Collateral Overview

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Why is Collateral Posted?

Collateral is posted to secure the liabilities associated with large deductible or self-insured programs. Many states require collateral or security for self-insureds, and the process for determining that amount is typically well defined. Insurance companies that require collateral for large deductible programs may not have a clearly defined formula or process for their requirements. Getting involved at the inception of a deductible policy and making sure the collateral mechanism is understood and negotiated is critical. As the insured renews and continues with the plan, there should be a continued effort to minimize collateral requirements through good analysis and information flow.

Actuarial Analyses for Collateral Negotiations:

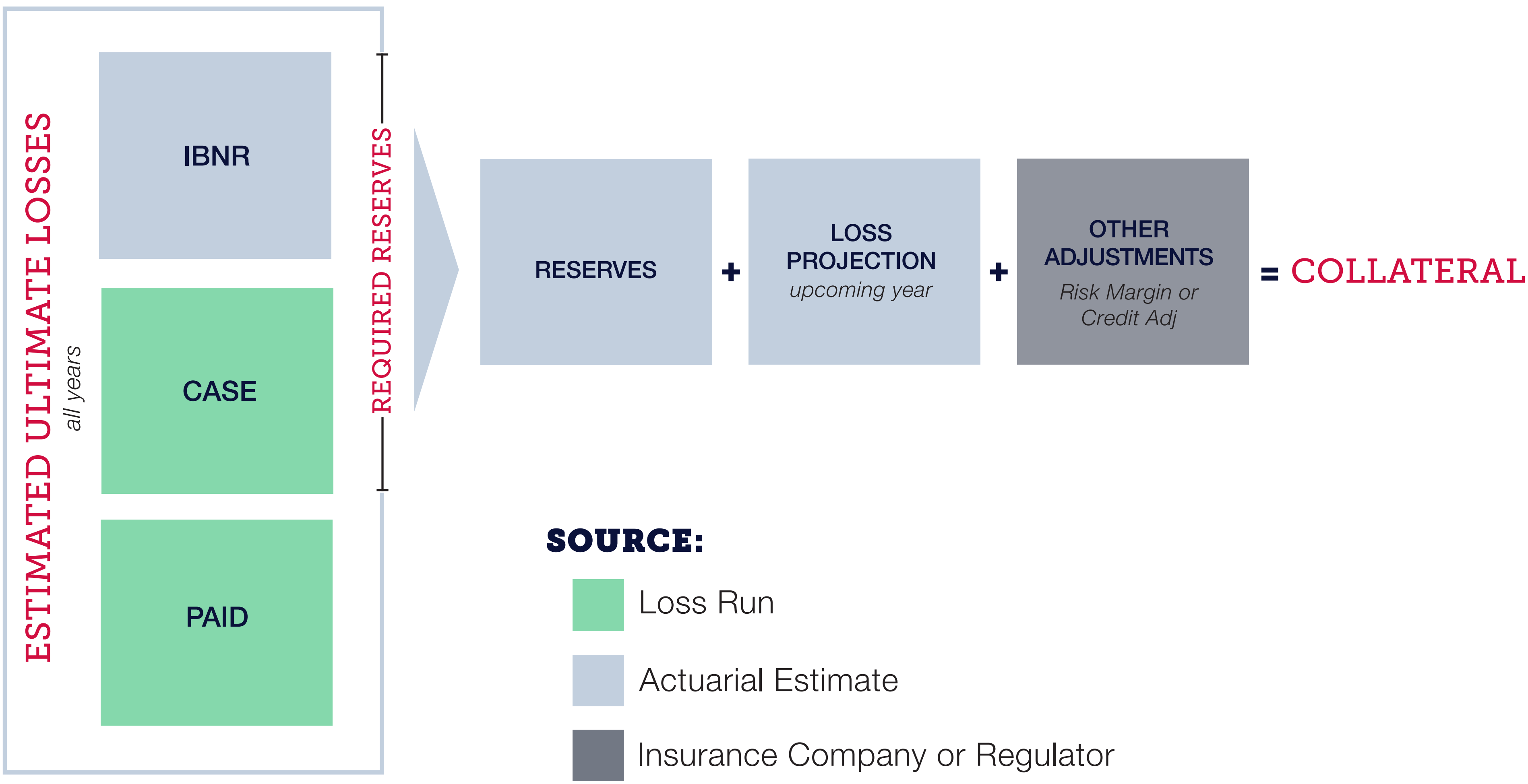
An independent actuary can provide the necessary analytics to verify whether or not collateral requirements are excessive and help negotiate lower levels with an insurance company or regulator, when appropriate. The following analyses are helpful in this process:

