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2012 Segment Review
October 28, 2013

Asbestos Losses Fueled by Rising Number of Lung Cancer Cases

A rising number of lung cancer lawsuits related to asbestos and evolving mass tort exposures continued to drive A&E losses in 2012.

While generally not a material drag on the property/casualty (P/C) industry's earnings, industry losses from asbestos and environmental (A&E) claims resumed an upward climb in 2012. Annual incurred A&E losses rose 12% in 2012 after a 31% decline in 2011. This comes amid a rising number of lung cancer lawsuits related to asbestos and evolving mass tort exposures on the environmental side. Yet industry funding of net A&E exposures has reached nearly $114 billion of estimated industry A&E liabilities of $127 billion, reflecting a close to 90% funding rate.

In December 2012, A.M. Best raised its estimate of net ultimate asbestos losses for the U.S. P/C industry to $85 billion from its previous estimate of $75 billion. No change has been made to the estimate of net ultimate environmental losses, which remains at $42 billion. The higher asbestos loss estimate reflected ongoing losses of roughly $2 billion per year with claim payments averaging $2.5 billion per year. A.M. Best's view of ultimate industry losses for A&E is $127 billion. As of year-end 2012, the industry had funded, through a combination of paid losses and loss reserves, nearly $76 billion in asbestos exposures and approximately $38 billion in environmental costs.

Total A&E incurred losses have increased in four of the past six years, with 2008 and 2011 posting declines of 47% and 31%, respectively. While incurred asbestos losses typically represent between 75% and 80% of total A&E losses, the annual percentage change in incurred environmental losses has closely followed asbestos losses.The 75% to 80% proportion of total A&E incurred losses represented by asbestos also holds true for loss reserves and, to a lesser extent, paid losses.While asbestos loss payments have roughly approximated asbestos incurred losses since 2010, environmental loss payments continue to significantly outpace environmental incurred losses.As a result, it appears that the industry is using a "pay-as-you-go" approach for asbestos claims while essentially paying down environmental loss reserves. This is also reflected in the flat level of asbestos reserves, hovering around $23 billion in each of the past five years despite $10 billion in additional incurred losses. Environmental reserves have slowly declined each year to $5.2 billion in 2012 from $6.2 billion in 2008 while posting $3 billion in additional incurred losses over the past five years.

The industry's aggregate funding for A&E liabilities rose by roughly $2.8 billion in 2012, with half of this additional funding (through incurred losses) spread among the top 10 insurer groups (as measured by net A&E reserves).The 2012 loss is slightly higher than the P/C industry's five-year funding average of $2.6 billion per year.

This analysis is based on A.M. Best's review of statutory annual statement Footnote 33 data for year-end 2012 (see **Exhibit 1**) and supplemented with A.M. Best's proprietary data, including prior years' footnotes dating back to and including 1991 (the oldest available year with National Association of Insurance Commissioners annual statements).

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Exhibit 1

U.S. Asbestos & Environmental – Key Statistics (2008-2012)

Recap from Footnote 33, adjusted for three large loss portfolio transfers.[1]
($ Billions)

Asbestos										
	2008	**% Chg.**	**2009**	**% Chg.**	**2010**	**% Chg.**	**2011**	**% Chg.**	**2012**	**% Chg.**
Beginning Net Reserves	25.5	-1.1	23.7	-7.1	23.2	-2.0	23.4	0.8	23.2	-0.9
Add: Net Incurred Losses	1.3	-48.0	1.9	44.2	2.8	45.2	1.9	-31.2	2.1	9.5
Less: Net Paid Loss & LAE	3.1	12.3	2.4	-23.7	2.6	8.9	2.1	-18.2	2.2	3.9
Ending Net Reserves	23.7	-7.1	23.2	-2.0	23.4	0.8	23.2	-0.9	23.0	-0.5
3-Year Survival Ratio[2]	8.1	N/A	8.4	N/A	8.6	N/A	9.8	N/A	10	N/A
1-Year Combined Ratio[3]	0.3	N/A	0.4	N/A	0.6	N/A	0.4	N/A	0.5	N/A
Environmental[4]										
	2008	**% Chg.**	**2009**	**% Chg.**	**2010**	**% Chg.**	**2011**	**% Chg.**	**2012**	**% Chg.**
Beginning Net Reserves	6.9	-4.7	6.2	-10.2	5.9	-5.1	5.7	-3.4	5.3	-5.9
Add: Net Incurred Losses	0.4	-44.7	0.5	45.5	0.8	52.2	0.6	-28.4	0.7	19.6
Less: Net Paid Loss & LAE	1.1	12.0	0.8	-20.6	1.0	18.9	0.9	-15.6	0.8	-2.1
Ending Net Reserves	6.2	-10.6	5.9	-5.1	5.7	-3.4	5.4	-4.8	5.2	-3.7
3-Year Survival Ratio[2]	6.0	N/A	6.1	N/A	5.8	N/A	6.0	N/A	5.8	N/A
1-Year Combined Ratio[3]	0.1	N/A	0.1	N/A	0.2	N/A	0.1	N/A	0.2	N/A
Total A&E[4]										
	2008	**% Chg.**	**2009**	**% Chg.**	**2010**	**% Chg.**	**2011**	**% Chg.**	**2012**	**% Chg.**
Beginning Net Reserves	32.4	-1.9	29.9	-7.7	29.1	-2.6	29.1	-0.1	28.5	-1.9
Add: Net Incurred Losses	1.7	-47.3	2.4	44.5	3.6	46.7	2.5	-30.5	2.8	11.9
Less: Net Paid Loss & LAE	4.2	12.2	3.2	-22.9	3.6	11.5	3.0	-17.5	3.0	2.2
Ending Net Reserves	29.9	-7.8	29.1	-2.6	29.1	-0.1	28.6	-1.7	28.3	-1.1
3-Year Survival Ratio[2]	7.5	N/A	7.8	N/A	7.9	N/A	8.7	N/A	8.8	N/A
1-Year Combined Ratio[3]	0.4	N/A	0.6	N/A	0.8	N/A	0.6	N/A	0.6	N/A

