Scope of Response

Starting in 2016, A.M. Best undertook a revision of the Best Credit Rating Methodology (BCRM) and its associated criteria procedures. This revision process extended into 2017 and involved multiple requests for comment (RFC). A.M. Best published its first RFC related to this process on March 10, 2016. Subsequently, A.M. Best published four additional RFCs: (1) November 14, 2016; (2) April 27, 2017; (3) June 30, 2017; and (4) July 26, 2017. These RFCs consisted of various proposed material changes to either the BCRM and/or the associated criteria procedures.

As a result of the RFCs, A.M. Best is publishing a total of 80 comments. Not included in this total are emails received in the Methodology inbox related to requests for slides from webinars, requests for copies of criteria, and company-specific questions about their capital model (BCAR) scores or other unique company-specific features. For those respondents who chose to remain anonymous, best efforts have been made to shield the identity of both the author and the company through the redaction of any text which could be used to identify the commenter. A.M. Best greatly appreciates all the responses received during the public consultation periods. When possible when a common theme was evident, questions and comments on topics have been grouped into general responses. In other cases, commenters appeared to be soliciting advice on ways to minimize risk charges or referenced conversations with rating analysts about specific treatment for their individual companies. These types of scenarios are not addressed in this response.

Industry engagement enabled A.M. Best to identify multiple areas in need of further revision/clarification. A.M. Best believes these revisions promote increased transparency. As discussed in various market briefings published throughout the revision period, A.M. Best did not respond individually to comments from the RFCs. The response outlined below summarizes the significant changes made to the BCRM and its associated criteria procedures from their initial draft releases to their final versions. These changes resulted both from public feedback and internal review. This response also describes proposals that were not adopted by A.M. Best and addresses more process-related, general questions in a Frequently Asked Questions (FAQ) format. In some comments, requests for elaboration on the elements of specific factor or Economic Scenario Generator (ESG) assumptions; category, region, industry or product specific benchmarks; or specific financial ratio calculations were received. Whenever possible, A.M. Best strives for transparency; however, all calculations or assumptions cannot be included within criteria.

In addition to the changes detailed in the following sections, A.M. Best made minor nonmaterial editorial revisions to the BCRM and its associated criteria procedures. These changes added greater clarity and were stylistic or grammatical in nature.

Changes to the BCRM and Its Associated Criteria Procedures

The following sections detail significant changes that A.M. Best made to the draft BCRM and its associated draft criteria procedures prior to their finalization.



BCRM

Defining Rating Units

Certain commenters requested additional insight into the formation of a rating unit. In response, A.M. Best revised the discussion of rating units within the November 2016 draft BCRM to provide greater clarity. These revisions included adding additional explanatory exhibits in Part II of the BCRM (Exhibit A.1 and Exhibit A.2). Additional detail was also provided regarding the discussion of financial guarantees which are considered in the review of explicit financial support (Part II-Section D).

Interpreting the BCAR Assessment

A.M. Best's November 2016 version of the BCRM recalibrated the BCAR interpretation exhibit (Part III, Exhibit B.4). This revision was made to reflect those made to the BCAR draft, i.e., the changes in the model's VaR levels. BCAR scores measured at various VaR levels were changed to 95, 99, 99.5 and 99.6 (new) from 95, 99, 99.5, 99.8 and 99.9. Additionally, the BCAR assessment descriptors of "Very Strong" and "Strongest" were changed to have buffers beyond 0 at the 99.6 VaR level. These modifications followed the revision to the BCAR model as noted in the November 2016 versions of the BCAR-related criteria procedures.

CRT-5 Balance Sheet Strength Adjustments

A.M. Best made some minor adjustments to the "Adequate" and "Weak" balance sheet strength assessment options available within CRT-5 countries. Specifically, A.M. Best revised the "Overall Balance Sheet Strength Assessment" chart to reflect bb/bb-/b+ for "Adequate" and b/b-/ccc+ for "Weak" in CRT-5 countries (Part III, Exhibit A.6 and Exhibit B.13). A.M. Best's original chart was bb-/b+/b for "Adequate" and b/b-/ccc+ for "Weak". A.M. Best made these revisions in order to promote consistency in the overlap (or lack thereof) between the "Strong," "Adequate," and "Weak" options across all CRTs.

Clarification of the Impact on Balance Sheet Strength from Changes in CRTs

A.M. Best received one suggestion to clarify the intended impact of changes in CRTs on the balance sheet strength assessment. Accordingly, A.M. Best revised the BCRM to read "A.M. Best does not place a cap based on a sovereign credit rating of the country in which the rating unit is domiciled or to which it is materially exposed; however, movements from one CRT to another do affect the overall assessment of balance sheet strength..." (Part III, p. 19).

Operating Performance and ERM Assessment Descriptors

As part of the ERM assessment, A.M. Best added the assessment descriptor "Marginal" (-1) to provide greater gradation (Part III, Exhibit A.11 and Exhibit E.2). The assessment descriptor "Weak" now corresponds to (-2). In addition, the "Adequate" (0) descriptor was changed to "Appropriate" to better align with the evaluation.



Like the adjustment to the ERM assessment, A.M. Best added the assessment descriptor "Marginal" (-1) in order to provide greater gradation within the operating performance assessment (Part III, Exhibit A.9 and Exhibit C.1). The assessment descriptor "Weak" now corresponds to (-2), while "Very Weak" is a (-3).

Business Profile and ERM Notching Limitation

In the July 2017 draft of the BCRM, A.M. Best added a notching limitation on the combined impact between business profile and ERM (Part III, p. 24). Companies with global complex business profiles have a need for a robust and comprehensive ERM program. In many cases, the complexities and demands of these companies' "Very Favorable" business profiles require an equally "Very Strong" ERM. Acknowledging this interaction, and the limit to favorable impact that these two qualitative building blocks may have on credit strength, A.M. Best revised the July 2017 draft BCRM so that the combined impact between business profile and ERM is restricted to a maximum of "+2" notches. This calculation only affects those companies that have both a "Very Favorable" business profile assessment and a "Very Strong" ERM assessment.

