

Article Title: ARCHIVE | Criteria | Insurance | Life: New Capital Adequacy Model Announced For Canadian Life And Health Insurance Market Data: (EDITOR'S NOTE: —This article is no longer current.) The Role of Standard & Poor's Capital Adequacy Model Standard & Poor's new Canadian capital adequacy model will play a significant role in our assessment of the capital strength of a life and health insurance company in the Canadian marketplace. This model produces a 'capital adequacy ratio' that compares a company's total adjusted capital (TAC), with a base level of TAC considered appropriate to support total risk at a secure rating level (triple-'B' or better). Standard & Poor's standards for marginal, good, strong, very strong, and extremely strong capital strengths are based on this ratio. To have good capital strength or be minimally secure (triple-'B'), the capital adequacy ratio must be at least 105%, and for Standard & Poor's to consider a company's capital strength to be extremely strong (triple-'A'), the capital adequacy ratio must be at least 150%. The capital adequacy ratio is only a starting point for judging capital adequacy. Qualitative and quantitative enhancements are applied as warranted to derive a more complete picture of an insurer's capital position. The analyst plays a critical role in adjusting the model to best assess risks that are unique to a company while maintaining a standard of comparability between companies. In the end, these standards are just that, and, as such, are only one part of Standard & Poor's analysis of the financial strength rating on an insurer, and will not, in and of themselves, be the sole determinants of the ratings on a company or group. This article supplements the published body of Standard & Poor's criteria on the insurance sector. All analytical criteria on the insurance sector can be found on RatingsDirect or on Standard & Poor's website ([www.standardandpoors.com/Resource Center/Ratings Criteria/Insurance/Life](http://www.standardandpoors.com/Resource%20Center/Ratings%20Criteria/Insurance/Life)). How the Model Works The Standard & Poor's Canadian capital adequacy ratio is calculated by taking a company's TAC and dividing this by a company's total risk-adjusted capital needed (TRACN) to support total risk. Intuitively, this coverage ratio tells the reader the surplus (or shortfall) of acceptable capital available to cover a company's total risk. This is a more conservative measure than the Canadian regulatory risk-based capital model or minimum continuing capital and surplus requirement (MCCSR) ratio, which include negative reserves, cash surrender value deficiencies, some weaker forms of capital instruments, and other items in the numerator that are not accepted by Standard & Poor's. Typically, the weaker capital instruments do not have acceptable ongoing loss absorption features and would not be classified as permanent capital by Standard & Poor's. This more conservative assessment is made as Standard & Poor's ratings are primarily calibrated to the probability of default. This differs from the Canadian regulators' mandate to protect the policyholder by minimizing the probability of default, and loss in the event of default. Some of the weaker forms of capital included in MCCSR, but not included in TAC, contain permanent loss absorption features that would provide principal protection to the policyholders. Nevertheless, Standard & Poor's will continue to use the MCCSR ratio to supplement its assessment of capital within the Canadian marketplace as this ratio often includes relevant and material regulatory adjustments. The numerator of the Standard & Poor's capital adequacy ratio, or TAC, is made up of a company's core capital and hybrid securities (preferred stock, trust preferred securities, and hybrid equities) considered acceptable by Standard & Poor's, and could include a small portion of a company's goodwill and identified intangibles (defined below). The denominator would include the TRACN to support a company's on- and off-balance-sheet assets and liabilities. Total Adjusted Capital A company's TAC is defined by Standard & Poor's as the sum of a company's core capital and acceptable hybrid securities to a set limit for a rating category. TAC also could include a small portion of a company's goodwill and identified intangibles. Core Capital A company's core capital is derived from its regulatory filings and would include the sum of shareholder equity (common shares, contributed surplus, retained earnings), par account, currency translation account, and net deferred realized gains/losses on investments not supporting policy liabilities, less goodwill and intangibles, negative reserves, cash surrender value deficiencies, and equity in unconsolidated subsidiaries. Acceptable Hybrid Securities These would include qualifying noncumulative perpetual preferred shares, innovative Tier 1 instruments, and other weaker hybrid securities (preferred stock, trust preferred securities, and hybrid equities) to a set limit for a rating category. Weaker forms of hybrid securities must exhibit the following attributes to meet Standard & Poor's criteria for acceptable hybrid securities: They have ongoing and permanent loss absorption features. Distributions are noncumulative or they can be suspended for a minimum of five years if they are cumulative, and loss of principle could

