COMPLETE ACTUARIAL SOLUTIONS COMPANY

The CASCO Bulletin

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Letters of Credit and Discounting

The selection of an appropriate discount rate was discussed in the previous CASCO Bulletin (Issue 1, 4th Quarter 2010). Discount rate selection is more complicated for captives and risk retention groups (RRGs) holding assets that do not generate investment income such as letters of credit (LOCs). Although this should not cause an issue in discount rate selection under GAAP fair value accounting, it can cause issues with auditors and regulators focused on solvency and adequacy.

Captives and/or RRGs form the backbone of self-insurance programs and are generally treated as insurance companies by regulators. They are often allowed to carry LOCs, surplus notes, and other types of assets that cannot be treated as admitted assets by traditional insurance companies. These types of assets do not generate investment income and can create an imbalance if liabilities are discounted.

The discounting of liabilities is essentially the current recognition of expected future investment income. Therefore, the discounted liability, along with the investment income it assumes, can be thought of as the value necessary to cover the full amount of the liability as it becomes payable. The following example shows that for a company earning a 3% risk-free yield on invested assets, the use of LOCs or other non-invested assets reduces the effective investment yield.

Example: 3% Risk-Free Yield on Invested Assets

1) Undiscounted Liabilities	$5,000,000
2) Discounted Liabilities at 3%	$4,600,000
3) Letter of Credit	$3,000,000
4) Invested Assets	$1,600,000
5) Total Assets = (3) + (4)	$4,600,000
6) Investment Income per Year = (4) x 3%	$48,000
7) Effective Investment Yield = (6) / (5)	**1.0%**

The existence of an LOC in the above example, accompanied by a selected discount rate of 3%, would cause an imbalance because the effective investment yield of 1% is lower than the 3% assumed by the discount rate. This imbalance necessitates future LOC increases or cash infusions. One reasonable approach to avoid such an imbalance is for the company to use a discount rate equal to the effective risk-free investment yield of 1% (option #1 below). Another possible approach is to use a 3% discount rate, but only discount the portion of liabilities that are backed by invested assets (option #2 below). These two possible options yield very similar results.

Example: Two Discounting Options

1) Undiscounted Liabilities	$5,000,000
2) Option #1 - Liabilities Discounted at 1%	**$4,861,000**
3) Option #2 - Partial Discounting at 3%	
a) Liabilities to be Discounted	$1,600,000
b) Discounted at 3%	$1,472,000
c) Liabilities Not Discounted = (1) - (3a)	$3,400,000
d) Total Discounted Liabilities = (3b) + (3c)	**$4,872,000**

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