

US reserve adequacy: diminishing returns

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With reduced equity in reserves, mistakes in underwriting, rate monitoring, and primary pricing will no longer be covered up by a reserve cushion

Reserve releases in the US are now in their eighth consecutive year, heightening concerns insurers are cutting reserves too aggressively. We can form an independent opinion about the adequacy of statutory reserves using the high-quality, uniform data at the legal entity available through the National Association of Insurance Commissioners' Schedule P in statutory accounts. These accounts provide US regulators with a clear view into insurance companies and are part of a very effective system of solvency regulation based on consistent and transparent reporting.

Five years ago Aon Benfield started publicly tracking the reported reserve adequacy of US companies. Each year we analyse the aggregated net loss development data by Schedule P line of business. Working at an aggregate level allows our actuaries to use different methods and to weight the results in different ways from company actuaries, who are working with smaller and less stable data sets. Unlike some other public studies, each of our reports has indicated overall reserve redundancies.

The table below summarises the analysis of year-end 2013 data. The overall industry redundancy position decreased to \$6.5bn at year-end 2013 - equivalent to only 1.1% of total booked reserves. This compares to a \$9.2bn total industry redundancy position at year-end 2012, while \$14.8bn was released by insurers during 2013. The amount of reserves released in 2013 was the highest since 2009. However, a closer inspection of the results shows a fundamental shift in the view of reserve adequacy on the commercial lines sector.

Table: US reserve estimated adequacy and loss development summary (\$bn)

Line	Estimated reserves	Booked reserves	Remaining redundancy at year-end 2013	Favourable (or adverse) development						Years at run rate
				2009	2010	2011	2012	2013	Average	
Personal lines	128.5	137.9	9.3	5.8	6.7	7.6	7.1	6.0	6.6	1.4
Commercial lines	490.8	438.0	(2.8)	12.8	3.9	5.1	5.1	8.8	7.1	N/A
Commercial property	42.8	43.4	0.5	2.4	2.7	1.4	1.1	1.7	1.9	0.3
Commercial liability	231.3	233.9	2.6	9.8	2.4	4.1	2.5	2.8	3.1	0.8
Workers' compensation	186.1	141.5	(4.6)	(0.5)	(1.6)	0.0	0.0	0.6	(0.3)	N/A
Financial guaranty	20.5	19.2	(1.4)	7.0	0.4	(0.0)	1.4	3.7	2.4	N/A
Total	569.3	575.8	6.5	18.5	10.5	12.7	12.2	14.8	13.7	0.5

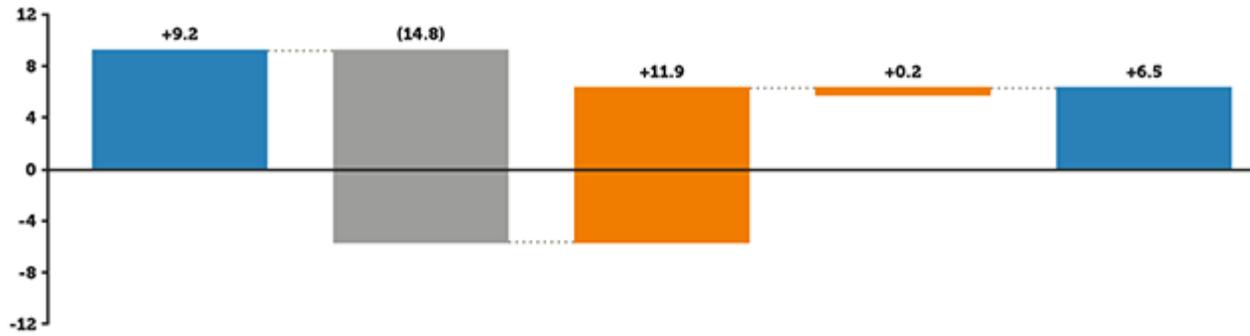
Source: Insurance Study Risk

The analysis reveals commercial lines continued to move further into an overall deficiency position of \$2.8bn at year-end 2013 compared to an estimated \$900m deficiency at year-end 2012. Reserve positions deteriorated across the commercial lines sector, which includes commercial property, commercial liability and workers' compensation. Financial guaranty moved to a slightly less deficient position, though it represents a small portion of the overall commercial lines sector.