occur to provide a cushion for more senior creditors in the case of bankruptcy. They are deeply subordinated. Through structural subordination they hold a subordinated legal position to the rights of policyholders and other senior creditors. They are perpetual. They can be viewed as a permanent feature of a company's capital structure. If hybrid securities being given equity credit constitute more than the sliding ceiling allowed for within a particular rating band, Standard & Poor's will give less equity credit for the note, in most cases treating the excess as debt. Any long-dated hybrid securities instruments given equity credit by Standard & Poor's that have maturity or call dates, are amortized at 20% per year beginning 10 years before maturity or the potential call date by the holder. As a result, these instruments have no equity credit by the fifth year before maturity. Within its notching criteria, Standard & Poor's does not differentiate between cumulative and noncumulative securities, but the Canadian regulators do not allow cumulative instruments to be included in their 'Tier 1 capital' bucket. Goodwill and identified intangibles. Subject to analytical judgment and committee approval, a portion of goodwill and identified intangibles created from acquisition activities can be included in TAC. Due to the soft and intangible nature of this asset, the inclusion of any goodwill and identified intangibles must be well supported by the quality of assets being purchased; and the insurer's superior franchise strength and its strong, consistent, and sustainable earnings profile. Total Risk-Adjusted Capital Needed TRACN would include the sum of asset default risk (C-1), mortality and morbidity risk, interest margin pricing risk, changes in interest rate environment (C-3), lapse risk, segregated fund guarantee risk, and other risk. Standard & Poor's largely recognizes the risk-adjusted framework used by the Canadian regulators in assessing these different types of on- and off-balance-sheet risk. With the introduction of the Canadian Asset Liability Method (CALM) for establishing policy liabilities, the assessment of negative reserves and cash surrender value deficiencies by the Canadian regulators is expected to change, and this will be reassessed by Standard & Poor's as things develop. Evaluating asset risk. Prospectively, the total asset default risk (C-1) charge also can be adjusted to reflect a portfolio size factor and any single-issuer concentration risk as is done in the U.S. The portfolio size factor would affect companies with investment portfolios that are less than C\$2.0 billion; and single-issuer concentration risk could carry an added capital levy if a single 'corporate' name exceeded 2.5% of a company's total TAC. Evaluating liability risks. The factors applied to liabilities reflect Standard & Poor's assumptions about the threshold level of capital necessary to absorb (in aggregate) mortality risk, morbidity risk, interest-rate mismatch risks, lapsing expense risk, and segregated fund risk for securely rated companies, and mirror the risk weightings used by the Canadian regulators. In general, the assessment of liability risk closely matches what is accepted globally by Standard & Poor's, with the exception of capital allocated to segregated fund guarantee risk, which appears to be unique to Canada.

Table 1 Standard & Poor's Canadian Capital Adequacy Ratio

CANADIAN CAPITAL ADEQUACY RATIO=TOTAL ADJUSTED CAPITAL (TAC)/TOTAL RISK-ADJUSTED CAPITAL NEEDED (TRACN)

TAC CONSISTS OF: CORE CAPITAL Shareholder equity (common shares, contributed surplus, retained earnings) Par account Nonpar account (mutuals) Currency translation account Net deferred realized gains/losses on investments not supporting policy liabilities Less: goodwill and identified intangibles Less: Negative reserves Less: Cash surrender value deficiencies Less: Equity in unconsolidated subsidiaries