1 Grossed up for the loss portfolio transfers of Fireman's Fund, Munich Re America Corp. and Swiss Re America's A&E reserves to their respective European parents in 2002, 2005 and 2011, respectively. Swiss Re's adjustments are estimated by AMB as actual figures were not provided.
2 Ending net reserves divided by three-year average of net payments.
3 Net point impact to combined ratio.
4 The beginning net environmental reserve for 2012 is $62 million less than the 2011 ending environmental reserve due to one insurer group excluding mold from its footnote 33 environmental losses without restating its prior-year footnote data in the 2012 annual statement.
Source: A.M. Best data & research; for information on full Note 33 data dating back to 1991 for all companies and groups, please call (908) 439-2200, ext. 5383.

All figures in this report are net of reinsurance and adjusted to include the 2005 loss portfolio transfer (LPT) of A&E liabilities by Munich Reinsurance America Corp. to its German parent (Munich Rueck); the 2002 LPT of Fireman's Fund Insurance Co.'s A&E liabilities to its German parent (Allianz SE); and A.M. Best's estimate of the 2011 LPT of Swiss Reinsurance Group's A&E liabilities to its Swiss parent (Swiss Re). The data prior to 2011 reflect Swiss Re's actual net U.S. losses prior to the LPT as reported in those years (only post 2010 data are estimated by A.M. Best as that information was not made available). **Exhibit 1** shows a recap of the industry's net A&E losses over the five-year period, adjusted for these three LPTs. All exhibits in this report are on an adjusted basis.

Asbestos

In the not-so-distant past, asbestos loss costs were driven by very large numbers of plaintiffs seeking relatively modest sums (per person) against a wide array of defendants, including many peripheral defendants, such as those not directly involved in the mining or selling of asbestos. According to insurers, the connection among many of these peripheral defendants' products and the injuries claimed were often tenuous. With the advent of tort reform, these types of asbestos claims have largely dried up and the lead has generally been taken over by more seriously injured mesothelioma claimants. This has tended to drive up the average cost per claim. These claims continue to be filed at relatively higher rates, confounding the expectations of some that such claims would peak during the mid-2000s.

In addition to more traditional mesothelioma filings, the volume of lung cancer cases appears to be rising as more attorneys seek higher settlements in the face of more successful suits relative to past settlements. According to industry participants, the number of such suits has begun to increase significantly. In short, more tobacco lung cancer cases are going to court and more damages are being awarded. This may be fueling an incentive for asbestos plaintiffs' attorneys to file cases alleging asbestos exposures as at least a contributor to the lung cancer. Some participants in asbestos litigation believe that 2% to 5% of new lung cancers are caused by asbestos exposure. That would translate into approximately 3,000 to 5,000 new cases per year. Over the years, some studies have noted an increased likelihood of developing cancer if exposed to both asbestos and tobacco and an even higher probability if asbestosis (scarring of the lung tissue caused by asbestos fibers) is present. This raises a number of issues, not least of which is how to allocate damages between asbestos and tobacco exposures.

Given the long latency period between exposure to asbestos and the manifestation of mesothelioma, as well as the very large number of people exposed over many years, both directly and indirectly, and the rise in the number of lung cancer cases being litigated, it is likely that asbestos losses will continue unabated for many years to come. As these losses grow, there could be upward pressure on A.M. Best's ultimate industry loss estimates.

Environmental

While asbestos loss exposure still represents the vast majority of total A&E losses, environmental claims continue to generate roughly $600 million of incurred losses each year, with annual loss payments averaging nearly $1 billion. Given the magnitude of policy buybacks that occurred in the late 1990s and early 2000s, the insurance industry's future liability appears contained to current estimates.

The legal environment with respect to environmental and mass tort exposures continues to evolve. As discussed in last year's Best's special report titled *"Asbestos Losses Persist; A.M. Best Raises Industry's Loss Estimate to $85 Billion"* (Dec. 10, 2012), a number of sizable pollution settlements were reached in 2012; pollution exclusions were narrowed or found to be ambiguous and thus unenforceable, a duty to defend was upheld where the policy incepted after the insured's polluting activities, and site contaminants were revisited and found to be far more toxic than originally thought, thus raising the potential for significantly higher losses. The report also discussed a potentially significant decision handed down by the California Supreme Court in August 2012 in "State of California v. Continental Insurance Co., et al." While this particular case relates to environmental exposures and only applies to California cases, the outcome may also be applied to other mass tort cases, including asbestos. In effect, the court ruled that insureds can stack coverage limits while also forcing insurers to pay "all sums," regardless of the fraction of time coverage was in place relative to the time period that the pollution occurred or the plaintiff was exposed to asbestos. Though the payment of "all sums" is not new, it requires the entire loss be allocated to a single policy year, subject to the policy's limits, without allocation to uninsured years. The stacking of policies means that an insured potentially has access to the full policy limits in each year of the pollution activity (or asbestos exposure); essentially refilling the available coverage each year.

