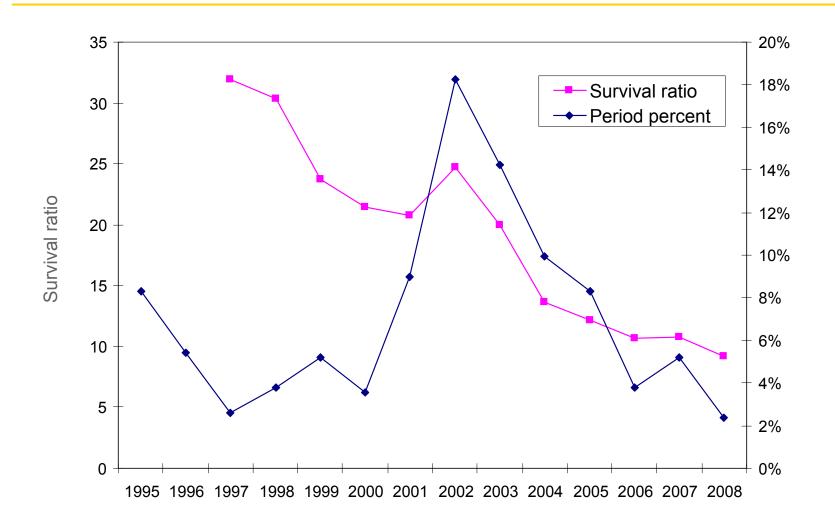
Notes:

A.M. Best unfunded asbestos liability estimated at \$3B at 2006 Net case for 2005 and prior artificial, likely overstated, thereby understating IBNR to case ratio Note 33/32 source for 2006-2008 reserve components

Net asbestos survival ratios

Year	Net paid	3-year avg. paid — \$millions —	Total reserve	Survival <u>ratio</u>
1995	1,300	Ψ		
1996	2,300			
1997	1,000	1,533	48,900	31.9
1998	1,400	1,567	47,500	30.3
1999	3,200	1,867	44,300	23.7
2000	1,400	2,000	42,900	21.5
2001	1,400	2,000	41,500	20.8
2002	2,000	1,600	39,500	24.7
2003	2,200	1,867	37,300	20.0
2004	3,300	2,500	34,000	13.6
2005	2,300	2,600	31,700	12.2
2006	2,600	2,733	29,100	10.6
2007	2,500	2,467	26,600	10.8
2008	2,700	2,600	23,900	9.2

Net asbestos paid and survival ratios



Asbestos reserve breakdown

	Net	Direct	Net to	Direct & assumed	Net to direct & assumed
Year	reserves \$million	reserves	direct pct.	reserves \$millions	<u>ratio</u>
2006	21,401	28,532	75.0%	41,483	51.6%
2007 2008	23,264 21,277	28,892 25,519	80.5% 83.4%	43,523 40,509	53.5% 52.5%

Net and direct reserve relationships

- Use of assumed reserves will double-count when intercompany pooling occurs in a group
- Net US reserves reflect foreign cessions
- If net US reserves increase relative to direct reserves, may indicate lower proportion of foreign cessions
- Commutations of reinsurance also a factor and these continue to be made

Are foreign cessions coming back?

- What about Berkshire-Hathaway (BH) and Equitas?
 - ▶ \$14.2B of cover
 - Equitas net reserves of \$8.7B at March 2007
 - Completed and effective June 30, 2009
- Will US industry net asbestos and environmental ultimate be redefined?

US reserve metrics may change

Asbestos net reserves

					Industry
		Industry			IBNR to
		IBNR to		BH IBNR	case ex
Year	<u>Industry</u>	case	BH only	to case	BH
	(\$mil)		(\$mil)		
2006	21,401	1.61	1,005	3.01	1.57
2007	23,264	1.93	1,280	4.66	1.85
2008	21,277	1.88	1,330	6.57	1.76
2009			?????		

Sources of information

- AM Best Special Reports:
 - "U.S. Asbestos and Environmental Liabilities 2006 Market Review", November 26, 2007
 - "Asbestos Claims Surge Set to Dampen Earnings For Commercial Insurers", May 7, 2001
 - "Asbestos Wave Continues to Crest: Can Environmental Be Far Behind?", December 6, 2004
 - "Asbestos and Environmental Losses Edge Toward Peak in 2004 As Funding Gap Narrows", March 2006
 - "Asbestos and Environmental Losses Rose During 2005 as Asbestos Funding Neared Completion", March 26, 2007
- Best's Aggregates & Averages, Property/Casualty, United States & Canada, 2000, 2004, 2005, 2009 Editions
- Industry 2008 Annual Statement Note 32 and corresponding prior Notes