A.M. BEST

METHODOLOGY **APRIL 4, 2005**

Understanding BCAR for Canadian Property/Casualty Insurers

A.M. Best's Capital Adequacy Ratio (BCAR) for Canadian Property/Casualty Insurers and Its Implications for Ratings

The objective of A.M. Best Co.'s rating system is to provide an opinion of an insurer's financial strength and ability to meet ongoing obligations to policyholders. The assignment of an interactive rating is derived from an in-depth evaluation of a company's balance sheet strength, operating performance and business profile as compared with A.M. Best's quantitative and qualitative standards.

For interactive ratings, A.M. Best believes the balanced approach of evaluating a company on both quantitative and qualitative levels provides a better analysis of a company and also results in a more discerning and credible rating opinion.

A.M. Best's quantitative evaluation is based on an analysis of more than 100 key financial tests and supporting data. These tests, which underlie the evaluation of balance sheet strength and operating performance, vary in their importance depending on a company's characteristics.

A company's quantitative results are evaluated on their own merits and also are compared with industry composites as established by A.M. Best. Composite standards are based on the performance of other Canadian insurance companies with comparable business mixes. These industry benchmarks are adjusted when needed to reflect changes in underwriting, economic and regulatory market conditions.

Balance Sheet Strength

In determining a company's ability to meet its current and ongoing obligations to policyholders, the most important area to evaluate is balance sheet strength, since it is the foundation for policyholder security. Performance then determines how that balance sheet strength will be enhanced, maintained or eroded over time. Balance sheet strength measures the exposure of a company's surplus to its operating and financial practices. An analysis of a company's underwriting, financial and asset leverage is very important in assessing its overall balance sheet strength.

Underwriting leverage is generated from current premium writings, reinsurance recoverables and loss reserves. In order to assess whether a company's underwriting leverage is prudent, a number of factors unique to the company are taken into account, including type of business written, quality and appropriateness of its reinsurance program, and adequacy of loss reserves.

Financial leverage is created through debt or debt-like instruments (including financial reinsurance) and is reviewed in conjunction with a company's underwriting leverage. An analysis of financial leverage is conducted at both the operating company and holding company levels, since debt at either level could place a call on the insurer's earnings and strain its cash flow, leading to financial instability.

Asset leverage measures the exposure of a company's surplus to investment, interest rate and credit risks. The volatility and credit quality of the investment portfolio, recoverables and agents' balances determine their potential impact on the company's balance sheet strength.

A company's underwriting, financial and asset leverage also are subjected to an evaluation by Best's Capital Adequacy Ratio (BCAR), which allows for an integrated review of these leverage areas. BCAR calculates the net required capital to support the financial risks of the company associated with the exposure of assets and underwriting to adverse economic and market conditions and compares it with economic capital. Some of the stress tests within BCAR include above-normal catastrophes, a decline in equity markets, and a rise in interest rates. This integrated stress evaluation permits a more discerning

Questions regarding A.M. Best Co.'s Canadian BCAR methodology can be directed to Charles Huber, senior financial analyst, or Thomas Mount, ACAS, MAAA, managing senior financial analyst, in the property/casualty division of A.M. Best.

view of a company's balance sheet strength relative to its operating risks.

A company's BCAR result is extremely useful in evaluating its balance sheet strength, but BCAR is only one component of the analysis. In addition, balance sheet strength is only one component of the overall financial strength rating, which also includes operating performance and business profile. BCAR is a minimum requirement to support a rating, but other factors driving expectations of future balance sheet strength drive the rating as well. All of these factors are important to the overall rating process.

Overview of BCAR

Structurally, A.M. Best's Canadian BCAR model is adapted specifically to the Canadian P&C-1 and P&C-2 Annual Statements as well as Canada's GAAP (generally accepted accounting principles) accounting standards. A.M. Best's Canadian capital formula takes a risk-based capital approach. Net required capital is calculated to support three broad risk categories: investment risk, credit risk and underwriting risk. However, A.M. Best's capital adequacy formula contains an adjustment for covariance, reflecting the statistical independence of the individual components. A company's adjusted surplus is divided by its net required capital, after the covariance adjustment, to determine its BCAR.

In contrast to the minimum capital test (MCT) calculation, a significant proportion of capital is required to support future premium risk, reflecting A.M. Best's view that balance sheet strength must support the risks associated with a company's current book of business as well as those it plans to insure in the upcoming year.

Investment Risk

Investment risk includes three main risk components: fixed-income securities, equities and interest rate. Capital charges are applied to different asset classes based on the risk of default, illiquidity and market value declines in both equity and fixed-income securities. A.M. Best's Canadian model has incorporated an interest-rate risk component that considers the market value decline in a company's fixed-income portfolio as a result of rising interest rates. Additionally, higher capital charges are ascribed to affiliated investment holdings, real estate, below-investment-grade bonds and nonaffiliated, privately traded common and preferred shares due to the illiquid nature of the asset and/or volatility of the reported value.