In 2013, pollution liability news included: a $500-million cleanup plan for the Gowanus Canal in New York City; a $47-million cleanup plan for the Ringwood, N.J., Superfund site; a lawsuit seeking $113 million filed by some upstate New York families alleging that the former "Love Canal" site is leaking; and suits against Exxon Mobil Corp. for its use of MTBE (an additive to gasoline to improve air quality as mandated by the federal EPA), which resulted in groundwater pollution in New York City. In "Doe Run Resources Corp. v. Certain Underwriters at Lloyds of London," excess liability insurers were found jointly and severally liable for policies written during the 1950s. The court also found that each separate and distinct cause of contamination at each site was considered a separate occurrence. With no aggregate limits in those policies, Doe Run was found to be entitled to coverage under each triggered policy for multiple per occurrence limits at each site. In another case also involving Doe Run, but against Lexington Insurance Co., an American International Group (AIG) company, the court found that the absolute pollution exclusion precluded a duty to defend in one case alleging discharge and release of mining wastes, but that a duty to defend did exist in a second case alleging distributed waste materials used in the local community for sandbox fill and other applications.

In June 2013, Oregon passed Senate Bill 814 that could force insurers to settle active pollution liability claims and subject them to retroactive bad faith actions. The bill includes an updated list of unfair environmental claims settlement practices and a private right of action for policyholders to pursue insurers based on the aforementioned list. It also allows insureds to seek and obtain special counsel to settle claims, services that would be paid for by insurers and end insurers' contractual rights to appoint counsel for the insured. Insurers claim that this legislation has already created great uncertainty for both closed and pending environmental cases, and legal challenges to the law may take years to resolve. While insurer losses for old environmental claims appear to be modest and reasonably stable, it is clear that ongoing litigation with the potential for large settlements remains certain.

Key Findings - Note 33

The 12% rise in 2012 annual incurred A&E losses followed a 31% decline in 2011 and increases of nearly 50% each in 2009 and 2010. This followed an almost 50% decline in 2008. However, the decline in 2011 and much of the increase in 2010 was due to AIG's $1.4 billion asbestos charge in 2010. Normalizing for this one charge by one insurer, both asbestos and total A&E incurred losses have been rising modestly over the past five years. Paid losses remain consistently high over the past five years, averaging $2.5 billion per year for asbestos and just under $1 billion per year for environmental.

Ten groups each recorded incurred A&E losses of roughly $125 million or more during 2012 with not much change in the number of such groups noted in recent years. Of these 10 groups, eight recorded asbestos losses exceeding $100 million each with no groups exceeding the $100 million mark for environmental losses.

Additional key findings in A.M. Best's analysis of Footnote 33 for year-end 2012 are:

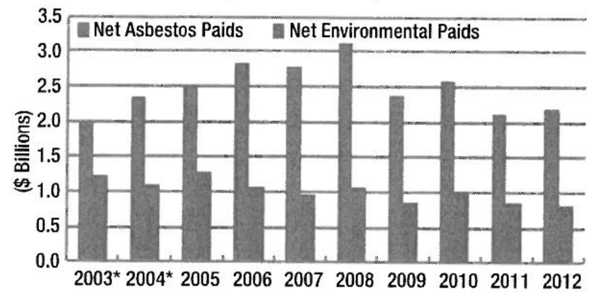
- Asbestos and environmental loss payouts were relatively unchanged from 2011, up 4% and down 2%, respectively (see **Exhibit 2**).

- Asbestos loss payments continue to exceed $2 billion per year since 2002.

- Although annual environmental loss payments have declined since the $2.9 billion peak in 1998, payouts are still significant, ranging between $830 million and $1.3 billion per year since the mid-2000s.

- Total net A&E loss reserves continue to hover above $28 billion, despite sizable loss payments. Net asbestos reserves were virtually unchanged in 2012 while net environmental reserves dipped 4%, for an overall decrease of just 1%.

Exhibit 2
U.S. Asbestos & Environmental – Normalized Net Paid Losses (2003-2012)

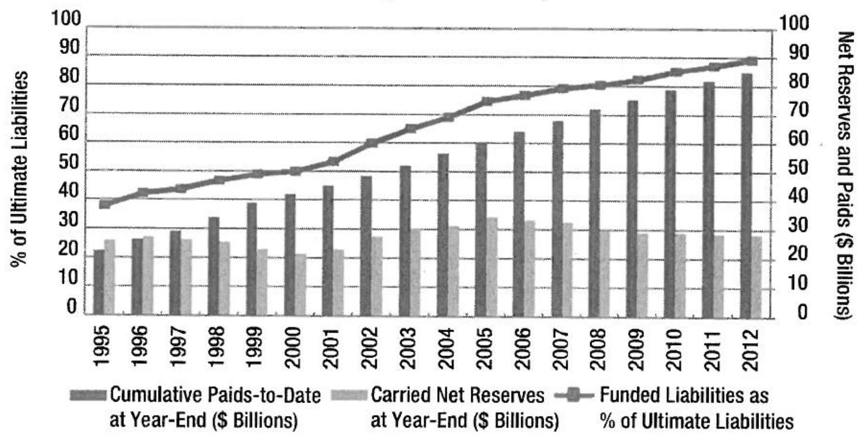


* 2003-2004 exclude $1.3 billion in Western MacArthur asbestos payouts from two insurers.
Source: A.M. Best data & research