ERM and the Framework Evaluation: RIW Adjustments

Revisions to the BCRM from its March 2016 draft version reflect some restructuring of the ERM section (Part III, Section E). The change was designed to align the Risk Impact Worksheet (RIW) more closely to the evaluation of an insurer's ERM. The RIW was refined to more explicitly indicate the review of an insurer's ERM framework and an assessment of the framework's development. The risk management framework evaluation emphasizes five assessment areas: risk identification and reporting, risk appetite and tolerances, stress testing, risk management and controls, and governance and risk culture. A.M. Best also added a sample RIW to the ERM section of the BCRM (Part III, Exhibit E.3) in order to increase understanding of the worksheet and its associated assessments.

VaR 99.8 and ERM

As opposed to the March 2016 original draft of the BCRM, the VaR 99.8 and 99.9 were removed from the measurement of capital adequacy in the November 2016 BCRM draft. The November 2016 draft indicated that lower probability tail events such as 99.8 will be incorporated into the discussion of the ERM building block (Part III, Section E). Industry feedback received during the initial RFC period was consistent in the concern of utilizing these lower probability tail events for capital measurement due to limited availability and reliability of model data, which in turn raised the potential for greater volatility in the rating process.

Non-Insurance Ultimate Parents and Lift

A.M. Best identified a limited number of instances in which a non-insurance ultimate parent, such as a sovereign, may have a greater impact (negative or positive) upon the lead rating unit than that which is provided for in the "Combined Balance Sheet Strength Assessment". To account for these specialized cases, A.M. Best now allows the additional impact of the non-insurance ultimate parent to be captured in the rating lift/drag assessment (Part III, p. 25, 79).



Best's Capital Adequacy Ratio (BCAR) Criteria Procedures

Tail Risk: VaR 99.8 and VaR 99.9

A.M. Best's March 2016 draft release of the U.S. Property/Casualty (P/C) BCAR criteria procedure stated the intention to calculate an insurer's BCAR at five VaR levels: 95, 99, 99.5, 99.8, and 99.9.

The May 2016 Briefing: *Update to Best's Credit Rating Methodology and BCAR Call for Comment* posed the question: "What are your views on using VaR metrics for risk modeling in general? Do your views concerning the value of these metrics change as one goes out into the tail (e.g., VaR 99.8 & 99.9)?" Responses to this question indicated that data reliability was an issue this far out in the tail, and raised the potential for greater volatility in the rating process should these VaR levels be used.

After considering the commentary received, the VaR 99.8 and 99.9 were removed from the measurement of capital adequacy in the November 2016 BCAR draft releases. These drafts indicated that BCAR scores would be measured at the 95, 99, 99.5 and 99.6 VaR levels. The addition of VaR 99.6 (1:250 return period) is consistent with a commonly used practice for capital measurement and the measurement of catastrophe tail risk.

Stochastic-based Factor Approach

In the original March 2016 draft of the P/C BCAR, A.M. Best stated that some of the BCAR's risk factors would be generated using stochastic modelling within the BCAR model itself. A.M. Best received feedback from the industry expressing concern with this approach since companies would be unable to conduct their own "what-if" analysis. As one of A.M. Best's goals in revising its methodology was to introduce greater transparency into the rating process, A.M. Best introduced revisions designed to address these concerns to the BCAR models outlined in the November 2016 drafts. These revisions entailed redesigning the proposed BCAR model to use stochastic-based factors. This change was made to provide greater transparency and to allow for "what-if" scenarios. The model continues to utilize company specific detailed data to customize the view of balance sheet strength through the BCAR. This change had limited impacts on the level of required capital.

Catastrophe Risk (B8) and the Covariance Adjustment

During the March 2016 RFC, A.M. Best received multiple comments that argued catastrophe risk (B8) should be moved from a direct capital requirement to being included as part of the covariance adjustment in the net required capital calculation. A.M. Best further considered the extent to which catastrophe risk is correlated to other risks and adjusted the new required capital formula to include the catastrophe risk charge within the covariance adjustment. This change generally resulted in lower net required capital.

Interest Rate Risk (B3) Adjustment

In the March 2016 draft, the estimated losses that were used to represent the expected liquidity need for interest rate risk directly increased as the confidence levels and (B8) required capital amounts increased. In response to comments suggesting that the assumption was too severe for the VaR



levels being modeled, A.M. Best chose to hold the rating unit's pre-tax gross 1 in 100 year catastrophe PML from the all perils combined per occurrence curve constant across all VaRs. The change to a constant loss amount for the expected liquidity need was made to reduce the implied direct correlation between the increasing interest rates and the occurrence of the event generating the need to sell assets quickly. This change generally resulted in lower net required capital at the higher confidence levels.

Bond Risk Charge Revisions

Following an internal review of these charges, A.M. Best adjusted the baseline bond risk charges for credit ratings of ccc+ and below starting in Year 6 for all VaR levels (all BCAR criteria procedures, Appendix 1).

Modifications to Stress BCAR

In the November 2016 versions of the BCAR criteria procedures, A.M. Best stated that rating units with natural catastrophe exposure would be subject to an additional stress test related to the occurrence of such a catastrophe. As part of the stress test, a company's reported surplus would be reduced by the 1-in-100-year net pre-tax PML (including reinstatement premium) from the per-occurrence all-perils combined information. After further consideration and review of submitted comments, A.M. Best has decided that this reduction should use the 1-in-100-year net post-tax PML if the analyst believes that the company will be able to use the tax benefit. This decision was reflected in the draft "Catastrophe Analysis in A.M. Best Ratings" released in the June 2017 RFC. The final versions of the P/C (U.S. and Canadian) and Universal BCAR criteria procedures also reflect these changes. Clarifying text was also included to be consistent with the process outlined in "Catastrophe Analysis in A.M. Best Ratings" to state that after calculating both a rating unit's standard and stressed BCAR, A.M. Best compares the results of the two analyses.