ACCEPTABLE HYBRID SECURITIES (PREFERRED STOCK, TRUST PREFERRED SECURITIES, AND HYBRID EQUITIES)* Noncumulative perpetual preferred stock Innovative Tier 1 capital instruments (such as SLEECs, MaCS, and CLiCS) Acceptable weaker forms of hybrid securities GOODWILL AND IDENTIFIED INTANGIBLES Acceptable portion of goodwill and identified intangibles

TRACN CONSISTS OF: Charges for: Asset default risk (C-1) Mortality risk/morbidity risk Interest margin pricing risk Changes in interest rate environment (C-3) Lapse risk Segregated fund guarantee risk Other risk

*The use of hybrid securities is limited to a sliding ceiling allowed within a particular rating band.

Table 2 Guideline Benchmarks for the Standard & Poor's Canadian Capital Adequacy Ratio

COUNTERPARTY RATING FOR PRIMARY OPERATING COMPANY

STANDARD & POOR'S CAPITAL ADEQUACY RATIO (%)

ASSESSMENT OF CAPITAL ADEQUACY

BB Less than 105 Marginal BBB 105-119 Good A 120-134 Strong AA 135-149 Very strong AAA 150+ Extremely strong

Adjustments to the Model

Standard & Poor's capital adequacy model creates a reasonably consistent initial approach to measuring insurers' capital adequacy. Still, the results are primarily guideposts, not absolute benchmarks, by which to gauge capital adequacy. A

vital part of the assessment of capital adequacy incorporates both qualitative and quantitative adjustments to the model. These adjustments could consider: The variation in financial ratios that can be expected with the business or operating profile of a company for a given rating category. A company with a stronger competitive position, more favorable business prospects, and more predictable earnings can afford to undertake added financial risk while maintaining the same credit rating. A company's ability to generate capital internally and to fund its growth through GAAP earnings. All else being equal, Standard & Poor's views companies with long track records of consistently strong earnings as having a stronger capacity for internal capital generation than companies with more volatile performance. Standard & Poor's also considers an insurer's prospective growth plans in conjunction with management's commitment to maintaining or enhancing the quality of its TAC. The quality of a company's investment portfolio, its exposure to spread business, and its asset liability management (ALM) techniques. Standard & Poor's views companies willing to accept incremental risk less favorably than those adhering to more prudent practices. A company that demonstrates a strong understanding of the risks it undertakes also influences Standard & Poor's assessment. The capital needs of a company's parent, affiliate, or subsidiaries. Standard & Poor's considers potential calls on capital by affiliates that might look to the rated entity for future capital support, or by a parent company that could make increasing demands for dividends. Conversely, a parent's, subsidiary's, or affiliate's ability to provide future capital support could have a positive effect on how Standard & Poor's views an insurer's capital strength. The amount of reinsurance. Standard & Poor's takes into account any use of reinsurance to support aggressive growth and reported capital strength, along with the expected timing of treaty recapture and the quality of assuming reinsurers. Other contingent liabilities. Bond guarantees or similar contingent liabilities that could warrant a charge against capital also are considered.

Similarities of Capital Rules For Canadian Insurers and Deposit-Taking Institutions When the Canadian regulators introduced MCCSR in 1992, a reasonable effort was made to harmonize the capital requirements with those used by banking supervisors. Both apply a risk-based formula, and the definition of capital is largely the same, and follows the framework set out in the 1998 Basel Accord outlining international capital adequacy rules for the banking industry. Differences in capital would include additions and deductions of certain items unique to the life insurance industry such as net deferred realized gains/losses on investments, negative reserves, cash surrender value deficiencies, and risk assumed by unregistered reinsurers. A Prospective View Ratings are an assessment of a company's ability to meet its obligations in the future, and ratio standards relate to a company's expected financial condition. Ratings are designed to reflect performance during the expected course of business cycles and not in what is viewed as a peak or trough period. Ratio standards do not always conform to an 'as reported' basis. Rather, a firm's financial figures can be adjusted to reflect ongoing or future expected performance.