Industry Funding Levels

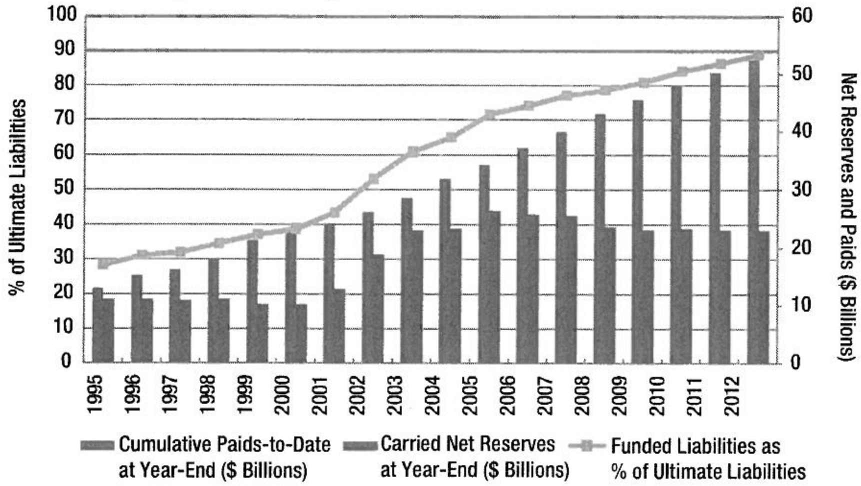
Industry funding of net A&E exposures has reached nearly $114 billion of estimated industry A&E liabilities of $127 billion, leaving an estimated shortfall of approximately $13 billion. This reflects a close to 90% funding rate of ultimate A&E exposures. These figures break down to just under $76 billion of asbestos funding (89% funded) and $38 billion of environmental funding (90% funded) as shown in **Exhibits 3-5**. The breakout of funding needs (shortfalls) between asbestos and environmental is now $9.5 billion and $4.3 billion, respectively. The industry funded (net incurred losses) nearly $30 billion of its A&E liabilities between 1991 and 1995, including a sizable $10 billion in 1995 alone, nearly 70% of which was for pollution losses that year. The 1996-2000 period witnessed almost $15 billion in losses, of which a third was incurred in 1996, including almost 60% for environmental liabilities. The following five-year period (2001-2005) generated $30 billion in losses, which were more evenly distributed throughout the period, but were much more heavily weighted toward

Exhibit 3
U.S. Asbestos & Environmental – Estimated Industry Liabilities as % of Ultimate (1995-2012)



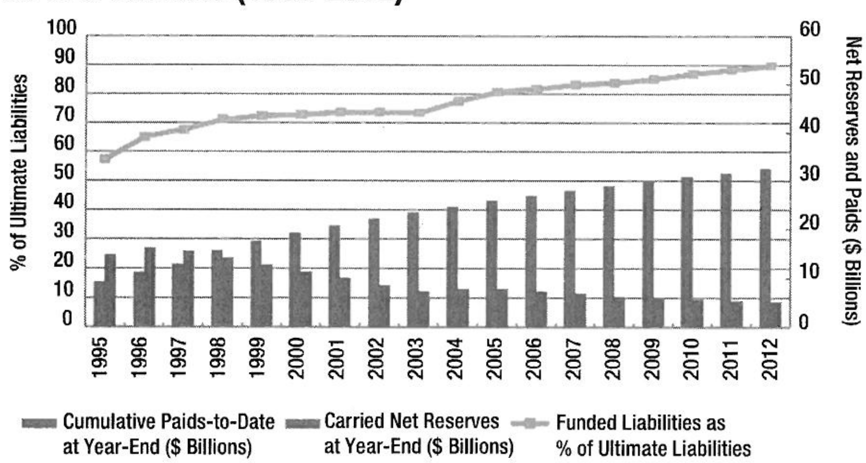
Source: A.M. Best data & research

Exhibit 4
U.S. Asbestos – Estimated Funded Liabilities as % of Ultimate (1995-2012)



Source: A.M. Best data & research

Exhibit 5
U.S. Environmental – Estimated Industry Funded Liabilities as % of Ultimate (1995-2012)



Source: A.M. Best data & research

asbestos losses. The 2006–2010 period saw just under $14 billion in losses, most of which were asbestos related. The start of the current five-year period (2011-2015) shows the same trends, with relatively modest environmental losses and still high asbestos losses.

Industry Survival Ratios

The three-year survival ratio is an estimate of the number of years that current reserve levels can support recent loss-payout patterns. For individual insurers, the ratio of reserves to the average of the three most recent annual payouts is normalized to exclude unusually large shock losses. A number of factors could distort this ratio including but not limited to, differences in settlement practices; primary layer vs. excess layer policies; commutations with reinsurers; and the use of structured settlements. As a result, this ratio should be used cautiously in drawing conclusions regarding A&E reserve adequacy.