In the final *Understanding BCAR for U.S. and Canadian Life/Health Insurers* further clarification was provided to indicate that stress tests may include mortality, morbidity or economic/market scenario type of events. Stress tests will be tailored to what is most appropriate based on what is viewed as the rating unit's largest exposure. A stress test related to XXX captives was removed from the typical examples cited as analysis of exposure to XXX type captives are performed as part of the overall balance sheet strength assessment.

References to Available Capital

Clarifying language was added to text and exhibits to be consistent with the concepts outlined in the *Available Capital and Holding Company Analysis* criteria. Added language includes that BCAR evaluations may also consider calculations at the holding company/consolidated level and that the starting point for available capital is the financial statement of the entity or entities being evaluated.

The Treatment of Terrorism Risk in the Rating Evaluation

A.M. Best added and revised several exhibits in its final version of its *The Treatment of Terrorism Risk* in the Rating Evaluation criteria procedure. These changes are intended to provide greater clarity to the



market and facilitate ease of understanding. Exhibit B.5 was added to clarify that, as part of the terrorism stress test assessment, all companies are subject to three concentration checks. Exhibit B.6 was modified for reader comprehension; the change to this exhibit was also applied to Catastrophe Analysis in A.M. Best Ratings and Rating Title Insurance Companies. The examples in exhibits B.7 and B.8 were expanded to give more comprehensive insight into the application of the terrorism stress test.

Catastrophe Analysis in A.M. Best Ratings

As mentioned, A.M. Best modified certain exhibits within *Catastrophe Analysis in A.M. Best Ratings* for reader comprehension. Exhibits C.2 and C.4 were modified to more clearly define what A.M. Best meant by stress BCAR tolerance.

Available Capital and Holding Company Analysis

Comments received expressed the desire to have a more robust discussion of A.M. Best's treatment of available capital than what was presented in the BCAR criteria procedures. As part of the April 2017 RFC, A.M. Best released a draft of its *Available Capital and Holding Company Analysis* criteria procedure. This criteria procedure greatly expanded the discussion of the components of available capital.

As part of the public consultation, A.M. Best received feedback that a few aspects of the *Available Capital and Holding Company Analysis* draft were unclear. To clarify, A.M. Best made some stylistic adjustments to Exhibit B.1 and added some explanatory text related to the following areas: terms to maturity, tax treatment of adjustments, and the issuance of debt by non-holding companies.

All Criteria Procedures

A.M. Best added the following text to the beginning of each BCRM-associated criteria procedure, "The following criteria procedure should be read in conjunction with Best's Credit Rating Methodology (BCRM) and all other related BCRM-associated criteria procedures. The BCRM provides a comprehensive explanation of A.M. Best Rating Services' rating process." This informs readers of any individual criteria procedures to refer back to the BRCM as the overarching document in order to understand the rating process.

Proposals Not Adopted

Fundamental Issues

A.M. Best received certain proposals related to changing the fundamental approach taken within the BCRM and/or its related criteria procedures. A.M. Best's responses to proposals that were not adopted are enumerated below.

No VaR BCAR/ Different BCAR

Multiple comments focused on alternative bases for calculating risk-adjusted capital. A.M. Best has broadly grouped these comments into the following categories:



- Comments that suggested using TVaR over VaR
- Comments that suggested alternative VaR confidence intervals for BCAR (Note: these comments differed from those that suggested the removal of the VaR 99.8 and 99.9)
- Comments that suggested VaR analysis be removed completely from the BCAR
- Comments that suggested A.M. Best make no change to the prior BCAR model
- Comments that suggested alternative calculations for the BCAR formula
- Comments that expressed concern about the use of a stochastic approach
- Comments that questioned the validity of third-party models in terms of generating comparable PMLs

The basis of risk measurement for BCAR remains Value at Risk (VaR). VaR allows for more consistent calibration of the BCAR model's risk factors across its various risk components. Within the model, VaR is applied to the risks that are typically the most material to an insurer. A.M. Best feels that the use of VaR at the 95, 99, 99.5 and 99.6 confidence levels is an appropriate means of measuring risk-adjusted capital as part of the balance sheet strength assessment. A.M. Best remains open to reviewing additional risk analysis that companies wish to share as part of its overall review of enterprise risk management.

No Comprehensive Adjustment

Some of the feedback received by A.M. Best questioned the necessity of the comprehensive adjustment building block. Although not expected to be used frequently, A.M. Best believes that it is appropriate to allow additional flexibility for characteristics of companies which may not have been adequately captured in the analysis within the balance sheet strength, operating performance, business profile, and enterprise risk management building blocks.

ERM Notching

A.M. Best received comments questioning the asymmetrical nature of the ERM assessment (+1/-4). Several proposals included increasing the upper range of the ERM adjustment to +2. A.M. Best supports the continuing refinement of enterprise risk management in the insurance industry. However, the limited upside notching for ERM is indicative of A.M. Best's belief that sophisticated ERM is an essential requirement for companies with complex risk profiles and the impact of such a sophisticated ERM program will be largely captured in other building blocks. It is A.M. Best's view that very negative ERM can erode capital precipitously and quickly place a company in distress.

Increasing Balance Sheet Credit Beyond a+

A.M. Best has frequently expressed the view that balance sheet strength is not the sole determinant of a rating. Moreover, the revised BCRM makes it clear that BCAR is just one component of the balance sheet strength building block. While balance sheet strength alone can give A.M. Best a certain level of assurance that a company can meet its obligations to policyholders, A.M. Best believes that the strongest insurers demonstrate capabilities beyond what is captured by the point-in-



time view of a balance sheet. After extensive testing of the revised rating process, A.M. Best does not believe it is appropriate to give insurers additional credit beyond a+ for balance sheet strength in the rating process, even if such strength is reflected in external assessments such as regulatory solvency ratios, e.g., Risk-Based Capital (RBC) in the US or SCRs under Solvency II in Europe.

