Demotech, Inc.

Is $8,000,000,000 Material?
A Look at Year-End 2010 Reporting of
Loss and Loss Adjustment Expense Reserve Adequacy

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Loss and loss adjustment expense reserve development has traditionally been the focus of actuaries, auditors and financial analysts. Statutory insurance accounting financial reporting contains several measures that can be utilized to evaluate the adequacy and accuracy of prior period estimates of loss and loss adjustment expense reserves.

Prior to summarizing our observations on calendar year 2010, a brief tutorial is in order. For those of us who have taken an Accounting course, we remember that:

	Assets
minus	**Liabilities**
equals	**Net Worth**

In insurance parlance, the equivalent formula is:

	Admitted Assets
minus	**Liabilities**
equals	**Surplus as Regarding Policyholders**

Similarly, to calculate pre-tax profits, we may recollect from our Accounting course that:

	Revenue
minus	**Cost of Goods Sold**
minus	**Operating Expenses**
equals	**Pretax Profit (or Loss)**

In insurance parlance, the equivalent formula is:

	Net Earned Premium
minus	**Loss and Loss Adjustment Expense**
minus	**Underwriting Expenses and Policyholder Dividends**
plus	**Investment Gain (or Loss) and Other Income**
equals	**Pretax Profit (or Loss)**

A review of the two equations related to insurer operating results leads to two fairly obvious observations:

1. If an insurer underestimates its loss and loss adjustment expenses by a dollar, then it overstates its surplus by that same dollar.

2. Concurrently when an insurer underestimates its loss and loss adjustment expense by a dollar, then it overstates its pre-tax profit or understates its pre-tax loss by a dollar.

Given that the process of estimating and recording loss and loss adjustment expense reserves requires claims professionals, actuaries, accountants and analysts to review historical data and patterns, including changes in legal, economic and other conditions, how accurate were the 2009 loss and loss adjustment expense reserve estimates, when viewed one year later, at year-end 2010?

We reviewed the year-end 2010 financial statements prepared by 2,765 property/casualty insurance companies as submitted to the National Association of Insurance Commissioners (NAIC) and the respective departments of insurance. We excluded 54 companies which focused primarily on mortgage or financial guaranty business. Based upon the year-end 2010 estimate of loss and loss adjustment expense reserves held at December 31, 2009, the 150 companies with the largest reserve increases were under reserved by a total of $8,000,000,000. In a vacuum, this dollar amount of under reserving might be considered staggering; however, with some perspective it is, in fact, manageable.

Specifically, these 150 companies reported at year-end 2009:

$252 billion of admitted assets

$104 billion of loss and loss adjustment expense reserves

$ 89 billion of policyholder's surplus

$ 6 billion of pre-tax income

Based upon the revised estimate of their year-end 2009 loss and loss adjustment expense reserve, in retrospect the year-end 2009 figures could have been:

$252 billion of admitted assets

$112 billion of loss and loss adjustment expense reserves (original estimate plus the additional $8 billion)

$ 81 billion of policyholder's surplus (original estimate minus the emerging understatement of the initial reserve estimate)

$ -2 billion of pre-tax income (original estimate minus the emerging understatement of the initial reserve estimate)

On average, the development for these 150 companies was adverse by 9% of year-end 2009 policyholders' surplus and 8% of 2009 loss and loss adjustment expense reserves. The information available to us indicated that two-thirds of this adverse development, or $5.3 billion, was associated with 7 companies in the American International Group. For this group of AIG companies, the development was adverse by 19% of year-end 2009 policyholders' surplus and 14% of 2009 loss and loss adjustment expense reserves. For the other 143 companies, the development was only 4% of surplus and 4% of loss and loss adjustment expense reserves.

In contrast, the other companies reporting data to the NAIC had favorable loss and loss adjustment reserve development totaling $18 billion. On average, this reduction was 3% of surplus and 4% of reserves. For these companies, the revised estimates suggest that, in retrospect, 2009 pre-tax income for these other companies could have been $63 billion instead of the $45 billion that was reported.