Exhibit 6 shows key net A&E figures and industry survival ratios for the three main industry segments that make up the total U.S. P/C industry: commercial, reinsurance, and personal lines. Approximately 70% of the industry's net A&E reserves are housed within the commercial lines segment, with reinsurers accounting for just over 20% of the industry's exposures. The total industry asbestos survival ratio has improved slowly, reaching 10.0 times in 2012 from 8.1 times in 2008. The environmental survival ratio has not moved materially in recent years, coming in at 5.8 times in 2012 from 6.0 times

Exhibit 6

U.S. Asbestos & Environmental – Reserves & Losses by Segment (2008-2012)

($ Billions)

Asbestos — Commercial Lines

Year	Net Reserve	Net Incurred	Net Paid	3-Year Survival Ratio
2008	$16.6	$0.8	$2.5	7.6x
2009	16.4	1.6	1.8	7.7x
2010	16.7	2.2	1.9	8.0x
2011	16.8	1.6	1.5	9.6x
2012	16.0	1.4	2.2	8.6x

Environmental — Commercial Lines

Year	Net Reserve	Net Incurred	Net Paid	3-Year Survival Ratio
2008	$4.2	$0.3	$0.8	5.5x
2009	4.0	0.4	0.6	5.7x
2010	3.8	0.5	0.7	5.5x
2011	3.7	0.5	0.6	5.9x
2012	3.5	0.5	0.6	5.7x

Asbestos — Reinsurance

Year	Net Reserve	Net Incurred	Net Paid	3-Year Survival Ratio
2008	$5.0	$0.4	$0.5	9.0x
2009	4.8	0.2	0.4	9.8x
2010	4.8	0.5	0.5	10.0x
2011	4.5	0.3	0.5	9.2x
2012	5.2	0.5	-0.2	17.6x

Environmental — Reinsurance

Year	Net Reserve	Net Incurred	Net Paid	3-Year Survival Ratio
2008	$1.2	$0.0	$0.1	8.5x
2009	1.1	0.0	0.1	8.8x
2010	1.1	0.2	0.2	7.6x
2011	1.0	0.1	0.1	6.8x
2012	1.0	0.0	0.0	7.4x

Asbestos — Personal Lines

Year	Net Reserve	Net Incurred	Net Paid	3-Year Survival Ratio
2008	$2.0	$0.2	$0.2	10.9x
2009	2.0	0.1	0.1	12.2x
2010	1.9	0.0	0.1	13.2x
2011	1.8	0.1	0.1	13.6x
2012	1.8	0.1	0.2	12.3x

Environmental — Personal Lines

Year	Net Reserve	Net Incurred	Net Paid	3-year Survival Ratio
2008	$0.8	$0.0	$0.1	6.1x
2009	0.7	0.1	0.1	6.0x
2010	0.8	0.2	0.1	5.9x
2011	0.7	0.1	0.1	5.5x
2012	0.7	0.2	0.2	5.1x

Asbestos — Total Industry

Year	Net Reserve	Net Incurred	Net Paid	3-Year Survival Ratio
2008	$23.7	$1.3	$3.1	8.1x
2009	23.2	1.9	2.4	8.4x
2010	23.4	2.8	2.6	8.6x
2011	23.2	1.9	2.1	9.8x
2012	23.0	2.1	2.2	10.0x

Environmental — Total Industry

Year	Net Reserve	Net Incurred	Net Paid	3-year Survival Ratio
2008	$6.2	$0.4	$1.1	6.0x
2009	5.9	0.5	0.8	6.1x
2010	5.7	0.8	1.0	5.8x
2011	5.4	0.6	0.9	6.0x
2012	5.2	0.7	0.8	5.8x

Source: A.M. Best data & research

in 2008. The commercial lines segment's asbestos survival ratio declined by one full point to 8.6 times as asbestos loss payments rose by roughly 45% to $2.2 billion during 2012. This higher payment "replaced" the 2009 payment of $1.8 billion that dropped off the three-year average. Conversely, the reinsurance segment's 8.4 point increase in its asbestos survival ratio to 17.6 times reflects a negative payment of nearly $390 million from Berkshire Hathaway Insurance Group, which generated a negative payment for the reinsurance segment of roughly $200 million. As a result, the three-year average loss payment figure was dampened, driving the segment's asbestos survival ratio increase.

Top 30 A&E Insurer Groups by Net A&E Reserves

Since 2004, the top 30 groups have held approximately 95% of the industry's total net A&E reserves (see **Exhibit 7**). The top 10 groups alone held nearly 65% of total net

A&E reserves, and the top five groups held 40% of the total. Asbestos reserves make up roughly 80% of total A&E reserves. This reflects the relatively more aggressive funding of asbestos liabilities vs. environmental. Meanwhile, asbestos loss payments have grown as a percentage of total A&E loss payments, rising to more than 70% in more recent years from 64% in 2003. Since 1991, aggregate asbestos payments comprise approximately 60% of total A&E payments.

Exhibit 7

U.S. Asbestos & Environmental – Key Benchmarks for Top Property/Casualty Writers (2012)

Ranked by total asbestos and environmental reserves.

($ Millions)

