## GUY CARPENTER



October 2017

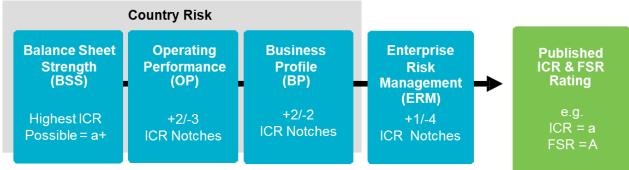
# A.M. Best's new Stochastic BCAR and its implications for (re)insurers

## INTRODUCTION

For most (re)insurers, their credit ratings are vital to conducting business transactions. A.M. Best published an update to its core methodology – Best's Credit Rating Methodology (BCRM) on October 13, 2017. The update represents the most extensive changes in over 20 years, with the aim of bringing greater transparency to the rating process. A significant part of this change is the shift to a stochastic-based Best's Capital Adequacy Ratio (BCAR), thereby having clearer, more accurate and consistent riskadjusted capital measures. As companies do their business planning and reinsurance renewals, they need to actively consider the potential capital and risk implications of these changes well in advance.

## DETAIL OF BCRM

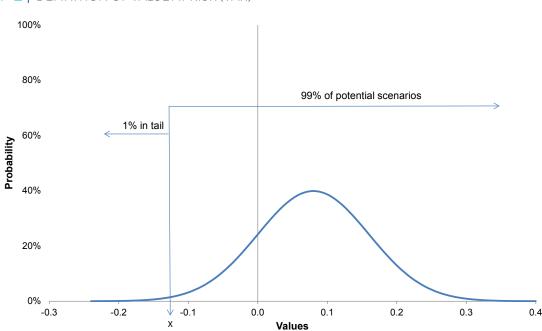
#### F-1 | A.M. BEST'S CORE RATING ASSESSMENT COMPONENTS (\*)



<sup>(</sup>Source: A.M. Best)

Under the new BCRM, Balance Sheet strength acts as the starting point. The highest possible anchor rating from this component depends on the company's Country Risk Tier (CRT), which is a holistic assessment of a country's economic, regulatory and legal environment (**not** a sovereign rating). The rating will then be revised up or down depending on the assessment of the company's Operating Performance, Business Profile and Enterprise Risk Management (ERM) processes.

The new Stochastic BCAR uses Value at Risk (VaR) to measure a company's Net Required Capital (NRC). What this means in practice (refer to the attached chart) is using simulation-based processes to calculate the threshold for a given confidence level (for example 99 percent or 1:100 year return period) beyond which a worse result could happen.



#### F-2 | DEFINITION OF VALUE AT RISK (VAR)

Example: Under VaR 99 percent or 1:100 year return period, 99 percent of potential scenarios have values above x; alternatively speaking, there is 1 percent probability that the result is worse than x. (Source: Guy Carpenter)

The new Stochastic BCAR thus evaluates a company's NRC across a range of VaR confidence levels ranging from 1:20 to 1:250 year return periods, measured against its adjusted policyholders' surplus (APHS). The 1:500 year BCAR score will also be calculated for the purpose of evaluating a company's ERM capabilities, scenario testing and risk tolerance setting process, but not in the Balance Sheet Strength stage.

BCAR Assessment	BCAR Scores at VaR Levels	ICR Rating	FSR Rating	P/C Industry % (A)
Strongest	> 25% at VaR 99.6 (1:250)	a/a+	А	64%
Very Strong	> 10% at VaR 99.6 (1:250)	a-/a	A-/A	27%
Strong	> 0% at VaR 99.5 (1:200)	bbb+/a-	B++/A-	5%
Adequate	>0% at VaR 99.0 (1:100)	bbb-/bbb/bbb+	B+/B++	2%
Weak	>0% at VaR 95.0 (1:20)	bb-/bb/bb+	B-/B	1%
Very Weak	0% at VaR 95.0 (1:20)	b+ and below	< B-	1%

#### T-1 | A.M. BEST'S BCAR ASSESSMENT

(Source: Best's Credit Rating Methodology, Exhibit B.4)

(A) Distribution of YE 2015 BCAR assessments for P/C industry (Source: A.M. Best 2017 Review/Preview conference)

Instead of calculating the BCAR as APHS divided by NRC, in the new Stochastic BCAR the formula is the excess or shortfall as a percentage of available capital, which is (APHS – NRC) divided by APHS. A positive score indicates the rated company has available capital in excess of its net required capital at that confidence level and vice versa. This represents closer alignments with typical risk tolerance statements, for example, a company can accept catastrophe losses of no more than 10 percent of its capital and surplus in a given year.