Removing the Limit between Business Profile and ERM Notching

A.M. Best received a comment regarding the notching limitation on the combined impact between business profile and ERM (Part III, p. 24). As explained previously, companies with global complex business profiles have a need for a robust and comprehensive ERM program. In many cases, the complexities and demands of these companies' "Very Favorable" business profiles require an equally "Very Strong" ERM. Acknowledging this interaction, and the limit of favorable impact that these two qualitative building blocks may have on credit strength, A.M. Best feels that this adjustment was appropriate.

Proposals for Adjustment to BCAR

A.M. Best received proposals for adjustment to the factors or to the calculations of BCAR. In some cases, these proposals were adopted and are now reflected within the BCAR models as noted above. The following are suggestions that A.M. Best did not adopt.

Standard BCAR (B8) - Post-Tax

Multiple commenters suggested that A.M. Best's (B8) catastrophe risk component be calculated on a post-tax basis. However, A.M. believes that using a pre-tax (B8) is appropriate; this ensures consistency with the other net required capital risk components, which are not tax affected. Furthermore, as one commenter mentioned, not only is it difficult to forecast the future tax position of a company, but tax rates can vary by type of company and country. A.M. Best will continue to use a net pre-tax all perils combined PML for the (B8) required capital risk component.

Adjustments to Company or Product/Asset Specific Capital Factors in the BCAR

The BCAR model allows the rating analyst to react to various market and/or economic conditions. Examples that can impact capitalization include interest rate changes, the stage of the underwriting cycle, changing reinsurance products, and reinsurance dependence. For asset classes, the risk factors may be reduced if the insurer provides more detail on items such as the types of investments, the volatility of the investments, the liquidity of the investments, correlations within the portfolio of investments, correlations to other risk categories such as underwriting risk, and how the rating unit manages the individual and overall risks created by this portfolio of assets. A.M. Best also recognizes that certain product details are not easily identifiable through the data within financial statements and that analyst adjustments may be necessary for certain product lines based on the nature of the local market.

Why isn't coupon income included as an offset to default risk for fixed income securities?

A.M. Best recognizes investment performance, including coupon income, in operating performance.



Different Factors for Company Occupied Real Estate and Investment Real Estate

While A.M. Best recognizes the different strategic purposes of occupied real estate and real estate held for investment, the BCAR model does not make this distinction and treats all real estate assets similarly. The factors for real estate are based on simulated movements in an index that incorporates some elements of the National Council of Real Estate Investment Fiduciaries Property Index which measures the total rate of return of a large pool of individual commercial real estate properties acquired for investment purposes.

Modifications to B3-Interest Rate Risk

A.M. Best received comments requesting alternative means of assessing/mitigating interest rate risk within the P/C and Universal models. Interest rate risk represents the potential loss a rating unit would incur if it were forced to sell its fixed income assets during a period of rising interest rates. As interest rates rise, the market value of the fixed income assets will decline, and if the rating units need to sell the fixed income assets, it would be at a price lower than is currently considered in available capital.

Suggestions included incorporating operating cash flow into the analysis or depleting cash balances prior to stressing fixed income assets. A.M. Best recognizes that each company has its own strategy for selling assets; fixed income assets serve as a proxy for the hierarchy of asset sales. A company's liquidity strategy is also part of the overall balance sheet strength assessment. A.M. Best believes that the current approach to interest rate risk within BCAR is appropriate.

Inclusion of Goodwill in Available Capital

A.M. does not currently consider goodwill (whether negative or positive) as part of available capital when calculating BCAR. There is no change to this process with the movement to the stochastic based BCAR model.

Other

Terrorism Tiers

A.M. Best received one comment suggesting that A.M. Best create a separate terrorism tier for New York City and Washington, D.C. A.M. Best feels that inclusion of New York and Washington among other Tier 1 cities remains appropriate and is consistent with prior iterations of the criteria.

FAQ

BCAR-related FAQs

What does the slope in BCAR mean in terms of rating impact?

BCAR is just one of many factors considered in the balance sheet strength assessment. BCAR measures risk-adjusted capital at a point in time, but does not explain why it is at that level or how it may change in the future. The slope in BCAR is reviewed during the current period (as well as over



time) to note any significant shifts across the different confidence levels, which can help identify tail risk and deteriorating trends in risk-adjusted capitalization.

Why have charges in the BCAR model changed/increased, e.g., fixed income risk charges, COLI charges, and cash?

The movement to a stochastic-based BCAR model resulted in changes to virtually all risk factors within the BCAR model. In some cases, attempts were made to promote consistency within the models globally, recognizing the differences inherent in financial statements across industries and borders. This was the case for COLI. Previously, in the U.S./Canadian Life/Health BCAR, the COLI charge was based on a counterparty credit charge based on a similar bond charge. To align with the U.S. P/C BCAR, the Life BCAR model now looks through to the risk within the asset backing the COLI contract, which may result in a higher charge.

Is catastrophe risk in the BCAR being double counted? Do the Premium Risk (B5) factors reflect catastrophe experience? Can the required capital for Catastrophe Risk (B8) be reduced by the catastrophe-related premium?

No. CAT risk is not double counted in BCAR. Capital factors are derived on data that excludes CAT. Excluding the CAT load would require higher factors on non-CAT components. The loss ratios used to derive the premium risk factors incorporate CAT.

How will A.M. Best proxy PMLs for those companies that do not have such information available?

For those rating units that do not provide PMLs, A.M. Best may use other information to estimate potential large losses, such as total policy limits, total insured value (TIV) by state, region or country or, actual historical experience. Information on concentrations in TIV, with more detail on catastrophe prone areas, is also useful.