								2012 Net A&E Paid Losses				Earnings Drag (Points)	
Rank	**Group**	**Normalized Net A&E Paid Share**	**Net A&E Reserve Share**	**Net A&E Loss Reserves**	**Net Reserve Change**	**Asbestos Mix**	**Environmental Mix**	**Net A&E Paid Loss**	**Asbestos Mix**	**Environmental Mix**	**3-Year Survival Ratio**	**1-Year**	**3-Year**
1	Travelers Insurance Cos[1]	15.1%	9.6%	$2,714	-2%	87%	13%	$320	74%	26%	7.3	1.2	1.1
2	Berkshire Hathaway Ins Group	2.4	9.1	2,562	21	79	21	-350	111	-11	0	0.3	0.3
3	American International Group	5.1	8.3	2,362	-8	93	7	292	90	10	9.7	0.4	2.7
4	Hartford Insurance Group[1]	5.2	6.5	1,828	-7	87	13	195	79	21	7.8	0.5	2.2
5	Nationwide Group	6.4	6.1	1,739	0	80	20	178	80	20	10.1	1.1	0.7
6	Munich Re America Corp. Group[5]	3.5	5.5	1,546	10	84	16	88	97	3	8.3	5.2	6.1
7	Allianz of America (Fireman's Fund)[5]	3.9	5.3	1,495	0	78	22	138	71	29	12.4	3.0	3.9
8	CNA Ins Cos[2]	6.9	5.1	1,440	6	78	22	173	56	44	8.6	4.4	2.7
9	Liberty Mutual Insurance Cos	8.2	4.3	1,205	-9	74	26	265	86	14	4.8	0.6	0.6
10	Allstate Insurance Group	3.5	4.2	1,193	-4	86	14	92	85	15	13.9	0.2	0.1
11	Swiss Reinsurance Group[5]	4.5	4.2	1,174	-5	90	10	105	83	17	8.5	2.7	1.8
12	Fairfax Financial (USA) Group	2.3	3.5	988	18	88	12	102	75	25	9.4	6.4	4.5
13	White Mountains Insurance Group[3]	3.0	3.2	913	-9	85	15	134	80	20	8.0	3.1	3.6
14	ACE INA Group	6.3	3.2	909	-18	87	13	342	82	18	3.5	3.1	2.7
15	Chubb Grp of Ins Cos[2]	2.5	3.0	850	-1	69	31	93	46	54	9.9	0.9	0.8
16	FM Global Group	0.8	1.8	518	-10	86	14	53	86	14	9.9	-0.2	0.1
17	Farmers Insurance Group	1.3	1.8	496	26	72	28	72	37	63	6.5	1.2	0.6
18	Zurich Financial Svcs NA Group	1.0	1.7	494	16	67	33	58	35	65	18.7	2.9	1.4
19	Great American P&C Ins Group	1.0	1.3	367	3	82	18	33	49	51	10.3	1.7	1.4
20	Arrowpoint Capital Group	2.0	1.2	348	-15	87	13	83	78	22	5.4	NM	NM
21	Sentry Insurance Group	0.5	1.1	325	1	56	44	21	46	54	15.7	1.6	0.9
22	Everest Re U.S. Group[4]	1.1	1.1	305	-10	95	5	36	89	11	7.4	0.0	0.0
23	Alleghany Ins Holdings Group	0.2	1.0	275	14	94	6	21	94	6	12.6	1.4	2.4
24	Markel Corporation Group	0.4	0.6	161	12	66	34	16	64	36	16.2	2.4	0.9
25	Randall Group	0.4	0.5	142	-6	86	14	24	78	22	5.8	NM	NM
26	Philadelphia Ins/Tokio Mar Grp	0.1	0.4	109	86	76	24	14	90	NM	12.3	2.0	1.0
27	GLOBAL Reins Corp of America	0.3	0.4	100	207	83	17	-83	58	42	0	NM	NM
28	Amerisure Companies	0.2	0.3	73	-6	86	14	8	93	7	9.2	0.6	0.1
29	Cincinnati Insurance Companies[6]	0.2	0.2	67	-51	31	69	16	29	71	6.5	0.3	0.4
30	Enstar Insurance Group	0.2	0.2	66	-22	74	26	23	85	15	3.4	NM	NM
	Total Top 30 Groups	**88.5**	**94.6**	**26,766**	**0**	**83**	**17**	**2,562**	**72**	**28**	**9.3**	**1.2**	**1.3**
	All Others	**11.5**	**5.4**	**1,526**	**-1**	**60**	**40**	**479**	**75**	**25**	**4.5**	**0.1**	**0.1**
	Total P/C Industry	**100.0**	**100.0**	**28,292**	**-1**	**81**	**19**	**3,041**	**73**	**27**	**8.8**	**0.6**	**0.7**

1 Paid shares normalized for Western MacArthur payouts in 2002-2004.

2 Paid shares normalized for Fibreboard payouts in 1996 and 1999. Net A&E reserves for CNA do not reflect the retroactive reinsurance transfer of nearly $1.5 billion in A&E reserves to National Indemnity (Berksire Hathaway) in 2010.

3 Net A&E reserves for OneBeacon/Potomac (White Mountains Insurance Group) do not reflect the retroactive reinsurance transfer of $1.5 billion in A&E reserves from the OneBeacon pool to National Indemnity in 2001.

4 Everest Re Group does not include approximately $300 million in A&E reserves held by an offshore affiliate, principally for assumed losses from the former Gibraltar Casualty affiliate.

5 Grossed up for the loss portfolio transfers (LPT) of Fireman's Fund, Munich Re America Corp. and Swiss Reinsurance Group's A&E reserves to their respective parents in 2002, 2005 and 2011, respectively. A.M. Best estimated Swiss Re's adjustments, as actual figures were not provided.

6. Cincinnati Ins Cos' 51% decrease in net reserves was driven by that group's restatement of environmental reserves to exclude $62 million in mold losses that had historically been included in the group's footnote 33. The group did not restate prior year data.

NM - Not meaningful.

Source: A.M. Best data & research

Exhibit 8

U.S. Asbestos & Environmental – Top 15 Groups

Ranked by average incurred A&E losses from 2008-2012.