Based on the re-estimation of 2009 loss and loss adjustment reserves reported as of year-end 2010, we conclude that the industry as a whole was reasonably reserved at year-end 2009. Total reserve reductions in calendar year 2010 were more than double the total reserve increases. In fact, roughly 4 out of 5 companies reported a reserve decrease or no change. Although reserve adjustments made in calendar year 2010 were not a significant percentage of reserves or surplus, these favorable adjustments to previous loss and loss adjustment expense reserve estimates account for $10 billion of the $61 billion in 2010 pre-tax income reported by the companies in this study.

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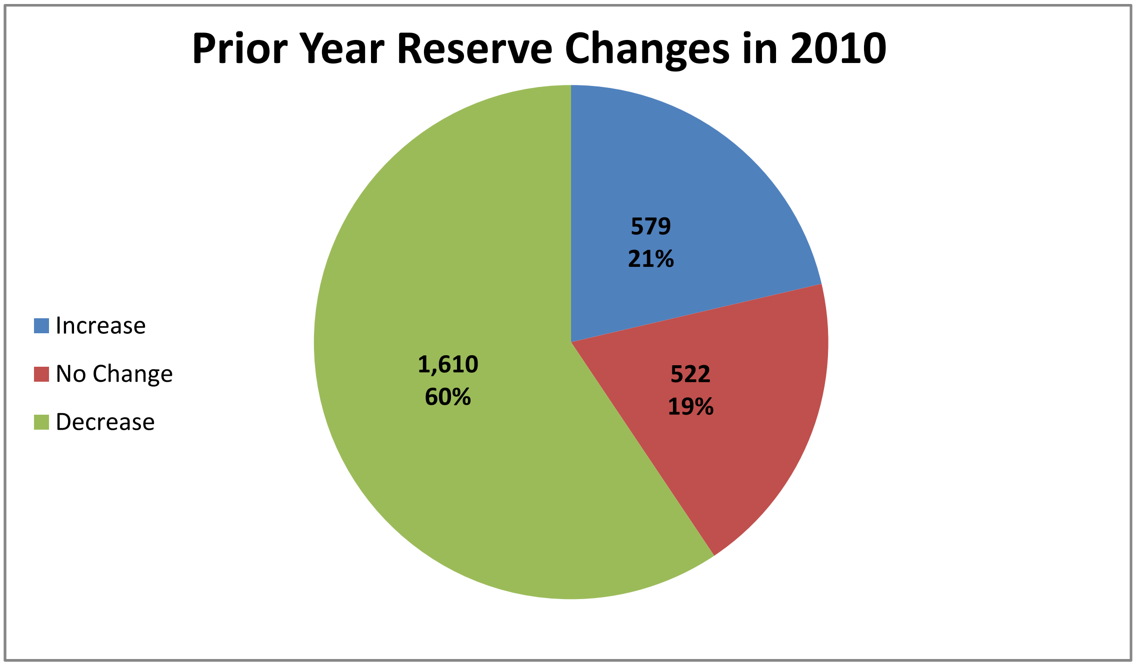

Data Source: The National Association of Insurance Commissioners, Kansas City, Missouri, by permission. Information derived from a Highline Data product. The NAIC and Highline Data do not endorse any analysis or conclusion based upon the use of its data.

As the late Senator Everett Dirksen said, "A billion here, a billion there, and pretty soon you're talking about real money." However, in an industry that reported more than $550 billion of loss and loss adjustment expense reserves as of December 31, 2010, the capability of the industry to utilize prior period reserve redundancy to supplement its current period earnings appears to have peaked. That is, the relative impact of prior period loss and loss adjustment expense reserve adjustments as a percentage of current period loss and loss adjustment expense reserves has become relatively low. This means that current period results are likely to be unaffected by prior period reserve savings or deficiency. Therefore, despite the increased surplus and capacity available to write new or renewal business, it may be time to think about how agents, consumers, reinsurers and regulators will respond to a hardening of market prices.

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