Why is the charge for unrated reinsurers 100%?

The baseline impairment rate for unrated reinsurers is 100%. However, this impairment rate is offset with a 50% recovery rate, resulting in an undiscounted risk charge of 50%. This is then discounted using an annual rate of 4%. The 100% risk charge for unrated reinsurers may be reduced if adequate additional information is provided to A.M. Best.

General Reinsurance (B4) Comments/Questions

Reinsurance recoverables assume a diversified panel. The appropriateness of the reinsurance program is handled outside of the model. A.M. Best does not currently include contingent commissions with recoverables.

One commenter asked if there was reinsurer concentration risk assessment based on structure of the reinsurer, if the two entities had the same rating. A.M. Best does not distinguish between reinsurers with the same rating for the purposes of assessing concentration.



Why is there a limitation for catastrophe bonds of 90% collectability in B4?

The treatment of collateral related to catastrophe bonds may be evaluated based on the underlying collateral and reinsurance agreement terms, which may result in higher credit than 90%.

Why is the charge for agent balances 5%?

A.M. Best's experience of the industry indicates that a charge of 5% is appropriate at this time.

What information can A.M. Best share regarding its third-party ESG?

A.M. Best bases some of the factors used in the BCAR model on a third-party vendor's ESG (Tower Watson Star ESG). This ESG is a real-world, arbitrage-free fully coherent and integrated stochastic Monte-Carlo generator covering a wide array of economic and financial risk metrics including interest rates, credit spreads, equities, property, F/X and many alternative series.

A.M. Best annually reviews output from the ESG and, to promote stability in the factors used within the BCAR model, phases in adjustments when appropriate. Questions were received comparing the factors in BCAR to internal company run models, external studies and other regulatory models. A.M. Best does not compare its derived factors to regulatory or other models.

A.M. Best also received questions regarding the use of the ESG to model dependence among risk components. Future model updates may consider additional uses for the ESG.

Can the old BCAR be mapped to the new?

No. Some of the submitted comments discussed translating the old BCAR scores into new ones. The old BCAR and the new BCAR are not equivalent and cannot be reconciled due to the stochastic-based modeling incorporated into the new model and the multiple BCAR scores—representative of different VaR levels—output by the new model.

Does VaR map to a specific rating?

No. The different confidence levels used in BCAR are part of the balance sheet strength assessment. A specific rating is not intended to match having a "passing" BCAR score at a specific VaR or confidence level.

Does the balance sheet strength assessment or the rating directly correspond to a company's BCAR scores?

Some commenters expressed the understanding that BCAR corresponds directly to a balance sheet strength assessment or even a company's rating. A.M. Best would like to emphasize that, although important, BCAR is just one component of the balance sheet strength assessment. Likewise, balance sheet strength is only one of the building blocks of A.M. Best's rating process. In addition to BCAR, a company's balance sheet strength assessment incorporates analysis of additional factors (outlined within the BCRM). Taken together assessments of the building blocks—balance sheet strength, operating performance, business profile, enterprise risk management, comprehensive adjustment, and lift/drag (when appropriate)—are the foundation of a rating.



Is available capital strictly a U.S. statutory measure?

No. Available capital is a concept used across all of A.M. Best's BCAR models including the Canadian and Universal models. For insurers outside of the U.S. that do not file U.S. statutory statements, the concept of available capital still applies. Accounting or regulatory treatment-related adjustments that may be made to the calculation of available capital are discussed in the *Available Capital and Holding Company Analysis* criteria procedure.

Why is there a spread of risk factor?

The BCAR model generates additional required capital to support investment risk relating to diversification of the portfolio, using a size factor corresponding to the spread of risk among all major asset classifications. Generally, no additional capital is generated from this adjustment for rating units with more than USD500 million in invested assets; A.M. Best believes that a smaller size of an investment portfolio limits diversification opportunities.

Why is there no diversification between country or region in BCAR?

Diversification or lack thereof is captured within the assessment of business profile.

How is credit for Total Portfolio Diversification treated in the Model?

Diversification is handled through the covariance adjustment and spread of risk within the model. Credit for a well-diversified portfolio will be further evident through the review of the rating unit's investment results in the assessment of operating performance and through other balance sheet factors including liquidity and asset liability management. The normal analytical process includes a review of investment guidelines, management capabilities and track record in which the potential benefits of portfolio diversification may be evident.

Greater Gradation among Fixed Income Securities

Within the BCAR model, fixed income default risk is based on credit rating, time to maturity and recovery rate. A few commenters suggested that A.M. Best should treat certain types of rated fixed-income assets differently from others, i.e., Japanese bonds versus U.S. bonds and tax-exempt municipal bonds versus corporate bonds. In other cases, it was suggested that similarly rated securities should receive different risk charges in BCAR (e.g. CLOs). A.M. Best believes that the baseline risk changes for a company's fixed-income assets should reflect the global CRA rating of those assets.

What is the break point for when an insurer's participation in foreign investments needs to be calculated and how is this adjustment calculated?

A.M. Best reviews foreign investment in certain asset categories to determine if exposures are higher risk, concentrated or represent a significant level of capital. For insurers with a material amount of foreign investments in a particular investment category, the risk charge for that asset category may be increased to account for the increase in volatility and/or decrease in liquidity associated with those foreign markets, financial systems, and economies.



How are sovereign bonds treated?

Sovereign bonds, or those bonds fully backed by sovereigns, that are rated AAA by a majority of CRAs may be categorized as exempt, and thus not subject to the normal bond risk charges. Otherwise, these securities are treated in the same fashion as other bonds in the BCAR model.

Are GSE bonds treated as exempt?

Exempt bonds are U.S. government securities backed by the full faith and credit of the U.S. Government.

Why are Z-category CMOs assessed higher risk charges?

Z Category CMOs receive an additional risk charge in the U.S and Canadian Life/Health model. These assets are typically held in tranches that are of lower priority and thus bear characteristics of equity-type investments. This is consistent with current practice.