($ Thousands)

Rank	Groups	5-Year Average Annual Asbestos Loss	5-Year Average Annual Pollution Loss	Total 5-Year Average Annual Incurred Loss	% Total
1	American International Group	$353,854	$25,468	$379,322	15%
2	Travelers Group	140,300	70,264	210,564	8
3	Hartford Insurance Group	155,252	47,948	203,200	8
4	Munich Re America Corp. Group[1]	175,440	26,980	202,420	8
5	Liberty Mutual Insurance Cos	172,227	-2,944	169,283	7
6	Allianz of America (Fireman's Fund)[1]	99,278	53,057	152,335	6
7	CNA Insurance Group[2]	69,420	75,720	145,140	6
8	Fairfax Financial (USA) Group	121,751	8,242	129,993	5
9	Farmers Insurance Group	81,196	16,549	97,745	4
10	Nationwide Group	90,920	499	91,419	4
11	ACE INA Group	76,761	14,130	90,891	3
12	Berkshire Hathaway Insurance Group	66,721	19,659	86,380	3
13	Chubb Group of Insurance Cos	9,168	67,626	76,794	3
14	Alleghany Insurance Holding	57,729	2,488	60,217	2
15	White Mountains Insurance Group[2]	49,314	2,282	51,596	2
	Top 15	**$1,719,331**	**$427,968**	**$2,147,299**	**83**
	All Other	284,558	166,409	450,967	17
	Total	**$2,003,889**	**$594,377**	**$2,598,266**	**100**
	Top 15	**86%**	**72%**	**83%**	
	All Other	14%	28%	17%	
	Total	**100%**	**100%**	**100%**	

1 Grossed up for the loss portfolio transfer (LPT) of Fireman's Fund and Munich Re America Corp. Group's reserves to their respective European parents in 2002 and 2005, respectively.

2 Losses of CNA and and White Mountains (OneBeacon) do not reflect the LPT transfer of their A&E reserves to National Indemnity (Berkshire Hathaway) in 2010 and 2001, respectively.

Top 15 Insurers by Average Annual Loss

Exhibit 8 lists the top 15 insurers by average annual incurred loss. Led by AIG, this group generated nearly 85% of the industry's average annual incurred A&E losses over the past five years. AIG's average is skewed high because of the very large $1.4 billion charge it took in 2010 for asbestos losses. Excluding this concentrated charge, AIG's average A&E loss would be less than $100 million per year. Over the past five years, the next largest loss for any given insurer group was posted by Munich American Re with $523 million in losses in 2010, of which approximately 70% was for asbestos claims.

Combined Ratio Impact Grid

The combined ratio grid (see **Exhibit 9**) categorizes 26 of the top 30 groups according to aggressiveness in funding A&E exposures, as measured by the impact of A&E losses on their combined ratios over the past five years. Excluded from this exhibit are four groups in run-off and therefore their respective ratios would not be meaningful. While the majority of companies have experienced only slight earnings drag in recent years, a few still experience significant drag from time-to-time. Fairfax Financial's losses, driven by its run-off operations, Clearwater Insurance and TIG Insurance, continue to grow year-over-year. The losses shown for Munich Re America, Allianz of America (Fireman's Fund), White Mountains (OneBeacon), CNA, and Swiss Re do not reflect their loss portfolio transfers (LPT) to either their European parents (Munich Re, Allianz, and Swiss Re) or to Berkshire Hathaway's National Indemnity Company (White Mountains and CNA). Conversely, Berkshire Hathaway's losses are understated relative to its assumed LPT exposures. Neverthe-

Exhibit 9

U.S. Asbestos & Environmental – Combined Ratio Impact (2008 - 2012)

	Insurer	2008	2009	2010	2011	2012	5-Year Average	Prior Year
		Combined Ratio Impact						
Heavy Drag	Munich Re America Corp. Group[1]	5.5	0.0	12.0	1.3	5.2	4.8	3.8
(> 3 points)	Fairfax Financial (USA) Group	2.2	2.6	2.8	3.7	6.4	3.6	2.7
	Allianz of America (Fireman's Fund)[1]	2.1	1.7	6.5	2.1	3.0	3.1	2.2
	White Mountains Insurance Group[2]	3.5	1.0	0.7	7.3	3.1	3.0	4.0
Modest Drag	CNA Insurance Companies[2]	1.9	2.7	1.4	2.2	4.4	2.5	5.3
(2-3 points)	Swiss Reinsurance Group[1]	3.0	1.8	-1.6	4.5	2.7	2.1	5.4
	Hartford Insurance Group	1.2	2.3	2.9	3.3	0.5	2.0	5.7
	ACE INA Group	0.6	1.1	3.1	2.1	3.1	2.0	9.7
	American International Group	0.3	0.7	6.8	0.8	0.4	1.7	1.7
	Alleghany Ins Holdings Group	0.1	0.1	1.2	4.4	1.4	1.4	0.3
	Amerisure Companies	5.2	0.0	-1.7	1.0	0.6	1.2	2.5
	FM Global Group	-2.1	7.1	0.8	-0.3	-0.2	1.1	3.1
	Travelers Group	0.6	1.3	0.9	1.2	1.2	1.0	4.5
	Great American P&C Ins Group	0.4	0.2	0.4	2.0	1.7	0.9	2.8
	Markel Corporation Group	1.5	0.2	0.0	0.1	2.4	0.9	2.5
Slight Drag	Zurich Financial Svcs NA Group	0.1	0.0	0.8	0.6	2.9	0.8	1.2
(< 2 points)	Chubb Group of Insurance Cos	0.8	0.9	0.7	0.8	0.9	0.8	3.4
	Sentry Insurance Group	0.7	0.5	0.4	0.7	1.6	0.8	1.9
	Liberty Mutual Insurance Cos	0.1	2.1	-0.5	1.6	0.6	0.8	1.5
	Farmers Insurance Group	0.8	0.8	0.2	0.3	1.2	0.7	0.4
	Nationwide Group	0.5	0.2	0.7	0.3	1.1	0.6	2.2
	Philadelphia Ins/Tokio Mar Group	-0.6	0.1	0.3	0.5	2.0	0.5	0.7
	Berkshire Hathaway Ins Group	0.3	0.7	0.6	0.0	0.3	0.4	1.5
	Cincinnati Insurance Companies	-0.2	0.4	0.7	0.3	0.3	0.3	0.6
	Allstate Insurance Group	0.0	0.0	0.1	0.1	0.2	0.1	0.8
	Everest Re U.S. Group	0.0	-0.3	0.0	0.0	0.0	-0.1	3.9
Industry	Commerical	0.5	1.1	1.4	1.1	1.0	1.0	
Segments	Reinsurance	1.8	0.8	3.0	1.4	2.0	1.8	
	Personal	0.1	0.1	0.1	0.1	0.1	0.1	
	Total Industry	**0.4**	**0.6**	**0.8**	**0.6**	**0.6**	**0.6**	