- Loss Projection Analysis
- Reserve Analysis
- Confidence Level Analysis
- Cash Flow Analysis

Actuarial Data Required for a Collateral Analysis:

- Loss runs for all years with retained losses
- Exposure information (historical and projected)
- Retention matrix or summary by year
- Recently audited financials
- Collateral plan parameters (if available)
- Qualitative information affecting losses

Sample Collateral Formula



A typical insurance company's process for computing collateral requirements follows these steps:

Step 1

Total Ultimate Losses for any and all historical deductible years are calculated by the insurance company's actuaries

Step 2

Total Claim Payments made to date are then *subtracted* from the **Ultimate Losses**

Step 3

An **Utimate Loss Estimate** for the new policy period is *added*

Step 4

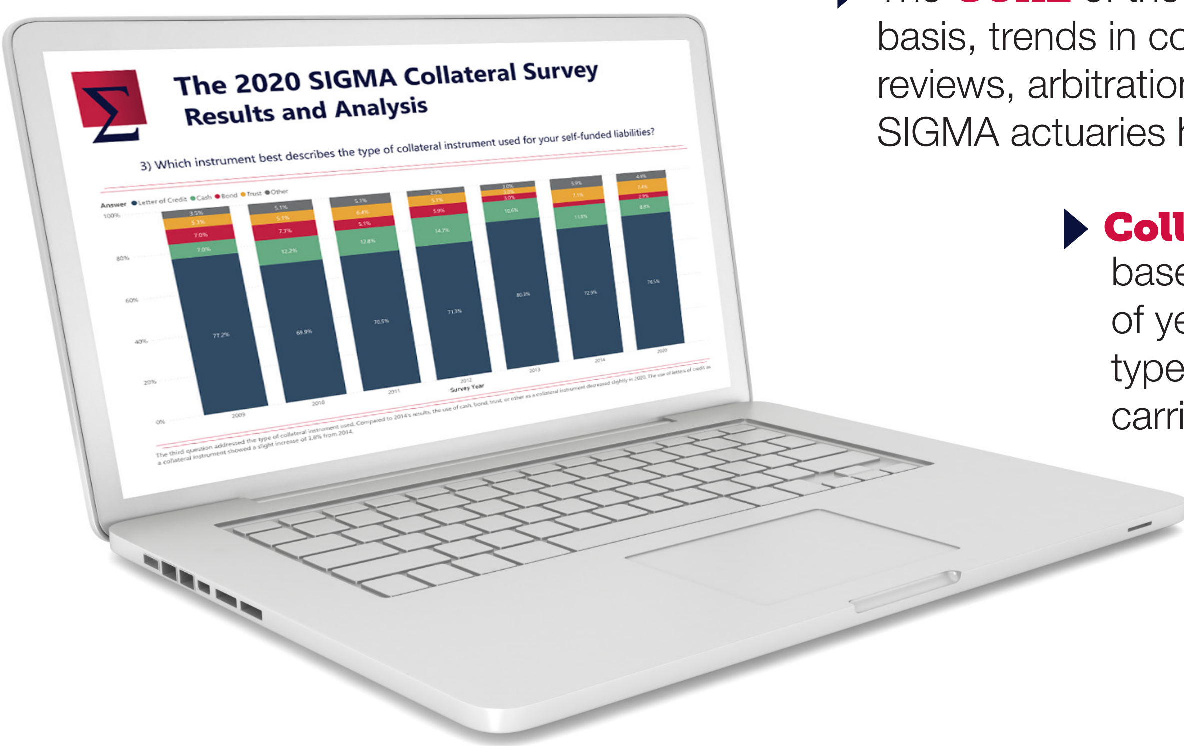
Adjustments for **Credit Ratings** (+/-) and **Risk Margins** are made

Additional collateral considerations:

- SIGMA has been successful in negotiating adjustments to this formula to account for losses paid in the first year.
- Some parameters related to the formula may be established contractually.
- Insurance companies offer varying degrees of transparency related to collateral calculations and workpapers.

SIGMA's Collateral Survey

Periodically SIGMA Actuarial Consulting Group invites a group of insurance brokers, risk management consultants, and risk management staff of self-funded concerns to participate in a survey regarding collateral. SIGMA first conducted this survey in 2009 because of the preceding financial crisis. The results of each historical survey can be found by accessing our complimentary education portal at **SIGMAactuary.com/education**