Does A.M. Best distinguish at all between sinking fund preferred stock versus perpetual preferred stock?

No. These differences are not presently recognized in the baseline BCAR factors for preferred stock. The risk charges are primarily based on credit ratings assigned to preferred stock and the rating unit's demonstrated ability to hold onto these investments for the long term.

How was the scaling performed to take the 92% VaR level charge for commercial mortgage loans (CML) to the other VaR levels?

A.M. Best used linear scaling to take CML from the 92% VaR level to the VaR 95, 99, 99.5 and 99.6 levels.

Questions Related to Schedule BA Assets

A.M. Best received a number of questions regarding "Other Invested Assets" (Schedule BA assets). These questions primarily focused on how the factors were derived and when a reduction to the baseline charges in the model may occur.

The factors for other invested assets were selected after a review of the ESG-simulated market volatility of more than 30 hedge fund indices. Included in these selected indices are private equity and real-estate funds.

Generally, when greater detail about the investment is available within the financial statement schedules, the investment will be matched to various indices produced by the ESG for that asset class (e.g. investments with the underlying characteristics of real estate). The risk charge assessed may be higher than the baseline for that specific asset class (e.g. real estate) due to potential difficulty in valuing the asset and/or lower liquidity. The risk factors may be reduced if the insurer provides more detail on items such as the types of investments, the volatility of the investments, the liquidity of the investments, correlations within the portfolio of investments, correlations to other risk categories such as underwriting risk, and how the rating unit manages the individual and overall risks created by this portfolio of assets. To promote consistency when there are adjustments to baseline



charges, an internal investment working group reviews proposed analyst adjustments to the baseline factors in BCAR, before they are presented to rating committee.

Can the changes in BCAR be adjusted to reflect the unique properties of a company's specific product/region/other?

A.M. Best would like to emphasize that the charges outlined within the BCAR criteria procedures are baseline charges. Given the wide scope of the BCAR models, not all components of the risk categories discussed may be applicable in all jurisdictions or for all company-specific situations. Analysts have the option to modify the factors to reflect actual experience if appropriate, credible data is provided for review.

Why are common stock charges higher than fixed income risk charges?

A.M. Best's fixed income risk charges (nonaffiliated bonds) are based on default risk (exposure to interest rate risk in the investment portfolio is addressed separately) and assumes a recovery rate between 55% and 20% depending on the credit quality of the bond. The risk charge for equities (common stock) reflects the market volatility based on the 95th, 99th, 99.5th, and the 99.6th percentile one-year changes in the S&P 500 Index and then adjusted based on the Beta of the company's common stock portfolio.

Why have common stock charges increased so much?

A.M. Best received a number of comments about increases to risk charges for ownership of common stocks. The process for calculating risk charges changed with the movement to a stochastic based BCAR. Under the prior U.S. and Canadian P/C and Universal BCARs, a 15% reduction in the market value of publicly traded common stocks held was applied while in the U.S./Canadian Life/Health model a 30% risk charge was applied.

With the movement to the new stochastic based model, a conscious effort was made to adopt a consistent global approach. The model also incorporated new features such as Beta. For example, for U.S. based BCAR models, regardless of line of business, A.M. Best generates baseline risk factors for market volatility based on the Beta of the rating unit's common stock portfolio relative to the S&P 500 Index. The ESG created ten thousand simulations of possible one-year changes to the S&P 500 Index; the changes that correspond to the 95th, 99th, 99.5th, and 99.6th percentiles are used as the industry baseline risk charges. The rating unit's portfolio Beta is applied to these changes after adjusting the rating unit's Beta for the reliability of the calculated Beta. A.M. Best uses the R-Squared statistic to measure how reliable the calculated Beta is. The index used (e.g. S&P 500) may change based on the rating unit's equity exposures. Please see response below.

In terms of the equity charges, how will the risk charges be determined for companies domiciled overseas or with investments outside of the U.S.?

Based on information received from the company, usually from the SRQ filings, stock portfolios are separated based upon the country of exchange in which the stock is traded. The location of the modeled exchanges include the U.S., Canada, the U.K. and Japan with the index used to calculate



the Beta & R-squared based on the S&P 500, S&P/TSX Composite, FTSE All Shares and TOPIX respectively. The risk charges for these indices, along with a broader global equity index, were developed based on ESG output.

Will mutual funds get a lower risk charge?

Stock mutual funds go through the same process as other common stocks.

Does A.M. Best consider the risk of more than one severe catastrophe event occurring within the same year?

For insurers with natural catastrophe exposure, A.M. Best conducts natural catastrophe stress testing. A.M. Best's stress testing approach is outlined in the "Catastrophe Analysis in A.M. Best Ratings" criteria procedure. As explained in this criteria procedure, to reflect the assumption that the company's net exposure essentially remains the same after an event and that the organization remains exposed to further events, the original net pre-tax PMLs will remain in the stressed BCAR. This should not be interpreted as A.M. Best requiring that a company withstand two major events, but is instead intended to be a reasonable reflection of a stressed risk profile shortly after a catastrophic event.

Questions related to Reserve/Premium Charges (B5/B6)

A.M. Best received several questions/suggestions related to the treatment of reserves/premiums in the P/C and Universal BCAR models. The following responses capture many of these queries.

Why did A.M. Best use ten years of Schedule P data for developing the premium risk probability distribution curve?

A.M. Best believes that the 10 years used for premium risk provides a sufficiently representative time frame to generate a reasonable starting point for the selection of industry probability curves.

Would A.M. Best consider companies future actions when adjusting baseline profitability distributions? What about changes in books of business?

Generally, adjustments to capital factors are subject to analytical judgment based upon the information provided to A.M. Best as well as the company's track record of prior successful execution of business plans and credibility of management. For changes in books of business, especially long tail lines of business, A.M. Best prefers to rely on credible actual experience rather than projected experience.