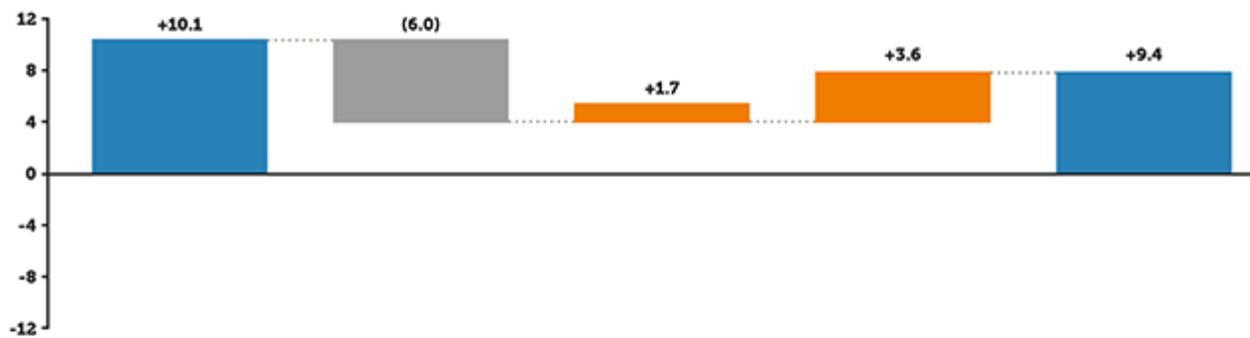
The drivers of year-over-year change in our reserve estimates are illustrated in the waterfall chart below. It shows the year-end 2012 estimate of the property/casualty industry reserve redundancy was \$9.2bn. During calendar year 2013, the industry released \$14.8bn of reserves. Offsetting the impact of reserve releases were two factors: 2013 calendar-year favourable loss emergence and redundantly booked reserves in the 2013 accident year. Favourable development of case-incurred losses in calendar year 2013 contributed to a decrease in ultimate loss estimates of \$11.9bn, while the 2013 accident year contributed an additional \$200m of reserve redundancy. The sum of these pieces drives our year-end 2013 redundancy estimate of \$6.5bn.

Graph: Drivers of 2013 reserve deficiency

All lines



Personal lines



Commercial lines



Source: Aon Benfield Analytics

When we separate the year-over-year waterfall into personal and commercial lines, a different picture emerges. On the personal lines side, a reduction in booked reserves during the 2013 calendar year was somewhat offset by favourable loss emergence on earlier years and redundancy in the 2013 accident year. However, on the commercial lines side, despite having favourable loss emergence offsetting the calendar year 2013 reserve releases, the 2013 accident year appears under-reserved. This results in a worsening negative overall position for the industry's commercial lines.

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We estimate companies will continue to release reserves through year-end 2014, possibly extinguishing overall redundancy in the industry. Through the first quarter of 2014 companies have already released an additional \$5.4bn of reserve, with \$4.1bn of this release from personal lines, while commercial lines released an additional \$1.4bn. The release in the personal lines may be attributable to conservatism in booked results at year end 2012 related to hurricane Sandy.

With reduced equity in reserves, mistakes in underwriting, rate monitoring and primary pricing will no longer be covered up by a reserve cushion. Compounding this issue is a continued low interest rate environment.

Understanding reserve risk is critical for effectively modelling company solvency. It is also a notoriously difficult problem: whereas all companies face broadly similar insurance risks, such as weather, legal, social and medical trends, each company's reserving practices are idiosyncratic. Rate adequacy and rate monitoring are not on an aggregate premium basis but on a rate per exposure basis will be critical to the operating results of companies.

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