## **IMPLICATIONS FOR (RE)INSURERS**

There are material changes to how the model treats catastrophe risk. First, the catastrophe Probable Maximum Loss (PML) figures will be measured on a "Pre-tax all-perils per-occurrence" basis, measured at the different confidence levels. Currently, they are set by choosing the larger of 1:100 year windstorm or 1:250 year earthquake PML amounts ("Net-tax largest peril per-occurrence" basis). Companies will be required to provide this information in the Supplemental Ratings Questionnaire (SRQ). Second, the catastrophe impact will be aggregated with other risks and captured in the NRC after reflecting diversification benefits between the risks. By contrast, under the current BCAR, the net-tax PML is simply deducted from reported surplus.

Under the new BCRM, the BCAR score's upside contribution to a company's overall rating is now capped. Even the most favorable BCAR assessment will only yield a baseline Issuer Credit Rating (ICR) of "a+" (equivalent to Financial Strength Rating (FSR) of "A"). Companies will need to outperform their peers in the three remaining evaluation areas (Operating Performance, Business Profile and ERM) in order to achieve a higher FSR. As such, companies will no longer be able to rely solely on very strong capitalization levels to achieve a superior credit rating.

Companies with large exposures to property catastrophe perils, common stock investments, long-duration and lower quality fixed income portfolios, volatile and long-tail underwriting risks and elevated reinsurance leverage and concentration are likely to experience higher cost of capital.

It was anticipated that only 3 percent of A.M. Best's ratings universe are "misaligned" and will be placed "under review" once the new criteria becomes effective, with companies having limited time to take corrective action before ratings are finalized. The rest of the industry's ratings will be deemed "unaffected." In fact as the updated

BCRM goes live, A.M. Best has published corresponding rating actions, including placing Hannover Re, Munich Re, Swiss Re and Allstate and their operating units "under review with positive implications", while approximately 30 other rated companies have been placed "under review with negative implications".

Although the new criteria will provide more transparency, there will be uncertainty and general industry concerns over the next ratings cycle until all ratings, 2016/17 Stochastic BCAR results and credit reports are updated and published industry-wide.

These changes will affect companies' planning and reinsurance renewals, among other areas. Regardless of their home country regulatory requirements, if they are targeting a higher rating they will need to show that they consider and manage risks beyond the 1:100 year return period. In addition, if they do any internal capital modelling, they should be prepared for more transparent discussions comparing their own work with BCAR in future rating reviews.

### HOW GC CAN HELP

Guy Carpenter is assisting rated companies to understand how their ratings would develop under the new BCRM and provide guidance and solutions on how to improve or stabilize their ratings over time.

Moreover, we have been assisting many (re)insurers to project and interpret their capital positions and risk impacts at the higher return periods for annual capital budgeting purposes using A.M. Best's U.S. property/ casualty and Universal BCAR models. Combined with our capital modeling and ERM advisory efforts, we can provide insightful context and guidance for (re)insurers to "own their risk," determine appropriate reinsurance protection and align their operations with their risk appetite and tolerances.

## CONTACTS

Sean Campbell sean.campbell@guycarp.com

Matthew Day matthew.day@guycarp.com

Jay Dhru jayan.dhru@guycarp.com Jimmy Molyneux jimmy.molyneux@guycarp.com

Kyle Mosher kyle.mosher@guycarp.com

Mark Murray mark.j.murray@guycarp.com Michael Owen michael.g.owen@guycarp.com

Vin Ranade vinayak.ranade@guycarp.com

Eric Simpson eric.m.simpson@guycarp.com

Jack Snyder jack.snyder@guycarp.com

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