Why does A.M. Best make adjustments for reinsurance contracts on a case by case basis?

Reinsurance contracts—such as ADCs, LPTs, and ASLs—are unique to each insurer's situation and are tailored to that specific situation. Currently, much of the detail needed to evaluate these contracts is not available in the statutory statement. Adjustments are contingent upon how the contract is booked in the statement and each contract must be reviewed for certain wording that might disallow any credit for the contract. For these reasons, adjustments for these types of reinsurance contracts are evaluated on a case by case basis.



How does A.M. Best treat a company's unearned premium reserves (UPR)?

After reviewing a company's UPR analysis, the difference between the booked UPR and the present value of future loss and expense is credited to surplus as UPR equity. A.M. Best does not discount the UPR on the reserve page as this would result in giving a credit to surplus twice.

Is consideration giving to the concept that not all potential adverse development may be knowable in one year?

Reserve capital factors are calculated on a discounted ultimate runoff basis so the model requires the company to hold capital for that ultimate runoff. This is a solvency approach rather than an ongoing concern approach. In addition, the model assumes the premium written in the upcoming year will ultimately result in an underwriting loss, and the company must hold capital now to absorb the ultimate underwriting loss on that business written next year.

Questions related to Mortality/Life Reserve Charges (C2/C3)

A.M. Best received several questions/suggestions related to the treatment of mortality in the model.

How is "good" mortality performance reflected in the model?

To begin, the mortality factors shown in the criteria are baselines and more information may result in adjustments to the charges. However, good underwriting tends to show up in other building blocks, most frequently in operating performance. So, while adjustments may not be made to the BCAR, the benefits of good underwriting are captured in the overall rating analysis.

Does life business benefit from diversification?

Yes. C-2 is part of the covariance adjustment which recognizes the benefits of diversification.

Mortality risk charges do not consider the average policy size. Why?

The factors do reflect the average policy size and number of policies through the net amount at risk. The lower risk bands have fewer policies to spread risk. As risk bands increase, there are a higher number of policies, thus reflecting average policy size.

Why are capital factors for non-interest sensitive reserves and interest sensitive life reserves the same?

Life products generally have stable longer-term cash flows, although increased policyholder optionality can create negative cash flows similar to deferred annuities. Therefore, A.M. Best does not distinguish between interest-sensitive and non-interest sensitive life reserves in the C-3 calculation.

A.M. Best added a table for group/credit life in the *BCAR for U.S. and Canadian LH Insurers* criteria in response to a comment requesting clarity on this calculation. In response to comments received, the U.S./Canadian Life/Health BCAR model now displays the reinsurance ratio column within C-2.

Does A.M. Best consider other measures when reviewing C-3 Variable Annuity risk, such as future hedging rebalancing?

A.M. Best is monitoring the developments related to AG-43 and C-3 Phase II and may make adjustments as appropriate. The model does not use standard scenarios, but uses stochastic



scenarios (net of reserves) which allow hedge programs to stay in effect. Hedge effectiveness can be reviewed qualitatively. Generally, better hedging should equate to lower value at higher VaRs.

General FAQs

Will A.M. Best add benchmarking results to its criteria or provide further guidance on how it conducts peer analysis?

No. A.M. Best received multiple requests asking for benchmarking results across various sectors and metrics. While this data was not included in the criteria, A.M. Best intends to publish benchmarking-related special reports that will discuss the performance of certain sectors across and within the building blocks. These reports will also cover BCAR scores in the aggregate. These documents will be updated as needed and will provide a more robust means of providing benchmarking information to the industry.

How will A.M. Best use a company's internal economic capital (IEC) model within the balance sheet strength assessment?

Several commentators questioned how A.M. Best intends to use a company's internal economic capital model within the rating process. The BCAR is a model designed for the entire insurance industry. In reviewing a company's IEC model, A.M. Best looks to promote dialogue related to any significant differences between the BCAR's and the company's own internal EC model's view of risk. A.M. Best also looks to understand how the IEC model is utilized in decision making. A.M. Best may review the level of reported capital relative to an insurer's calculated required economic capital. The required capital provided by a company should be from well-understood, proven IEC models that capture the enterprise's material risks. A.M. Best may give consideration to company-run IEC models in conjunction with rating units' reported BCAR scores, which in turn could lead to a change in the balance sheet strength assessment.

What is the difference between Rating Unit and Subsidiary Ratings/Analysis?

Under the revised BCRM, A.M. Best continues to perform its analysis at the rating unit level. A rating unit may be composed of one or multiple insurance entities. When a rating unit is composed of several selected insurance entities (i.e., not necessarily based on a consolidated group), all members of the rating unit will receive the same ICR and FSR. If a rating unit comprises two or more insurers, the analysis of the rating unit will be based on either the entities' combined or consolidated financial results. In addition, for complex, multinational organizations, analysis may also be done at the legal entity/sub-group/geographical level to complement the work done at the rating unit level.

Rating units are identified as either "lead" or "non-lead" rating units. Both groups go through the same steps within the building blocks; however, only the lead rating unit provides lift/drag.

The lead rating unit designation may be based on the consolidated accounts. A consolidated financial view would indicate the highest possible rating within the group from lift (when



applicable). Any other rated insurance legal entities not included in the lead rating unit would be viewed as "non-lead" rating units. A rating unit based on a consolidated group will always be considered the lead rating unit for that group.

Under special circumstances, it is possible for a non-lead rating unit to obtain a rating higher than that of the lead rating unit. This might occur when the non-lead rating unit consists of a sub-group that specializes in a particular business—which is clearly identifiable and separate from that of the rest of the group—and is (normally) subject to a different regulatory framework and jurisdiction, with clear regulatory restrictions on the flow of capital within the wider group.

How is ALM treated in the balance sheet strength analysis?