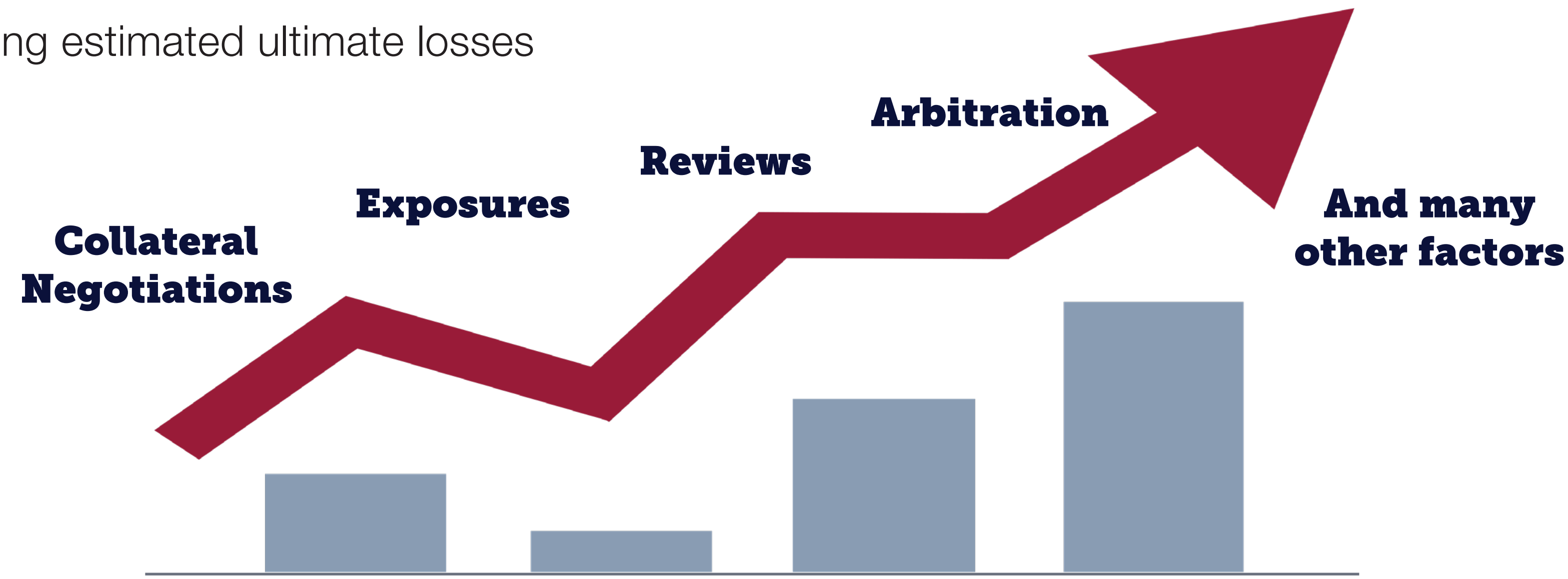


- The **GOAL** of the surveys was to assess, on a national basis, trends in collateral negotiations, exposures, reviews, arbitration, litigation, and other factors that SIGMA actuaries have been seeing with our own clients.

- **Collateral issues vary significantly** based on the line of coverage, the number of years collateral has been posted, the type of industry, and most importantly, the carrier. It is important to recognize that these surveys do not constitute in-depth statistical research. However, we believe the results provide valuable information on collateral trends.

Common Collateral Issues:

- Collateral grows beyond expectations because of risk type (e.g, long tailed coverage)
- Collateral grows beyond expectations because of company growth in exposures
- Lack of clarity on when and how collateral will be calculated and required to be posted
- Excessive collateral being held or not reviewed for a run-off program
- Lack of agreement on loss development factors used in calculating estimated ultimate losses



About SIGMA

Founded in 1995, SIGMA Actuarial Consulting Group, Inc. is an independent property and casualty actuarial firm located in Brentwood Tennessee. SIGMA provides casualty actuarial consulting services to captive managers, risk managers, brokers, risk management consultants, TPAs, and CPAs. Our credentials cover a broad spectrum from actuarial credentials and advanced academic degrees to risk management and captive insurance specialty credentials. SIGMA is dedicated to offering professional services to its clients and prides itself in the method used to communicate the results of the analysis. We are known for providing an easy to read and understandable analysis free of actuarial jargon. The findings are presented in such a way that individuals not necessarily familiar with actuarial principles and procedures can follow and reasonably understand how the calculations are made and the implications of the results. The analyses of loss data are objective and reference the most recently available insurance industry statistics when necessary and appropriate. SIGMA has won numerous industry awards that highlight our commitment to excellence and education.

Captive International US Awards WINNER	Captive International US Awards HIGHLY COMMENDED	Captive International US Awards HIGHLY COMMENDED	Captive International US Awards HIGHLY COMMENDED
Actuarial Firm SIGMA	Actuary Al Rhodes	Feasibility Study SIGMA	Feasibility Specialist Al Rhodes

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