1 Grossed up for the loss portfolio transfers (LPT) of Fireman's Fund, Munich Re America Corp and Swiss Reinsurance Group's A&E reserves to their respective European parents in 2002, 2005 and 2011, respectively. A.M. Best estimated Swiss Re's adjustments, as actual figures were not provided. Four of the top 30 groups are in run-off, and therefore combined ratio impacts are not meaningful.
2 Combined ratio impact for CNA and White Mountains (OneBeacon) do not reflect the LPT transfer of their A&E reserves to National Indemnity (Berkshire Hathaway) in 2010 and 2001, respectively.
Source: A.M. Best data & research

less, the combined ratio impact on the commercial lines segment, where most of the industry's nominal A&E reserves and losses are concentrated, has not been significant. The reinsurance segment has recorded the greatest combined ratio impact, driven by losses at Munich Re America and Swiss Re. Everest Re has not experienced any material losses since 2007 when it posted a $266 million asbestos charge. Conversely, Munich Re America has taken sizable A&E reserve charges every other year since 2006.

Analytical Methodology – Reserve Adequacy and Capital Strength

A.M. Best utilizes a combination of three approaches when evaluating an insurer's A&E reserve adequacy: historic premium market share, post-1990 paid loss share (1991–2012) and three-year survival ratios. In the event a company has completed a current ground-up study of its A&E exposures, A.M. Best will weigh the high end of the study's range by 50% to 80%, depending on the credibility of the study, while weighting A.M. Best's own estimate by 20% to 50%.

In estimating an insurer's ultimate A&E exposure, a company's historic premium market share and paid loss share is multiplied by A.M. Best's estimate of ultimate industry losses ($85 billion for asbestos, adjusted for a small number of very large losses for a few insurers, and $42 billion for environmental exposures). The estimated A&E adequacy is then arrived at by subtracting the company's incurred-to-date A&E losses from the company's ultimate exposure.

The third method takes into account a company's unfunded reserve by comparing its three-year survival ratio (adjusted for any large paid losses or other anomalies) against A.M. Best's undiscounted benchmark of 17 times (asbestos), 13 times (environmental), or 15 times if blending A&E together (for the rare company that does not breakout A&E separately in their footnotes), imputing the unfunded reserve from the difference.

The final estimate of A&E reserve adequacy is included in Best's Capital Adequacy Ratio (BCAR) model, in which loss reserves are adjusted upward for A.M. Best's estimate of overall reserve deficiencies and then discounted to present value. It is worth noting that the majority of insurers with material A&E exposures are well capitalized and are deemed to be able to comfortably absorb any A&E shortfalls.

Conclusions

Asbestos losses continue to chip away at the P&C Industry's earnings. While generally not a material drag on earnings for most companies, they are expected to remain an issue for many years to come. The roughly 30% drop in losses during 2011 was due to AIG's sizable $1.4 billion asbestos loss in 2010. Excluding as much as $1.2 billion of AIG's 2010 loss, the industry still would have incurred $1.4 billion in losses that year, and the 2011 loss would have been an increase over 2010. Nevertheless, industry losses resumed their upward climb in 2012.

The industry has begun to see a new front opening as more lung cancer cases are being brought alleging injuries caused, at least in part, by exposure to asbestos. This, in conjunction with some weakening in tort reform provisions in some states, has increased award levels. As a result of the wide spread use of asbestos for many decades and the very long latency period for some of the more serious asbestos-related illnesses to manifest symptoms, A.M. Best anticipates material losses for the industry to continue unabated for years to come. As A.M. Best continues to monitor issues related to asbestos, the current estimated ultimate industry asbestos exposure could very well increase in the medium term.

Pollution losses have generally stabilized in recent years with annual incurred losses ranging between $350 million and $800 million.Though annual loss payouts average nearly $1 billion per year, a portion of this appears to reflect paying down existing reserves. With the majority of the largest losses settled, in most cases with waivers signed to prevent reopening of claims for cleaned sites and newly discovered sites, it appears the industry has funded most of its $42 billion estimated pollution exposure. Still, there remains the potential for losses to accelerate in the future as insureds find new ways to access full policy limits across multiple years. Nevertheless, A.M. Best expects paid losses to begin to taper off in coming years with only modest additional funding occurring on an annual basis.

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