Asset/Liability matching is reviewed from both a quantitative and qualitative basis. From a quantitative basis, ALM is recognized in the C-3 portion of the U.S. and Canadian Life/Health BCAR model. Baseline factors may be adjusted for company-specific ALM strategies or for other characteristics that may be present in a company's life insurance and/or annuity products.

Further credit in BCAR beyond what is currently in the model was requested in comments received. Discussion of ALM practices generally occur at rating meetings and can be incorporated as part of the BCAR analysis or as part of the balance sheet strength assessment.

What will be displayed in A.M. Best's revised credit reports? What will be published in a company's credit report?

Several commenters posed questions related to credit reports under the new BCRM and what information A.M. Best intends to publish when the new BCRM is implemented. A.M. Best will be publishing detailed information regarding the rating rationale, including the specific assessment descriptors assigned to a company. For instance, companies can expect one of the below descriptors for each building block and have their associated descriptors published.

Balance Sheet Strength	Operating Performance	Business Profile	Enterprise Risk Management
Strongest	Very Strong	Very Favorable	Very Strong
Very Strong	Strong	Favorable	Appropriate
Strong	Adequate	Neutral	Marginal
Adequate	Marginal	Limited	Weak
Weak	Weak	Very Limited	Very Weak
Very Weak	Very Weak		

Analyst Judgment (Flexibility and Final Rating Outcome)

Analytical judgment continues to be an important part of the rating process. A number of questions arose about the flexibility rating analysts have in modifying BCAR charges and the ability of analysts to recognize company's unique product features and/or invested assets. A.M. Best would like to reaffirm that the BCAR model allows the rating analyst to react to various market and/or economic



conditions. Analysts have the option to modify the factors to reflect actual experience if appropriate data is provided for review.

Contrasting this viewpoint were comments that rating analysts had too much flexibility in determining building blocks and ultimately the rating. Rating recommendations continue to be vetted by rating committees comprised of experienced rating analysts. The rating committee approach ensures rating consistency across different business segments and maintains the integrity of the rating process and methodology.

Will a smaller or less diversified organization always receive negative notching for lack of size/lack of diversification?

No. A.M. Best believes that demonstrated defensible market niches will continue to be recognized in the building block approach. However, limited business profiles, as they are today, may be significant challenges for many companies less diversified and/or concentrated in scope.

How does the "Holding Company Assessment" differ from the lift/drag building block assessment?

The Holding Company analysis generally is conducted within the balance sheet strength assessment. A.M. Best believes that the strength or weakness of a holding company directly affects the financial strength of the lead rating unit and, ultimately, all operating companies. In this analytical construct, the activities of the holding company will directly affect the assessment of the lead rating unit only. This lead rating unit analysis factors in the strengths and weaknesses of both the insurance entities and the holding company or non-insurance affiliates. Other rating units in the enterprise may be eligible to receive lift or drag from the lead rating unit.

Given that the impact of a holding company on the lead rating unit is assessed in balance sheet strength, no additional rating lift or drag is generally given to the lead rating unit in the Lift/Drag building block. However, non-insurance parents may, in some instances, offer lift/drag to the lead rating unit which has not already been recognized in the balance sheet strength assessment. Non-lead rating units may receive lift/drag, but only from the designated lead rating unit. The typical characteristics of non-lead rating units assigned lift/drag are outlined within the BCRM. Lift/drag notches noted within the BCRM are typical assessments but in certain cases, the lift/drag may exceed the notches noted. Instances in which a non-lead rating unit would receive no lift/drag are also enumerated within the BCRM.

Is the path to achieving an ICR greater than a+/a more difficult under the new BCRM?

No. The key elements of the rating process—balance sheet strength, operating performance, business profile and ERM—remain the same under the new BCRM. The goal of the building block approach outlined in BCRM has been to promote transparency and spur dialogue with rated companies.



Will this methodology change or impact the process for gathering data from companies?

Generally not, as A.M. Best already reviews its data requests on a regular basis, including yearly reviews of the questions in its Supplemental Rating Questionnaire (SRQ). In January 2017, A.M. Best announced a new web-based client rating portal that allows clients to interact with A.M. Best's analytical teams. The first phase of the portal development enabled clients to file their SRQs through the portal. A.M. Best anticipates utilizing the portal for future data requests.

Does A.M. Best incorporate risks related to the regulatory structure of a country into its country risk evaluation?

Yes. When creating its country risk tiers (CRTs) A.M. Best incorporates the regulatory structure of a country into the political and financial system risk evaluation of a country's overall risk assessment. Some of the factors considered include the transparency and effectiveness of the regulations currently in place; the strength of the rule of law; the regulatory sophistication, staffing and enforcement powers of the supervisory authority; the adoption of and adherence to the International Association of Insurance Supervisors Insurance Core Principals; and the use of a risk based capital system for regulation and reporting.

Does A.M. Best consider line of business and sources of distribution when assessing a company's business profile?

The business profile assessment is multifaceted. It includes assessments of a company's distribution channels, product/geographic concentration, market position, degree of competition, pricing sophistication and data quality, management quality, and regulatory, event, market, and country risks.

Does A.M. Best consider ESG (environmental, social and governance) analysis in the methodology?

ESG is not explicitly considered in the BCRM. Insurance companies which adhere to ESG tenets may discuss how the process is implemented across the organization and any benefits noted as part of their rating presentation.

Are there any criteria which will no longer be in use?

A number of criteria procedures were consolidated into either the BCRM or its criteria procedures. Effective with the release of the new BCRM on October 13, 2017, the following criteria procedures were retired.

- BCAR for Title Insurance Companies
- Rating Protected Cell Companies
- Insurance Holding Company and Debt Ratings
- Analyzing Insurance Holding Company Liquidity
- A.M. Best's Perspective on Operating Leverage
- Evaluating Non-Insurance Ultimate Parent's
- Risk Management and the Rating Process for Insurance Companies



- Analyzing Contingent Capital Facilities
- Rating Members of Insurance Groups