Credit Risk

Capital charges are applied to different receivable balances to reflect third-party default risk. Credit risk factors are ascribed to recoverables from all registered and unregistered reinsurers, including affiliates. Required capital for credit risk may be modified after taking into account any collateral offsets for reinsurance balances; the quality of the reinsurers that participate in the company's reinsurance program; and the company's dependence on its reinsurance program. Also included in the credit risk component are charges for premium receivables from agents and brokers, policyholders and installment premium balances, as well as funds held by "Facility Association" and the "P.R.R." and other miscellaneous receivables.

Underwriting Risk

Underwriting risk is the largest risk category and typically accounts for two-thirds of a company's gross required capital. This category encompasses both loss and loss-adjustment expense reserves and net premiums written. The loss reserve component requires capital based on the risk inherent in a company's loss reserves, adjusted for A.M. Best's assessment of its reserve equity. The net premiums written component requires capital based on the pricing risk inherent in a company's mix of business. In addition, required capital for the reserve and premium components may be increased to reflect an additional surcharge for "excessive" exposure growth. Finally, there is credit for a well-diversified book of business, but this credit is minimized for those companies that maintain small books of many lines of business and may not necessarily have expertise in each of them.

Collectively, these six risk components generate more than 99% of a company's gross required capital, with the business risk component generating minimal capital requirements for off-balance-sheet items. A company's gross required capital, which is the sum of the capital required to support its seven risk components, reflects the amount of capital needed to support all risks if they were to develop simultaneously. These individual components are then subjected to a "square root rule" covariance calculation within the BCAR formula to account for the statistical independence of these components. This covariance adjustment essentially says that it is unlikely that all seven risk components will develop simultaneously and generally reduces a company's overall required capital between 35% and 45%.

A.M. Best recognizes the distortions caused by this "square root rule" covariance adjustment, whereby the more capital-intensive underwriting risk components are disproportionately accentuated, while the less capital-intensive asset risk components are diminished in their relative contribution to net required capital. Nevertheless, by using other distinct capital measures, A.M. Best can counterbalance this apparent shortcoming.

A.M. Best makes a number of adjustments to a company's reported surplus within the Canadian capital model to provide a more economic and comparable basis for evaluating capital adequacy. Goodwill and other intangible assets are eliminated. Other significant adjustments are related largely to equity, or economic values, imbedded in loss and loss-adjustment expense reserves, fixed-income securities, and common stocks. Further adjustments are made to surplus to reflect the pricing risk inherent in unearned premium reserves and nonbalance sheet risks, including catastrophe exposures and debt-service requirements.

The model also can be adjusted in response to various market issues. Some examples of the issues that can impact capitalization include rate changes, the stage of the underwriting cycle, changing reinsurance products and reinsurance dependence. The ability of the model to respond to these market issues makes it a dynamic tool that assists in the evaluation of the company's balance sheet strength.

Formula Drivers

Generally, more than two-thirds of a company's gross capital requirement within A.M. Best's Canadian capital model is generated from its loss reserve and net premiums written components. Consequently, a company's absolute BCAR value is influenced largely by the capital required to support its net underwriting commitment, which in turn is largely a function of its business mix, surplus size, stability of loss development, profitability, loss reserve adequacy, and length of claims payout. All other things being equal, the absolute BCAR score of a company will be lower due to higher capital requirements associated with higher underwriting leverage, greater indicated reserve deficiencies, and unstable or unprofitable business.

While only one-third of the gross capital requirement is generated from investment risk, interest-rate risk and credit risk components, a company that maintains a more aggressive investment portfolio, is heavily dependent on pyramided capital, has excessive credit risk or is excessively dependent on reinsurance, likely will generate a lower BCAR value.

Conclusion

A.M. Best Co., established in 1899, is the world's oldest and most authoritative insurance rating and information source. We remain dedicated to providing our customers in Canada with superior products and an unbiased opinion about the financial well being of insurance and reinsurance companies within the Canadian insurance industry. Our expert analysts have developed a strong knowledge of the Canadian insurance market and remain vigilant in staying abreast of current events that impact it. A.M. Best currently provides interactive ratings on more than 60 Canadian property and casualty insurers and their U.S. subsidiaries. We are pleased that we have been able to expand upon our Canadian BCAR modeling, which includes enhancements and charges that are very specific to the Canadian insurance market.

A.M. Best Co., established in 1899, is the world's oldest and most authoritative source of insurance company ratings. Best's Ratings are the definitive symbol signifying the financial strength and operating performance of insurance companies worldwide. For more information, visit A.M. Best's Web site at *http://www.ambest.com*, or contact one of our offices:

A.M. Best Company
Ambest Road
Oldwick, New Jersey 08858
Phone: (908) 439-2200
Fax: (908) 439-3296
http://www.ambest.com

A.M. Best Europe Ltd.
12 Arthur Street, 6th Floor
London, UK EC4R9AB
Phone: 011-44-207-626-6264
Fax: 011-44-207-626-6265
www.ambest.com.uk

A.M. Best Asia-Pacific Ltd.
Unit 5707 Central Plaza
18 Harbour Road
Wanchai, Hong Kong
Phone: 011-852-2827-3400
Fax: 011-852-2824-1833
www.ambest.com.hk